



2008 AUSTRALIAN WATER SAFETY CONFERENCE

WATER SAFETY - EVERYONE'S RESPONSIBILITY

PROGRAM AND PROCEEDINGS

MAY 2008

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2008 AUSTRALIAN WATER SAFETY CONFERENCE

PROGRAM AND PROCEEDINGS

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Presentation papers are included for all presentations received by 2 May 2008 and are listed under the themes in the conference program and concurrent sessions.

Disclaimer:

The Conference Program and Presentation Papers were correct at the time of printing, however, presentations and/or presenters may change due to circumstances beyond the control of the organisers, which may necessitate substitutions or alterations to the conference program.



**Australian
Water Safety
Council**

INTRODUCTION

FROM AUSTRALIAN WATER SAFETY COUNCIL

Dear Delegate

WELCOME TO THE 2008 AUSTRALIAN WATER SAFETY CONFERENCE

On behalf of the Australian Water Safety Council (AWSC) I would like to welcome you to the 2008 Australian Water Safety Conference. You will see from the Conference Papers that we have an excellent program planned for you – one we believe you will thoroughly enjoy.

Over the past eight years there has been a significant increase in the public awareness of water safety issues and a giant leap forward in terms of government and corporate support at national, state and local levels. We have also seen growing interest from those involved in and committed to water safety and this conference received 62 expressions of interest to present papers or posters which were received from throughout Australia and overseas.

During the conference we will profile the newly drafted Australian Water Safety Strategy 2008-2011 and analyse the ramifications for the coming years. This is a particularly important time for us because after the significant reductions in the national drowning rate during 2001-2005 we have seen a puzzling plateau over recent years and this is of great concern.

Water Safety is “Everyone’s Responsibility” and, along with my colleagues from the AWSC, I look forward to joining you for a successful event.

Brett Williamson OAM, Surf Life Saving Australia

Gordon Mallett, AUSTSWIM

Adam Pine, Australian Swimming Incorporated

Julie Depczynski, Farmsafe

Martin Grose, Surfing Australia

Dr Richard Franklin, Research Committee Convenor - RLSSA

Maurene Horder, National Marine Safety Council

Gary Penfold, Aquatic and Recreation Institute

John Egan, Standing Committee on Recreation and Sport (SCORS)

Greg Morris, Australian Government Department of Health and Ageing

Stan Konstantaras, Australian National Sportfishing Association

Eric Chalmers, Kidsafe

Ralph Richards, Australian Swim Coaches and Teachers Association

We hope you enjoy the conference.

ROB BRADLEY

Australian Water Safety Council Convenor

Chief Executive Officer – Royal Life Saving Society Australia

FOREWORD

THE HON KATE ELLIS MP Minister for Sport

On behalf of the Australian Government, I welcome you all to the 2008 Australian Water Safety Conference. Congratulations to the Australian Water Safety Council for its leadership in water safety and for organising this conference.

You are about to set the standards for water safety in Australia for the years ahead. The updated Australian Water Safety Strategy will be presented to delegates for discussion. Your views will help to ensure that it is implemented effectively, improving safety and saving lives. For your contributions, you have my thanks and support.

The Australian Government places a high priority on promoting wellbeing and preventive health, which is why this conference is funded by the Department of Health and Ageing under the National Injury Prevention Program.

Planning for the future is a key focus for the Government. The major themes of the 2008 Australian Water Safety Council Conference touch on all the important aspects we need to keep in mind – education, risk management, safety services, research, standards and legislation, and community development.

In a country with such a strong beach and water sports culture, continued education efforts are needed to promote safety and minimise mortality and morbidity. That is why the Australian Government continues to make a significant contribution to support water safety initiatives in Australia.

This conference is a valuable opportunity for people in water safety to share information, best practice and research. Your expertise and hard work will be reflected in the new Australian Water Safety Strategy.

I wish you well in your work to remind our fellow Australians that Water Safety is Everyone's Responsibility.

THE HON KATE ELLIS MP
Minister for Sport



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WELCOME

THE HON JUSTINE ELLIOT MP Minister for Ageing

A warm welcome to all 2008 Australian Water Safety Conference delegates.

The Australian Government is proud to be supporting this conference through the National Injury Prevention Program.

And I am pleased to see that this year's conference, 'Water Safety – Everyone's Responsibility', will consider ways of reducing deaths among older Australians.

Work on the Australian Water Safety Strategy 2008-2011 will build on achievements already made to increase awareness of water safety and programs that provide opportunities for over-55s to acquire or rediscover water safety skills. These programs continue to improve water safety for older Australians and I look forward to seeing the finalised strategy.

Last month I launched the Grey Medallion swimming program for people over 55, funded by the Australian Government and conducted by the Royal Life Saving Society Australia. This program aims to equip older people with life saving skills and reduce the drowning rates of older people in Australia.

In addition to funding the Grey Medallion, the Australian Government has also supported the implementation of health-related elements of the National Water Safety Plan 2004-07.

This funding has targeted a wide range of groups who are at risk of drowning, including children in the 0-4 age group, rural and remote communities, and Aboriginal and Torres Strait Islander peoples.

The Australian Government also currently funds the National Injury Surveillance Unit and the National Coroners Information System, to improve data collection and analysis in relation to drownings.

As such I am pleased to see injury prevention featuring heavily throughout the conference. I wish you well for the coming two days and look forward to drawing on your expertise and experience.

THE HON JUSTINE ELLIOT MP
Minister for Ageing

BACKGROUND: AUSTRALIAN WATER SAFETY COUNCIL

The Australian Water Safety Council (AWSC) was officially formed in February 1998 as a result of strong industry consultation and with the support of the Federal Minister for Sport & Tourism, The Honourable Andrew Thomson MP. The Council acts as a consultative forum comprising the major water safety and related government agencies and focuses on the presentation of key water safety issues to governments, industry and the community.

The Australian Water Safety Council does not represent an additional layer of organisational bureaucracy and does not receive funding directly. The Council provides a collective voice for its member organisations. It liaises closely with kindred bodies at State, National & International levels.

The AWSC is committed to improving Water Safety in Australia as demonstrated through the production and implementation of two National Water Safety Plans. These plans have generated bipartisan support for Water Safety in Australia and have seen the improvement of Water Safety throughout the country. The AWSC member bodies continue to demonstrate their commitment to Water Safety by directing resources of their respective organisations towards the development and implementation of the Australian Water Safety Strategy.

This is the fifth Water Safety Conference undertaken by the AWSC, previous conferences were held:

- 5 May 1998 at the Melbourne Sports & Aquatic Centre
- 22 November 2000 at Canberra Convention Centre
- 22-23 September 2003 at Bondi in Sydney
- 17-18 August 2006 at the Holiday Inn Surfers Paradise Queensland

All conferences involved a broad cross-section of the Australian Water Safety Community which included representatives of government departments, agencies and statutory authorities from throughout Australia. This proceedings document joins the papers presented from the previous two conferences, which can be found on the Australian Water Safety Council website www.watersafety.com.au.

The recommendations and spirit of cooperation engendered at the Conference in September 2003 was incorporated into the 2004-2007 National Water Safety Plan which was released in September 2004.

Recommendations from the 2006 Conference and the AWSC Planning Workshop held in 2007, have been used as the basis for the development of the Australian Water Safety Strategy 2008-2011. This plan will be discussed in detail at the Conference.

Each conference allows for reflection on the water safety strategy and provides direction for future water safety activities. Current and past Plans can be downloaded from www.watersafety.com.au.

MEMBERSHIP

Australian Water Safety Council

ROBERT BRADLEY (CONVENOR)
Royal Life Saving Society Australia (RLSSA)

BRETT WILLIAMSON OAM
Surf Life Saving Australia (SLSA)

GORDON MALLETT
AUSTSWIM

ADAM PINE
Swimming Australia Limited

JULIE DEPCZYNSKI
Farmsafe Australia

MARTIN GROSE
Surfing Australia

RICHARD FRANKLIN
*(Research Committee convenor)
Royal Life Saving Society Australia (RLSSA)*

MAURENE HORDER
National Marine Safety Council

GARY PENFOLD
Aquatic and Recreation Institute

JOHN EGAN
*Standing Committee on Recreation
and Sport (SCORS)*

GREG MORRIS
*Australian Government Department of
Health and Ageing*

STAN KONSTANTARAS
Australian National Sportfishing Association

ERIC CHALMERS
Kidsafe Australia

RALPH RICHARDS
*Australian Swimming Coaches & Teachers
Association (ASCTA)*





The Northern Territory Government continues its commitment to water safety by extending the Safe Pool Grant...

Shaan Myall

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STATE AND TERRITORY

WATER SAFETY COUNCIL TASKFORCE REPORTS

NORTHERN TERRITORY

SHAAN MYALL

Executive Officer, Northern Territory Water Safety Advisory Council

OVERVIEW

Since the inception of the Swimming Pool Safety Act the Northern Territory has not recorded a drowning death in the under 5 age group in a backyard pool. The Northern Territory Government continues its commitment to water safety by extending the Safe Pool Grant which offers a rebate to existing pool owner to make their pool fence safer; continuing the Water Safety Awareness Program for children under 5; and supporting the Northern Territory Water Safety Advisory Council (NTWSAC).

The Water Safety Branch inspects approximately 200 pools per week or 40 pools per day and since the introduction of the legislation 10,500 pools are now compliant.

The NTWSAC continues to be proactive with a number of key initiatives currently on the agenda, these include a Safe Boating Campaign, Swimming in Schools and a Safe Drain Campaign.

The Swimming Pool Safety Act is currently being reviewed to ensure backyard pools in the Northern Territory are safe.

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. Indefinite continuation of the Water Safety Awareness Program for children under 5 years.
2. The continuation and expansion of Water Safety Month.
3. No drownings in the under 5 age group in backyard pools since Easter 2003.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

1. Encouraging Territorians to undertake safe boating practices.
2. Reducing that rate of Indigenous drowning.
3. Acceptance and endorsement of Australian Standard 1926 (2007) by the Northern Territory Government.

AUSTRALIAN CAPITAL TERRITORY

KIM POLSEN

Manager, Sport and Recreation Programs, Sport and Recreation Services ACT

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. Development of a draft 2008-2011 Water Safety Action Plan for the ACT.

- Review of 2004-07 ACT Water Safety Action Plan undertaken by Safe Waters ACT Working Party.
- Review of Working Party membership conducted.
- New Safe Waters ACT Working Party brand developed and released.

2. Commitment received from ACT Government to undertake a review of the Public Baths and Public Bathing Act 1956.

- Legislation review to be conducted in 2008. Process will be driven by ACT Department of Territory and Municipal Services and will involve consultation with members of the Safe Waters ACT Working Party.

3. Implementation of a range of water safety education and promotion programs including:

- **Keep Watch @ Public Pools**
Keep Watch program implemented at four ACT Government owned facilities in 2008. Funding for the project was provided through Sport and Recreation Services with the provision of resources and training of staff completed by RLSS ACT Branch.
- **Muslim Aquatic Recreation Program**
RLSS ACT with the support of Sport and Recreation Services developed a Muslim Aquatic Recreation Program (MARP). The program involves weekly aquatic recreation sessions for men and women and involves around 100 local Muslim community members.
- **Indigenous Aquatic Recreation Project**
The Indigenous Aquatic Recreation Project funded by ACT Health has helped develop policies and programs aimed at strengthening Indigenous communities through aquatic recreation and safety focused activities. The program endeavours to increase participation rates for Indigenous people in swimming and lifesaving programs.
- **Improving Water Safety in Primary School**
Kidsafe and RLSS ACT are working with the Department of Education, school systems and public pools to develop and pilot a new approach to school water safety education in primary schools. This project arose from research that confirmed a developing trend of reducing involvement in school swimming programs.

The aim is to have a new approach piloted by late 2008 and to have identified the extent of any ongoing support needed from Government to ensure that all ACT children leaving primary school are able to save themselves in and near water.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

1. Ongoing funding for water safety initiatives.
2. Lack of staff within the aquatic industry – swimming instructors/ lifeguards.
3. Ageing pool facilities in the territory and the impact of increasing maintenance costs and repair requirements. Community access to facilities during repair / maintenance schedules.

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NEW SOUTH WALES

KATHY BOOTH

Project Officer, NSW Sport and Recreation and Executive Officer, NSW Water Safety Advisory Council

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. "On the Same Wave"

This project aims to provide support to young Australians of all backgrounds, particularly young Australians of Middle Eastern background to engage Surf Life Saving around Australia. It also aims to increase Surf Life Saving's openness and responsiveness to cultural diversity and increase diversity within clubs. "On the Same Wave" is a partnership between the Department of Immigration and Multicultural Affairs, Surf Life Saving and Sutherland Shire Council. The program includes communities and surf clubs across Australia with an initial focus on NSW.

2. Indigenous Aquatic Scholarship Initiative (RLSSA)

This program provides Indigenous communities with the opportunity to participate in aquatic activity in a structured and safe manner through the establishment of appropriately trained individuals (within the community.) Training will be in line with industry best practice and appropriate to the needs of indigenous communities.

3. Keep Watch @ Public Pools

This program aims to eliminate all drowning deaths and reduce the number of near drowning incidences that occur in aquatic leisure centres public swimming centres and pools. The program is targeted at parent and carers of children to help them understand the dangers of leaving their children unattended at the pool.

Pools that participate in the program sign a partnership agreement with the Royal Life Saving Society as a commitment to implement the initiatives of the program and comply with the Guidelines for Safe Pool Operation. Since the launch of the program in February 2007 by Samantha Riley over 60 pools throughout NSW have implemented the program.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

1. Keeping Water Safety as a major agenda item for Government
2. Maintaining a focus on the goal of reducing drowning and near drowning incidents in NSW
3. Managing Climate change and it's affect on Water Safety

Further Information:

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QUEENSLAND

GREGORY SCHONFELDER

Principal Project Officer, Building Codes Queensland, Department of Infrastructure and Planning, Queensland Government

OVERVIEW

For swimming pools

To continue to review and assess the existing legislation to provide the most appropriate methods to reduce the number of drowning of young children in swimming pools. Continue with the summer swimming pool safety program (subject to funding) to make the community aware of the dangers of unsupervised children near swimming pools.

Children should be taught to swim at an early age and be familiar with water and its dangers.

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. 2007-08 Summer Swimming Pool safety program with the "Wiggles" at the government launch and included in the new brochure 'How safe is your pool'.
2. Minor legislation amendments and the release of the updated Guidelines 'Interpreting swimming pool fence requirements'
3. Representative on the committee which reviewed the Australian Standard on swimming pool fencing. When amendments are completed it is hoped that it will be adopted into the Building Code of Australia and can be referenced by all States which will bring more uniformity to the fencing of swimming pools.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

For swimming pools:

1. Ensuring all pool fences comply with the regulations and are well maintained, with gate not left open.
2. Promote the need to supervise young children needs swimming pools and other similar bodies of water
3. Ensuring children are taught to swim and supervisors learn CPR and first aid skills

Further Information:

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SOUTH AUSTRALIA

MICHAEL SCHETTER

Director Recreation and Sport Development, Office for Recreation and Sport

OVERVIEW

In September 2006, the Office for Recreation and Sport (ORS) formalised the establishment of the South Australian Water Safety Co-ordinating Committee (SAWSCC).

Membership of the SAWSCC comprises representation from:

- Office for Recreation and Sport (ORS)
- Department of Education and Children's Services (DECS)
- SA Police (SAPOL)
- Department of Justice (State Emergency Services)
- Department for Transport, Energy and Infrastructure (DTEI)
- Local Government Association of SA
- Boating Industry Association of SA
- Royal Life Saving Society SA
- Surf Life Saving SA
- Swimming SA
- SA Farmers Federation
- Kidsafe SA Inc
- Aquatic Recreation Institute (SA Branch).

In March 2007 the SAWSCC initiated the development of a State Water Safety Plan for South Australia. A Draft State Water Safety Plan has been developed and industry consultation recently closed.

The Draft Plan was endorsed at the SAWSCC meeting on 13 March 2008. The Plan is now to be forwarded to the Minister for Recreation, Sport and Racing for State Government endorsement.

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. Formalising the South Australian Water Safety Co-ordinating Committee.
2. Completing the Draft State Water Safety Plan for South Australia.
3. The high level of engagement and commitment from all relevant organisations – government and non-government.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

1. Endorsement of the Draft State Water Safety Plan for South Australia
2. Coordination and collaboration to ensure implementation of the Plan.
3. Maintaining a high profile for water safety and water safety related initiatives

Further Information:

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TASMANIA

ROD MARSHALL

Chairman, Tasmanian Water Safety Council

MEMBERSHIP

<i>Rod Marshall</i>	<i>Local Government Association of Tasmania</i>
<i>Jade Sperring</i>	<i>Royal Life Saving Society</i>
<i>Justin Foster</i>	<i>Marine and Safety Tasmania</i>
<i>Ian Carter</i>	<i>Department of Education</i>
<i>Corrina Travers</i>	<i>Swimming Tasmania</i>
<i>Alex Deane</i>	<i>Surf Life Saving Tasmania</i>
<i>Peter Fox</i>	<i>Australian Recreation Institute and Disability Sector</i>
<i>Kate Mirowski</i>	<i>Sport and Recreation Tasmania</i>

Major Achievements

1. Reviewed Tasmanian Water Safety Plan
2. Co-ordinated Migrant Water Safety Education Program
3. Implemented a generic community awareness campaign for water safety
4. Develop the co-operative network of aquatic agencies available in Tasmania

Major Achievement 1

- Reviewed membership of Council
- Reviewed actions/objectives of the plan
- Future projects to be limited to
 - a) Advocacy
 - b) Research
 - c) Policy
 - d) Promotion

Major Achievement 2

- Program extended to northern Tasmania

Major Achievement 3

- Co-ordinated implementation program for “Watch Out around Water”
- Assisted the development of the “Keep Watch at the Farm” program
- Implemented signage within highland lakes area – a partnership with Royal Life Saving

Major Achievement 4

- Reviewed the membership of the Council to maintain an effective group
- Continue to involve the relevant State Government Ministers in program launches and development of targeted programs

Challenges

- Identifying projects that will maintain interest and contribution from member organisations
- To change direction from funding direct providers to advocacy, research, policy and promotion
- To maintain the operational funding granted from the Tasmanian Government
- To seek sponsorship for major projects

Further Information:

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VICTORIA

WARWICK WATERS

Chief Operations Officer, Life Saving Victoria

OVERVIEW

The Victorian Government has continued it's support of the Play it Safe By the Water program, which has now been running for the past ten years. This program continues to develop that key partnerships between the recognised organisations, Life Saving Victoria as the lead water safety and lifesaving organisation supported by Surfing Victoria and Aquatic's & Recreation Victoria. The 2007/2008 campaign has continued to use data supplied by LSV to help shape the key public awareness messages such as; Look Before you Leap, targeting Risk Takers. Never Turn Your Back, targeted at young parents, Never Swim Alone, a general water safety message and Always Watch Then Around Water, targeted at parents and carers.

All the above message tie into the states water safety plan and all address key groups identified in drowning numbers.

There also has been increased support for water safety activities in both CALD and Indigenous communities across Victoria.

THREE MAJOR ACTIVITIES/ACHIEVEMENTS FOR WATER SAFETY IN YOUR STATE/TERRITORY

1. Increased funding for CALD and Indigenous water safety programs.
2. Increased acceptance and use of Aquatic Risk Management services across local government and private land developers.
3. Increasing partnership across all kindred water safety type agencies, The creation of a Heads of agency group.

THREE MAJOR CHALLENGES FACED WITH WATER SAFETY IN YOUR STATE/TERRITORY

1. Continued Government involvement.
2. Keep water safety in the public domain 12 months of the year.
3. Engaging new and emerging communities.

Further Information:

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THURSDAY 15 MAY 2008

2008 Australian Water Safety Conference - Program

8:00am	REGISTRATION (FOYER-BLACKWATTLE MEETING ROOM)	
CONFERENCE OPENING AND KEYNOTE SPEAKER ADDRESS (BLACKWATTLE MEETING ROOM 2&3)		
9:00am	Welcome to Country - Allen Madden, Metropolitan Local Aboriginal Land Council	
9:10am	Conference Opening - Noeline Brown, Ambassador for Ageing	
9:20am	Conference Introduction - Aims, Objectives and Schedule Rob Bradley, Convenor, Australian Water Safety Council & Chief Executive Officer, Royal Life Saving Society Australia	
9:30am	Australian Water Safety Strategy 2008-2011 – Water Safety Everyone’s Responsibility (Page 18) Rob Bradley, Convenor, Australian Water Safety Council & Chief Executive Officer, Royal Life Saving Society Australia	
10:00am	International Keynote Presentation – How We Hope To Get Asia to Adopt the Australian Culture of Water Safety (Page 22) Dr Michael Linnan, Technical Director, The Alliance for Safe Children (TASC)	
10:30am	MORNING TEA (FOYER BLACKWATTLE & BLACKWATTLE MEETING ROOM 1)	
CONCURRENT SESSIONS		
	LIFESTAGES	HIGH RISK LOCATIONS
	CHILDREN Blackwattle Meeting Room 2	BEACH SAFETY Blackwattle Meeting Room 3
11:00am	How do parents supervise their children at pools and playgrounds? (Page 30) Lauren Petrass, PhD Scholar, School of Human Movement and Sports Sciences, University of Ballarat Dr Jenny Blitvich, School of Human Movement and Sports Sciences, University of Ballarat	Coastal Risk Management - CoastSafe: the National Coastal Safety Management Service (Page 42) Norm Farmer ESM, National Manager Coastal Safety Services, Surf Life Saving Australia
11:20am	16 Years of Pool Fencing debate: where to now? (Page 33) Dawn Spinks, Director, Queensland Safe Communities Support Centre (QSCSC) and Manager, Queensland Injury Surveillance Unit (QISU)	Delivery of Coastal Public Safety in New Zealand - A centralised and aligned approach within a multi-tiered volunteer organisational structure (Page 46) Brett Sullivan, Lifesaving Manager and Nathan Hight, Life Saving Development Manager, Surf Life Saving New Zealand Inc
11:40am	Keep Watch @ Public Pools (Page 35) Caitlin Chelley, Health Promotion Manager, Royal Life Saving Society Australia (New South Wales) and Dr Richard Franklin, National Manager Research and Health Promotion, Royal Life Saving Society Australia	Gold Coast City Council & Sunshine Coast Regional Council Lifeguard Services (Page 50) Warren Young, PSM, Chief Lifeguard, Gold Coast City Council
12:00pm	Nipper Safe (Page 37) Elaine Farmer OAM JP, General Manager, Surf Life Saving (South Australia)	The Research, Development and Implementation of the UK National Guidelines and Specifications for Coastal Public Rescue Equipment (Page 54) Steve Wills, National Beach Safety Manager, Royal National Lifeboat Institution, UK
12:20pm	LUNCH (RED SALT RESTAURANT)	
CONCURRENT SESSIONS		
	HIGH RISK LOCATIONS	DROWNING PREVENTION PILLARS
	RURAL / REMOTE Blackwattle Meeting Room 2	DROWNING PREVENTION STRATEGIES Blackwattle Meeting Room 3
1:20pm	Swim for Life - Naiyui - Aquatic Recreation Project (Page 59) Betty Sullivan, Project Officer and Justin Scarr, Chief Operations Officer, Royal Life Saving Society Australia	Beach Safety and the Law (Page 75) Prof Jeff Wilkes, Consultant, Surf Life Saving Australia
1:40pm	No school no pool: maximising the benefits of the community pool for remote Aboriginal and Torres Strait Islander Communities (Page 63) Tarina Rubin, Project Officer Dr Richard Franklin, National Manager Research and Health Promotion Justin Scarr, Chief Operations Officer Amy Peden, Research Officer Royal Life Saving Society Australia	Managing New Zealand’s National Injury Prevention Contract to Reduce Drowning and Injury (Page 77) Alexander Brunt, B.A (Hons), AR.Pro, Project Manager, Water Safety New Zealand

THURSDAY 15 MAY 2008

2008 Australian Water Safety Conference - Program

2:00pm	Managing Rural Emergencies (Page 66) Ann Price, Senior Development Officer, Royal Life Saving Society Australia (South Australia)	An integrated approach to beach lifeguarding and lifeboating (Page 79) Steve Wills, National Beach Safety Manager, Royal National Lifeboat Institution, UK
2:20pm	Progress in the reduction and prevention of toddlers drowning in farm dams (Page 69) Julie Depczynski, Agricultural Health Research and Development, Australian Centre for Agricultural Health and Safety (ACAHS), University of Sydney	Water Safety That Works (Page 83) Lauren Nimmo, Health Promotion Manager, Royal Life Saving Society Australia (Western Australia)
2:40pm	Survey of Rural and Remote Teachers of Swimming and Water Safety Survey (Page 71) Dr Richard Franklin, National Manager Research and Health Promotion and Penny Larsen, National Manager Training and Education, Royal Life Saving Society Australia	Water Safety Awareness Program (WSAP) (Page 86) Northern Territory Program for Drowning Prevention of Children under 5 years of age Floss Roberts, Executive Director, Royal Life Saving Society Australia (Northern Territory) Rebecca Gawne, Water Safety Awareness Manager, Royal Life Saving Society Australia (Northern Territory)
3:00pm	AFTERNOON TEA (FOYER BLACKWATTLE & BLACKWATTLE MEETING ROOM 1)	

CONCURRENT SESSIONS

	KEY DROWNING CHALLENGES	HIGH RISK LOCATIONS	DROWNING PREVENTION PILLARS
	CULTURALLY AND LINGUISTICALLY DIVERSE (CALD) COMMUNITIES Blackwattle Meeting Room 2	BEACH RESEARCH WORKSHOP SESSION Blackwattle Meeting Room 3	FOUNDATION SKILLS, WORKFORCE ISSUES & LOCAL GOVERNMENT Sussex Meeting Room / Level 1
3:30pm	Whanau Nui - swimming and water safety for families at risk (Page 89) Craig Mills, Drowning Prevention Coordinator, WaterSafe Auckland Inc	Parental/caregiver water safety supervision of young children at beaches: An observational study (Page 98) Dr Kevin Moran, Chairman, Watersafe Auckland Inc (WAI)	Games with Aims (Page 132) Marcelle Frederick, Principal, Aquatic Education
3:50pm	Water Safety for African Refugees - The Newcastle Experience (Page 91) Susan Denholm, Business Liaison Coordinator, Community Development Group, Newcastle City Council	Improving Beach Safety: The Science of the Surf Research Project (Page 102) Professor Ann Williamson, Professor of Aviation Safety, Department of Aviation, University of New South Wales	Be Prepared – Water Safety, Life Saving and the Australian Year of the Scout (Page 134) Professor John Pearn, National Medical Advisor, Royal Life Saving Society Professor of Paediatrics & Child Health, Royal Children's Hospital National Councillor, Scouts Australia
4:10pm	Current CALD Projects at Life Saving Victoria (Page 92) David Holland, CALD Project Manager and Manar Chelebi, CALD Project Officer, Life Saving Victoria		Influenza Pandemic and it's effect on Water Safety (Page 107) Craig Roberts, Manager Lifesaving Services, Surf Life Saving New South Wales
4:30pm	DrownBase™ - Identifying At Risk Factors with Maori Drowning in New Zealand (Page 95) Mark Haimona, Regional Manager, Water Safety New Zealand Inc	Moving forward - How best do we investigate parental supervision of children at the beach (Page 103) Dr Jenny Blitvich, Lauren Pettrass and Prof Caroline Finch, Injury Prevention Research Group, Human Movement and Sport Sciences, University of Ballarat	Water Safety Essentials for Local Governments: A guide to improving aquatic health and safety (Page 108) Amy Peden, Research Officer and Dr Richard Franklin, National Manager Research and Health Promotion, Royal Life Saving Society Australia
4:50pm	Summary/Close	Summary/Close	Summary/Close
5:00pm	CONFERENCE DAY ONE CLOSE		
6:30pm	Conference Dinner – Depart Foyer Crowne Plaza Darling Harbour for King St Wharf for Harbour Cruise		
7:00pm	Conference Dinner – Harbour Cruise Magestic Cruises King St Wharf – Cruise Departs at 7pm and returns at 10pm. CRUISE WILL DEPART AT 7PM SHARP, will need to board the boat at 6:45pm.		

FRIDAY 16 MAY 2008

2008 Australian Water Safety Conference - Program

8:00am	REGISTRATION (FOYER-BLACKWATTLE MEETING ROOM)		
MAIN PLENARY SESSION (BLACKWATTLE MEETING ROOM 2 &3)			
9:00am	Open Forum - Australian Water Safety Council – Australian Water Safety Strategy 2008-2011 (Page 165) A structured, informative and entertaining debate that engages the water safety community/conference audience and challenges the core ideas contained in the draft Australian Water Safety Strategy 2008-2011.		
10:30am	MORNING TEA (FOYER BLACKWATTLE & BLACKWATTLE MEETING ROOM 1)		
CONCURRENT SESSIONS			
	KEY DROWNING CHALLENGES	DROWNING PREVENTION PILLARS	
	SPECIAL POPULATIONS Blackwattle Meeting Room 2	COMMUNICATIONS/MEDIA Blackwattle Meeting Room 3	
11:00am	The Disabled Surfers Association of Australia Inc (Page 112) Gary Blaschke, DSAA Founder and National President, Disabled Surfers Association of Australia Inc	Using the Media to Save Lives (Page 123) Craig Roberts, Manager, Lifesaving Services, Surf Life Saving New South Wales	
11:20am	Emergence of Extreme Water Sports (Page 114) James Stewart, Health Promotion Officer, Royal Life Saving Society Australia (Western Australia)	Play it Safe by the Water - Owning the Summer Media Space (Page 124) Guy Britt, Manager Communications and Media, Life Saving Victoria	
11:40am	A Water Safety Program for Older Australians (Page 117) Penny Larsen, National Manager Training and Education Dr Richard Franklin, National Manager Research and Health Promotion, Royal Life Saving Society Australia	Swim for Life - A Multi Media Campaign Promoting Learn to Swim (Page 126) Matthew Claridge BPhEd, General Manager, Water Safety New Zealand	
12:00pm	Water Safety Education Lessons (Page 120) Lesley-Anne Hodge, Project Officer, NT Water Safety Branch, Department of Local Government, Housing and Sport and Shaan Myall, Executive Officer, NT Water Safety Advisory Council, Water Safety Branch, Department of Local Government, Housing and Sport	Reaching communities who hear with their hearts Pacific Peoples Project for Water Safety New Zealand (Page 130) Ben Penita Taufua, Pacific Peoples Consultant to Water Safety New Zealand & Managing Director, Tautua Synergy Consultants	
12:20pm	Working Lunch & POSTER PRESENTATIONS Facilitated session with authors available to respond to questions. Authors will be provided with time to speak to their poster presentations (5 minutes)		
CONCURRENT SESSIONS			
	CHILDREN - EDUCATION Blackwattle Meeting Room 1	COMMUNITY SPECIFIC STRATEGIES Blackwattle Meeting Room 2	BEACH SAFETY Blackwattle Meeting Room 3
POSTERS	Watch Around Water – It's Everyone's Responsibility! (Page 167) Jeff Fondacaro, President, Leisure Institute of Western Australia Aquatics Lauren Nimmo, Health Promotion Manager, Royal Life Saving Society Australia (Western Australia)	Remote Aboriginal Swimming Pools Project (Page 173) Greg Tate, Manager Community Relations, Royal Life Saving Society Australia (Western Australia)	Surf Life Saving New Zealand (SLSNZ) Training and Development Framework: One Organisation approach to education (Page 180) Tim Marsden, Lifesaving Development Officer, Surf Life Saving New Zealand Inc
POSTERS	Water Watcher Armband - Keeping Kids Safe (Page 168) Dushyanthi Vimalachandra, Department Head, Kids Health & Candace Douglass, Kids Health, The Children's Hospital at Westmead	On the Same Wave (Page 174) Chris Giles, National Development Manager, Surf Life Saving Australia	Integrated Aquatic Programme IAP (Page 181) Brett Sullivan, Lifesaving Manager, Surf Life Saving New Zealand Inc Siobhan Harrod, Project Coordinator, WaterSafe Auckland
POSTERS	Active Family Fun Days (Page 170) Monique Sharp, National Manager Events, Royal Life Saving Society Australia	Water Safety for the Muslim Community - Water Connections and Swim for Life (Page 176) Caitlin Chellew, Health Promotion Manager, Royal Life Saving Society Australia (New South Wales)	A National Lifesaving Plan to prevent Drowning and injury in New Zealand, 2005-2010 (Page 182) Brett Sullivan, Lifesaving Manager, Surf Life Saving New Zealand

FRIDAY 16 MAY 2008

2008 Australian Water Safety Conference - Program

POSTERS	Swimming Pool Fencing Survey Statistics – Sunshine Coast (Page 171) Terri Ridgeway, Technical Officer, Sunshine Coast Regional Council	Remote Pools Project (Page 177) Floss Roberts, Executive Director and Corrine Warhurst, Remote Pools Project Manager Royal Life Saving Society Australia (Northern Territory)	
POSTERS		Swim Smart, Swim Sober - A study examining the contribution of alcohol to drowning deaths in NSW (Page 178) Erin Simmonds, Health Promotion Officer and Caitlin Chellew, Health Promotion Manager, Royal Life Saving Society Australia (New South Wales)	
CONCURRENT SESSIONS			
	DROWNING PREVENTION PILLARS	HIGH RISK LOCATIONS	DROWNING PREVENTION PILLARS
	FOUNDATION SKILLS Blackwattle Meeting Room 1	BOATING/FISHING Blackwattle Meeting Room 2	RISK MANAGEMENT Sussex Meeting Room / Level 1
2:00pm	Development of an interactive CD-ROM for water safety education targeting children (Page 136) Brooke Irvine, General Manager Education and Training, Life Saving Victoria	Staying on top: changing rock fishers use of, and behaviour towards, buoyancy aids (Page 148) Teresa Stanley, Drowning Prevention Manager, WaterSafe Auckland Inc	Reduction of the Victorian Drowning Toll: Lessons Learned (Page 157) Warwick Waters, Chief Operations Officer, Life Saving Victoria
2:20pm	Preparation for lifetime participation in aquatic recreation - A 21st century approach (Page 138) Meredith King, Aquatic Specialist Manager YMCA Victoria and Phillip Hare, CEO YMCA Sydney	Monitoring changes in safety behaviour among recreational boaters across Western Australia (Page 150) Dr Terri Pikora, Senior Research Fellow, Marine Safety Research, School of Population Health, University of Western Australia	Merging Hospitalization Data and Fatal Drowning Data: New Zealand's Drowning Landscape and Data Capture Methods (Page 159) Matthew Claridge BPhEd, General Manager, Water Safety New Zealand
2:40pm	ActiveGator - Open your Eyes - Be Waterwise Program (Page 140) Patricia Krajacic, Swim Academy Assistant; Barbara Parmeter, Swim Academy Assistant; Christopher Gray, AUSTSWIM Instructor Fairfield City Council Leisure Centres	Boating adventure education and training with nautical discipline as a guiding star leading through the turbulent waters of upper teenage years (Page 151) Bouc Jones, Principal, Adelaide Nautical College	Automated Pool Safety Assessment System (Page 160) Alistair Thom, National Manager Aquatic Industry Services, Royal Life Saving Society Australia
3:00pm	Aquatic Education in Schools - The Integrated Aquatic Programme (IAP) (Page 144) Siobhan Harrod, Faculty of Education, University of Auckland and Jan Taylor, Operations Manager Schools, WaterSafe Auckland Inc	Water Safety Education: Evaluation of the Boating Safety for Kids Program (Page 154) Brooke Irvine, General Manager Education and Training, Life Saving Victoria	** Sponsored Presentation ** Poseidon-Drowning Detection Technology (Page 163) Peter Caswell, General Manager and Russell Harrison, Technical Manager/Project Manager, Third Watch
3:30pm	AFTERNOON TEA (FOYER BLACKWATTLE & BLACKWATTLE MEETING ROOM 1)		
	MAIN PLENARY SESSION (BLACKWATTLE MEETING ROOM 2 & 3)		
4:00pm	Keynote Presentation – Reviewing Diving Safety in Australia (Page 27) John Lippmann OAM, Executive Director, Divers Alert Network (DAN) Asia Pacific		
4:30pm	Summary and Future Directions Rob Bradley, Convenor, Australian Water Safety Council & Chief Executive Officer, Royal Life Saving Society Australia		
5:00pm	CONFERENCE DAY TWO CLOSE		



**Australian
Water Safety
Council**

Each conference allows for reflection on the current water safety plan and provides direction for future water safety activities.

AUSTRALIAN WATER SAFETY STRATEGY 2008-2011

WATER SAFETY – EVERYONE'S RESPONSIBILITY

ROB BRADLEY

Australian Water Safety Council Convenor

Chief Executive Officer – Royal Life Saving Society Australia

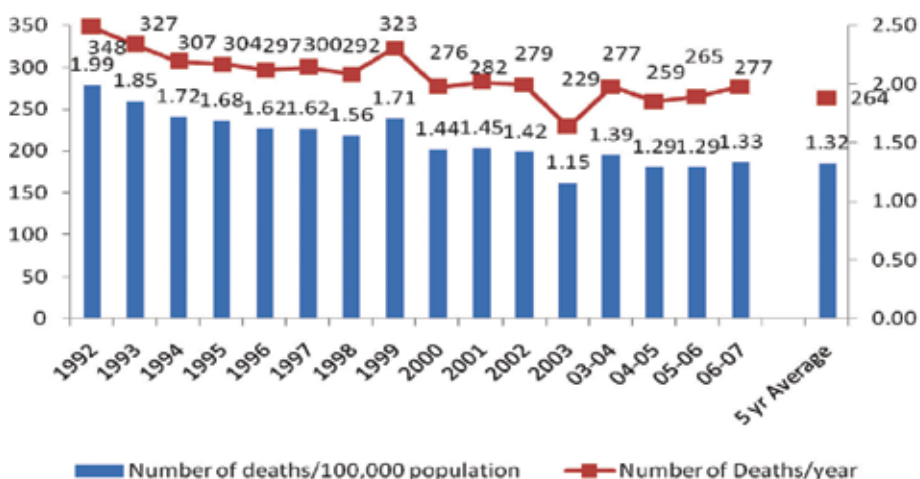
Aim of the Conference

- Brief review of what has been achieved 2004-2007
- Release the draft Australian Water Safety Strategy for 2008-2011
- Receive presentations on Best Practice and Innovations in Water Safety
- Determine whether there are new or emerging issues and priorities
- Networking and Sharing Ideas
- Reaffirm our commitment and impetus for achieving the objectives set within the draft Australian Water Safety Strategy 2008-2011

Drowning In Australia 2008

- Over 260 Australians drown every year
- Drowning is the third highest cause of accidental death
- In the 0-5 age group it is the No.1 killer
- Almost every drowning is preventable
- There has been a disturbing plateau of the drowning rate during past 4 years

National Drowning Statistics - Unintentional Drowning Deaths Australia, 1992-2007



Rob Bradley
PO Box 558, Broadway NSW 2007

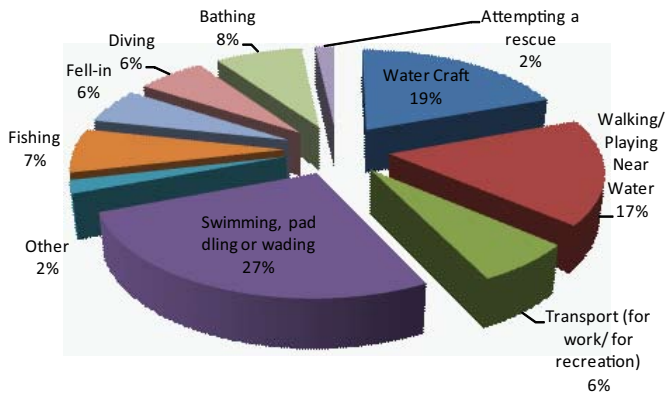
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Email: rbradley@rlssa.org.au

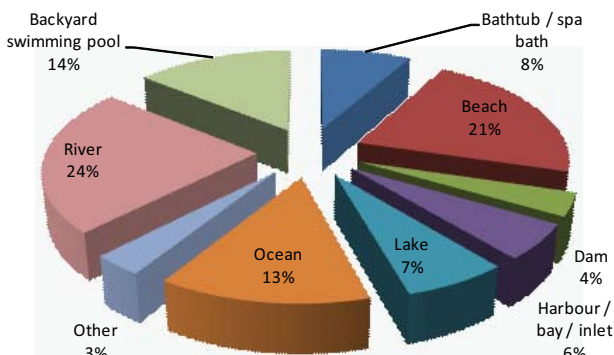
Where?

Drowning deaths in Australia 2004-2007, location at time of deaths



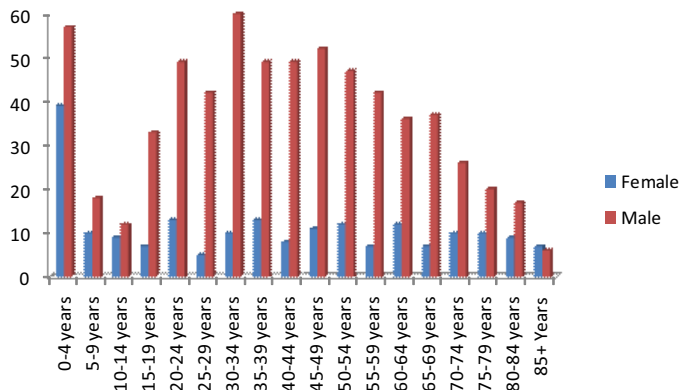
Activity?

Drowning deaths in Australia 2004-2007, activity at time of deaths



Age Groups

Drowning deaths in Australia by age group, 2004-2007



The Australian Water Safety Council

- AWSC is an industry driven Lobby Group representing the key Water Safety organisations.
- Officially formed in February 1998
- Striving to work more closely with State Governments and stakeholder groups
- National Water Safety Plans – 1998-2003 and 2004-2007

Purpose of the National Water Safety Plan

In the diverse & complex Aquatic Industry we aim to:

- Provide a bipartisan framework that will ...
 - Reduce Duplication of Effort & Resources
 - Share ideas and strategies
 - Identify the responsibilities of stakeholders
 - Help us Save Lives

Stakeholders of the Plan/Strategy

- A complex issue with many layers of stakeholders
- Water Safety sits across Governmental portfolios:
 - Sport & Recreation
 - Health & Ageing
 - Education
 - Tourism
 - Emergency Services
 - Local Government & Local Councils
 - Primary Industry
 - Transport
- State Water Safety Councils
- National Water Safety organisations – state & territory branches
- National / State organisations with a water safety interest
- Commercial operators and private providers

Australian Water Safety Strategy 2008-2011 - Overarching Goal - "Target 2020"

The Australian Water Safety Strategy aims to reduce drowning:

- by 15% by 2011
- by 50% by 2020

Key Priority Areas in Drowning Reduction

1. Life Stages Perspective
2. High Risk Locations
3. Key Drowning Challenges
4. Drowning Prevention Pillars

1. Adopt a Life Stages perspective

Objectives:

1. Reduce drowning deaths in children under five
2. Reduce alcohol related drowning in men 18-34
3. Reduce drowning deaths in older people

2. High Risk Locations

Objectives:

1. Reduce beach and coastal drowning deaths
2. Reduce rural and remote drowning deaths
3. Reduce drowning deaths in home swimming pools

3. Meet Key Drowning Challenges

Objectives:

1. Reduce drowning deaths attributed to high risk recreational activities
2. Reduce drowning in high risk populations
3. Reduce the impact of climate change on drowning deaths

4. Drowning Prevention Pillars

Objectives:

1. Build systems that support safe recreational venues
2. Strengthen the skills, standards and contribution of our drowning prevention people
3. Extend the drowning prevention evidence base
4. Foster collaborative approaches to drowning prevention

Structure of the Strategy

- Change to the Strategic Perspective
- Identifying the Priority Areas we can make most impact
- Case Studies and Best Practice
 - Using Case Studies to highlight major issues and profile success stories across states and territories
 - Identify and promote the importance of Best Practice
 - Refine and implement strategies to translate the Best Practice nationally
- SMART Goals
 - Statements of Key Principles
 - Recommendations for Action
- Integration of the work of States and Territories
- Benchmarks and Target Setting
- Build on positive "Political Will"
 - Whole of Government approach
 - Identify the State Government "lead agencies"
- Continue the Evaluation Methodology and Review Timeframe - annual review of achievement of milestones

Communication Strategy

- AWSC committed to ongoing reporting to, feedback from and dialogue with stakeholder groups
 - as the strategy is rolled out
 - linked to the formal annual evaluation strategy
 - stronger communication links between AWSC & State Water Safety Councils
- Specific Issue Analysis
 - forums to be held to discuss single issues in detail eg: National Home Pool Fencing Forum held Oct 2005
 - involving the specific stakeholders with interest/expertise in the area
- Water Safety Interest Group Conferences and Workshops



KEYNOTE PRESENTATIONS:

HOW WE HOPE TO GET ASIA TO ADOPT THE AUSTRALIAN CULTURE OF WATER SAFETY

DR MICHAEL LINNAN

Technical Director, The Alliance for Safe Children (TASC)

Born an American citizen, Mike has spent the majority of his professional life working in international health and development in Asia and Africa. Trained initially as an engineer, he returned to medical school and did residency training at Harvard before completing a fellowship in public health training at the US Centers for Disease Control (CDC).

Mike joined CDC as permanent staff in 1984 and spent the next twenty years in the international health division at CDC. He was seconded for much of his CDC career to development and health agencies such as USAID, WHO and UNICEF working in Africa and Asia. He helped develop many of the programs collectively known as child survival, such as breast feeding, growth monitoring, immunizations, oral rehydration therapy, and safe motherhood. He was active in defining the HIV/AIDS and tuberculosis co-epidemic as well as the public health response.

Mike has spent much of his career developing health capacity in the countries, starting public health and epidemiology training programs in Uganda, Zimbabwe, Taiwan, Thailand, Philippines, Indonesia, and most recently in Vietnam, where he helped develop the Hanoi School of Public Health.

Along with the work in health and development, he has been active in disaster medicine and remediation, with time spent in Sudan and Ethiopia during the Sahel Famine disaster and work in Indonesia on earthquake and volcano disasters. Most recently he has been involved in the Indian Ocean Tsunami, with operational research in Aceh, Indonesia.

He helped establish the non-profit foundation, The Alliance for Safe Children and became the technical director following his retirement from the US CDC. In this role, he has helped conduct the largest set of mortality and morbidity surveys ever conducted at the community level in six countries in Asia (Vietnam, Bangladesh, Thailand, Philippines, Indonesia and China). The surveys have shown conclusively that injury is the leading killer and disabler of children in Asia after infancy, and the leading cause is drowning.

Mike helped establish the Centre for Injury Prevention Research, Bangladesh (CIPRB) to create a community laboratory to develop injury prevention programs that are effective, sustainable and at the appropriate development level. Much of the research being presented comes from the surveys across Asia as well as the CIPRB operational research.

Dr Michael Linnan

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While technical director of TASC, he maintains faculty appointments as professor of international health and development at the Payson Center, Tulane University in New Orleans, Louisiana; epidemiology and public health at the Hanoi School of Public Health in Hanoi, Vietnam; and adjunct faculty at Emory University School of Public Health in Atlanta, Georgia.

PRESENTATION PAPER

I have had recently reviewed the excellent report on “Deaths and hospitalizations due to drowning, Australia 1999-00 to 2003-04” with data from the Australian Institute of Health and Welfare, Canberra, and the analyses done at Flinders by Renate Kreisfeld and Geoff Henley, released March 2008. I was struck by similarities in the drowning data from Asia gathered by TASC and UNICEF.

Our data, gathered in collaboration with UNICEF in a series of national and provincial surveys in six countries in Asia (Vietnam, Bangladesh, Thailand, Philippines, China and Cambodia) shows the same patterns as in the data reported for Australia. While the rates of fatal and nonfatal drownings are about ten times higher than those in the report for Australia during the same time period, the patterns are identical: 1) peak ages for fatal and nonfatal drownings are in early childhood; 2) males greatly predominate; 3) the more rural the population, the higher the drowning rates; and 4) rates increase in warm weather. It gives me hope that the same approach to water safety and drowning prevention that has worked so effectively in Australia will serve equally well to reduce the epidemic of drowning that is occurring in your neighbours.

Our name—The Alliance for Safe Children—is an indication of who we focus on; children. Our data very clearly shows that there is a regional epidemic of drowning in children in Asia: 1) In the countries surveyed, the child drowning rate was 30 per 100,000 children 0-17 years. 2) For the peak age group of child drowning, (1-4 years of age) rates exceed 65 deaths per 100,000 children 1-4 years of age; and 3) when placed against the child population of Asia, this represents about 350,000 children drowning each year in Asia. This is a staggering number—over a third of a million children drowning each year. If children in Australia were drowning at this rate each year, it would be the equivalent of every child in Perth drowning annually. Conversely, were the children of Asia so fortunate to live in a culture of water safety similar to what you have created here in Australia, with your child drowning rate, the numbers of child drownings would fall from the present 350,000 children to less than 24,000; a fifteen-fold reduction.

This is the fundamental reason why we at TASC have chosen the Australian model of water safety and drowning prevention to emulate in the countries we work in. Our goal is to achieve the same, low, child drowning rates that you have achieved in Australia, by following a similar set of strategies to what has worked so well here in Australia. Those strategies are increased supervision by adults, isolation of children from water hazards, and swim training combined with widespread provision of rescue and resuscitation capability.

Working with Royal Life Saving Society Australia (RLSSA) assistance, we have already explored how to take the specific strategies of supervision, isolation from water hazards, and swim training within a stage of childhood approach and adopt them so that they are culturally appropriate, effective and acceptable to the communities we work within. Last year you heard about the creation of a community injury prevention laboratory in rural Bangladesh in collaboration with UNICEF. It is the developing world's first large, quasi-experimental research community that actively trials and evaluates different interventions for drowning, as well as other causes of child injury. I say large, as it covers almost one million population; quasi-experimental as it is designed with three separate intervention areas and a control area in which different intervention packages are trialled for best effect; and research community, as it has an active, monthly home visitation system that ensures we record all drownings so that we have the necessary evidence base to calculate prevention efficacy and cost effectiveness of the intervention packages.

In the PRECISE Project, the three year effort with UNICEF to develop effective, affordable and acceptable intervention packages, the first two years are now behind us, and the success that was reported in 2006 by Ambassador Peterson and Dr Rahman has continued. We have just completed an evaluation of the packages in the active intervention areas. The data show that the combination of increased supervision of children under four with creation of safe play areas and daily crèche attendance has led to a two thirds reduction in drownings as well as almost the same reduction in hospitalization for burns. These strategies are equally effective for decreasing other causes of child injury as well as drowning in early childhood.

The other major strategy, that of teaching children survival swimming as soon as they reach the age of four has been equally successful. Using the program of learning to swim in a specially adapted village pond and local swim instructor for training that Royal Life Saving helped to develop, we have just reached the milestone of the 24,000th child taught to swim.

Our early estimates of the cost have proven to be quite robust, with the cost of teaching one child survival swimming in twelve lessons in the village pond being \$2.50 USD. In the cohort of 24,000 children taught survival swimming, we have not had a single drowning death as of yet. That makes it difficult to do the math required for determining the cost per drowning death averted, as we need at least one drowning death in a swim-trained child in order to do those calculations. But we are quite happy to have this problem, as you might imagine.

We are taking advantage of this very large cohort of swim-trained children to answer a very significant question in injury prevention. I'm sure that it will surprise many of the water safety practitioners here to find out that there actually is no evidence that swim training prevents drowning. As practitioners, you have been focused on doing what works, and have left the determination of prevention efficacy to academics. We have moved forward with the swim training effort based on the evidence provided by our large national surveys, where we compare the rates of drowning in children who can swim, and those who cannot, and find a significant protective effect for swimming. But, as epidemiologists, we know that such evidence is only proof of an association of swimming and drowning reduction. It is not actually proof that being able to swim causes prevention of drowning. The lack of evidence is mainly due to the factors that confound a rigorous study of the issue – the cofactors such as alcohol, etc. Since we can look at early childhood drownings where alcohol would not be used and mid and late childhood drownings in an Islamic society that proscribes alcohol, we have the opportunity to prove it with academic rigor. This is an important fact when one is talking about the public health community undertaking swim training across Asia. The children needing training number in the hundreds of millions, and the evidence must be iron-clad to convince policy makers to commit the necessary resources. Even at the incredibly low cost of \$2.50/per child trained in survival swimming, when you multiply this by a hundred million children, the resultant figure is a quarter of a billion dollars and that is not pocket change. It is an incredibly cheap investment, however, if it prevents those 350,000 children from drowning annually in Asia. So, we need the hard evidence and we have a rigorously designed cohort trial of sufficient power to clearly answer the question. Funding the analysis of that trial is one of our short term priorities in the collaboration with Royal Life Saving in Bangladesh.

The same issue relates to another key prevention measure that you use almost every day-- that of CPR. I know it will surprise many here, but there is not iron-clad evidence that CPR is effective in drowning resuscitation. Most of the available evidence

comes from other causes of cardiac arrest, such as heart attacks. Observational studies and what epidemiologists call 'case-control' studies provide most of the actual evidence for its effectiveness. The gold standard of a large, population-based and controlled cohort trial of effectiveness in resuscitating drowning victims is lacking. That lack was less of a problem when the medical community all believed in the current compression plus ventilation technique of CPR. However, you may be aware of recent changes in resuscitation policy across the developed nations that favor a move to compression only resuscitation in certain circumstances. This has the potential to erode the capacity for 'proper' CPR for drowning victims (that includes ventilation with compressions) in the general population. If so, then the water safety community suffers the weakening of one major pillar of the triad of rescue, resuscitate and transport. As a result, another of the short-term goals on our research agenda in Bangladesh is to develop that needed controlled trial of the effectiveness of CPR in drowning resuscitation, and its ability to be widely taught within a rural community. This is another set of collaborations with the Australian water safety community that we place great priority on.

Finally, I would like to apprise you of another recent piece of water safety research that we have just completed, and I think will be of professional interest to the water safety experts present here. We often think of swimming as a recreational sport, as well as a life-saving skill in the unexpected case of someone facing death by drowning. We usually do not think of it as a technology for "child survival". In case you aren't fluent in international maternal and child health jargon, let me explain that child survival is a term that is used to cover simple and effective technologies for preventing early child deaths in developing countries. Examples are measles immunizations to prevent death from pneumonia, a major killer of infants and young children in developing countries; or vitamin A supplementation to prevent the same death from pneumonia in a child who is not immunized against measles.

You may recall the Boxing Day Tsunami in 2004. Most of the press coverage tended to be sensational in tone (the killer wave that destroyed entire societies, was one magazine's notable approach). We at TASC saw it somewhat differently, as a cataclysmic aquatic disaster, and one that resulted in the single largest mass-drowning event in recent history. We saw this as an opportunity to learn what factors were protective for drowning and led to survival, and what factors were associated with increased mortality.

In January and February 2006 13 months after the tsunami, we conducted a retrospective cohort study working with collaborators in the Indonesian Ministry

of Health in Jakarta and Aceh. The survey covered survivors living in temporary housing near where their pre-tsunami household had been in two areas of northern Sumatra: Banda Aceh, and Aceh Besar. The survivors provided information on their households as constituted on Dec 26, 2004 when the tsunami wave came ashore.

The two areas were selected to allow inclusion of different environmental factors, as Banda Aceh is urban, and Aceh Besar is rural. Half of the cohort was selected from each area. Both areas were divided into four zones beginning at the shore and at increasing distance away from the shore. Increasing distance from the shore allowed an examination of the decreasing physical forces in urban and rural areas inundated by the tsunami waves.

A total of 3,568 households were studied with a population of 14,299 people. Data collected through face-to-face interviews included the maximum depth and force of water sustained, location at the time of exposure, injury and death resulting from the exposure, and individual factors after exposure to the water which might lead to increased survival. These included the ability to swim, clothing worn, closeness of other adults, and behaviours engaged in for survival, such as running, swimming, floating, being rescued, etc.

A multivariate logistic regression analysis was done to control and adjust for age, sex, swimming ability, distance from the coast, location at time of tsunami, survival behaviour used, and if a child was involved, whether the child's caretaker was present and if that caretaker was able to swim.

Despite the coverage suggesting the tsunami was an unsurvivable wall of deadly water, the results showed that over two thirds of those fully exposed and inundated with water above their heads survived. For the factor of age, young or middle aged adults had higher rates of survival than children. Presumably this is due to physical strength factors as males had higher survival rates in each of the age groups with lowest mortality.

For the factor of gender, there was no difference in early and middle childhood until age 10-14 when male survival rates increased compared with females and remained elevated thereafter. After early and middle childhood, males had significantly lower mortality rates than females. This is consistent with the strength increases associated with post-pubertal males compared with females of the same age.

Adult caretakers of infants had lower survival rates compared to caretakers of older children, possibly

related to the total dependence of the infant on the caretaker and the physical disadvantage that placed the caretaker at compared with an older child.

For the factor of distance from shore, survival rates across the cohort in all ages increased as distance from the shore increased. This was likely due to the effect of decreasing force and depth of the advancing tsunami waves as distance from the shore increased.

For swimming ability, being able to swim was significantly associated with survival in each age group after 14 years, and there was a trend for significance in the child age groups before that. Being able to swim, whether a male or a female roughly doubled survival. The effect of swimming was greater than the effect of age or gender in the logistic regression model.

For adults who were caretakers of children, the vast majority were females over 25 years of age. Being able to swim increased their odds of survival between two and three times according to the age of dependent child being cared for.

For infants and children 1-4, if the caretaker survived, the odds the child survived were over twenty times those whose caretakers did not survive, and for the less dependent children (aged 5 -9 years) their odds of survival were about 15 times higher if their caretaker survived. This follows logically, as it is difficult to see how an infant or young child could have survived in the tumultuous environment of the tsunami.

There are several very significant findings in this study, which is currently in press at the UNICEF Innocenti Research Center. First, this shows survival swimming was strongly associated with survival in the tsunami; people who were able to swim were twice as likely to survive. Secondly, it showed that when mothers and caretakers of young children were able to swim, the children they cared for survived at greatly increased rates compared to children whose mother or caretaker could not swim. The survival advantage conferred on the mother through swimming was protective of the child in her care. Third, survival swimming appears to be an effective technique for pre-disaster preparation that decreases mortality in all groups affected by a cataclysmic aquatic disaster. We see this as one key piece of evidence that swimming should be regarded as a critical life skill and taught to everyone in developing countries as soon as they reach the age of four years.

There is one other perspective on the results. From the viewpoint of child survival, or how to most effectively drive down mortality in the first five years of life, teaching mothers to swim helps provide protection from drowning to their children. Since the overwhelming proportion of caretakers are mothers it is useful to note the public health benefit for children that accrues to female swimming: Teaching males to swim would confer significant protection from drowning that extends throughout the rest of their lives. Teaching a female survival swimming confers this protection on herself and her young children as well.

I began by noting the similarities in the patterns of drowning between Australia and Asia and the differences: While the pattern was the same, there is an epidemic of child drowning in Asia; however the rates are low in Australia. I noted the intention to use proven Australian water safety strategies to help address the epidemic of child drowning in Asia. I have also noted a number of fundamental research questions that are being answered in Asia, as a result of the very high drowning rates.

I conclude by noting the potential for Australia to benefit from the fruits of this research. Proof that swimming prevents drowning is likely to strengthen the already firm commitment to swim teaching, and perhaps can help drive efforts to teach children to swim at the earliest possible age. Proof that classical CPR with ventilation is effective in drowning resuscitation may help drive policy considerations to ensure that this technique continues to be widely taught to laypersons. Finally, survival in aquatic disasters is markedly enhanced by survival swimming. As a country with most of the population living within a few score kilometres of the coast, this may offer an important strategy at the national level for pre-disaster preparation.

REVIEWING DIVING SAFETY IN AUSTRALIA

JOHN LIPPMANN OAM

Executive Director, Divers Alert Network (DAN) Asia-Pacific

ABSTRACT

Recreational scuba diving and snorkelling (diving) are popular activities in Australia, especially around the Great Barrier Reef. As these activities are conducted in a potentially hostile environment there are some inherent risks. Many of these risks can be reduced by factors such as adequate education and training, ensuring adequate fitness and health for diving, appropriate supervision, appropriate and functional equipment, and common sense. However, there is still significant morbidity and mortality as a result of diving despite efforts by the industry and various governments to reduce this. Although there has been a rise in the annual number of diving fatalities over the last two decades, there has been a substantial fall in the number of divers treated for (non-fatal) decompression illness (DCI) over the last decade or so.

On the available data, it appears that the scuba diving fatality rate for Australia as a whole is at most 0.57/100,000 dives, a rate that appears to be relatively low by comparison to reports from other places. The incidence of decompression illness is 10.74/100,000 or lower. This compares favourably with rates published from some other localities, but is higher than others.

Dive instructors and operators in Australia are required to comply with international and local Standards for training divers, State and Territory Occupational Health and Safety Regulations, and well as Codes of Practice (COP) in certain States. The regulated Code of Practice in Queensland appears to have been effective in improving diving safety in that State. However, regulating a COP for diving can be expensive, difficult and unpopular with the dive industry.

PRESENTATION PAPER

Introduction

Scuba diving and snorkelling (diving) are exhilarating and rewarding recreational activities. However, both can be challenging and accidents can and do occur with a resulting incidence of serious injuries or fatalities.

As the wider community has become more aware of the beauty of the underwater world, and diving is marketed to a broader spectrum of age groups, there are many more participants with relatively poor aquatic skills, and sometimes relatively poor health and fitness. Unless this is carefully managed by appropriate and adequate participant screening, training, supervision and accident management systems, it can be a recipe for significant morbidity and mortality.



