

POLICY NO: M - 006

POLICY: COMMUNICABLE DISEASES

ORIGINAL POLICY: OCTOBER 1994

LAST REVIEW DATE: OCTOBER 2002

REVIEW DATE: CURRENTLY UNDER REVIEW

1. BACKGROUND

The first published medical report on the disorder initially labelled AIDS, appeared in The New England Journal of Medicine in 1981 and the world has not been the same since. To the end of March 1992, 3160 cases of the disease had been reported in Australia, with almost two thirds of these being in NSW.

Over 97% were in men, of whom 91% were adults or adolescents reporting homosexual contact. In women, 40% of cases were acquired through receipt of blood, blood products or tissue.

Understanding of the disorder is still in its early stages and it is to be expected that all policies devised to minimise its spread will be under constant review. It has been correctly designated by experts as an epidemic requiring urgent community action in many areas.

Health care workers are involved in two separate ways:-

- (a) They may be exposed to the risk of acquiring the infection through contact with blood or other body substances of sufferers or carriers. Policies to protect health care workers have been in place for some time and represent only an extension of time honoured principles of hygiene used for many decades. There are cases of HIV infection having been transmitted from patient to health care worker but the numbers are small and the risk is not great if sensible precautions are taken. By September 1992, there were 65 documented cases of occupational transmission of HIV but many more cases of occupational transmission of Hepatitis B had been reported.
- (b) There is a small number of health care workers who have developed the illness themselves and they must act in a way that minimises the risk of transferring their illness to patients they are treating.

This statement deals with both issues. The disorders concerned include all grades of HIV infection, Hepatitis B and C as well as any other relevant disorder as described in the literature from the NSW Health Department.

2. RESOURCE DOCUMENTS

NSW Infection Control Policy for HIV, AIDS and associated conditions.
NSW Health Department Circular 92/49 entitled "HIV and Hepatitis B infected health care workers".

Worksafe Australia Draft National Code of Practice for Health Care Workers and other people at risk of the transmission of human immunodeficiency virus (HIV) and Hepatitis B in the work place. (This is a public discussion paper for comment by 31st December 1992).

These documents themselves have exhaustive reference lists, some of which have been used.

- Medical Journal of Australia Vol 158, 4 Jan 1993.
- University of Sydney Faculty of Health Sciences Booklet entitled "Infectious Diseases and You".

3. THE NEED FOR LIFESAVING ORGANISATIONS TO HAVE A POLICY

The resource documents provide most of the rules required by life saving and first aid organisations but still require individual interpretation. Paragraph 1.8 of the NSW Circular 92/49 reads:

"Using these guidelines as a basis, professional organisations and health care establishments are appropriate bodies to undertake detailed development of recommendations specific to their area of expertise".

Elsewhere, the documents state "health care organisations are expected to ensure adoption of effective and practical infection control practices by all health care workers".

This is a clear indication that Governments expect lifesaving organisations to formulate relevant policies within our specific area of expertise and to implement them.

There can be no doubt that a lifesaver can be defined as a health care worker when performing a rescue, resuscitation or in providing first aid.

SELECTED QUOTES FROM RESOURCE MATERIAL

As very few people can be expected to read all of the relevant papers fully, it is reasonable to highlight some paragraphs of special relevance to life saving organisations.

For the purposes of the NSW documents, health care workers are defined as “persons, including students and trainees, whose activities involve contact with patients or with blood or other body fluids from patients”.

Appendix 4 of the Worksafe draft provides an outline of the current policy of the intergovernmental committee on AIDS, as endorsed by the Australian Health Ministers Conference in April 1992, on HIV infected health care workers.

“Health care workers (and their employers who are vicariously liable for their actions) should be protected from civil liability for HIV transmission or exposure where adequate universal precautions as agreed from time to time by the appropriate authorities (the National Health and Medical Research Council, The Australian Council on AIDS and The National Occupational Health and Safety Commission) have been complied with”.

