

UNK Sports Medicine and Athletic Training Education Program

POLICY AND PROCEDURES

Exposure to Blood/Body Fluids Policy & Procedure

Purpose: To ensure that each Athletic Trainer and Athletic Training Student is aware of the actions they should to prevent exposure to blood and body fluids and actions to take if exposure to blood/body fluids has occurred; both for their own benefit and if they are involved in the immediate management of exposed workers.

Policy: It is the policy of Sports Medicine branch of the Department of Intercollegiate Athletics and the Athletic Training Education Program to:

- Ensure that staff are aware of the appropriate procedures to minimize the risk of exposure incidents,
- Ensure that appropriate action is taken immediately in the event of a significant exposure to reduce to a minimum the possible health risks associated with exposure to blood borne viruses,
- Recognize the uncertainties which may be associated with a significant exposure incident and the consequent psychological effects to provide staff with necessary information, advice and counseling,
- Investigate all significant exposure incidents to identify causes and contributory factors and initiate appropriate remedial action.

Procedure: Exposures to blood and body fluids can be prevented/minimized through use of Standard and Universal Precautions (using appropriate barriers such as gloves, eye and face protection, or gowns when contact with blood is expected) and by using safer techniques (for example, not recapping needles by hand, disposing of used needles in appropriate sharps disposal containers, and using medical devices with safety features designed to prevent injuries). This procedure covers the immediate actions to be taken following percutaneous or mucocutaneous exposure to blood and body fluids.

The CDC Department of Health Human Services publishes a brochure that includes detailed information called, *"Exposure to Blood: What Health-Care Workers Need to Know."* Please familiarize yourself with this information and the risks to you as a health care provider. (http://www.cdc.gov/ncidod/dhqp/pdf/bbp/Exp_to_Blood.pdf)*

It should be recognized that while hepatitis B virus (HBV) transmission has occurred through a wide variety of fluids and modes of exposure, human immunodeficiency virus (HIV) transmission from patient to health care worker (HCW) has only been known to occur (up to this time) from exposure to blood or frankly bloody fluids. The frequency of transmission of HBV is estimated to be as high as 60% when the blood is from a carrier with both hepatitis B

surface antigen (HBs AG) and hepatitis B e antigen positive (HBe AG) , and as high as 30% for a surface antigen positive source. The risk of post-needle stick infection with hepatitis C is 3% compared to a maximum of 30% for HBV. The risk of HIV is approximately 0.3% for HIV when such injury involves blood from a known HIV infected individual.

Body fluids that may transmit blood borne viruses

- Blood
- Vaginal fluid
- Semen
- Exudate or tissue/fluid from burns/wounds
- Any other body fluid if visibly blood stained

What is meant by exposure?

- Percutaneous injuries e.g. from used needles, bites and other wounds from sharp items.
- Mucocutaneous exposure e.g. splashes into the mouth, eyes etc, or splashes onto broken skin e.g. existing cuts, eczema etc.

Exposure to low risk body fluids e.g. urine, vomit, feces, sputum and saliva is not normally considered a risk unless visibly stained with blood. Exposure of unbroken skin to blood and body fluids has not been associated with blood borne virus transmission.

If you are exposed to the blood or body fluids of a patient, it is recommended to do the following:

1. *Immediately following an exposure:*

- a. Thoroughly wash needlestick or sharps induced injuries and cuts with disinfectant soap and water.
- b. Flush splashes to the nose, mouth, or skin with water. Irrigate eyes with clean water, saline, or sterile irrigants.

2. *Immediately inform your supervisor.*

Prompt reporting is essential because, in some cases, post exposure testing and treatment may be recommended and it should be started as soon as possible. The employee who sustains occupational exposure, should access post exposure services within hours as opposed to days, after the exposure. If stuck with a contaminated needle, or otherwise subjected to contamination by bodily fluids from a patient, there is a small but very real risk of acquiring a serious infection from the host. **If such an incident does occur, you are automatically excused from whatever you are doing.** Remember that your health comes first.