John Lippmann began diving some 36 years ago and developed an early interest in deeper diving. He has been involved in researching, teaching, writing and consulting on safe diving, decompression and accident management for the past 30 years. He has specialised in certain areas including resuscitation, first aid, oxygen administration, dive rescue and various aspects of decompression and deeper diving.

John has authored, or co-authored, many books which have been published and distributed worldwide. These include *The DAN Emergency Handbook*, *Deeper Into Diving*, *The Essentials of Deeper Sport Diving*, *Scuba Safety in Australia*, *Oxygen First Aid*, *First Aid & Emergency Care*, *Automated External Defibrillators*, *Advanced Oxygen First Aid*, *Basic Life Support*, *Cardiopulmonary Resuscitation*, the *Ambulance Service Victoria First Aid Training Manual*, and others. John's articles on dive safety, decompression and accident management have been published in medical, technical and recreational diving journals throughout the world.

John is currently the Executive Director and Director of Training of the Divers Alert Network Asia-Pacific (DAN AP), which he founded in 1994 in an effort to improve the safety of scuba diving within the Asia-Pacific. John has received an Order of Australia (OAM) for his contributions to diving safety and resuscitation and first aid training.

Risks of Diving

The causes of diving accidents are many, and may include: Lack of familiarity with the environment; lack of familiarity with equipment, or equipment failure; inadequate physical fitness; inadequate medical fitness; human error and violations of safety rules; attitudinal; marine animal and boats. Safe diving requires an adequate understanding of the risks involved, adequate medical and physical fitness, appropriate training, suitable and reliable equipment, and a good dose of common sense.

The Diving Population

Scuba diving is a sport participated in regularly by an estimated 80,000 Australian residents, and with possibly in excess of 200,000 foreign visitors diving whilst in Australia. There are approximately 50,000 new scuba divers trained in Australia annually.

Based on some recent sports and diving surveys it can be estimated that in excess of 1.75 million scuba dives were conducted in Australia in 2006. In addition, it is likely that more than 2 million snorkel dives are conducted annually around the Australian coastline.

Diving accidents in Australia

Fatalities

In all, there were a total of 566 recorded diving fatalities recorded between 1972 and 2006. 290 of these divers were using scuba, 194 snorkel, 62 'hookah', and 6 were using a 'rebreather'. The average number of fatalities per decade has increased from 12.6 (1972-79) to 23 (2000-06).

Trends in Diving Fatalities

Divers Alert Network data indicate that an increasing number of snorkelling and scuba diving fatalities are occurring in older participants with a large proportion of these deaths due to cardiac causes.

A concerning number of diving accidents involve inexperienced scuba divers who are diving in sea conditions different to those in which they were trained.

Technical diving is diving that utilizes a variety of breathing gases, often involves very deep diving requiring long mandatory decompression stops, and substantial equipment additional to that carried for normal recreational diving (e.g. 'rebreathers'). The accident rate in 'technical divers' appears to be relatively high.

Decompression Illness

Decompression illness (DCI) is an ever-present potential hazard of compressed gas diving. Manifestations can be relatively mild, such as fatigue, body aches or mild paraesthesia; or severe,

such as paralysis or death. Approximately 30% of divers treated for decompression illness are left with residual symptoms which can take weeks or months to resolve, if ever. Prompt recognition, and rapid and appropriate first aid and treatment may reduce the severity of symptoms, the amount of treatment required, and the likelihood of residual symptoms.

There were a total of 3,558 divers treated for DCI in Australian chambers during the various financial years between 1995 and 2007. However, there has been a substantial reduction in DCI cases treated over the later years. Although this reduction is likely to be due in part to reduced diving activity, it may also be reflective of better diver education and decompression accident prevention strategies, and possibly equipment that help to control ascent rate.

Between 1995-2007 Queensland had the highest percentage of DCI cases followed by Victoria and NSW. Interestingly, the diving industry in Victoria is smaller than in NSW, however more divers have been treated for DCI in Victoria. This could be a result in part from more demanding diving conditions (e.g. colder water), easier accessibility to a chamber and possibly a lower diagnostic threshold for treatment of the dive physician, among other factors.

Incidence of Morbidity and Mortality

Fatalities

Working on the basis of 1.75 million dives conducted in Australia each year in recent years gives an estimated scuba fatality rate of 0.57/100,000 dives. This compares favourably with published rates from some other countries.

Decompression Illness

In Australia, between 2002-2006, an average of 188 divers were treated for DCI each year. Using the basis of 1.75 million scuba dives Australia-wide this yields an estimated DCI rate of 10.74/100,000 for Australia. This rate is lower than published rates from some certain countries and higher than some others.

Standards and Regulations relevant to Diving

Dive instructors and operators in Australia are required to comply with international and local Standards for training divers, State and Territory Occupational Health and Safety Regulations, and well as Codes of Practice (COP) in certain States.

There are two main international Standards that impact, or are likely to impact, the conduct of diving in Australia. These are Standards set by the Recreational Scuba Training Council (RSTC) and the ISO/TC 288 2007 Standards.

In 2006, draft Standards for ISO/TC 288 were circulated by Standards Australia for comment

to sectors of the recreational diving community represented on the Australian Standards committee involved in recreational diving. The suggestion was that the ISO standards would be likely to replace the existing AS4005-2000, with the aim of achieving greater consistency internationally.

Some parties embraced the ISO Standards, while other parties expressed concern that adoption of the ISO Standard would represent an undesirable reduction in certain current minimum requirements in Australia. The Standards were published in 2007 but the final version has not yet been reviewed and discussed by the diving committee involved with Australian Standards. This review is likely to occur later in 2008.

There are a variety of Australian Standards that currently apply to recreational diving in Australia. These include Standards for training and certification of recreational divers and dive professionals (AS 4005:2000); conduct of recreational diving and snorkelling (AS/NZS 2299.3:2003); some pertaining to scuba diving cylinders (AS2030.1:1999 & AS3848.2:1999); among others.

The Australian Standards for training of recreational divers changed considerably over the past 15 years or so. Currently, there is substantially less open water training time, higher instructor-student ratios (among other changes) than was required under earlier versions that evolved from Australia. These current Standards more closely match the guidelines propagated by the RSTC. This has been the subject of some debate and concern by certain parties concerned about a degradation of training standards.

In addition to Australian Standards, certain States have Regulations and/or Codes of Practice that directly apply to recreational diving. There are two regulated Codes of Practice (COP) in Queensland, enforced by several diving inspectors. There is a COP in WA which is ignored by most of the industry. In Victoria, some dive operators created a voluntary COP, although it is now being utilized, until recently it was also largely ignored.

Occupational Health and Safety Legislation in each State or Territory applies to diving in a workplace. Regulators have chosen to interpret the body of water where diving activities takes place as a workplace, occupied by employees (e.g. diving instructors) and non-employees who are nevertheless covered by the legislation on account of being "visitors in the workplace".

Diving has inherent risks and scuba divers and snorkelers must accept a certain degree of responsibility for their own safety. However, dive

operators have a Duty of Care to provide their services with a reasonable degree of safety and professionalism. The diving industry in Australia is predominantly a commercial industry which, like most other industries, strives to minimise its costs in order to maximise its profits. There is a constant balance between these commercial imperatives and the safety of the diver clients.

There appears to be little doubt that the existence of the regulated Codes of Practice in Queensland has improved scuba diving and snorkelling safety in that State. However, there is a substantial cost associated with the monitoring and enforcement of compliance with these Codes. The diving industry in Queensland is large and reasonably robust and relatively lucrative. By contrast in places such as Victoria, Tasmania, South Australia and the Northern Territory it is very small and many operators find it difficult to remain viable from time to time. The imposition of unrealistic and impractical requirements could further undermine the viability of the industry in these areas. Any specific regulations affecting the dive industry should only be introduced after extensive consultation and reasonable support from various parts of the industry. Otherwise they are less likely to be effective.

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Background/Introduction

Childhood drowning is a world-wide health problem and inadequate supervision has been associated with injury and death in children. Identifying and applying appropriate and valid measures of parental supervision in different environments is challenging.

A systematic review of supervision and injury literature enabled identification of an appropriate model which considers attention, proximity and continuity of supervision, and was implemented as a template in this investigation.

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PRESENTATIONS:

CHILDREN - LIFESTAGES

HOW DO PARENTS SUPERVISE THEIR CHILDREN AT POOLS AND PLAYGROUNDS?

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ABSTRACT

Methods

A six-hour observation of behaviour potentially associated with injury risk was conducted at six public pools and four playgrounds. Supervision and behaviour were quantified using an observational tool based on the Saluja et al.¹ model and Morrongiello's² definition of supervision. Infants to 10 year-old children engaged in play and their carers were observed. Child behaviour, corresponding parent supervision, and parental intervention were recorded.

Results/Evaluation

Chi-square tests showed higher levels of supervision were associated with specific behaviours in pools and playgrounds. Factors significantly linked to level of parental supervision included child age; parent age; number of children for whom parents were responsible; and in aquatic settings, swimming ability of the child.

Discussion

Level of parental supervision differs with children's play. Despite increased dangers in aquatic environments, parents supervised less at pools than playgrounds highlighting inappropriate parental dependence on lifeguards.

Conclusion

Future research examining the relationship between supervision and young children's risk of drowning at other aquatic environments is required. Attention, proximity and continuity of supervision should be assessed. Findings will enable key water safety stakeholders to further highlight this phenomenon in drowning prevention programs.

References

1. Saluja G, Brenner R, Morrongiello BA, Haynie D, Rivera M, Cheng TL. The role of supervision in child injury risk: definition, conceptual and measurement issues. *Injury Control Safe Promot* 2004;11(1):17-22.
2. Morrongiello BA. Caregiver supervision and child-injury risk: I. Issues in defining and measuring supervision; II. Findings and directions for future research. *J Pediatr Psychol* 2005; October 1, 2005;30(7):536-52.

PRESENTATION PAPER

Introduction

Unintentional injury is a leading cause of child death and hospitalisation for children aged 0-14 years (National Public Health Partnership [NPHP], 2004; Peden, McGee, & Krug, 2002). Insufficient supervision that allows child exposure to hazardous situations or events has been recognised as a contributing factor to injury risk for young children. The paucity of research in the area has resulted in considerable speculation about the relationship between injury risk and supervision and, to date the impact of supervision on child injury risk has not been fully clarified. There are few studies investigating the nature of supervision that children experience during active recreational activities. The aim of this study was to address this gap in knowledge by providing evidence of the function of supervision as a potential risk or protective factor, and identifying the willingness of parents to intervene when children exhibit behaviours that can potentially cause injury in aquatic (public pools) and non-aquatic (playground) contexts. Observation of parental responses to incidents with the potential to result in injury enabled categorisation of the level of supervision displayed by parents. No judgement was made of supervision in the absence of an incident. Accordingly, this study provides objective data to help researchers and practitioners develop injury prevention campaigns and intervention programs to reduce unintentional injuries in aquatic and playground environments.

Methods

Morrongiello (2005) indicated that it can be difficult to examine supervision in ways that do not misrepresent or distort the phenomenon, and that have relevance for investigations of child-injury risk. As researchers are yet to agree upon a standardised method to measure supervision, a systematic review of methodological approaches was conducted, which identified high quality data collection methods for the measurement of supervision (Petross, Finch & Blitvich, unpublished). Based on the review recommendations, the data collection method of naturalistic observation was chosen for this study.

The taxonomy developed by Saluja et al.(2004) was implemented as a framework to measure parental/ carer supervision. The measurement instrument considered attention, proximity and continuity and enabled categorisation of supervision as “excellent, good, sound, poor or absent”, as per Table 1.

All the observation sessions were conducted during school holiday periods, or on weekends throughout the school term to gain sample periods with high levels of children’s active recreational play. The recordings were made during a single six hour observation period spent at each venue, conducted between 10:00am-4:00pm or 10:30am-4: 30pm, as these were judged to be the busiest times of the day. All data collection was conducted by one of the researchers (LP) and followed pilot testing to ensure familiarity with the observation instrument. This study received approval from the University of Ballarat Human Research and Ethics Committee.

Venues across metropolitan and regional Victoria were selected from the phone book and internet. The final sample of venues was convenience based as, by necessity, data collection occurred at venues providing access during non-summer months. Permission to collect data was obtained from three metropolitan and three regional aquatic centres. Popular outdoor venues were selected in the same way, with two metropolitan and two regional venues chosen. Infants to 10-year-old children engaged in recreational play, with parents/carers who were present at the venue during the observation time, were eligible to be monitored.

A set of three matrices were used to record supervisory behaviours (based on the taxonomy of Saluja et al. 2004), child behaviours, and associated environmental factors. The matrices were developed following preliminary observations at swimming centres and playgrounds. They were refined following data collection in a pilot project prior to the main study.

Data Analysis

To identify the relationships and common themes within different settings, analyses occurred in two sections, one for the aquatic setting and the other for playground environments. Summary tables were developed to describe relationships between variables in the aquatic or playground environments. These tables were later used to compare common themes between the two diverse venues. Where common themes were identified, either within environments or when making comparisons, cross tabulations and chi-squares were conducted to identify significant differences between variables. An alpha level of 0.05 was selected.

Five parental variables were selected for statistical analysis comparing child behaviour displayed and associated parent intervention. The parental variables were:

- approximate age of the supervisor;
- number of children for whom the supervisor was responsible;
- responsibility level of the supervisor (based on focal and visual attention, proximity and continuity);
- intervention (yes/no);
- intervention description.

These variables were compared with three child-based variables:

- approximate age of the child;
- behaviour displayed;
- swimming ability of the child.

Results

A total of 715 incidents, (defined as any child behaviour that had the potential to lead to, or result in the occurrence of an unintentional injury) were recorded at the six aquatic venues and 334 incidents across the four playgrounds. Due to the low frequency of incidents in the 12-18 year supervisor age category, this group was eliminated, resulting in 705 aquatic and 334 playground incidents.

Higher levels of parental/carer supervision were associated with a lower frequency of injury risk behavioural incidents in aquatic and playground settings. The level of supervision that parents/carers provided in pool and playground settings was significantly associated with a number of parental and child based variables including the age of the parent/carer; the number of children for whom the parent/carer was responsible; the age of the child; and, in aquatic environments, the swimming ability of the child. When comparing the level of supervision parents provide for children, and notwithstanding the increased dangers in aquatic environments, a greater percentage of incidents (30%) were associated with no level of supervision in aquatic settings, than in playground environments (20%) (see Table 1).

Table 1: Categorisation of level of supervision (by percentage) in pools and playgrounds.

Level of Supervision	Environment	
	Pool	Playground
Excellent	6%	7%
Good	23%	27%
Sound	19%	20%
Poor	23%	26%
Absent	30%	20%

Discussion - Levels of supervision in aquatic and playground environments

Despite previous research recognising that dangers associated with aquatic environments result in increased risk compared with land-based venues (NPHP, 2004), and the Royal Life Saving Society Australia [RLSSA] (2004) recommending the level of supervision of active play should be far greater when water is present, supervision in aquatic environments is variable. Many parents appear to ignore facility requirements based on the 'Guidelines for Safe Pool Operation' (RLSSA, 2001), which state that children under 10 years should not be permitted entry to a facility unless under the active supervision of a person 16 years or older.

The findings of this study demonstrated that the level of parental supervision differs depending on the environment in which children are engaged in recreational play, with a greater number of child based incidents associated with absence of parental/carer supervision in aquatic settings, compared with land based venues. Anecdotally, this may be explained by parents mistakenly believing that the responsibility for children's safety is transferred to the lifeguard once they enter an aquatic venue.

Implications for Prevention

Supervision is usually perceived by parents as an effective strategy for avoiding injury as they can intervene during an injury-threatening situation (Iltus, 1994). Supervision is a prescribed and often assumed method of injury prevention (Pollack-Nelson & Drago, 2002). However, a number of factors affect the level of supervision provided to children. The overall aim within any environment should be that parental supervision is at a level that allows children to develop a level of independence and responsibility, whilst impacting positively upon minimising unintentional injury incidents. This highlights the need for the level of supervision to be linked with the level of risk in the play environment. Hence, an open water aquatic environment (high risk) would require a higher level of continuous supervision than an enclosed play environment (low risk), where a sound level of supervision may be appropriate.

The fact that parents/carers demonstrated different levels of supervision in different risk environments highlights the need for future research to incorporate a greater number of enclosed recreational environments with different levels of associated risk. As the findings of this study identified lower levels of parental supervision when a lifeguard was present, further research is required to elucidate the supervision/risk relationship in natural aquatic environments (beaches, rivers, lakes and dams) where lifesavers are not always present. This research is of importance, with children frequently engaged in aquatic environments during warm weather months, and a large proportion of aquatic deaths attributed to a lack of supervision.

References

- Iltus, S. S. (1994). Parental ideologies in the home safety management of one to four-year-old children. Unpublished Doctor of Philosophy, The City University of New York.
- Morrongiello, B. A. (2005). Caregiver supervision and child-injury risk: I. Issues in defining and measuring supervision; II. Findings and directions for future research. *Journal of Pediatric Psychology*, 30(7), 536-552.
- National Public Health Partnership [NPHP]. (2004). The national injury prevention and safety promotion plan: 2004-2014. Canberra: NPHP.
- Peden, M., McGee, K., & Krug, E. (2002). *Injury: A leading cause of the global burden of disease, 2000*. Geneva: World Health Organisation.
- Petrass, L.A., Finch, C.F. & Blitvich, J.D. (unpublished) A systematic review of methodological approaches used to assess the relationship between parental supervision and child injury risk.
- Pollack-Nelson, C., & Drago, D. A. (2002). Supervision of children aged two through six years. *Injury Control and Safety Promotion*, 9(2), 121-126.
- Royal Life Saving Society Australia [RLSSA]. (2001). *Guidelines for safe pool operation*. Sydney: Royal Life Saving Society Australia.
- Royal Life Saving Society Australia [RLSSA]. (2004). *Swimming and lifesaving: Water safety for all Australians (4th ed.)*. Sydney: Elsevier Mosby.
- Saluja, G., Brenner, R., Morrongiello, B. A., Haynie, D., Rivera, M., & Cheng, T. L. (2004). The role of supervision in child injury risk: Definition, conceptual and measurement issues. *Injury Control and Safety Promotion*, 11(1), 17-22.

16 YEARS OF POOL FENCING DEBATE: WHERE TO NOW?

DAWN SPINKS

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DR RUTH BARKER

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ABSTRACT

Pool drownings in backyard pools is still at an unacceptable level. Whilst the pattern and prevention of drowning in dams, creeks, manmade water ways, and buckets needs to also be addressed, this paper aims to identify how far we have come in preventing domestic pool drowning, and question why we are still road-blocked on a number of critical factors.

Over the past fifteen years, coalitions have developed and agreed on a number of strategies to reduce the incidence of toddler pool drowning in domestic environments. These strategies include: effective pool fencing, knowledge of CPR, supervision and ongoing community education. No one would dispute the importance of these interventions. So why are we still fighting to have these strategies implemented and what are the stumbling blocks?

Effective pool fencing - 'effective' being the operative word. In Queensland there is overwhelming agreement now as to what constitutes 'effective' fencing and the importance of four sided barriers which conform to the Australian Standard. There is also agreement as to the importance of training programs for inspectors, regular inspection procedures, development and maintenance of data basis for pool ownership, approvals and appropriate penalties for infringements and ongoing community education. But, at the moment, we only have the Australian Standard (AS) and none of the other essential elements – and even the AS has some challenges for implementation! What do we need to do now to implement what we know will save the lives of our Australian toddlers?

PRESENTATION PAPER

Key components of effective interventions

- Education, enforcement, engineering/environment
- Strong partnerships (standards)
- Sound evidence
- Long term sustainable approach
- Learning from others
- Manageable components
- Clear uncomplicated processes

The WHO Safe communities 6 indicators

- An infrastructure based on partnership and collaborations, governed by a cross-sectional group that is responsible for safety promotion in their community
- Long-term sustainable programs covering both genders and all ages, environments and situations
- Programs that target high-risk groups and environments, and programs that promote safety for vulnerable groups
- Programs that document the frequency and causes of injuries
- Evaluation measures to assess their programs, processes and the effects of change
- Ongoing participation in national and international Safe Communities networks

Challenges to implementing 4 sided pool fencing

Setting and maintaining a “best practice” four sided pool fencing national standard. Finally achieved via Standards Australia.

Process included:

- valid and reliable data, consensus, simplicity, advocacy, sharing knowledge, awareness of need to advocate on behalf of vulnerable group.

BUT – until ABC take it on board – still some challenges.

Converting gold standard to best practice

We need to address Education, enforcement environment/engineering. But what does this mean in the context of toddler drowning?

Barriers – type and location of fencing

Prevention of toddler domestic pool drowning is about creating an environment that allows for the implementation of all aspects of an effective intervention.

Australian Standards is only one part of this.

Enforcement

We need an

- approved inspector program and an implementation process.
- reliable data base within each council that includes follow up systems -
- Improved police reporting at time of incident.
- Police education re fencing requirements

Education

- Swimming lessons – yes or no!
- Media – local and state
- CPR
- Supervision
- Maintenance of barrier
- Engage partners
- Educate government and non govt about legislative requirements
- Safe communities program – solid delivery opportunity

Myths

**MY TODDLER IS “DROWN PROOF”
– dangerous statement!**

**OTHER METHODS CAN MAKE A POOL AS SAFE
– unproven and unlikely!**

**TODDLERS WOULDN'T DIE IF ADULTS
WERE CAREFUL**

Is better supervision the answer and what is good supervision?

And what about after a drowning event?

The way forward

Safe Communities one delivery mechanism at one level

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KEEP WATCH @ PUBLIC POOLS

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ABSTRACT

Introduction

Injury in public aquatic centres is a major issue faced by the Aquatic and Recreation Industry. If you ask the staff at any local swimming pool or aquatic centre what their major working challenge is, the lifeguards will invariably answer, "parents not supervising their children".

Royal Life Saving is targeting risk areas for toddler drowning deaths such as public pools. Lack of direct supervision of the parent or carer while the child was in the water has been the main factor in 70% of the drowning deaths at public pools.

Royal Life Saving, in consultation with the aquatic industry, has developed the program 'Keep Watch @ Public Pools' to support the Guidelines for Safe Pool Operations and assist in improving parental supervision within public swimming pools and aquatic centres through a range of strategies.

These strategies includes a range of key supervision messages within the facility such as pool signage, safety messages on pool announcement systems and information cards for lifeguards to use to help educate parents. Centres that participate in the program will have strict policies for parental supervision.

Methods

A case controlled study was conducted across 6 public pools in Victoria to examine the effectiveness of Keep Watch @ Public Pools. Baseline information was collected from all pools in the study about current levels of supervision. The program was then delivered in half of the pools and supervision levels were measured again and compared to pre-intervention levels. Feedback about the program in Victoria and New South Wales was gained via surveys to lifeguards and centre management.

Results/Evaluation

Overall the response to the program by lifeguards and centre managers was positive with some improvements in parental supervision observed at pools participating in the program. The level of improvement in parental supervision was dependent upon the age range of the children being supervised. The resources provided were considered appropriate and further recommendations were made to improve the resources, such as providing written information in languages other than English.

Conclusion

By both parents and aquatic centres working together and following the Keep Watch @ Public Pools program, we can improve parent supervision and prevent children from drowning in public swimming pools.

PRESENTATION PAPER

Introduction

Injury in public aquatic centres is a major issue faced by the Aquatic and Recreation Industry. If you ask the staff at any local swimming pool or aquatic centre what their major working challenge is, the lifeguards will invariably answer, "parents not supervising their children".

Royal Life Saving is targeting risk areas for toddler drowning deaths such as public pools. Lack of direct supervision of the parent or carer while the child was in the water has been the main factor in 70% of the drowning deaths at public pools.

Royal Life Saving, in consultation with the aquatic industry, has developed the program 'Keep Watch @ Public Pools' to support the Guidelines for Safe Pool Operations and aims to eliminate all drowning deaths and reduce the number of near drowning incidences that occur in aquatic leisure centres, public swimming centres and pools.

Keep Watch @ Public Pools is targeted at parent and carers of children to help them understand the dangers of leaving their children unattended at the pool. Parents have the responsibility of looking after their children - lifeguards do a great job of keeping our pools safe but they are not babysitters!

Improving parental supervision within public swimming pools and aquatic centres is achieved through a range of strategies. These strategies include a range of key supervision messages within the facility such as pool signage, safety messages on pool announcement systems and information cards for lifeguards to use to help educate parents.

Centres that participate in the program also have strict policies for parental supervision.

- Children under 10 years are not allowed entry unless under active supervision of a person 16 years or older.
- Parents or guardians should actively supervise their children at all times. As such, they should be dressed ready for action, including unexpected entry to a pool.
- For 0-5 year olds and non-swimmers, a parent or guardian is in the water at all times (within arms reach) of the child. It is best if you are engaging with your child i.e. playing with them, talking to them, touching them.
- For 6-10 year olds a parent should be close enough to make eye contact with the child and be constantly watching them.
- For 11-14 year olds a parent must regularly check on their child by physically going to the point where they are in or around the water.

A professional development workshop for centre management and staff is also included as part of the package.

Over 100 pools within New South Wales, Queensland and ACT participate in the program and have signed a partnership agreement with as a commitment to implement the initiatives in the Keep Watch @ Public Pools program along with the compliance to the Guidelines for Safe Pool Operation.

Methods

A case controlled study was conducted across 6 public pools in Victoria to examine the effectiveness of Keep Watch @ Public Pools. Baseline information was collected from all pools in the study about current levels of supervision. The program was then delivered in half of the pools and supervision levels were measured again and compared to pre-intervention levels. Feedback about the program in Victoria and New South Wales was gained via surveys to lifeguards and centre management.

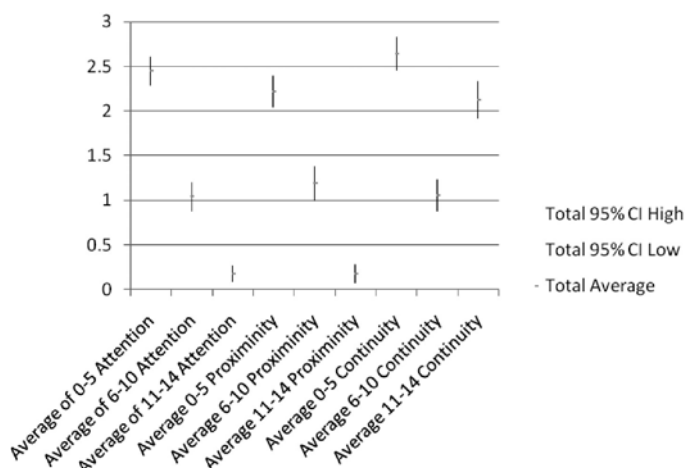
Supervision was measured across three domains, attention (how much time was spent focusing on the child), proximity (how close the carer was to the child) and continuity (how much time the care spent in the vicinity of the child). Parent to child ratios were also measures. Survey was sent to all pool who implemented the Keep Watch @ Public Pools program to gauge their feedback.

Results

The results of the study show clear differences in the way people supervise children around water, with younger children (0-4 years) being supervised

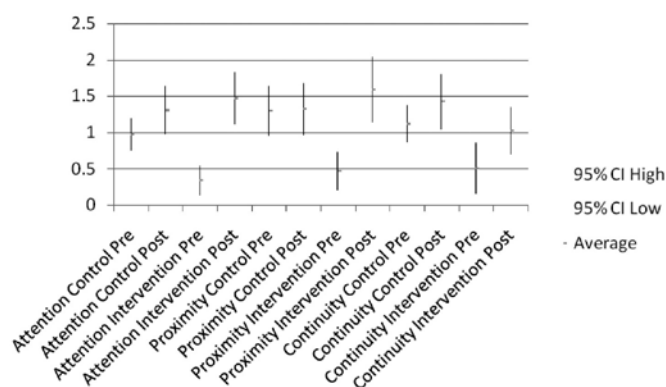
closely, the parents in close proximity and present at all times. However, as children age the level of supervision decreases (Figure 1).

Figure 1 Level of supervision overall



For the 0-5 year olds and the 10-14 year olds, there was a small but non significant change in parent's supervision habits following the introduction of the Keep Watch @ Public Pools Program. For the 5-9 years age group there was a significant improvement across all three scales of supervision (Figure 2).

Figure 2 Pre and Post Control and Intervention average supervision levels for 5-9 year olds.



Feedback from the lifeguards at the centre who had implemented the Keep Watch @ Public Pools program at their pool felt the supervision by parents was good and believed that the majority of parents were more aware of the need for supervision of their children. The majority of pool lifeguards felt that the Keep Watch @ Public Pools program had made their job easier in getting parents to supervise their children. The feedback from patrons was identified as being mostly good, with only one lifeguard identifying indifferent feedback about the program.

All lifeguards rated the program as being moderately successful and said they would recommend the Keep Watch @ Public Pools initiatives to others in the industry.

Discussion

The Keep Watch @ Public Pools program was developed in consultation with industry to meet the need of informing parents of their responsibilities when supervising children at aquatic centres. The program has been designed to be flexible to meet the differing needs of centres. The program is now running at over 100 aquatic centres in NSW, ACT and Queensland, and has been well received by the centre managers and public.

The evaluation showed that there was a significant improvement in behaviour by parents supervising children 5-9 years of age in those pools where the Keep Watch @ Public Pools program was implemented. While not significant there were also some improvements in the other age groups. The feedback from the lifeguards was on the whole positive. The resources provided were considered appropriate and further recommendations were made to improve the resources, such as providing written information in languages other than English.

The development of the program continues with new material being added to the Keep Watch @ Public Pool program to keep it relevant to industry.

Conclusion

Overall the response to the program by lifeguards and centre managers was positive with some improvements in parental supervision observed at pools participating in the program. The level of improvement in parental supervision was dependent upon the age range of the children being supervised. By both parents and aquatic centres working together and following the Keep Watch @ Public Pools program, we can improve parent supervision and prevent children from drowning in public swimming pools.

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NIPPER SAFE

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LUCAS STUBING

Developer of Nipper Safe, Surf Lifesaver and member of SA Police, STAR GROUP

ABSTRACT

Background/Introduction

Nipper Safe is a Member Protection Strategy developed in 2004 by collaboration between the South Australia Police and Surf Life Saving SA, with support from the Sexual Offender Treatment and Assessment Program and Children Youth and Family Services.

In SA it has become a Community Policing Program and an important Crime Reduction Strategy and is now one of the most highly awarded children's protection programs in Australia.

It has a very simple objective. ..

TO REINFORCE SURF LIFE SAVING NIPPERS AS A SAFE AND POSITIVE ENVIRONMENT FOR CHILDREN TO LEARN AND DEVELOP.

Although developed specifically for surf lifesaving, its message is relevant for all organisations interested in protecting their younger members.

How it came about

As a direct result of the Peter Liddy issue, many of our members were asked by people they knew about whether they thought nippers was a safe thing for their kids to do. This question was asked of 2 of our members, who also happen to be Police Officers, viz Damien Eichner and Lucas Stubing. The guys thought this was a terrible indictment from Surf Life Saving's point of view and set about doing something to address it.... and the Nipper Safe concept was born.

Damien and Lucas then spent months getting a concept presentation together which they brought to Surf Life Saving. It was immediately recognised that this provided another dimension to our current Member Protection policies and so the partnership between Surf Life Saving SA and SA Police was established.

Early on in the collaboration we were extremely fortunate to be able to access 2 Officers from the Paedophile Task Force in Detective Senior Sergeant Paul Lewandowski and Senior Constable Allan Dalgleish (again, both volunteer surf lifesavers). This 5 member team then worked diligently together to come up with the final product.

The resources developed by SLSSA (including 2 DVD's) mean that the program can be very easily adapted and introduced into any community organisation, at little or no cost.

How did the project improve community safety, and what future benefits are expected?

Within Surf Life Saving each State has had its share of issues with respect to paedophilia. SA had disgraced magistrate Peter Liddy, and this program was developed as a direct result of that. However, it does also address how to recognise indicators for all forms of child abuse and by being alert and understanding what we should be looking for, we are already balancing the scales more in our favour and away from child abuse in all of its forms.

This cancerous activity is not just restricted to surf lifesaving and this program aims to extend the program into the wider community for the safety of EVERYONE.

The aim of the program:

- If we can begin to understand the various traits of paedophiles, then we have taken the first step to placing barriers in front of them and as a consequence of that we can start to have an impact on their activities.
- The adults within our organisation are armed them with the information to enable them to make educated decisions about recognising behaviours.
- We tell people what a paedophile is because very few know that it is a medical condition.
- We then venture into the type of children usually targeted by a paedophile and their differing modus operandi.
- We look at the effects on victims and the reasons why they are reluctant to report the abuse.
- We also talk about why people who actually see these indicators sometimes do not report what they have seen.
- And we offer simple ways in which parents, coaches, instructors and others can protect themselves from false allegations.

To what degree does it represent best practice and how is it leading the way?

I reiterate that this was a pilot program initiated by two surf lifesavers, who were also members of the SA Police STAR Operations Group. As far as we are aware there is no comparative program anywhere in Australia. The benefits to individuals are:

For surf lifesavers

It offers an extension to the valuable community service they already provide (viz beach patrols, all patrols being safety houses and now Nipper Safe).

For coaches / instructors

It provides them with information which guides them on what is considered appropriate/inappropriate action.

For parents

They have the comfort in the knowledge that their "nippers" are being trained / coached in the best and safest environment that SLSSA can possibly offer.

For everyone

The self satisfaction in knowing that that if they stay alert and report what they see, then they can start to protect children from all forms of child abuse.

For the community

Reducing crime and the fear of crime.

For the paedophile

The knowledge that the circle is tightening and that more people are being educated in how to recognise their behaviours – and more importantly – that they can do something about it.

For SLSSA in particular, its success can be measured by:

- The increase in the number of reports on child abuse reported to CYFS.
- The confidence demonstrated by our members in approaching people on the beach regarding taking photographs of nippers, etc.
- Clubs making their shower facilities "nippers only" during certain times (e.g. 3-4 on a Saturday afternoon).
- An increase in the number of members undertaking Police screening.
- An average of 50 members a year being trained as Club Reporting Officers.

The beauty of the program is that within a very short time the project becomes entirely the responsibility of the organisation offering it and does not impact on the resources of those organisations who assist in its establishment.

How innovative is the project?

There is no comparison program anywhere that we are aware of. This has been a pilot program initiated by surf life saving and developed by collaboration with the South Australia Police.

It has greatly raised the awareness of the issue within the surf lifesaving ranks, but also with outside organisations. We have presented it at many schools and other recreational and sporting organisations.

All Clubs are fully aware of the program and are running it out to all of their members prior to the commencement of each nipper season. This means that we have an extra 5300 people with the potential to recognise child abuse in any form and with the knowledge of how to deal with that information.

In addition, we have a large number of parents (who are not members) also armed with the same advice.

Since the program was reported in the media SLSSA has been swamped by enquiries from community organisations about how they can implement it into their organisations. It is for this reason that SLSSA handed it over to the SAPOL Community Programs Support Branch.

SLSSA has never sought any recompense for the thousands of dollars spent in developing the program because we see it as benefit to the entire community and not a fund raising exercise.

How effectively and efficiently was it implemented?

The program was implemented very easily. The Nipper Safe program consists of 4 phases which range from awareness through to training.

- Phase One - was a DVD presentation aimed at providing members with enough of an awareness to realise that they can make a difference and as a result, fuel their desire to complete Phase 2.
- Phase Two - is where we organised the conduct of accredited mandated notification reporting training. (Currently all recreation and sporting groups in SA are now mandated reporters).
- Phase Three - Clubs appointed their Club Reporting Officers, who must have completed Phase 2 (or be accredited through their own work environment).
- Phase Four - the Club Reporting Officers then undertook further training including their role and obligations, storing of the reporting book, confidentiality, privacy, personal impacts and so on.
- Phase Five - the program is up and running.

There are no negatives with this program. It will continue to expand. More people will be informed

and become observant. Because of its simple adaptability to any organisation, its value is immeasurable.

However, just presenting Phase One to too many organisations has raised awareness and consciousness of paedophilia and how easy it is for them to do something about it.

What recognition has the program received?

The program has received major recognition from outside sources such as:

March 2005

The two surf lifesavers who initiated the idea received a National Innovation Award from SLSSA

September 2005

The program received a Special Commendation in the Australian Safer Communities Awards

2006

It received a Certificate of Merit from the Australian Heads of Government Crime and Violence Prevention Awards

June 2006

It won the Minister for Recreation and Sport's Safety Initiative Award

June 2006

The two surf lifesavers who initiated the idea won the Minister for Recreation and Sport's Award for Outstanding Contribution to the Industry

PRESENTATION PAPER

Context

Whilst Surf Life Saving in Australia is an emergency service, it is also an organisation that provides for surf sports, community education, and youth development. Within a membership of 130,000 members across Australia, over half are under the age of 18 years. Surf Life Saving Australia has more junior surf lifesavers under the age of 14 years in training (47,000), than it has front line surf lifesavers patrolling Australia's beaches (37,000).

As the State Centre responsible for Surf Life Saving in South Australia, Surf Life Saving South Australia (SLSSA) has the responsibility for the safety and well-being of surf lifesavers within that state. A significant responsibility rests with SLSSA in its duty of care for its junior surf lifesavers ('Nippers').

Purpose of the initiative

Nipper Safe is a Member Protection Strategy developed by collaboration between Surf Life Saving South Australia Inc (SLSSA) and the South Australia Police (SAPOL) with support from Children Family and Youth Services (CYFS), the Sexual Offender Treatment and Assessment Program and the Office for Recreation and Sport. It has a very simple objective:

TO REINFORCE SURF LIFE SAVING NIPPERS AS A SAFE AND POSITIVE ENVIRONMENT FOR CHILDREN TO LEARN AND DEVELOP.

How it came about

Many of you would not be aware of the Peter Liddy issue that arose in South Australia, Peter was a senior magistrate who was convicted of child abuse and who belong to a Surf Life Saving Club in SA. As a result of his court case many of our members were asked by people they knew about whether they thought nippers was a safe thing for their kids to do. This question was asked of two of our members, who also happen to be Police Officers, namely Damien Eichner and Lucas Stubing, who thought this was a terrible indictment from surf lifesaving's point of view. As General Manager of SLSSA I shared that view so the three of us set about doing something to address it.... and the Nipper Safe concept was born.

We three spent months getting a concept presentation together and it was introduced to surf lifesaving in 2003 and it was immediately recognised that this provided another dimension to our current Member Protection policies.

Early on in the collaboration SLSSA was fortunate to access two Officers from the Paedophile Task Force in Detective Senior Sergeant Paul Lewandowski and Senior Constable Allan Dalglish (again, both volunteer surf lifesavers). This brought our team number to five, and this group developed the final product, which was launched by the Governor of SA in November 2004.

Overview of Nipper Safe

Within Surf Lifesaving each State has had its share of issues. South Australia had disgraced magistrate Peter Liddy, and NIPPER SAFE was developed as a direct result of that experience. The entire program is an innovation that is about educating members to recognise certain behaviours. Education is the key to reducing the risks paedophiles present to children in our community and within our organisation.

- If our members can begin to understand the various traits of paedophiles, then we have taken the first step to placing barriers in front of the paedophiles and as a consequence of that we can start to have an impact on their activities.

- The adults within SLSSA are armed with the information to enable them to make educated decisions about recognising certain behaviours.
- The program tells people what a paedophile is because very few know that it is a medical condition.
- It ventures into the type of children usually targeted by a paedophile and the differing modus operandi of these perpetrators.
- It takes a look at the effects on victims and the reasons why they are reluctant to report the abuse.
- It talks about why people who actually see these indicators sometimes do not report what they have seen.
- And it offers simple ways in which parents, coaches, instructors and others can protect themselves from false allegations.

Innovative Practice

This was a pilot program and as far as SLSSA is aware there is no comparative program elsewhere in Australia. The program has become one of the most highly awarded child protection programs in Australia and has achieved major recognition from sources such as:

March 2005

National Innovation Award from SLSA

September 2005

Special Commendation in the Australian Safer Communities Awards

November 2005

Certificate of Merit from the Australian Heads of Government Crime and Violence Prevention Awards

June 2006

South Australian Minister for Recreation and Sport's Safety Initiative Award, South Australian Minister for Recreation and Sport's Award for Outstanding Contribution to the Industry

Does it represent best practice and is it leading the way?

Nipper Safe provides benefits to individuals, organisations and the general community. Those benefits include:

For surf lifesavers

It offers an extension to the valuable community service they already provide (viz beach patrols, all patrols being safety houses and now Nipper Safe).

For coaches / instructors

It provides them with information which guides them on what is considered appropriate/inappropriate action.

For parents

They have the comfort in knowing that their “nippers” are being trained / coached in the best and safest environment that SLSSA can possibly offer.

For everyone

The self satisfaction in knowing that that if they stay alert and report what they see, then they can start to protect children from all forms of child abuse.

For the community

Reducing crime and the fear of crime.

For the paedophile

The knowledge that the circle is tightening and that more people are being educated in how to recognise their behaviours, and more importantly, that they can do something about it.

Scope for other organisations to implement a similar approach?

SAPOL, through Chief Inspector Bill Prior of the SA Police Community Programs Support Branch intends to take the project on with the view to rolling it out to the wider community (including all sporting and recreational organisations).

Because of the differing legislations within States (and countries) the program needs to be tailored to suit, but this is a simple process. For those organisations that do not wish to introduce the complete program then just introducing the DVD to its membership can have enormous impact.

Success within SA

This program was not fully implemented until the first day of the SLSSA 2004/05 patrolling season, however there have been major results since then.

- All age groups managers sit through the educational CD prior to undertaking any activities on the beach.
- The number of new people undertaking the course each year (approx 30 each year).
- The increase in the number of reports on child abuse reported to CYFS (not quantifiable but feedback prior to NIPPER SAFE was zero).
- The confidence demonstrated by SLSSA members in approaching people on the beach regarding taking photographs of nippers, etc.
- Clubs making their shower facilities “nippers only” during certain times (e.g. 3-4 on a Saturday afternoon).
- An increase in the number of members undertaking Police screening (approx 150 each year).

Without any shadow of a doubt, the project will see many more of the surf lifesaving fraternity become trained as mandated notifiers, which can only assist other organisations such as CYFS and SAPOL. As the program gets deeper and deeper into the community, and people become much more aware of what is happening around them, we can start to balance the scales in our favour, and away from the paedophiles, and we can start to restrict the areas in which these predators can freely operate. The only people who will not benefit out of this program are the paedophiles themselves, and even if it were to save only one child, then it has been well worth the time, effort and money spent on its development.

There are no negatives with this program. It will continue to expand. More people will be informed and become observant. Because of its simple adaptability to any organisation, its value is immeasurable.

Sharing Nipper Safe

Surf lifesaving has been inundated with requests for the program and as a result SLSSA has copied the entire Phase 1 presentation on to a DVD so that it can be used by any organisation, recreational body, or school to adapt and implement. There is a small fee to cover the costs of the DVD's. This is a community service offered by SLSSA.

SLSSA has received no recompense for the thousands of dollars spent in developing the program because of the benefit to the entire community.

CONCLUSION

As a conclusion we should take a statement from the Child Abuse Report Line leaflet

“Children are powerless to protect themselves from abuse and will only be protected from abuse and neglect if responsible adults take action on their behalf”.

Surf lifesaving has recognised the need for some action and that is Nipper Safe.

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Over 85% of Australians live near the coast and our tourist beaches alone receive an estimated 55 million visitations every year.

PRESENTATIONS:

BEACH SAFETY **HIGH RISK LOCATIONS**

COASTAL RISK MANAGEMENT COASTSAFE:

THE NATIONAL COASTAL SAFETY MANAGEMENT SERVICE

NORM FARMER ESM MRMIA

National Manager Coastal Safety Services, Surf Life Saving Australia

ABSTRACT

Over 85% of Australians live near the coast and our tourist beaches alone receive an estimated 55 million visitations every year. The vast coastline of Australia covers more than 35,877kms and when all islands are included the length increases to 59,736kms (Source: Geoscience Australia). The coastal beaches while a magnet for living and visiting also brings with it inherent, and up until now, unpredictable risk. In the past 100 years Surf Life Saving Australian (SLSA) has saved over 530,000 lives at our beaches and continues to rescue more than 11,000 people every year. Tragically, each year more than 80 lives are lost and many thousands of people suffer injuries – from minor incidents to serious trauma and permanent disability in accidents relating to our coast.

Of the 11,748 beaches identified by the Australian Beach Safety and Management Program (ABSAMP), only approximately 335 or 3% have a lifesaving service that is provided by the lifesaving clubs affiliated with SLSA and patrolled by lifeguard services provided by SLSA and local governments across Australia.

For SLSA, coastal safety and risk management is a core responsibility and activity.

In 2005, and to address Recommendations 13 and 19 of the National Water Safety Plan 2004-2007, SLSA developed CoastSafe. Australian CoastSafe brought together what was then the three key components of SLSA activity in coastal safety management; ABSAMP, Australian Coastal Public Safety Guidelines, and coastal risk assessments. In the past three years these three programmes have been enhanced to become integral to addressing increased risks associated with use of the coast, beaches and waterways.

CoastSafe is now the intelligence and strategic national coastal safety management service of SLSA which gathers data on all beaches around Australia and establishes systems, and programmes to deliver a safer aquatic environment. It is a vital vehicle to support beach safety for lifesavers and lifeguards but even more practically, offers benefits to all

levels of government, coastal management agencies and groups, private developers and tourism to reduce the risk of injury or death and protect the reputation of Australia's coastal lifestyle and the significant economic value this brings to our nation.

The coastal zone and its beaches provide a vast array of passive and active recreational opportunities. Australians value the coast as a high quality of life experience, whether it is for the short or long term. The quality of life is directly proportional to the level of safety; both perceived and real.

SLSA is firmly focussed on the saving of lives and reduction of injury along the entire coastline of Australia through cooperation and collaboration.

PRESENTATION PAPER

Background

Over 85%¹ of Australians live near the coast, and our tourist beaches alone receive an estimated 55 million visitations every year. The vast coastline of Australia covers more than 35,877kms and when all islands are included the length increases to 59,736kms². The coastal beaches while a magnet for living and visiting also brings with it inherent, and up until now, unpredictable risk.

In the past 100 years Surf Life Saving Australia (SLSA) has saved over 530,000 lives at Australia's beaches and continues to rescue more than 11,000 people every year³. Tragically, each year more than 80⁴ lives are lost and many hundreds of people suffer injuries – from minor incidents to serious trauma and permanent disability in accidents relating to our coast.

Of the 11,748 beaches now identified by the Australian Beach Safety and Management Program (ABSAMP), only approximately 3% (350) have a lifesaving service provided by the lifesaving clubs affiliated with SLSA and patrolled by lifeguard services provided by SLSA and local governments across Australia.

In the 1970s, SLSA realised that it needed to do more to protect human life along Australia's coastline. As a consequence there has been the development of a range of lifesaving support services such as rescue helicopters, jet rescue boats, off-shore rescue boats and more recently rescue water craft (PWCs). However despite these lifesaving and support services, people continue to drown along Australia's coastline and outside the traditional lifesaver patrolled areas and the red and yellow flags.

In the mid 1990s, and shortly before the formation of the Australian Water Safety Council in 1998⁵,

SLSA adopted the principles of risk management and created an aquatic safety and risk assessment tool which at the time was largely based on safety signage. The risk assessments were adopted in a random manner, in particular by those coastal managers who were leaders in their field or by those responsible for the coast and who were under pressure from increasing insurance premiums and needed to do something.

In 2005, and to address Recommendations 13 and 19 of the National Water Safety Plan 2004-2007⁶, SLSA developed an initiative called Australian CoastSafe.

Australian CoastSafe has brought together what were then the three key components of SLSA activity in coastal safety management; Australian Beach Safety and Management Program – ABSAMP, Australian Coastal Public Safety Guidelines, and coastal risk assessments.

In the past three years these three programs have been enhanced and improved to become integral to addressing increased risks associated with use of the coast, beaches and waterways.

For SLSA, coastal safety and risk management is a core responsibility and activity.

Methods

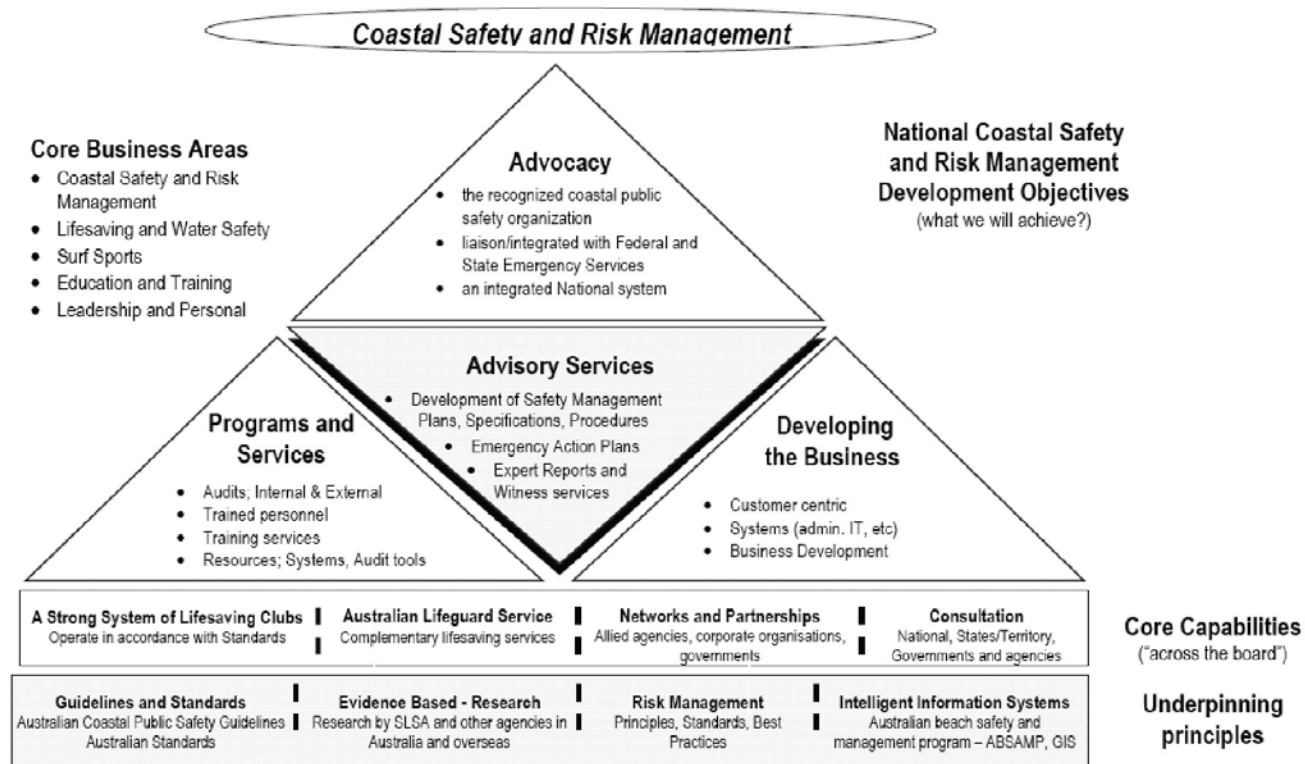
The National Water Safety Plan 2004–2007, suggested that “to ensure the safety of people who visit these locations (aquatic locations), a range of strategies is required”. Further, “this plan provides the basis for managing risk at aquatic locations through a range of standards, legislation and management strategies and through the provision of surveillance and rescue services”. SLSA adopted a number of the Plans' recommendations, in particular recommendations 13 and 19.

Recommendation 13 stated “that the Surf Life Saving Australia (SLSA) Aquatic Risk and Safety Auditing incorporating the Australian Beach Safety and Management program provide safety standards and best practice for all surf beach locations and environments. Further, recommendation 19 stated “that risk and safety audits be conducted and Risk Management Plans be prepared and implemented at all regularly used aquatic locations; beaches, pools, inland swimming holes.

In response to these recommendations, SLSA re-focused attention on developing a holistic view to coastal safety and risk management, and in 2005 adopted a strategic position on the broader coastal safety. The following diagram represents the general strategic position of SLSA in coastal safety and risk management.

Fig1. SLSA Strategy for Coastal Safety and Risk Management

SLSA Strategic Overview of Coastal Safety and Risk Management



Discussion

SLSA has determined that the only way we can truly make a difference in coastal safety and risk management is to take a holistic view underpinned by risk management principles, an evidence based approach, developing and referencing guidelines and standards and the introduction of intelligent information systems.

Guidelines and Standards: SLSA has been using and referencing the Australian Standard on Risk Management AS/NZS 4360 since its first release in 1996. SLSA through its personnel have also provided feedback on the development of the new International Standard ISO31000. The SLSA Aquatic Safety and Risk Assessment tool developed in the late 1990s and since reviewed has been used effectively in all States and Territories across Australia; most recently in Western Australia, Northern New South Wales and the Darwin Waterfront development in the Northern Territory.

The development and referencing applicable guidelines, standards and regulations is vital in coastal safety and risk management. As such SLSA references the growing range of available information such as Australian and International Standards, and guidelines such as the National Aquatic and Recreational Signage Style Guide and the Australian Coastal Public Safety Guidelines.

Risk Management: SLSA has been providing coastal risk assessments across Australia for more than 10 years and in that time more than 200 risk assessments have been completed on coastal beaches, in estuaries, on tropical islands and along coastal trails. More recently, SLSA has completed an extensive review into its risk assessment resources, tools and training to ensure it reflects current best practice and new standards. The review has been conducted as a tripartite arrangement including Surf Life Saving New Zealand and the Royal National Lifeboat Institution, UK. The enhanced aquatic safety and risk assessment program now includes a range of inputs in determining the risk of a particular beach or coastal area. These inputs include:

- Population
- Visitations
- At risk groups; e.g. new arrivals, tourists
- Beach hazard ratings
- Human activity and interaction
- Coastal access
- Incidents
- Hazards and risks

Further, the training of risk assessors is being enhanced to ensure it meets Australian and International standards such as RABQSA.

A new Lifesaving Service Calculator (LSC), which analyses a range of beach information inputs and recommends the level of surveillance and response services required on a given beach, provides an objective assessment of the lifesaving service needs whether provided by SLSA lifesavers or lifeguards, or those provided by local government authorities. The LSC outputs include the number of trained lifesavers and supporting equipment needed along with the days and times during which they should be available.

Evidence Based: Since 2000, SLSA has been progressively enhancing its research capabilities to ensure, wherever possible, its programs and activities are underpinned by an evidence based practice. For example, the 2007 Coastal Safety Report was developed after an extensive review of available data from a range of sources. Further, SLSA has partnered with the University of New South Wales in research collaboration on the Science of the Surf which will provide evidence on how best to get the message of Surf and Rip safety across to the populations who are unfamiliar with hazards of coastal waters.

The use of intelligent information systems is vital in this 21st century to process the volumes of information and data necessary to provide important evidence to underpin water safety awareness, education and training programs, activities and services. ABSAMP is one example with extensive information and data on every beach in Australia collected over the past 20 years. The data and images are now in an SQL based database that enables interconnectivity with a range of information technology media such as the internet and Geospatial/Geographic Information Systems (GIS).

As an example, SLSA is using ABSAMP in its work with the Department of Climate Change in their National Vulnerability (to climate change) Assessment of the Australian coast and priority coastal systems, and the University of Tasmania through its School of Geography and Environmental Studies (Spatial Science) for the Smartline⁷ mapping within the National Shoreline Geomorphic and Stability Mapping Project. The 'Smartline' is a nationally-consistent coastal GIS map in the form of a segmented line. Each line segment includes multiple attribute fields that describe important aspects of the geomorphology of the coast. This data enables an assessment of the sensitivity of the coast to the potential impacts of climate change and sea level rise.

The SQL database technology is also allowing SLSA information integration with a range of client software applications such as GIS that will enable local government authorities, for example, to import

to and manipulate the information in their mapping and work flow management tools. In this instance, the output of the risk assessments that may have identified facilities for repair (e.g. beach access steps or vandalised signs) or new installations (e.g. warning, prohibition and/or information signs) can be imported into the land manager's GIS system pinpointing on the map where the work needs to be done as well as loading the job activity into the work flow management tool that estimates the time and materials needed and when the job should be completed.

Collaboration

SLSA recognises the importance of collaborating with those organisations, government departments and agencies involved in and/or responsible for coastal management and safety. In addition to those mentioned previously, SLSA is collaborating with Coastalwatch in a range of technological solutions to beach and water condition monitoring and forecasting to provide lifesaving services across Australia with valuable tools through which to provide an enhanced service.

Coastalwatch⁸ have developed a range of enhanced technologies that will assist beach management. These technologies (CoastalCOMS modules), which are underpinned by camera vision that is captured from a network of shore-mounted video cameras, typically mounted on surf clubs, lifeguard towers and harbour entrances, include wave height, beach usage (people counting), beach state monitoring and beach risk indices.

Conclusion

Australian CoastSafe is the intelligence and strategic national coastal safety management service of SLSA which gathers data on all beaches around Australia and establishes systems, and programmes to deliver a safer aquatic environment. It is a vital vehicle to support beach safety for lifesavers and lifeguards but even more practically, offers benefits to all levels of government, coastal management agencies and groups, private developers and tourism to reduce the risk of injury or death and protect the reputation of Australia's coastal lifestyle and the significant economic value this brings to our nation.

The coastal zone and its beaches provide a vast array of passive and active recreational opportunities. Australians value the coast as a high quality of life experience, whether it is for the short or long term. The quality of life is directly proportional to the level of safety; both perceived and real.

SLSA is firmly focussed on the saving of lives and reduction of injury along the entire coastline of Australia through use of an integrated approach, and through cooperation and collaboration.

References

1. 1301.0 – Year Book Australia 2004, Australian Bureau of Statistics
2. Geoscience Australia at <http://www.ga.gov.au/education/facts/dimensions/coastlin.htm>
3. Surf Life Saving in Australia saving lives in the water for more than 100 years – A Service Profile, 2007, pp12
4. National Coastal Safety Report 2007, Surf Life Saving Australia
5. National Water Safety Plan, Australian Water Safety Council, July 1998
6. National Water Safety Plan 2004 – 2007: Continuing cooperation and commitment in the fight against drowning, Australian Water Safety Council, August 2004, pp42
7. Smartline Mapping at www.ozcoasts.org.au
8. Coastalwatch at www.coastalwatch.com and CoastalCOMS at www.coastalcoms.com

DELIVERY OF COASTAL PUBLIC SAFETY IN NEW ZEALAND

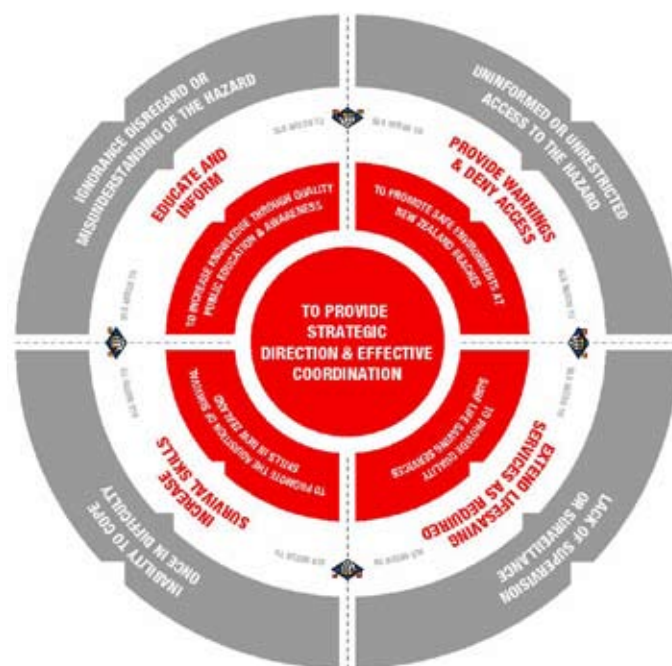
A centralised and aligned approach within a multi-tiered volunteer organisational structure

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Above: Graphical representation of the Surf Life Saving New Zealand National Lifesaving Plan (NLP)

ABSTRACT / PRESENTATION PAPER

Background

In 2004 Surf Life Saving New Zealand (SLSNZ) identified the need to approach drowning prevention strategically, centrally, and make decisions based on fact/evidence.

SLSNZ developed a National lifesaving Plan 2005-2010 which focussed on strategies to target each of the four causes of drowning:

1. Ignorance, disregard or misjudgment of the hazard.
2. Uninformed or unrestricted access to the hazard.
3. Lack of supervision or surveillance.
4. An inability to cope once in difficulty.

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Therefore, to reduce drowning, we have identified strategies to address all four factors (above) which include:

1. Education and information
2. Denial of access and or provision of warnings
3. Provision of supervision, and
4. Acquisition of survival skills.

SLSNZ's NLP is about strategically, centrally and proactively targeting people, communities and/or environments at risk to public safety and make effective decisions about which control measures to put in place to mitigate identified risks.

This project is now at an implementation phase and SLSNZ has developed a different approach in order to achieve a holistic approach to drowning/injury prevention.

Methodology

SLSNZ has led this initiative centrally which has ensured it has maintained systematic 'top down' progress. SLSNZ has in place a national lifesaving strategy based on the internationally accepted causes of drowning or 'drowning chain'.

Each of SLSNZ's nine district associations has a lifesaving committee responsible for local decision making. For the outcomes of this project to be effectively implemented and consistent across the country, SLSNZ needed to develop a long-term consultative process and engagement with each committee – yet still maintain a centralised, consistent approach nationally.

The implementation of the NLP can be expressed as a series of steps:

Step One: Initial consultation

Initial meetings with nine district associations – gain buy in to path forward. Surf Life Saving New Zealand staff met with each district manager and their volunteer lifesaving advisory committee's to enhance literacy of the national life saving plan and how SLSNZ proposed to implement the plan. Volunteers and staff provided with a good opportunity to discuss any concerns or ideas that may enhance the implementation process.