“Employees should not normally be obliged to disclose their AIDS diagnosis or HIV or Hepatitis B status to employers, co-workers or clients,. However, they should comply with the reporting requirements for illnesses or impairments that are likely to affect professional practice and not act in a way which would put others at risk”.

The NSW documents on the issue of employee responsibility, state:-

“Health care workers should note that they have an obligation to care for the safety of others in the work place (this includes fellow workers and patients) under the Occupational Health and Safety Act, 1983”. Furthermore “negligence is broadly defined as a breach of duty. A professional has to be careful to avoid practices that could foreseeably cause harm to a patient. Professional health care workers’ actions are expected to measure up to the standard of a reasonable member of the profession.”

“The principle of universal body substance precautions as the ideal standard is strongly endorsed. All health care establishments must implement infection control policies and practices that incorporate the minimum standard of universal body substance precautions”.

These require all health care workers to assume that the blood and body substances of every patient must be considered as potentially infective, independent of diagnosis or perceived risk. Body substance precautions should be used consistently when health care workers are in contact with mucous membranes, non-intact skin and body substances including blood, faeces, urine, sputum, saliva and wound drainage. These precautions are designed to :-

Reduce the risk of nosocomial transmission of infectious agents from patient to patient. (Nosocomial means “relating to a hospital” and is used in the setting of transfer of new infections in hospital).

Protect health care workers from exposure to patients’ infections with blood borne and non-blood borne pathogens.

Protect patients from exposure to infected health care workers.

“Until further epidemiological studies are available, all blood and body substances whether visibly contaminated or not must be considered as potentially infective”.

Appendix 4 of the Worksafe document states:-

“HIV antibody positive or Hepatitis B surface antigen positive employees should:-

- a) Not participate in mouth to mouth resuscitation.
- b) Not perform tasks which are frequently associated with blood accidents without the prior advice of treating doctor or expert review panel. If HIV infected employees continue to perform tasks which are frequently associated with blood accidents, their clients should be informed of their HIV or Hepatitis B status. Informed consent to the risk of transmission of HIV or Hepatitis B is relevant to civil liability and also to public health offences for knowingly exposing others to HIV”.

4. LIFESAVERS WHO HAVE A POTENTIALLY COMMUNICABLE DISORDER

Persons with serious communicable disorders such as HIV infection or carrier status may be members of life saving organisations.

Those who choose NOT to notify a person in authority within the organisation of their infective or potentially infective status must bear full responsibility for their actions as defined by law.

Those who choose to notify a responsible authority within the organisation are assured of maximum confidentiality. It is suggested that an appropriate person for notification in the first instance is the State Medical Officer.

If necessary, the State or National Medical Officer will communicate with the physician responsible for the medical care of the affected member and define areas of duty which do not put either the member or the bathing public at risk. This communication will only occur after due consultation with the lifesaver concerned and after having obtained his/her written permission.

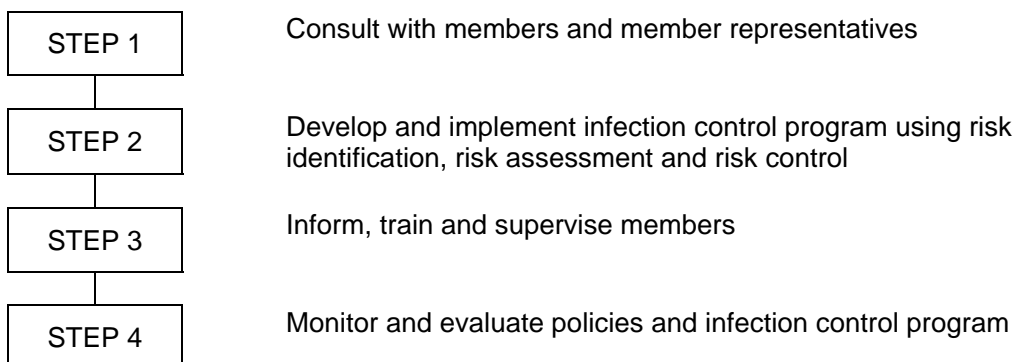
Resuscitation will be taught, if desired, according to the criteria set in this document.