3. *Complete an incident report.* It is to your benefit to report all incidents both verbally and in writing because, if necessary, you will need to prove that you were exposed/infected during work in order to file a worker's compensation or disability claim.

The University's Workmen's Compensation program is self-insured. This means that the State of Nebraska pays all hospital and medical expenses resulting from an injury or occupational disease while on the job or in the course of employment. To receive this benefit, it is necessary to report all accidents immediately, no matter how slight, so that

an accident report may be prepared recording the details. This report provides the basis for preparing a Workmen's Compensation report which must be submitted if an injured employee is to receive benefits. The UNK Workers' Compensation Incident Report is located on SAPPHIRE.

(http://sapphire.nebraska.edu/standard/Business_forms.asp?Campus=UNK&Want=Forms&Heading=Human%20Resources). Human Resources (HR) should be notified and all paperwork and medical bills should be submitted to HR.

Medical attention for blood/body fluid exposure is recommended and will include *cleansing and treating any wound. Persons involved in the exposure incident will be referred for the purposes of obtaining both the exposed person's blood and the source patient's blood for testing, and the provision of counseling on follow-up treatment and testing.*

For your own information and for patients who ask, it is important to differentiate between confidential and anonymous testing. Confidential testing is done at a medical institution, and the results become part of the medical record, which is available to insurance companies and may affect future insurability. Anonymous testing is done by "neutral" organizations like UNK Health Care, Central Health Center and state/county health agencies, and only the patient will know the result. Consider this issue before being tested.

The employee/student has the option of receiving medical attention, testing, treatment, counseling and/or follow-up at any facility/clinic of their choice.

The source patient will be questioned to determine whether the source's HIV, HBV and HCV status are known. If the patient's status is not known, consent for testing will be requested. The law requires obtaining informed consent before testing a person for HIV. In addition, the person being tested must receive pre and post-test counseling. If the patient lacks legal capacity to consent, counseling must be provided to the health care agent, guardian, or other person lawfully authorized to make health care decisions for the patient. The injured healthcare worker should not carry out the pre-test discussion.

Source Patient pre- test discussion (includes HIV antibody)– points to be covered

1. Advise source patient:
 - a. Of the nature of the exposure incident and of the difficulties in the Healthcare Worker's situation, either missing the opportunity for treatment or being given unnecessary treatment. Explain that the test is voluntary.
 - b. Of the Sports Medicine & ATEP policy and procedure which you are following and the aims of enabling a risk assessment to be undertaken, so that appropriate positive action can be taken
 - c. That the proposed tests are the same as those carried out routinely on blood donors and that they are not being approached on the basis of perceived risk
 - d. Of the implications should any blood tests prove positive, offering specialist assessment and counseling if required.
 - e. Of their right to decline:
 - i. To co-operate with answering specific questions

- ii. To consent for blood to be taken for immediate serological testing
 - iii. To consent for blood to be taken for storage and possible future testing
2. Provide information about the blood-borne viruses – Offer the source patient information brochure “HIV fast facts-Testing”. The discussion should include:
 - The different viruses
 - Modes of transmission
 - Difference between HIV and AIDS.
3. Risk Activities - do they want to discuss this? “Window period” When was their last risky activity? (They do not need to say what). Risk activities are:
 - Unsafe sex
 - Intravenous drug abuse
 - Recipient of blood products before 1985 (HIV) or 1991 (HCV)
 - Tattooing
 - Occupation
 - Overseas travel with high risk activities
4. Discuss advantages and disadvantages of testing from the viewpoint of the source patient.
 - a. Advantages - if found to be infected, allows:
 - Appropriate medication and prophylactic care e.g. retroviral treatment, prophylaxis against some diseases, contraindicated vaccines
 - Interventions to prevent onward transmission
 - To make decisions regarding the future.
 - b. Disadvantages
 - Psychological complications – how would they cope with a positive result, who would they tell?
 - Adverse effect on relationships
 - Restrictions on travel and insurance if positive – for life insurance they should only be asked about a positive test, for other insurance they may be asked about whether they have had any test, leading to further questions about risk factors.
5. Discuss test procedure and how results will be communicated, including
 - What happens if there is a positive result – including further confirmatory testing, but that delay in results does not necessarily indicate a positive result.
 - Significance of a negative result – does NOT indicate immunity
 - Confidentiality – will not be disclosed to another healthcare professional unless failure to disclose would put that person at risk, advantages of informing primary care provider
6. Provide source patient the opportunity to ask questions to clarify their understanding of the situation.
7. Present the source patient with the Consent Form asking them to read it carefully and to respond and sign it. If patient refuses consent or it is considered detrimental or inappropriate to ask, this should be recorded in the patient’s notes.
8. Sign and date Consent Form appropriately
9. Take blood specimens for serology or storing. Tests performed should include HepBsAg, HCV, HIV1, and ALT.