Step Two: Splitting the plan in half – left side / right side

At this point, given the process being undertaken to accrue the evidence to make effective decisions, a decision was made to essentially split the plan into a 'right side' and 'left side'. Both sides remain linked by the inside core of the plan – a centralised, aligned and strategic approach.

Left Side: A focus on ignorance, disregard or misjudgment of the hazard and an inability to cope once in difficulty. The evidence needed to make effective decisions in and around provision of education and information and acquisition of survival skills is largely statistical and involves identification of trends in certain communities, ethnicities, genders, age groups as well as other factors.

Right Side: A focus on uninformed or unrestricted access to the hazard and a lack of supervision or surveillance. The evidence needed to make effective decisions in and around denial of access and or provision of warnings along with provision of supervision requires more physical data such as site risk assessments and risk modeling.

Step Three: The Left Side

Public Education Review, stock-take/consultation/statistical risk assessment.

- **Stock-take**
It was important to ascertain and compile all current and historical deliverables. This includes all existing public education programmes, projects and resources – internal and external to SLSNZ. This provided an accurate and current state of play.
- **Consultation**
Other aquatic stakeholders were surveyed and interviewed in order to get a grasp of what types of programmes and initiatives existed, their mechanisms of delivery, how groups were targeted, potential collaboration and examples of best practice. This consultation included all nine (9) Surf Life Saving Districts within New Zealand.
- **Statistical Risk Assessment**
In order to accurately target programmes and initiatives, it was important to analyse both drowning and drowning intervention information. SLSNZ compiled a five (5) year summary of all rescues, first aids and searches performed by Surf Lifeguards and overlaid them with five (5) year summary of all surf beach, flat water beach and rocky foreshore drowning. Analysis was done nationally and regionally and included the following:-
 - i. Location
 - ii. Age
 - iii. Sex
 - iv. Ethnicity
 - v. Activity

In addition, census information was obtained to best determine migration trends to and from coastal areas and international tourist movements and trends within New Zealand.

Step Four: The Right Side

SLSNZ has offered consultancy advice (on a commercial basis) to land managers in New Zealand since 2003. Advice that was provided focussed on how land managers could comply with the NZ Water Safety Signage Standard 8690:2003. While signage is one of a range of control measures available to enhance coastal public safety, a range of other control measures are also relevant.

SLSNZ has worked alongside other key international lifesaving agencies (Surf Life Saving Australia, Royal National Lifeboat Institute UK) looking to develop similar audit and report tools. An audit tool has now been produced to provide objective output information for land managers and SLSNZ's nine districts. The challenge in New Zealand is that land managers do not have a legal obligation to undertake coastal public safety risk management analysis. For this reason, SLSNZ have had to take a different approach to implementation of physical risk assessment. SLSNZ have progressed a non-commercial approach towards risk assessment in order to remain in control of data, coastline prioritisation, alignment and consistency of coastal risk management.

The advantage in pursuing a non-commercial approach is that SLSNZ is able to create a value proposition to land managers around NZ which can then be leveraged off to enhance the uptake of recommendations in a risk assessment as well as enhance working relationships at a local level between land manager and district SLS association across NZ (which traditionally has revolved around funding for paid services, rather than a holistic approach to public safety).

Step Five: Consultation

At this point it was important to go back to SLSNZ's primary stakeholders – the nine district associations, and gain buy in to the path forward as well as highlighting agreement in the path taken thus far. Key agreement was reached on - a) the approach to risk assessment and analysis in both the 'left side' and 'right side' of the NLP and b) the non-commercial, nationally prioritised and consistent philosophy of the data collection and flow down methodology into the local space.

Step Six: Implementing the Decision Making Tools

The outcome of SLSNZ's Coastal Risk Management Programme is expressed in two formats to two target audiences:

1. District Life Saving Plan – encompassing all audited sites across all land management territories within each districts jurisdiction. All nine plans are templated identically in format and in the presentation of data analysis.

2. Territorial Authority (Land Manager) Coastal Public Safety Report - encompassing all audited sites within the territory being assessed.

Data is collected, analysed and provided back to both districts and land managers centrally by SLSNZ staff or contractors. The fact that all data is collected centrally has a significant impact on enhancing consistency of how output control measures are applied in NZ (i.e. where a sign is placed, how a lifeguard service is prescribed, which education programme gets delivered, which piece of public rescue equipment is placed etc).

Step Seven: The Land Manager / Surf Life Saving Partnership

Once both SLS District and Land Manager reports have been developed or populated with data, SLSNZ provide both organisations with the reports. The District SLS Association and the land manager then work together in creating a 3/5/10 year work plan to enhance public safety in that area. This may involve targeting key 'at risk' sites that have been identified in the risk assessment or through widespread application of specific control measures such as applying signage to an entire area, rather than just one site.

Step Eight: Monitor and Review

It is critical for the effective implementation of any risk management programme to monitor and review progress. Annual review meetings are established and held (at least) annually between SLS District and Land Manager to discuss each agency's implementation responsibilities. Generally responsibilities are divided into:

SLSNZ/SLS District: Education and Awareness Programmes, Survival Training and Providing Lifeguard HR, Training and Support (both volunteer and paid lifeguards)

Land Manager (TLA): Safety signage, Public Rescue Equipment, Funding of needed Paid Lifeguard Services, bylaws, emergency response alarm systems.

This methodology is intended to implement the national life saving plan based on a 'top down' approach. Through a consistent approach to data collection and risk analysis, all SLS Districts and Land Managers will have much more engaging relationships and work towards enhanced coastal public safety around New Zealand.

Results

A nationally aligned approach has been maintained throughout the project methodology, which should

promote consistent output information at a local level, therefore a consistent approach across NZ towards coastal public safety. This will not be truly measurable for some years as local work plans are implemented.

In the education space, there is an obvious need to target messages nationally, regionally and locally. While there is likely to be a number of generic programmes and initiatives that will cater for all, a number of significant at risk groups were identified that require specific attention. Ultimately, the more initiatives that are required the less cost effective the framework becomes however this is the only approach to ensure education meets the need.

Initial results of SLSNZ's education risk assessment (the 'left side') have highlighted the following need:

- Continue public education for Caucasians population.
- Educate the Asian community around safe practices "in, on and around" beach environments.
- Increase awareness and understanding of Asian and Maori water culture, educational styles and language.
- Target education programmes/campaigns for the male population.
- Consider the 41 to 60 and 61+ age groups for future educational campaigns.
- Educational campaigns and programmes for the under 20 age group to focus on greater self responsibility, good decision making and water skills to reducing the dependence on SLSNZ rescues
- Consideration of initiatives and programmes targeted for the 20 and under age group and families, focusing on safe practices at the beach.
- Investigate circumstances around the drowning of the 60+ age group in relation to water competence, environmental conditions, location and/or personal medical conditions. Discuss the possible influence of these factors in future awareness campaigns.
- Increase public awareness campaigns outside peak seasons to reduce the consistent average of 5.8% of beach drowning between April to October.

Discussion / Conclusion

Since this project started with the development of a national lifesaving plan, implementation steps are continuing positively. The true results, conclusions, and benefits to coastal visitors / tourists, of this strategy will not be known for some time.

A re-developed Risk Audit Tool has been developed and is currently being field tested. The new tool will provide enhanced holistic control measure recommendations to enhance evidence based decision making.

SLSNZ has highlighted a different, non-commercial approach in order to implement risk assessment findings with land managers. This approach has been developed given the legislative framework that exists in New Zealand. Through providing full risk assessment information and findings, SLSNZ will be able to create a value proposition to land managers New Zealand wide. In addition, SLSNZ's approach will have an effect on the duty of care of land managers to implement available control measures to mitigate identified risks to public safety.

A consistent approach to risk assessment and analysis between Australia (SLSA), New Zealand (SLSNZ) and UK (RNLI) is being evolved through the promotion and sharing of good practices and challenging the status quo of the three countries. As a result, opportunities have unfolded for joint projects of mutual benefit in the future.

Throughout implementation, managing volunteer tiers of the organisation remains pivotal to achieve alignment and consistency in local delivery.

Acknowledgements

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GOLD COAST CITY COUNCIL & SUNSHINE COAST REGIONAL COUNCIL

LIFEGUARD SERVICES

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PSM, Chief Lifeguard, Gold Coast City Council

ABSTRACT

This presentation will highlight the responsibility taken on by these Councils over a long period in the interest of beach safety and how the sharing of ideas and techniques at forums such as the Australian Professional Ocean Lifeguard Association national conferences, regular forums held on a regional basis and forums with other agencies has assisted in the delivery of Aquatic Safety programs.

The enormous responsibility that Local Councils accept for management of beaches and relevant local law provisions in relation to liability issues has been accentuated in recent years.

The presentation covers the following:

- A brief history of Council's beach safety commitment across the Gold & Sunshine Coasts.
- Rescue Equipment used.
- Recent statistics.
- Growth over the past fifty years.
- Innovations by Council Lifeguards.
- Training and Standards for Professional Ocean Lifeguards.
- Successful working relationships with Surf Life Saving and other agencies.
- Education Programs.
- Beach Signage.
- Liability issues (Examples).
- Future challenges for beach safety services in this rapidly growing region.

Understanding the role of Local Government in relation to water safety would lead to a better working relationship with all agencies involved.

PRESENTATION PAPER

Introduction/History

Local Government in South East Queensland has a proud record of service to beachgoers. Gold Coast commenced in 1935, Caloundra in 1964, Maroochy Shire in 1967 and Noosa Shire in 1977. Caloundra, Maroochy and Noosa Councils were amalgamated in 2008 to become the Sunshine Coast Regional Council which covers over 70 kilometres of ocean beaches while Gold Coast City cover some 55 kilometres.

This area has some of the most beautiful and popular ocean beaches in the world. However at times, due to prevailing onshore wind and swell direction, beach and surf conditions can be hazardous. The combination of ideal climate conditions, exponential rises in tourist visitations and the explosion of people moving to these areas for a better lifestyle has seen this area grow from small seaside holiday villages to large cities with planning and infrastructure being put in place to cope with continued expansion.

From humble beginnings the services have progressed to a point where the Sunshine Coast Regional Council provides professional lifeguard services at 29 beaches during the busy periods and Gold Coast 42 beaches. These two professional Lifeguard Services employ 250 professional lifeguards. It is undoubtedly the busiest expanse of year round lifeguarded beaches in Australia and the commitment of the local governments on the Gold and Sunshine Coasts is considerable and is indicative of an appreciation of the importance of beach safety to the economy of this region. It is considered that the combination of Council lifeguard beach services and the wonderful efforts of volunteer surf club members patrolling on weekends and public holidays during the summer period offer an overall service that is unmatched in this Country.

Innovation and Development

Training for career lifeguards must be specific, stimulating and include an acceptance and understanding of new technology. In the early days lifeguards were required to perform rescues using the reel, line and belt which was extremely difficult when working in a one man situation where they had to rely on help from the public to complete the rescue. This led on occasion to the rescuer and patient being hauled in so fast that the majority of the journey was spent under water. This was unacceptable and Beach Inspectors/Lifeguards began to experiment with equipment that was better suited to a one man situation and rescue tubes and rescue boards were used with much success. The rescue board has been developed to the present standard and has proven to be most practical for surf rescue. In fact, on the Gold Coast where we have the availability of the most

modern equipment, rescues using rescue boards comprise 70% of all rescues effected by lifeguards.

4WD Beach Vehicles – Council Lifeguard Services use specially designed and equipped 4WD vehicles extensively for emergency response and prevention purposes to cover our long stretches of ocean beaches. Input from experienced staff has ensured the storage and fit out of these vehicles has been customised to enable the most effective response in times of emergency.

Jet Skis/Powered Watercraft (PWC) - Gold Coast City Council first purchased a Jet Ski for use in ocean rescue at Surfers Paradise in 1977. It was used for rescue work and crowd control. However, due to storage and maintenance problems and some impractical aspects of the craft it was decided not to continue its use. Council's have used PWC's for surf rescue since 1993 after lifeguard staff witnessed the successful use of these craft by Hawaiian lifeguards on the North Shore in the early 1990's utilising a rescue sled attached to the craft. This most critical development was pioneered by Hawaiian lifeguards and their willingness to share this technology has led to major advances in the rescue of people from the broken water surf zone and their efforts should always be recognised.

With the success of PWCs with sleds, which we refer to as Lifeguard Power Craft (LPC), for surf rescue at the Gold and Sunshine Coast, and at other New South Wales Council Lifeguard Services, Surf Life Saving Australia (SLSA) requested input from professional lifeguards in their considerations for incorporating this rescue technology. In April 2000 Gold Coast Lifeguard Milton Brunton and Caloundra Lifeguard Superintendent Stuart Cordingley were invited to the National Power Water Craft Facilitators Course conducted by SLSA to instruct their members on the use of these craft.

Education

Council Lifeguard Services across the Gold and Sunshine Coasts view beach safety education as a vital awareness tool and undertake significant and continuous public education campaigns.

Many interactive and passive forms of public education are used and targets include:

- schools;
- addresses at community group meetings;
- safety signage at all beach entrances;
- distribution of educational material to hotels and accommodation units; and
- regular TV and radio 'beach reports' that include the safety message.

On the Gold Coast, given the culturally diverse nature of the city of both residents and visitors much of the signage and printed material is multi-lingual and/or pictographic.

To assist spread the beach safety message, programs have been delivered at the following educational institutions:

- Griffith University;
- Bond University;
- Southern Cross University;
- Central Queensland University;
- QIBA Language College;
- Macintosh College, Palm Beach;
- Browns English College, Southport;
- Kings College Language;
- Gold Coast TAFE;
- GEO's Qld College of Surfers;
- Train Tech 2000;
- Image Education Australia; and
- AICOL Southport.

The service has also created and introduced 'Larry the Lifeguard', a larger-than-life character who assists in public education campaigns as an icon and symbol of beach safety initiatives.

Larry the Lifeguard was Australia's first lifeguard costume character. Introduced by Gold Coast City Council in 2001, this happy, positive, non-threatening character continues to be a huge hit with young children in 2004, the then Caloundra City Council also adopted 'Larry the Lifeguard' into their education programs with equal success.

As the star of the Council's Lifeguard Education Program, Larry spreads the beach safety message at schools and kindergartens throughout South East Queensland. The Council also receives regular requests for the lively Lifeguard to make appearances at events and promotions across the region and with councils throughout Australia now using him to spearhead their own campaigns, he is becoming something of a beach safety celebrity. In the mid 1990's Caloundra City Council also pioneered Australia's first 'Adopt a Lifeguard' program amongst local schools.

Lifeguard Towers

The continued sprawl of residential and tourist development away from traditional patrolled areas saw a spate of serious aquatic incidents when people needed to be rescued after swimming in front of accommodation houses instead of utilising the flagged areas that were some distance away.

This required Council to address the situation, particularly in areas of density and high beach usage by implementing a Tower Plan whereby strategically placed Lifeguard Towers were manned as required by trained lifeguards. The importance of highly trained and experienced staff to assess these areas and advise on staffing requirements cannot be overstated.

The towers have become synonymous with beach safety in South East Queensland due to the unique design. Gold Coast City Council received an award recognising the towers for innovation in Urban Design in 2003. The design is patented, however Council resolved to share the plans with other rescue agencies in the interest of public safety. Clifton Beach Surf Club in Tasmania built a tower five years ago after receiving plans from Council and many NSW Council Lifeguard Services use the Gold Coast Tower design.

Surveillance Cameras/Swell forecast

Councils have introduced the Coastalwatch surveillance/forecasting system to beaches in South East Queensland and this technology is used to support lifeguard systems. It is important to take advantage of the available technology and the swell forecasting network is particularly helpful to warn of imminent changes in weather patterns affecting the local area.

Defibrillators

Defibrillators were introduced by Councils in 1997 and were first used successfully at Mooloolaba by Maroochy Shire lifeguards. Assistance was gained at the time in the implementation of these devices by doctors from the Department of Emergency from Nambour General Hospital. They are such a crucial piece of equipment for use by first responders and are placed strategically at lifeguard stations and vehicles to ensure a speedy response.

Lifeguard Training/Qualifications

Unlike other emergency service professionals such as police, fire and ambulance officer's lifeguards are the first responders and are therefore required to be ready for many different challenges when their training, experience and application of correct procedures are so important. The value of having new staff placed with experienced staff to facilitate learning in lifeguarding should never be underestimated and Council lifeguards have also benefited from having regular training with these other professional agencies.

Professional Lifeguards at entry level must possess relevant qualifications:

- an ocean lifeguard qualification (such as the APOLA Professional Ocean Lifeguard Award Level 1) or surf lifesaving qualification (such as the SLSA Bronze and/or Gold Medallion) or equivalent qualification;
- current Senior First Aid Certificate;
- current Advanced Resuscitation Certificate;
- Defibrillation Certificate;
- manual "C" Class Drivers Licence;
- age 18; and
- Recreational Ship Masters Licence and a Power Craft Licence are also a consideration on the Sunshine Coast.

They also undergo regular rigorous physical training to ensure the required physical fitness and rescue skill competency is met. Gold Coast City Council introduced a specific swim, run, paddle test in 1978 for professional lifeguards utilising the natural ocean course at the southern end of the Gold Coast. The test comprises a 750m ocean swim followed by a 1600m run and finishing with an 800m paddle on a rescue board. The test must be completed within a required timeframe.

Prior to this the testing was restricted to a timed pool swim only. South East Queensland Councils all have similar testing and also include an M shaped course which requires lifeguards to demonstrate skill and endurance whilst negotiating the surf break. These tests usually last for 25-30 minutes duration and are an ideal way to ensure staff are maintaining the required level of skill and fitness. Lifeguards are also required to complete an 800 metre pool swim in a time under 14 minutes. Regular assessments are critical to the maintenance of physical, emergency response and First Aid/Resuscitation competencies. It is important that accurate records are kept and updated. Quality Assurance Audits are also conducted on an annual basis.

Australian Professional Ocean Lifeguard Association Incorporated (APOLA)

APOLA Inc is a non-profit professional association that is recognised as the peak professional association for Australian professional beach inspector ocean lifeguards. It promotes best practice in ocean water safety and beach management and coordinates professional ocean lifeguard activity in lifeguard training, community education, tourism support, public relations, regulation and risk management in consultation with Councils and their professional lifeguard services staff. APOLA membership is predominantly career professional beach inspector ocean lifeguards employed by Coastal Councils.

Typically Council professional ocean lifeguards wear the nationally endorsed workplace uniform for Council Professional Ocean Lifeguards which includes a long sleeve white work shirt with blue collar and cuffs with the word LIFEGUARD in block red on the front and back worn with blue shorts or blue long pant.

APOLA convenes Annual lifeguard conferences and it affords an opportunity for professional lifeguards to exchange ideas and techniques. The great strength of the conference is that it is attended predominantly by practitioners who are vastly experienced in ocean safety and ensures the practical implications of equipment usage are fully tested. It is also a wonderful opportunity for members to gain a better understanding of the unique problems associated with other seaside Councils.

Partnerships and Interaction

The maintenance of good relationships with all agencies is important to our ongoing operations and we have healthy interaction with the following:

Surf Life Saving Qld (SLSQ) – Councils in this area work side by side with our volunteer surf lifesavers and appreciate the incredible commitment by all members to beach safety.

Councils are aware of the value of this wonderful organisation and we meet regularly to discuss matters of mutual interest relating to beach safety. The majority of our lifeguards are members of surf lifesaving clubs and began lifeguard careers after joining surf clubs and doing patrols. It is considered critical in our areas to always ensure this partnership is healthy and open lines of communication must be maintained. Councils also support SLSQ branches in this area financially and in kind.

Other joint initiatives undertaken between Councils in this area and Surf Lifesaving Queensland representatives to enhance beach safety include:

- Quarterly Beach & Water Safety Sub-Committee meetings held on the Sunshine Coast;
- Weekly meetings each Monday morning on the Gold Coast;
- Jointly developed and signed off patrol Service Agreements between local surf clubs and Councils; and
- Close working support service relationships.

Royal Life Saving Society Australia

There are Royal Life Saving Clubs in our areas and they are also dedicated to aquatic safety and receive support from Council.

Other agencies that we work closely with include:

- Queensland Police and Water Police Services;
- Queensland Ambulance Service (QAS);
- Volunteer Marine Rescue (VMR);
- Australian Volunteer Coastguard Association;
- Maritime Safety Queensland (MSQ);
- Emergency Management Queensland (EMQ) Rescue Helicopter; and
- Sunshine Coast Helicopter Rescue Service.

The interaction with all emergency services is positive and ongoing, especially with the Queensland Police Service and the Queensland Ambulance Service who engage in training relating to search and rescue and patient care with our lifeguard staff.

Local Government Local Laws

Council accepts the onerous responsibility of the management/regulation and enforcement of various local laws. Professional lifeguards are recognised as authorised persons to enforce local laws relating to Bathing Reserves. These laws are comprehensive and wide ranging and the objects of this local law are to:

- a) provide for the supervision and regulation of bathing reserves; and
- b) provide for the surveillance of bathing reserves by life-saving patrols; and
- c) regulate conduct in bathing reserves so as to enhance public safety, convenience and amenity and in particular –
- d) enhance public safety and convenience in bathing reserves.

Responsibilities and Future Challenges

The phenomenal growth of South East Queensland and the sheer size of the Gold and Sunshine Coast Council Lifeguard Services has led to these lifeguard services being regarded as the benchmark for professionalism within the industry. We have had to plan and react to keep pace with this growth in the past, however the future will hold increasing challenges.

There are many issues ahead relating to the management of bathing reserves in relation to beach safety education, signage, PWC's (Powered Water Craft), kite surfing, commercial use of beaches, surfing Contests and intrusion on passive recreational usage.

However, by far the most important factor will be the ability of all agencies involved in aquatic safety to work together towards a common goal. The continued commitment of Local Government seaside councils to recognise and address water safety issues is absolutely critical to the successful coordination and delivery of aquatic safety services.

We who live in Australia are blessed to have a society which places a high value on life. Professional lifeguards who attend work at beaches around our beautiful country in their chosen career are certainly privileged to be able to be active in preventing and saving lives – I often ask what career can be more rewarding than having an opportunity to guide and protect people when they come to play at our beaches.

It is heartening to attend a Conference such as this with stakeholders from such diverse areas who are brought together due to their mutual passion for water safety.

By working together anything can be achieved.

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THE RESEARCH, DEVELOPMENT AND IMPLEMENTATION

OF THE UK NATIONAL GUIDELINES AND SPECIFICATIONS FOR COASTAL PUBLIC RESCUE EQUIPMENT

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ABSTRACT

Context

In the UK someone is rescued at a beach every 90 minutes¹. A number of factors link together to form the drowning chain and, using the drowning chain model the Royal National Lifeboat Institution (RNLI) is preventing drownings and water-related accidents by breaking each link in the chain. Priority should always be given to breaking the drowning chain early, through education, safety advice and information, and supervision. However, if appropriate control measures are not in place or fail to break the early links, the last, and only, link left to break is people's inability to cope along with the lack of effective public rescue equipment (PRE).

Project/partners

Previously there were no standards in the UK to assist coastal managers with determining and managing their PRE requirements. Much of the equipment found on UK beaches is probably not fit for purpose and, in some cases, has contributed to further drownings. This is why the RNLI, in consultation with other key water-related bodies, has produced the world's first coastal managers' user guide for PRE, entitled A guide to coastal public rescue equipment.

Working with two UK universities, a robust testing methodology was developed and implemented with trials undertaken in a survival tank and at various coastal environments.

Results and discussion

Over 500 public trials took place to identify the most effective PRE equipment. Research was also conducted on the following aspects of PRE: emergency communications, most suitable PRE

locations, maintenance solutions, auditing tools and frequency of checks, PRE signage, user-instruction information and ways to reduce vandalism and theft.

The 50-page guide, *A guide to coastal public rescue equipment*, was launched in the UK in June 2007. Copies have now been distributed to all UK coastal managers and private beach owners.

Learning outcomes

1. To understand the need for effective PRE around the world to reduce drowning.
2. To learn the PRE testing methodology and research/trials undertaken.
3. To understand what the UK has implemented to reduce drownings through effective PRE use.

PRESENTATION PAPER

Context

With the UK having some of world's most spectacular coastline, it's unsurprising that millions of people enjoy the UK coast every year. However, with an increasing trend for recreational activity on our beaches and inshore waters, UK maritime rescue services have never been so busy helping people in difficulty.

There are over 7,000 miles of coastline in the UK and over 1,100 designated bathing beaches¹. However, only 254 of these are lifeguarded at peak times during the summer season². The UK Government has recently launched the Marine Bill to open up access to the English coastline. There is also a growing increase in the number of people using the coastline for leisure, especially walking, swimming and extreme sports such as surfing, windsurfing, sea kayaking and kitesurfing which will result in more people placing demands on the coastline.

With 63% of the UK's population visiting the coast³ in the UK at least once a year and only 4% of these people considering safety features when selecting a beach to visit⁴, assistance required from the UK maritime emergency services is increasing. In 2006, the Royal National Lifeboat Institution's (RNLI) rescue services (233 lifeboat stations and 62 lifeguard units) were the busiest on record since the RNLI's formation in 1824.

However, with emergency response times varying depending on location, severity of incident and early notification, many situations may require early intervention from the public and lay persons before the professional rescue services arrive.

It is during the period between an incident occurring and the rescue services arriving that public rescue

equipment (PRE) is required and can make the difference between casualty survival and a fatality. The current provision of PRE in the UK is largely inconsistent and based primarily on supplier advice rather than researched guidelines. In certain locations where coastal managers are experienced and have conducted an effective risk assessment, correct PRE practices may be in place. However, locations where managers are only partially responsible for beaches and/or have limited beach management experience may have no PRE provision.

There is currently no legislation or mandatory requirement for PRE on UK beaches. PRE provision is based on duty of care and risk management processes such as risk assessments and historical information.

Over recent years beach operators have been in doubt about the most appropriate PRE to be used at coastal locations and this has led to unsuitable equipment being installed. In many cases this has been identified as a major factor contributing to deaths and injuries.

In 2006, the RNLI identified the need for standard guidance for coastal public rescue equipment in the UK. The main factors that influenced the RNLI's decision to develop a national industry standard and guidance include the number of deaths that could have been prevented through effective PRE management, coastal managers requesting practical guidance, limited international guidance available to adopt in the UK, and current PRE provision being generally ineffective and not fit for purpose.

Project

1. Forming a working group

A PRE working group was formed to ensure that the PRE guidelines were agreed and promoted by all UK organisations involved in water safety and maritime rescue. The RNLI together with ROSPA, RLSS UK, University of Plymouth and University Wales Institute Cardiff undertook several key stages of research to help develop the national guidelines and product specifications.

2. Reviewing existing standards

The University Wales Institute Cardiff conducted a literature review for this project including any existing standards. Information that was found mainly related to ancillary devices such as marine equipment or standards connected to lifesaving appliances. Although the majority of these national, European and international standards are aimed at the shipping industry, appropriate elements have been consulted and incorporated into the new guide. There was, however, very little research identified that related directly to PRE.

3. Definitions of coastal types

In order to develop appropriate PRE for the UK coastal environment it was paramount that equipment was designed and managed to suit the type of environment in which it would be sited at. Each coastal environment has different features and a coastal site may also have more than one type of feature. The four main types identified⁵ were: rocky coasts, beaches, man-made coasts and tidal inlets and estuaries.

a. Rocky coasts

Rocky coasts consist of any coastal environment where rock headlands, rock outcrops on a beach, or cliffs reach the shoreline. They can take on either a steep or a gradual profile depending on the type of rock being eroded and the amount of wave energy acting on it. A section of the coast or beach may fall into this category if at any time it is submerged at high water, thereby allowing the shoreline to interact with the cliff face creating a sheer drop into the water.

b. Beaches

A beach is a wave-deposited accumulation of sediment and can exist on any shoreline exposed to waves where there is sufficient sediment supply. A beach is often defined as lying between the point at which the waves first move sediment on the seabed (this can be to a depth greater than 10m on high energy beaches) to the upper limit of the shoreline that would reach its maximum height during a spring tide (this height is increased by more than 1m in the UK during storm conditions).

The critical parameter for a PRE assessment is the presence of a steep beach profile within any section of the inter-tidal zone (the area of the beach that is submerged by the tide during some point within the tidal cycle).

A steep section of beach is defined as being any part of the inter-tidal zone that possesses a slope of 1:12 or steeper. This slope resembles the steepness that will result in a person of average height being out of their depth within 25m of the shoreline.

Extreme storm sea levels must be taken into account (possibly researching historical storm sea levels) as the level of spring high water can increase by more than 1m in certain areas during severe storms.

For the purpose of a PRE risk assessment, the beach environment is broken down into three distinct categories:

- i. reflective steep beach (steeply shelving)
- ii. reflective/intermediate beach containing steep section(s) (medium shelving)
- iii. intermediate/dissipative beach with no steep sections (shallow shelving)

c. Man-made coasts

Man-made coasts consist of any coastal environment where man-made structures are present at the shoreline and occupy a position within the inter-tidal zone. This may occur in combination with any of the other coastal environments described. Common coastal man-made structures are: harbour walls, sea walls, breakwaters, jetties, groynes and piers.

The critical parameter for determining if PRE is required is the presence of a steep slope within all or any section of the inter-tidal zone (the area of the beach that is submerged by the tide during some point with the tidal cycle). In the case of many man-made coastal structures, a near vertical drop into the water is present. It is important to remember that extreme storm sea levels must be taken into account in this environment.

d. Tidal inlets and estuaries

Tidal inlets and estuaries can be found along many sections of the UK coast. They vary in scale from small streams to large estuaries and tidal inlets more than 1km wide. Both tidal inlets and estuaries can occur in the same environment. For the purpose of a PRE risk assessment both represent similar hazards. There are two key hazards presented by this coastal environment:

- The presence of an inter-tidal slope greater than 1:12.
This will result in a person of average height being out of their depth within 25m of the shoreline.
- Fast moving water.
This can cause water users to lose their footing and transport them to deeper water; currents can transport the water user faster than the user can swim.

These environments are highly dynamic and currents can be controlled both by tidal movement and freshwater output of rivers, meaning hazards can vary vastly throughout the year.

4. Testing methodology and trials

Testing methodology was developed in order to measure the effectiveness of the PRE items tested. The methodology was designed both for the rescuer and the casualty as well as general health and safety concerns. The trials comprised of five stages:

- health and safety requirements
- survival tank tests
- tests using lifeguards (the rescuers) at three UK coastal locations
- tests using members of the public (the casualties) at six UK coastal locations (500 samples)
- manufacturing ability tests.

Over 40 items of PRE equipment from across the world were tested during a 2-year trials programme. Items included throw bags, life rings, frisbee devices, throwable lifejackets and gas-propelled lines. Each PRE item was tested against certain criteria and measured against its performance. Various questions were also answered during the trial stages.

Results

5. Findings

Forty-one items of PRE were tested. During each stage of testing a device specification was developed and items that did not meet the specification were then removed from the tests. The stringent tests carried out during the research stages revealed the following key conclusions:

- PRE that requires the rescuer to enter the water to reach a casualty should not be used, for example a personal flotation device with a line attached.
- PRE should have inherent buoyancy to support an adult casualty whilst in the water.
- PRE device should be retrievable once deployed and then reusable.
- the line should float and have a breaking strain of no less than 0.5 tonne.
- the line should be no longer than 25m plus any additional drop to the water.
- the PRE should be of a weight that is not overly affected by wind conditions and should not present a danger to the casualty.
- minimum instructions should be presented in order, to reduce confusion and deployment time.
- PRE is not a suitable control measure for some types of shallow shelving beaches.

Of the 41 items of PRE tested only 16 met the health and safety requirements. Of these 16, only 11 passed the survival tank tests. Only 5 of these 11 items passed the tests carried out by lifeguards and of these final 5 items of PRE, only 2–3 items met both the manufacturing ability tests and those carried out by members of the public. These final items proved to be the most effective types of PRE for different types of coastal environment.

The three types of PRE suggested for general public use are: a throw line with flotation, a small to medium sized life ring and a large-sized life ring. Each specific type of PRE is suited to a particular type of coastal environment. Detailed specifications were developed for the three types of PRE recommended; there were no products available on the market that met the specifications. However, PRE manufacturers are now developing their product ranges to meet the new PRE specifications.

Discussion

The research programme carried out indicated the key types of PRE required. If used effectively the PRE can reduce the chances of drowning through third party assistance but PRE provision on its own does not prevent incidents occurring.

PRE provision should only be considered in conjunction with a full coastal risk assessment and should form part of a strategy to prevent accidents and fatalities. Managing risk in the coastal environment requires the systematic application of management policies, procedures and practices to the tasks of identifying, analysing, treating and monitoring risk. PRE is only one of several control measures; risk assessment must take a holistic approach when determining the most effective actions and control measures to implement. Other control measures that can reduce risk and the likelihood of incident include education, signage, lifesaving facilities and zoning.

PRE is not a suitable control measure for all types of coastal environments. Many shallow shelving beaches, especially those with large tidal ranges, are often unsuitable for PRE devices.

Emergency communication devices should also be considered at coastal locations as the reliance of mobile phone reception (coverage and reliability) is not always guaranteed. Emergency communications should not replace general PRE but should supplement if where necessary. Having devices such as emergency telephones allows the emergency services to pinpoint incident locations, speeding up the search and rescue call out times.

6. Compiling and launching a national guide

The completion of the in-depth research programme has led to the compilation by the RNLI of A guide to coastal public rescue equipment. This is a national set of guidelines in the form of a 50-page guide and is the first of its kind, not only in the UK but worldwide. The guide contains information about the research and provides the six key steps to carrying out a risk assessment and determining the most effective PRE control measures at various coastal locations:

1. Understand coastal environments.
2. Understand risk management and carry out a risk assessment.
3. Select appropriate PRE.
4. Select emergency communications.
5. Locate PRE and emergency communications.
6. Consider information signs, user information, housing, maintenance and advice on reducing vandalism.

The guide has been distributed to all coastal managers in the UK with the aim of implementation over the next few years as PRE is replaced or readdressed through risk assessment. Coastal managers will be able to make better-informed decisions about their PRE requirements that result from a risk assessment.

With credible and robust research, this guide is in a position to set a world benchmark for coastal public rescue equipment. The benefits of standardising types of PRE are immeasurable but one thing is certain: UK beaches will become safer as more operators adopt these standard measures.

References

1. RNLI/National Beach Safety Council (2006)
2. Marine Conservation Society (2007)
3. Marine Conservation Society (2007)
4. RNLI/Ipsos MORI research (2006)
5. Tim Scott, University of Plymouth (2007)

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PRESENTATIONS:

RURAL/REMOTE HIGH RISK LOCATIONS

SWIM FOR LIFE NAUIYU – AQUATIC RECREATION PROJECT

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ABSTRACT

Background/Introduction

The Swim for Life - Naiyu Aquatic Recreation Project was developed and implemented in consultation with the people of Naiyu Nambiyu, a community on the banks of the Daly River in the Northern Territory. Swim for Life aims to increase physical activity and recreation among community members through use of the community swimming pool. The project is implemented with the support of the Australian Government Department of Health and Ageing Building Healthy Communities Initiative.

Methods

A community driven development model is being implemented using a locally appointed project officer and the formation of a community recreation committee. This two year project focused on achieving key outcomes across community engagement and communication, programs and events, and training and employment.

Results/Evaluation

Key results include:

- Significant increase in community participation in pool management decisions.
- Increased access and program provision at the swimming pool.
- Reductions of over 60% in some ear, nose and throat infections.
- Measurable positive impacts on employment among young aboriginal workers in sport and recreation, and health.
- Significant increase in swimming and water safety skills among school aged children.
- The project was awarded an Australian Day 2007 Award for best community project.



The Swim for Life program provides a model for successful community driven management of a remote indigenous swimming pool.

Discussion

This presentation explores the community development model being used by Royal Life Saving in Nauiyu. This model has turned the swimming pool into a venue for the promotion of a wide range of health issues, leadership development, youth diversion and building relationships across community members and support agencies. The project is driven by local community members, in a support system provided by Royal Life Saving at a branch and national level.

Conclusion

The Swim for Life program provides a model for successful community driven management of a remote indigenous swimming pool.

Acknowledgements

Australian Government Department of Health and Ageing

Royal Life Saving - NT Branch

PRESENTATION PAPER

Background

The remote community of Nauiyu Nambiyu is located on the banks of the Daly River in the north-west of the Northern Territory. Nauiyu has a population of 500, including 475 Indigenous people.

During discussions with representatives of the Indigenous Coordination Centre - Darwin, the people of Nauiyu voiced several concerns about children swimming at the Daly River crossing. The Royal Life Saving Society Australia (RLSSA) was invited to participate in the development of a plan to resolve this issue. Community consultation identified the need to increase physical activity and recreational opportunities to address the issue of chronic disease among the Nauiyu population.

Consultation resulted in the implementation in 2006 of the Nauiyu Aquatic Recreation Project (also known as Swim for Life); a Building Healthy Communities in Remote Areas Initiative supported by the Australian Government Department of Health and Ageing. Its overall goal is to increase the level of physical activity and recreation in the community through use of the community swimming pool.

Uniquely, the project seeks to do this by employing a Community Leadership Development model which engages a spectrum of community groups and organisations in the development and delivery of a range of programs and activities that incorporate pool facilities. Project partners include Nauiyu Nambiyu Community Government Council (NNCGC), St Francis

Xavier School, Wooliana School, Nauiyu Sport and Recreation, Nauiyu Community Health Centre (NCHC) and local aged care and childcare facilities.

The Swim for Life project aims to:

- Increase the range of physical activity based programs offered at the community swimming pool.
- Increase participation in programs at the community swimming pool across the targeted age groups; parents and children (0- 4), school aged children, adolescents and senior citizens.
- Develop employment and volunteer opportunities for community members in areas of aquatic instruction, lifeguarding and pool operations.
- Increase the profile of the community swimming pool as a venue for safe and active recreation.
- Evaluate the effectiveness of the project strategies.

Methods

The project is achieving its goals by:

- Engaging the community in the planning, implementation and evaluation of the project
- Increasing the use of the community swimming pool through an increase in;
 - structured programs
 - recreational activities
 - community events
- Increasing the sustainability of the community swimming pool through the implementation of strategies in the areas of;
 - training
 - leadership
 - employment
- Raising awareness of the project and community swimming pool across all stakeholders.

These strategies are based upon the implementation of the Community Leadership Development model, which employs a locally based Project Officer and engages community stakeholders in daily project management through participation on the Community Recreation Group.

Results

Awards

- 2007 Community Event of the Year, Northern Territory in Australia Day Local Government Awards.
- Betty Sullivan, Project Officer, Community Leader of the Year in Australian Sports Awards 2007.

Physical Activity

The overall level of physical activity in Nauiyu has increased significantly since the inception of the Nauiyu Aquatic Recreation Project, through improved access to and provision of aquatic programs. While increases in activity have been experienced by all age groups, they are greatest for children. Segregated male/female night time pool sessions and regular weekend pool openings have been supported to encourage adult participation in project activities.

Health

As shown in Table 1, two health screenings of school children in Nauiyu conducted one year apart by the Nauiyu Community Health Clinic show large reductions in the prevalence of skin sores (pyoderma), trachoma follicles and the need for ear, nose and throat referrals after a period of regular and sustained swimming pool use. This is significant as these conditions are related to otorrhoea and otitis media, and trachoma; respectively the leading causes of deafness and blindness in Aboriginal and Torres Strait Islander people^{1,2}.

HEALTH ISSUE	Mar-06	%	Mar-07	%	% change 06-07
Trachoma follicles	17	18.5	6	8.3	-55.1 %
Skin Sores	9	9.8	3	4.2	-57.2 %
ENT referrals	6	6.5	0	0.0	-100%
Failed audiometry	2	2.2	0	0.0	-100%
Anaemia	2	2.2	11	15.3	+595.4%
Heart abnormalities	0	0.0	0	0.0	0%
Eye test failure	0	0.0	0	0.0	0%
Sample	92	100	72	100	

Table 1 Results of Child Health Screenings March 2006 and March 2007.

Employment, skills development and training

The project directly employs a project officer and a project support officer, and Nauiyu Sport and Recreation employees conduct activities at the swimming pool daily. Employment opportunities also exist for pool management and operations, as well as lifeguards and swim instructors.

Skills development and training programs currently provided by the Nauiyu Aquatic Recreation Project:

- Bronze medallion
- AUSTSWIM teacher training
- First aid
- Pool operator
- Leadership development
- Regular training updates

The skills associated with these programs are all easily transferrable and endow community members with intercommunity employment mobility. The integrated community approach adopted by the project means that skills are also transferrable between community organisations and that schools, health care services, youth development services, and councils can not only encourage the exposure of community members to the benefits of swimming and physical activity, but can also be supported in the delivery of their own services at the pool.

Education

The two schools in the Nauiyu community, St Francis Xavier and Wooliana, both operate a 'No School No Pool' program to encourage attendance at school. Strong anecdotal evidence indicates that school attendance rates have improved since the introduction of the 'No School No Pool' policy. Schools use the pool for school swimming two to three times a week. There have also been significant improvements in the swimming and water safety skills of school aged children.

Social Activity

The swimming pool facility is a safe and controlled, drug and alcohol free environment appropriate for a range of recreational activities. Barbeques, family days, concerts, adult only evenings, youth nights and other such organised events all seek to encourage community members of all ages to use the pool facility. In a remote community such as Nauiyu, where boredom presents a potential problem for young people in particular, these activities are useful for youth diversion. The use of pool premises as a hub for social interaction is also an important starting point for exposing community members to the benefits of aquatic activity.

Swimming carnivals have been very successful at the Nauiyu pool, with two or three being held each year. These are sometimes intercommunity carnivals and therefore can also aid in supporting the relationship between Nauiyu and its neighbouring communities.

Discussion

The most successful feature of the project has been its close adherence to the Community Development Leadership Program. That is, the way in which it has engaged a range of community groups and organisations throughout the process of project consultation, development and implementation. As a result, the Swim for Life project relates to much more than aquatic recreation; it is about utilising the swimming pool facility as a community asset for the greatest benefit of the entire Nauiyu community.

The role of project officer is vital to the community-based coordination of the project. The project officer organises and delivers project activities, working closely with the reference group and community leaders to engage individuals in the project on a daily basis.

Each project partner has a stake in the project and has made commitments to maintaining their involvement, particularly as members of the Community Recreation Group. This forum for monthly community consultation, communication and cooperation is absolutely fundamental to the maintenance of the project in the hands of the Nauiyu community - one of the features common to the most effective health promotion interventions in Aboriginal and Torres Strait Islander communities³.

The Nauiyu Aquatic Recreation Project supports each of the project partners in incorporating the swimming pool facility into the delivery of their own services, thus ensuring that each has a vested interest in promoting aquatic activity. Consequently, the benefits of the project for the Nauiyu community extend far beyond increases in physical activity, to improvements in broader health, economic, social and educational outcomes, outlined earlier. The project maintains a capacity building focus which is vital to its long term sustainability. Its distinguishing and most successful trait is its status as a whole of community initiative, rather than a pool-based program in isolation.

Conclusion

The successes of the Nauiyu Aquatic Recreation Project to date demonstrate what can be achieved when remote Aboriginal and Torres Strait Islander communities are engaged in developing and delivering initiatives locally, albeit with external support. While more still must be done to involve older members of the community in project activities, the Nauiyu community is to be commended for its commitment to maximising the health, social, economic and educational benefits of the community swimming pool. The Swim for Life project is thus a model for the successful community driven management of swimming pools in remote Aboriginal and Torres Strait Islander communities.

Acknowledgements

The Swim for Life project is dependent upon the ongoing support of several organisations and individuals: partners of the Community Recreation Group including the Nauiyu Nambiyu Community Government Council, St Francis Xavier School, Wooliana School, Nauiyu Sport and Recreation, Nauiyu Community Health Centre and Nauiyu aged care and childcare facilities; Royal Life Saving NT Branch - Floss Roberts, Leah Cullen and Corrine Warhurst; and the Royal Life Saving Society Australia – Justin Scarr and Richard Franklin. The project is an Australian Government Department of Health and Ageing Building Healthy Communities in Remote Areas Initiative.

References

1. Audera C. Swimming Pools in Aboriginal Communities: Health Related Issues. Swimming pools in remote Indigenous communities: Some basic information for planning a pool: National Centre for Epidemiology and Population Health, 1999:15.
2. Telethon Institute for Child Health Research. The Swimming Pool Study 2000-2006: Telethon Institute for Child Health Research, 2006:12.
3. Black A. Evidence of effective interventions to improve the social and environmental factors impacting on health: Informing the development of Indigenous Community Agreements. Canberra: Department of Health and Ageing, 2007:66.

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NO SCHOOL NO POOL:

MAXIMISING THE BENEFITS OF THE COMMUNITY POOL FOR REMOTE ABORIGINAL AND TORRES STRAIT ISLANDER COMMUNITIES

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ABSTRACT

Background/Introduction

'No School No Pool' is a program more complex than its short, catchy title would indicate. 'No School No Pool' is a community health promotion initiative which uses the community swimming pool as a means to encourage school attendance and provide wider benefits for remote Aboriginal and Torres Strait Islander communities.

The first of its kind, an examination of the 'No School No Pool' program in remote Aboriginal and Torres Strait Islander communities in the Northern Territory was undertaken by Royal Life Saving Society Australia, in consultation with school staff.

Drowning and water safety are important issues for Aboriginal and Torres Strait Islander people who have been identified by The National Water Safety Plan 2004-2007 as an at-risk group.

Methods

In December 2007, Royal Life Saving Society Australia conducted interviews with members of school staff in 11 remote Aboriginal and Torres Strait Islander communities in the Northern Territory to gather data on the 'No School No Pool' program.

Results/Evaluation

Response to the 'No School No Pool' program varied; both supportive and critical. While beneficial

for attendance rates, there are several issues that influence the effectiveness of the program, including the need for community support, financial and staff resourcing in schools and pools, quality of pool (maintenance, programs, etc), ethical treatment of students and environmental considerations.

Discussion

Community support is essential to the success of 'No School No Pool' so that schools and pools may be adequately resourced to implement and enforce the program regularly throughout the school year. Community pools must be open, operating and accessible as much as possible so that all students are able to access the benefits of pools.

Conclusion

Although complex, when applied appropriately as part of broader school attendance strategy and in consideration of resourcing and ethical issues, 'No School No Pool' can deliver educational, health, social and economic benefits for remote Aboriginal and Torres Strait Islander communities.

Acknowledgements

This study was funded by the Australian Government Department of Health and Ageing.

PRESENTATION PAPER

Introduction

Aboriginal and Torres Strait Islander people die from drowning at a rate three to four times that of the general Australian population. Access to traditional water safety programs is also somewhat limited for this group, particularly in rural and remote areas. For these reasons, Aboriginal and Torres Strait Islander Australians are identified by the Australian Water Safety Council as an at-risk group.¹

Swimming pools in remote Aboriginal and Torres Strait Islander communities are an often underutilised resource, both in terms of water safety and the broader health, economic, social and educational benefits they bestow. Health benefits of regular and sustained pool use include improvements in respiratory, ear, eye and skin health, as well as general fitness. Swimming pool facilities provide numerous employment, skills development and training opportunities to local community members (such as pool management and operations, lifeguarding and first aid). As a community hub, swimming pool facilities also provide great opportunities for social activity and interaction in a safe and controlled environment. An integrated, community development approach to the use of the swimming pool as a community asset enables each of these benefits to be maximised.

By linking pool facilities with local school institutions, 'No School No Pool' forms an integral part of the Royal Life Saving Community Leadership Development Program. This program encourages community ownership of the pool facility by engaging a spectrum of community groups in the organisation and delivery of pool activities. This means that support for pool facilities is community-wide and the exposure of community members to the benefits of aquatic activity is maximised. This community development approach also enables various local institutions to use the pool in addressing their own priorities; such as increasing school attendance levels, for example.

'No School No Pool' has been introduced in recent years to several remote Aboriginal and Torres Strait Islander communities in response to poor school attendance rates and gaps in learning outcomes, particularly in comparison to non-indigenous students². An opportunity to facilitate the realisation of the educational benefits of swimming pools, the 'No School No Pool' program is a health promotion initiative which uses the appeal of the community swimming pool to encourage school attendance. Based on the assumption that school-aged children enjoy the pool, those that do not attend school are denied access to the pool.

Current educational discourse identifies the need for flexible educational practices that reflect the cultural and linguistic diversity of communities and engage students in the learning experience³. Use of the community pool in education is one such practice that has immense potential to engage students, and may therefore have a positive impact on school attendance, school retention rates and general learning outcomes.

The first comprehensive examination of the 'No School No Pool' program, this study aimed to investigate:

- If, how and why the program runs on a daily basis
- How community organisations work together to deliver the program
- The effects of 'No School No Pool' for the broader community
- Potential models for successful implementation.

Method

A review of the literature examined water safety for Aboriginal and Torres Strait Islander people; school participation and engagement of Aboriginal and Torres Strait Islander youth; the benefits of pools in remote communities and Aboriginal and Torres Strait Islander health promotion.

A study of the 'No School No Pool' program was undertaken with members of school staff in eleven remote communities in the Northern Territory, known

by the Royal Life Saving Society Australia (RLSSA) to have or be in the process of building community swimming pools. Thirteen semi-structured telephone interviews were conducted by RLSSA over the period 3-14 December 2007 to collate data on the 'No School No Pool' program. Interviews were conducted with staff at twelve schools. Eight interviews were conducted with the School Principal, three with the Deputy Principal, and two with other members of teaching staff. For the purpose of consistency, this study was limited to remote communities in the Northern Territory.

Results

'No School No Pool' is a community strategy which utilises swimming pools to encourage school attendance. It relies on the assumption that the threat of being denied pool access will motivate students to attend school. There is currently no formal documentation as to what constitutes 'No School No Pool'. Consequently, each community has interpreted the program slightly differently.

Interview responses were quite varied; both supportive and critical of the program. All presently running the program (five respondents) reported it to be effective in improving attendance rates, although in each case 'No School No Pool' operated in conjunction with other attendance schemes.

Other reported benefits of 'No School No Pool' for children include improvements in:

- Classroom behaviour
- Swimming ability, fitness and water safety competence
- Self-esteem
- Hygiene and skin health.

The program also supports the use of the pool as an alternative place to swim to other often crocodile-infested waterways.

Four communities had tried but terminated 'No School No Pool', and two had never implemented it. Issues associated with 'No School No Pool' related to:

- The need for whole of community support
- Staff resourcing at both schools and pools to ensure the program is enforced effectively
- Pool maintenance – the program cannot operate unless the pool is well maintained and operational
- What to do in cooler weather when the pool is less appealing to students
- The ethical implementation of 'No School No Pool' - a vital consideration given that students may be periodically denied access to the swimming pool and its benefits.

Discussion

'No School No Pool' is a program more complex than its short, catchy title would indicate. Its success as an attendance scheme demands complete support for resourcing and enforcement at school, pool and community levels. Swimming pool facilities must be adequately resourced so that they are open and operational as many days of the week and as many months of the year as possible, so that the program is implemented ethically and all students have some opportunity to get into the water.

For the 'No School No Pool' program to work successfully (as with other health promotion initiatives), Aboriginal and Torres Strait Islander communities must be engaged in strategy development, and policies should be driven by community-identified priorities to target specific needs⁴⁻⁶.

The ideal model for the successful implementation of 'No School No Pool' is characterised by:

- Whole of community support (monetary resourcing and support of parents, teachers, schools, pool operators, community leadership)
- Locally developed and clearly articulated guidelines to program operation so that community members understand its aims and are willing and able to support implementation and enforcement
- Regular opening hours of swimming pool facilities during the week and on weekends
- Well-maintained swimming pool facilities
- Appropriately trained local staff to implement, manage and enforce the program consistently
- Incorporation of 'No School No Pool' into broader school attendance strategies
- Understanding of the ethical implications of restricting pool access and the application of a considered and cautious approach to ensuring all students are treated fairly
- Locally interpreted programs to ensure specific needs of individual communities are addressed.

Conclusion

'No School No Pool' is a program more complex than it initially appears. It has been applied with varied success by remote Aboriginal and Torres Strait Islander communities in the Northern Territory. 'No School No Pool' has the potential to be greatly beneficial, however, communities operating and considering the program should contemplate the model outlined above and address each issue so that the program is valuable for the community as a whole.

'No School No Pool' cannot be successful in isolation. Broad-reaching support is essential at school, pool

and community levels so that the community as a collective imparts a strong and persistent 'No School No Pool' message to students. Without whole of community endorsement, the message behind the program becomes diluted and cannot be as effective in affecting student behaviour.

Where possible, all remote communities should consider their options for introducing this or similar programs as a means to effectively utilise existing infrastructure to address community priorities.

While not flawless, 'No School No Pool' demonstrates how a flexible approach to educational practice can engage students and be mutually beneficial for the health and safety of the wider community.

References

1. Australian Water Safety Council. National Water Safety Plan 2004-2007. Sydney: Australian Water Safety Council, 2004.
2. Department of Education, Science, Training. National Report to Parliament on Indigenous Education and Training, 2004. In: Department of Education Science and Training, editor: Australian Government, 2006:187.
3. Ministerial Council on Education Employment, Training, Youth Affairs. Australian Directions in Indigenous Education 2005-2008: Ministerial Council on Education, Employment, Training and Youth Affairs, 2006:34.
4. ANTA. Success Stories in Indigenous Health: A showcase of successful Aboriginal and Torres Strait Islander health projects. Sydney: Australians for Native Title and Reconciliation, 2007.
5. Mikhailovich K, Morrison P, Arabena K. Evaluating Australian Indigenous community health promotion initiatives: a selective review. Rural and Remote Health [online] 2007;7(746):18.
6. Black A. Evidence of effective interventions to improve the social and environmental factors impacting on health: Informing the development of Indigenous Community Agreements. Canberra: Department of Health and Ageing, 2007:66.

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MANAGING RURAL EMERGENCIES

ANN PRICE

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ABSTRACT

Background/Introduction

The Managing Rural Emergencies program was developed to address health and safety issues on rural properties in SA, including First Aid training. People on rural properties continue to sustain higher number of injuries and deaths compared to their urban counterparts, including children (drowning is one of the major issues). The lack of training available for people on rural properties in the area of health and safety and first aid training became evident whilst attending conferences & forums in country areas and through discussions with rural and agricultural organisations.

Methods

This program aims to educate people living on rural properties on health and safety issues and provide first aid training as part of their risk management strategies for reducing injuries and death.

Results/Evaluation

This program has nine modules that are run over a day and provides information on:

- Identify existing and potential occupational health and safety hazards on farms.
- Assess the risks from identified hazards in accordance with safe work practice using information from farm occupational health and safety records, industry information and relevant occupational health and safety legislation/codes of practice.
- Adopt appropriate work processes and control measures to reduce exposure to identified health and safety hazards.
- Demonstrate a knowledge of the need for health and safety induction and training programs for farm workers.
- Demonstrate a knowledge of the need to maintain a system of relevant health and safety records on the farm.
- Demonstrate the knowledge and ability to identify, manage and assist in an emergency.
- Establish and maintain procedures for dealing with occupational health and safety emergencies on the farm.

The program is able to be tailored to meet the requirements of each group/enterprise, to address their industry specific areas. As the course meets specific training requirements it has been approved for participants to receive FarmBis support in SA, provided participants meet the criteria stipulated by FarmBis.

Discussion

To date this program has run in several locations in South East of the state with further courses being planned as well going to the West Coast where further courses have been requested. The feedback from participants has been very positive with them specifically identifying that they enjoyed being shown how to effectively process the identification and management of risks as well as learning resuscitation and gaining confidence in managing an emergency.

Conclusion

Lack of immediate first aid means that people living on rural properties need to ensure that they have strategies in place to eliminate, minimise or reduce the severity of injuries and deaths on their place. This program provides people living on rural properties with the skills to manage their environment and make it safer for themselves, those in their care and people visiting.

Acknowledgements

Royal Life Saving SA
FarmBis SA

PRESENTATION PAPER

Introduction

How did the program evolve?

Having a background in both farming and teaching both swimming and water safety, and pre-school, it was natural progression to become involved in Farm Safety especially with a focus on children. The national drowning report reflects the drowning of under 4year olds on rural properties as the highest statistic, which is of concern, many of these children are our future farmers.

It is a program that developed through discussions at conferences and seminars in rural regions where two issues were identified that related to the limited knowledge of:

- basic first aid skills and the application of them if an accident occurred and to be able to manage until further assistance arrived and
- the skills to use necessary tools to enable the business to identify risks and develop measures so as not to have to use the newly learnt first aid skills.

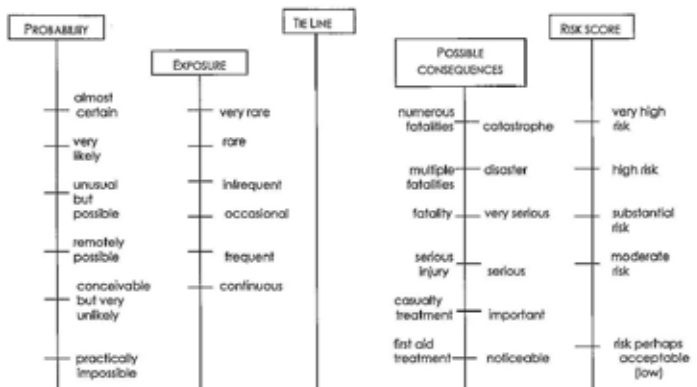
Method

The initial part of the days training is basic first aid, then identifying the elements of risk within their business, provide and discuss the tools to analyse risk; each course is tailored to the region in which it is being conducted and one hazard that is common across all rural regions is 'water', which is what I will focus on.

Below are two (2) Risk Calculators that may be used to determine the level of risk that anyone living / visiting the property/station/block may encounter when in the vicinity of a hazard.

Consequence of injury	Frequency of exposure to hazard			
	Daily	Weekly	Monthly	Rarely
Kill or disable	HIGH	HIGH	HIGH	HIGH
Several days of work	HIGH	HIGH	MEDIUM	MEDIUM
First aid	HIGH	MEDIUM	LOW	LOW

You should recall that the degree of risk is a combination of the potential severity of injury and the frequency of exposure to the hazard.



Risk Assessment Calculator

To use the risk assessment calculator:

- Select the appropriate point on the probability scale
- Select the appropriate point on the exposure scale
- Draw a line between the points chosen on the probability and exposure scales. Extend the line so that it intersects with the tie line
- Draw a line from the point on the tie line to the point on the possible
- Select the appropriate point on the possible consequence scale consequence line. Extend the line to the risk score scale

The risk score obtained can then be used to make a judgement about whether the level of risk is acceptable or not.

However, the risk score should only be used as a basis for reasoned judgement about risk. It should be interpreted with caution, as it has certain limitations. For example, it is not possible to describe complex human behaviour by numerical means.

If the score falls between very high risk and risk perhaps acceptable (low), the risk must be reduced to the lowest possible level.

Identify any of your hazards and make a list, complete the Risk Assessment of the identified hazards using one of the charts to assist you in determining the degree of risk:
i.e.- Low, Medium or High.

Once the list of risk assessments are complete then an action plan is developed, for each hazard to enable it to be managed using the 'Hierarchy of Control' and/or SAFER principles which list safety control options in their order of effectiveness.

This activity is done in small groups, with a lot of interaction through discussion and 'swapping' of ideas.

Evaluation

Each participant is provided with a feedback/evaluation sheet from which we are able to measure the strengths and weaknesses and adjust accordingly.

Discussion

So how do we address the situation?

Risk is 'a combination of the probability, or frequency, of occurrence of a defined hazard and the magnitude of the consequences of the occurrence: how often is a particular potentially harmful event going to occur, [and] what are the consequences of this occurrence?' (Harding 1998:167)

Risk = frequency x consequences, risk will alter with each person, as we all perceive risk from a different perspective, the way we live with risk and manage risk differs between each of us.

Risk is inherent to primary production.

Those often most at risk are children:

- who live on farms/stations/rural blocks
- who visit these properties/stations/rural blocks

The one hazard that is common across all rural regions is 'water', statistics show that the leading cause of unintentional deaths of children on farm is drowning, 24 children drowned between 2001-2004 (35.8% of on-farm deaths), these occurred in channels, creek/river, dam, pond, sheep/cattle dip, swimming pool and water trough. These statistics have shown that the number of backyard drowning in swimming pools is decreasing, they are increasing on farms.

Water is a commodity that is always present and a hazard; dams, troughs, dips, all areas where stock access is required, these cannot be fenced off, so appropriate safety precautions are required.

Where water is stored use appropriate safety measures, cover if practicable with well fitting sturdy covers, e.g. dips - empty holding tanks, windmills – place covers over exposed holes, water tanks – covered in and ladders removed.

As young children are curious by nature, very mobile and have a poor concept of danger, they require a fenced play-safe area to play in that is easily supervised and provides children with a stimulating and learning environment. If out of the safe area young children need to be within sight and sound of an adult and holding hands if a hazard is nearby.

When creating a play-safe area take the time to plan, and use quality materials, use fencing that children will have difficulty climbing, remove objects that they would be able to stand on to be able to climb over the fence, ensure that it is self locking and that the locks and fence is maintained.

Education is another key factor, children need to be taught the rudiments of safety and areas which are 'off limits', when involving children with 'chores' don't ask to much of them ensure they are supervised, appropriate training is essential and limit it to the child's ability and strength, older children will still require supervising to ensure that it is done safely, children can be easily distracted and find themselves in a situation that they cannot manage.

Hence it is important that rules are discussed and understood to give children ownership and responsibility and a deterrent for unsafe behaviour.

