Standard Treatment Guidelines for Occupational Blood and Body Fluid Exposure

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DEFINITIONS

Employee - refers to all paid and unpaid people working in a Virginia Department of Corrections setting who have the potential for exposure to any infectious materials such as blood or body fluids.

Bloodborne pathogens are pathogenic microorganisms that may be present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV).

Occupational Health is a field of healthcare that primarily focuses on maintaining the physical, mental, and social health of employees and is designed to prevent health related challenges in the workplace.

Occupational Body Fluid Exposure is when an employee is placed at risk for bloodborne and other body fluid pathogen transmission Exposure includes a percutaneous injury (Also called a sharps injury: needlestick or other sharp object that penetrates the skin), contact with mucous membrane (nose, eyes, mouth) or non-intact skin (e.g., when the exposed skin is chapped, abraded or afflicted with dermatitis), or contact with intact skin when duration of contact is prolonged (i.e., several minutes or more) and blood, body tissue, or other body fluids are on intact skin. Other body fluids that are considered potentially infectious:

- Cerebrospinal fluid
- Synovial fluid
- Pleural fluid
- Peritoneal fluid
- Pericardial fluid
- Amniotic fluid

Unless there is visible blood with the exposure, saliva, nasal discharge, tears, sweat, vomit, urine and feces are not considered infectious. Semen and vaginal secretions are infectious in the setting of nonoccupational exposure.

High Risk Occupational Exposure - is defined as (1) a sharps injury resulting in penetration of the skin by a contaminated needle, blade, lancet, or other sharp object; (2) mucous membrane (mouth, nose, eyes) exposure of blood, body tissue, or other body fluids considered potentially infectious.

Infectious Disease - is illness caused by harmful pathogens (HIV, Hepatitis B, Hepatitis C) that get into your body.

Health Care Personnel - refer to all paid and unpaid people working in a health-care setting.

Licensed Medical Practitioner - is a physician, dentist, physician's assistant or licensed nurse practitioner that is licensed to prescribe medications under the laws of the Commonwealth of Virginia.

Source patient is the person whose body fluid was involved in the occupational body fluid exposure (inmate/probationer).

PROCEDURE

I. Infectious Disease Risk from Body Fluid Exposure

A. Needlestick/sharps injury

1. The overall risk of contracting an infectious disease from a sharp's injury is considered very low. The average risk of contracting the infectious disease after a sharps injury with infected blood is 0.3% (i.e., 3 in every 1000 needlestick exposures to infected blood will result in infectious disease transmission).
2. The risk can increase depending on the depth of the puncture, the amount of visible blood on the needle, and whether the source patient has a high amount of infectious disease in their blood.

B. Mucous membrane exposure (body fluid enters the nose, mouth, or eyes). The risk after body fluid exposure of the eye, nose, or mouth to infectious blood is estimated to be 0.03% (1 in 3000).

C. Non-intact skin exposure. The risk after body fluid exposure of non-intact skin to infectious blood is estimated at less than 0.1% (less than 1 in 1000).

D. Intact skin exposure. A small amount of blood or body fluid containing blood on intact skin likely poses no risk at all.

E. Exposures that involve prolonged contact with larger volumes of infectious body fluids or higher levels of HIV RNA levels in the blood pose a greater risk.

II. Steps Following Exposure to Body Fluids

A. Immediately wash the area of exposure

1. If you have a needlestick or cut with a contaminated instrument, thoroughly wash the area with running water and soap for 15 minutes. If soap and water are not readily available, use hand sanitizer and immediately find running water and soap. **DO NOT SCRUB OR SQUEEZE.**
2. If splashed with body fluid in your eyes, remove contacts (if applicable), keep your eyes open flush your eyes with water for 15 minutes at an eye wash station. If the eyewash station not available, flush eyes under the sink with tepid water for 15 minutes or as tolerated. Keep eyes open and rotate the eyeballs in all directions to remove contamination. Help may be needed to keep the eyelids open.
3. If splashed with body fluid in your nose or mouth, flush 20 times with water.

B. Report the exposure

1. Report the exposure to your supervisor who should notify the Institutional Safety Specialist (ISS), facility's Human Resource Officer (HRO), Facility's Health Authority, and the Occupational Health Nurse Practitioner.
2. Employee fills out the Employer's Accident Report (261_F8)
3. The Facility Health Authority reviews the source patient's medical history and laboratory results for infectious disease. It is the Health Authority or designee's responsibility to report bloodborne pathogen findings to the exposed employee and Health Care Provider treating the employee. If the source patient has HIV, this information should include, but is not limited to, CD4 count, viral load, and current/previous antiretroviral therapy.
4. The ISS reports the exposure in the OSHA 300 log.
5. The exposure must be documented in the employee's medical record and reported through

Workers' Compensation.

C. Medical evaluation

1. The source person (employee or inmate) and exposed employee should be evaluated by a licensed medical practitioner and appropriate lab tests performed.
2. For high-risk occupational exposure, the employee will be directed to go to the closest Emergency Room (ER) within 2 hours of exposure to be evaluated by a Licensed Medical Practitioner for the occupational exposure and consideration for post-exposure prophylaxis (PEP).
3. The employee will take the HIV PEP stat box (located in Medical) with them to the ER in case HIV PEP is needed. Please see attachment # 1 for guidelines and contents of the HIV PEP stat box. After the visit, The PEP stat box, with any unused medication and literature, should be returned to the facility. The box should then be forwarded to the pharmacy services to be restocked/sealed.
4. During the ER visit, the Licensed Medical Practitioner will order baseline bloodwork for the employee (includes, at minimum, Hepatitis profile and HIV test. CBC, urine HCG-females only, AST and ALT) that will be sent to the hospital's lab for testing. The Licensed Medical Practitioner should also educate the employee on the rates of transmission for specific exposure and PEP indications.
5. The source patient should be evaluated by a Licensed Medical Provider who will provide pretest counseling and perform indicated blood work (included but not limited to Hepatitis profile and HIV test). In addition, if the source patient has known HIV, a CD4 count, and viral load should be performed.

D. Follow-up

1. The Occupational Health Nurse Practitioner will follow-up with the Facility's Health Authority or Designee 72 hours after the exposure for any updates on the source patient's (if known) test results.
2. The Occupational Health Nurse Practitioner will follow-up with the employee via phone call and email 72 hours after the exposure.
3. The Facility's HR staff will give the exposed staff member a choice of 3 Workers' Compensation Panel Physicians to follow up with after the ER visit.
4. The panel physician will determine appropriate follow-up testing and treatment if necessary.

E. Documentation

1. All information and documentation regarding occupational body fluid exposures will be filed in the employee's medical file and be kept confidential.

REFERENCES

CDC Best Practices for Occupational Exposure to Blood
CDC Blood/Body Fluid Exposure Option
NIH Body Fluid Exposures
OSHA Chapter 19: Bloodborne Pathogens
UpToDate