They will not be allocated to duties where the performance of respiratory resuscitation is likely.

Application to participate in competition will be dealt with on an individual basis and should, in the first place, be made direct to the Hon. National Medical Officer who will act in the same way as outlined above.

5. PREVENTION OF CROSS INFECTION FROM PATIENT TO LIFESAVER

Duty to provide a safe and healthy work place



These steps should be taken using external information sources, current or existing internal instructions and bearing in mind relevant State/Federal laws and policies (eg anti-discrimination, privacy and health legislation). This is the advice of the National Occupational Health and Safety Commission.

6. GENERAL PRINCIPLES

This section is intended to deal with prevention of cross-infection from patients to lifesaver. Although it is prompted by the threat posed by HIV, Hepatitis B and C, the measures suggested will be appropriate for minimising risk for almost all communicable diseases.

Although the risk of cross-infection to lifesaver is not great, the potential exists and all lifesavers, administrators and officials must be aware of their responsibilities. The risk from Hepatitis B is much greater than the risk of contracting HIV.

All practical lifesaving awards must include instruction on cross-infection risks relevant to that award.

All lifesavers are strongly advised to be immunised against Hepatitis B.

Universal precautions require that lifesavers assume that every patient is potentially infected with HIV or other blood-borne agents. Since blood is the single most important source of HIV, Hepatitis B virus and other similar agents, infection control efforts must focus on preventing exposure to blood (as well as on Hepatitis B immunisation).

The policy on prevention has been extended to recommend universal precautions against other body substances such as faeces, saliva,

sputum, urine etc. This will minimise the risk of transmission of all types of infections to lifesavers.

7. FIRST AID

Lifesavers who have known cuts or other small wounds on their hands should avoid administering first aid which involves contact with body substances of the patient.

Protective attire should always be worn in first aid except for simple procedures not involving body substances. This for lifesavers will mean using gloves but there may be rare instances where mask and protective eye wear should be worn.

In many such cases it may be safe and appropriate to wait for an ambulance or doctor. The nature of first aid varies with the location so that lifeguards at pools and beaches deal with rather different problems. Although much beach first aid involves the treatment of marine stingers with no risk to the lifesaver, statistics show a high incidence of cuts and abrasions which must be managed with caution. Most pool first aid involves minor injury.

Lifesavers will not usually use needles or other sharp items of equipment in the course of their duties. Needles may, however, be found near life saving facilities and should this happen, they should be handled without direct contact and in such a way that the sharp end presents no risk to the lifesaver or anyone else.

For this occasional risk, it is recommended that each first aid room have a yellow "sharps" container. The most frequent use of "sharps" in lifesaving conditions is by ambulance personnel who have been called and they should be asked to attend to their used needles, syringes and other contaminated equipment. This is a usual part of their duties but because of urgency, they may ask lifesavers for help.

Patient clothing contaminated with blood or other body substance must be removed as soon as practical but this may often be left to the ambulance officers. Protective attire must be worn in these circumstances; the hands and body must be washed after removal of gloves.

A supply of impermeable plastic bags should be available for the disposal of contaminated clothing and debris.

First aid must be reported in the book provided for this purpose.

Any accidental exposure to body substances must be reported immediately to the First Aid Officer. The lifesaver concerned is advised to see his/her own Medical Adviser or the nearest hospital at the earliest opportunity.

Linen contaminated with body substances must be stored in bags which prevent leakage. This linen must be washed with detergent in hot water (at least 71 degrees C) for 25 minutes. Linen which is not contaminated can be cleaned in the same way as domestic linen. First aid rooms must

be kept spotlessly clean at all times. In addition to simple cleanliness and hygiene, disinfection of instruments, floors, etc, will be required frequently.