10. Document details of exposure incident, of discussions with patient and outcome of serology (unless anonymous testing requested) in the patient's medical record.
11. Make arrangements for source patient to obtain further results of blood tests and arrange for any follow up required following test results.

Recommended follow up testing for the employee if the source patient is positive includes:

- 6 week HIV
- 3 month HIV
- 6 month HIV, HCV (if source positive), ALT
- 12 month HIV

CDC recommendations for Post exposure Prophylaxis (PEP) to blood borne Pathogens.

The CDC Department of Public Health Services publishes guidelines that include detailed information for postexposure prophylaxis called, *“Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HIV and Recommendations for Postexposure Prophylaxis”* (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5409a1.htm>) and *“Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis”* (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm>). Please review for detailed recommendations.

A. Recommended post-exposure management for exposure to HIV – Post exposure treatment is not recommended for all occupational exposures to HIV because most exposures do not lead to HIV infection and because the drugs used to prevent infection may have serious side effects. You should discuss the risks and side effects with a health care provider before starting post exposure treatment of HIV.

B. Recommended post-exposure management for exposure to hepatitis B virus
If you have not been vaccinated, then hepatitis B vaccination is recommended for any exposure regardless of the source person’s hepatitis B status. HBIG and/or hepatitis B vaccine may be recommended depending on your immunity to hepatitis B and the source person’s infection status.

C. Recommended post-exposure management for exposure to hepatitis C virus
Currently there is no recommended post exposure treatment that will prevent HCV infection. The following are recommendations for follow-up occupational HCV exposures:

- For the person exposed to an HCV-positive source: Baseline testing for anti-HCV and ALT activity; and perform follow-up testing (e.g., at 4-6 months) for anti-HCV and ALT activity (if earlier diagnosis of HCV infection is desired, testing for HCV RNA may be performed at 4--6 weeks). Confirm all anti-HCV results reported positive by enzyme immunoassay using supplemental anti-HCV testing (e.g., recombinant immunoblot assay [RIBA]). IG and antiviral agents are not recommended for PEP after exposure to HCV-positive blood. **Be aware that specific guidelines for administration of therapy during the acute phase of HCV infection is controversial.** However, limited data indicate that antiviral therapy might be beneficial when started early in the course of HCV infection. When HCV infection is identified early, the person should be referred for medical

management to a specialist knowledgeable in this area. **Source: MMWR, June 29, 2001/ 50 (RR11); 1-42.**

D. Precautions to be taken during the follow-up period

- **HIV** During the follow-up period, especially the first 6-12 weeks when most infected persons are expected to show signs of infection, you should follow recommendations for preventing transmission of HIV. These include not donating blood, semen, or organs and not having sexual intercourse, if you choose to have sexual intercourse, using a condom consistently and correctly may reduce the risk of HIV transmission. In addition, women should consider not breast-feeding infants during the follow-up period to prevent exposing their infants to HIV in breast milk.
- **HBV** If you are exposed to HBV and receive post exposure treatment, it is unlikely that you will become infected and pass the infection on to others. No precautions are recommended.
- **HCV** Because the risk of becoming infected and passing the infection on to others after an exposure to HCV is low, no precautions are recommended.
(Information Network: 1-800-342-AIDS P.O. Box 6003 Spanish: 1-800-344-SIDA Rockville, Maryland 20849-6003 Deaf: 1-800-243-7889 or 1-800-458-5231)