All children where possible (distance/isolation may be a factor) to be encouraged to receive instruction in swimming and water safety, to provide them with safe skills and knowledge to use when in and around water, this knowledge can be reinforced at home, as often the summer holidays is the only time that isolated children are exposed to a water environment.

First aid training should be a requirement on all farms.

Conclusion

Primary producers need to be aware and minimize the risks it is the key to prevent unnecessary deaths of children, this requires them to change their attitude to risk and their behaviours relating to risk management.

A farm can be a dangerous place for unsupervised children, aim for a safe farm rather than a safe child. Make rules about safety, but make sure by locking danger away.

Ensure you have an emergency plan, is everyone familiar with it and do children know how to dial 000 in an emergency?

Safety is often over looked, especially during busy seasonal periods, and primary producers are the only ones that can improve their situation, therefore it is up to them to make changes in the way they manage safety. A careless action could affect the rest of their life.

Accidents don't have to happen in most cases we let them happen.

Acknowledgement

Pollock K, Fragar L, Morton C (2007) Traumatic Deaths in Australian Agriculture Pub.No7_151



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PROGRESS IN THE REDUCTION AND PREVENTION OF TODDLERS DROWNING IN FARM DAMS

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ABSTRACT

Background/Introduction

Drowning of toddlers and young children in farm dams continues to be an issue, but has there been progress in absolute terms, or in uptake of preventative measures? Two progress indicators assessed in this presentation are the (1) changes in the number of drowning deaths in farm dams over time; and (2) changes in the prevalence and security of fenced house yards on farms, as a context-specific measure to prevent toddler access to farm water bodies.

Methods

On-farm drowning fatalities were extracted from the NCIS and analysed by age and location for the 2001-2004 period. These were compared with results for 1989-1992. Drowning rates were not calculated due to low numbers and unknown population baseline. Adult farmers attending major agricultural field day events (2003-2006) were quota surveyed about the presence and security of fenced house yards, recommended as a farm drowning prevention measure.

Results/Evaluation

The number of children who drowned on farms halved between the two study periods, for all farm water bodies and for dams in particular, where 90% of victims were toddlers. Thirty children drowned in farm dams in the period 1989 – 1992, compared to sixteen in the 2001-2004 period.

Overall, three quarters of the 2569 adult farmers surveyed at major agricultural field days between 2003–2006 reported having a safe play area or fenced house yard on farm. Around one half of these were rated as difficult / almost impossible for a child 0-5 yrs to breach. At Ag-Quip NSW, where surveys were comparisons could be made across all four years, the percentage of respondents with a safe play area increased from 77% to 86%, though this was not statistically significant. Those who stated the safe play area was difficult /almost impossible for a child 0-5yrs to breach rose more significantly from 40% to 55% between 2003 and 2006. ($X^2=13.1$ $df=3$ $p=.01$).

Discussion

Results will be discussed in the context of key recommendations of Farmsafe Australia and other agencies for preventing young children drowning on farms, with examples of program activities provided. Other factors which may have influenced the number of children drowning in farm dams include a declining rural population, ongoing drought and the influence of general / unspecified factors associated with a parallel reduction in overall drowning deaths since the 1990's.

Correspondence of the time periods for the fatality data and any particular water safety programs were not ideal, so the influence of programs on fatalities is only suggested in very general terms. The reported improvement in the security of house yard fences on farms between 2003-2006, however, may have been associated with specific programs promoting these carried out by Farmsafe and other agencies during this period. Any subsequent influence on drowning rates may not be apparent until the next retrospective analysis of on-farm drowning fatalities. Limitations with sampling and the self reporting methodology used are acknowledged, as are the difficulties in extracting timely on-farm fatalities data using the NCIS.

Conclusion

The number of young children drowning on farms and in farm dams particularly, halved between the periods 1989-1992 and 2001-2004. Along with other factors, the work of water safety advocates may have contributed generally to this reduction. Recent programs have promoted securely fenced house yards to help prevent unsupervised access of toddlers to farm dams. Surveys of farmers conducted at agricultural field days suggest these may be having an impact, with an apparent increase in the incidence and security of fenced house yards reported, corresponding with campaigns conducted from 2003-2006. Any subsequent affect such interventions may have on drowning figures may not be apparent for a several years.

Acknowledgements

Farmsafe Australia
Department of Health and Ageing
Australian Water Safety Council

PRESENTATION PAPER

Background/Introduction

Drowning of toddlers and young children in farm dams has been highlighted as an issue by coronial inquiries and water safety advocates for a number of years. Recent reports of incidents in the media, leads one to wonder if there has been any overall progress on this issue in recent years in absolute terms, or in uptake of preventative measures. This presentation looks at two indicators of progress (1) reduction in the number of drowning deaths in farm dams over time; and (2) prevalence and security of fenced house yards on farms as a setting-specific drowning prevention recommendation. These will be discussed in the context of other promotional activity of drowning prevention agencies.

Methods

On-farm drowning fatalities were extracted from the NCIS and analysed by age and location for the 2001-2004 period. These were compared with results for 1989-1992. Surveys of farmers attending 13 major agricultural field day events from 2003-2006, were analysed regarding the existence and security of fenced house yards to prevent young children gaining unsupervised access to farm dams.

Results/Evaluation

For the period 1989 – 1992, 49 children under 15 years drowned in farm water bodies overall (including dams, creeks, rivers, channels, ponds, dips, pools, troughs). Of these, 33 incidents occurred in farm dams as a specific water body. Further age breakdown revealed that 90% (30) of the children who drowned in dams were aged less than five years of age. For the 2001-2004 period, there were 25 children who drowned in farm water bodies overall, with 16 of these occurring in farm dams. When figures are compared, the number of on-farm drownings halved between the two study periods, both for all farm water bodies; and for farm dams in particular. Drowning rates were not calculated due to the low numbers involved and lack of a relevant population baseline.

Around three quarters of the 2569 adult farmers surveyed at major agricultural field day events from 2003 – 2006, reported having a safe play area such as a fenced house yard for children. Overall, around one half of these were rated as difficult / almost impossible for a child 0-5 yrs to breach. At Ag-Quip NSW, where surveys were conducted in each of the

four years, there was an overall improvement in the percentage of respondents with a safe play area from 77% to 86%, between 2003 and 2006; although this result was not statistically significant. The percentage of farmers at Ag-Quip who stated the safe play area was difficult /almost impossible for a child 0-5yrs to breach increased slightly but significantly from 40% to 55% between 2003 and 2006. ($X^2=13.1$ $df=3$ $p<.01$). Improvements to house yard fences and safe play areas was also the most commonly cited free response to the question "What actions have you done in the past 12 months to address child safety?"

Results of the 2007 field day surveys are currently being analysed. Preliminary results indicate that the improvements noted above between 2003-2006 have dropped back, with only 75% stating they had a safe play area on farm and 45% stating it was difficult or almost impossible for children under five years to breach unassisted. A shift in emphasis to other safety messages during this time can be mapped these results.

Discussion

Results are discussed in the context of key recommendations of Farmsafe Australia and other agencies for preventing toddler drowning in farm dams, with examples of program activities provided. Other factors which may have influenced the number of children drowning in farm dams include a declining rural population, ongoing drought and the influence of general / unspecified factors associated with a parallel reduction in overall drowning deaths since the 1990's.

Correspondence of the time periods for the fatality data and any particular water safety programs were not ideal, so the influence of programs on fatalities is only suggested in very general terms. The reported improvement in the security of house yard fences on farms between 2003-2006, however, may have been associated with specific programs promoting these carried out by Farmsafe and other agencies during this period. The more recent drop in awareness, can be mapped against a shift to promote other child farm safety messages during this time and a general decrease in funding available for public awareness campaigns. This suggests the important role of media in maintaining safety awareness.

Limitations with sampling and the self reporting methodology used are acknowledged and results should be interpreted with caution. Alternative sampling and reporting methods may help to confirm the validity of the field day findings. Drowning rates were not calculated due to the low numbers involved and lack of a valid population baseline. Other data issues include timeliness in producing 'on-farm' fatality profiles when they are reliant on extracting

information from larger data sets such as the NCIS. The use of media reports to 'flag' occurrence of incidents, may be helpful in future.

Conclusion

The number of young children drowning on farms and in farm dams particularly, halved between the periods 1989-1992 and 2001-2004. Along with other factors, the work of a range of water safety advocates may have contributed in a general way to this reduction. More recent programs highlighting securely fenced house yards (safe play areas) to prevent unsupervised access of toddlers to farm water bodies, may also be having an impact. Surveys of farmers at major agricultural field days suggest an increase in the incidence and security of fenced house yards between 2003-2006, corresponding with campaign periods. A subsequent decrease in campaigns focusing on safe play areas corresponds with a decrease in the reported incidence, security and awareness of safe play areas on farms messages in the media. Sustained improvements in water safety awareness and behaviours on farms may require more sustainable efforts and resources for public awareness campaigns. Any subsequent affect of recommended safety interventions on a further reduction in drowning figures may not be apparent for a several years.

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- Farmsafe Australia
- Commonwealth Department of Health and Ageing
- Royal Life Saving Society Australia
- Australian Water Safety Council

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SURVEY OF RURAL AND REMOTE TEACHERS OF SWIMMING AND WATER SAFETY

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ABSTRACT

Introduction

Access to teachers of swimming and water safety is essential for ensuring that all people have the opportunity to acquire the knowledge and skills to be safe in the water. The acquiring of this knowledge should be in an enjoyable and safe environment with professional instruction.

This study explored the needs of rural swimming and water safety teachers.

Methods

A survey developed in conjunction with swimming and water safety teachers and AUSTSWIM was sent to 3,512 swimming and water safety teachers on the AUSTSWIM database whose postcode was classified as outer regional, remote and very remote. An on-line version was also made available.

Results

There were 735 responses (635 mail and 100 on-line) to the survey with most from outer regional areas. The majority (88%) of respondents were females and were aged between 35 and 54 years (54%).

The issues identified in the study included access to and cost of professional development, working conditions (pay, hours and length of season), strategies for helping people return to work after taking time off, administration (ease of re-registering, costs, access and availability), number of children undertaking swimming lessons and facilities (ageing and water space availability).

Discussion

While a number of issues have been identified as barriers to the provision of teachers of swimming and water safety, there are a range of solutions that could be utilised, they include: delivery of more professional development in rural and remote locations, development of recruitment strategies that are age / life stage specific; development of a professional support network. Some issues are more complex, particularly those around pay, working conditions and travel. Also, access to water is an issue for those in areas where water restrictions apply.

Conclusion

Some simple and effective solutions to these issues could have a dramatic effect on the recruitment and retention of rural swimming and water safety teachers.

Acknowledgements

Funding for this project was provided by the Australian Government Department of Health and Ageing.

PRESENTATION PAPER

Introduction

Access to teachers of swimming and water safety is essential for ensuring that all people have the opportunity to acquire the knowledge and skills to be safe in the water. Access to teachers of swimming and water safety, is also an important strategy in reducing drowning deaths in Australia, particularly in rural and remote areas where water safety programs and services may be limited or not available. In the National Water Safety Plan for the period 2004-2007 (please visit www.watersafety.com.au for full plan), rural and remote communities were identified as one of the four high risk groups for drowning. While a number of issues were identified, improving access and availability to quality water safety programs and instruction was seen as the major issue.

The provision of swimming and water safety lessons and subsequent uptake of these lessons by children is an important strategy in the reduction of drowning deaths in Australia. For this to occur there is a need to have qualified swimming and water safety teachers throughout Australia.

The needs of swimming and water safety teachers in rural and remote areas are also important as this can influence the provision of swimming and water safety skills, and the quality of the lessons provided.

To gain a greater understanding of the needs of rural and remote swimming and water safety teachers

the Royal Life Saving Society in conjunction with AUSTSWIM in 2007 undertook a survey of all rural and remote teachers of swimming and water safety teachers identified by postcode on the AUSTSWIM database.

Methods

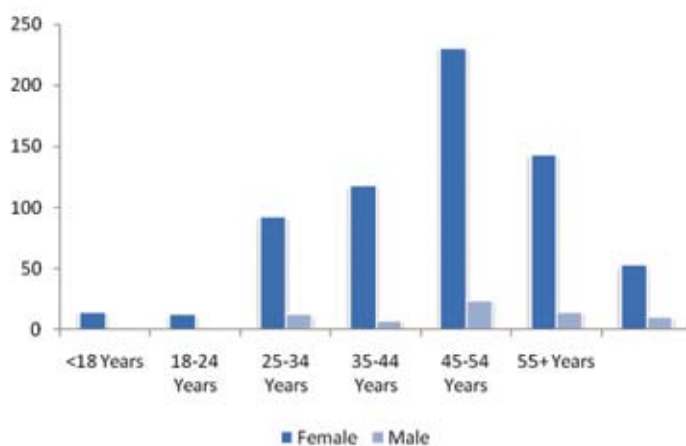
A survey was developed in collaboration with Swimming and Water Safety Teachers, Royal Life Saving and AUSTSWIM and piloted in NSW by Swimming and Water safety Teachers. On the AUSTSWIM database of swimming and water safety teachers those postcodes which were outer regional, remote and very remote according to the ASGC classification were sent a copy of the survey. An on-line version was also made available.

The survey was sent out during January 2007 and responses were required by 15-March-2007. In total 3,512 surveys were sent out. The returned information was entered into Microsoft Access™ and then transferred into SPSS 15.0 for cleaning and analysis.

Results

Of the 3,512 surveys sent out, 776 were returned of which 753 (23%) were able to be used after data cleaning. The majority of the respondents were females (88%) and were aged between 35-44 years (34%) (Figure 1). Almost three quarters (72%) of people surveyed started teaching prior to reaching 35 years of age.

Figure 1 Gender by Age group



There were a range of reasons identified by respondents for becoming a swimming and water safety teacher. The main reasons were: the desire to become a swimming teacher (46%); background in swimming (36%); and part-time / casual work (33%). Some of the other reasons identified included family, local school had a need, someone asked them to do it and preventing drowning.

Approximately one third of the people surveyed had taken one or more years off from teaching. The average amount of time taken off was 3.4 years but this varied by age and region. The two most common reasons for taking time off were other work commitments (43%) and children (42%). The two most common reasons for coming back to work were desire to teach again (42%) and children were older (26%).

There were over 200 different skills identified by the teachers of swimming and water safety as important skills. Common themes included water safety, teaching skills, first aid / CPR, safety, stroke development, patience, knowledge of local conditions, flexibility, communication, and adaptability. Just under a quarter of respondents (22%) did not provide any information on how often they were undertaking professional development. One third (33%) of respondents indicated they were undertaking professional development once a year. Nearly two thirds (61%) of respondents reported that the professional development activities were not easy to access.

Overall, respondents worked with an average of 4.2 (range 0-50) other teachers. The number of people working together decreased as the more remote they became. On average, respondents worked 16.4 weeks per annum and 13.6 hours per week. A third (32%) of respondents said that there was no one there to replace them when they were sick. The majority of respondents were paid by the hour (58%).

Future needs identified by the respondents were:

- More workshops and training (professional development) in rural areas, more often
- More employment
- Higher wages (wages that account for responsibility, preparation & pack up time, administration, professional development, accreditation costs)
- Easier access to programs for students
- Ensuring all children in rural and remote areas know how to swim, not just those who can afford it
- Less complex registration process for AUSTSWIM
- Year round access to pools in rural areas, specific pools for learn to swim and water safety programs
- Access to water to keep pools open
- More / better teaching resources
- Training in conducting individually paced learning

Discussion

Rural and regional communities are recognised as a group that has an increased risk of drowning. The AWSC has identified learning to swim and being water safe as one of the most important life skills in the prevention of drowning deaths in Australia. For this activity to occur it is predicated on having available people who can teach these skills. A better understanding of the needs of swimming and water safety teachers in rural, regional and remote areas may help implement action and lead to a reduction in drowning deaths in rural, regional and remote communities.

Availability or access to training leading to qualification for teaching swimming and water safety appears to be more difficult for people in rural and remote areas. Flexibility in delivery and access to courses for people in rural, regional and remote areas is an issue that was raised in many responses and needs to be considered by AUSTSWIM and Royal Life Saving.

There were a number of positive workforce issues identified from the part-time / casual nature of the work, to the ability to take time off to meet changes in life. People identified the desire to be a swimming and water safety teacher, background in swimming and part-time/casual work as reasons why they became a swimming and water safety teacher. There were also a number of workforce issues that were seen to hinder the retention of swimming and water safety teachers, such as pay, amount of work available, replacement staff when sick, distance to and from work, and access to professional development.

The recommendations from the study were:

- AUSTSWIM and Royal Life Saving to provide greater access to their qualifications in regional, rural and remote locations
- AUSTSWIM to develop recruitment strategies for swimming and water safety teachers that are age / life stage specific (e.g. returning to work, part-time work, children at school, etc)
- AUSTSWIM to develop a professional support network for teachers of swimming and water safety that can be accessed in regional, rural and remote locations
- AUSTSWIM to further explore the administrative time involved in providing lessons and appropriate pay for this responsibility
- AUSTSWIM to explore options for professional development activities in regional, rural and remote locations that do not require travel and can be accessed on a regular basis
- Strategies that make pools more water efficient need to be explored by the aquatic industry

Conclusion

Teachers of swimming and water safety are essential in ensuring the continued reduction in drowning deaths of Australians. Swimming and water safety teachers in regional, rural and remote areas are concerned about access to professional development and equitable pay for work undertaken. They have a wide range of views, experiences and ideas about their job. To ensure that swimming and water safety teachers continue to provide these services further work needs to be undertaken to improve the administrative processes of AUSTSWIM, particularly in relation to professional development, improving working conditions and providing greater opportunities for children in regional, rural and remote regions to undertake swimming and water safety lessons.

For a copy of the full report from the study please visit www.watersafety.com.au.

Acknowledgements

The authors would like to thank the regional, rural and remote swimming and water safety teachers who provided responses to the survey and AUSTSWIM for their support. This study was funded by the Australian Government Department of Health and Ageing.

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PRESENTATIONS:

DROWNING PREVENTION STRATEGIES – DROWNING PREVENTION PILLARS

BEACH SAFETY AND THE LAW

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ABSTRACT/PRESENTATION PAPER

Introduction

Australians love the beach. With more than 80 per cent of our population living along the coastline and approximately 55 million visits made annually, beaches are a central part of the Australian lifestyle. The beach is also at the heart of our Sea Change culture, coastal development and tourism destination image. Keeping beaches safe and providing for sustainable future use is a critical challenge for all of us; and is very much in keeping with this conference's theme of Water Safety: Everyone's Responsibility.

As part of its centenary celebrations Surf Life Saving Australia (SLSA) organised the 2007 Beach Safety and the Law National Summit, held 8-9 November at the Surfers Paradise Marriott Resort and Spa on Queensland's Gold Coast. The aim of the Summit was to examine the unique set of legal issues concerning roles and responsibilities for those groups charged with ensuring a visit to the beach is safe and enjoyable.

The Summit was a joint initiative between SLSA, the Queensland Law Society and the Queensland University of Technology Faculty of Law. It involved prominent Supreme Court Judges, barristers and solicitors, and representatives from local government councils and the insurance industry. Some of the key presentations from the Summit have been published in the book *Beach Safety and the Law: Australian Evidence*, available from https://www.shop.creata.com/wcsstore/CreatCatalogueAUS/surftrade_index.html

Summit Findings

This paper describes some of the main findings from the Summit, including presentations that are not contained in the book. One of the most important outcomes of the Summit was to highlight the range of stakeholders involved in beach safety – everyone's responsibility.



Keeping beaches safe and providing for sustainable future use is a critical challenge for all of us...

While local government councils have legal powers to manage and control coastal foreshores, there are also many other important stakeholders who have legal responsibilities for beach safety. These include parks and recreation authorities, tourism operators and accommodation providers, insurers, developers, police and emergency services, and of course legal practitioners advising these groups.

Diverse stakeholders are matched with diverse areas of responsibility. For example, the main examples of hazards and potential injury in a beach environment can be summarized as follows: water (immersion – drowning), marine animal (bites and stings – jellyfish), litter (cuts – broken glass), wave action (broken bones – collarbone from dumping), equipment (head injury – hit by surfboard), cliffs (fall – trip on cliff edge), water pollution (infection – gastroenteritis from faecal contamination), underwater object (spinal cord injury – diving into sandbar), criminal activity (assault – robbery), sun (sun stroke – sun exposure).

In her Summit opening address the Hon Justice Margaret McMurdo, AC, President of the Queensland Court of Appeal noted that:

“The law does not and has never required local governments, volunteers and the organisations that foster them, tourism operators, resort managers or police and emergency service personnel to protect beach users from all risk. Any obligation when it exists is only to take reasonable care for beach users. What is reasonable care will depend on the unique facts of each case”.

The law has long recognised the hazards and potential dangers involved with surfing and beach use. As a point of clarification – there is no duty for a person to rescue someone else in danger when the person did not cause the danger. A ‘Good Samaritan’ response to help someone else at the beach, however, is now largely protected by legislation and this extends to volunteers such as surf lifesavers who are serving the community and acting in good faith.

A number of the Summit speakers noted that under Australian Civil Liability legislation beach users must largely take personal responsibility for ‘obvious’ risks at the beach. However, a person’s age and general knowledge are relevant in deciding if they should have recognised an obvious risk related to beach safety.

A consistently repeated observation by the Summit speakers was that tourists are an ‘at risk’ group requiring special attention. Risks may not be obvious to them due to a lack of local knowledge about beach conditions, their poor swimming ability and language barriers.

Recognising the vulnerability of tourists, the experts recommended that tourism operators take steps to

train their staff in beach safety and to educate their clients about swimming between the red and yellow flags on patrolled beaches. Unlike local government councils, tourism operators have commercial relationships with their clients that may give rise to legal responsibilities under contract law, tort, trade practices, and workplace health and safety legislation.

For all stakeholders in beach safety the Hon. Justice McMurdo AC suggests that:

You will not go far wrong if you do the following. Regularly review your obligations and any systems you have relating to beach safety. Respond reasonably to potential risks. Take into account the size of the risk, the degree of the probability of it occurring and the expense, difficulty and inconvenience of taking alleviating action. Weigh those matters against your conflicting responsibilities. Regular monitoring and refinement of obligations and systems, taking into account all the ever-changing circumstances, is essential. I do not mean just the transitory beach and surf conditions, or even those dramatic changes predicted as a result of climate change and global warming. Factors such as origin, culture, language and needs of beach tourists are relevant. So, too, are changing patterns in criminal behaviour at the beach and new information on medical and health issues. Knowing how to most effectively communicate safety information to beach users so that they can enjoy the beach is essential. Stakeholders must make beach users aware of inherent dangers so that they can take informed personal responsibility for their own safety without endangering others.

In keeping with this general advice, the Summit experts also noted that beach safety across the nation would be greatly enhanced by standardised guidelines and signage, consistent safety messages and by improved coordination between volunteer lifesavers, salaried lifeguards and government emergency services.

Signage, for example, is a very important element in beach safety. However, it needs to be part of a larger and integrated risk management strategy. Similarly, the use of modern technology such as cameras should be investigated for broader coverage of beach environments, but with this comes a consideration of legal issues such as privacy, storage and retrieval of data, and coordination of rescue response capability. As noted in the Summit presentation by Police Superintendent Jim Keogh, during the 2006-2007 financial year there were 760 marine based search and rescue operations coordinated in Queensland involving the police, other government departments and surf lifesavers.

Another key finding from the Summit was that we still have large gaps in our knowledge about beach safety. We fairly diligently collect figures on fatalities

occurring at the beach, and according to Queensland Coroner Michael Barnes most of the reportable deaths on beaches are preventable. However, we need more research undertaken to understand the circumstances and underlying causes of these deaths if we are to intervene successfully.

In relation to identified 'at risk' groups such as tourists and small children, both groups categorised as not necessarily recognising an 'obvious risk' according to the law, there remains a paucity of reliable information on how to best communicate safety messages.

Similarly, each year surf lifesavers are involved in more than 200,000 preventive actions that enhance beach safety. We need to know more about these actions, and through properly conducted evaluations of other pro-active initiatives just what will work to facilitate beach safety. Without such evaluation it is impossible to assist stakeholders to discharge their legal responsibilities.

Conclusions

The 2007 Summit provided the first real snapshot of stakeholders and their legal responsibilities for beach safety in Australia. While the black letter law was easily identified by the Summit experts, a consistent message was that discharging obligations involved having an appropriate risk management system in place, regular monitoring and a willingness to respond reasonably to potential risks taking into account ever-changing circumstances. Tourists, in particular, were identified as a group requiring special attention since legally and practically they may not be aware of an 'obvious risk'. Finally, considerably more research must be undertaken to guide and assist the many and varied stakeholders to discharge their responsibilities for beach safety.

Acknowledgments

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MANAGING NEW ZEALAND'S NATIONAL INJURY

PREVENTION CONTRACT TO REDUCE DROWNING AND INJURY

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ABSTRACT

Water Safety New Zealand (WSNZ) administers a national funding contract from the Accident Compensation Corporation of New Zealand (ACC). Since the contracts inception in 2000 there has been the expectation from both organisations that drowning and injury entitlement claims would decrease. Yearly evaluations of this goal have seen record lows recorded for drowning statistics, but fluctuations in the level of entitlement claims.

Currently WSNZ and ACC have been working in partnership for more than seven years. The partnership's focus has periodically changed with the current focus being on Maori, rivers and public pools. The delivery mechanisms stemming from the contract have involved employing contractors, specialized industry personnel and establishing a tier of programme providers to deliver river education to school children.

Working in any partnership contains problems, challenges and many benefits. This presentation will offer a glimpse at some of those hurdles, what has been learnt and how central government and non government organisations can work to achieve water safety outcomes for the benefit of the community via a national funding contract.

Water Safety New Zealand is an incorporated society of 35 member organisations while ACC is one of New Zealand's largest central government departments.

Conclusions

1. Central government can play a vital role in funding water safety education and achieving positive results for mutual benefit.
2. Yearly funding contracts do not lend themselves to adequate evaluation requirements, but can work over a sustained period of time.

PRESENTATION PAPER

New Zealand is extremely fortunate to have some of the most extensive and beautiful waterways in the world. Our cultural way of life has traditionally meant that we take advantage of all opportunities to enjoy these environments, whether it is as part of organised activity, sport, fun, or relaxation. Sadly, this love for the water extracts too high a toll on our communities, last year, (1 January – 31 December 2007) 110 New Zealander's drowned.

Water Safety New Zealand Incorporated (WSNZ) provides for a consolidated national strategy for water safety education activities. Without such strategy water safety education in New Zealand would be ad-hoc and fragmented, the outcome of which would undoubtedly be more deaths and injuries from drowning.

WSNZ continues to grow as an organisation in response to community needs, which further supports the nationwide network of water safety education providers. While this growth is positive in terms of enhancing opportunities of exposure for the community, in terms of education, the resource level remains static, while participation in water related activities increases.

WSNZ's vision is to 'ensure everyone in New Zealand will have the water safe attitudes, skills, and exhibit the necessary behaviour to use and enjoy our water environments safely'. Our mission is through water safety education prevent injury and drowning. Since 1985, vigorous education programmes have helped reduce the annual drowning toll by 58%.

The Accident Compensation Corporation (ACC) administers New Zealand's accident compensation scheme, which provides personal injury cover for all New Zealand citizens, residents and temporary visitors to New Zealand. Sports and recreation entitlement claims cost New Zealand on average \$200 million – injuries from aquatic-based activities represent a considerable proportion of this overall figure.

Obvious overlapping areas of interest lead to discussions on 'joint' initiatives and subsequently in 2001 WSNZ entered into a contractual agreement with ACC to develop and implement initiatives to positively impact on the number of aquatic related entitlement claims. Focus for the initiatives concentrated on rivers, pools and boating. This has developed to include ethnic water safety campaigns such as the Maori Water Safety Strategy at the expense of boating.

WSNZ and ACC have been working in partnership for more than seven years with a view to mutually

benefiting from the relationship. There is an expectation that the initiatives will reduce the number of injury entitlement claims for ACC and the number of deaths by drowning. WSNZ is responsible for the development and implementation of the programme with appropriate sign-off for content and branding from ACC as defined in the contract.

As it stands the following statements can be made with regard entitlement claim data in New Zealand.

1. Boating, fishing, kayaking, surfing, swimming, underwater diving, waterskiing and windsurfing contribute \$21.8 million to ACC entitlement claims (total cost unknown).
2. On average there are 414 aquatic injury cases hospitalised each year, representing 4.4% of all sport and recreation injuries (2,486 of 56,144 cases).
3. The distribution of injuries by gender in 2007 was 75% male, and 25% female.
4. The type of injury varies significantly for aquatic sports, however neck and head injuries are the most common at 22% with injury arising from decompression sickness and the effects of drowning and non fatal submersion accounting for 22%. Neck injuries were most commonly associated with diving and head injuries with swimming and boating activities.

Since 2005/06, there has been a 16.6% reduction in new entitlement claim costs. A increase of 13.3% in on-going entitlement claim costs, and a 5% increase in total entitlement claims costs from all recreational water-related activities. It could be claimed that this overall increase means that the programme has not been effective – however, many other factors need to be taken into consideration before concluding this.

Firstly, it is hard to accurately estimate how many people actually participate in such activities – although indications are that there is increasing participation in water-related activities and an increase in the number and type of activities available. It is also thought that an increase in claims could in part be due to the increasing population in New Zealand, and the increase in the population level. So, more people and more activities involved increases the exposure to risk and therefore may impact on claim statistics.

It is also worth noting that when looking at increases in claim numbers and rates, we cannot accurately account for changes in the ACC scheme, which may be pushing up the statistics – for example, the changes due to de-privatisation of the scheme in 1999/2000 (which saw a large increase in claims

across all areas); parts of ACC's business working to encourage people to make claims or increase access to the scheme; increased rehabilitation access etc. The recreational water-related activities programme is based on strategies that have been effective in other injury prevention programmes, so the expectation is that this programme will have a positive impact on injuries and drowning deaths over time.

Working in any partnership contains problems, challenges and many benefits. This presentation will offer a glimpse at some of those hurdles, what has been learnt and how central government and non government organisations can work to achieve water safety outcomes for the benefit of the community via a national funding contract.

Conclusions:

1. Central government can play a vital role in funding water safety education and achieving positive results for mutual benefit.
2. Yearly funding contracts do not lend themselves to adequate evaluation requirements, but can work over a sustained period of time.

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AN INTEGRATED APPROACH TO BEACH LIFEGUARDING AND LIFEBOATING

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ABSTRACT

Context

The Royal National Lifeboat Institution (RNLI) has provided a lifeboat service in the United Kingdom (UK) and Republic of Ireland (RoI) since 1824 and is recognised as a world leader in the provision of offshore search and rescue through a predominantly volunteer-based organisation. In 2001, the RNLI decided to expand its remit to include beach lifeguarding to provide an integrated lifesaving service from the beach to the open sea.

Project

The RNLI now provides a lifeguard service to local authorities and beach owners on over 100 UK beaches employing over 500 paid lifeguards during the summer season. Subject to risk assessment, the service will continue to expand to cover an additional 10 to 20 new beaches annually. It is envisaged that over the next 10 to 15 years the RNLI will provide a national lifeguard service that complements the existing national lifeboat service currently provided by over 230 lifeboat stations.

Results and discussions

After the initial cultural and operational differences between the lifeguard and lifeboat service had been overcome, the lifeboat stations embraced lifeguarding as part of one single humanitarian lifesaving service. An integrated approach to management, maintenance of standards, together with joint training exercises and close cooperation during operations has helped to create a seamless approach to saving lives at sea. This partnership approach has also resulted in the sharing of ideas and standards, covering operational techniques and lifesaving equipment as well as fitness standards.

As a secondary consideration to the RNLI's remit of 'saving lives at sea', the expansion into beach lifeguarding has enabled the RNLI to increase its appeal to a greater cross-section of the public who are potential supporters, donors and lifesavers for the future.

Learning outcomes

1. To understand the rationale behind the creation of an integrated service.
2. To gain an appreciation of the scope of the service currently being provided and the proposals for future expansion.
3. To draw conclusions regarding the benefits of entering into partnership arrangements between lifeguard and lifeboat organisations, both at a national and international level.

PRESENTATION PAPER

Context

With over 7,000 miles of coastline in the UK and over 1,100 designated bathing beaches¹, it is surprising that the responsibility for the provision of safety services on these beaches has never been clear². Her Majesty's Coastguard (HMCG), which is part of the Maritime and Coastguard Agency (MCA)³, has a clear mandate for the initiation and coordination of Search and Rescue (SAR) from the near shore to offshore. However, there is no statutory duty to provide a lifeguard service or other safety measures on the beaches, although it's generally accepted that the local authority or the landowner is responsible for safety.

Historically, lifesaving clubs have tried to protect visitors to UK beaches by providing voluntary patrols. The formation of these clubs has often been in response to a perceived local need, more often as a result of a series of tragedies. The majority of clubs in the UK belong to Surf Life Saving Great Britain (SLSGB) or the Royal Life Saving Society UK (RLSS UK). Both organisations offer training and qualification schemes for beach lifeguards and, along with the Royal Society for the Prevention of Accidents (RoSPA) and HMCG, they have tried to set national standards for beach safety.

During the last 20 years, the advent of a tourist-driven economy and the need to offer a more regular weekday service throughout the summer season meant that local authorities began to supply the majority of paid lifeguards on a seasonal basis, often replacing the volunteer patrols. However, because of the lack of clarity over who is responsible for beach safety and also because there has been no statutory requirement to provide a lifeguard service,

local authorities often invested the bare minimum, sometimes providing dangerously low levels of cover. With no national standard for signage, uniform, patrol hours, equipment, training and communications, this led to an ad hoc approach.

Naturally, the voluntary lifesaving clubs and the paid 'professional' lifeguards became increasingly disillusioned with the lack of investment and, in many cases, the reduction in expenditure in so-called low priority service areas. The lack of equipment, often poorly maintained, put the lives of the lifeguards at risk. Often coupled with a lack of even the most basic facilities, the plight of the UK lifeguard service was in desperate need of support. As the new millennium arrived, SLSGB, the RLSS UK and the newly formed National Beach Safety Council (NBSC), which represented the coastal local authorities, approached the RNLI for help.

The Royal National Lifeboat Institution

In the same way that lifesaving clubs had formed, lifeboat stations also emerged from a local need, often in response to a local tragedy. However, whilst the first beach lifesaving clubs can be traced back some 50 or so years, the first lifeboat stations were established over 200 years ago⁴. In 1824, Sir William Hillary founded the National Institution for the Preservation of Life from Shipwreck, later to become the Royal National Lifeboat Institution. Since then the RNLI has gone on to be the foremost voluntary lifeboating organisation in the world currently providing an inshore and offshore SAR service out to 100 nautical miles.

Although the RNLI provides the service to the maritime community under a Royal Charter, it receives no Government funding and relies almost entirely on voluntary contributions and legacies to fund its circa £130M (approx. AUS\$300m) per annum running costs.

The RNLI lifeboat service

The RNLI provides a lifeboat service as part of the commitment to the UK and Republic of Ireland search and rescue framework. The provision of the service aims to meet three key performance standards:

- achieve an average launch time of 10 minutes from notification.
- reach all notified casualties where a risk of life exists, in all weathers, out to a maximum of 100 nautical miles.
- reach at least 90% of all casualties within 10 nautical miles of lifeboat stations within 30 minutes of launch in all weathers.

To do this, the RNLI deploys a strategically located fleet of 322 all-weather lifeboats (ALBs), which are

available at all times, and tactically placed inshore lifeboats (ILBs), which are subject to weather limitations.

The RNLI Headquarters is in Poole, Dorset, which employs over 800 full-time management, technical, logistic and fundraising and communications staff. Poole is also home to The Lifeboat College, a purpose-built 60-bed residential training college with a sea survival pool and lifeboat simulator. A repair yard and modern stores facility complete a campus-style set up that is one of the most sophisticated and well-resourced Headquarters of a charitable rescue organisation in the world.

Project/partners

The RNLI's decision to provide help to the lifesaving community required a different approach to saving lives. As the lifeboat service was predominantly reactive, and the requirement for a lifeguard service was to be proactive, it was impossible merely to adapt the existing lifeboat assets to address the safety requirement on beaches. In 2001, the RNLI piloted a new Beach Rescue service on 43 beaches in the south west of England, essentially taking over and significantly improving the existing local authority lifeguard service. The RNLI therefore set about demonstrating that it could, and should, provide a joined up service from the beach to the open sea.

Initial concerns

Such a venture, away from the traditional role that the RNLI had played for over 180 years, was a major leap of faith for the organisation. The RNLI Trustees had to balance the perceived increased risk to reputation with the provision of what was essentially a policing role combined with the more traditional rescue service. There was an increased exposure to the potential risk of litigation if things went wrong, as the whole issue of who was responsible for beach safety was still not clear. The image problem was also one of the first hurdles to overcome. The employment of young lifeguards (with their own unique surf culture) who were paid, rather than being volunteers like the older 'sensible' lifeboat crews, did not sit well with some RNLI crew, supporters and even staff.

In addition, the initial reaction from lifesaving clubs and the international lifesaving community, which is represented by the International Life Saving Federation (ILS), was one of suspicion and in some cases open concern. Such a large, comparatively wealthy organisation such as the RNLI was seen by some to be a threat to their independence and identity. The potential to provide help and support was seen as the 'carrot' but the fear that there was going to be a 'stick' created a climate of mistrust that has taken some time to dispel.

Communication

Volunteering for a lifesaving organisation is, by its very nature, emotive. For someone to give up their free time to put their own life at risk requires dedication and passion. A feeling of pride in both the organisation and the local group they represent is part of this requirement and so it is only natural for emotions to run high when a new way of doing things is introduced.

To counteract the fears within the lifeboat crews and lifesaving volunteers, key members of the project team, together with representatives from SLSGB and the RLSS UK, visited lifeboat stations and lifesaving clubs to explain the positive benefits of the project and answer any concerns directly. A comprehensive communications plan was implemented using examples of how the RNLI and the lifeguards were benefiting from the relationship. This gradually persuaded most to give the new initiative a 'fair wind'.

Entering into formal service level agreements, as well as asking the local authorities to provide a subvention, equal to the cost of employing the lifeguards themselves, helped allay the concerns about paying lifeguards instead of having volunteers.

By the end of the first trial year (2001), RNLI lifeguards had come into contact with over 3M beach visitors⁵ and had saved 20 lives and rescued 231 people. These statistics spoke for themselves and the project was given the go ahead to become an integral part of the RNLI rescue service.

Results and discussion

It was clear from the outset that by investing more in the lifeguard service the quality and standards would rise as well as the ability to do more. The investment the RNLI made in equipment, buildings, protective clothing and training has had a significant impact on the lifeguard services that were previously run by local authorities. The lifeguards themselves feel looked after and in turn are able to look after a greater number of beach visitors more effectively and efficiently. The public now sees a uniformly high standard service that provides them with an air of reassurance and knowledge that an organisation that comes with a legacy of saving lives is looking after them.

Lifeguarding was often seen as the poor relation to the other emergency services. Indeed, Her Majesty's Coastguard often declined to believe some of the rescue figures put forward by the local authorities. It came as a shock to them when the RNLI not only confirmed these figures but, after the introduction of a new national beach-related incident recording system (BEAREM) with the systems, procedures and the discipline needed to collect the statistics accurately, the figures dramatically increased.

The fitness culture that lifeguarding has brought into the RNLI has been matched by the high standards that the RNLI has introduced to lifeguarding. The RNLI, being a maritime service with strong links to the professional maritime organisations' way of doing things, has a certain discipline running throughout the organisation that lifeguards often lacked. Very soon, lifeguards were required to amend their dress code and to look after their equipment in a way that simply had never been expected in the past.

Lifeguards and lifeboat crews began working together on joint exercises and on actual rescues, soon learning to respect each other's capabilities and distinct role. Whilst lifeboat crews viewed the near shore and the surf as difficult environments to operate in, the lifeguards felt most comfortable here as they had perfected their skills of boat handling and swimming in these areas. The exchange of skills and techniques for operating in both environments has started to take place and can only continue to benefit the two arms of the organisation and ultimately the public, which is in safer, better trained and more experienced hands.

The RNLI lifeguard service

The RNLI now provides a lifeguard service on 109 beaches in England and Wales, with more coming online each year. The local authority, using an agreed funding formula, pays towards the cost of the service, which equates to the seasonal salary costs of the lifeguards and is normally 40% of the total cost. The RNLI provides the remaining 60% of the funding that covers clothing, equipment, training, management and facilities. The service level agreements ensure that the RNLI provides the service on behalf of a third party and therefore does not take on the responsibility for the provision of the service. This reduces the risk of litigation, although necessary third party liability insurances are also in place.

The RNLI lifeguard service is provided on beaches following a comprehensive risk assessment. This is conducted using a process underpinned by a scientific classification of UK beaches being developed by the University of Plymouth⁶. The RNLI 'declares' to patrol an area delimited by red and yellow flags out to 300m from the water's edge. This distance has been determined from the fitness standards research⁷, which in turn underpins the baseline performance standard that says RNLI lifeguards will:

- reach any beach casualty up to 300m from shore, within the flags on RNLI lifeguard-patrolled beaches, within 3½ minutes.

To provide the lifeguard service, the RNLI currently employs over 500 lifeguards during the summer season, which runs from 1 May to

the end of September. A full-time management and administrative team of over 40 people and a Headquarters team of 12 supports the lifeguards. A strict maintenance and technical support regime, which mirrors the system supporting the lifeboats and lifeboat crews, has been put in place and, wherever possible, technicians have been cross-trained to provide support to both the lifeboats and the lifeguards services.

A national beach safety and education strategy also underpins the lifeguard service. As well as the more traditional school visits, literature, and safety education delivery methods for beach safety information, the RNLI Beach Safety team has recently published two key standards documents to help local authorities with their beach safety signs, flags and symbols⁸, and coastal public rescue equipment⁹.

Challenges ahead

In 2006, 64% of the UK's population visited the coast at least once⁵ and watersports, including surfing, bodyboarding and kitesurfing have increase vastly recent years. In response to this increasing need, the RNLI intends to double the number of beaches on which it provides lifeguards over the next 5 years. The future aim is to provide lifeguards on every beach that warrants them in the UK and Republic of Ireland over the next 10 to 15 years.

The decision by the RNLI Trustees to expand the lifeguard service has, until recently, been dependent upon clarity being given by the UK Government on the issue of responsibility for beach safety. However, although the RNLI has decided to implement its roll-out plans without this being given, it continues to lobby Government in this area. With clarity for responsibility comes clarity on who should fund the service. Whilst the RNLI is currently both capable and content with funding at least 60% of the cost, it does not wish to be held responsible for providing the service in perpetuity should its financial position change dramatically.

Conclusions

There have been a number of lessons learned during the 8 years since the inception of the Beach Rescue project. Communications have not always been as good as they could have been and the style of communicating, as much as the message itself, has often led to difficulties. Effective, open and honest communication is often the key to acceptance, even if initially the message is not necessarily palatable. If delivered with integrity, the communication of change, however inevitable, is normally greeted with similar integrity.

Change on this scale is something that the RNLI has not been used to and its approach to change management

has needed updating in light of the experience of taking on such a project. However, the fundamentally sound ethos of providing a joined up service to save more lives is unquestionable. It has served the Institution well as it has slowly changed course to head in a direction that may well prove to be its financial sustentation as well as providing it with an unquestionably strong moral platform as it goes forward as a bigger, stronger and more rounded organisation.

Since 2001 RNLI lifeguards have saved 256 lives and attended over 43,000 incidents¹⁰. These statistics speak for themselves. The introduction of a lifeguard service is arguably one of the greatest success stories in the RNLI's recent history. As the joined up lifesaving service expands, being able to claim that the RNLI truly provides a 'ring of safety' around the coastline of the UK and Ireland is a powerful message that will position the RNLI as perhaps the greatest beach marine search and rescue Institution ever.

References

1. Marine Conservation Society. (2007)
2. RNLI policy briefing paper. (2007): Providing safety for the public on Britain's beaches
3. Maritime and Coastguard Agency. (2002): Search and rescue framework for the United Kingdom of Great Britain and Northern Ireland
4. Formby Civic Society. (2003): Origins of Britain's first lifeboat station
5. The UK Tourism Survey. (2006)
6. Dawes, P. and Scott, T. (2007): Developing a risk assessment model for practical application in the UK. World Water Safety Conference 2007.
7. Reilly, T. and Tipton, M. (2005): Fitness standards for Royal National Lifeboat Institution (RNLI) lifeboat crew. University of Portsmouth report.
8. RNLI. (2005): A guide beach safety signs, flags and symbols
9. RNLI (2007): A guide to coastal public rescue equipment
10. RNLI Beach Related Emergency (BEAREM) database

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WATER SAFETY THAT WORKS

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ABSTRACT

Background/Introduction

Water safety and drowning prevention has come a long way over the past ten years within Western Australia. In 1997, 38 Western Australians drowned with the majority of incidents occurring in the 0-4 year's age group (24%). The Beach/Ocean and Home Swimming Pools were common incident locations and swimming was the most common activity being undertaken at the time of the incident.

Our most recent statistics indicate that in 2006, a total of 28 Western Australians drowned, with the majority (46%) occurring amongst 30-59 year olds. Swimming, fishing and boating were common activities being undertaken at the time of the incident and the majority occurred at rivers and coastal locations.

Methods

Much has changed over the past ten years, and a combination of a number of strategies has contributed to this including:

Legislation and Policy

- Swimming Pool Fencing Legislation
- Introduction of the Code of Practice for the design, construction, operation, management and maintenance of aquatic facilities
- Supervision policies in public aquatic facilities adopted by the Leisure Institute of Western Australia Aquatics and the aquatics industry

Education and Training

- Health promotion and drowning prevention education programs
- Community first aid and lifesaving training
- Indigenous specific training course development
- Professional development training for industry professionals

Research

- Compilation of coronial drowning deaths statistics
- Evaluation of health promotion programs and initiatives
- Market and industry research

Safety Risk Management

- Home swimming pool fencing compliance audits
- Public swimming pool compliance audits
- Inland waterways audits

Results/Evaluation

As a result of the holistic approach toward drowning prevention and water safety, the number of drowning deaths within Western Australia has decreased over the past ten years. Drowning deaths amongst toddlers aged 0-5 years is at a ten year low. In addition there have been no drowning deaths recorded in public swimming pools since 2004 and rates amongst children aged 6-14 have remained low.

Research gives us the ability to monitor drowning death trends and to identify new populations to target that rate at a high-risk of drowning death.

Discussion

By engaging government and assisting to influence legislation, water safety standards will continue to be promoted and ingrained in the Western Australian community. By taking a holistic approach and engaging with government, non-government organisations, the industry and the community we have been able to influence and effect behaviour change in relation to drowning prevention and water safety in Western Australia.

Conclusion

Although we have had success in reducing the number of drowning deaths in toddlers and young children in Western Australia, we still face many challenges in the future. Fishing and boating have emerged as high-risk activities that require attention. In addition, increases in drowning deaths amongst older populations and at inland waterway locations also need to be considered when planning water safety and drowning prevention initiatives in the future.

PRESENTATION PAPER

Introduction

Australia's climate and geographic conditions are conducive to water-related activities and recreation around the water has become a popular leisure activity for many Western Australians. Unfortunately, these activities can be associated with injury and the loss of life through drowning.

Drowning deaths and near-drowning incidents contribute significantly to the health burden of the Western Australian population. Drowning is responsible for a greater number of potential years of life lost per incident than any other injury (Gillam et al 2003). In addition, the costs associated with drowning deaths and near-drowning incidents are extensive. The cost of drowning is estimated to be \$1.6 million per individual that drowns (Hendrie, 2003).

Water safety and drowning prevention has come a long way over the past ten years within Western Australia. In 1997, 38 Western Australians drowned, with the majority of incidents occurring in the 0-4 year age group. The beach/ocean and home swimming pools were the most common incident locations and swimming was the most common activity being undertaken at the time of the incident.

The most recent statistics indicate that in 2006, a total of 28 Western Australians drowned, with the majority occurring amongst those aged 30-59 years. Swimming, fishing and boating were common activities being undertaken at the time of the incident and the majority of deaths occurred at inland waterway and coastal locations.

Methods

Much has changed over the past ten years, and a combination of strategies has contributed to this. Through developments in a number of areas including legislation and policy, education and research, we have been able to grow our organisational capacity and improve drowning prevention and water safety within the Western Australian community.

Legislation and Policy

Working with government and industry to develop legislation and policy is important to ensure that drowning prevention and water safety become regulated and embedded within the community.

Over recent years, the Royal Life Saving Society Australia – WA Branch has been very proactive in advocating with the aquatics and recreation industry for changes to water safety regulations. This has resulted in improvement to the swimming pool fencing legislation to change the barrier requirements of home swimming pools and to enable organisations other than local government to conduct home swimming pool barrier inspections. This has led to the inspection of around 100,000 home swimming pool barriers over the past eight years.

This advocacy has also resulted in the development of the Code of Practice for the design, construction, operation, management and maintenance of aquatic facilities – a comprehensive document which covers

many health, safety and operational requirements all swimming pool facilities including public pools through to school pools and strata pools.

Royal Life Saving has also worked with industry to establish policies regarding parental supervision of young children when using public swimming pool facilities throughout Western Australia. These policies have also been implemented in South Australia and soon to be in Victoria due to their success in Western Australia.

The No School No Pool policy has also been developed and introduced into swimming pool facilities managed in five remote Aboriginal communities to encourage children to attend school. Principals in these communities have reported a marked increase in the number of children attending school since the introduction of the policy. Some have even needed to employ additional teachers due to the increased attendance.

Education and Training

Education and Training has long been a service offered to the community by Royal Life Saving. However, over the last ten years the number of training courses and education programs has been expanded. In addition to traditional first aid and bronze medallion, courses covering safe pool operations and certificate IV in Assessment and Workplace training are available to the community. First aid and lifesaving courses which have been designed specifically for Indigenous communities have been developed to ensure that training is available for all Western Australians.

It is important to ensure that industry professionals have access to up-to-date information regarding drowning prevention and water safety and are provided with the necessary training to ensure they are confident to promote safety messages to the community.

Royal Life Saving WA has also developed a number of health promotion and drowning prevention programs covering areas such as toddlers, Indigenous communities and alcohol related drowning deaths. These programs assist in reducing the number of drowning deaths recorded in Western Australia.

Research

Research underpins all the work undertaken by the Royal Life Saving Society. Research enables us to monitor drowning death trends, and identify at-risk groups and activities. It also ensures we develop strategies based on evidence and best practice and allows us to determine the effectiveness of our programs.

Coronial data and drowning death information is collected on a monthly basis direct from the Coroner's Court of Western Australia. This data gives us a detailed profile of drowning deaths in Western Australia which assists in allocating resources for drowning prevention initiatives.

The various drowning prevention programs and initiatives are all evaluated regularly to ensure that strategies remain effective and relevant to the community.

In addition, Royal Life Saving has expanded the scope of our work undertaken and the expertise of their staff to include specialised research services. Recently we have completed market research projects for the Department of Sport and Recreation, Office of Crime Prevention and Department of Water to improve the information available for government and most importantly industry in the area of drowning prevention and water safety.

Results

As a result of this holistic approach towards drowning prevention and water safety, the number of drowning deaths recorded within Western Australia has decreased over the past ten years.

One of the biggest success stories has been the decrease in drowning deaths recorded within the under five years age group. Drowning deaths amongst toddlers under the age of five is at an all time low, with only two deaths recorded amongst this age group in 2006 in Western Australia.

In addition there have been no drowning deaths recorded in public swimming pools since 2004 and drowning death rate have remained low amongst children aged 6-14 years over the past few years.

Discussion

To achieve improvements in drowning prevention and water safety, it is important to take a holistic approach. No one strategy works in isolation. Through engaging with government, non-government organisations, the aquatics and recreation industry and the community, we have been able to influence and affect behaviour change in relation to drowning prevention in Western Australia.

Ongoing monitoring of drowning deaths trends in Western Australia through reviewing coronial data and conducting market research is essential to enable monitoring of trends in drowning deaths and identify priority areas and target groups for drowning prevention strategies within the community. It is important to monitor trends to ensure that programs and strategies remain relevant and address the needs of the community.

Conclusion

With the Royal Life Saving Society Australia – WA Branch celebrating 100 years of service to the community in 2009, we have been able to reflect on the growth and success of the organisation. The organisation has come a long way since it was started by a police sergeant in Kalgoorlie in 1909 who conducted water safety classes for people who travelled to the coast for holidays.

Royal Life Saving WA now employs over 200 full time staff and provides a range of services for the community including training opportunities, drowning prevention programs and safety risk management services.

Although we have had success in reducing the number of drowning deaths in toddlers and young children in Western Australia, we still face many challenges. Fishing and boating have emerged as high-risk activities that require attention. In addition, increases in drowning deaths amongst older populations and at inland waterway locations also need to be considered when planning future drowning prevention initiatives.

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WATER SAFETY AWARENESS PROGRAM (WSAP)

NORTHERN TERRITORY PROGRAM FOR DROWNING PREVENTION OF CHILDREN UNDER 5 YEARS OF AGE.

FLOSS ROBERTS

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REBECCA GAWNE

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ABSTRACT

In 2002, the Northern Territory (N.T.) had the highest drowning rate in Australia in the under five's age bracket. To combat this alarming statistic, RLSSA NT Branch in conjunction with N.T. Government decided to implement the "Water Safety Awareness Program (WSAP)".

WSAP is a N.T. Government funded initiative that aims to reduce the number of drowning and water related incidents in the under five age group. This is achieved by providing parents with children aged under five, with the information and skills relating to emergency procedures, water awareness, safety and swimming foundation skills. These can be used and practiced throughout their child's development. WSAP is available to children aged six months to five years and who are permanent residents of the N.T. WSAP entitles eligible children to participate free of charge. There are five structured lessons facilitated by an accredited and approved instructor. The program uses a voucher booklet system as a means of claiming the sessions.

The program has proved to be successful with the N.T. now having one of the lowest drowning rates for this age bracket in Australia. To date 4803 families have enrolled in the program with 12 active providers delivering the water sessions. The enrolments are proportionally even to population. All providers must undergo a self safety assessment, a health and safety assessment and an onsite assessment. These assessments have been beneficial for improving the safety standards whether it is a public swimming pool or a private pool. The emergency care session is vital for parents to learn how to respond correctly and

confidently in an emergency situation. By gaining this knowledge and skills, the wider community can also benefit.

All information regarding the program is recorded on a data base. Monthly reports are promulgated from this information and provided to the Water Safety Branch NT. Out of these reports RLSSANT have been able to identify some emerging issues. One predominate issue was that parents were utilising all the water session vouchers and not attending the emergency care session. To remedy this, RLSSANT introduced a policy that parents will be issued one voucher initially to attend the emergency care session. After successful completion of the session, the parents then receive the remaining four vouchers. The attendance rate of these sessions has noticeably increased since the change in policy.

Several remote indigenous communities have had the opportunity to utilise WSAP. These communities have embraced the program with an overwhelmingly positive response. In the wet season, remote areas are difficult to access and southern areas are affected by cooler weather. This provides logistical problems delivering the program year round. Families that reside in remote locations are given access to a DVD which contains all the information on the emergency care session and the first water session.

In December 2007 the Northern Territory Government announced that the WSAP would become a continuous program. Previously WSAP has been relying on yearly funding being approved. The program now links into both the National Water Safety Plan and the Northern Territory Water Safety Plan.

PRESENTATION PAPER

Introduction

Last year 35 Australian children under the age of 5 died as a result of a preventable drowning. The majority of toddler drownings occur at swimming pools.

The Northern Territory is an aquatic environment and the hot tropical environment makes us love the water, especially children. Pools, rivers, lakes, billabongs, dams and the ocean are part of our culture and lifestyle.

Water awareness begins from birth and parents can enjoy safe water fun with their children.

Background

In 2002 the Northern Territory had the highest drowning rate in Australia in the under 5's age bracket. Royal Life Saving Northern Territory Branch in partnership with the Northern Territory

Government implemented the Water Safety Awareness Program as a strategy targeted at families and lifestyle. The Water Safety Awareness Program aims to reduce the number of drowning and water related incidents in the under five age group. This aim is achieved by providing parents of children under five with the information and skills relating to emergency procedures, water awareness and safety and swimming foundation skills, which can be used and practiced throughout their child's development. The Water Safety Awareness Program is available to children aged six months to five years and who are permanent residents of the Northern Territory.

Method

The program entitles eligible children to participate free of charge, in a five part series of structured lessons facilitated by an accredited and approved instructor. This consists of one session on emergency care with a strong focus on resuscitation and emergency procedures and four practical water sessions. The program uses a voucher booklet system as a means of claiming the sessions. The emergency care session is vital for parents to learn how to respond correctly and confidently in an emergency situation. These knowledge and skills are invaluable to the family and the community. Children under five depend on their parents for the safety and protection from danger. To reduce the risk of drowning, the program is aimed at the parents who have children aged under five. Both the child and the parent are involved in the water sessions, creating a learning atmosphere of aquatic awareness, capabilities and an understanding of supervision requirements around water.

Results

The program has achieved milestones in the Northern Territory as we now have one of the lowest drowning rates for this age bracket across Australia. To date over 5000 families have enrolled in the program with 12 active providers delivering the water sessions. This has provided employment and business opportunities within the aquatic industry. The enrolments are proportionally even to population. All providers must undergo a self safety assessment, a health and safety assessment and an onsite assessment. These assessments have been beneficial for improving pool safety standards, whether it is a public swimming pool or a private pool.

Information regarding the program is recorded on a data base. A monthly reporting schedule to the Water Safety Branch NT. assists to identify issues or trends. The most predominate issue was that parents were utilizing all the water sessions vouchers and not attending the emergency care session. Royal Life Saving Northern Territory recommended parents be issued one voucher to attend the emergency care session.

Upon attending this session parents receive the remaining vouchers. The attendance rate for the emergency care session has increased since this change and feedback from the parents are their shock regarding the risk of drowning and their lack of awareness of supervision.

Discussion

In December 2007 the Northern Territory Government announced that the program would become a continuous program. In the past the program has been relying on funding being approved. Continuous funding has allowed for further promotion, development and improvement of the program. It is to be commended that the Northern Territory Government has a proactive strategy for drowning prevention of toddlers.

Providers of the program must be AUSTSWIM infant qualified. This has made it challenging to procure providers especially in the Remote areas. Representatives of the Water Safety Awareness Program do conduct visits to the communities that do not have local providers to promote and deliver the program. This allows for all communities to actively participate and gain knowledge and skills from the program.

Several remote Indigenous communities have had the opportunity to utilize the Water Safety Awareness Program. With Indigenous people being four times more likely to drown compared to non Indigenous Australians, the program is essential for delivering fundamental skills and knowledge to members within these communities. The communities have embraced the program with a positive response. In the wet season remote areas are difficult to access due to widespread flooding and southern areas are affected by cooler weather in the dry season thus making it difficult to deliver the program all year round. Families that reside in remote locations are given access to a DVD which contains all the information on the emergency care session and the first water session.

The program is identified in the National Water Safety Plan and the Northern Territory Water Safety Plan. Specifically the program increases participation in swimming and water safety programs to develop survival skills, resuscitation and safe participation in and around the water. Also by identifying and monitoring standards for venues, aquatic activities and qualifications of service providers according to nationally recognised standards from peak aquatic agencies whilst following best practice water safety standards and guidelines.

The Water Safety Awareness Program compliments the Royal Life Saving Society's KEEP WATCH program

within the Northern Territory. Both of these programs have the key focus points of supervision, restricting access, water familiarisation and resuscitation.

WSAP is industry best practice and our clients enjoy the lifestyle benefits.

Conclusion

The Water Safety Awareness Program offers many direct achievable and realistic benefits to the community. The program aims to reduce the drowning rate of under 5's across the Northern Territory but the effects are much deeper, some of these benefits include the provision of local jobs for local people, promotes leadership skills and employability skills within the community, engaging and developing links between community agencies, strong networks across remote indigenous communities, promotes community events, programs and physical activities, safety and risk management practices.

The health, social and economic benefits are enormous. It is fun, free and making a positive contribution to the life of Territorians.



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PRESENTATIONS:**CULTURALLY AND LINGUISTICALLY DIVERSE (CALD) COMMUNITIES****KEY DROWNING CHALLENGES****WHANAU NUI
SWIMMING AND WATER SAFETY
FOR FAMILIES AT RISK**

CRAIG MILLS

*Drowning Prevention Coordinator, WaterSafe Auckland Inc***ABSTRACT**

Addressing the over representation of two ethnic groups - Maori and Pacific Island people - in New Zealand's drowning statistics, a programme offering free family swimming and water safety lessons has been delivered in the Counties Manukau Region (South Auckland) for the past three years.

The Whanau Nui Programme, which translated means 'Big Family Swim', encourages Maori and Pacific Island families to introduce their children to safe aquatic practices in water familiarization and 'learn to swim' lessons.

The programme places great emphasis on parental supervision and participation, with a criteria for involvement in the programme being that a parent must be in the water with their children during each of the five lessons.

The objectives of the Whanau Nui Programme are to:

- 1) Give children an opportunity to learn basic water safety skills and increase their confidence in water.
- 2) Teach parents water safety skills which they can continue to reinforce with their children once the free lessons have finished.
- 3) Deliver water safety messages to parents focusing on active child supervision when in or near water.
- 4) Deliver the programme in such a way that the water safety skills are fun and enjoyable for both the parent and the children.
- 5) Target at risk ethnic groups in the Counties Manukau Region, specifically Maori and Pacific Island peoples.

A major result of the programme has seen parents value 'learn to swim' lessons for their children, with 25% (n=53) of participants in the 2006, and 25% (n=118) of participants in the 2007 programme enrolling their children for further paid tuition.



