



Training Circular



July

Personal Health Safety



Bloodborne Pathogens

A bloodborne pathogen is an infectious agent that is transmitted through exposure to blood or contaminated body fluids and can cause illness or disease. Some examples of bloodborne pathogens include hepatitis B virus (HBV), hepatitis C virus (HCV) and human immunodeficiency virus (HIV).

Blood is the most important body fluid that may contain a bloodborne pathogen. Other body fluids that can contain these pathogens even if no blood is visible, Other Potentially Infectious Materials (OPIM), include spinal fluid, joint fluid, amniotic fluid (the water from childbirth), semen, vaginal secretions and the small amount of fluid that surrounds the heart, lungs and intestines. Except for semen, it is unlikely that a non-medical worker would have an exposure to any of these other fluids without blood also being present.

Routes of Exposure

An exposure can only take place if the pathogen can get into the body of the exposed person. This can happen if blood or OPIM comes into contact with a mucous membrane (lined parts of the body that open to the outside, eg. lining of the nose, mouth, and eyes), broken skin (such as a recent cut, burn or abrasion) or a parenteral exposure (through injection or intravenous). Employees should recognize potential exposures. **If you are uncertain about an exposure it is better to report it than to assume there is no danger.**



Prevention of Exposures

Employees shall be familiar with the Bloodborne Pathogen Exposure Control Plan as outlined in the Correctional Managed Health Care (CMHC) policy B-14.27.

This plan is designed to help staff identify, minimize, and eliminate risks associated with exposure to potentially infectious diseases they may encounter at work. These are defined as category I job classifications that involve individuals potentially being exposed to human blood or bodily fluids on a regular basis.

Examples of Category I tasks include use of force, contact body search, emergency first aid, cell search, drawing blood, providing medical care.

Work Practices

Properly label containers and storage areas.

Disinfect contaminated equipment and materials before releasing for re-use.

Dispose of contaminated materials according to Infection Control Manual.

Clean spill of blood or OPIM when they occur by trained personnel using appropriate personal protective equipment and disinfectant.

Engineering Controls

Dispose of potentially contaminated sharps in an approved container, according to Infection Control Manual.

Use Personal Protective Equipment (PPE)

PPE includes water-resistant gowns, gloves, face shields, use of force shield, shoe covers and other equipment determined appropriate for a particular job or task.

PPE are to be used whenever exposure to blood or OPIM can reasonably be anticipated.

The employee is responsible for using the appropriate PPE.

The supervisor is responsible for assuring the appropriate PPE is available and is used.

PPE should be inspected before use. If damaged get it replaced.

PPE needs to be cleaned and disinfected when dirty or contaminated.

MRSA

(Methicillin-Resistant Staphylococcus Aureus)

In the general community, MRSA most often causes skin infections. In some cases, it causes pneumonia (lung infection) and other issues. If left untreated, MRSA infections can become severe and cause sepsis - a life-threatening reaction to severe infection in the body.

Who is at Risk?

Anyone can get MRSA on their body from contact with an infected wound or by sharing personal items, such as towels or razors, that have touched infected skin. MRSA infection risk can be increased when a person is in activities or places that involve crowding, skin-to-skin contact, and contaminated surfaces (eg. Dayroom tables, benches, showers, and handrails).

Symptoms

Sometimes, people with MRSA skin infections first think they have a spider bite. However, unless a spider is actually seen, the irritation is likely not a spider bite. Most staph skin infections, including MRSA, appear as a bump or infected area on the skin that might be:

- Red
- Swollen
- Painful
- Warm to the touch
- Full of pus or other drainage
- Accompanied by a fever

HIV/AIDS and Viral Hepatitis

- Hepatitis B (HBV) virus and human immunodeficiency (HIV) are blood-borne viruses transmitted primarily through sexual contact and injection drug use.
- Hepatitis B vaccination is available in the medical department on each facility.
- Hepatitis C (HCV) is a bloodborne virus transmitted through direct contact with the blood of an infected person.