For general surface disinfection of blood or body substances after cleaning has been completed, the recommended solution is household bleach. This is the chemical "sodium hypochlorite" and may be purchased as a solution, granules or tablets. Concentrations vary with different brands, so the recommendations of the manufacturer must be checked to ensure that the concentration is equivalent to 10,000 parts per million (ppm) available chlorine.

It is important that the granular and tablet forms are completely dissolved to ensure the correct concentration of the hypochlorite.

The user must pay attention to the storage life of bleach preparations as deterioration occurs.

Bleach solutions for disinfection must be freshly prepared.

They will irritate the skin in the concentrations recommended above.

They may corrode metal and may bleach fabric.

After disinfection, special attention must be paid to rinsing the surface free of hypochlorite and then drying. In each case, the directions of the manufacturer must be followed.

Glutaraldehyde must not be used as a surface disinfectant.

Women lifesavers who are, or think that they might be pregnant, should take care in administering first aid and be aware of any possible risk to their foetus. This is especially important where body substances are involved. The onus is on the lifesaver concerned to act in a responsible manner.

Lifesavers who have any doubts concerning risks they may have encountered should consult their own doctor who will decide on the need for testing or any treatment.

All needlestick injuries, whether to the public or to a lifesaver must be referred to a doctor or the nearest hospital as a matter of importance. Records must be kept of all the circumstances.

All groups providing first aid must appoint a First Aid Officer whose duties include ensuring that proper body substance precautions are taken at all times and that full records are kept.

7. RESUSCITATION

Up to September 1992, there had been no case reports of HIV or Hepatitis B having being transmitted to a Health Care Worker by the performance of expired air resuscitation (EAR). Nevertheless, the viruses have been grown from saliva and so the theoretical possibility exists.

Therefore, while mouth to mouth resuscitation should never be delayed:-

Lifesavers and lifeguards should keep masks and gloves as close as possible to their areas of responsibility.

In clearing the patient's airway, the lifesaver must take care not to break the skin of the fingers. Gloves should be worn if possible.

Lifesavers should change to a method which involves the use of a mask as soon as possible; this means either mouth to mask or bag-mask methods, depending on the level of training and the numbers of those present.

Because of inevitable contact with the patient's saliva and often vomitus, gloves should be worn as soon as they are available during expired air resuscitation (EAR).

Following resuscitation, lifesavers should wash themselves thoroughly, as recommended following first aid.

In cases where resuscitation has been performed, efforts should be made to determine the health status of the patient after admission to hospital. Considerations of privacy may prevent information being provided but the effort should be made through medical sources available to the club or organisation involved. Lifesavers have the

right to know whether they have placed their health at risk from their actions. In cases where resuscitation was not successful, the Police or Coroner will often be able to provide information. In some cases, the lifesaver's personal doctor may have access to this information on a confidential basis.

Lifesavers who have performed resuscitation and been exposed to a patient's body substances should consult their personal doctor within one or two days to be advised on whether they require any health checks or treatment.

In each lifesaving unit (eg pool, club) one person should be responsible for ensuring that resuscitation equipment is in a good state and readily available in the appropriate places.

All active lifesavers should be competent in the performance of mouth to mask resuscitation, preferably with supplementary oxygen.

8. RESUSCITATION TRAINING

Practical sessions on resuscitation involve some work on other members of the class and some work on manikins. Different instructors have different teaching styles which may sometimes have to be modified because of infections in members of the class. In most cases, these are minor problems such as the common cold but the potential for serious infection exists. Up to September 1992, there were no recorded cases of HIV or Hepatitis B having been transmitted by manikin training. Whatever the known status of the class, precautions against cross-infection must always be strict.

9. PRECAUTIONS FOR TRAINEES

It is proper that when constituting a class, members be informed of the facts on cross infection; they should be asked that if any of them suffer from a communicable disorder, this information be given to the appropriate authority on a strictly confidential basis so that suitable arrangements can be made to avoid transmission of the conditions to fellow trainees.