The Whanau Nui Programme, which translated means 'Big Family Swim'

The programme model and further results of the 2006, 2007 and 2008 programmes will also be presented.

PRESENTATION PAPER

Introduction

Living in an island nation, New Zealanders are privileged to have easy access to a wide range of aquatic environments such as lakes, rivers, beaches and public swimming pools. Given the ease of accessibility, and the cultural importance of water to many New Zealanders, it is little wonder that aquatic participation is the number one leisure activity for young people, and the second highest leisure activity for adults (SPARC Facts; 2001).

Unfortunately, New Zealanders' love and affinity with the water often has serious consequences with an average of 130 people drowning, and 650 hospitalisations a year as a result of a water related injury (NZ Drowning Prevention Strategy, 2005).

Whilst only making up 21.5% of New Zealand's population, collectively Maori and Pacific Island Peoples make up 30% of New Zealand's drowning statistics (22% and 8% respectively). When examined on a regional level, Maori and Pacific Island Peoples make up 40% of Counties Manukau's (South Auckland's) drowning statistics (DrownBase, WSNZ).

Programme

Addressing the over representation of Maori and Pacific Island People in New Zealand's and Counties Manukau's drowning statistics, a programme offering free family swimming and water safety lessons has been delivered in the Counties Manukau Region for the past three years led by Injury Free Counties Manukau.

The Whanau Nui Programme, which translated means 'Big Family Swim', encourages Maori and Pacific Island families to introduce their children to safe aquatic practices in water familiarization and 'learn to swim' lessons.

The programme, which consists of five, free 30 minute lessons run over five days, places great emphasis on parental supervision and participation. A criteria for involvement in the programme is that a parent must be in the water with their children during each of the five lessons. For children under three years of age, the required parent to child ratio is 1:1. For children over three years of age, the maximum parent to child ratio is 1:4.

Each thirty minute lesson has five to seven families, as well as two to three swim instructors. Each day, instructors give parents and children a specific water safety message throughout the lesson.

At the end of the lesson, accompanying resources are given to the parents and children to help further reinforce the message. The messages promoted throughout the programme are:

Day One: Adults must stay within sight and reach of children under eight years of age

Day Two: Learn to swim

Day Three: Swim between the flags

Day Four: Always wear a lifejacket

Day Five: Learn infant/child CPR techniques

Programme Objectives

The objectives of the Whanau Nui Programme are to:

- 1) Give children an opportunity to learn basic water safety skills and increase their confidence in water.
- 2) Teach parents water safety skills which they can continue to reinforce with their children once the free lessons have finished.
- 3) Deliver water safety messages to parents focusing on active child supervision when in or near water.
- 4) Deliver the programme in such a way that the water safety skills are fun and enjoyable for both the parent and the children.
- 5) Target at risk ethnic groups in the Counties Manukau Region, specifically Maori and Pacific Island peoples.

Discussion

Since the programme's inception in 2006, 1418 participants have completed the Whanau Nui Programme.

Each year, the level of interest in the programme grows, and further aquatic facilities are brought on board to meet the increased public demand. The initial 2006 programme had five participating aquatic facilities, with this number increasing to nine aquatic facilities covering eight districts within the Region in 2008. The 2008 programme also saw the inclusion of a facility to cater specifically for infants and disabled participants.

A major result of the programme has seen parents value 'learn to swim' lessons for their children, with 25% (n=53) of participants in the 2006, and 25% (n=118) of participants in the 2007 programme enrolling their children for further paid tuition.

Results across all of the locations consistently show that children most enjoy the progression they made throughout the five days, and opportunity to be in the water. Parents were asked what two things they had learnt during the lessons. Consistently across all

locations water safety skills and swimming skills were the most common learning outcomes. Approximately 80% of parents now believed that they would be able to teach their children basic swimming skills in their own time.

The success of the programme has seen the model been applied into two further major ethnic groups based in Auckland – Asian and New Settlers/ Refugees, and resulted in the programme being delivered outside of the Counties Manukau Region and into Auckland City.

Acknowledgments

Funding and co-ordination from Injury Free Counties Manukau, an injury prevention branch of the Manukau City Council has ensured the sustainability and success of the Whanau Nui Programme.

The programme also continues to receive support from Manukau Leisure Services, Water Safety New Zealand, Swimsation, Swimgym and Sandra Blewett Swim School.

WATER SAFETY FOR AFRICAN REFUGEES

THE NEWCASTLE EXPERIENCE

SUSAN DENHOLM

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ABSTRACT / PRESENTATION PAPER

Imagine being a refugee from Africa – the drier parts; speaking another language and coming to Australia where going to the beach or a pool is a way of life. To further complicate the lack of familiarity with aquatic situations.

Newcastle has recently seen the emergence of African refugee communities numbering several hundred people. After a couple of immersion incidents at public pools, the African Aquatic Water Safety Project was developed to provide water awareness to high risk groups within these CALD communities, in particular high school students.

The project goals were to:

- Prevent drowning or immersion incidents in a high risk population
- Increase their participation in community based aquatic activities
- Seek to achieve greater community integration within a broader community given the importance of recreational aquatic activities in Newcastle.

The pilot project approach was developed in partnership with Hunter Surf Lifesaving and the Migrant Resource Centre (now known as Northern Settlement Services), with input from local high schools.

A cultural specific teaching approach was developed that differed from the usual teaching methods and included developing a broader community awareness of water safety.

Twenty African high school students successfully completed the pilot program with at least 3 wanting to go on and strive for their Bronze Medallion. There has been a significant increase in overall understanding of water safety issues with subsequent changes in behaviours; an understanding of the role of aquatic staff; increased cultural awareness and understanding by Lifeguards of Africans and their cultural needs.

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Acknowledgements

- This Program gained funding assistance from the Local Government and Shires Association of NSW Healthy Local Government Grants Program.
- It was implemented by Hunter Surf Lifesaving and Newcastle City Council with organisational support from Northern Settlement Services Ltd and St Clemente High School.
- Program sponsors included Newcastle Permanent Building Society, Prime Television and assistance with equipment from Ray Baartz Sports and Greg Frame Promotions.

CURRENT CALD PROJECTS AT LIFE SAVING VICTORIA

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ABSTRACT

Background/Introduction

CALD communities, for many reasons, have had reduced exposure to swimming and water education opportunities. Via examples of current programs, LSV believes important CALD issues such as greater inclusion into clubs, greater safety/enjoyment around aquatic environments and potential aquatic employment pathways are being addressed.

Methods

Some common key characteristics exist with the implementation of all programs under discussion. Initial community consultation to establish the key concerns and needs of the target group and the importance of identifying key partners to assist with program execution are essential to the future of the program. One to four year programs are currently in place and the challenges of both will be discussed.

Results/Evaluation

Numerous participants have participated in school incursions targeting water safety and basic resuscitation. Others have engaged in learn to swim and first aid programs. Employment pathways have been addressed via pool lifeguard and swim teaching courses. Other initiatives include female only child/infant CPR and first aid courses, diversity training for participating staff members and community events such as Family Fun days to further engage the larger community with local facilities.

Discussion

As our population has grown so has its diversity. Our clubs need to better reflect the communities they represent and service.

There are obvious benefits of such programs including the greater safety for CALD groups and greater representation of CALD groups within clubs.

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All programs are currently in the early or pilot stages with the hope that program success will allow lessons learnt at pioneer facilities to be adapted across both clubs and industries. This in turn builds capacity within the facilities involved.

Conclusion

The better programs require 'buy in' from communities via early consultation and then ongoing program involvement/ownership. Longer term programs instill confidence and the ability to plan ahead, in both the target group and partnering organisations (such as schools, migrant resource centres and community groups).

Aquatic educational awareness, motivation for future involvement, cross cultural awareness/acceptance all improve as a result of offering opportunities previously unavailable.

Acknowledgements

Life Saving Victoria would like to acknowledge the support of the Department of Immigration and Citizenship, Department of Justice and Vic Health for funding the various projects. We also thank the various local community partners for their continuing support of the projects.

PRESENTATION PAPER

Cultural and Linguistically Diverse (CALD) communities, for many reasons, have had reduced exposure to swimming and water education opportunities. Current LSV CALD projects address important issues such as greater inclusion into Life Saving clubs and aquatic facilities, greater safety/enjoyment around aquatic environments and potential aquatic employment pathways.

Some common key characteristics exist with the implementation of all programs under discussion. Initial community consultation to establish the key concerns/needs of the target group and the importance of identifying key partners to assist with program execution are essential to the future of the program.

Current Life Saving Victoria (LSV) programs are of various lengths - one, two and four years are currently in place. Longer term programs have shown to instil greater confidence and the ability to plan ahead, in both the target group/s and the partnering organisations (such as schools, migrant resource centres and community groups).

Numerous participants have participated in the various LSV projects included below.

School incursions have been effective in conveying water safety and basic resuscitation messages. Others have engaged in learn to swim and first aid programs.

Employment pathways have been addressed via opportunities to participate in pool lifeguard and swim teaching courses.

Other initiatives include child/infant water awareness sessions for parents and carers, cultural diversity training for participating service providers, and community events such as Family Fun Days to further engage the larger community with their local facilities.

Whilst most of LSV's programs below are in their early stages, already it is clear that project aims such as improving basic knowledge of water safety, improving relationships and mutual understandings between CALD and non CALD groups, demystifying the operations of Life Saving Clubs/ Leisure centres/pools and displaying aquatics as a positive recreational/sporting option has already been achieved.

Current projects fall into the following three categories;

1. Pool/Leisure Centre based
2. Swimming based
3. Life Saving Club/beach based

1. Pool/Leisure Centre based – "The Water Connections Project"

Aims to educate CALD communities about water safety, increase participation and access of CALD communities with local leisure facilities within the Hume Shire of Melbourne and offer aquatic employment pathways.

This current 18 month program started early 2007 through funding from the Dept of Immigration and Citizenship. As the Hume Shire has a high Muslim population this group was targeted, but is not exclusive of other CALD groups.

Most activities occur in the Hume Shire of Melbourne.

Activities covered last year, and currently running, are Pool lifeguard courses, community and school education sessions such as Meet-a-life guard, Resuscitate-a-mate and Parent/Carer Water Awareness sessions, and Family Fun days at the Broadmeadows, Coburg and Thomastown Leisure/ Aquatic Centres.

In excess of 4,000 people participated in the Water Connections project this year.

2. Swimming based – “The Skills for Life for All Project”

Aims to teach and increase participation in swimming, increase water safety knowledge and increase CALD community access to local pools.

The program will run for four years and started term 1, 2008 through funding from Vic Health.

LSV in partnership with The Smith Family (TSF), Belgravia Leisure (BL) and Western English Language School (WELS) offer 70 positions for swimming classes.

TSF recruit these candidates. The project pool, Wyndam Aquatic and Events Centre, is in Hoppers Crossing, Melbourne. The program is available to children 4-16 years of age.

Children swim for four terms per year, 10 weeks per term, 1x 30 min class per week per candidate. The participants are from a mix of CALD and low socio economic backgrounds (a ratio of approximately 75% and 25% respectively). Most of the children currently come from the Burmese community.

The children are involved in regular swimming classes already scheduled by the partnering swimming pool, therefore fully integrated.

Those who cannot continue to participate in the program are replaced by children from within the same target communities so as to always fully utilize the 70 positions available.

The children follow an established LSV water program ('Swim and Survive') providing a balanced approach to swimming, water safety and survival skills.

Aquatic 'pathways' (both in progressive skills and potential employment) are an aim of the program. Partnering pools (Belgravia Leisure) additionally offer free access to all participants and their families for free play or lap swimming whilst they are involved in the program.

3. Life Saving Club/beached based – “Value a Volunteer” and “On The Same Wave” Projects

Funded by the Department of Justice and the Department of Immigration and Citizenship.

Respectively, both are 12 month programs that aim to educate CALD communities in water safety as well as better educate and include CALD communities in Life Saving clubs. Edithvale Lifesaving Club and Altona Lifesaving Club are the two main participating clubs at the moment with genuine interest shown by other clubs for the upcoming summer.

There are a number of activities Life Saving Victoria offer to 'spike' the interest of these CALD communities.

These activities ideally take place 'onsite' at the clubs themselves but many need to occur 'offsite' in the suburbs, closer to the homes of participants.

Activities 'offsite' however still convey messages and teach skills, whilst offering opportunities to become involved with the pilot club at a later stage.

To date, over 1,000 participants from the Horn of Africa, Muslim and Asian communities of Melbourne have been involved in activities on beaches or offsite in school, university or community group settings.

As our population has grown so has its diversity. Our Life Saving clubs need to better reflect the communities they represent and service.

There are obvious benefits of such programs to both clubs and CALD communities alike including the greater safety for CALD groups at beaches and greater representation of CALD groups within clubs. Both are pilot programs established with the hope that program success will allow lessons learnt at these pioneer facilities to be adapted by other clubs and industries alike. Building the capacity of participating clubs to continue links with CALD groups post funding is a major project objective.

Life Saving Victoria would like to acknowledge the support of the Department of Immigration and Citizenship, Department of Justice and Vic Health for funding the above projects.

We also thank our various local community partners for their continuing support of the projects



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DROWNBASE™

IDENTIFYING AT RISK FACTORS WITH MAORI DROWNING IN NEW ZEALAND

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ABSTRACT

DrownBase™ is the official database for Water Safety New Zealand (WSNZ) that records all fatal drowning outcomes in New Zealand and categorizes them in a variety of fields. DrownBase™ was developed in 1990 and contains records of all fatal drowning incidents in New Zealand since 1980. The statistical information allows for analysis on many criteria including site of drowning, activity, gender, age group, ethnicity, alcohol involvement, rescue attempts and region. Up until 1996 Maori who drowned were only categorized as Maori if they had a Maori surname otherwise they were identified as Caucasian or Unknown. DrownBase™ data has now been researched with cross analysis to identify a range of 'at risk' factors associated with Maori drownings from 1999 to 2006.

In 2003, WSNZ undertook a proactive approach to establishing a water safety strategy for Maori. 'Kia Maanu, Kia Ora – Stay Afloat, Stay Alive' is a water safety strategy, which aimed to integrate Maori language and tikanga to reduce the number of Maori drowning. Since its inception, a number of resources and strategies aimed at promoting and encouraging water safety for Maori have been developed and distributed to key agencies such as Kohanga Reo (Maori Early Childhood Centres) and Kura Kaupapa (Maori Language Immersion Schools).

A recent study commissioned by WSNZ, extends on previous work by exploring four key principal areas of research;

1. Which waterways Maori tend to frequent and use,
2. What activities are undertaken by Maori while in, near or on the water,
3. Who are the primary teachers of water safety and swimming for Maori, and
4. What are the safety rules that are recalled in, near or on the water?

The aim of gathering information from Maori around these four key areas is to provide a more accurate picture of how Maori attitudes & behaviours impact on their water activities, their communities and safety.

PRESENTATION PAPER

Abstract

DrownBase™ is the official database for Water Safety New Zealand (WSNZ) that records all fatal drowning outcomes in New Zealand and categorizes them in a variety of fields. DrownBase™ was developed in 1990 and contains records of all fatal drowning incidents in New Zealand since 1980. In 2003, drowning statistics indicated that whilst the total number of people drowning in New Zealand was decreasing over time, the proportion of Maori drowning was increasing. Through DrownBase™ Maori male and Maori children under five were identified as the most likely 'at risk' group of drowning. As a result WSNZ launched a Water Safety Campaign, Kia Maanu, Kia Ora (Stay Afloat, Stay Alive) for the provision of quality water safety education to Maori. This presentation will demonstrate how DrownBase™ and recent research has been used to identify at risk factors relating to Maori drowning and priority areas for water safety education.

Background

In 2003 WSNZ took a proactive approach to establish a water safety strategy in response to the high rate of Maori drowning in New Zealand. On average 27 Maori people drown and many more are hospitalised every year as a result of water related injuries (Chalmers, 2004). So far, strategies employed to reduce Maori drowning in New Zealand have produced positive outcomes in terms of raising the awareness and promoting key water safety messages in the community. However, further research into practices, activities, sites and demographics associated with Maori is needed to develop future strategies and programmes aimed at reducing the drowning rate.

DrownBase™

DrownBase™ is the official database for Water Safety New Zealand (WSNZ) that records all fatal drowning outcomes in New Zealand and categorizes them in a variety of fields. DrownBase™ was developed in 1990 and contains records of all fatal drowning incidents in New Zealand since 1980. The statistical information allows for analysis on many criteria including site of drowning, activity, gender, age group, ethnicity, alcohol involvement, rescue attempts and region.

DrownBase™ protocols require that the New Zealand Police and Coroners records be used to capture all drowning related deaths. It is also relied on by external organisations such as the New Zealand Department of Statistics and the Accident Compensation Corporation (ACC) for benchmarking and recording indicators. Up until 1996 Maori who drowned were only categorized as Maori if they had a Maori surname otherwise they were identified as Caucasian or Unknown.

DrownBase™ data has now been researched with cross analysis to identify a range of 'at risk' factors associated with Maori drownings from 1999 – 2006.

At Risk Factors for Maori

The most common sites for Maori drowning are:

1. River
2. 0-1km Offshore
3. Beaches

The most common activities for Maori drowning are:

1. Accidental Immersion
2. Swimming
3. Fishing/food gathering

The most at risk age groups are:

1. 15-44 years
2. Preschool aged children 0-4 years
3. 84 percent of Maori who drown are male

The most at risk regions are:

1. Waikato
2. Northland
3. Bay of Plenty

Advancing DrownBase™ data may soon include where Maori are from in terms of their tribe and region to better understand whether inland Maori (based by rivers & lakes) are perhaps more 'at risk' of drowning than sea based Maori. It is also proposed that WSNZ will consider extending the data to capture hospitalisations as a result of respiratory impairment through immersion.

Waka Ama Guidelines

An investigation of Maori drowning whilst undertaking traditional activities such as gathering kaimoana (seafood) and waka ama (outrigger canoe) showed a common factor in these incidents was no safety equipment or adequate safety procedures. As a result Maritime New Zealand in association with Nga Kaihoe O Aotearoa has since produced Waka Ama Guidelines for sport and recreation. The guidelines are a code of safe practice for Waka Ama paddlers and clubs to implement in accordance with the local conditions within which they operate. The Waka Ama Guidelines provide the following information for use of waka as an individual or group activity.

- Waka Design and Equipment
- Personnel
- Operational Procedures
- Emergency Procedures
- Safety Considerations for Design and Construction
- Navigation Safety Rule – Maritime Rule Part 91

"In short, it is essential that the risks to both paddlers and other water users are minimised through the adoption of a code of safe practice for Waka Ama. All new paddlers entering the sport must be made aware of the risks and be provided with the skills needed to avoid unnecessary risk situations or, in the event of an incident occurring, have the knowledge to deal with it appropriately" (Maritime New Zealand, 2006).

Survey Data from Cultural & Sporting Events

A recent survey administered by WSNZ at two major national events was conducted to gather information about Maori practices and activities towards water safety. Overall, 172 surveys were collated from Maori who attended the National Waka Ama and Te Matatini Kapahaka Competitions. Although further research is needed, the survey findings show some correlations to DrownBase™ data about Maori. In particular, the high percentage of Maori across all ages who are likely to do their swimming in the sea and rivers (Karapu and Takurua, 2007). A summary of findings from this survey were as follows:

- Maori tend to swim in the sea, than rivers, lakes or pools. However, the resulted difference between these waterways is small, with 'lake' being the least preferred place where Maori swim. Additionally, this outcome was not consistent with the youngest age group, 7 to 15, who selected river as their preferred place to swim.
- The activity that Maori mostly do while in, near or on the water is swimming, followed closely by hoe waka, though the latter is more a result of, sampling effect. This outcome is not surprising as the majority of participants (48%) were under the age of 26.
- As age increases so too does the frequency of participants engaging in other activities such as fishing, boating, gathering of seafood, scuba diving and surfing.
- Maori learned how to swim through their whanau and friends rather than school, private lessons or self taught. This result was consistent across all age groups used in this study. Only 14% said they learned how to swim through private swimming lessons.
- As age increases so does the percentage of Maori learning to swim by their whanau and school. Private swimming lessons were higher for the younger age groups.
- Wearing a life jacket, swimming between the flags, supervision and safety behaviours are four main areas of water safety rules recalled by Maori.
- Water Safety around the home was mentioned by only one participant.

Water Safety Education & Awareness

Water safety education for Maori is a key priority to encourage awareness and safer practices in and around water. DrownBase™ statistics identify Maori male, youth and preschool children as the most at risk of drowning in New Zealand. Each demographic group has its own peculiar characteristics and so targeted strategies are required to bring about significant improvement. Coordination and consultation with Maori and water safety organisations to ensure positive ideas and best practice will be an important part of providing quality education for the future.

A summary of water safety initiatives and resources developed for Maori in the last five years include:

- Education Kits for Kohanga Reo and Kura Kaupapa Schools (WSNZ, ACC, National Kohanga Reo Trust)
- Waka Ama Safety Guidelines (Maritime NZ, Nga Kaihoe O Aotearoa)
- Divesafe resources (WSNZ, Underwater NZ)
- Akona Te Kauhoe/ Learn to Swim resource (WSNZ & Manukau City Council)
- Website for update information and resources (WSNZ)
- Radio and TV advertisements (WSNZ & ACC)
- Rangatahi/Youth Pool Lifeguard Award (Rotorua District Council, WSNZ)
- Research Surveys for Cultural & Sporting events (WSNZ)
- Teacher training support (WSNZ, Waikato University)
- Regional Forum Meetings (WSNZ, Iwi Service Providers)

Conclusion

DrownBase™ provides the key evidence for identifying at risk factors associated to Maori drowning. It is important that Maori have opportunities to access water safety education and skills for individual, whanau and community needs. Research and development will help to prioritise gaps in water safety education and contribute to a better understanding of the causes of drowning for Maori.

Take Home Messages

1. Identify through evidence based data key factors and priorities for the provision of water safety education to Maori at a local, regional and national level.
2. Develop knowledge and the understanding of trends and behaviours that contribute to Maori drowning and water related injury.
3. Establish partnerships with organisations and community groups that enhance the development, delivery and experience of water safety initiatives to Maori.

References

- Chalmers, D. McNoe, B and Stephenson, S. (2004). Drowning, near-drowning and other water related injury: literature and analysis of national data. Otago, NZ.
- Karapu.R and Takurua. N (2007). Strategies and Issues around Maori Practices and Attitudes towards Water Safety. Centre for Maori and Pacific Development Research, University of Waikato, pp.3.
- Maritime New Zealand and Nga Kaihoe O Aotearoa (2006). Waka Ama Safety Guidelines, Auckland, NZ, pp 2.
- Water Safety New Zealand (2007). New Zealand Drowning Statistics. In Drownbase (Data from 1999 to 2006 period), Wellington: Water Safety NZ.

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A lack of appropriate adult supervision has been identified in most childhood drowning incidents.

PRESENTATIONS:

BEACH RESEARCH WORKSHOP SESSION HIGH RISK LOCATIONS

PARENTAL/CAREGIVER WATER SAFETY SUPERVISION OF YOUNG CHILDREN AT BEACHES: AN OBSERVATIONAL STUDY

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ABSTRACT

The number of children who drown at open-water locations such as surf beaches and waterways increases with age. In New Zealand, from 1980-2002, 34% of 1-4-year-old toddlers (n=110) drowned in open water locations compared with 70% of 5-9-year-olds (n=71). A lack of appropriate adult supervision has been identified in most childhood drowning incidents. However, little is known about parental supervisory practices of young children in open-water environments such as flat-water and surf beaches. The purpose of this paper is to report on observed parental/caregiver supervision of children when playing in the water at the beach.

Two experienced lifeguards were trained as research assistants to assess the appropriateness of observed parent/caregiver supervisory behaviour when their young children were in the water at 18 popular flat-water and surf beaches in the summer of 2007.

Of the 544 observations made, one quarter (24%) of children in the water were not considered to be adequately supervised. Most supervision (74%) was done by a single person irrespective of the number of children in the water. Most supervised children (62%) played in the water in groups of 2-3 under the supervision of a single adult. A small proportion (3%) of under ten-year-olds was being supervised by other children. Of the 130 parents/caregivers failing to provide adequate supervision, one third (30%) lay on the beach sunbathing, one quarter (28%) talked to others, and one quarter (27%) used cell phones. Lesser occurring distractions included eating/drinking (11%), reading (7%) and drinking alcohol (3%).

In light of these findings, recommendations about safe supervision practices by parents/caregivers are suggested. In addition, on patrolled

surf beaches, lifeguards need to be aware that some young children may not be adequately supervised, especially when a single supervisor has charge of many children. Finally, water safety organisations need to develop and promote guidelines for the safe supervision of young children at beaches.

PRESENTATION PAPER

Introduction

One of the persistent risk factors identified in almost all child drowning tragedies is the lack of adult supervision (Cody, Quraishi, Dastur, & Mickalide, 2004). In New Zealand, the risk of drowning posed by the perceptual, cognitive, and physical immaturity of childhood is exacerbated by high frequency of exposure to risk in an aquatically-oriented society with easy access to water (Moran & Stanley, 2006). While most under 5-year-olds drown in home environments, the number of children who drown at open-water locations such as beaches increases with age. In New Zealand from 1980-2002, 34% of 1-4-year-olds (n = 110) drowned in open water locations compared with 70% of 5-9-year-olds (n = 71) (Child and Youth Mortality Review Committee [CYMRC], 2005).

Not surprisingly, in response to the high rates of drowning among young children, many organisations have promoted the necessity of close and constant adult supervision of young children around water (for example, American Academy of Pediatrics [AAP], 2000; Centres for Diseases Control and Prevention [CDC] 2004; Safekids USA, 2007). Educational campaigns have used such catch phrases of 'touch supervision', 'within arm's length' and 'in sight, in reach' to promote the necessity of best supervisory practice. While most studies of child drowning have focused on risk factors in the home, little is known about parental supervisory practices of young children in beach environments.

In New Zealand (and many other OECD countries including Australia, Britain and the US), flat-water beaches are often perceived to be 'safe' and so professional surveillance via lifeguard services is often unavailable. In such conditions, a premium is placed on parents to provide young children with the necessary protection in the event of unintentional submersion. The close and constant supervisory role of the parent/caregiver thus becomes paramount in the drowning prevention chain for youngsters at the beach. It is therefore the purpose of this study to observe the water safety supervisory practices of parents and to make recommendations that will enhance child safety at the beach.

Method

A cross-sectional survey of people who used public

beaches throughout the upper North Island, which included the metropolitan and west coast beaches of Auckland, and popular holiday beaches in Northland and the Bay of Plenty, was conducted during the late summer period of 2007. A total of 18 surf and flat-water beaches were purposively sampled to generate a sample of New Zealand's beach-going population. The beaches were selected because of their popularity and proximity to major urban concentrations of population. The sample population included all people over the age of 16 years who were accompanied by young children and on the beach at the time the research assistants were conducting the field work. Young children were defined by estimate as being aged 9 years or less.

The two research assistants assigned to observe caregiver behaviour had experience of dealing with the public through their professional teaching and medical training and, in addition, both had extensive knowledge of beach safety from their considerable surf lifesaving experience. Initially the research assistants worked together on beaches in order to ensure consistency of observations and data gathering procedures. Interviewers were trained to observe adult beachgoers' arrival at the beach, note the composition of their social group and the number of children less than 10 years of age in their charge, and then observe caregiver supervisory actions when children went into the water. Where beachgoers were spread along a beach, the research assistants systematically observed caregivers in approximately 50m sections of the beach for periods of 20 minutes before moving to the next adjacent section.

Data from the completed questionnaires were entered into Microsoft Excel X for statistical analysis using SPSS Version 14.0 in Windows. Descriptive statistics such as means and proportions were used to describe the supervisory behaviours of parents and caregivers. Chi-square tests were used to determine significant differences between independent variables (such as gender and ethnicity) and dependent variables (such as supervisory practice).

Results

Table 1 shows that, of the 544 observations made, one quarter of adults (24%; n = 130) were not considered to be providing adequate supervision of their children for the prevailing water conditions. The research assistants also noted the distractions that reduced the adequacy of the close and constant supervision among those who were deemed not to be providing appropriate supervision. Six distractions to close and constant supervision were observed occurring 175 times by the research assistants. Of those not at the water's edge supervising their children (n = 130), almost one third (30%; n = 39)

spent their time lying down on the beach sunbathing and more than one quarter (28%; $n = 36$) talked to other people or used cell phones (27%; $n = 35$). Other distracters observed among parents/caregivers not providing adequate water safety supervision were eating or drinking activities (11%, $n = 14$), reading books or magazines (7%; $n = 9$), drinking alcohol (3%; $n = 4$) and other unspecified activities (29%; $n = 38$).

Table 1. Observed Supervisory Behaviours

Observed Supervisory Behaviours		<i>n</i>	%
Appropriateness of supervision	Adequate supervision	414	76.1
	Inadequate supervision	130	23.9
Total		544	100.0
Supervisor	Female adult	173	41.8
	Male adult	131	31.6
	Non-adult	12	2.9
	>1 adult	98	23.6
Total		414	100.0
Size of child groups being supervised in the water	1 child	130	31.4
	2 children	190	45.9
	3 children	66	15.9
	4-10 children	28	6.8
Total		414	100.0

Of those who were observed providing appropriate supervision of water activity (76%; $n = 414$), females were the most frequently-observed, single supervisors (42%; $n = 173$). One third of single supervisors were adult males (32%; $n = 131$), a small proportion were non-adults under the age of 16 years (3%; $n = 12$) and one quarter of supervision was undertaken by more than one adult (24%; $n = 98$). Table 1 shows that the number of children together in the water under the supervision of adults varied from 1-10 children. One third (31%; $n = 130$) of those observed being supervised were single children, groups of two children made up almost half of the supervised groups (45%; $n = 190$) and groups of three children accounted one sixth (16%; $n = 66$) of supervised children. Less than 10% of children (7%; $n = 28$) were being supervised in groups that varied in size from 4-10 and in all these cases there were multiple adult supervisors.

No significant differences were observed in either the provision of close and constant supervision or the

number of children in the water under supervision when analysed by beach location. However, significant differences ($\chi^2 [4, N = 437] = 18.144, p = 0.001$) were observed in the gender of supervisors with more females than males likely to provide close supervision at flat-water beaches (females 52%; males 22%).

The specific nature of the supervision was not systematically recorded, although inappropriate behaviours were noted. Among the inappropriate supervisory behaviours observed among in-water caregivers were the wearing of unsuitable attire such as shoes and being fully clothed, failing to constantly observe their children, allowing their charges to drift too far away from them and failing to recognise changing conditions such as larger than usual waves and rips.

Discussion

The results of this study suggest that parental/caregiver child water safety supervisory behaviours vary considerably among the beach-going public. The results should, however, be considered in respect of several methodological limitations. Firstly, the sample did not include parents/caregivers who take young children to the beach for aquatic activity outside of peak hours or during weekdays that were not public holidays. Secondly, the sample population, while representative of the holiday beach-going population, varied from the national population in terms of gender and ethnic demographics. Thirdly, on very busy beaches with multiple points of entry, observation of some supervisory behaviour may have been missed. Fourthly, the age of children observed in the water (estimated to be <10 years) was not verified and may have resulted in the inclusion of some children over that age. Fifthly, while supervision was subjectively assessed as being adequate/inadequate and distractions noted, case-by-case, detailed analysis of supervisory practice was not recorded. These limitations notwithstanding, the findings do provide evidence of some questionable parental/caregiver supervisory practice of children's water activity at the beach.

While most adults provided appropriate close attention to their child's water safety, one quarter (24%) of those observed did not. Of those not at the water's edge, one third (30%) chose to lie down on the beach sunbathing thereby providing no surveillance of their child's safety. This observational finding was reinforced by the self-reported behaviours reported in the questionnaire section of the study (Moran, 2007) where almost one third (30%) of respondents reported that they did not provide close in-water supervision.

Most children were observed playing in the water in groups of two or more (62%) and most supervision (74%) was done by a single person irrespective of the number of children in the water. Looking after more than one child in open water, especially if they are of differing ages and abilities, is challenging even when the caregiver is located in-water and not distracted. This is especially the case in surf conditions where wave, tide, and current action may make staying close together a continual challenge for parent and children alike.

Conclusion

To counter any misconceptions among parents/caregivers of their essential role in supervision, water safety education initiatives emphasising the importance of close and constant supervision of young children in pools and other closed environments needs to be specifically extended to parents/caregivers in charge of children at beaches. Furthermore, given the inadequacy of some of the observed in-water supervision, the precise nature of good beach safety supervision also needs to be explicitly promoted.

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References

- American Academy of Pediatrics. (2000). Swimming programs for infants and toddlers. *Pediatrics*, 105(4), 868-870.
- Centres for Disease Control and Prevention. (2004). Tips for general water safety. Retrieved March 16, 2004 from <http://www.cdc.gov/safeusa/water.htm>
- Child and Youth Mortality Review Committee. (2005). Circumstances surrounding drowning in those under 25 in New Zealand (1980-2002). Wellington: Water Safety New Zealand.
- Cody, B.E., Quraishi, A.Y., Dastur, M.C., & Mickalide, A.D. (2004). Clear danger: A national study of childhood drowning and related attitudes and behaviours. Washington (DC): National SAFE KIDS Campaign, April 2004. Available at: <http://www.usa.safekids.org/NKSW.cfm>
- Moran, K. (2007, May). Water safety supervision of young children at beaches. Report to the Faculty of Education Research Committee, The University of Auckland, Surf Life Saving New Zealand and WaterSafe Auckland. Auckland: Watersafe Auckland. Available at: <http://www.watersafe.org.nz/page.asp?page=449>
- Moran, K. & Stanley, T. (2006). Parental perceptions of toddler water safety, swimming ability and swimming lessons. *Injury Control and Safety Promotion*, 13(3), 139-143.
- Safekids USA. (2007). Water safety campaign 2007. Washington (DC): National Safe Kids Campaign, 2007. Available at: <http://www.usa.safekids.org/water/beach.html>

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IMPROVING BEACH SAFETY

THE SCIENCE OF THE SURF RESEARCH PROJECT

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ABSTRACT

Stage 1: Collection of baseline data to inform a tailored intervention

More than 60 people drown at Australian beaches each year and up to 600 are hospitalised due to near-drowning. There are also countless 'near misses': lifesavers perform more than 11,000 rescues and provide first aid on more than 40,000 people each year.

The aim of this research project is to develop, implement and evaluate an educational intervention aimed at reducing the risk of beach related drowning. Education campaigns that tell people what they already know are unlikely to be effective. Therefore, an effective educational intervention needs to provide new knowledge.

This presentation focuses on stage 1 of the project which aimed to determine what beachgoers know about beach safety. We administered 375 structured interviews with beachgoers in two regional areas of NSW over the 2007 Easter period. Eighty-five percent of respondents reported that they would swim between the flags and 90 percent were aware that

flags are positioned in the safest place on the beach. In contrast, only 40 percent of people could correctly identify a rip current, despite 80 percent believing that they could. Of concern was that, when shown a photograph of a beach, nearly half of respondents selected a rip current as the safest place to swim.

The results of the baseline survey were critical for informing a tailored intervention. These findings indicated the need for better education on rip currents and their dangers. This became the focus of the second phase of the project; the development and implementation of a beach safety education campaign.

Stage 2: Development and process evaluation of the "Don't get sucked in by the rip" campaign

Stage 1 results of the Science of the Surf program indicated low recognition of, and high intention to swim in, rips characterized by calm water between breaking waves. These findings are consistent with anecdotal media reports of recent drownings. We aimed to develop a campaign based on these results.

Our key message was to warn people about rips appearing as calm water using an attention-grabbing slogan and message: "Don't get sucked in by the rip - Don't be fooled by calm, flat sections in the surf, because these are often rips". We reinforced peoples' strong intentions to swim between the flags (as indicated in Stage 1), by using campaign-components designed to highlight the difficulty of identifying rips. Based on Stage 1 process questions, the campaign used several components. A media release and campaign launch achieved exposure in local print, radio and television. A poster, conveying our key message, was hung in most local retail outlets. The same image was distributed as a postcard, and the front of a brochure. The brochure, distributed via retail outlets and rental accommodation agents, provided more scientific substance to our key messages and included a "spot the rip quiz" to encourage reading, and to show rips in different surf conditions. The brochure also reinforced peoples' knowledge about what to do in a rip (shown in Stage 1 to be high) and primed thoughts to prevent panic.

Preliminary results indicate that the campaign was well received. More detailed results of the process evaluation will be presented.

Stage 3: Evaluation of the effectiveness of the "Don't get sucked in by the rip" campaign

The overall purpose of any community safety education campaign is to increase knowledge of the best approaches to maintaining safety. This was also one of the main aims of our "Don't get sucked in by the rip" campaign.

In the third presentation on the Science of the Surf project we will discuss the results of the outcome evaluation for the project. As the data collection phase was only completed at the end of January, data analysis is currently underway. The presentation will describe the results of the analysis which compares beachgoers in control (no campaign, n=400) and intervention (campaign, n=539) areas on a range of questions including their knowledge of the safest places to swim on the beach and their knowledge of rips and how to handle them.

The analysis also compares responses on these questions for beachgoers in the intervention area who were aware of the campaign with those who could not report that they had seen the campaign. If the campaign has been successful, we expect knowledge of rips and of the safest places to swim to be better in the intervention area than the control area and better for beachgoers who can report awareness of the campaign than those who cannot. The next stage of the project will involve a further mail-out survey of survey participants from the intervention area. The presentation will also discuss the lessons-learned from this project that are important for designing future beach or water safety campaigns.

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MOVING FORWARD

HOW BEST DO WE INVESTIGATE PARENTAL SUPERVISION OF CHILDREN AT THE BEACH?

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ABSTRACT

Introduction/background

Previous University of Ballarat research identified that parents supervise their children with less vigilance at swimming pools than playgrounds, despite the serious consequences potentially associated with inadequate supervision at pools. The closed environment of public pools and the presence of lifeguards may be influential in lowering parental guard. The proposed research project aims to investigate parental supervision at beaches, specifically related to child injury risk and drowning prevention. The research is still in the design phase and the researchers seek input from water safety experts to assist in project development. This session will be interactive, providing ample opportunity for audience members to contribute to discussion.

Methods

Following a brief outline of our research to date and current plans for further research, the presenters will invite expert comment from conference delegates regarding study design. It is anticipated that the ensuing discussion will be interesting and stimulating.

Discussion

Consequent to this session and the discussion it fosters, the researchers will refine their research plans. The opportunity to receive input from the group of interested and concerned individuals who make up the Water Safety 2008 audience will enhance the proposed research, leading to an improved research project, the findings of which will help water safety stakeholders in targeting their drowning prevention programs.

Conclusion

Expert opinion is a recognised process for research design development. Water Safety 2008 provides an ideal forum to enhance the proposed research through interaction with practitioners. In turn, the findings of this research will provide important information to those actively involved in the fight against drowning.

PRESENTATION PAPER

Introduction

Unintentional injury is the leading cause of death among Australian children aged 1 – 14 years, and drowning is the second greatest cause of injury related death in this age group (Australian Institute of Health and Welfare [AIHW], 2005). The importance of constant supervision for the prevention of childhood drowning, particularly at the beach and in private swimming pools, has been highlighted in many Australian water safety campaigns such as “Play it Safe by the Water” (Department of Justice, 2007), “Keep Watch” (RLSSA, 2005), “Kids Alive Do the Five” (Lawrence, 2006) and “Safe Waters” (Haddrill & Mitchell, 2006). Internationally, Petridou and Klimentopoulou (2006) and Peterson and Stern (1997) have emphasised that parental supervision is vitally important in high risk settings such as aquatic environments, stating that it may be the only effective intervention for injury prevention in such situations. Despite these claims, there is a dearth of literature specifically investigating or evaluating supervision behaviours and practices.

In the paper “How do parents supervise their children at public pools and playgrounds” (Petross, Blitvich and Finch, 2008) already delivered at this conference, the findings of an investigation of parental/carer supervision behaviours at public swimming pools have been discussed. This study found that parental supervisory practices observed at public pools were less vigilant than those at public playgrounds. While anecdotally it has been suggested that parents may be depending on lifeguard supervision at pools, given the potential consequences of inadequate supervision in an aquatic environment, these findings are indeed alarming.

The authors are interested to investigate whether similar supervisory behaviour patterns occur at beaches, and to explore the supervisor, child and environmental factors that influence the level of supervision that parents provide to their children. A mixed method approach, which incorporates observational research methods and self report, is proposed. Expert opinion is a recognised process for research design development and in order to inform and validate our proposed research methods, we seek consultation with Water Safety 2008 conference

delegates. Your input will allow us to refine our research plan, leading to an improved research project, the findings of which will assist water safety stakeholders in targeting future drowning prevention programs.

The overall aim of the proposed research project is to generate knowledge and understanding of parental beliefs, perceptions and behaviours in relation to the level of risk at beach settings. The following research questions have been posed:

1. What are parents’ general beliefs about the level of injury risk associated with beach environments?
2. How do parental, child and environmental factors influence parental perceptions of injury risk in beach environments?
3. How do parental, child and environmental factors impact on levels of actual and self-reported supervision of children at the beach?

Examples of factors which will be considered are outlined in Table 1.

Table 1: Examples of supervisor, child and environmental factors for consideration

Supervisor, child or environmental factors	How factors will be measured
Gender of supervisor and child	Male/female
Age - Supervisor	16-18; 19-55; 56+
- Child	<1, 1-4, 5-9, 10-14
Location of residence from setting	Near/Far
Frequency of visiting beach setting	More than once a week; weekly; fortnightly; every three weeks; monthly; infrequently (e.g. for a week or fortnight holiday); other
Undertaken swimming lessons	Yes/No
Type of beach	Patrolled/unpatrolled
Location on patrolled beach	Between flags/outside flags
Activity undertaken on beach	Playing on sand; climbing on rocks on sand; in water; exploring rock pools; recreational game e.g. cricket, soccer, volleyball; other

Due to the relative infancy of research investigating the role of supervision in injury prevention, researchers are yet to agree upon a standardised method of investigation. Based on the findings of a systematic review undertaken by the authors of methodological approaches used in investigations of supervision, a mixed method approach incorporating naturalistic observational and self report methods has been selected. A categorisation scheme developed through modification of a taxonomy used by Saluja and colleagues (2004) will provide a framework against which to measure supervision at beaches.

Naturalistic observation involves observing individuals in a natural setting, with minimal intrusion, influence or disturbance on the participant's behaviour throughout the observation process (McBurney & White, 2004). A naturalistic observational technique provides rich information of the overall context in which unintentional injury occurs in natural settings (Harrell, 1994). Further, the described and measured behaviours are likely to reflect the supervisors' true behaviours (Harrell, 1994). Naturalistic observation has been shown to be very accurate for specifically defining the behaviours of the supervisor to be observed, and can be used to develop a way of measuring and quantifying the behaviour (Berg & Latin, 2004). This approach, albeit costly, time consuming and very labour demanding (Morrongiello & House, 2004) maximises ecological validity (Morrongiello, 2005). The proposed study aims to use naturalist observation to inform about parental supervision in beach environments.

Self report through questionnaire is a research method which can provide a broad understanding of factors including opinions; attitudes; behaviours or beliefs; background and demographic information; and knowledge of intentions and aspirations from a large sample (Marczyk et al., 2005). A questionnaire is a versatile and simple tool, with relative low cost for gathering a large amount of data of high enough quality to test hypotheses and make real-world policy suggestions (Breakwell et al., 2006). However, steps must be taken to assure the validity of questionnaires, and consultation with water safety experts at Water Safety 2008 will form part of the validation process of the questionnaire to be used in the proposed study.

Participant narrative is an additional method of self-report also planned for implementation in this study. Questionnaire completion will occur at beach settings where the researcher will approach potential participants to invite them to take part. As participants return completed questionnaires, the researcher will ask whether they have any further comments to offer, and these comments will be recorded. Simple narrative such as this can be information rich and add value to the research process.

The use of these methods of data collection provides the opportunity for triangulation – a process which uses different research methods to explore the same phenomenon (Hayes, 2004). This mixed method approach, where comparison and overlap of data is applied to confirm and validate data, is considered to provide more compelling evidence than would be available from studies which implement single method designs (Morrongiello, et al., 2004a; Morrongiello, et al., 2004b).

Conclusion

Water Safety 2008 provides an ideal forum to enhance the proposed research through interaction with water safety practitioners and researchers. The modifications to the research plan that follow this consultation should ensure that the project is designed so that findings will provide important information that can be used by those actively involved in drowning prevention. We thank all session participants in anticipation of their contribution to this forum.

References

- Australian Institute of Health and Welfare [AIHW]. (2005). *A picture of Australia's children*. Canberra: AIHW.
- Berg, K. E., & Latin, R. W. (2004). *Essentials of research methods in health, physical education, exercise science, and research* (2nd ed.). Baltimore: Lippincott Williams & Wilkins.
- Breakwell, G. M., Hammond, S., Fife-Schaw, C., & Smith, J. A. (Eds.). (2006). *Research methods in psychology* (3rd ed.). London: Sage Publications Ltd.
- Department of Justice. (2007). *Watersafety: "Who's looking out for you"*. , Victoria, Australia. Retrieved November, 5, 2007, from <http://www.watersafety.vic.gov.au>
- Haddrill, K., & Mitchell, R. (2006). *SafeWaters water safety campaign in New South Wales, Australia*. In J. J. L. M. Bierens (Ed.), *Handbook on Drowning* (pp. 120-121). Berlin, New York: Springer.
- Harrell, W. A. (1994). The impact of shopping cart restraints and adult supervision on near injuries to children in grocery stores. *Accident Analysis and Prevention*, 26(4), 493-500.
- Hayes, N. (2004). *Doing Psychological Research*. United Kingdom: Open University Press.
- Lawrence, L. (2006). *Community campaigns in Australia targeted towards parents and children*. In J. J. L. M. Bierens (Ed.), *Handbook on drowning* (pp. 121-122). Berlin, New York: Springer.
- Marczyk, G., DeMatteo, D., & Festinger, D. (2005). *Essentials of research design and methodology*. Hoboken, New Jersey: John Wiley and Sons, Inc.

- McBurney, D. J., & White, T. L. (2004). *Research methods* (6th ed.). Sydney, NSW: Wadsworth/Thomson Learning.
- Morrongiello, B. A. (2005). Caregiver supervision and child-injury risk: I. Issues in defining and measuring supervision; II. Findings and directions for future research. *Journal of Pediatric Psychology*, 30(7), 536-552.
- Morrongiello, B. A., & House, K. (2004). Measuring parent attributes and supervision behaviors relevant to child injury risk: Examining the usefulness of questionnaire measures. *Injury Prevention*, 10(2), 114-118.
- Morrongiello, B. A., Ondejko, L., & Littlejohn, A. (2004a). Understanding toddlers' in-home injuries: I. Context, correlates, and determinants. *Journal of Pediatric Psychology*, 29(6), 415-431.
- Morrongiello, B. A., Ondejko, L., & Littlejohn, A. (2004b). Understanding toddlers' in-home injuries: II. Examining parental strategies, and their efficacy, for managing child injury risk. *Journal of Pediatric Psychology*, 29(6), 433-446.
- Peterson, L., & Stern, B. L. (1997). Family processes and child risk for injury. *Behaviour Research and Therapy*, 35(3), 179-190.
- Petrass, L., Blitvich, J. & Finch, C. (2008) How do parents supervise their children at public pools and playgrounds? *Proceedings of Water Safety 2008*.
- Petridou, E., & Klimentopoulou, A. (2006). Risk factors for drowning In J. J. L. M. Bierens (Ed.), *Handbook on Drowning* (pp. 63-69). Berlin, New York: Springer.
- Royal Life Saving Society Australia [RLSSA]. (2005). *KEEP WATCH information manual*. Sydney: Royal Life Saving Society Australia.
- Saluja, G., Brenner, R., Morrongiello, B. A., Haynie, D., Rivera, M., & Cheng, T. L. (2004). The role of supervision in child injury risk: Definition, conceptual and measurement issues. *Injury Control and Safety Promotion*, 11(1), 17-22.

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PRESENTATIONS:

WORKFORCE ISSUES AND LOCAL GOVERNMENT DROWNING PREVENTION PILLARS

HUMAN INFLUENZA PANDEMIC AND IT'S EFFECTS ON WATER SAFETY

CRAIG ROBERTS

Manager, Lifesaving Services, Surf Life Saving NSW

Member of NSW Health Volunteer Working Group for Human Influenza

PRESENTATION PAPER

Background

Pandemics are epidemics of disease that occur on a worldwide scale. They are traditionally caused by infectious diseases such as influenza which have had devastating effects on people. The timing of influenza pandemics is unpredictable, but they can be expected to occur every 10 to 50 years. An influenza pandemic occurs when a new influenza virus emerges which is markedly different from recently circulating seasonal influenza viruses and is able to:

- infect people and cause disease (rather than, or in addition to, other mammals or birds);
- spread readily from person to person; and
- spread widely because most people will have little or no immunity.

It is essential that the community, business and all levels of government undertake planning and preparatory action beyond health and emergency planning to protect the community and minimise the impact of any pandemic¹.

Pandemic Influenza History

Previous pandemics, including three during the 20th century, have caused large-scale illness, deaths and socio-economic impacts worldwide. Conservative estimates of deaths by the World Health Organization (WHO) range from one million people in the "Hong Kong" flu of 1968-69 to 40 million people worldwide in the "Spanish" flu of 1918-19.

Current Threat

The highly pathogenic avian influenza virus known as H5N1, currently circulating in domestic and wild bird populations around the world is a public health concern because of its potential to transform into a pandemic strain.



ABSTRACT

In 2006 Surf Lifesaving NSW implemented a stage 1 Flu Pandemic Response Plan for NSW Lifesavers and Lifeguards in line with the National Governments influenza plan. In 2007 NSW Health adopted a wider community emergency management plan. SLSNSW and NSW Health have worked together on volunteer issues and risks and issues for water safety in NSW. This has also seen a version 2 of the SLSNSW Response Plan.

As long as the virus continues to circulate in birds and animals, there will be opportunities for this virus to change and adapt to humans.

The hazard and possible impact on Water Safety

The possible effects of an influenza pandemic depend directly on the nature of the strain of virus that emerges and are not possible to accurately quantify prior to an outbreak. The expected impacts of an influenza pandemic on NSW would include health, social and economic effects. Specifically for Water Safety this would most probably include:

Absence among volunteers and employees may pose a threat to the continuity of critical community services, such as:

- Power for electricity to run Swimming Pools.
- Water supply for Swimming Pools.
- Waste disposal and sanitation which may include effluent to coastal water ways, lack of disposal for public venues and a lack of maintenance of infrastructure, beaches, public access areas.
- Possible orders to close beaches, public swimming pools or open water ways.
- Demand may outstrip supply for certain goods such as Chlorine, First Aid Supplies, Clean Water, Toilet paper etc.
- Public Venues may be commissioned for such things as accommodation, isolation, community information.
- People will most probably choose to isolate themselves. For example quiet beach locations that are unpatrolled may be used more frequently.
- Due to the impact of volunteer required for such an event. Volunteer Lifesaving services will be reduced dramatically.
- Many carers may be unable to perform their usual role and the community will need to provide these services. Specifically those with additional knowledge in Patient Care, Emergency Care etc
- The work environment may change during a pandemic due to large numbers of staff choosing or requesting to stay at or work from home and there may be changes in work practices and environments to limit the spread of disease

¹Dr Jan Fizzel NSW Health 2006

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WATER SAFETY ESSENTIALS FOR LOCAL GOVERNMENTS:

A GUIDE TO IMPROVING AQUATIC HEALTH AND SAFETY

AMY PEDEN

Research Officer, Royal Life Saving Society Australia

DR RICHARD FRANKLIN

*National Manager Research and Health Promotion,
Royal Life Saving Society Australia*

ABSTRACT

Background/Introduction

The 'Guide to Water Safety Essentials for Local Governments' has been created to point people in the right direction and provide an overview of essential resources available to Local Government for undertaking water safety initiatives. The National Water Safety Plan 2004-2007 identified the need to produce a guide to water safety for Local Government authorities that should contain information about legislative requirements and best practice (recommendation 18).

Methods

A reiterative approach was undertaken in the preparation this Guide. The authors engaged in consultation with industry, Local Government and other interested parties to ensure the most relevant and up-to-date information was presented in an informative and user-friendly format.

The draft Guide was circulated to those who had expressed an interest (Local Government and aquatic industry) during the initial consultation process, to provide feedback on the content, design and readability of the document. A workshop was also held with RLSSA, SLSA, and ARI representatives to further refine the content of the document and ensure a diverse range of interests were represented. The Department of Health and Ageing also had input into the guide.

Results/Evaluation

The Guide takes a best practice approach to the issue of water safety. The Guide outlines a risk management approach to aquatic safety and includes an example of risk assessment for a beach.

Essential water safety information is presented for a wide range of aquatic environments including: beaches, dams, home swimming pools, lakes and lagoons, open drains and irrigation channels, public swimming pools, and rivers and creeks.

A section on safety considerations across all aquatic locations is also included and addresses; alcohol, means of access to hazardous locations, security, use of mobile phones and other recording devices and working with children considerations.

There is a section on resources available for further information and a list of useful contacts for each State and Territory are also included.

Discussion

Response to the Guide has been overwhelmingly positive and consultation has identified a real need within Local Government for succinct and accessible water safety information.

This Guide has been designed to introduce water safety concepts and ideas to all involved in water safety in Local Government, from the mayor to council employees. It is not intended to replace a thorough risk management approach and those intending to undertake a risk assessment should consult further documentation as identified within the resources and useful contacts sections of this Guide.

Conclusion

This document aims to improve aquatic health and safety through the provision of best practice water safety information and is targeted at those who can have an impact on the decision making process for safety at aquatic locations within their jurisdiction. The Guide is available for download from the Australian Water Safety Council website where ongoing consultation is being sought.

Acknowledgments

This Guide was produced with funding provided by the Australian Government Department of Health and Ageing.

PRESENTATION PAPER

Background/Introduction

Local Governments may have a number of different aquatic locations or bodies of water under their management, each of which may present different health and safety concerns. These aquatic locations can also confer different legal duties on operators.

The Australian Water Safety Council (AWSC) identified a lack of water safety information available to Local Governments in Australia.

Accordingly Recommendation 18 of the National Water Safety Plan 2004-07 states that "...a guide to water safety for Local Government authorities be produced, that contains information about legislative requirements and best practice..."¹. In response to this recommendation, the AWSC, with funding provided by the Australian Government Department of Health and Ageing, has produced 'A Guide to Water Safety Essentials for Local Governments'.

This Guide aims to provide information for all involved in water safety in Local Government, from the mayor to council employees. The Guide is particularly targeted at those who are involved with water safety decision making at aquatic locations within their jurisdiction, as it is vital that these decisions are based on a best practice risk management approach to health and safety.

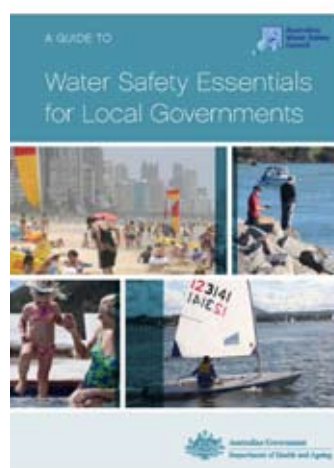
Methods

To ensure the most relevant and up-to-date information was presented in this Guide, the authors undertook a reiterative approach to consultation. This approach involved discussion with Local Government, water safety and other relevant industry groups and individuals.

The consultation process included the circulation of the draft Guide to those who had expressed an interest in the document (Local Government and the aquatic industry groups and individuals). Feedback on the content, design and readability of the document was sought during this stage.

A workshop was also held with representative from RLSSA, SLSA, and ARI to further refine the content of the document and ensure a diverse range of interests were represented in the final document. The Department of Health and Ageing also had input into the guide.

Below: Cover artwork for the guide.



Results/Evaluation

The Guide begins by defining broad risk management concepts such as hazards and risks. A hazard is defined as a source of potential harm that is any factor that could cause harm or injury². A risk is defined as the probability that a hazard will cause harm³. Risk management that is the process of identifying, assessing and controlling risks to people, to an organisation, or to an asset⁴ is then considered, along with the hierarchy of control.

A risk assessment example for a hypothetical unpatrolled Australian beach surrounded by cliffs is then provided. This example identifies likely hazards and associated risks present at the beach, such as large swell (risk of injury and drowning), inappropriate access to the beach (risk of falls from cliffs resulting in injury or death) and submerged rocks (risk of injury spanning from minor to major injuries such as spinal injuries and drowning).

The likelihood of the risk due to the frequency of exposure to the hazard is assessed and the risks associated with the hazards are then evaluated. Potential measures to eliminate or control the risks are offered, such as reducing the risk posed by inappropriate access to the beach by increasing the number of safe access points, restricting access to the cliffs through the use of fences and education campaigns to encourage people to use designated points to access the beach in a safer manner.

Safety considerations across all aquatic environments are then discussed. These include the increased safety risk that consumption of alcohol at aquatic locations poses, education as an important risk management tool, security and privacy considerations that the use of mobile phones and other recording devices can cause at aquatic locations and legal considerations associated with working with children among others.

A number of different aquatic locations are then discussed. These follow a consistent format, whereby the location is initially defined. This definition is followed by a list of safety issues associated with that particular area, presented in alphabetical order. Measures to address these issues are then discussed, presented in an order consistent with the hierarchy of control. The different aquatic locations discussed in the Guide are: beaches, dams, home swimming pools, lakes and lagoons, open drains and irrigation channels, public swimming pools, and rivers and creeks.

The use of safety signage in aquatic environments is then discussed as part of a broader risk management approach. These include a discussion of different kinds of water safety signage such as warning

signs, depth markers and beach flags as well as occupational safety signage such as first aid and HAZCHEM signage.

The section on water safety qualifications aims to ensure that staff employed at aquatic locations are correctly accredited. A risk management approach should ensure that all staff possess relevant and current water safety qualifications. Beach lifeguards, employees and responsible persons, pool lifeguards and teachers of swimming and water safety qualifications are discussed including resources and training programs such as AUSTSWIM, CPR, First Aid and the Bronze Medallion.

Relevant documents to be consulted for legal duties are also discussed. These documents include occupational health and safety acts and regulation, dangerous goods acts and regulations, hazardous substances documents, codes of practice and land management acts in each State and Territory amongst others. There are important legal considerations for all people involved with water safety at a Local Government level to be aware of.

Local Governments are encouraged to utilise their own resources and expertise within their own council or organisation. However additional resources such as the Australian Coastal Public Safety Guidelines, the Guidelines for Safe Pool Operation and the National Aquatic and Recreation Signage Style Manual among others are listed as potential sources of further information.

Useful contacts for water safety organisations, departments of Local Government and work health authorities in each State and Territory are also listed.

Discussion

This Guide has been created with the aim of pointing people in the right direction with respect to water safety information for all aquatic locations that may fall under a Local Government's control. The document is primarily aimed at people in Local Government involved in the decision making process and higher level management of water safety issues.

The Guide aims to be highly accessible to all readers regardless of their level of water safety knowledge. The document has a reader friendly layout and aims to provide information on a best practice and risk management approach to water safety in a succinct manner. The document also provides resources and useful contacts should the reader wish to seek out further information on a particular topic or water safety issue.

The reiterative approach to feedback taken with the drafting of this Guide will continue. Comments are being sought from the AWSC website (www.watersafety.com.au), where the report can be downloaded free of charge. It is the aim of the authors to produce updated versions of this Guide based on feedback received and as improved water safety information comes to hand.

Conclusion

Through increasing the level of water safety knowledge amongst Local Government this Guide hopes to improve aquatic health and safety within the Australian community. By producing this Guide with the aim of targeting decision makers within Local Government, the authors hope to ensure informed best practice decisions are taken within the context of a risk management approach to aquatic health and safety.

Those involved in water safety at a Local Government level and other interested parties are encouraged to download the Guide and provide feedback via the AWSC website. Feedback received will be considered for subsequent version of the Guide.

Acknowledgements

This Guide was produced with funding provided by the Australian Government Department of Health and Ageing. The authors of this presentation would also like to acknowledge the individuals and groups that provided feedback throughout the consultation stages of this Guide's development.

References

1. Australian Water Safety Council. National Water Safety Plan 2004-2007. Sydney: Australian Water Safety Council, 2004.
2. Standards Association of Australia and New Zealand. Australia/New Zealand Standard 4360: Risk Management. In: Standards Australia and New Zealand, editor: SAI Global, 2004.
3. Ellis N. Work and Health: Management in Australia and New Zealand: Oxford University Press, 2006.
4. Royal Life Saving Society Australia. Guidelines for

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Our primary aim is to give all disabled people the opportunity to enjoy a “safe surfing experience”

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PRESENTATIONS:

SPECIAL POPULATIONS – KEY DROWNING CHALLENGES

THE DISABLED SURFERS ASSOCIATION OF AUSTRALIA INC.

GARY BLASCHKE
*DSAA Founder and National President,
 Disabled Surfers Association of Australia Inc*

ABSTRACT

Background/Introduction

- Our primary aim is to give all disabled people the opportunity to enjoy a “safe surfing experience”.
- Started in 1986.
- 12 branches Australia wide.
- Full disabled spectrum catered for, as per the UNESCO definition, except for participants evidencing violence.
- Totally voluntary organisation tapping into the largest potential pool of volunteers in Australia – surfers.

Methods

- Unique training program for its initial core of volunteers in each branch.
- Each event is conducted under the most rigorous risk management procedures.

Results/Evaluation

- Ongoing monitoring by National body.
- Independent peer assessment.
- Benefits experienced by target and volunteer group far more profound than first anticipated.

Discussion

- Program can run safely providing DSAA protocols in place.
- Our knowledge skills are still expanding with our level 2 training program for team leaders and event marshals being introduced in 2008.
- Significance of being able to cater for C2 quadriplegia requiring breathing assistance.