**Tuberculosis**

TB bacteria are spread through the air from one person to another. *The TB*

*bacteria are put into the air when a person with TB disease if the lungs or throat coughs, sneezes, or speaks. **People nearby may breathe in these bacteria and become infected.***

TB is NOT spread by

- Shaking someone's hand
- Sharing food or drink
- Touching bed linens or toilet seats
- Sharing toothbrushes
- Kissing

Signs and Symptoms

Symptoms of TB depend on where in the body the TB bacteria are growing. TB bacteria usually grow in the lungs. TB in the lungs may cause symptoms such as

- A bad cough that lasts 3 weeks or longer
- Pain in the chest
- Coughing up blood or sputum (phlegm from deep inside the lungs)

Other symptoms of TB are

- Weakness or fatigue
- Weight loss
- No appetite
- Chills
- Fever
- Sweating at night

TB Vaccine

- There are two types of tests for TB infection: the TB skin test and the TB blood test.
- The TB skin test requires two visits to the dr. On the first visit the test is placed; on the second visit the sr reads the test.
- The TB skin test is performed by injecting a small amount of fluid (called tuberculin) into the skin on the lower part of the arm.

- A person given the tuberculin skin test must return within 48 to 72 hours to have a trained health care worker look for a reaction on the arm.
- The result depends on the size of the raised, hard area or swelling.
- Positive skin test: This means the person's body was infected with TB bacteria.

Negative skin test: This means the person's body did not react to the test, and that infection is not likely.

Influenza

Influenza is commonly referred to as the flu and is a highly infectious respiratory disease. When the virus is inhaled, it attacks cells in the upper respiratory tract, causing typical flu symptoms such as fatigue, fever, and chills. If a person has any of the influenza-like symptoms, they should refrain from exposing themselves to others in effort to prevent the possible spread of illness.

The CDC recommends annual vaccination as the best tool for influenza prevention. However, for persons with suspected or confirmed influenza, treatment with antiviral drugs can be an important component of clinical care.

Clinical trials and observational data show that early antiviral treatment may (1) shorten the duration of fever and illness symptoms (2) reduce the risk of complications from influenza and (3) shorten the duration of hospitalization.

Prevention

To prevent transmission of bloodborne pathogens, healthcare and public safety workers should adhere to recommended standard precautions and fundamental infection control principals, including safe injection practices and appropriate aseptic techniques.

They should also receive the complete Hepatitis B vaccine series.

Precautions:**Handwashing**

Handwashing is like a "do-it-yourself" vaccine—it involves five simple and effective steps you can take to reduce the spread of diarrheal and respiratory illness so you can stay healthy.

- Wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
- Lather your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.
- Scrub your hands for at least 20 seconds. Need a timer? Hum the "Happy Birthday" song from beginning to end twice.
- Rinse your hands well under clean, running water.
- Dry your hands using a clean towel or air dry them.

Regular handwashing, particularly before and after certain activities, is one of the best ways to remove germs, avoid getting sick, and prevent the spread of germs to others.

Even if gloves are worn, hand washing is still extremely important when gloves are removed. Gloves may become perforated and bacteria can multiply rapidly on gloved hands.

Cough/Sneeze Etiquette

Exercise cough etiquette, which simply means Cover Your Cough! Anytime someone coughs or sneezes, they should cover their mouth and nose with a tissue or cough or sneeze into their upper sleeve, not into their hands. Also, wash hands with soap and water after coughing or sneezing.

Spills

Spills of blood or OPIM must be contained and cleaned up immediately. Broken glass must not be picked up with the hands. Appropriate PPE (eg. gloves, eyewear with side shields, gowns, masks, shoe covers, or face shields as deemed necessary) should be worn by the person cleaning up the spill. Contaminated materials must be disposed of properly. A spill kit containing supplies necessary for cleaning small spills can be obtained from the unit medical department – refer to Infection Control Manual Policy B-14.25 Attachment A for further guidance.

Spill Kits

Spill Kits are to be strategically located on the unit as determined by health authority or his/her designee, with the assistance of the unit warden. After the kit is used, it is to be disposed of properly in the contaminated waste receptacle located in the medical department, and a new kit obtained from the medical department for restocking.

Any staff involved in the use of a spill kit must notify the medical department so that the kit can be replaced.

The unit medical department will provide Spill Kits for the entire unit. The kits are to be used to clean up (decontaminate) blood and body fluids to which standard precautions apply. The kits must contain at a minimum:

- Two pairs of gloves
- Fifteen paper towels
- Four rags
- One large clear plastic bag
- One large red plastic bag
- Bottle of hospital "disinfectant"
- Instructions for use of kit

Resources :

- Center for Disease Control and Prevention—<http://www.cdc.gov/>
- Correctional Managed Health Care Infection Control Policy Manual (B-14.24; 14.25; 14.27)

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