

RISK OF VIRAL INFECTION

GENERAL

1. Since the 1980's, there has been a heightened interest in, and concern about, the threat posed by viral infections such as Acquired Immune Deficiency Syndrome (AIDS) and Hepatitis B. Questions have been raised about the risks posed to Brigade members during the provision of patient care procedures, and the steps that may be taken to limit this risk.

RISK

2. The provision of patient care by a member of the St. John Ambulance Brigade may pose a risk of disease transmission to the caregiver or the patient. It is important that the caregiver be aware of and minimize the risk of infectious disease transmission.
3. The viruses responsible for the transmission of AIDS and Hepatitis B are found in body fluids and the risk to the caregiver is directly related to the exposure to these contaminated fluids. Blood, blood products, semen, breast milk, sputum, saliva, tears and urine are potential sources of contamination for the AIDS (HIV) and the Hepatitis B (HBV) virus. It is therefore mandatory that all members of the Brigade, who by the nature of their service, be trained in the appropriate methods of reducing exposure to potential contamination.

ACTIONS TO LIMIT RISK

4. There is a low risk of infectious disease transmission when providing care. This risk can be further reduced by:
 - a. good personal hygiene (e.g. handwashing);
 - b. the use of appropriate barrier devices as warranted;
 - c. prompt decontamination following possible exposure; and
 - d. immunization (for Hepatitis B).
5. Refer to the Reference Text for the Brigade Training System for the details of these actions.

RISK ASSESSMENT

6. Patient care providers must be prepared to assess the risk of infectious disease transmission as a direct consequence of treating an injured or ill person. The following factors must be considered in determining the procedures and specific actions to be taken in limiting the risk of exposure:

- a. Are body fluids present, and are they likely to be a source of contamination? If so, take specific precautions as listed below.
- b. To what degree will introduction of appropriate barriers increase the risk to the ill or injured person? The caregiver must immediately assess the increased risk to the injured or ill person that may result from the use of appropriate barrier devices and any delay in instituting appropriate care. The insertion of barriers between the caregiver and the casualty may decrease the effectiveness of first aid procedures, and will be a function of:
 - i. the time taken to apply a barrier; and
 - ii. the degree to which a barrier reduces the Brigade member's ability to provide effective care, ie. impairment of sense of touch, and the use of resuscitation devices during artificial respiration.

The severity of the injury and the consequences of delay, judged against the risk to the patient care provider not using mechanical aids, will determine whether or not the use of mechanical barriers is warranted.

PRECAUTIONS

7. It is important for the caregiver to limit the potential for contamination. The two principle methods are:
 - a. the introduction of appropriate barrier devices between the caregiver and the potential contaminant; and
 - b. the use of hygienic procedures.

BARRIER DEVICES

8. As disease transmission results from the transfer of infected body fluids it follows that the introduction of an appropriate barrier device that reduces or inhibits the transfer of fluids will reduce the risk to the caregiver. Barrier devices that have proven to be effective in limiting exposure to body fluids are:
 - a. disposable latex or vinyl gloves; and
 - b. faceshields and masks with one-way valves.
9. Patient care providers must have access to, and training in the use of these appropriate barrier devices. The use of barrier devices will be the member's responsibility and should be consistent with their assessment of the degree of risk posed to them by the patient.

HYGIENE

10. Good personal hygiene following exposure to body fluids by a caregiver will significantly reduce the risk of disease transmission. Skin that has been exposed to potentially contaminated body fluids must be thoroughly washed (but not scrubbed with a stiff brush) at the earliest practical opportunity following exposure. Abrasions and breaks in the skin should be thoroughly and carefully washed preferably with soap and water, any cuts or lacerations being allowed to bleed freely for a few moments first. Note that it is the mechanical action of washing properly that is more important than the type of soap or disinfectant which is used.
11. Clothing and other non-disposable items that may have been contaminated with body fluids should be decontaminated. At the earliest opportunity following exposure, use a disinfectant such as a 1:10 solution of sodium hypochlorite in water. This is made by diluting one part of a 5-6% solution of sodium hypochlorite (household bleach) with ten parts of water. The item may then be washed in the normal manner.
12. Disposable items such as soiled gloves, bandages, dressings, tissues, etc. should be placed in a sturdy plastic bag, sealed and then bagged again in a second plastic bag and sealed before disposal. Where available, use biohazard disposal.
13. Following the handling of potentially contaminated clothing or equipment, and after the removal of disposable gloves, hands and exposed parts of the body should be carefully washed. If a Brigade member is splashed in the eyes with blood, the eyes and face should be rinsed immediately with running water.

IMMUNIZATION

14. Hepatitis B is a relatively common disease which can have serious consequences. It is strongly recommended that members eliminate this danger by taking advantage of the three-stage immunization procedure as soon as possible. To assist in this, National Headquarters has facilitated an immunization program. Details of the Hepatitis B Immunization Program are available in the manual prepared for this purpose, which is available from each Provincial/Territorial Council.