A. INFECTIONS OF SHORT DURATION

Most infections are of brief duration. Throat infections, diarrhoea, the childhood infectious diseases are some examples. Trainees with such conditions should be warned of the risks of transmitting their illness to others during hands-on sessions with either manikins or other members of the class. It will often be possible for them to delay their training to a later date, or simply re-arrange their curriculum so that they learn their theory while they are infectious.

If this is not possible, they should be restricted to manikin practice, using their own facepiece or headpiece on a single manikin with a minimum of training partners. It should be remembered that transmission of this group of infections is often via the hands rather than saliva or coughed droplets. German measles is very dangerous during pregnancy.

B. INFECTIONS OF LONG DURATION

Examples of this group of conditions are:-

- Known positive blood test for HIV
- Known positive blood test for Hepatitis B or C
- Known carrier status for typhoid

Provided that the rules on manikin decontamination and care are strictly followed, the most recent scientific evidence is that the risk of spread of HIV or Hepatitis B and C is negligible during supervised manikin practice. Persons with these conditions should not be precluded from being taught resuscitation.

When practising on a student partner during training, clearing the airway of foreign material by putting the fingers into the mouth should be simulated or simply watched as a demonstration by an instructor.

Mouth to mouth and mouth to mask techniques of resuscitation should be practised on the manikin and not on other members of the class.

The older types of manikin without separate face pieces and disposable bag systems are difficult to decontaminate and should not be used if class members have known infections.

C. PRECAUTIONS FOR ALL CLASSES

If more than one manikin is used in a training class, trainees should be assigned to one manikin to limit the potential for cross-infection.

The use of manikins with individual face or mouth-nose pieces along with disposable lung bags or airway tubes is strongly recommended; they reduce the risks of cross-infection but only if the rules are followed.

At the start of the class, each trainee should be issued with his own face or mouth- nose piece for use during the entire session. If mouth to mask is being taught then ideally there should also be a mask for each trainee.

When practising on a student partner, clearing the airway of foreign material should be simulated rather than by actually putting fingers into the mouth.

All persons responsible for CPR training should be familiar with the need for personal hygiene and for the cleaning, disinfection and maintenance of training manikins and accessories.

10. DISINFECTION OF TRAINING MANIKINS AND ACCESSORIES

A. DURING A TRAINING CLASS

When individual face or mouth-nose pieces have been used, they should be scrubbed with a nailbrush using a detergent solution or soap and water. They should be rinsed in clean water and dried before disinfection procedures are carried out.

Resuscitation face masks should be cleaned and disinfected in the same way as manikin face pieces. The lung bag should be discarded after use into an appropriate container provided near the manikins. Instructors must ensure that trainees assume responsibility for removal of their individual face pieces and lung bags, and for the disinfection of interchangeable parts.

B. AT THE END OF TRAINING CLASSES

Manikins must be thoroughly cleaned and disinfected. Disposable parts should be discarded into a sealed container.

The recommended disinfectant solution is 70% alcoholic chlorhexidine for 2 minute immersion of face pieces and masks. The alcohol to be used is ethanol or industrial methylated spirit. Isopropyl alcohol is not to be used.

After immersion, parts should be rinsed in clean water and allowed to dry thoroughly. Disinfectant solutions must be discarded at the conclusion of each class. Household bleach (hypochlorite) and glutaraldehyde solutions are not suitable for manikin disinfection.

11. RESPONSIBILITIES OF ADMINISTRATORS

At national, state, branch and club level there needs to be a high level of awareness of the potential problems of cross-infection but also a strong sense of realism and perspective.

Hepatitis B immunisation must be emphasised much more than in the past. The aim is to have all active lifesavers immunised. Annual drives must be held because of the large numbers joining each year. In addition, junior members should be targeted.

Officials must set a good example by their actions, their knowledge and in the conduct of classes and examinations. First Aid Officers must be appointed wherever first aid facilities are provided - for example, clubs, pools, carnivals, special events, etc.

This Officer must be a suitably qualified person, able to assume responsibility for all aspects of first aid including all aspects of cross-infection. It is the responsibility of the relevant officials to provide this Officer with all the backing he requires.