Conclusion

- The DSAA has far exceeded initial expectations.
- Taps into a huge wellspring of supporters prepared to give something back without any material reward.
- The DSAA will continue to expand in Australia and eventually world-wide.

Acknowledgements

- No federal funding up to this point in time.
- Fundraising, at branch level, not an issue after initial start-up funds have been provided by the DSAA.
- Official charity status.

Additional Information

- www.disabledsurfers.org

PRESENTATION PAPER

Who are the Disabled Surfers Association of Australia Inc?

Predominately a bunch of surfers.

Including rehabilitation doctors, professional carers, parents of children with mild to severe disabilities, professional business people and surfers, trades people, housewives, kids or what surfers call 'grommets' and particularly the disabled community.

We have twelve branches throughout Australia in four states with several on the drawing board that will see a new branch in Victoria this year. Several countries are requesting our service.

We are a registered national incorporated organisation.

We are a registered public benevolent institution with the Australian Taxation Office.

We cater for all disabilities, no matter how challenging under safe conditions, (totally inclusive).

We produce our own newsletter and web site - www.disabledsurfers.org

We run our own award winning training program for volunteers.

We address major groups like the Royal Rehabilitation Hospital at Ryde, the National conference for the Diversional Therapy Association and the Australian Professional Ocean Lifeguards Association.

We have a pilot training program with the largest surf coaching school in Australia at Bondi.

We are not recognised or supported by the NSW Government or the Federal Government as a sport or a National sporting organisation for the disabled (NSOD).

After twenty two years of hands on disability surfing without incident, we now don't believe that we are only just a bunch of surfers, But it's great to say we are !

See you at the water safety conference.

Gary Blaschke OAM
DSAA Founder and National President
"Surfers helping Surfers"

EMERGENCE OF EXTREME WATER SPORTS

JAMES STEWART

Health Promotion Officer, Royal Life Saving Society Australia (Western Australia)

ABSTRACT

Background/Introduction

Over the past few decades there has been an increased interest in the development of and participation in a range of lifestyle sports and activities. These sporting forms present alternatives and potential challenges to conventional sporting practices and industry bodies.

Due to growing community interest and participation, Royal Life Saving identified the need to further investigate and understand the current status of lifestyle sports and activities within Western Australia and the associated implications in terms of policy, safety risk management and water safety.

Methods

Royal Life Saving together with the Department of Sport and Recreation conducted an extensive research project investigating the growing number of lifestyle sports and activities currently being undertaken in Western Australia. This was achieved through conducting focus groups and interviews with lifestyle sport participants, event organisers and local government representatives.

Results/Evaluation

The research project indicated that there were a number of lifestyle sports and activities currently being undertaken in Western Australia ranging from windsurfing and powerboat racing to big wave surfing and kite-surfing.

Young single males were most likely to participate in lifestyle sports. Motivations for participation ranged from social interaction with like people to intrinsic rewards and the rush or thrill of participating.

Risk and safety was considered by participants to be a part of the sport and/or activity and the issue of increased popularity and commercialisation and the lack of organised training programs and information available was identified as a safety issue.

Discussion

While lifestyle sports may not promote the same values as conventional sporting forms such as teamwork and cooperation, they are not void of positive values. Lifestyle sports have a number of benefits including social skill development, encouraging physical activity in groups who may not participate in conventional sport and assist in self development.

The research identified many challenges that face government, non-government organisations and lifestyle sport participants. Monitoring of participation trends in lifestyle sports, strategies to balance risk and safety and the provision of training and information all need to be considered.

Conclusion

The research project has provided the Royal Life Saving Society and the Department of Sport and Recreation with invaluable information regarding the emergence of lifestyle sports and their growing popularity in Western Australia. Royal Life Saving is continuing to work with the Department of Sport and Recreation and lifestyle sport participants to establish a coordinated approach to better cater for these sports and ensure the safety of participants.

Acknowledgements

- Department of Sport and Recreation.
- Department of Environment and Conservation.
- All the focus group participants.

PRESENTATION PAPER

Introduction

Over the past 20 years there has been an emergence of new sporting forms that have presented alternatives and potential challenges to conventional and traditional sporting practices and industry bodies. The surfacing of such sports presents a number of challenges, particularly for government bodies and sporting organisations with regards to policy and the necessary expansion to include the growing market of extreme sports.

Extreme sports are dynamic, innovative, spontaneous and informal by nature. Underpinning these many forms is a consistent culture that is about being involved and taking part in adventurous physical activity. These activities take place in unregulated and uncontrolled areas that tend to resist institutionalisation.

Research indicates that around 10% of the adult population is interested in participating in lifestyle sports. Participants are typically found to be young

single males that come from medium to high socio-economic classifications and participate in these activities on an occasional basis.

There is also evidence to suggest that participation in traditional team and group sports has begun to decline as extreme sports have been gaining momentum.

These alternative sporting forms have evolved from a combination of generational change, technological advances and changes in society.

Due to growing community interest and participation, Royal Life Saving identified a need to further investigate and better understand the current status of extreme sports and activities within Western Australia and the associated implications in terms of safety risk management, policy and water safety.

Previous research in this area in Australia is limited, however is increasing particularly in the area of surfing. However, these sports and their implications for sport policy in Western Australia have not been looked at in great detail and this research project looks to add valuable and practical information to this area of study.

Methods

Royal Life Saving together with the Department of Sport and Recreation conducted an extensive research project investigating the growing number of extreme water sports and activities currently being undertaken in Western Australia.

The research project involved conducting focus groups with extreme water sports participants, event organisers and local government representatives.

These focus groups were aimed at enabling the research team to gain a better understanding of the identified extreme sports. It also enabled us to create a profile of extreme sports participation and who was participating. The focus group discussions covered a number of issues including:

- Motivations for participating in their chosen sports
- Participant experiences in their chosen sport
- Risk and safety issues associated with participation
- The evolution of their chosen sport
- Existence of coordinating organisations and associations
- Resistance to institutionalisation of their sport
- Social interactions, way of life and communication methods

The focus groups were all conducted at locations specific to the extreme water sports selected for

inclusion. For example big wave surfing focus groups were conducted at the beach. This was to facilitate active participation in the session and encourage interaction and the delivery of useful information.

Focus groups were conducted by a facilitator and were video recorded which enabled us to capture participant interactions with each other, their reactions to certain questions and ideas, their language and general mannerisms. This assisted in creating a complete and overall picture of the sports and its participants. Information was also recorded in hard copy by a scribe.

Results

In total, eleven focus groups were conducted with extreme sport participants.

The research project indicated that there were a number of extreme water sports and activities currently being undertaken in Western Australia from windsurfing and powerboat racing to big wave surfing, kite-surfing and deep water swimming.

Results from the research supported those found in the literature with young, single males aged 16-30 years who were employed full time were most likely to participate in extreme water sports.

The participants discussed a range of motivations for becoming involved in their chosen sport. Some indicated social and intrinsic rewards and motivations for participation. The fun, enjoyment, freedom, sense of accomplishment and the opportunity to improve skills offered through these sports were common motivators. Participants in extreme water sports also stated that involvement of family and friends was also a major motivation.

While some participated for in their chosen sport because of the social aspects and intrinsic rewards they offered, others craved the thrill and risk associated with participation and the way it makes them feel. The adrenaline rush, pushing the limits and the danger associated with participation was a major motivating factor amongst some extreme water sports participants.

A number of limitations and barriers to participation in extreme water sports were identified by the focus group participants including the costs associated with beginning the sport and the initial learning curve and time taken to master the necessary skills.

All participants identified that risk was an inherent element of the sport. There were differing levels of safety risk management measures in place amongst the extreme water sports included in the study.

For example, kite-surfing has a number of safety measures in place. Participants are required to complete beginner lessons when they purchase new equipment to ensure they have the skills required to participate safely. In addition, all participants carry safety equipment such as life vests in case of emergency.

In comparison, big wave surfers stated that safety was not even considered while participating. However, while participants said they never thought about safety, they did take safety measures including storing flares on jet skis and sometimes wearing safety equipment while surfing.

Discussion

While extreme sports may not promote the same values as conventional sporting forms such as teamwork and cooperation, they are not void of positive values. Extreme sports have a number of benefits including social skill development, encouraging physical activity in groups who may not participate in conventional team sports and assist in self development.

The emergence of extreme sports means that there are many challenges that face government, non-government organisations, industry bodies and participants.

There are still many unknown elements regarding these sports and activities. They are continuously evolving due in part to the transient nature of the participant group. Ongoing monitoring of participation rates and growth in popularity of extreme sports in Western Australia is needed. This will assist in identifying trends in participation and the emergence of new activities which will influence safety risk management strategies and policy.

A fundamental premise of some extreme water sports is that participation can occur anywhere and at any time and risk was an inherent part of participation. The growing popularity and increased participation in extreme water sports has resulted in a number of safety issues. With more people with limited skills and technique becoming involved in these sports, there is the potential for a greater number of injuries.

It is essential that safety and risk management strategies are in place to ensure safe participation. Adequate training prior to participation and inclusion of safety equipment during participation should be required for all extreme water sports. These strategies should be developed in consultation with industry groups and participants.

Some sports such as kite-surfing have established a governing body and have safety and risk

management strategies in place. These sports should be used as a benchmark for other more unregulated activities to ensure safety for participants (particularly novice participants).

Conclusion

This research project has provided the Royal Life Saving Society and the Department of Sport and Recreation with invaluable information regarding the emergence of extreme water sports and their growing popularity in Western Australia. Royal Life Saving is continuing to work with the Department of Sport and Recreation to establish a coordinated approach to better cater for these sports and ensure the safety of participants.

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The Royal Life Saving Society would like to thank everyone involved in the development and implementation of the research into the Emergence of Extreme Water Sports in Western Australia. In particular we would like to thank:

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A WATER SAFETY PROGRAM FOR OLDER AUSTRALIANS

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ABSTRACT

At the previous water safety conference in 2006, a paper was presented focusing on aquatic activities and drowning deaths of older Australians. Since this presentation the Royal Life Saving Society Australia (RLSSA) has been developing a program called the Grey Medallion.

The Royal Life Saving Grey Medallion is a water safety and lifesaving skills program for the Over 55's aiming to reduce the drowning rates of older Australians and encourage a healthy, independent and active lifestyle.

The program endeavours to teach participants a range of personal survival techniques, provide them with skills to deal with an emergency situation and to develop confidence and competence to enjoy aquatic exercise and other water-based activities safely.

There are four main components of the program:

- Water Safety Knowledge
- Resuscitation and Emergency Care
- Aquatic Exercise
- Personal Survival and Lifesaving skills

This presentation talks about the development of the program, the evaluation to date and the future of the program in Australia.

Acknowledgements

Funding for this program was provided by the Australian Government Department of Health and Ageing.

PRESENTATION PAPER

Introduction

It has been well documented that the population is ageing. An estimated one-third of the population will be aged over 55 years by 2021. As people retire they are moving to or spending more time at aquatic locations and undertaking activities on, in or around water such as boating, fishing and walking, therefore increasing their exposure to the risks associated with water. In 2006-07 there were 62 older Australians (over 55 years) who drowned. With the ageing population, if action is not taken today then the number of drowning deaths is likely to increase.

Resulting from the research into the circumstances surrounding drowning deaths of older Australians presented at the last conference, Royal Life Saving has developed a program for older Australians called the 'Grey Medallion'. The program aims to educate older Australians about water safety, and assist them to develop practical skills that can be used to assess risks in aquatic environments, and participate safely in aquatic activities.

Aim

The overall aim of the program is to:

- Reduce the number of older Australians drowning;
- Provide older Australians with water safety knowledge and skills;
- Increase the number of older Australians participating safely in aquatic activities; and
- Reduce the risk of falls in older Australians through aquatic based activity.

The Grey Medallion

The Royal Life Saving Grey Medallion is a water safety and lifesaving skills program for the Over 55's aiming to reduce the drowning rates of older Australians and encourage a healthy, independent and active lifestyle.

The program endeavours to teach participants a range of personal survival techniques, provide them with skills to deal with an emergency situation and to develop confidence and competence to enjoy aquatic exercise and other water-based activities safely in a fun, non-threatening environment.

There are four main components of the program:

- Water Safety Knowledge
- Resuscitation and Emergency Care
- Aquatic Exercise
- Personal Survival and Lifesaving skills

Water Safety Knowledge

The aim of this module is to provide an understanding of the dangers of aquatic locations, safe practices and responsibilities. Essential water safety information for a range of aquatic locations (rivers, lakes, beaches, etc) and aquatic activities (boating, fishing etc) is the focus for this module. The prevention of emergencies depends on the understanding of, and ability to apply, simple water safety actions.

This module focuses on:

- Australian drowning statistics
- Identifying hazards in aquatic locations
- Safe practices for aquatic activities
- Drowning awareness campaigns
- An individual's role in drowning prevention

Over the decade 1992 - 2002 the number of drowning deaths for the over 55s has remained constant at an average of 60 deaths per annum (Figure 1). To reduce the number of older Australians drowning, the Grey Medallion aims to arm participants with water safety knowledge including safe practices in a variety of aquatic environments where older Australians are drowning; from swimming pools to bathtubs to lakes and rivers. The program provides water safety tips and discusses potential hazards in and around aquatic environments.

Figure 1. Drowning Deaths of Older Australians, 1992-2002



The following factors have been found to increase the risk of drowning in older Australians; deterioration of skills through lack of use, overestimating skill level, changing body abilities, increased exposure to aquatic environment which stems from lifestyle changes such as sea change (an abandonment of city living in favour of a perceived easier life in rural coastal communities), in addition to the increased participation in more aquatic activities, and a lack of water safety knowledge. Each of these factors is discussed in the Grey Medallion program.

In today's society, older Australians are increasingly responsible for regularly caring for their grandchildren and this often involves visiting aquatic locations, participating in activities and supervising them around the home environment. As such, the Grey Medallion program introduces participants to Royal Life Saving's drowning awareness campaign; Keep Watch. Keep Watch is a public education program with key messages aimed at preventing drowning deaths of children in all aquatic locations.

Resuscitation and emergency care

The first person on the scene of an emergency situation is often a family member. By teaching people in the community vital resuscitation and emergency skills, these could one day be used to provide resuscitation or emergency care to a loved one. This module aims to increase confidence and competence in dealing with an emergency situation.

This module aims to teach the following:

- Recognising an emergency
- Understanding resuscitation and when it's required
- DRABCD action plan
- Aftercare

Early CPR increases the casualty's chance of survival. In the Grey Medallion program the participants are provided with practical resuscitation skills and an opportunity to practice these skills, as well as information and discussion on how to react in an emergency situation.

The emergency care section of the Grey Medallion program provides participants with basic awareness of the signs and symptoms of some common medical conditions and simple, effective treatment skills relevant to these emergency situations.

Aquatic exercise

The aim of this module is to provide an understanding of the importance of physical activity and experience a range of activities in aquatic exercise. Aquatic exercise is ideal for the over 55's because of its low impact nature, suitable for both active people, and those with restricted mobility. Regular physical activity can reduce the risk of heart attack, improve blood cholesterol, lower blood pressure, and help prevent falls.

Research has shown, there are many benefits in aquatic exercise; it is low impact, helps increase muscle strength, improve oxygen intake, improves flexibility, help to lose excess body fat, increases agility, and has fewer exercise-related injuries compared to other land-based exercise.

This module provides practical sessions for older

Australians to further develop their swimming skills in a fun and non-threatening way and is tailored to cater for a range of abilities. It includes:

- Water movement skills
- Gentle exercise
- Correct swimming techniques
- Exercises to improve endurance and fitness levels

Depending on the participants' skills level, the program can be modified to suit the needs of the participants. For example, for swimmers with good swimming skills the session will focus more on swimming techniques whereas those with average or no swimming skills, the emphasis will be on water orientation.

While educating the participants in water skills, the program will continually stress the importance of regular physical activity and participation in a water exercise program to improve physical function, mobility and flexibility for older Australians.

Personal survival and lifesaving skills

The aim of this module is to provide a range of personal survival and basic lifesaving skills for the participants and equip them to deal with an aquatic emergency scenario.

Lifesaving skills are not just for those that swim at a beach, 'Everyone can be a life saver' and this module helps the participants with essential personal survival techniques and basic rescue. Arming participants with skills they need so they don't become a statistic and have the ability to assist somebody else in trouble.

Components of the module include:

- Entries and exits
- Survival techniques and strategies
- Rescue principles
- Non swimming rescues

It is important to learn lifesaving techniques - as lifesaving in its broadest context implies the saving of life through prevention of accidents, personal survival and rescue of others. The thoughtful application of the skills being taught in the Grey Medallion program will help save lives whilst ensuring the rescuer's safety. The program will provide participants with a range of lifesaving skills so they have several courses of action to select from in an aquatic emergency.

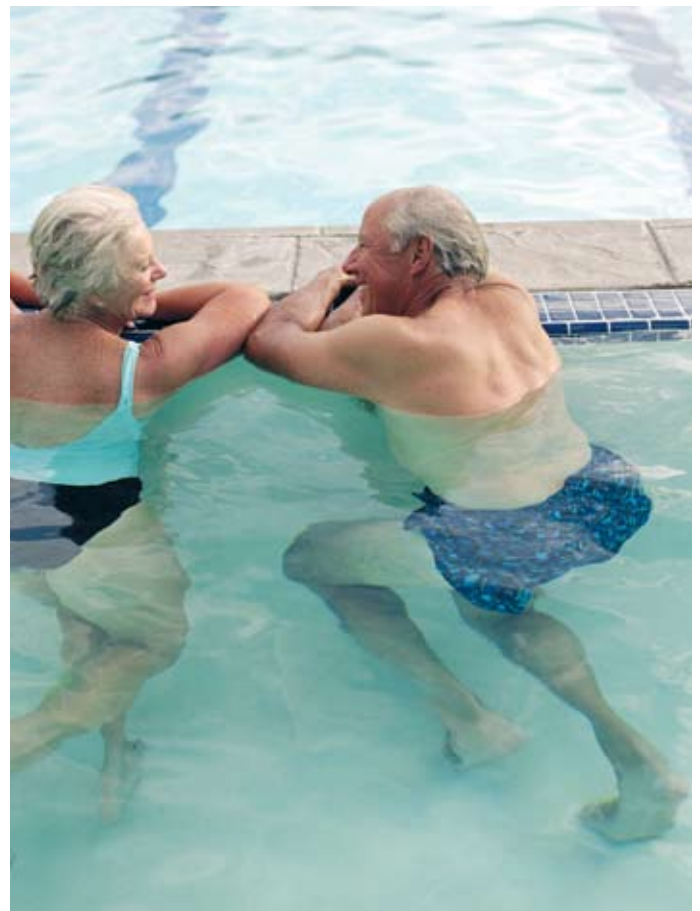
The future of the program

The Grey Medallion program is still in its infancy and following the piloting of the material, Royal Life Saving is now rolling out programs throughout Australia and developing strategies for the sustainability of the program. To achieve

sustainability, Royal Life Saving will be working closely with related affiliations such as aquatic facilities, retirement villages/homes, U3A, Probus, Rotary and others. With the program underway, public awareness of the program has increased through the use of media releases, interviews, program launch and other promotional channels relating to the Grey Medallion program.

Acknowledgements:

The authors of this paper would like to thank the contribution of the Reference Group, participants and instructors in the Grey Medallion program. Funding for this program was provided by the Australian Government Department of Health and Ageing.



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WATER SAFETY EDUCATION LESSONS

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ABSTRACT

Background/Introduction

Swimming in NT schools is no longer compulsory and has been that way for over 10 years. Several attempts have been made to re introduce water safety education into school, so far without success. This is of particular concern to the NT Water Safety Advisory Council.

Currently only 33% of school age children are meeting national benchmarks when it comes to water safety, despite the NT having one of the most conducive climates for water related activities.

In 2004 the NTWSAC developed a teacher's resource manual based on water safety, to educate primary school aged children. The resource manual is mapped to the NTG curriculum framework and provides teachers with the opportunity to introduce water safety education into schools.

It was realised that whilst this was a valuable resource it was not being used by teachers.

Methods

The concept was to create 4 lessons for early childhood, middle and upper primary, so 16 lessons in total, based on the already existing resource manual. Lessons are based on pool fencing, in land water way safety, beach and boat safety. They are a comprehensive all inclusive tool that educators can pick up and deliver. No extra planning is required.

Four schools were chosen to pilot the lessons throughout Water Safety Month (September) and lessons were delivered by Water Safety Branch staff in conjunction with the Education Department.

Results/Evaluation

The response from the pilot schools was extremely positive as it exposed children to water safety education that they might not get elsewhere. It was also a cost effective way to provide water safety education to those schools that could not afford swimming programs. Whilst the aim of the lessons is not to detract from the work that Royal Life Saving and Surf Life Saving do, it enables one person to deliver holistic water safety education without a water based qualification.

Schools certainly embraced the sessions and made it the focus of the learning for that term of schooling. A simple questionnaire was provided to teachers to gain feedback.

Discussion

The lesson plans have been further developed to link to the NTG curriculum framework. They are presented as a package, so they have all the resources and learning tools attached, so easy to pick up and run with. Whilst they look simple, it has taken just under one year to complete the writing and piloting of the lesson plans. The lesson plans worked well in Indigenous communities as there are lots of visual and hands on activities for the students to get involved in.

Lesson plans for middle school students are now being developed with a focus on risk taking behaviour in and around water.

Conclusion

The lesson plans are now available online for all educators and are an easy resource for NT based teachers to pick up and run with. Short (1 hour) professional developments for teachers will be held throughout 2007 and in the lead up to Water Safety Month. Teachers who piloted the program will become Ambassadors and advocate for the lessons plans.

Acknowledgements

The project was undertaken with virtually no budget, just staff wages.

PRESENTATION PAPER

Background / Introduction

Swimming lessons and water safety education in Northern Territory schools is no longer compulsory, having been that way for more than 10 years now. This is of particular concern to the NT Water Safety Advisory Council (NTWSAC). Several attempts have been made to re introduce water safety education into school, so far without success.

Currently only 33% of school age children in the NT are meeting national benchmarks when it comes to water safety, despite the NT having one of the most conducive climates for water related activities.

In 2004 the NTWSAC in conjunction with the Department of Education Employment and Training (DEET), developed a teacher's resource manual entitled *Boof's Book About Water Safety*, to educate primary school aged children about water safety. The resource manual is mapped to the NTG Curriculum Framework and provides teachers with the opportunity to introduce water safety education into the classroom.

It was realised that whilst *Boof's Book* was a valuable resource it was not being used by teachers. After consultations with teachers and DEET it was decided that ready to use lesson plans be developed based on the existing resource manual. These lesson plans would then be trialled in three schools throughout Darwin, evaluated and made available to teachers and public.

Methods

The concept was to create 4 lessons for early childhood, middle and upper primary, 16 lessons in total, based on the already existing *Boof's Book About Water Safety* resource manual. Lessons are based on pool fencing, in land waterway safety, beach and boat safety.

Each lesson was developed by DEET in consultation with Water Safety Branch staff. Concepts, ideas and activities were pulled from the existing resource manual with many new ideas also been created. Plans were developed in line with the NTG Curriculum Framework.

Once the lesson plans were mapped out, all schools in the Darwin area were invited to nominate their school to trial the lesson plans. There was an overwhelming response from schools and as a result four schools were chosen to pilot the lessons throughout Water Safety Month 2007 (September).

An in house trial of the lessons was conducted to ensure that everything would run smoothly once staff delivered at schools.

Staff met with all teachers and schools before lessons were delivered to ascertain the ability of students and any questions or amendments the teachers had. This was an important step in developing and evaluating the lesson plans.

Each lesson took approximately 40-60 minutes to deliver and in some cases extra time was required to complete art and craft activities.

Some schools chose to have their lesson plans delivered over four consecutive weeks, others had two lessons per week over two weeks. Timing was at the discretion of the school and had no bearing on the success of the program.

All lessons were delivered by staff from the Water Safety Branch and DEET. This was done so that teachers could see how lessons were modelled and so that Water Safety staff could learn how to deliver the lessons as well. All equipment, resources, activities and worksheets were organised and provided by the Water Safety Branch at no cost to the pilot schools.

Results/Evaluation

The response from the pilot schools was extremely positive as the lessons exposed students to water safety education that they might not have received. The lesson plans also proved to be a cost effective way to provide water safety education to those schools that could not afford swimming programs. Whilst the aim of the lessons is not to detract from the work that Royal Life Saving and Surf Life Saving do, they enable one person who may not have a water based qualification and or suitable funds to deliver holistic water safety education.

Most pilot schools embraced the lessons and made water safety the focus of the learning for the school term. Some schools used the class based sessions in lieu of swimming lessons and some used them as a lead up to their swimming program.

At the conclusion of the program, each teacher was provided with an evaluation form that rated the delivery of the lessons as well lesson content. Feedback was positive with only minor changes needing to be made to the lessons.

The lesson plans were again revisited this year with minor changes to content made. Professional Development sessions for teachers will begin in May and extend to remote areas of the NT. It is intended that these sessions will increase the awareness and use of the lesson plans.

The development of the lesson plans has filled a gap in curriculum based water safety education in the Northern Territory.

The NTWSAC and DEET are now in the process of developing lesson plans for middle year's students (year 7-9). These sessions will focus on risk taking behaviours around water and the role of aquatic based organisations. It is expected that these lessons will be completed by June 2008.

Discussion

The lesson plans are available on the internet for anyone to access. They will be continually reviewed and updated as required and provide educators with the opportunity to include water safety as part of their learning. Whilst they are mapped to the NTG Curriculum Framework, they can be adapted for other States/Territories. The lessons can and are easily used as a basis for information sessions and talks outside the school environment. For example they have been delivered to community group such as the Girl Guides and Junior Fishing Clubs.

The lessons are a comprehensive all inclusive tool that educators can pick up and deliver. No extra planning is required and all worksheet, ideas and appendices are included.

It took approximately one year to fully develop the resource and trial it.

One of the main challenges in implementing the lesson plans was ensuring that all resources were taken to the pilot sessions. Because the lesson plans were only in the development phase at this stage, they were not yet a complete package and it was often difficult to track what worksheets went with what lesson plans. It is much easier to use now the resource has been trialled and all the attachments and worksheets are complete.

The Water Safety Lesson Plans add value to any school's curriculum. Other States aiming to implement a similar program must ensure the following:

- Lessons are developed to meet Education Departments policies, and curriculum.
- Lessons are developed in conjunction with educators, teachers and those with an aquatic background.
- When piloting the lessons – organisation is essential.
- Continue to work with your Education Department in the development and evaluation of the resource to ensure its meeting benchmarks/standards.

Conclusion

The lesson plans are a valuable tool for educators as they provide comprehensive and easy to use information and activities relating to water safety.

The resource is available online and will continue to evolve as required.

Acknowledgements

The project has been conducted out of the existing Departmental budget however minimal funds have been required to get this project underway.

Staff from DEET should be acknowledged for the continued support and dedication to water safety education in the NT, in particular Jenny Verrall.

Lesson plans can be found online at www.watersafety.nt.gov.au

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PRESENTATIONS:

COMMUNICATIONS/ MEDIA – DROWNING PREVENTION PILLARS

USING THE MEDIA TO SAVE LIVES

CRAIG ROBERTS

Manager, Lifesaving Services, Surf Life Saving NSW

Member of NSW Health Volunteer Working Group for Human Influenza

PRESENTATION PAPER

Background

For a number of year's water safety bodies and emergency services have been using the media to enhance safer communities throughout Australia within their particular fields. In 2005 Commercial Radio Australia commissioned Millward Brown to investigate and explore the multiplier effect of a combination of radio and television. Its objective was to understand the impact on sales and awareness that a strategy combining television and radio activity has over television activity alone.

While for advertising agencies and radio stations this was a major industry study the power of some of the results for other organisations is just being realised.

Some of the key points that SLSNSW identified were:

- High reach of radio across the day complements televisions reach during the evening
- 6.6 million people tuned into metropolitan commercial radio breakfast in 2006
- Commercial radio breakfast average audiences were 2.02 million people per quarter hour throughout 2006
- Tourist were more likely to listen to radio while on holidays than watch television
- Listening to the radio at home is the most popular with work decreasing and the car increasing.

Advertising Water Safety

In early 2007 SLSNSW Media Officer and Lifesaving Services Manager worked with regional and state media outlets to build an extensive sales strategy relationship.



ABSTRACT

For a number of year's water safety bodies and emergency services have been using the media to enhance safer communities throughout Australia within their particular fields. In early 2007 SLSNSW worked with regional and state media outlets to build an extensive relationship and target particular media times and forms for times and messages that were critical to drowning studies. The full impact is yet to be truly realised however the program has seen an excellent return in feedback to media outlets from the general public. SLSNSW will be continuing to work with the NSW Media to enhance the safety of others.

The project was designed to use the basis of the study to advertise the following:

- What to take to the beach
- Sun Safety
- Beach by Beach Opening and Closures information
- Where is the best place to swim
- Specific Surf Safety Messages for particular times in the week/month/season
- Specific Surf Safety Messages for High risk times (i.e. NYE – Alcohol and Swimming)
- Specific areas that were statistically a high risk area

The project combined a series of methods based off the research to enhance both the time the networks would use the relevant messages and when the listeners would be greater reached. The messages included:

- A series of Multilingual typed messages for CALD specific radio stations
- A series of topic specific messages (i.e. Rough Surf) in different formats
- Pre-recorded messages from expert Lifesavers and Lifeguards
- Press releases
- Phone Interviews
- Television appearances

Example

In the 2 days prior to New Years Eve and the Morning of New Years Day, 130 Phone Interviews advertising Surf Safety Messages were conducted by SLSNSW. 11 Radio Network groups did 3 hourly updates on the conditions and/or open closures of every patrolled beach in NSW.

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PLAY IT SAFE BY THE WATER

OWNING THE SUMMER MEDIA SPACE

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ABSTRACT

Background/Introduction

Drowning prevention has been recognised as a priority area in health by state and federal governments in Australia. The Play It Safe by the Water (PISBTW) campaign is a state-wide initiative that aims to promote water safety throughout the Victorian Community, from the beach to inland waterways, the pool and in the home.

The main aim was to ensure that Play It Safe by the Water and Life Saving Victoria were able to 'own' the media space for water safety in the hearts and minds of Victorians and respond to any water safety issue.

Methods

PISBTW is a major water safety campaign that combines general public awareness campaigns, targeted education programs and life saving service development using a collaborative approach between various water safety organisations, the community and state and local government.

It was established in 1997 and over 10 years the agencies that are party to the program have continued to adapt and refine the model as necessary to reach all members of the Victorian community.

Results/Evaluation

Evaluation is divided in two ways. The first is via media monitoring to evaluate our success in obtaining hits in the media and being first port of call for all media outlets state wide on issues of water safety.

Example:
Media Hits for:
Dec 06 = 261
Dec 07 = 344
Jan 07 = 408
Jan 08 = 783

The second is to via traditional research methods in analysing drowning incident data and advertising message recall.

Example:

Data were collected on all drowning incidents across Victoria from 1997/1998 to 2006/2007. Public awareness of and attitudes to water safety and related advertising was assessed pre- and post-campaign across three campaign seasons from November 2004 until April 2007.

Since the inception of the PISBTW campaign the unintentional drowning rate in Victoria has decreased from 1.38/100,000 in 1997/1998 to 0.72/100,000 in 2006/2007.

Survey results indicated a recall of advertising by up to 77% of respondents.

Discussion

Results indicate the overall success of the program. Emerging issues such as drought and climate change have thrown up new challenges over the recent summer.

The program will continue to be refined and will remain fluid and adaptable as traditional waterways disappear and new ones emerge, bringing new issues and new challenges.

The challenge was pulling together the multiple agencies but by having the one umbrella message, multiple agencies with at times different objectives and messages can work together to effect change via a collaborative approach.

Conclusions

The major findings from the Play It Safe by the Water campaign include:

- 1) A decreased drowning rate.
- 2) Life Saving Victoria being a one stop shop for all water safety issues.
- 3) A greater and more effective reach across the state in engaging the communities on the issues of water safety.

Acknowledgements

Funding via the Victorian Government
www.lifesavingvictoria.com.au
www.watersafety.vic.gov.au

PRESENTATION PAPER**Background / Introduction**

- The aims of the Play It Safe by the Water campaign is to actively increase the Victorian communities awareness of water safety.
- The campaign was developed in 1998 as a state government response to the issue drowning and aquatic related injuries.

- Play It Safe by the Water is a campaign which is managed by staff in the Office of the Emergency Services Commissioner in the Department of Justice but is delivered across Victoria by Partner agencies including Life Saving Victoria, Surfing Victoria and Aquatic and Recreation Victoria.
- All Victorians are the target group but there are campaigns specifically targeted at groups such as toddlers, young male risk takers and the CALD community just to name a few.
- Many community groups participate in the campaign in both planning and delivering components to different community groups across the state.

Methods

- There are multiple components to the campaign which are both practical and public awareness based through the use of print, radio, television and other media.
- The Play It Safe by the campaign has been running across Victoria for 10 years.

Results/Evaluation

- The campaign has been continually monitored and evaluated both in house and by professional research and auditing companies.
- Short term there has been a reduction in drownings in smaller target groups from the campaign (e.g. toddlers) but long term there has been a significant reduction in drowning numbers in Victoria.
- In reducing the overall drowning rate the program has been successful but until there are 0 drownings there is more work to be done.
- Unexpected outcomes have included the rise of unforeseen issues such as people storing water in buckets etc due to water restrictions and this becoming a new hazard for toddlers.

Discussion

- The Play It Safe by the Water campaign will continue to be evaluated and updated to ensure that water safety stays front of mind to Victorians, not just during summer but year round.
- This project could be rolled out in every state and indeed on a national scale. The key component is the one clear message that water safety agencies can share and work under.
- Life Saving Victoria and the other water safety agencies learnt the effectiveness of working together to achieve a common goal by pooling their collective knowledge and resources.

- The initial challenge was bringing together the different organisations who all had their own key messages and different strategies for promoting and dealing with water safety and coming up with a single 'umbrella' message.
- New issues arose over the decade but the collective knowledge and water safety 'talent' who sat on the committee to run the campaign were able to deal with anything that emerged as a collective.
- In running the program in the future we would possibly look to get more stakeholders at the table to increase the reach of campaign.
- One Key message is the most powerful and effective way of reaching a mass audience.

Conclusion

- A major finding is that there is often no trend in drowning statistics. The campaign cannot target just one group at a time as the victims come from all ages, backgrounds and locations and thus the campaign must be able to target each and every one of them.

Acknowledgements

- The funding for the campaign comes courtesy of the Department of Justice and the State Government of Victoria.
- www.lifesavingvictoria.com.au
- www.slsa.com.au
- www.royallifesaving.com.au
- www.watersafetyvic.com.au



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SWIM FOR LIFE A MULTI MEDIA CAMPAIGN PROMOTING LEARN TO SWIM

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ABSTRACT

Swim For Life is a water safety marketing initiative. Its core objective is to ensure New Zealand children learn to swim and develop survival skills, essential for life in New Zealand.

Research (Water Safety New Zealand, the Ministry of Education [Government Agency] and AC Nielson) indicates an alarming divergence between New Zealand children's perception of their swimming ability and actual swimming ability. Less than 25% of all New Zealand children can swim 200m by the age of 12.

Also of concern in New Zealand is the failure of the education system to provide quality learn to swim outcomes and a greater reliance on private enterprise to support the development of fundamental learn to swim skills in school children. The barriers to learning to swim and survival in New Zealand are evident across all geographic and demographic categories. Swim For Life is a marketing initiative focussing on creating awareness and mobilising parents, communities, individuals and schools to not only understand the importance of learning to swim in a relevant context but to act upon the need.

Since 2002, Water Safety New Zealand (WSNZ) has undertaken extensive research, surveying and evaluation to develop a marketing campaign New Zealanders will be receptive to, along with achieving a long term reduction in drowning deaths.

In 2007 WSNZ launched the first phase of a major public awareness campaign with television and movie theatre advertisements.

As a result of the multi media campaign Swim For Life is now partnering with Sanitarium via WEET-BIX (corporate) to promote the understanding and importance of learning to swim in New Zealand. The role of further corporate and strategic partnerships is also being explored.

This presentation will detail how the role of social marketing and communication of drowning prevention initiatives has been enhanced in New Zealand by the use of the multi-media through mediums like television along with the creative input from an international advertising agency.

PRESENTATION PAPER

Abstract

On average (2002-2006) 124 New Zealanders perish as a result of drowning every year, this equates to 3.1 deaths per 100,000 population (DrownBase™ 2007).

Swim For Life is a water safety marketing initiative. Its core objective is to ensure New Zealand children learn to swim and develop survival skills, essential for life in New Zealand.

Research (Water Safety New Zealand, the Ministry of Education [Government Agency] and AC Nielson) indicates an alarming divergence between New Zealand children's perception of their swimming ability and actual swimming ability. Less than 25% of all New Zealand children can swim 200m by the age of 12 (AC Nielson, 2002).

In April 2007 Water Safety New Zealand launched the first phase of a major public awareness campaign with television and movie theatre advertisements.

The market research undertaken post campaign indicates 41% of those surveyed recalled the ad. Of those that recalled the ad, 16% have enrolled their children in swimming lessons as a result.

An additional outcome of the multi media campaign is that Swim For Life is now partnering with Weet-Bix and children's television show What Now? to promote the understanding and importance of learning to swim in New Zealand. The role of further corporate and strategic partnerships is also being explored.

Introduction

Swim For Life is a social marketing initiative. It is not a programme or method of learning to swim.

"Social marketing is the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence the voluntary behaviour of target audiences in order to improve their personal welfare and that of society" (Andreasen, 1995).

The objective of Swim For Life is to raise awareness of learning to swim and survive, by ensuring that all schools and private swim schools/operators offer a quality learn to swim and survive opportunity to their students.

This objective recognises that the ability to swim and survive impacts upon all aquatic activity and is therefore fundamental in increasing water confidence levels in, on and under the water, and the prevention of drowning.

In 2007 Water Safety New Zealand (WSNZ) commissioned the production of a television commercial (60 second and 30 second). The television commercial (TVC) formed an essential component of a Mass Media Campaign which also incorporated movie theatre advertising. The length of the campaign was 8 weeks (2007) and four months (2008).

As a result of the attention and success gained by the Mass Media campaign in 2007, WSNZ have entered into a partnership with Weet-Bix. Weet-Bix is New Zealand's number 1 breakfast cereal (Sanitarium website, 2007). Weet-Bix manage the Weet-Bix Tryathlon and are major sponsors of the All Blacks.

Weet-Bix believe every New Zealand child should learn to swim and in partnership with WSNZ are working to support the Swim For Life marketing initiative by way of communications and promotional support.

Background

The foundation skill for enjoying New Zealand's vast and varied aquatic environments and activities safely is the ability to swim and survive. All New Zealanders should know how to swim and survive regardless of their choice of aquatic recreation. Even those who don't undertake aquatic based activities need to be able to swim and have basic water safety skills. Over the last 15 years, more people have drowned from non-recreational incidents, such as accidentally falling into water, than while participating in recreation activities (DrownBase™ 2007).

Swim For Life is the largest initiative in 50 years promoting learn to swim and survive. It is not an event or a programme, but pulls together potential providers and deliverers of learn to swim and survive to provide quality learn to swim and survive outcomes to young New Zealanders.

All young New Zealanders should experience learn to swim and survive as a normal course of growing up. Many barriers to having a nation of swimmers have become apparent. These barriers include factors such as schools no longer having or being able to afford to operate their own pools, families being unable to afford swimming lessons, and the changing cultural composition of New Zealand communities. These and other factors have contributed to learning to swim slipping off the priority radar.

WSNZ realises that the current situation cannot be allowed to continue. Swim and survive is a core-life skill and our children deserve the opportunity to learn how.

Also of concern in New Zealand is the failure of the education system to provide quality learn to swim outcomes and a greater reliance on private enterprise to support the development of fundamental learn to swim skills in school children. The barriers to learning to swim and survival in New Zealand are evident across all geographic and demographic categories. Swim For Life is focussing on creating awareness and mobilising parents, communities, individuals and schools to not only understand the importance of learning to swim in a relevant context but to act upon the need.

Since 2002, Water Safety New Zealand has undertaken extensive research, surveying and evaluation to develop a marketing campaign New Zealanders will be receptive to, along with achieving a long term reduction in drowning deaths.

The aims of the Swim For Life marketing campaign are represented over two levels:

1. Increase awareness of the importance of learning to swim.
2. Mobilise parents and caregivers to take action.

To achieve the above aims an understanding of social marketing and the process of behaviour change must be reached to develop the campaign proper.

Clemenger BBDO identified the 5 Principles of Behaviour Change:

1. Making a change takes time.
2. Change depends on four conditions.
 - a. Benefit of change
 - b. Cost of change
 - c. Self efficacy
 - d. Influence of others
3. Change only happens when benefits are perceived to outweigh the costs.
4. You need "education" to assist change – it's the carrot. You need "enforcement" – it's the stick.
5. Education and enforcement work best together, rather than in isolation.

Internationally and more recently in New Zealand, there is a growing body of evidence that social marketing – the application of marketing principles to achieve behaviour change for a social good – is experiencing great success (Porter Novelli New Zealand, 2002).

Examples of successful and long running social marketing initiatives in New Zealand include; drink driving, road safety, smoke free, fire safety, physical activity, alcohol consumption.

Clemenger BBDO also detail the 5 Principles of Behaviour Change Communications:

1. Identify the audience and the objective.
2. Knowledge is the key – the power of research.
3. Telling ain't selling – the education fallacy.
4. There is no single "magic bullet".
5. Budget for sufficient activity over sufficient time.

Results

The post campaign market research indicates that the awareness of drowning as a social issue in New Zealand increased from 1% pre-campaign to 2% post campaign.

There was 41% recall of the TVC.

- 62% of those that recalled the TVC feel more strongly about the importance of learning to swim.
- 16% of those who recalled the TVC have enrolled their children in learn to swim lessons.
- 7% of those who recalled the TVC have made enquiries at their local swim school.
- 6% of those who recalled the TVC have contacted their child's school to investigate the schools learn to swim programme.

Discussion

WSNZ identified the audience as being parents, caregivers, school teachers and school principals. The objective is to raise the awareness of the importance of learning to swim and to mobilize parents to take action.

Significant qualitative and quantitative research supports the TVC and mass media campaign along with the fundamental concept of Swim For Life.

A cognitive approach was undertaken as the method to achieve success. A TVC was produced that leveraged emotion, sense of loss and helplessness. A mix of rational and emotional messages forms the basis of the TVC.

Complimenting the mass media campaign is supporting communications. This includes the production and distribution of Swim For Life booklets to parents, schools and children throughout New Zealand in partnership with Weet-Bix. Over 200 swim schools and aquatic facilities are Swim For Life branded, displaying 3m x 2m banners and placing footpath bollards in the entrance way. A significant amount of print advertising in education industry publications along with placement in parent magazines was also undertaken.

The budget expended on Swim For Life in 2006/07 was over \$600,000 NZD. This will rise in 2007/08 and further support is assured for future years so long as achievement standards are met and evidence of successful outcomes documented.

Conclusion

The Swim For Life mass media campaign achieved an impressive level of success (41% recall and 16% enrolled children in lessons). The value of supporting communications collateral cannot be underestimated.

The mass media campaign raised the profile of learning to swim in New Zealand significantly enough, such that a major corporate (Sanitarium) and the popular brand Weet-Bix are now partners in the Swim For Life Initiative.

Weet-Bix have committed to placing billboard sized banners within public pools in New Zealand further promoting the value and importance of learning to swim. Future intentions include communications support from Weet-Bix for bus shelter and bus back advertising with potential to become a major sponsor in the future.

The impact on the community cannot be lost or undervalued in the midst of the mass media campaign. The community are the real benefactors of the Swim For Life initiative. An increase in swimming ability will over time show a reduction in drowning incidents in New Zealand. The ability to swim also opens up a myriad of recreational activity for which can be enjoyed more safely.

Key Messages

1. Learning to swim no longer exists as a core activity in New Zealand's primary schools due to a number of factors including increasing competition from other social issues e.g. fire, drugs, road vehicle etc. There is a growing shift to utilise council or private providers.
2. A social marketing campaign to increase awareness of the importance of learning to swim and the mobilisation of parents and caregivers to act does work.
3. The benefits of partnering with a major corporate provide ongoing and additional opportunities to further the reach of the social marketing campaign.
4. The ongoing investment to achieve behavioural change in society needs to be large and sustainable.
5. The support of industry partners (swim schools and aquatic facilities) is paramount to ensuring the infrastructure exists to support social change.

6. Advocacy is an undervalued tool which should be used in partnership with a comprehensive communications plan to support societal change.

Acknowledgments

While Swim For Life® is a Water Safety New Zealand (WSNZ) initiative it will bring together many partners or stakeholders. These include the Regional Sports Trust network, the Ministry of Education, New Zealand Swim Coaches and Teachers Association, Swimming New Zealand, the New Zealand Recreation Association and Local Authorities all of whom are integral to achieving the objective and vision of the Swim For Life® initiative.

References

- AC Nielson, 2002; Assessing Student Swimming and Aquatic Skills, Water Safety New Zealand & Ministry of Education
- Andreasen A.R., 1995; Marketing Social Change: Changing Behaviour to Promote Health, Social Development, and the Environment. San Francisco, CA: Jossey-Bass
- Clemenger BBDO, 2002; A Guide to Assisting Voluntary Behaviour Change, New Zealand
- DrownBase™, The official Drowning Database of New Zealand, Water Safety New Zealand, 2007
- Porter Novelli New Zealand, 2002; cited in Social Marketing; A Guide to Assisting Voluntary Behaviour Change, Clemenger BBDO, 2002, New Zealand
- Sanitarium Website, 2007; <http://www.sanitarium.co.nz/default.asp?sectionID=27&categoryID=5>

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RESEARCHING COMMUNITIES WHO HEAR WITH THEIR HEARTS

PACIFIC PEOPLES PROJECT FOR WATER SAFETY NEW ZEALAND

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ABSTRACT

This paper describes a water safety project designed to raise awareness of water safety issues amongst Pasifika communities in New Zealand. Water Safety New Zealand (WSNZ) developed a national Pacific Peoples Water Safety Strategy 2007–2010, providing direction to meet its mission for Pasifika families and communities: Through water safety education prevent death by drowning.

The Strategy called for the development of a three-year Pacific Communications plan 2008-2011, detailing the development of a specific and targeted approach to addressing Pacific peoples' water safety education needs in a manner that is likely to be effective, responsive and culturally appropriate, thereby increasing WSNZ's effectiveness in reaching Pasifika communities with timely key water safety messages.

Fundamental to the success of this plan is the need for WSNZ to consult with Pacific communities and involve Pacific peoples in the organisation's efforts to address water safety issues for Pacific peoples in New Zealand. Key goals focus on raising awareness through Pacific Engagement with media and networks including Churches and Community Roadshows. A DVD was developed specifically for the roadshows entitled, *Without A Father*. The documentary focuses on the impact of drowning on Pasifika families. It focuses on 'real' families, living with 'real' consequences, evoking 'real' emotions within Samoan and Tongan communities specifically. Produced in the mother tongue of the target audience, the DVD demonstrates the need for collective responsibility around water safety, is inherently emotional and contributes to the desired behavioural change. It presupposes that Pasifika communities hear with their hearts, so will ultimately achieve the desired outcome.

Launched in March 2008, this community development project will be evaluated to gauge the level of awareness and behaviour change in the Pasifika community.

PRESENTATION PAPER

Background/Introduction

In 2007 WSNZ made a proactive decision to establish a Pacific Water Safety Strategy in response to the high rate of Pacific drowning in New Zealand. Though the rate of drowning is low in comparison to the rest of the population this is a trend WSNZ have a vested interest in keeping at bay. 2007 was an especially bad year with 11 Pacific deaths from drowning, most of which occurred over the summer months in December 2007 and January 2008.

The Pacific population in New Zealand is diverse, made up of people primarily from Samoa, Cook Islands, Tonga, Niue, Fiji, Tokelau and smaller numbers from Tuvalu and other small island nations. They speak at least 13 distinct languages and comprise of people born in the Pacific and born in New Zealand. It is a youth population with the highest proportion of children of all the major ethnic groups (37.7 percent). They are located throughout New Zealand particularly within the urban areas of Auckland, Wellington and Christchurch. Sociocultural factors further reflect the heterogeneity of this population.

As a result different approaches are needed to communicate effectively with these audiences. Those with multiple ethnicities as well as language considerations need to be factored into any communications strategy.

The Pacific Peoples Water Safety Strategy for Water Safety New Zealand is intentionally a strategy for implementation with Pacific families. It provides a direction which will enable WSNZ to meet its mission: Through water safety education prevents injury and death. WSNZ is currently investing in the development of its Pacific capacity and capabilities to ensure the long-term success of its service to Pacific peoples in New Zealand, demonstrated in the development and implementation of its Pacific strategy.

The strategy as 3 goals: Pacific Engagement, Churches Roadshow and Community Groups Roadshow. The objective of all three goals is to raise the awareness of water safety issues to Pacific communities utilizing regional and national Pacific media, Pacific churches networks and community networks. To be effective the roadshows require resources which help to demonstrate the relevant issues and key messages in order to galvanise the community to change their view of water safety issues, and ultimately their behaviour, in order to achieve fewer injuries and deaths from drowning.

By incorporating Pacific values, principles and beliefs into its organizational culture WSNZ is likely to enhance the effectiveness and responsiveness of its programmes and services to Pacific peoples. Evidence demonstrates that a Pacific person using Pacific models of care that are underpinned by Pacific strategies and concepts best serve the needs of Pacific peoples.

Methods

Subsequent to the Strategy is a Pacific Communications Plan. One of the resources being developed as a result of the plan is a DVD developed specifically for the roadshows entitled Without a Father. The documentary focuses on the impact of drowning on Pacific families. It focuses on 'real' families, living with 'real' consequences, evoking 'real' emotions within Samoan and Tongan communities specifically.

Produced in the mother tongue of the target audience, the DVD demonstrates the need for collective responsibility about water safety is inherently emotional and contributes to the desired behavioural change. It presupposes that Pacific communities hear with their hearts, so will ultimately achieve the desired outcome.

The DVD presentation will be played in a variety of community setting including church or community meetings and kava sessions.

Results/Evaluation

The implementation of the strategy in the form of the roadshows will be launched in September 2008, incorporating an evaluation of each session to gauge the level of awareness and behaviour change in the Pacific community.

From these evaluation results we should be able to gauge the awareness of churches and communities to the messages that have been developed. A change of behaviour should be signalled in improved drowning statistics over time.

Discussion

Anecdotal evidence suggests that current water safety advertisements are not reaching Pacific communities hence a review of the mediums utilized raised the importance of targeted messages to the hearts of the audience rather than the portrayal of mere facts and statistics.

Challenging the norms of social marketing this DVD presentation panders to the Pacific story telling oral traditions of old as mediums of sustainable, memorable communication.

Finding families willing to share their stories so that others could benefit from their loss was a simple task.

Organising their lives around the weather and the production team was a greater challenge.

To revisit their loss through the production of a documentary was tantamount to reliving the experience over and over again. The producers had to take this into account to ensure the experience contributed to the families' healing rather than opening up old wounds.

Doing the same old same old social marketing is just not an option. Any marketing strategies targeted at Pacific peoples must be cognizant as to identifying the real issues and the most appropriate response.

The development of resources is a constant challenge not just in terms of the production process but also the cost to replicate in many languages. It is acknowledged but most people who work with Pacific communities recognize this challenge and also acknowledge the importance of delivery by a familiar person to the target audience.

Conclusion

For Pacific communities the engagement of hearts as well as minds is critical to effecting behaviour change in a population this is driven by emotional connection to real live issues affecting their daily lives.

If you always do what you've always done, you'll always get what you've always got.

Acknowledgements

Acknowledgements are made to the Tongan and Samoan families who shared their stories of grief and loss so that others may learn and benefit from key water safety messages; and Wilmason Jensen, Managing Director of Evolute for producing the DVD. Pacific peoples are grateful to WSNZ for their proactive stance in staving off further injury and deaths from drowning through the development of a Pacific Peoples Water Safety Strategy, a Pacific Communications Plan and relevant resources produced to effectively reach Pacific communities, raising the awareness of water safety issues and prompting behaviour change that results in fewer injuries and death from drowning or near misses.

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The aim of the project is to give easy, inexpensive strategies for water safety teachers to implement into their program.

PRESENTATIONS:

FOUNDATION SKILLS – DROWNING PREVENTION PILLARS

GAMES WITH AIMS

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ABSTRACT

Background/Introduction

The aim of the project is to give easy, inexpensive strategies for water safety teachers to implement into their program.

The program was developed to include students of mixed aquatic skills in an interactive learning of survival and rescue skills.

Methods

The program can be implemented by instructors like AUSTSWIM Teachers of swimming and water safety also school based aquatic programs.

Results/Evaluation

The program has been implemented by Carolyn Asher in some remote and indigenous communities in North Qld.

Discussion

The program requires organisation to ensure the activities are interactive and interesting.

The program has some skills that can be land or water based, this gives variety of implementations for different environments and students varying skill level.

Conclusion

The program has had a small introduction and implementation and has been well received; ideas can be included as a fun activity after a swim lesson or used as a base for a water safety program.

Acknowledgements

The program was funded by Aquatic Education. The RLSSA Junior Lifeguard Program assisted in some of the activities.

PRESENTATION PAPER

Background/introduction

- The project aims to encourage safe practice in and around water by giving students personal survival tools and experiencing competence in a variety of water environments.

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- The program was initially developed to assist instructors to work with large groups of students, and a variety of student abilities & in the circumstances of water not being available due to environmental issues.
- Initially the program was introduced in Brisbane. The program has been implemented in regional and remote areas of North Queensland.
- The target group is the remote and indigenous, although not limited to this clientele.
- The program was very well received by the instructors as it offered a variety of teaching strategies.

Methods

The program has been implemented along with Royal Life Saving Society’s water safety program in LTS lessons and water safety sessions with school aged children.

Results/evaluation

Water Safety education is ongoing; generally feedback has been very positive from instructors and participants. The students always comment on the fun aspect and the variety from the standard LTS lessons they have experienced. This program has been successful mainly due to the instructor’s enthusiasm and the programs low resource cost.

Discussion

- The program is being developed as a professional development non-contact program for AUSTSWIM instructors to gain reaccreditation hours.
- The program could be implemented in rural and remote locations as an ongoing or once only program.
- Implementation of the program was very easy; organisation of resources was the key to successful, speedy implementation.

Conclusion

The implementation included a small group of students with varying ages, gender, swim skills and abilities. The program was found to be very successful in the school holidays as an alternative aquatic holiday program. It was found to bring together siblings in the same group; this was beneficial to parents and carers.

Acknowledgements

- Useful resources: AUSTSWIM Teacher of Swimming and Water Safety the Australian Way.
- Useful resources: RLSSA Junior Lifeguard Program - Coaching Manual.

Games with Aims

These activities are aimed at bringing water safety, self preservation and team building skills into the aquatic teaching environment.

The program was brought together using skills in the Royal Life Saving Society Program, team building skills and activities delivered through Scouts Australia and resources learnt and adjusted from AUSTSWIM Teacher of Swimming and Water Safety.

The initial program was written by formatting teaching strategies to deliver water safety in a variety of situations. Discussions with learn to swim teacher identified a concern when weather, or other conditions make water space unavailable also concerns are raised when groups are larger than expected and may be of mixed ability.


This program requires minimal swimming skills so can be adjusted for groups of varying ages and aquatic abilities. The developer was also aware of minimising cost and outlay to deliver the program, trying to use what is available at the pool environment.

The program has been delivered in rural and remote locations in Queensland. The program was conducted in Outback Queensland and Far North Queensland by Carolyn Asher, Regional Director RLSSA, Nth Queensland.


Gail Small, who operates a local swim pool has delivered parts of the program to students in the Western Downs area of Queensland.

I recently delivered the course to towns in and around Broken Hill, New South Wales.

The program is divided into wet and dry activities:




Wet activity









Dry-land activity

I have listed the activity according to the environment (wet or dry) and listed the resources required, formations used and instruction for each activity.



4 Rescue Circuits

6	Minefield
	Resources: A4 sheets, squeaky toy, grid area map
	Team Building and Memory Skills Formation: Grid Pattern Instruction: Make a grid on the ground, have a pattern that is a 'safe' method to travel through the grid. If a student steps on a safe spot they can continue, if they step on an unsafe spot the squeaky toy is triggered and they must return to the end of the line. Each student watches the student before them and memorises the safe spots and works together to find the safe pathway through the minefield.
7	Changing Environments
	Resources: kickboards Personal Survival Skills Formation: Lines of students standing opposite each other in shallow water Instruction: students push the boards in the water creating 'waves'. Other students move through the water creating currents & swim through the wave & current area
8	Team letters
	Resources: Water safety messages on paper Team Building & personal survival skills Formation: 2 teams on opposites sides, 10m area between Instruction: Teams work opposite each other A water safety question is asked and the team must send in 1 person to collect the correct answer on the paper The team with the most correct answers wins
9	Triathlon
	Resources: Personal survival & Fitness Skills Formation: 3 areas defined for 3 sections; run, bike, swim Instruction: each participant is working against PB time 1 run in water over set distance 2 bike on a noodle over set distance 3 swim with or without aid over set distance
10	Puzzles
	Resources: puzzle pieces from water safety signs and beach flags Team building & water safety awareness Formation: scattered in teams around tables Instruction: Each team has to put their puzzle together and them identify the message on each sign / flag
11	Newspaper Relay
	Resources: newspaper (or gloss magazine works best) Rescue Skills Formation: In teams Instruction: Each team works as a relay. The swim stroke selected will depend on ability. The aim is to complete relay. Using the newspaper as the baton and keeping the newspaper dry

BE PREPARED

WATER SAFETY, LIFE SAVING AND THE AUSTRALIAN YEAR OF THE SCOUT

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ABSTRACT

2008 is the Australian Year of the Scout. It commemorates 100 years of Scouting in Australia. Open to boys and girls and men and women of all ages, some 100,000 Australians identify with Scouting today. It remains the largest youth organization in the world. In 1908, Lieut-General Baden-Powell wrote *Scouting for Boys*, the most read book in English after the Bible. In it he promoted the necessity of training in life saving and resuscitation. The Scouts' Motto, "Be Prepared", refers specifically to the exhortation to be prior-trained about how to act in taking a leadership role in helping in any circumstance of accident or emergency. Specifically, Baden-Powell recommended the Schafer method of resuscitation, invented in 1897, and still novel in his day. In 2008, training in water rescue and first aid remains central to Scouting doctrine.

PRESENTATION PAPER

2008 is the Australian Year of the Scout, commemorated by the Australian Government to highlight the endeavours of Scouting over the past 100 years. The Year of the Scout has been commemorated by the issuing of a 50-cent coin and 5-dollar silver coin by the Royal Australian Mint¹; by the issue of postage stamps on 19th February 2008²; by Centenary Celebrations of Scouting; and perhaps most importantly of all, by a reappraisal and highlighting of the elements of Scouting which remain essential for youth development and training today. Lifesaving and resuscitation skills have always been central to Scout training. This paper is a Centenary audit of their place in Scouting doctrine.

Scouting today is open to boys and girls and men and women of all ages. Some 100,000 Australians, 60,000 of them in uniform, identify with Scouting today. With 28 million members in uniform, in 55 nations, Scouting remains the world's largest youth organization. Its terms of reference are the promotion

of self-development and good citizenship through collegiate outdoor experiences and adventure, in a milieu of good fun. Through all contemporary training and activities there runs the central tenets of safety, risk assessment and prior training for rescue, especially self-rescue, and emergencies.

In 1908 Lieutenant-General Baden-Powell (1857-1941) wrote *Scouting for Boys*³, one of the most influential books ever written. It has been read, it is estimated, by 360 million readers; and in the 20th century was the second most sold book after the Bible.

Baden-Powell wrote *Scouting for Boys* initially in parts, which he called "Camp Fire Yarns". The first part was sold on 15th January 1908 for four-pence a copy, and fortnightly thereafter. Its huge success resulted in the launching of the first full length bound copy of *Scouting for Boys* on 1st May 1908. It was published by Horace Cox, a printing firm owned by the British newspaper magnate, C. Arthur Pearson, proprietor of the *Daily Express* and *Pearson's Weekly*. Pearson himself had for several years encouraged the (then) Major General Baden-Powell to publish and promote his teaching of military scouting skills for the benefit of civilian youths, especially underprivileged urban boys⁴.

From the beginning of Scouting, Baden-Powell promoted lifesaving as a skill for all. In his *Camp Fire Yarn No 2* he wrote a section entitled "Saving Life"⁵. In *Camp Fire Yarn No 24*⁶ he included a major section entitled "Rescue from Drowning"⁷. In this context he developed four themes – the importance of being taught swimming skills; how to use flotation aids; the use of lifebuoys and techniques to "enter" the life-ring in the water; and techniques of how to rescue a drowning person.

In this latter section, he promoted the concept of "shout, reach, throw"; and, of special significance, the non-contact doctrine fundamental to basic water rescue techniques taught today by Royal Life Saving Society branches throughout the world and by the Surf Life Saving Association in Australia and its sister bodies elsewhere.

In these approaches, the advocacy and exhortation for pre-teen and teenage boys to learn explicit life-saving skills by Baden-Powell was, as in so many other areas⁸, a concept and development ahead of its time.

In *Camp Fire Yarn No 25*⁹ he published a major section entitled "Artificial breathing"¹⁰ of the apparently drowned. In this subject he gave detailed instructions about the Schafer method of artificial resuscitation. The method had been invented by Dr. Edward Sharpey-Schafer ten years earlier, in 1897. It replaced the former technique, Silvester's "Physiological Method of Resuscitation", which had been developed

36 years earlier (1861) by the English physician, Henry Robert Silvester (1829-1908). Baden-Powell's promotion of the new Schaefer method, reflected "best-practice" of its day. The Schaefer method had the advantage that the apparently-drowned victim was placed face down (with the potential for drainage of fluid from the mouth), rather than on his or her back, which was the technique of the earlier Silvester method. In the Schaefer method, the rescuer placed the victim face-down with head turned to the side; and with a rocking motion alternatively applied pressure to the thorax and then released the pressure. It remained the recommended resuscitation method of choice for all teaching bodies and specifically the Royal Life Saving Society and the Surf Life Saving Association of Australia, until supplanted by Holger-Nielson's method (invented in 1943), which was introduced into Australia after the Second World War.

"Be Prepared"

Baden-Powell's first use of the Scout Motto "Be Prepared"¹¹ was in the context of his passionate advocacy for self-training "to be prepared to help in emergencies or accidents":

"The meaning of the Motto is that a Scout must prepare himself by previous thinking out and practising how to act on any accident or emergency so that he is never taken by surprise; he knows exactly what to do when anything unexpected happens"¹¹.

Such remains the principals of rescue and resuscitation training, not only of Scouting bodies throughout the world, but of every organization teaching water safety, water rescue and resuscitation skills.

The current book of doctrine for Scouting in Australia, *Field Book for Australian Scouting*¹², continuously promotes the concepts of safety, prior risk assessment and the prevention of unintentional injury. Chapter 2 of that volume is entitled "Risk Assessment and Management"¹³. Throughout this book of current Scouting doctrine, emphasis is placed on the necessity or remaining current in all first aid skills, "due to the continuing changes in knowledge and first aid skills . . . and being involved in adventurous outdoor activities requires up-to-date training in first aid, thereby allowing you to manage a situation until medical help arrives"¹⁴.

The perspective of the past 100 years acknowledges the significance of the promotion, by Baden-Powell initially and by the world of Scouting, of his advocacy for training of life-saving and resuscitation skills. The need for such skills knows no barrier of age, gender, socio-economic status. Accidents are no respecter of time or place. Baden-Powell's pioneering doctrine, begun in 1908 to afford young boys and girls and later men and women the opportunities to be trained

in lifesaving skills, remains as true today as it did 100 years ago.

References

1. Royal Australian Mint. Issue of a dodecahedral 50-cent cupro-nickel coin on 19 February 2008; and an issue of a limited-edition of 5000 Fine Silver (99.9%) proof 5-dollar coins designed by C. Goodall with the reverse inscription "1908 Scouts Australia Centenary 2008".
2. Australia Post. Issue of a 50-cent postage stamp on 19 February 2008; and a 2-dollar stamp for international postage portraying Lord Baden Powell (1857-1941) in his World Chief Scout Uniform. Stamp design by Asprey Creative.
3. Baden-Powell, Lieut.-General RSS. *Scouting for Boys. A Handbook for Instruction in Good Citizenship*. London, Horace Cox, 1908.
4. Boehmer, Elleke. Note on the Text. In: *Scouting for Boys. The Original 1908 Edition (Facsimile Edition published in 2004)*. Oxford, Oxford University Press, 2004: xl-xliv.
5. Baden-Powell, Lieut-General RSS. *Scouting for Boys*. London, Horace Cox, 1908. *Camp Fire Yarn No 2*:23-25.
6. *Ibid.* *Camp Fire Yarn No 24*:253-263.
7. *Ibid.* :257-258.
8. Pearn JH. Baden Powell on Teeth. *British Dental J* 2008;204:33-36.
9. Baden-Powell, Lieut-General R.S.S. *Scouting for Boys*. Op cit.: see Ref 3. *Camp Fire Yarn No 25*: 263-272.
10. *Ibid.*: 264-265.
11. *Ibid.*:20.
12. Scouts Australia. *Fieldbook for Australian Scouting*. Third Edition. Sydney, McGraw-Hill Australia Pty Ltd, 2007.
13. *Ibid.* Chapter 2. "Risk Assessment and Management":21-26.
14. *Ibid.*:56.

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DEVELOPMENT OF AN INTERACTIVE CD-ROM

FOR WATER SAFETY EDUCATION TARGETING CHILDREN

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ABSTRACT

Introduction

Multimedia programs and the Internet are increasingly being used to help deliver education messages throughout the community. An interactive water safety CD-ROM program was developed to provide all Victorian Primary School age children with a broad range of information about water safety, from the home to the beach. This report describes the development and initial evaluation of the CD-ROM.

Methods

The CD-ROM provides teachers with instant access to print classroom resources and other support material as well as a host of interactive games and activities for use with students in the classroom.

Prep to Grade 6 students from 9 schools across Victoria were surveyed to determine the ease of use, acceptability and learning from the CD-ROM. Teachers from each of the schools were also surveyed to obtain their feedback.

Results

A total of 1,359 students were surveyed. The majority of students in all Grades found their relevant section of the CD-ROM easy to use, easy to navigate, thought that it looked good overall, found the instructions easy to follow, and didn't skip any parts. While the majority of students in all Grades also said that they learnt something new about water safety, less found the CD-ROM challenging.

Nearly all students from Prep to Grade 4 also found the CD-ROM interesting, enjoyable, fun and not boring. However, the proportion of students finding the program interesting, enjoyable, fun and not

boring decreased in Grades 5 and 6.

Fifty three teachers from the nine schools that participated in the review responded to a teacher feedback survey. Overall the CD-ROM was viewed highly by all teachers who taught at various levels from Prep to Grade 6.

Discussion

The results from both the students and teachers to this new interactive water safety CD-ROM provided important feedback for revision prior to the state-wide launch and distribution of the program.

Conclusion

The CD-ROM will provide vital water safety information and activities to keep students involved and learning about water safety around the home and at the beach.

Acknowledgements

This project was funded by Play it Safe by the Water. Life Saving Victoria greatly appreciates the time and effort of teachers and students from the various schools in completing the survey.

PRESENTATION PAPER

Background/Introduction

What are the aims and objectives for the project/program/service?

- To assist schools in implementing theoretical water safety programs into their curriculum.

Why was the project/program/service developed?

- The CD Rom was developed to supersede a very popular but cumbersome document which was distributed to schools over 5 years ago. The idea was to update the resource with a student focused component that would give them a more hands on experience when learning about water safety.

Where is it located?

- The CD Rom will be distributed to every State Government Primary School in Victoria prior to summer.

Who are the target group/stakeholders?

- The CD Rom is targeted at Prep to Grade 6 Students.

Was there any community participation?

- Prior to development of the CD Rom a number of Teachers from various areas across the state as well and University Lecturers participated in a review of the materials.

Methods

How has the project/program/service been implemented?

- The CD Rom is yet to be implemented in schools. However the plan is to distribute the CD Rom to State Government schools with the support of the Department of Justice and the Department of Education and Early Childhood Development along with a media campaign and promotion. Schools will then have the ability to put the program on their network for students to access.

What has been the timeframe?

18 months to date. Just under 2 years to roll out.

Results/Evaluation

How have you monitored/evaluated the project/program/service?

- Pre production – a number of schools volunteered to participate in a pilot of the program. They were reviewing content as well as design usability and age appropriateness. Surveys were collated and a report sent to the design company to implement suggested changes.

Discussion

How will the project/program/service and its benefits continue into the future?

- Our key water safety messages rarely change they just have different focuses, therefore this program can be easily used in the future. Due to the format (CD Rom) it is also more easily updated, if and when required than previous resources that have been developed.

Can the project/program/service be replicated with other groups and in other areas?

- Yes definitely, especially with the CALD communities, realistically any age appropriate group could use it as a learning / teaching tool.

What did you and other stakeholders learn from the project/program/service?

- Don't expect too much or aim too high. Developing this type of resource is very timely and expensive. As well as this, technology is changing so quickly that alternative and cheaper options to developing interactive programs like this appear all the time.

What would you do the same/differently if you implement such a project/program/service again?

- Look at online options, Web based programs.

Any advice for others implementing a similar project/program/service?

- You almost need a project officer working on a program like this with perhaps 1–2 other projects but no more.
- Work out your timeframes.
- Look for innovative companies.
- Piloting your material is really worthwhile.
- Get as many groups/people on board to assist in development, promotion and giving of advice as possible.

Conclusion

Provide a brief summary of the major findings from the project/program/service.

- Pre release feedback – CD was well received and thought to be a good idea. It was generally user friendly however required a few minor changes to voice overs and directions given in activities etc.

Acknowledgements

What was the project/program/service budget and/or funding source?

- Funded out of the Play It Safe By The Water Campaign Budget – Department of Justice. \$70,000

List any contacts, links or resources that you found particularly useful in carrying out the Project/program/service which could be helpful to others.

- No specific contacts, however it is a great idea if you are developing an educational resource to source Curriculum Writers who can map your documents to the education curriculum. It is fairly inexpensive and saves an enormous amount of time.



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PREPARATION FOR A LIFETIME PARTICIPATION IN AQUATIC RECREATION

A 21ST CENTURY APPROACH

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ABSTRACT

Overview

Does traditional learn to swim still meet the needs of 21st century communities?

With increasing demand and desire for shoreline inhabitation and recreational activities, combined with an ever expanding multi cultural population, the YMCA believes we need to challenge the traditional approach and teaching techniques of learning to swim. This session outlines these challenges from a YMCA perspective and overview the concepts and approach we have initiated to address aquatic education in the 21st century.

Traditionally learn to swim has a largely sporting focus with outcomes and competence focused heavily on distance and correct performance and technique of the traditional swimming strokes. This approach has served us well for many years.

However the Y believes that in the rapidly changing face of our society this traditional approach is no longer as suitable or effective.

The YMCA's suite of aquatic programs has an approach that looks beyond the development of physical knowledge and skills to incorporate and challenge intellectual and personal development. Simulated open water environments form a major component of core programs; with an intent to provide students with a greater level of understanding of recreational environments and the conditions generally encountered in our vast array of aquatic environments.

Time will be the testament of our approach, but of one thing we are very certain, our programming is

the way forward as we believe it is a balance between tradition and community needs.

PRESENTATION PAPER

Background / Introduction

The YMCA AquaSafe Aquatic Education Program aims to provide lifespan swimming and water safety knowledge and skills in a program that is underpinned by a program framework that incorporates the development of confidence, self awareness and social interaction.

Organisational research indicated traditional swimming programs were not fully meeting community needs. A false sense of water safety and aquatic competence exists within the population.

The YMCA's suite of aquatic programs has an approach that looks beyond the development of physical knowledge and skills to incorporate and challenge intellectual and personal development. Simulated open water environments form a major component of core programs; with an intent to provide students with a greater level of understanding of recreational environments and the conditions generally encountered in our vast array of aquatic environments.

YMCA aquatic programs are presented to the community throughout Australia, specifically the AquaSafe aquatic education program is presented to 30,000+ students on a weekly basis.

The program is provided for children and adults from 6 months to senior years of age.

Community participation focuses on two areas, one sees parents taking an active part in both infant and preschool classes. While the more traditional approach is to remove parents from classes very early in a program, the Y keeps the parents involved to ensure that parents:

1. gain and continually practice good water safety techniques with their children
2. gain an understanding of the scope and range of aquatic learning and actively contribute to and engage with their child's aquatic education.

Classes with parental involvement are active as there are no children waiting for their turn.

Further community involvement sees the Y actively encouraging community members to undertake aquatic teaching certification, this enable us to offer employment to community members and for them to make an active and positive contribution to their local community.

Methods

The development of an electronic training program has enabled the Y to provide consistent program curriculum training to its aquatic education teachers, no matter what part of the country they are based in. The interactive two hour training program provides teachers with audio and visual content that details our programs while providing a background for our philosophy and approach to aquatic education. Every teacher undertakes this training prior to the commencement of teaching.

The Y is active in 170 aquatic facilities throughout Australia over 40% of these provide weekly aquatic education programs.

The curriculum review commenced over 18 months ago with new resources, program content and teacher retraining undertaken for the launch in 2007.

Results/Evaluation

An evaluation and review will be conducted at the midyear mark in 2008. This extensive process will involve focus groups that include teachers, parents and students.

Initial feedback from teachers, parents and students has been extremely positive: Many teachers have expressed that the new curriculum has reinvigorated them, created a challenge and removed the repetition and 'boredom' factor.

Students are enjoying the challenge and discussion/decision making aspects of the new curriculum. They have also expressed their enjoyment of peer engagement aspects of the activities presented.

Parents, while initially sceptical have noted the impact of the new curriculum on their children who are eager to attend class. Parents have also commented on the broad range knowledge their children now bring to family conversations.

To date the project has achieved our objective, but this is by no means an end. The Y will continue to evaluate, assess and refine our approach to aquatic education to ensure it is relevant to community needs.

The acceptance of the new curriculum and approach by government and private sector education departments has been an interesting outcome to the program. The many inquiries received indicate our approach is meeting the broad scope of learning outcomes being sought in today's educational institutions.

Other unexpected outcomes have been the YMCA international inquiries. Canada, USA and New Zealand have all expressed interest in the curriculum and approach. There's quite extensive discussion taking place around the globe.

Discussion

YMCA Australia is committed to aquatic programs that provide a balance between traditional swimming and community water safety education that encompasses our vast array of recreational environments.

YMCA Australia has replicated the program throughout the country with fully trained and committed teachers and quality program resources.

Our learning's have been broad and extensive. Change is never easy to implement, however the gradual and stepped approach has been well received by the majority of stakeholders. There has been some initial hesitancy from older style teachers and a few parents. We continued to work with this group and can happily report positive progress.

• What were the main challenges in implementing the project/program/service? How did you meet these challenges or difficulties?

We faced a major challenge with our program development as we moved away from a traditional approach that was so fully entrenched and fully focused on the acquisition of a physical skill in a controlled environment was a big challenge.

Another large challenge was the traditional approach of teachers who were very 'coach based' in their approach to classes, where direction and command was the norm. The new curriculum challenges teachers to fully engage and interact with students and to many this was a challenge.

Changing terminology from swim lessons to a broader scope known as aquatic education was also a challenge but it has now very much part of our organisational vocabulary.

The scope and range of 'thinking outside the square' by aquatic management personnel was unexpected and a pleasant surprise. The expectation was that resistance would be evident but as the research information came to light it was clear that change was needed.

Conclusion

Major findings from this project include:

1. Consistent teacher training is crucial to ongoing success.
2. Ongoing involvement and input from program management personnel is essential to maintain program quality.

Acknowledgements

The YMCA committed to an extensive research process that included an international tour to view and discuss teaching trends, curricula and program philosophy.



ACTIVEGATOR

OPEN YOUR EYES BE WATERWISE PROGRAM

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ABSTRACT

Introduction

Water safety has always been a vital part of the Fairfield City Leisure Centres Learn to Swim Curriculum. With the high number of drownings throughout Australia, the Centres were looking for a way to emphasise the importance of water safety awareness throughout the wider community.

As part of Fairfield Council's waterwise initiative the Leisure Centres put together a number of strategies to increase community awareness of the importance of water safety & risk awareness by developing and focusing on water safety specific projects. The "ActiveGator – Open Your Eyes – Be Waterwise Program" is an integral part of Fairfield City Leisure Centres safety awareness portfolio.

The program was launched in September 2005 to coincide with National Water Safety Week and has been going extremely strong ever since.

The program is presented to all Learn to Swim participants during Safety Week in all swimming programs at our Leisure Centres.

We launched the program to our local Pre/Infant/Primary schools and Community groups and by the end of 2006 the wider community had incorporated our "Activegator Waterwise Program" into their curriculum.

Project Methods

This initiative raises awareness about water safety issues and develops water safety skills aimed at the wider community specifically pre-schoolers and school aged children. The objective is to encourage and educate participants to be aware of water

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safety, not only in a pool environment but also at the home, beach and inland water environments. We promote that although lifeguards are an important safety feature they are not intended to replace close supervision of parents or guardians.

Open Your Eyes be Waterwise - ActiveGator Waterwise Presentation

The aim of this program is to teach children and make them aware of the dangers that may occur in and around water. Our goal is to keep children safe whilst they enjoy water activities. Fairfield City Leisure Centres have developed, in house, a very unique presentation that includes a specifically written and recorded song, use of a discussion video on all aspects of safety in and around water including pools, beaches, rivers, lakes and dams. ActiveGator, our mascot, has also been developed and will help promote our program along with a number of giveaways that the school can use to reinforce the message of Be Water Wise.

The children participate in basic scenarios with:

1. Questions and answers.
2. Interaction with "Activegator" - Fairfield City Leisure Centres MASCOT.
3. Learning safety slogans and singing along with our custom produced "ActiveGator Safety" song.

Each group then receives a complimentary package including:

1. Puzzles
2. Stickers
3. Bookmarks
4. Tattoo

This helps teachers and community group leaders to re-enforce the safety message in an ongoing basis.

Evaluation

The "ActiveGator Waterwise Program" has had tremendous success with many organisations in the wider community keen to reinforce the water safety message by re-booking our Safety Program.

Due to the catchy lyrics of the ActiveGator Safety song you can hear children singing the chorus once they see the poster of ActiveGator within the Leisure Centres.

The children are now very aware of the safety rules at any Aquatic location i.e. public/home pools, beach/river/lake/s.

ActiveGator is now a recognizable MASCOT within the Fairfield Local Government area with many

requests for star appearances at Family fun Days/ Schools/Shopping Centres to help reinforce the water safety message to all.

Becoming a part of the community and running basic educational programs at schools, festivals, markets and local service clubs has been an effective way to broadcast a level of education to the community.

In Addition

As a result of the successful "ActiveGator Waterwise Program" Fairfield City Leisure Centres launched the "STAY WITH ME" campaign during September 2006. This campaign was introduced to educate parents to stay with any child under the age of 5years who enter our facilities and for the child to be recognised they must wear a "Stay With Me" wristband in and around our pools.

Recorded messages are played over our PA systems at regular intervals asking "Where is your child now" and information reminding parents/guardians of their responsibility while visiting our facilities.

Regular visitors to any of our Leisure Centres are now accustomed to the Leisure Centres "Conditions of entry".

Following a review of our school carnival bookings and in an attempt to improve safety & water awareness, Fairfield City Council Leisure centres has developed a Schools Excursions Package and introduced a Schools Carnivals Package.

A Schools Excursions Information Package.

This package is intended to be a guide for schools participating in excursions to our leisure centres. It is intended to aid in complying with the OH&S legislation and Department of Education & Training policies. It also provides specific risks associated with our leisure centre to aid in developing the risk assessment.

Schools Carnival Package.

Council has introduced a new procedure that requires the school to designate an event co-ordinator and two safety officers. Each school will be responsible for delegating a carnival co-ordinator and two safety officers who will be required to wear fluoro safety vests supplied for the duration of the carnival. The co-ordinator will be Council's contact for specific requests etc and the safety officers will be responsible for monitoring their students, specifically while in the water.

The vests are for use during the carnival to ensure that at least two teachers are watching the children at all times whilst in the water. Teachers at the carnival can take turns being on "duty", so that everyone has the opportunity to participate in other activities.

The vest easily identifies the teachers watching the children, but by no means absolves others from responsibility. In addition, council lifeguards will also be on duty during the event with their primary contact being the designated carnival co-ordinator.

Conclusion

With the ongoing enthusiasm of the Fairfield City Leisure Centres staff eagerly promoting our "ActiveGator – Open Your Eyes – Be Waterwise Program" it has become an integral part of Fairfield City Council and the surrounding Communities.

PRESENTATION PAPER

Abstract

With drowning incidents on the increase in NSW waters and to coincide with National Water Safety Week 2005, Fairfield City Leisure Centres (FCLC) introduced a number of safety awareness programs.

Our "ActiveGator – Open Your Eyes – Be Waterwise", "STAY WITH ME" and "Triple 'S'" (Schools, Strokes and Survival) programs were developed in order to provide children, teenagers, parents and guardians with the skills necessary to stay safe in any aquatic environment.

To achieve this we have used a number of different mediums including water safety presentations, water safety mascot (ActiveGator), safety announcements over PA systems, public awareness campaigns and skill promoting activities.

We have also recently developed our School Excursions Information Package and Aquatic Carnival Package which have an emphasis on safety for school groups utilising our Leisure Centres.

The enthusiasm and ongoing commitment of our staff has resulted in all of our programs being successful in providing our community with increased awareness of water safety as well as increased water safety skills.

Introduction

During the year 2003 to 2004, 110 people lost their lives as a result of drowning incidents in NSW. This figure was significantly higher than the previous year (80) and greater than the five year average of 89. There had also been an increase in the number of swimming pool drowning deaths compared to previous years.

Due to the increase in drowning incidences and in order to coincide with National Water Safety Week 2005, FCLC developed and introduced our "ActiveGator - Open Your Eyes - Be Waterwise" Presentations to all participants enrolled in our Learn To Swim Program. The aim of these presentations

was to provide children with the skills necessary to stay safe in all aquatic environments. Furthermore, the program sought to educate parents and guardians that lifeguards and swim instructors, while playing a necessary role in safety promotion, do not replace the close supervision of parents or guardians. In 2006 the presentations were expanded to include local primary and preschools.

In the 2004–2007 National Water Safety Plan, the 0-4 yr old age group was identified as the highest 'at risk' priority group. A total of twelve in this age group drowned in NSW in 2005/2006, double that of the previous year's figure of six. As 50% of these incidences occurred in swimming pools, FCLC focused on drowning prevention strategies for this age group. The "STAY WITH ME" public education program was developed and implemented to educate parents and guardians the importance of being within arm's reach of any child under five years of age in any aquatic environment.

In 2006/2007 FCLC introduced a School Excursions Information Package. This was developed as a water safety guide for all school groups participating in various aquatic activities. Developed in order to provide risk assessments of our facilities, it also complies with Occupational Health and Safety Legislation and Department of Education and Training Policies.

In addition, FCLC introduced an Aquatic Carnival Package which endeavoured to improve water safety processes during swimming club and schools carnivals. A major component of these packages was for the school to designate one coordinator and two safety officers to assist the centre's lifeguards in maintaining a safe environment for the children to swim.

Also in 2007, FCLC developed and implemented our Triple 'S' Program to cater for increasing interest from local high schools to address water safety awareness. The program was initially designed to address the aquatics element of the Sport, Leisure and Recreation Module for Year 11 students. It incorporates learn to swim, lifesaving skills, water safety and a basic Cardio Pulmonary Resuscitation awareness. After a successful introduction to year 11 and 12 students it was further refined to cater for junior high and primary aged children.

Methods

"ActiveGator - Open Your Eyes - Be Waterwise " is a water safety presentation based on two words, 'SAFETY' and 'WATERWISE'. The presentation incorporates a video, pre-recorded water safety song and a guided discussion on being safe in pools, beaches, rivers, lakes and dams. During the discussion

component, Learn to Swim and school participants partake in a question and answer session regarding water safety. In addition, children are encouraged to sing along and join in specific actions of our ActiveGator Water Safety song.

ActiveGator is our centre's life-sized mascot who participates and interacts with the children throughout the presentation. All participants receive a safety pack which includes puzzles, colour-in sheet, stickers, bookmarks and temporary tattoos which reinforce the water safety message.

A shortened 10 minute version of this presentation is given to all Learn to Swim participants enrolled at our FCLC centres during the Swim Program's 'Safety Week' which is a specific week during each term. The water safety message is then reinforced throughout each lesson of the term.

A more in depth presentation is also taken on the road to pre-schools, schools and community groups. Each of these presentations can range from 35 to 75 minutes depending on the age range and capability of the children and covers safety in all aquatic environments as well as basic survival skills.

Our "STAY WITH ME" public education program, which is aimed at parents and children under five years of age, is a continuous safety awareness campaign that is promoted in our Leisure Centres. The campaign advocates the importance of a parent or guardian (over 16 years of age) staying within arm's reach of children under five by using a number of strategies. All children under five entering our aquatic areas are given a special wristband to wear. This not only identifies them to staff as being under five but is a constant reminder to parents and guardians they need to stay within arm's reach at all times. Recorded messages are played over our PA system at regular intervals with specific water safety messages such as 'where is your child now?' There are also large signs which clearly state 'supervise children at all times'. Parents and guardians are also given "STAY WITH ME" information flyers and are informed of our conditions of entry prior to entering the pool.

Our "Triple 'S'" program is uniquely designed to cater for the group's age, swimming ability and competence level. Each program consists of a number of scheduled sessions (between 60–90 minutes) and involves Learn to Swim and stroke correction, water safety, Cardio Pulmonary Resuscitation awareness, water survival skills and rescues. Revision is given at each session to encourage familiarity and progression. Assessment and feedback is given throughout the program and an individual certificate is awarded to each participant which identifies the skills that they have achieved.

Our School Excursions Information Package is sent to schools that intend to utilise our Leisure Centres. The package outlines any known risks at our centres and allows the opportunity for schools to conduct a risk assessment of their own. The package is monitored regularly and amended accordingly.

A letter accompanying our Aquatic Carnival Package is sent to all schools that book their swimming carnival at one of our centres. The letter identifies the purpose of ensuring water safety for students during their carnival and outlines the procedure they must follow whilst utilising our centres on the day. On arrival, the school coordinator must pick up their carnival package and sign in the number of students attending the carnival. The package consists of three vests (one safety coordinator, two safety officers) which the school designates to three members of staff and must be worn for the day. The vests allows students and our Leisure Centre staff to easily identify designated staff in case an emergency arises.

Results

Our "ActiveGator – Open Your Eyes – Be Waterwise" Presentation is evaluated through the participant's responses to discussion and question segments. Feedback sheets are also provided to school coordinators in order to identify areas that may require improvement. Furthermore, a similar process is used in order to evaluate our "Triple 'S'" Program. Feedback forms are provided to the school coordinator at the completion of the program. Evaluation of student performance throughout the program is also monitored in order to determine whether adjustments need to be made.

Our "STAY WITH ME" public education program is implemented and monitored daily by Leisure Centre staff that ensures that patrons are abiding by our conditions of entry. They also ensure that all children under five years of age are fitted with "STAY WITH ME" wristbands and educate any parents or guardians that are not supporting the program. Feedback forms are also available at reception which allows patrons to identify any safety concerns they may have.

The introduction of our School Excursions information package and Aquatic Carnival package has ensured that school groups share responsibility in providing a safe environment for their students whilst swimming. Feedback is sorted by Leisure Centre staff in order to identify areas that may need improvement.

Discussion

Overall, our initial objectives of spreading the water safety message has been promoted to various users of the centres. In particular, teachers and students of pre-schools, primary and high schools have seen an increase in water safety awareness, resulting in more

people carrying out safe practices whilst visiting and utilising our centres. Furthermore, there has been an increase in parent/guardian participation and support of water safety programs at our centres.

We have recently begun to translate signs in different languages for those patrons whose primary language is not English. This will ensure a higher number of patrons understand our conditions of entry. FCLC also seeks to further develop our "ActiveGator Open your Eyes – Be Waterwise" Presentations in order to cater for Playgroups and Child Care Centres. The program will be further developed in order to improve water safety practices in the home environment and will introduce basic Cardio Pulmonary Resuscitation awareness to parents/guardians. In addition, FCLC intends to increase the use of ActiveGator appearances at community festivals, shopping centres and community clubs. This will assist in providing the wider community with water safety education.

Conclusion

Following an increase in drowning incidences in New South Wales waters, FCLC have risen to the challenge of developing a number of ways to keep the community informed of water safety awareness. Our "ActiveGator – Open Your Eyes – Be Waterwise"; "STAY WITH ME"; "Triple S", School Excursions Information Package; and Aquatic Carnival Package were developed in order to ensure that children remain safe around all aquatic environments. In addition, the programs have reinforced to teachers, parents and guardians that they share the greatest responsibility for the close supervision of their children whilst in an aquatic environment.

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Chris Zaverdinos and Ross Wilson. Fairfield City Leisure Centres.
Song Lyrics: Patricia Krajacic, David Bernoth
Music: David Bernoth

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AQUATIC EDUCATION IN SCHOOLS

THE INTEGRATED AQUATIC PROGRAMME (IAP)

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ABSTRACT

Water is a dominant feature of the New Zealand landscape, and many New Zealanders spend much of their recreational time in, on or by water. (Ministry of Education 1999)

This school-based initiative demonstrates one way of promoting water safety education in schools. The Integrated Aquatic Programme (IAP) is a New Zealand web based resource for teachers of students aged 5 – 12 years. It has been collaboratively developed by key aquatic stakeholder organisations alongside members of the education sector. This initiative supports the New Zealand Drowning Prevention Strategy by providing quality water safety education and awareness.

The IAP supports teachers in identifying and meeting the learning needs of students within the context of Aquatic Education. It provides a comprehensive overview of teaching material to support student learning in a range of aquatic contexts. The IAP is supported by competency models which suggest a progression for the development of swimming and water safety skills in a practical environment. The available teaching material provides classroom based learning activities that allow students to examine and critically reflect on the knowledge, attitudes and behaviours needed for safe aquatic participation.

In 2007 a pilot study was set up to evaluate the potential of the IAP as a framework for a school's aquatic programme.

A cluster of three low decile schools in South Auckland, New Zealand were part of the pilot. One school had their own pool; the other two used a local facility. The pilot study aimed to assist schools to develop sustainable aquatic education programmes that support schools, teachers, students and their

families in building water safety skills, knowledge and attitudes to create a water safety culture within the school community. The results of this pilot study as well as examples of student work and community involvement will be shared in the presentation.

PRESENTATION PAPER

Water is a dominant feature of the New Zealand landscape, and many New Zealanders spend much of their recreational time in, on or by water¹.

The aim of this schools initiative is to provide teachers and schools with a framework for developing aquatic education in schools. The Integrated Aquatic Programme provides:

- A visual tool to develop aquatic education programmes for Year 0 – 8 students (age 5 to 12).
- A learning pathway for students to have safe and meaningful aquatic experiences.
- Increased understanding of what an 'aquatically educated' student could look like.
- Links to relevant aquatic organisations and their resources.

The Integrated Aquatic Programme supports objective 6 of the New Zealand Drowning Prevention Strategy² by providing quality water safety education and awareness.

The initiative was developed in response to environmental and political issues, together with evidence gathered from a number of sources.

1. A study³ of 433 schools in the greater Auckland region on the provision of aquatics education for primary age pupils (age 5 to 12) reported the principal ways to improve aquatics education suggested by schools currently teaching aquatics education are:

- Increase professional training opportunities (60%).
- Increase funding for aquatics education (52%).
- Improve swimming facilities (43%).

2. Moran⁴ reported that in primary education pre service training programmes, a mean of 6 hours with a range of 2 – 18 hours was allocated to aquatics education in one-year graduate pathways, whilst a mean of 5.6 hours with a range of 1 – 15 hours was allocated to aquatics education in three-year undergraduate pathways.

3. The ACNielsen report⁵ *Assessing Student Swimming and Aquatic Skills* recommended:

- There is a need to look at ways of addressing the difference in skills outcomes for low decile schools, given that parents of students in higher decile

schools are more likely to have financial means to access extra swimming and aquatic skills training.

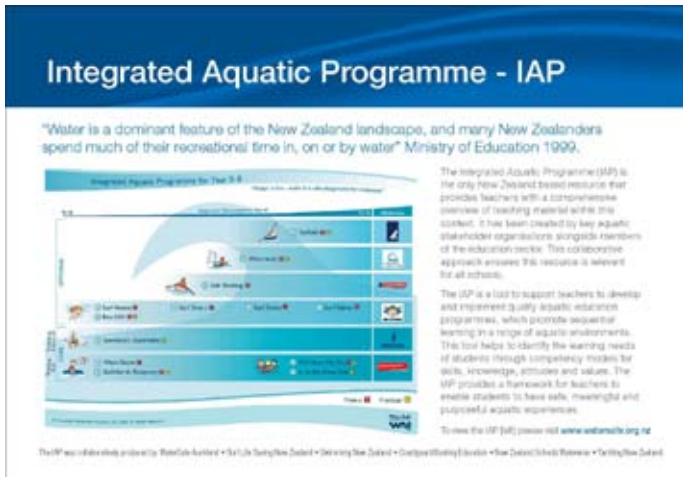
- Some "best in class" examples of programmes and success stories about local authority / school partnerships should be showcased to provide ideas for schools' that do not have a strong swimming culture.
- Schools need to maximize their use of available resources. This includes maximizing use of facilities, teaching resources and instructors available in the local community; and working in partnership with other schools and community groups.
- There is a need for professional development, such as refresher training for teachers.
- Schools' communication to and with parents about the value and importance of learning water safety and swimming skills is important.
- There is a need to consider ways to better target and reach teachers.

From the evidence WaterSafe Auckland identified a need to have a framework to promote aquatic education in schools. For such a framework to succeed in promoting water safety and swimming skills there was a need to have a collaborative approach from the aquatic organisations working in the school setting.

In 2004 proposals were presented to key organisations outlining the possible scope and reach of such an initiative. The proposal included criteria for the inclusion of each organisations educational material within the framework. Professional development opportunities in the primary education pre service training and primary schools. Promotion of water safety in schools by regional coordinators.

The IAP was collaboratively developed by the following organisations with the support of the education sector:

- WaterSafe Auckland (WAI)
- Surf Life Saving New Zealand (funding partner)
- Swimming New Zealand
- Coastguard Boating Education
- New Zealand Schools WaterWise Inc
- Yachting New Zealand



Each organisation's teaching resources were developed or revised in line with educational criteria. They were aligned to Learning Areas of the New Zealand Curriculum⁶. WaterSafe Auckland provided professional development for partner organisations around the potential of aquatic education in the primary school sector. Partners were offered the opportunity to develop and trial learning activities with teachers and students. Resources contained both practical and classroom activities. The Integrated Aquatic Programme framework was trialled and evaluated by teachers through a nationwide pilot.

Additional teacher support material was developed in partnership with educational and aquatic sector focus groups. This included student needs analysis and three competency models outlining water safety skills, knowledge, attitudes and values to promote safe participation in, on and around water.

The IAP was launched in February 2006. It can be viewed on several partner's websites including www.watersafe.org.nz. This website contains all the partner's resources and hyperlinks to their websites. Resources and other support material can be downloaded free of charge.

A Whole School Professional Development model was designed to investigate the effectiveness of the Integrated Aquatic Programme as a framework for developing aquatic education in schools. This was piloted in three low decile South Auckland schools. Only one of these schools had an existing aquatic programme. This was based on learn to swim and delivered in their school pool.

The initiative was a joint partnership between TEAM Solutions (Auckland University) and WaterSafe Auckland Inc (WAI). The intended outcomes were to:

- Develop a whole school approach to building a water safety culture for staff, students and the school community.

- Develop holistic and sustainable aquatic programmes based on student learning needs within their own school environment that shows an intended progression throughout the school.
- Measure the level of student learning around water safety using the National Educational Monitoring Project⁷ (NEMP) safe swimming tasks.
- Investigate how the Integrated Aquatic Programme (IAP) can provide teachers and schools with a framework for developing aquatic education.

The professional development model included a series of workshops; whole school staff meetings and practical learn to swim and water safety sessions for teachers. Each school with facilitator support reviewed, planned and / or revised their aquatic programmes to meet the needs of their students. The programmes included both classroom and practical sessions for students, designed to build water safety knowledge, skills and attitudes. Lead teachers from each school shared their experiences and successes during an expo at the end of 2007.

Evidence of the impact of this professional development on schools, teachers, students and the school community will be shared.

All three schools are continuing with their programmes this year and will evaluate progress and amend programmes as their students develop an increased understanding of water safety. WaterSafe Auckland has received funding from the ASB Trust allowing this professional development opportunity to be extended for up to ten low decile schools in the Auckland Region for the 2008 school year.

Throughout the collaborative planning of this project future initiatives and scoping studies to further develop the Integrated Aquatic Programme have been identified and carried out. The Integrated Aquatic Programme is the educational tool that provides a framework for the delivery of aquatic education in schools. It has the potential and the capacity to:

- Build a water safe culture within the educational sector.
- Increase delivery of professional development around aquatic education in schools.
- Extend the framework to include secondary and early childhood education settings.
- Work with swim schools to create a common understanding of the services they offer to schools and how best to meet the needs of schools, students and teachers.
- Continue to add value to partner organisations.

References

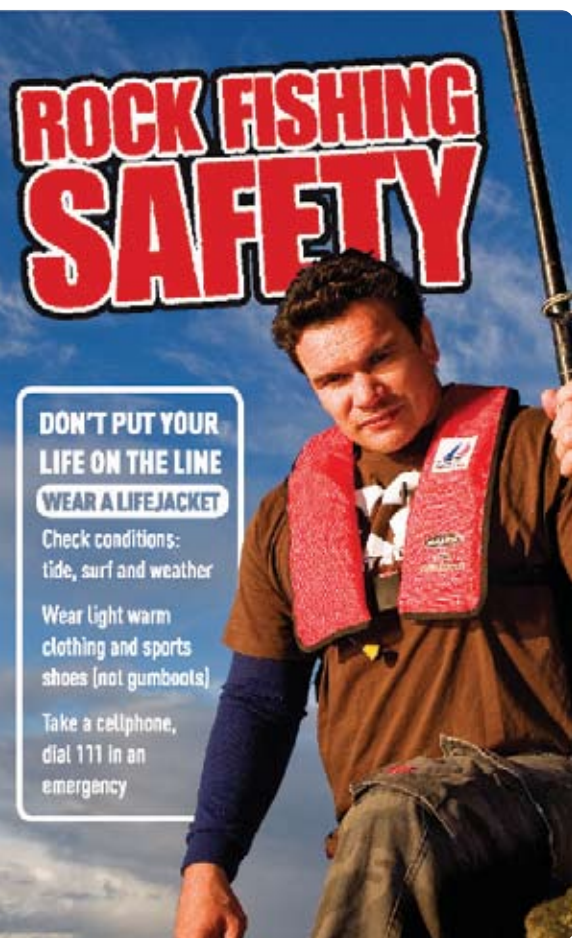
1. Ministry of Education (1999). Bubbles to Buoyancy: Aquatic Education: Years 1-3. Wellington: Learning Media.
2. Accident Compensation Corporation (2005). Drowning Prevention Strategy: Toward a Water Safe New Zealand 2005-2015. Wellington, New Zealand.
3. Moran, K. (2002). The provision of aquatics education for primary school-aged pupils in the greater Auckland region. (Research Rep. No.1). Auckland, New Zealand: Auckland College of Education, Faculty for Postgraduate Studies and Research.
4. Moran, K. (2000). Aquatics education in New Zealand initial teacher education. Paper presented at the International Conference of Physical Education, July 2-4, Wellington, New Zealand: Physical Education New Zealand.
5. AC Neilson (2001). Assessing Student Swimming and Aquatic Skills. Prepared for Ministry of Education and Water Safety New Zealand.
6. Ministry of Education (1993). The New Zealand Curriculum Framework. Wellington: Learning Media.
7. Crooks T. and Flockton L.; NEMP National Education Monitoring Project New Zealand. Health and Physical Education Assessment Results 2002 National education monitoring report 26 Educational Assessment Research Unit Dunedin for Ministry of Education

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...most recognised the value of wearing buoyancy aids when fishing at high-risk locations but most never wore one.

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PRESENTATIONS:

BOATING/FISHING HIGH RISK LOCATIONS

STAYING ON TOP

CHANGING ROCK FISHERS USE OF, AND BEHAVIOUR TOWARDS, BUOYANCY AIDS

TERESA STANLEY

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DR KEVIN MORAN

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ABSTRACT

From 1999-2005, 11 drowning fatalities occurred on a 50km stretch of Auckland's rugged west coast. In all instances the victim was not wearing a buoyancy aid. An initial survey of fishers in 2006 indicated that most recognised the value of wearing buoyancy aids when fishing at high-risk locations but most never wore one.

In an attempt to address this situation, an ongoing education campaign promoted the use of inflatable, collar-type buoyancy aid when fishing from rocks into surf. A subsequent survey in the second year of the campaign (2007) indicated an improvement in buoyancy aid use among fishers with a much reduced proportion of fishers reporting never using them (2006, 72%; 2007, 53%) and an increase in those using them often (2006, 4%; 2007, 15%). In addition more fishers thought that wearing a buoyancy aid would reduce drowning risk 2006, 71%; 2007, 80%).

Preliminary analysis of results from the final phase of the three year project in the summer of 2008 suggests some encouraging change in behaviours and attitudes towards buoyancy aids. Ways that the programme promoted their use on-site, including testing the "in-surf" efficiencies of the buoyancy aids, and future strategies to maintain and enhance buoyancy aid use are discussed.

PRESENTATION PAPER

Introduction

From 1999-2005, 11 drowning fatalities occurred on a 50km stretch of Auckland's rugged west coast. In all instances the victim was not wearing a buoyancy aid. Auckland Regional Council (ARC), Surf Life Saving Northern Region (SLSN) and WaterSafe Auckland Inc (WAI) agreed to combine resources for a collaborative West Coast Rock Fishing Safety project.

An initial survey of fishers (Moran, 2006) indicated that most recognised the value of wearing buoyancy aids when fishing at high-risk locations

but most never wore one. In an attempt to address this situation, an ongoing education campaign promoted the use of inflatable, collar-type buoyancy aid when fishing from rocks into surf. These lifejackets are a lot less bulky and easier to wear than the traditional models.

Because Asian, especially Chinese, fishers are at high risk of drowning, promotional resources were developed in English, Chinese and Korean. Resources were distributed throughout the region at information centres, fish and tackle and bait retailers. Four multi-lingual rock fishing advisers were employed at four high-risk West Coast fishing locations - Muriwai, Piha, Karekare and Whatipu - during the summer of 2006 to advise on safety and equipment and to survey fishers on their practices and beliefs. Putting Asian-language speaking safety advisors onsite throughout the summer, provided opportunities to not only identify fisher safety behaviours/beliefs but also to promote inflatable PFD use when fishers were engaged in fishing at the hazardous sites.

In the first year of the programme we found out that almost all (96%) of the fishers didn't wear a lifejacket when fishing off the rocks (Moran, 2006). We knew that some of the most alarming behaviours and subsequent fatalities were most evident amongst fishers from our region's Asian communities. Because of some reluctance among Korean fishers to participate in the first year of the study, the second year of the project included two extra Korean-speaking advisers and a Korean language copy of the survey.

In the second year of the project, three main distributors of the inflatable PFD's, Hutchwilco, RFD New Zealand Ltd, and Safety at Sea, agreed to redeem their retailers \$60.00 when presented with a coupon for inflatable jackets. The coupons were distributed onsite to fishers as well as through the Asian, new settler and fishing communities.

Results

The survey in the second year of the campaign (2007) indicated an improvement in buoyancy aid use among fishers with fewer fishers reporting never using them (2006, 72%; 2007, 53%) and an increase in those using them often (2006, 4%; 2007, 15%) (Moran, 2007). In addition more fishers thought that wearing a buoyancy aid would reduce drowning risk (2006, 71%; 2007, 80%). Table 1 shows that fishers also considered that their fishing safety knowledge, attitudes and behaviours had improved by the end of the second year of the project.

In the past year -	Agree (%)	Disagree (%)	Don't Know (%)
Your rock fishing safety knowledge has improved?	63.4	6.3	30.4
Your rock fishing safety attitude has improved?	62.5	8.9	28.6
Your rock fishing safety behaviour has improved?	52.7	15.2	32.1

Discussion

By the end of the second season, fishers reported positive changes in behaviours and attitudes towards the use of buoyancy aids when fishing in hazardous surf locations. However, while attitudes and behaviours appeared to have changed for the better, some appear to be well entrenched and require further attention. One area of concern that was highlighted through the research was that many fishers still think that their knowledge of the site their swimming ability will keep them out of trouble. More than half of the fishers surveyed reported never wearing any lifejacket or flotation aid and fifty five per cent still felt that their local knowledge of the site meant that they were unlikely to get into difficulties. This continued confidence in their supposed knowledge of the site and the sea is cause for concern given that one quarter of those surveyed were visiting the site for the first time.

The ethnic groups that were most likely to change their behaviour were the Asian ethnicities but those least likely were Maori and Pacific Islanders. Consequently, in the third year of the project (2008) new strategies were introduced to promote on-site use of buoyancy aids and to maintain and enhance their use. Samoan and All Black rugby player Michael Jones agreed to promote rock fishing safety to the 'diehard' Kiwis by being a figure head for resources and media spokesperson.

Another incentive introduced in the third year of the project was the provision of a \$20.00 voucher given to any fishermen seen wearing a lifejacket. The \$20.00 was redeemable at any of the retailers linked to the three buoyancy aid distributors.

Monthly rock fishing safety workshops were held throughout the summer within the Chinese community.

These six workshops were attended by almost 150 people from the Chinese community. Inflatable lifejackets were given away as prizes for the workshops and at other promotional events.

Preliminary analysis of results from the final phase of the three year project in the summer of 2008 suggest some encouraging change in behaviours and attitudes towards buoyancy aids.

Conclusion

Results for the first two years of the project and preliminary analysis of the final year currently underway suggest that the project has had a positive effect on fisher safety especially with regard to the use of inflatable buoyancy aids. Among possible reasons for the success of the venture is that each of the three organisations involved - Auckland Regional Council (ARC), Surf Life Saving Northern Region (SLSN) and WaterSafe Auckland Inc (WAI) - agreed to combine resources and utilise their individual strengths. Surf Life Saving has expertise and experiences in rock fishing incidents and safety and rescues, as well as lifeguards and equipment on the beaches. WaterSafe Auckland brought expertise in water safety promotion, research and links to the new settler, Maori and Pacific communities. The Auckland Regional Council provided funding, management, political support and park rangers.

Ultimately the success of the project is measured in lives saved. There were eleven fishing fatalities on Auckland's west coast between 1999-2005. In 2005 there were five deaths in four months. Since the project has been implemented, there has been one rock fishing fatality in 2006, two in 2007 and one in 2008 to date.

References

- Moran, K. (2006). Water safety and Auckland's west coast rock fishers. Report prepared for Auckland Regional Council, Surf Life Saving Northern and WaterSafe Auckland. Auckland: WaterSafe Auckland (pp.1-41). Available in PDF format at http://www.watersafe.org.nz/_attachments/rock-fishing-report-1.pdf
- Moran, K. (2007, May). Water safety and Auckland's west coast rock fishers: Follow-up study. Prepared for Auckland Regional Council, Surf Life Saving Northern and WaterSafe Auckland. Auckland: WaterSafe Auckland (pp.1-29). Available in PDF format at http://www.watersafe.org.nz/_attachments/rock-fishing-report-followup.pdf

MONITORING CHANGES

IN SAFETY BEHAVIOUR AMONG RECREATIONAL BOATERS ACROSS WESTERN AUSTRALIA

DR TERRI PIKORA

Senior Research Fellow, Marine Safety Research, School of Population Health, University of Western Australia

ABSTRACT

Background

Recreational boating is a popular leisure time activity in Western Australia. It is estimated that boating incidents are second only to motor vehicle crashes as a cause of serious injury in Australia. Due to increasing numbers and types of recreational vessels and users on our waterways, it is important to assess trends in safety issues and behaviours among recreational boaters.

Purpose

This paper will present changes in recreational boater attitude and knowledge regarding safety issues; identify whether beliefs, attitudes and behaviours toward boating safety issues and standards have changed; and monitor any changes in the previous five years in relation to the number, type and reporting to authorities of injuries and incidents.

Method

Using the vessel registration database kept by the Western Australian Department for Planning and Infrastructure, a stratified sampling frame was used to ensure that more owners of common vessel types were included in the sample and that these quotas were based on boaters in seven regions of WA. Telephone surveys were conducted in 2003, 2006 and 2008.

Results

Marine safety issues that boaters suggested as requiring more focus or effort included boating safety education, control of boaters under the influence of alcohol or drugs, and control of reckless operation. Few boaters reported having had an alcoholic drink while on their most recent trip, or to logging on, checking weather and fuel supplies, or conducting a general boat and equipment check prior to using their boat.

A high level of support was found for the introduction of the Recreational Skippers Ticket (the mandatory boater education qualification required by all recreational skippers in WA introduced in 2006).

Conclusions

These findings will assist when revising existing and developing new strategies to ensure that recreational boaters are better informed regarding safe boating practices. Recommendations regarding areas to target efforts will be made.

BOATING ADVENTURE EDUCATION

AND TRAINING WITH NAUTICAL DISCIPLINE AS A GUIDING STAR LEADING THROUGH THE TURBULENT WATERS OF UPPER TEENAGE YEARS

BOUC JONES

Principal, Adelaide Nautical College

ABSTRACT

So the world has become a dangerous place. We wrap our children in automobiles to take them to school and back home each day. We teach them "Stranger Danger" and tell them all sorts of horrible things that might happen to them if they venture out to play, or even dare to go outside the back fence, let alone go down to the creek or the beach alone. The safe place is at home behind security doors watching TV or playing computer games for pseudo-adventure. The result - - - an obesity epidemic.

The teenage years are a time for adventure and challenge. The young body demands physical challenge and the thrill of adrenalin rush. Schools have become prisons that for most part do not allow for this essential physical development. The disaffected young people break out and get the adrenalin rush by throwing rocks or painting fences or driving fast cars and are branded Hooners or they hide in the world of drugs and depression. Some obedient little lambs make it thought to adulthood without too many scars.

This immense youthful energy can be captured and redirected towards a positive future through "safe" adventure challenge. The nasty people who pose the threat to our society do not have the intestinal fortitude to venture onto the water.

Let's use the very long tradition of Nautical Skills training and discipline to guide young people through to a constructive future in maths, engineering, information technology, hospitality, tourism etc.

Let's allow our young people to make and paddle their own canoes, to make and sail their boats, to SCUBA dive and explore the ocean depths, to drive fast boats and big ships. They might just come through as a better person.

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Let's remove the brick walls of fear, complacency, bureaucratic butt protection and empire building. If the cap fits - - - wear it.

PRESENTATION PAPER

Background/Introduction

- Upper teenage or Senior High School / Undergraduate years are a time when the young person needs to "let go of the side of the pool", to test themselves, to have physical adventure producing an adrenalin rush.
- Recognising that the human brain decision making powers reach maturity a few years later than the physical maturity, the power of adrenalin and other hormones, if not guided, can lead to heartbreak.
- Over many years working with schools in aquatics based eco-adventure education I have seen the benefits of exposing young people to boating adventure. In a controlled environment extending them beyond their comfort zone helps the timid to gain confidence and the over adventurous to learn valuable, uncomfortable lessons. They test themselves against natural elements; they find that cooperation with others is an effective means of achieving success and that the rejected student is often of great assistance.
- Our main area of operation was the Coorong National Park near the Murray Mouth. Canoes and Kayaks the adventure boats closely escorted by outboard dinghies and a larger launch for the more sedate teachers.
- A NEW VENTURE for Adelaide Nautical College - Registration as a Training Provider to deliver cruise ship based training in all aspects of maritime operations to Advanced Diploma Level on normal commercial cruise operations in Australian waters during summer and South West Pacific Islands during winter.
- Target group is young people, minimum age 16, Senior high school, Gap year, and Undergraduate, who will enrol as Cadets and undertake training in all aspects of cruise ship operations; deck, engineering, hospitality, aquatic adventure instruction and shore expeditions guiding as qualifications for work in the Cruise Ship and Super Yacht industries.
- Students join the ship as ANC Cadets for a short program or enrol in the 4 year fulltime Advanced Diploma program to gain world recognised Maritime Qualifications.
- South Australia has changed the "full time participation in Education" age to 17years as from 1st January 2008. This means that a large number of young people who would normally have dropped out of school, or training including those

who want to take a "Gap" year, will be forced to continue in education or training without a break. Unemployment of youth under the age of 17 will cease to exist. 16 is the target age for entry to the ANC Cadet program.

- There is a world shortage of well trained young people to work in the cruise and super yacht industries. This program will provide ANC Cadets with an opportunity to travel the world while training and earn a good income with their skills once they become competent.
- The Australian Navy is also having great difficulty in recruiting young people so Navy assistance with this project may be a possibility. This has recently been suggested to the Minister.

Methods

- This idea has been growing for some considerable time. When I was approached by a cruise company to assist them to enter the education group cruise market I promoted the concept of providing accredited training as an attractive cruise product for them. They agreed to provide financial assistance.
- The project has reached the stage of preparation for registration as a Training Provider. This is a formidable task, especially when negotiating with government employees who forever seem to protect their tails. Frustration is a good word to describe this phase.
- It is quite clear that to achieve registration it is best to employ an independent consultant to guide the preparation of all documentation. If things go wrong they can be blamed and personal stress is reduced. This is now the current ANC position.

Discussion

- Residential Colleges are becoming recognised throughout the world as best practise for whole of student education for the 16 to 24 year old student cohort. The phenomenal success of the "Harry Potter" books is an indication of this trend toward acceptance. A Residential College onboard a cruise ship with all of the traditions, rituals and romance of seafarers and cruise adventure thrown into the mix is a very attractive option for young people. ANC Cadets will live and learn their training through experience in a restricted and focussed shipboard community.
- The Cruise ships will be operating normal commercial cruise schedules. ANC Cadets will be onboard as part of the ship's complement. Great care will be required to ensure that the Cadets are well protected from undesirable elements that have appeared on some cruise ships. This will be a task for the supervising ANC trainers, mentors and the ship's master.

- I anticipate that most of the enrolments will be for short course Certificate 1 and 2 levels training in various aspects of cruise ship operations and aquatic adventure. These programs are likely to be in the form of school group bookings or individual vacation bookings for individual students. These will generally include basic small boat skills, power boat licence, OH&S at Sea, First Aid, Language & Cultural exchange and some experience in large ship operations.
- From this group I expect some students will want to sign on for perhaps a term, a semester or a year. Not because they want a career in shipping but they want some time out from home and school to plan their future and see a bit of the world.
- Another group of students will see a 4 year full time training program leading into formal higher level qualifications for them to enter both the Cruise and the Super Yacht industries. These students will form the student leadership with part of their training being team leadership and staff management.
- After testing and refining the program, ANC will approach other cruise ship and super yacht owners to place ANC cadets on their ships to be supervised in their training and assessment by ANC. There is a great opportunity for ANC in internet based communication for delivery and assessment of this training. The ship's crews will act as skilled mentors assisting ANC Cadets to obtain their qualifications.
- The greatest challenge to implementing this program has been lack of seed capital to get it started. Ships owners are difficult to convince when it comes to training Cadets on their ships. However they are starting to recognise that this is necessary to provide their future crew.
- The only advice I can give to anyone trying to get a major project like this off the slips is to first find an investor who can see the financial benefit of the opportunity. The do-good youth training, educational and safety training benefit is of little interest to people who have the financial power. They just want the least cost to move their ships.
- The only way I interested a ship owner was to ask him how he was going to find good competent crew for his new cruise venture. He knew from world search, including crewing companies, that good senior officers for cruise operations are difficult and expensive to find and that young, enthusiastic, competent junior cruise ship crew are just not available, so he asked me to set up a system to train young crew in deck, engineering, hospitality, aquatic adventure instruction and tour guiding on his ships so he could select the best to retain for his crews.

Conclusion

- A new, innovative training venture is very difficult to start in Australia without substantial capital to cope with all of the regulatory requirements and the bureaucratic hurdle jumping.
- Find the money first. No matter how good your qualifications, your experience or your idea, they will go nowhere without money.
- The ANC Cruise Ship training program will offer a unique opportunity for young people to participate in a challenging and exciting learning adventure that will stand them in good stead for the rest of their life no matter where their future leads them. They will certainly be water safe and so will their children.

Acknowledgements

- I thank Capt. John Webb, COE, Via Marine Australia for the opportunity to establish this training opportunity on their ships.

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WATER SAFETY EDUCATION

EVALUATION OF THE BOATING SAFETY FOR KIDS PROGRAM

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ABSTRACT

Introduction

From 1999 to 2002 there were 40 fatalities from recreational boating incidents in Victoria. A number of factors contributed to these fatalities: hazardous environmental conditions; vessel occupants suddenly and unexpectedly entering the water; and absence of personal flotation device use. In response to these and other findings a number of initiatives were undertaken to improve marine safety and reduce fatalities as a result of marine accidents.

The 'Boating Safety for Kids' program was one such initiative. The objective of the program was to deliver high quality boating safety education to Victorian primary school children (Grades 4-6). Specific aims were to: develop knowledge of personal safety while boating; and encourage participants to reinforce safety messages back to parents and other family members.

Methods

A Boating Safety for Kids Quiz was developed to assess student knowledge of boating and water safety following the program. The quiz was then sent to a random selection of 20 schools in metropolitan and regional Victoria who had completed the program (intervention group) along with 20 geographically matched control schools who had not completed the program previously (control group).

Results

Nine intervention schools (289 children) and 8 control schools (567 children) responded to the quiz. There was no significant difference in gender of the children completing the quiz. However, children in the intervention group were slightly older than the control group (mean age 11.10 vs 10.50 respectively).

Knowledge levels about boating safety were compared between intervention and control groups. Children in the intervention group had significantly greater levels of knowledge about trip preparation, safety equipment; checking the weather, and most aspects of emergency responses compared with controls.

Discussion

The results demonstrate that in the two to three weeks following the 'Boating Safety for Kids' theory session the majority of participants remembered many of the important aspects of boating safety. Comparing these results to the control group this level of knowledge about boating safety was significantly greater than for children not participating in the program.

Conclusion

Students are learning important boating safety messages from the 'Boating Safety for Kids' program. Ongoing research assessing knowledge after a further three months will determine the amount of information retained from the course in the longer term, and will also help determine whether safety messages have been passed on to others.

Acknowledgements

This project was funded as part of a Boating Safety and Facilities Program Grant by Marine Safety Victoria. Life Saving Victoria greatly appreciates the time and effort of teachers and students from the various schools in administering and completing the survey.

PRESENTATION PAPER

Background/Introduction

From 1999 to 2002 there were 40 fatalities from recreational boating incidents. A study of these incidents by the Victorian Coroner's Office identified a combination of three factors that contributed to these fatalities: hazardous environmental conditions; vessel occupants suddenly and unexpectedly entering the water; and absence of personal flotation device (PFD) use. The study also found that 50% of fatalities involved vessels capsizing and 14% person overboard. Many of the capsize incidents were caused by prevailing environmental conditions and operator error, that is, either inexperience or poor judgement. In response to these and other findings a number of initiatives were undertaken by Marine Safety Victoria, including: education programs and public awareness campaigns, the introduction of boat operator licensing, and new legislation on PFDs and other safety equipment.

In addition Life Saving Victoria in conjunction with Yachting Victoria developed the Boating Safety for Kids program. In 2004 an interactive theory component of the program, tailored for the classroom, was developed by Life Saving Victoria. These sessions aimed to educate children on trip preparation, safety equipment, PFD use, dangers in both inland and open waterways, emergency response and licensing.

Designed to educate the community on changes in boating regulations and general boating safety the objective of the project was to deliver a high quality boating safety education program (Boating Safety for Kids) to middle and senior Victorian primary school children (Grades 4-6).

The specific aims of the program were to:

1. develop knowledge of personal safety while boating;
2. encourage participants to reinforce safety messages back to parents and grandparents.

The emphasis of the program was on the key boating safety rules outlined in the Victorian Recreational Boating Safety Handbook.

Methods

How has the project/program/service been implemented?

- The program has been rolled out to Victorian schools across the state, since its inception in 2003/2004. It is a 1hr interactive, in class program with the option of attending a practical session with Yachting Victoria.

What has been the timeframe?

- 1yr Grant Funding model, run for the past 4 years.

Results/Evaluation

How have you monitored/evaluated the project/program/service?

- A Boating Safety for Kids Quiz was developed to assess student knowledge of boating and water safety following the program. The quiz was based on key boating safety messages in the Boating Safety for Kids interactive workbook and teachers guide, and in accordance with the Victorian Recreational Boating Safety Handbook. The original version of the quiz was reviewed by Life Saving Victoria staff that had assisted with design and/or delivery of the theory component of Boating Safety for Kids. Revised versions of the quiz were also reviewed by staff from Marine Safety Victoria and Yachting Victoria for content accuracy and readability. A pilot version of the quiz was then trialled on a school group who had recently participated in the program to ensure comprehension and readability. Minor changes were made following each of these processes.

The final version of the quiz was then sent to a random selection of 20 schools in metropolitan and regional Victoria who had completed the program (intervention group) along with 20 geographically matched control schools who had not completed the program before (control group). A follow-up

quiz was sent to the same schools 3 months later to determine longer term retention of information.

All data were stored in a password protected Microsoft Excel database. Statistical analysis was performed using with SPSS Version 14 for Windows. Tests included Mann-Whitney U, Pearson's Chi-Squared and Z-tests as appropriate for the distribution and nature of data. The level of significance was taken as P-value <0.05.

What changes/benefits have been experienced by the target group from the project/program/service (Short-term and long term)?

- Overall, the results demonstrate that in the two to three weeks following the Boating Safety for Kids theory session the majority of participants remembered many of the important aspects of boating safety taught in the sessions. Comparing these results to the control group this level of knowledge about boating safety was significantly greater than for children not participating in the program.
- Assessment of knowledge after a further 3 months demonstrated that except for one variable (the best type of PFD to keep you afloat) the intervention group retained their boating safety knowledge over the longer term.

Discussion

How will the project/program/service and its benefits continue into the future?

- We can hope that the increased knowledge and awareness about boating hazards and the use of PFD's etc will decrease the number of fatalities from boating incidents.

Can the project/program/service be replicated with other groups and in other areas?

- Potentially yacht clubs, sailing schools etc.

What were the main challenges in implementing the project/program/service? How did you meet these challenges or difficulties?

- Schools availability and fitting into the curriculum. This was made easier by the fact that the program was offered free of charge to schools.

What would you do the same/differently if you implement such a project/program/service again?

- Coordination with Yachting Victoria in regards to their delivery times in the different regions.

Any advice for others implementing a similar project/ program/service?

- Direct marketing to schools, to year level coordinators.

Conclusion

The study undertaken on the Boating Safety for Kids program demonstrated that students are learning important boating safety messages from the Boating Safety for Kids Program. The study further demonstrates that this knowledge can be retained over a period of 3 months. Further research is necessary to fully determine the retention of knowledge over an even longer period of time.

Acknowledgements

Marine Safety Victoria fully funded the program which we ran in partnership with Yachting Victoria. Funding varied from year to year depending on the funding model but was up to \$250K per year.

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PRESENTATIONS:

RISK MANAGEMENT DROWNING PREVENTION PILLARS

REDUCTION OF THE VICTORIAN DROWNING TOLL: LESSONS LEARNED

WARWICK WATERS

Chief Operations Officer, Life Saving Victoria

ABSTRACT

Introduction

Drowning prevention has been recognised as a priority area in health by state and federal governments in Australia. Various strategies for the prevention of drowning have been developed both in Australia and worldwide. The drowning rate in Victoria (0.72 per 100,000 population) is currently the lowest of any Australian State, and one of the lowest worldwide. The various strategies and initiatives undertaken in Victoria over a 20 year period were assessed to determine the key factors they may have influenced the Victorian drowning toll from the beach to inland waterways, the pool and in the home.

Methods

Data were collected on all drowning incidents across Victoria from 1987 to 2007. Public awareness campaigns, policy change, operational change, education and training initiatives and key agency collaborations were assessed across the same timeframe and mapped against the drowning rate. The key impetus for the initiatives was also determined.

Results

The drowning toll in Victoria decreased from an average of 63 from 1987-1997 to 47 from 1997-2007. The crude drowning rate in Victoria also decreased from 1.81 per 100,000 population in 1987 to 0.72 in 2007. Multiple factors were identified as having a potential influence on the Victorian drowning rate at key stages over 20 years.

Discussion

A range of initiatives have been undertaken to promote a water-safe Victoria with varying success. The Victorian example provides a model of a multi-focussed, multi-organisational approach to drowning prevention and the way in which drowning data is utilised to inform the direction and targets for future public awareness campaigns, education, training and service delivery.



Various strategies for the prevention of drowning have been developed both in Australia and worldwide.

Conclusion

While the decrease in the drowning rate is an indication of the success of multiple strategies, there is still work to be done to further reduce the drowning toll in Victoria.

PRESENTATION PAPER

Background/Introduction

Drowning prevention has been recognised as a priority area in health by many State and Federal governments across Australia. Various strategies for the prevention of drowning have been developed both in Australia and worldwide.

The drowning rate in Victoria (0.72 per 100,000 population) is currently the lowest of any Australian State, and one of the lowest worldwide. The various strategies and initiatives undertaken in Victoria over a 20 year period were assessed to determine the key factors they may have influenced the Victorian drowning toll from the beach to inland waterways, the pool and in the home.

Methods

In 1998 the Victoria Government launch the Play It Safe By the Water program as a result of a major drowning event. The Government of the day called together all of the key stakeholders and announced a major public awareness and education strategy, Play It Safe By the Water.

The major element of difference for this program was that it was the first time Government had facilitated and encouraged all the key stakeholders to work together along with support this action with appropriate funding and establishing a single brand to deliver a state-wide water safety message.

Along with a call to action by Government there was a need to look at the actual data that had been collected around drownings. This data was used to help shade the key facets of the program and assist with development of educational programs and awareness program to target at risk groups.

Ten years on this model has develop to one that sees the major stakeholders communicate and operate many of the major state water safety programs and initiatives under a single brand and still relies on many sources of data collection and research.

Results/Evaluation

Over the past ten years there has been ongoing review and evaluation of both the public awareness programs and the educational programs and this process has contributed to the evolution of the Play it Safe message and contributed to the introduction of many different water safety education programs and resources.

There had been a total reduction in the drowning rate over the ten year period and we believe that this type of program well not completely responsible for the reduction it has been a major contributing factor.

Results

The drowning toll in Victoria decreased from an average of 63 from 1987-1997 to 47 from 1997-2007. The crude drowning rate in Victoria also decreased from 1.81 per 100,000 population in 1987 to 0.72 in 2007. Multiple factors were identified as having a potential influence on the Victorian drowning rate at key stages over 20 years.

Discussion

A range of initiatives have been undertaken to promote a water-safe Victoria with varying success. The Victorian example provides a model of a multi-focussed, multi-organisational approach to drowning prevention and the way in which drowning data is utilised to inform the direction and targets for future public awareness campaigns, education, training and service delivery.

Conclusion

While the decrease in the drowning rate is an indication of the success of multiple strategies, there is still continued work to be done to further reduce the drowning toll in Victoria. We endeavour to create a water safe culture in Victoria and one that believes every accidental drowning is preventable.

Acknowledgements

All the key stakeholders, Life Saving Victoria, Surfing Victoria, Aquatic's & Recreation Victoria and the Department of Justice, Office of the Emergency Commissioner. Along with other key partners such as Marine Safety Victoria, Yachting Victoria and Swimming Victoria.

All have played their appropriate roles in delivering key elements of water safety and community education over the past ten years and all have embraced the umbrella message of Play It Safe By The Water and by doing so have all contributed to creating a water safety culture within Victoria.

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MERGING HOSPITALIZATION DATA AND FATAL DROWNING DATA

NEW ZEALAND'S DROWNING LANDSCAPE AND DATA CAPTURE METHODS

MATTHEW CLARIDGE BPhEd
General Manager, Water Safety New Zealand

ABSTRACT

DrownBase™ is the official New Zealand drowning database. It records all drownings in New Zealand and categorises them in a variety of ways.

DrownBase™ was developed in 1990 and contains records of all drownings in New Zealand from 1/1/1980.

The database of drowning incidents is maintained to ensure the provision of targeted and focused water safety education and promotion. This statistical information allows for analysis on many criteria including site of drowning, location, activity, gender, ethnicity, alcohol involvement, rescue attempts, resuscitation attempts, buoyancy, age, etc. It provides the basis of information for media releases, the development of new educational programmes and the refinement of existing ones. DrownBase™ protocols require that the New Zealand Police and Coroners Records be used to capture all drowning related deaths. DrownBase™ is updated on a weekly basis.

Recently Water Safety New Zealand (WSNZ) have expanded the capacity of DrownBase™ to include hospitalization data for respiratory impairment through immersion captured from the Ministry of Health. This process has drastically improved the ability to profile the needs of water safety education in New Zealand. It has led to some interesting statistics around gender, age, ethnicity and environment.

This presentation will explore the importance of data capture in New Zealand, the challenges of incorporating hospitalization data into a pre existing database for fatalities and an analysis of key findings to date. It will look at some of the future challenges in New Zealand around data capture and the use of statistics.

PRESENTATION PAPER

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The provision of statistical information is essential for prioritising education initiatives. It is also relied on by external organisations such as the Department of Statistics for benchmarking and recording indicators in the New Zealand Injury Prevention Strategy.

A significant number of individuals and organisations request drowning statistics that require comprehensive and accurate analysis, this includes provision of information to the media and WSNZ members. The advent of the Drowning Prevention Strategy and the impending implementation of it have caused numerous organisations to request drowning statistic information on a more frequent basis. DrownBase™ is now serviced by two WNSZ staff members and is updated, or has information processed daily for recording and reporting purposes.

This project allows for the development of targeted initiatives and communications that meet the needs of the community at a local, regional and national level. DrownBase™ is recognised worldwide for its depth of information and for being as the only integrated database of drowning.

AUTOMATED POOL SAFETY ASSESSMENT SYSTEM

ALISTAIR THOM

*National Manager Aquatic Industry Services,
Royal Life Saving Society Australia*

ABSTRACT

Background/Introduction

Royal Life Saving (RLS) have delivered Aquatic Facility Safety Assessments for approximately the last 15 years. This presentation will detail how the process has been automated and briefly discuss some analysis of the results of the assessments in the last nine months.

Methods

The project was implemented over a six month period. An IT company (IVT) was engaged to develop software for an automated auditing system. Hardware was purchased by RLS for the auditors in the different RLS Branches and a national training course was held in June 2007.

Results/Evaluation

The results of this program are yet to be fully assessed. Anecdotally, the automated auditing process has been very well received by the RLS assessors. It is estimated that anywhere between 2-4 hours of time have been saved per assessment. Again anecdotally, the system has been well received by the consumers of the product. An analysis of the results of the completed assessments is due to be undertaken, allowing comparison on the basis of state to state and even assessor to assessor. The analysis will allow RLS not only to quickly see the state of the aquatic industry, but will also allow RLS to conduct an internal QA program to ensure consistency between Branches and assessors.

Discussion

An automated auditing system of this complexity had not been done before. Each question (some 250) had to be able to be assessed using one of two scales, have unique assessment criteria and have individual comments made about it. Once the software had been developed, the RLS assessors had to be trained in how to use it, which was done with a three day training course.

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Conclusion

The automated auditing system has been very well received by the RLS assessors who use it. It has saved considerable time in delivering the audits and allowed RLS to easily provide details of the state of the industry and conduct QA at the same time.

Acknowledgements

- Steve Eccleston, previous National Manager - Aquatic Industry Services for RLS.
- Rob Andronaco, Manager Aquatic Risk - Open Water, Life Saving Victoria.

PRESENTATION PAPER

Introduction

Royal Life Saving (RLS) has been delivering the Aquatic Facility Safety Assessment (AFSA) for approximately 15 years. The AFSA is delivered to public swimming pools and is based on the Guidelines for Safe Pool Operation, relevant State/Territory regulations and industry best practice. The AFSA consists of four sections, the Forward (introduction and summary of results), the Inspection (each assessment point and its' results), the Safety Improvement Plan (recommendations stemming from the inspection) and lastly the Observations section which contains general comments and photographs relating to the assessment.

Previously, the AFSA has been done manually with the writing of the report taking at least as long as the actual facility assessment which was anywhere from 3-5+ hours. Aside from the time that this approach took to complete, it also meant that each AFSA was an individual document. As a result of having individual records for each assessment, any analysis of the results was exhaustively time consuming as each could have up to approximately 250 separate assessment and Safety Improvement Plan points, the data from which needed to be entered into a spreadsheet manually.

In 2007, Royal Life Saving approached Internet Vision Technologies (IVT) to automate the AFSA process. The aims Royal Life Saving was trying to achieve were two fold. Firstly, there was the aim of speeding up the process of report production whilst maintaining the quality of the product and the second aim was to develop a central repository of the results from the assessments, allowing detailed analysis to be conducted.

The resulting system (introduced in August 2007) is a web based system that contains the current versions of the AFSA (slightly different for each State/Territory due to local regulations) on a web based server. To

conduct an assessment, the assessor enters the swimming pool contact details etc into the web server which generates an assessment for that particular swimming pool. The server then downloads the assessment to a tablet computer (each Branch of RLS was issued with a tablet computer specifically for the conduct of these assessments). The assessor then conducts the assessment using the tablet computer on site, which records the findings as they are entered. Once the AFSA inspection is completed the assessment is automatically uploaded back to the server. For each Inspection item that scores less than the maximum 5/5, the server automatically generates the appropriate Safety Improvement Plan item and inserts this into the report. At this point the RLS Assessor can attach relevant photographs and make any changes to the assessment that they feel necessary. Once this is done, the assessment is marked as complete and a PDF is generated, allowing clients to receive the results of the AFSA as quickly as on the day or the day after the assessment was conducted.

Time Saving

A brief survey of RLS Assessors using the system conducted in January 2008 revealed that: The average time saved per report is 3.5 hours. The RLS Assessors rated the system at 4.6 (out of 5) for being beneficial to their work. The RLS Assessors rated the system had been received very positively by the Aquatics Industry (4.3 out of 5).

From this (admittedly brief) survey and from anecdotal reports, it would appear that at this stage, the automated AFSA process is well on the way to achieving the first aim of the project in reducing the workload for our RLS Assessors.

AFSA Results Analysis

The second aim of having a central repository of the results of the AFSA has also been achieved. The second part of this presentation is an initial analysis of these results.

Approximately 130 public swimming pools were assessed between August 2007 to March 2008. From these, 100 were randomly selected for analysis.

Overall Results

	Safety Score		Overall Compliance	Qualification Items
Mean Score (%)	80.53	Mean Score	4.12	3.61
Min	31.11	% Compliant	82.60	74.79
Max	98.37	% Non-Compliant	17.40	25.21

Specific Points of Interest

- Question 1.1** Is there an operations manual?
Mean Score: 4.29 (out of 5)
Compliance: 85.71%
- Question 1.2** Is there a current copy of the Guidelines for Safe Pool Operations?
Mean Score: 3.23 (out of 5)
Compliance: 64.65%
- Question 1.4** Has an Emergency Action Plan been developed?
Mean Score: 3.67 (out of 5)
Compliance: 75.51%
- Question 1.10** How often do lifeguards undertake in-service training?
Average: 3.88 (out of 5)
Compliance: 65.91
- Question 2.1** Is there an appropriate designated First Aid room or area?
Average: 3.94 (out of 5)
Compliance: 64.65%
- Question 2.5** Is there at least one portable first aid kit?
Average: 4.60 (out of 5)
Compliance: 91.92
- Question 2.7** Is functioning oxygen equipment available?
Average: 4.57 (out of 5)
Compliance: 91.49%
- Question 3.1** Is all pool water monitored and maintained within local regulations?
Average: 4.18
Compliance: 83.5
- Question 3.9** Has a risk assessment been done on Dangerous Goods / Hazardous Substances?
Average: 2.91 (out of 5)
Compliance: 58.14%
- Question 3.13** Are Material Safety Data Sheets available for each stored chemical?
Average: 4.08 (out of 5)
Compliance: 81.63%
- Question 3.23** Is appropriate PPP provided?
Average: 3.71 (out of 5)
Compliance: 74.23%
- Question 4.11** Are there sufficient depth markers?
Average: 3.61 (out of 5)
Compliance: 77.00
- Question 4.12** Are depth markers clearly visible from the pool?
Average: 2.88 (out of 5)
Compliance: 57.58
- Question 4.13** Are depth markers clearly visible from the concourse?
Average: 3.36 (out of 5)
Compliance: 67.35%
- Question 4.14** Is there sufficient Deep / Shallow Water warning signs?
Average: 2.50 (out of 5)
Compliance: 50.00%
- Question 5.2** Is the spa sufficiently supervised?
Average: 4.46 (out of 5)
Compliance: 89.29%
- Question 11.2** Are there sufficient lifeguards?
Average: 4.75 (out of 5)
Compliance: 95.00%
- Question 11.3** Are all pools being adequately supervised?
Average: 3.78 (out of 5)
Compliance: 76.04%
- Question 11.4** What criteria are considered when deploying lifeguards?
Average: 3.78 (out of 5)
Compliance: 76.04%
- Question 11.14** Is there signage that encourages active parental supervision in appropriate areas?
Average: 4.63 (out of 5)
Compliance: 92.68%
- Question 11.15** Is the rule that children under 10 are supervised by a guardian over 16 enforced?
Average: 4.20 (out of 5)
Compliance: 84.04%

Quality Assurance

In terms of quality assurance, the automated AFSA system allows RLS to compare the assessment results from state to state, from assessor to assessor and date to date. Using this system, we are able to check to see if the assessment of any particular item has a state, time or assessor bias, thus allowing RLS to implement measures to correct it. With the previous system, it is quite likely that any bias in the assessment would have gone unnoticed. This has provided RLS with an invaluable tool to ensure maximum and ongoing consistency in the delivery of this product.

POSEIDON

DROWNING DETECTION TECHNOLOGY

PETER CASWELL

General Manager, Third Watch Pty Ltd

RUSSELL HARRISON

*Technical Manager/Project Manager,
Third Watch Pty Ltd*

ABSTRACT

By way of prefacing this submission; Poseidon is the worldwide benchmark for computer aided drowning detection systems. Poseidon technology serves as a lifeguard's 'third eye' to help prevent drowning tragedies in public swimming pools. It does not replace lifeguards.

Poseidon is an intelligent system that uses proprietary computer vision technology to help provide constant surveillance of the swimming pool. Comprised of an advanced camera network that continually surveys the pool and a specialised software system that analyses the trajectories of swimmers, the system can alert lifeguards in as little as 10 seconds of a potential accident and to the exact location of the swimmer in danger. Real time images of the incident and its location are displayed immediately on a supervision work station and recorded on a central processing computer unit.

Acknowledging that it is humanly impossible to monitor all swimmers all of the time, Poseidon helps lifeguards deal with varying environmental conditions such as surface reflection and glare, as well as high noise and activity levels.

Poseidon can be installed retrospectively or as part of a new project.

Currently, Poseidon is in service or being installed in more than 160 aquatic centres in Europe, North America and Japan and has been responsible for helping save lives in France, Germany, Belgium and the UK.

Poseidon offers additional safety for the users of aquatic centres and swimming pools across Australia.

Poseidon's first installation in Australia is in operation at Blacktown Leisure Centre Stanhope, NSW.

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What people say about Poseidon:

“Forget about the cost. A drowning or near drowning changes the life of those involved forever. Installing this system in each of our pools can’t be measured in dollars and cents. It’s the right thing to do and it’s priceless if it helps to save one life “.
Ed Munster, CEO, Metropolitan YMCA Atlanta

“The Poseidon system helps lifeguards get over the problem that you can’t monitor all of the swimmers all of the time”.
Mr. Andrew Ebben, Managing Director IQL, Royal Life Saving Society (United Kingdom)

“The Poseidon system is an excellent example of how advances in technology can support the work of our pool lifeguards. The results from overseas seem very impressive and I am sure that the computer surveillance technology will help save lives in Australia too. I believe that this technology will play an important role in lifesaving in the future”.
Mr. Rob Bradley, Chief Executive Officer, Royal Life Saving Society Australia

PRESENTATION PAPER

Poseidon, the computerised drowning detection system for public swimming pools, has become the world-wide benchmark for reducing risk in public swimming pools.

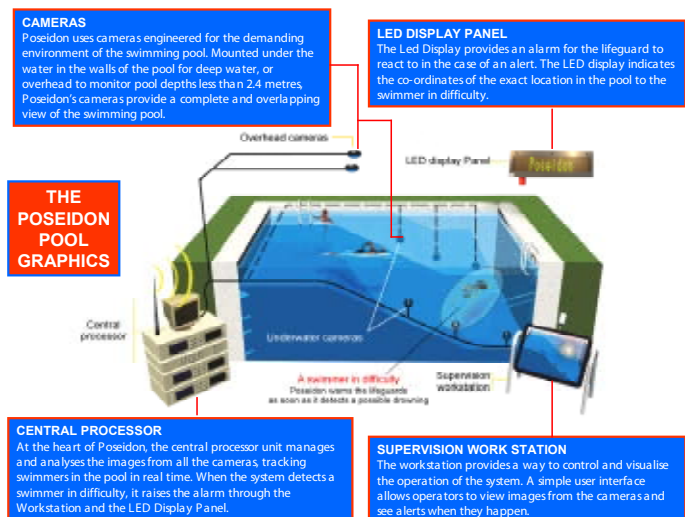
Poseidon is a risk management solution designed to assist lifeguards in preventing drowning and near drowning incidents.

Comprised of an advanced camera network that continually surveys the pool and a specialised software system that analyses the trajectories of swimmers, the system can alert lifeguards in as little as 10 seconds of a potential accident and to the exact location of the swimmer in danger.

Poseidon helps lifeguards deal with varying environmental conditions such as surface reflection and glare, as well as high noise and activity levels.

Poseidon is installed in 160 aquatic centres around the world.

Poseidon’s first Australian installation was commissioned by Blacktown Leisure Centre Stanhope and has been operational since late last year.



SYSTEM PERFORMANCE; A PROVEN TECHNOLOGY

Live Saving Poseidon Rescues

Since its introduction on the market, the Poseidon System has triggered alerts from real accidents enabling lifeguards to save the swimmer at risk and initiate first aid more rapidly.



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OPEN FORUM AUSTRALIAN WATER SAFETY COUNCIL

AUSTRALIAN WATER SAFETY STRATEGY 2008-2011

Aim

To facilitate a structured, informative and entertaining debate that maximizes the expertise of key speakers, engages the wider audience and challenges the core ideas contained in the draft Australian Water Safety Strategy 2008-2011.

Rationale

The integration of the draft strategy into the program and activities of the conference is essential in order to confirm its contents, collect information for future amendments and promote a general call to action from across the water safety community. This open forum will add to this process.

Methodology

The debate will be conducted in three sections; the oration; the challenge and the summary.

The oration section will involve 5-6 speakers who each will have 3-5 minutes to present a background piece on an element of the strategy that they feel strongly about. This will be open to the invited speakers and orations can be expected to support, challenge and potentially contradict elements of the Draft Strategy.

The challenge section will consist of two parts. The first will be questions received on notice through a process of feedback generated throughout the conference. These questions will be accepted up until 6pm on the evening before the forum. Several questions, being a representative sample will be selected and introduced into the forum during the challenge section. This process eliminates the risk of the forum being sidetracked or stagnating due to poorly framed/targeted questions from the floor.

The challenge section will also include questions via the facilitator and from the floor.

The summary section will provide the speakers and the facilitator with an opportunity to summarize or make final comments in relation to the session.

The Panel

The panel will include Dr Mike Linnan, Technical Director, The Alliance for Safe Children (TASC) and Professor John Pearn, National Medical Advisor, Royal Life Saving Society Australia.



**integration of
the draft strategy
into the program
and activities of
the conference
is essential**

The intent is for the panel to not just overview the plan but provide interpretation and highlights giving an opinion on gaps/challenges etc with elements of the strategy.

The panel will also include representation from Hannah's Foundation to give a personal perspective.

Structured approach to questions/ Questions on Notice

A template has been created for questions on notice and will be distributed at conference registration. These questions will provide a dual function of collecting information for review of the strategy in addition to providing focus for the panel discussion.

Structure

The forum will be structured as follows:

- Session Introduction
- A Lifecycle Approach
 - Children
 - Men and Alcohol
 - Older people
- High risk venues
 - Beaches
 - Rural and Remote
- Drowning challenges
 - Activities
 - Communities
 - Climate Change
- Drowning Prevention Pillars
- Facilitated questions to the Panel
- Facilitated questions from the floor
- Summary and wrap up.

POSTER PRESENTATIONS:

CHILDREN - EDUCATION

WATCH AROUND WATER

IT'S EVERYONE'S RESPONSIBILITY!

JEFF FONDACARO

President, Leisure Institute of Western Australia Aquatics

LAUREN NIMMO

Health Promotion Manager, Royal Life Saving Society Australia (Western Australia)

ABSTRACT

Background/Introduction

There is often a misconception by parents that the supervision of young children is the sole responsibility of lifeguards. With lifeguards employed on a minimum 1:100 ratio as outlined in the Guidelines for Safe Pool Operations, it is unrealistic for parents to expect lifeguards to provide the constant and direct supervision that is needed for every young child in the facility at all times.

Watch Around Water is a comprehensive initiative created by the aquatics industry for the aquatics industry. This awareness raising program run throughout aquatic facilities in Western Australia, South Australia and soon to be run throughout Victoria. The program has been developed to address the industry concern regarding the supervision of young children when visiting public aquatic facilities.

Methods

The program takes a comprehensive approach to addressing this issue by using a combination of strategies to support the legislation and guidelines implemented and to complement activities already being undertaken by aquatic centres. The package consists of: policy requirements, public education, environmental analysis, management and staff professional development training and centre accreditation.

The program is owned by LIWA Aquatics and the aquatic and recreation industry, with Royal Life Saving responsible for providing program support and coordination through a strategic alliance. Through the development of the program a working financial model has been established ensuring the sustainability of the program.

Results/Evaluation

In total, 55 aquatic facilities throughout regional and metropolitan Western Australia are currently accredited Watch Around Water centres. The success has led to the expansion of the program interstate. The program is currently being pilot tested through 12 aquatic centres in South Australia and plans to implement it in Victoria are underway.



There is often a misconception by parents that the supervision of young children is the sole responsibility of lifeguards.

Discussion

The success of the Watch Around Water program has only been possible through the strong networks and relationships formed between the aquatics industry body, the aquatics industry and the Royal Life Saving Society. Together we have been able to develop an industry program which has resulted in a significant increase in awareness amongst parents of young children of the need to supervise their child whilst visiting aquatic centres.

Conclusion

LIWA Aquatics and Royal Life Saving will continue to work together with the aquatics industry to expand the Watch Around Water program and to promote adequate and effective supervision of young children in public aquatic centres. We will also continue to work with Royal Life Saving South Australia and Lifesaving Victoria to further develop the program in their state.

Acknowledgements

- Royal Life Saving Society Australia – South Australia Branch
- Lifesaving Victoria
- Aquatic Recreation Industry South Australia
- Aquatic Recreation Industry Victoria

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WATER WATCHER ARMBAND KEEPING KIDS SAFE

DUSHYANTHI VIMALACHANDRA

Department Head, Kids Health, The Children's Hospital Westmead

CANDACE DOUGLASS

Kids Health, The Children's Hospital Westmead

ABSTRACT

Drowning is a leading cause of death among children aged five years or less. Through the development of a Water Watcher Armband, Kids Health at The Children's Hospital at Westmead (CHW) aims to highlight the importance of adult supervision in preventing drowning incidents among children aged five years or less. The project is in line with the NSW Health Strategic Direction 'Make prevention everyone's business' and ensures that at least one adult is watching children at all times during social gatherings in and around water.

Approximately 14,500 armbands were produced and distributed to families in New South Wales, over the summers of 2005 and 2006. The results from an evaluation suggested that the project was well received and considered a success.

Background/Introduction

Drowning is a leading cause of death among children aged five years or less. Through an extensive literature search and based on recent research findings, Kids Health have established that one of the main contributing factors in drowning is a lack of direct adult supervision. Once CHW had highlighted the importance of adult supervision in preventing drowning, it was found that there was really very little education and support for parents on this important issue.

In New South Wales, approximately 11 children drown each year (NSW Child Death Review Team, 2005) with a further 90 children being hospitalised for near drowning (Population Health Division, 2004). Between January 1995 and April 2001, 82 children aged five years or less drowned in NSW with over 40% of these drowning incidents occurring in swimming pools.

The NSW Injury Risk Management Centre has conducted research into the factors surrounding drowning incidences and identified a lack of direct

adult supervision as an issue. Supervision played a role in all cases of drowning, with over 75% of children being left alone without adult supervision.

Methods

To highlight the importance of child supervision in and around water, Kids Health at CHW developed the Water Watcher Armband. The armband bearing the message 'Supervise with your eyes' was designed for use during outdoor gatherings to ensure that at least one adult was watching children at all times. The armband was chosen for both its durability and transferability between adults. It was also favoured due to its easy identification from most angles; children and other parents can clearly identify the adult supervising the children in and around the pool.

An information card titled 'Supervise with your eyes...keep watch' was also developed which provided details on how to utilise the armband and the following three key messages:

- Familiarise your children with water.
- Learn infant resuscitation.
- Fence your pool and never leave the gate open.

On the reverse were details of the resuscitation procedures for use during an emergency. These resuscitation techniques were changed on the card during the project re-launch in 2006, when the guidelines were updated by the Australian Resuscitation Council (ARC).

Approximately 14,500 armbands and information cards were produced and distributed to families in New South Wales, over the summers of 2005 and 2006. The distribution was progressed through the Hospital and public swimming pools across the state. Advertising was done through the Kids Health Website, Hospital intranet and media sources which included local newspapers, The Daily Telegraph and the Today show on Channel 9.

Results/Evaluation

All of the armband recipients, whose contact details we were able to obtain, were invited to complete a survey. In total, 2005 surveys were mailed or emailed to the armband recipients over the two years, with 483 surveys being completed. The project success is highlighted by the following results:

- 90% understood the main message of the armbands ("When in and around water, always have an adult closely supervising the children").
- 75% liked the presentation of the armband.
- Over 50% revealed that the armband had persuaded them to change their child supervision techniques in and around water.

In addition, there were several comments received from the armband recipients which suggested that the project had a positive outcome.

Discussion

Whilst it is difficult to correlate the success of this initiative with a decrease in drowning rates, the results are promising as there has been a substantial change in behaviour with adults who have used the Water Watcher Armband better supervising children around water.

As with all educational campaigns it is important that the key messages be reinforced with future target audiences (new parents with children of swimming age). We hope to re-run the campaign in coming years and better assess a change in behaviours and drowning rates.

To sustain the message we are continuing to promote the message through our Hospital website.
http://www.chw.edu.au/parents/kidshealth/water_watcher/

Conclusion

This was an innovative idea undertaken and a full report of the findings will be made available on the Kids Health site which would allow those wanting to engage in similar health promotion initiatives to view both the values and drawbacks of such an undertaking.

We plan to run the campaign again in the future and hope to see it adopted across NSW.

Acknowledgements

NSW Child Death Review Team, Annual Report 2004. 2005, NSW Commission for Children and Young People: Sydney.

Population Health Division, The health of the people of New South Wales – Report of the Chief Health Officer. 2004, NSW Department of Health: Sydney.

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ACTIVE FAMILY FUN DAYS

MONIQUE SHARP

*National Manager Events,
Royal Life Saving Society Australia*

ABSTRACT

The Swim and Survive Active Family Fun Days (AFFD) are a series of promotions held at Royal Life Saving Endorsed Aquatic Facilities across Australia.

AFFD promote the importance of Water Safety and physical activity, and are designed to encourage healthy, active, fun participation of families in Aquatic activities in a safe, friendly, informative and welcoming environment.

Based on the Swim and Survive program activities conducted at an AFFD aim to provide participants with a sound knowledge of how to be safe when in, on and around the water, as well as acquiring skills in swimming, personal survival and basic rescue. Activities include Resuscitation & Rescue Demonstrations.

Further, AFFD, promote the importance of physical activity, which is increasingly important within today's lifestyle and obesity epidemic. Activities include Family Aquarobics and Noodle Races.

AFFD are open to all families within the local community/region to enjoy all the activities on offer. For families attending it provides an opportunity to participate either free of charge or with discounted entry in a fun program of water safety related activities in addition to having the opportunity to win some great prizes.

For Aquatic Centres it provides an opportunity to engage their local community and showcase their facilities which in turn also helps to drive registrations into their Water Safety and Swim and Survive programs.

Over 55 AFFD have been held across Australia since 2004. With 30,000 school children in the 5-14 age group having participated in an AFFD.

AFFD have had a strong Regional focus, which has included venues outside Aquatic Centres, including Mulwala Lake and Tocumwal Town Beach (Murray River).

Further, AFFD have been targeted to at risk populations (including newly arrived migrants and the indigenous community) within local communities to raise awareness of water safety issues and to provide them with an opportunity to learn more about Water Safety.

The organisation and delivery of an AFFD is a team effort between the Aquatic Facility, Royal Life Saving State/Territory Branch and the Royal Life Saving National Office.

The AFFD Event Management Guide which has been developed to support AFFD can be easily replicated and implemented for any AFFD at any venue/location.

Acknowledgements

- The Sony Foundation Australia who have been strong supporters of the Active Family Fun Days since inception.
- Aquatic Centres across Australia who have hosted AFFD.
- Families who have participated in AFFD since 2004.
- Community groups & agencies that have supported and promoted AFFD.
- Penny Larsen, National Manager Training and Education, Royal Life Saving Society Australia



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SWIMMING POOL FENCING SURVEY STATISTICS

SUNSHINE COAST

TERRI RIDGEWAY

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ABSTRACT

Background/Introduction

Conducting a survey is an effective method of identifying the knowledge and understanding from the wider community on the importance of water safety and maintaining an effective barrier around backyard swimming pools. The statistics collated for this poster is a result of an ongoing Swimming Pool Safety Inspection Program with our Council.

Our Programs aim is to achieve a zero tolerance in childhood drownings within our shire and with this in mind the objective of the program is to maintain a consistent level of awareness for safe pool fencing in order to reduce the risk of any drownings in private swimming pools.

Community participation is an ongoing education project. This has been achieved by our participation in numerous shows/expos, conducting our own seminar/forums, developing a television promotion to educate the wider community about pool fencing & water safety, not excluding advertisements in local newspapers/magazines & radio.

Methods

The project to gather statistics has been ongoing process and will continue in the future. Surveys were received from our participation at expos/shows, daily inspections & forums/seminars. Respondents were asked a range of questions in relation to the awareness associated with swimming pools. The feedback provided Council with opinions about pool fencing and inspections and our program was able to gauge the exposure of children under 5 years to these pools.

Results/Evaluation

- From the 450 surveys returned, majority of respondents were owner/occupiers.
- Only 20% of respondents indicated that children under 5 lived on the property & 50% of respondents stated children under the age of 5 visited the property.
- Data collected over 2006/2007 60% of respondents indicated that there is a pool fence around the entire pool.
- 66% stated that they had completed a resuscitation course but the majority of certificates were not current.
- 74% of respondents were in favour that swimming pool fencing should be required by law.

Clear indication shows an increase compliance rate in relation to swimming pool fencing. Council is playing integral role in promoting water safety and the importance of compliant swimming pool fencing. The program has achieved its aim/objective by persisting with education about pool fencing requirements and responsibilities of pool ownership. This has been a strong focus throughout the program to encourage self regulation and voluntary compliance.

Discussion

As the program has its own entity in Council, Technical Officers will continue to promote water safety and ensure the monitoring of swimming pool fences is a high priority.

Our program has been recognised as a pilot program from the State Government which has lead to numerous other Local Government stakeholders expressing an interest in the way we conduct business.

From this experience indications have shown that more emphasis on the promotion of education and awareness of water safety and the importance of compliant pool fencing around swimming pools is required by state government/local government authority.

With the small team we have we have made a significant impact in promoting water safety and fencing compliance and our advice for others which are implementing a similar program "take manageable chunks". We also recommend exhausting all available State Regulations, State Legislation and stakeholders within your state or Territory.

Conclusion

In concluding, the findings from our survey/questionnaire provided us with valuable statistics which have shown the wider community is in support of the promotion water safety around swimming pools and the continuance of routine inspections of private swimming pool fencing by local government authorities.

Acknowledgements

We would like to acknowledge the support of Warren Bolton formerly of the Department of Local Government and Planning, Sport and Recreation, Dawn Spinks - Injury Surveillance Unit, Dr Robert Pitt – Mater Hospital, Brisbane, Steven Tucker & John Dunn – Sunshine Coast Regional Council in providing ongoing support, technical advice and guidance for the success of the program.

Relevant link: www.poolfencing.qld.gov.au

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POSTER PRESENTATIONS:

COMMUNITY SPECIFIC STRATEGIES

REMOTE ABORIGINAL SWIMMING POOLS PROJECT

GREG TATE

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ABSTRACT

Background/Introduction

Indigenous groups have been identified as a demographic at a high risk of drowning in Australia. Drowning deaths and near-drowning incidents contribute significantly to the health burden of the Western Australian Indigenous community.

In the period 1995-2000, 22 Indigenous Western Australians drowned, contributing to 12% of the total number of drowning deaths recorded (Gillam et al 2003). This is a vast over-representation of injury within a minority group.

The Remote Aboriginal Swimming Pools project aims to work with communities to run safe, efficient and effective aquatic facilities and to reduce the number of drowning deaths within Indigenous communities through education and training.

Methods

Royal Life Saving was contracted by the State Government Department of Housing and Works in 2000 to manage newly installed swimming pools in the remote Aboriginal communities – Burringurrah, Yandeyarra and Jigalong – and to deliver swimming and lifesaving programs to the community.

Royal Life Saving employs and trains pool managers who live in the communities for nine months of the year, maintaining the pools and delivering community programs.

Results/Evaluation

The project has delivered significant positive outcomes for the community including health and social benefits and improved education/training opportunities. Research indicates that since the pools have opened, the children in the community appear healthier with significant decreases in the incidence of skin sores and ear infections.



**Indigenous groups
have been identified
as a demographic at a
high risk of drowning
in Australia.**

In addition the introduction of the 'No School, No Pool' policy has resulted in a marked increase in school attendance rates and an overall improvement in the children's behaviour.

Discussion

Working with remote Aboriginal communities is a rewarding process and establishing and maintaining relationships with the communities is an ongoing process. The most significant challenge has been gaining an understanding of their culture and developing a strong relationship and open lines of communication with the communities.

Conclusion

The success of the Remote Aboriginal Swimming Pools project over the past seven years has resulted in the recent construction of swimming pool facilities in two additional remote Aboriginal communities – Bidyadanga and Warmun.

Acknowledgements

- Department of Housing and Works.
- BHP Billiton Iron Ore.
- Our dedicated remote pool managers - Jaime O'Donohue, Linda and Scott Kendall, Victor Belotti, Peter Heyward and Linda Murphy.
- The remote communities of Burringurrah, Yandeyarra, Jigalong, Bidyadanga and Warmun.

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ON THE SAME WAVE

CHRIS GILES

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ABSTRACT

The beach is a popular recreation destination for all Australians and has become an important part of the Australian psyche. The Australian surf lifesaver is synonymous with the beach, and in particular, with safety at the beach. The Australian surf lifesaver is a national icon. In 2007 Surf Life Saving Australia (SLSA) celebrated 100 years as a water safety organisation. Over that time, SLSA has remained essentially white, Anglo-Celtic in its membership. An incident that occurred at Cronulla on 4 December 2005 was a wakeup call to both SLSA and the Australian community. The resulting civil disorder became known as the Cronulla riots. The Australian beach lifestyle had become an issue of community tension.

On the Same Wave is a program that aims to provide support to young Australians of all backgrounds, particularly young Australians of Middle Eastern background, to engage Surf Life Saving around Australia. The partnership aims to achieve greater harmony between all beach users and promote a culture that the beach is for all. It further aims to develop inclusive practices within SLSA and individual surf life saving clubs to more effectively recruit members from a broader population demographic.

In delivering On the Same Wave, SLSA is not only meeting the cultural needs of the organisation, but also demonstrating a practical example how a volunteer based organisation can engage in contributing to social change in the Australian community.

Focus groups were conducted with a number of selected groups to gain information on their views about surf life saving and experiences with the beach. The results found:

- A strong perception that surf lifesaving is for those of an Anglo-Celtic background.
- 98% of young people said they would not consider being a surf lifesaver as they did not feel welcome, did not believe they had the abilities and because they have significant family commitments.

- 80% unprompted said that seeing ethnic lifesavers would assist.
- Despite the number of individuals was said they would not be lifesavers, 60% said they would be interested to learn the skills associated with surf lifesaving.

Because of the diverse nature of the target group it was felt a flexible approach was needed to allow people to access surf lifesaving at different levels therefore a wide range of courses and opportunities were offered these included:

- Basic first-aid.
- CPR.
- Beach awareness talks.
- Club tours.
- Surf rescue certificate.
- Bronze medallion.

In total the 'On the Same Wave' program has delivered the surf safety message to over 2400 people since the establishment of the program. To achieve this 'On the Same Wave' has accessed over 40 schools and community groups reaching individuals from a variety of CALD backgrounds.

The needs of the program covered such diverse groups that new resources needed to be developed these included:

- A power point presentation on beach awareness.
- A kit that consisted of – a cultural awareness DVD.
- Recruitment brochures in different languages.
- Surf safety messages in 18 languages.
- Information on how to conduct a surf awareness day.
- Information on how to get in touch with local ethnic groups.
- Media releases.

With the development of new resources the program was able to be presented to other states as a tried and tested model. Once the other states start to implement the program it is hoped that in the future with the use of the resources developed the program will be sustainable at a club level.

Following the success of the program in New South Wales the delivery model has now been expanded and is being implemented across Australia.

Learning Objectives

1. To understand where the beach sits within the Australian Psyche.
2. To understand the membership demographics within Surf Life Saving Australia.
3. To discuss the On the Same Wave program and its contribution to understanding cultural change within SLSA, and within the wider volunteer setting.
4. To identify the delivery model, results and expansion of same across Australia.

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WATER SAFETY FOR THE MUSLIM COMMUNITY

WATER CONNECTIONS AND SWIM FOR LIFE

CAITLIN CHELLEW

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DR BERNADETTE MATTHEWS

*Manager Research and Injury Prevention,
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ABSTRACT

Background/Introduction

Culturally and Linguistically Diverse (CALD) Communities in Australia have been identified as 'at-risk' of drowning. CALD communities are one of the priority areas for action in the Australian National Water Safety Plan 2004–2007, and it is therefore important to develop culturally appropriate aquatic safety and recreational programs.

Methods

A program was implemented to increase participation, employment and training opportunities for people from Muslim communities within NSW and Victoria. 'Swim for Life' and 'Water Connections' aimed to provide local opportunities for local communities within New South Wales and Victoria, using existing aquatic and recreational facilities in the area.

Training and employment strategies and activities were designed to develop more sustainable links between the Muslim community and the local aquatic facilities. Evaluation of the program was conducted to determine the level of community participation, and training and employment opportunities provided.

Results

Five highly skilled Muslim Community Development Officers were employed to coordinate the programs and to conduct a range of activities aimed at building relationships and effective action across the Muslim communities within Sydney and Melbourne.

So far, 58 Muslim pool lifeguards have been trained to work in aquatic facilities and over 220 community education sessions have been conducted to provide

broader skills and awareness of aquatic safety and recreation across the Muslim community. Over 1500 school children participated in programs about water safety, and resuscitation skills. Other initiatives included: female only classes in the form of CPR and infant and child first aid training; cultural diversity training for aquatic centre staff; and community events providing larger opportunities for the community to utilise their local aquatic facilities.

Discussion

The program has, and continues to establish a successful collaborative community model and generates research that will be used to address water safety, aquatic recreation and employment issues in all CALD communities.

Conclusion

In order to conduct a program with CALD communities, long term goals and strategies combined with flexibility in programs and services is needed – discovering what communities 'want' rather than only providing what we offer.

Acknowledgements

Royal Life Saving and Life Saving Victoria would like to acknowledge the support of the Department of Immigration and Citizenship and Department of Victorian Communities for funding the project. We also thank the various local community partners for their continuing support of the project.

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REMOTE POOLS PROJECT

FLOSS ROBERTS

Executive Director, Royal Life Saving Society Australia (Northern Territory)

CORRINE WARHURST,

Remote Pools Project Manager, Royal Life Saving Society Australia (Northern Territory)

ABSTRACT

Remote Pools Project

The Royal Life Saving Society Australia (RLSSA) has been working with remote indigenous communities for many years. Our focus has been on; “Maximizing the health, social and economic benefits of swimming pools in remote indigenous communities...”

Background / Introduction

RLSSA applauds the work that is currently being undertaken in constructing and upgrading swimming pools in remote indigenous communities. Governments are making significant investments across Indigenous Australia and the National Remote Indigenous Pools Strategy is aimed at ensuring the best possible long term results. Our work in this area is driven by our vision;

- Remote swimming pools are managed by indigenous people who perform a variety of roles including facility management, supervision, instruction and health promotion.
- Remote swimming pools are the hub of community activity including effective use by the school, sport and recreation, health clinic, child care, aged care and council.
- Remote swimming pools are providing a range of community development activities including supporting community leadership, youth development, family relationships and health.

The National Remote Indigenous Pools Strategy aims to ensure that the primary outcomes of improved child health and school attendance are achieved, and the opportunities to influence a broad range of social, health and economic outcomes are identified and strategies implemented to address them.

Methods

Engaging and developing links between community agencies, RLSSA implements an approach based on the principle that each community has at least four core government agencies that have an identifiable relationship with the swimming pool. These agencies and their relationships are identified below;

- Health Centre – links to the pool as a venue for health promotion, community engagement, preventative and rehabilitative services.
- Sport and Recreation – links to the pools as a venue for physical activity, community recreation and events.
- Council – governs and administers the pool as well as other activities that maintain, repair or staff it. A key link between community members and government.
- School – links to the pool as a venue for learning.

Results / Evaluation

- Local people employed as project officers in each community.
- Project coordination located in a community or close regional centre.
- Increased inter-community activities, events and programs.
- Local people employed in a variety of part-time positions to support project strategies.
- Flexible focus but geared towards sustainable systems across key community agencies and target population.
- Holistic view of swimming pool incorporating all demographics.
- Support provided by RLSSA state and national co-ordinators.
- Funds allocated towards regular community events, activities and programs.

Discussion

RLSSA recommends that three models be pursued in order to maximize benefits from existing and newly built swimming pools. These models have been developed based on key learning from our current projects. The models are;

- Intensive community development model.
- Regionalized community development model.
- Regionalized support projects.

Conclusion

The key areas of the National Remote Indigenous Pools Strategy include;

- Effective and ongoing community engagement.
- Building community skills in the management and use of the swimming pool.
- Targeting a range of social, health and economic benefits.
- Developing sustainable systems that reinforce the roles of local people in the management of the swimming pool.
- Leveraging the investments made by other agencies.
- Supporting the Shared Responsibility Agreement approach being implemented by Government.
- Establishing project infrastructure that is flexible enough to respond to community driven issues.
- The majority of project funds are expended in the local community through the employment of local people and the use of local businesses.
- Employment of local people in a variety of project roles.

The swimming pool in a remote indigenous community can be a source of great community interest, enjoyment and cooperation if managed effectively. Effective management requires the involvement of all community agencies and key community members.

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SWIM SMART SWIM SOBER

A STUDY EXAMINING THE CONTRIBUTION OF ALCOHOL TO DROWNING DEATHS IN NSW

ERIN SIMMONDS

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CAITLIN CHELLEW

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ABSTRACT

Introduction

The use of alcohol and illicit drugs prior to partaking in aquatic activity has been shown to significantly increase the risk of drowning due to a range of physical changes that occur when alcohol or illicit drugs have been consumed- including impaired judgment and greater risk taking behaviour. The National Water Safety Plan 2004-2007 highlighted that alcohol and drugs are often present among males 16-35 years and programs targeting this age group should take into account findings of research conducted on alcohol and recreational activity. However, there is little evidence of the role of alcohol in drowning in NSW.

Aim

To examine the contribution of alcohol and illicit drugs to drowning deaths in NSW.

Methods

Unintentional drowning deaths in NSW were identified using the National Coroners Information System (NCIS), coronial investigations and media reports on drowning deaths from 1 July 2002 to 30 June 2007.

Results

There were 494 deaths that were identified using the NCIS that were due to drowning/immersion of which 325 (65.8%) were closed cases. Of these 494 drowning deaths, alcohol and illicit drugs were identified in 167 (33.8%) cases. The relationship between the consumption of alcohol and drowning appears to be higher on weekends (48.2%) and in locations such as inland waterways (46.1%), beaches (16.2%) and oceans (12.0%). The vast majority of drowning deaths involving alcohol and illicit drugs

occurred whilst swimming (21.0%), undertaking watercraft activities (15.6%) and driving (10.8%) and were highest amongst males (80.8%) aged 15-34 years old (40.2%).

Discussion

Information obtained from the NCIS is sufficient to adequately identify drowning deaths within NSW. However, more specific evidence between Blood Alcohol Content (BAC) and the risk of drowning needs to be undertaken. This information and circumstances surrounding these drowning deaths involving alcohol and illicit drugs is needed to effectively plan, initiate, develop and evaluate injury prevention and health promotion strategies. This can be achieved through increased access to coronial records and further information on the use, attitudes to alcohol use and the nature and extent of increased risk associated with alcohol use.

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Training has traditionally been delivered in 'silos' namely lifeguarding and surf sports.

POSTER PRESENTATIONS:

BEACH SAFETY

SURF LIFE SAVING NEW ZEALAND (SLSNZ) TRAINING AND DEVELOPMENT FRAMEWORK

ONE ORGANISATION APPROACH TO EDUCATION

TIM MARSDEN

*Life Saving Development Officer,
Surf Life Saving New Zealand Inc (SLSNZ)*

ABSTRACT

Background/Introduction

Training has traditionally been delivered in 'silos' namely lifeguarding and surf sports. Recently training has been delivered in leadership. While this system has been successful, the organisation has identified the need to develop a framework that will cater for the needs of members as they look to develop expertise vertically (within lifesaving, sport and leadership) and horizontally (across silos).

The stakeholders that will be affected by these changes are diverse. Initially the trainers and assessors within SLSNZ will be asked to adhere to a new learning and assessing structure, also any members participating in training will be affected. Long term, with the new framework, any training of lifeguards could possibly have an effect on anyone who goes to the beach.

Methods

The project began in silos with sport and lifesaving completing separate framework reviews. Various methods were used in the two reviews such as: member consultation, expert group discussion, and surveys.

An independent contractor, Dangerous Minds, was brought in to assist SLSNZ with development of a competency based framework that could encompass all silos within SLSNZ enabling development of members vertically and horizontally.

The development of the framework began after the framework review in September 2007. SLSNZ are looking at October 2008 to roll out the first level (of three) for each silo. It is planned that a new level will be rolled out each year.

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Results/Evaluation

As the project is in its early stages there has been some communication with other organisations regarding the proposed structure of the framework. Sport, Fitness, and Recreation, Industry Training Organisation (SFRITO) have been consulted regarding our framework and learning and assessing structure and also possible inclusion onto the National Qualifications Authority framework. Once the project is underway success will be measured on the following:

- Nationwide consistency in member education (successful auditing)
- Stakeholder satisfaction of the training and assessing process

Discussion

Creating a framework covering all silos in SLSNZ will enable members to travel through pathways within each role, and also across to other roles. In the long term this will reduce the doubling up of training and SLSNZ will have a more robust learning and assessing structure to work from. This will create consistency across the country for lifeguards, coaches and officials.

The main challenges foreseeable in this project are:

- 'Buy in' on the process, structure, and pathway by members
- Educating instructors and examiners
- Pressure and increased workload for volunteers

Conclusion

Prior to the framework project it was evident there was a difference in how members were educated. Not only was each pathway wholly unrelated but the way in which members was taught and assessed was completely different. The new framework structure will create a uniform approach to education and allow generic areas of learning to be taught across different roles/silos in the same fashion.

Acknowledgements

Dangerous Minds: Robert Barnes & Danya Hodgetts

INTEGRATED AQUATIC PROGRAMME IAP

BRETT SULLIVAN

Lifesaving Manager, Surf Life Saving New Zealand Inc (SLSNZ)

SIOBHAN HARROD

Project Coordinator, WaterSafe Auckland

ABSTRACT

"Water is a dominant feature of the New Zealand landscape, and many New Zealanders spend much of their recreational time in, on or by water" (Ministry of Education 1999).

The Integrated Aquatic Programme (IAP) is a resource for teachers of students aged 5-12 years and has been produced by key aquatic stakeholder organisations alongside members of the education sector. This collaborative approach ensures this resource is relevant in terms of content and application.

The IAP is the 'Roadmap' for teachers. It identifies the learning needs of students through detailed competency models for skills, knowledge, attitudes and values. This enables teachers to select the appropriate curriculum based programme(s)/resources available.

The IAP not only gives teachers a visual tool to develop sequential pathways but increases understanding of what an 'aquatically educated' student could look like. It provides a scaffolding of learning, enabling students to have safe, meaningful and purposeful learning experiences.

Integrated Aquatic Programme - IAP

"Water is a dominant feature of the New Zealand landscape, and many New Zealanders spend much of their recreational time in, on or by water" Ministry of Education 1999.

The Integrated Aquatic Programme (IAP) is the only New Zealand based resource that provides teachers with a comprehensive overview of teaching material within this context. It has been created by key aquatic stakeholder organisations alongside members of the education sector. This collaborative approach ensures this resource is relevant for all schools.

The IAP is a tool to support teachers to develop and improve quality aquatic education programmes, which promote sequential learning in a range of aquatic environments. This tool helps to identify the learning needs of students through competency models for skills, knowledge, attitudes and values. The IAP provides a framework for teachers to enable students to have safe, meaningful and purposeful aquatic experiences.

To view the IAP full please visit www.watersafe.org.nz

The IAP was developed jointly by WaterSafe Auckland • Surf Life Saving New Zealand • Surfing New Zealand • Outrage Offshore Education • New Zealand School Rowing • Te Tai Pūngā

The IAP was collaboratively produced by:-

- WaterSafe Auckland
- SLSNZ
- Swimming New Zealand
- Coastguard Boating Education
- New Zealand Schools WaterWise
- Yachting New Zealand.

To view the IAP (right) please visit www.watersafe.org.nz

A NATIONAL LIFESAVING PLAN

TO PREVENT DROWNING AND INJURY IN NEW ZEALAND, 2005-2010

BRETT SULLIVAN

Lifesaving Manager, Surf Life Saving New Zealand

ABSTRACT

People are drowning at beaches throughout New Zealand. Unfortunately the vast majority occur when the Surf Lifeguards are not patrolling OR at locations where there are no patrols. The National Lifesaving Plan provides a framework to do something about this. It intends to best meet the provision of all surf lifesaving activity in New Zealand through to 2010.

It is imperative that any plan has clear and obvious connections to the Surf Life Saving New Zealand (SLSNZ) mission 'preventing drowning and injury in New Zealand'. Upstream it is the means for the organisation to substantially contribute to the central government's strategy of 'a watersafe New Zealand, free from drowning'.

Surf Life Saving has identified the four (4) causal factors associated with drowning and set realistic and achievable goals to counteract each of these factors. Five (5) interrelated objectives support these goals and together will provide the framework for coordinating work under the strategy.

1. People drown because of ignorance, disregard or misunderstanding of the hazard

Surf Life Saving must aim to educate and inform by increasing knowledge through quality public education and awareness. This increase in knowledge will lead to positive beach behaviour and in turn ensure the beach going public of New Zealand participate wisely and safely in our environment. A centralised and national led public education strategy is critical to the success of the plan.

2. People drown because they are uninformed or have unrestricted access to the hazard

By taking the high ground and providing warnings and denying access, Surf Life Saving will create safer environments at New Zealand beaches. As Surf Lifeguards we can't be everywhere all of the time, it is important we understand where the hazards are in our turf and be innovative in managing these hazards. Central to the objective of safer environments is the concept of personal responsibility.

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3. People drown because of a lack of supervision or surveillance

'Lifesaving Services' covers the preventative and rescue aspects of our organisation. Services are often the last chance for people in trouble in the ocean. To truly say we are experts we will need to build on our firm foundations and fill gaps innovatively ie extend as required. Surf Life Saving must 'think outside the square' in order to remain relevant when deciding future service provision.

4. People drown because of their inability to cope once in difficulty

A determined effort to increase survival skills will contribute to a population of New Zealanders who can use the countries many aquatic environments safely and skilfully. The fact that hazards exist at beaches means we must look for ways to increase the ability of people to survive in an environment they are unfamiliar with.

At the core of the plan is strategic direction and effective coordination. This means policy development, resourcing, reviews along with essential research and development that will infiltrate all parts of the Surf Life Saving and ultimately contribute to work under each of the goals. In short this ensures an evidence based and measurable approach to prevent drowning in New Zealand.

The Surf Life Saving New Zealand Lifesaving Plan and its operational rollout into programmes and initiatives is based on qualitative and quantitative analysis including:-

- NZ Drowning Data
- SLSNZ Incident Data (rescue, first aid and search)
- Demographic Data
- Risk and Hazard Analysis
- Coastal Mapping and Analysis
- Stakeholder knowledge and expertise

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Conference delegates will have the opportunity during breaks (i.e. morning tea, lunch and afternoon tea) to mingle amongst the display booths/tables and to ask questions to those directly exhibiting.

TRADESHOW / EXHIBITORS

AQUATIC AND RECREATION INSTITUTE

The Aquatic and Recreation Institute (ARI) is a peak industry body representing aquatic and recreation facilities, operations and suppliers. This organisation is represented on the Australian Water Safety Council and other stakeholder organisations.

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AUSTSWIM

AUSTSWIM is the Australian Council for the Teaching of Swimming and Water Safety. It has a representation in each state and territory of Australia. AUSTSWIM is a non-profit organisation.

The AUSTSWIM Council comprises an independent Chairperson, a member from each Business Centre and a representative from the following organisations:

- Swimming Australia Ltd .
- The Royal Life Saving Society Australia
- Surf Life Saving Australia

Mission

AUSTSWIM's mission is to provide leadership in the design, development, marketing and delivery of comprehensive, high-quality courses, programs and resources for the training of teachers of swimming and water safety.

AUSTSWIM's vision is to set the highest national standards for teachers of swimming and water safety.

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COASTALWATCH

The Coastalwatch website (www.coastalwatch.com) links viewers to live coastal images via a network of web cameras, and provides a range of information about coastal conditions as well as news about coastal issues and events. The site was established in 1998 and is Australia's No.1 Water Sports and Web Camera website.

Coastalwatch provides three levels of cost effective service, all from the one camera.

- **Science:** CoastalCOMS assists with effective coastal management as the system recognises the need to manage the long-term impacts of natural and human activities, and to protect coastal resources for future generations. Coastal management authorities require timely access to information on the health of the beach system in order to effectively manage the distribution of resources

and to address community concerns regarding beach amenity and safety. The Coastal Conditions Monitoring System (CoastalCOMS) offers a range of modules which provide comprehensive real-time and predictive information about beach, surf and harbour entrance conditions. The real-time data includes offshore wave height, near shore wave height, wind direction and strength, beach usage and shoreline position. Combined with data from other sources such as tide predictions and expert observations, the collected data is stored and used to train predictive algorithms. The data produced by these algorithms is then displayed in a user friendly format via CoastalCOMS facilities. CoastalCOMS will soon be able to provide real-time information on beach state, beach risk and surf quality.

- **Safety:** CoastalCOMS utilises the camera network to make a significant contribution to safer coastal use. To this end, Coastalwatch has partnered with NSW Maritime, Surf Life Saving Australia, the Australian Professional Ocean Lifeguarding Association, and the many Volunteer Rescue organisations and community groups across Australia and overseas.
- **Recreation:** The website offers free access high-quality live, archived and still images and weather condition reports, along with environmental, news and editorials.

Coastalwatch is a community focused commercial organisation, deriving income from the sale of advertising on site and the provision of data and related services.



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SURFING AUSTRALIA

The Safe Surfing program was designed and developed to offer a structured program for introducing participants of all ages to the sport of surfing. The 5 Certificate Program was introduced in 2003 by Surfing Australia and is delivered by the 80 Surfing Australia Affiliated Surfschools around Australia. The 5 Certificate Program takes the individual from their first "experience" to carrying out manoeuvres on the green waves. Participants in the program are also educated about the dangers involved in participating in an ocean based activity and to assist others who may get into difficulty.

Corporate Profile

Surfing Australia is a not for profit incorporated National Sporting Organisation. It was formed in 1963 to establish, guide and promote the development of surfing in Australia. Surfing Australia is recognised by the Australian Sports Commission (ASC) and the Australian Olympic Committee (AOC) and is a member of the Australian Water Safety Council.

Surfing Australia is the representative body on the International Surfing Association (ISA) of which there are 56 member countries. Surfing Australia has branches in six states – Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia.

Vision

Our vision is to achieve the highest standards for the development of surfing in Australia.

Mission

Our mission, as Australia's peak surfing body, is to promote the growth, competitive success and positive image of surfing in Australia.

We will provide the best possible experience for all participants, by encouraging, advancing and administering the sport, whilst producing champions.

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INSURANCE MADE EASY

- Specialists in the Aquatic Industry.
- We operate programs for AUSTSWIM, Royal Life Saving Society Australia, Victorian Aquatic Recreation and AUSTSPORTS Commission.
- Combined professional indemnity and public liability policies for aquatic teachers, coaches, trainers.
- Full insurance packages for facility operators/ owners.



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LAERDAL PTY LTD

Providers of CPR and Defibrillation Training Equipment as well as airway management, spinal immobilisation and Defibrillation Therapeutic products.



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ROYAL LIFE SAVING SOCIETY AUSTRALIA

Royal Life Saving has been serving Australia for over 110 years and is the leading water safety, swimming and lifesaving education organisation in Australia.

Royal Life Saving is dedicated to turning everyday people into everyday community lifesavers.

We achieve this through:

- education
- training
- health promotion
- risk management
- advocacy
- sport and participation
- research
- community development

Lifesavers are everywhere in the community. They can be teachers, students, mums, dads, firemen, plumbers or accountants. They patrol the houses, streets, workplaces and parks of the communities in which they live. They don't always wear a uniform but they can and do save lives.

Our programs are well researched. They are available to all.

Our Mission

To prevent loss of life and injury in the community with an emphasis on the aquatic environment.



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SURF LIFE SAVING SOCIETY AUSTRALIA

Surf Life Saving Australia (SLSA) is Australia's major water safety and rescue authority and is one of the largest volunteer organisations in the country. Our mission is "to provide a safe beach and aquatic environment throughout Australia."

SLSA and its state centres provide patrol services on 400 of the 11,560 beaches around Australia's 36,735 km of coastline.

In addition to this core service and responsibility, SLSA also contributes to the community by:

- Training volunteer surf lifesavers and paid lifeguards to undertake rescues, administer first aid and take preventative actions to keep our beaches safe;
- Developing and implementing community and school education programs, including to regional and rural communities;
- Providing helicopter, jet and offshore rescue boat services;
- Managing and delivering surf sports events, including the Australian Surf Life Saving Championships.



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THIRD WATCH POSEIDON

DROWNING DETECTION TECHNOLOGY

Poseidon, the computerised drowning detection system for public swimming pools, has become the world-wide benchmark for reducing risk in public swimming pools.

Poseidon is a risk management solution designed to assist lifeguards in preventing drowning and near drowning incidents.

Comprised of an advanced camera network that continually surveys the pool and a specialised software system that analyses the trajectories of swimmers, the system can alert lifeguards in as little as 10 seconds of a potential accident and to the exact location of the swimmer in danger.

Poseidon helps lifeguards deal with varying environmental conditions such as surface reflection and glare, as well as high noise and activity levels.

Poseidon is installed in 160 aquatic centres around the world.

Poseidon's first Australian installation was commissioned by Blacktown Leisure Centre Stanhope and has been operational since late last year.

Further Information:

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