

Preventing the Spread of Ebola and Other Infectious Diseases in Correctional Facilities

Introduction

Corrections officers are exposed to a variety of infectious diseases. Those raising the most concerns are bloodborne pathogens, which includes Ebola, Methicillin Resistant *Staphylococcus aureous* (MRSA) and Tuberculosis.

Microorganisms capable of transmitting diseases are called pathogens or "germs." There are four general classes of pathogens: virus, bacteria, fungus and parasite. Pathogens must have a reservoir or a "host" for it to grow.

Pathogens can spread disease in the following ways:

- Contact with people or objects
- Ingestion (oral-fecal route)
- Inhalation (coughing or sneezing)
- Through blood and mucous membranes

Whether a person becomes ill depends on many factors, including the strength of their immune system. In the workplace, infectious diseases are a recognized hazard employers must control. This is mainly accomplished through the use of standard precautions and for certain diseases, by implementing an Exposure Control Plan (ECP).

What are Standard Precautions?

Standard precautions refer to the infection control practice of treating <u>all</u> human blood, body fluids, secretions, excretions (except sweat), non-intact skin and mucous membranes <u>as</u> <u>infectious</u>. Standard precautions include hand hygiene and depending on the anticipated exposure, the use of a barrier (gloves, gown, mask, eye protection or face shield) between people. Frequent cleaning and sanitizing of kitchen and eating areas, toileting and shower facilities, exercise equipment and health services areas are essential to preventing the spread of disease.

Bloodborne Pathogens

Bloodborne Pathogens are microorganisms present in blood or other potentially infectious materials (OPIM) which can cause disease. Diseases are spread when a person has contact with the blood of an infected individual through a cut or opening in the skin, or through a mucus membrane.

In correctional facilities, the main bloodborne pathogens of concern are Hepatitis B, Hepatitis C and Human Immunodeficiency Virus (HIV), however, the Ebola outbreak has raised concerns among corrections officers.

Unlike HIV and Hepatitis B and C, Ebola can be found in the vomit, stool and most other body fluids of an infected individual. A worker can only be infected from a symptomatic person and the virus can be spread by direct contact with objects such as needles and bed sheets that contain infectious blood or body fluids.

Facilities must be prepared to implement evaluation and isolation protocols to respond to the possibility of a new inmate having traveled to West Africa or been in direct contact with individuals who have, and are running a fever. These individuals should be isolated from the general population until the state health department can determine if further testing is needed. They should be treated at an Ebola treatment center, if necessary, not at the correctional facility. Corrections facilities should have a written plan for dealing with a possible Ebola infected inmate in place and medical and other responsible staff should be familiar with the protocol.

It is estimated that 1 in 7 people living with HIV will pass through a correctional facility. In addition, co-infections (both HIV and Hepatitis C) are commonly seen in inmate populations.

AFSCME locals should protect their members from exposure by ensuring their employer is following OSHA's Bloodborne Pathogen Standard (29 CFR 1910.1030). The standard was enacted to prevent occupational exposure to blood and other body fluids containing blood.

The bloodborne pathogen standard covers private sector workers in all states. It covers state and local government workers in states with federally approved state OSHA plans and those in states with laws that cover public employees. Employers are required to develop and implement an Exposure Control Plan (ECP), which must be updated for possible Ebola exposure. The plan must identify workers at risk, provide safety needles and puncture proof containers, ensure that standard precautions are practiced, provide gloves, masks, and other protective equipment, provide prompt evaluation and treatment to workers who have a needlestick or other exposure to blood, or other body fluids, provide Hepatitis B vaccinations to workers who are exposed to blood, and train workers must have access to it. In addition, the Federal Bureau of Prisons has developed its own treatment and containment protocols.

http://www.bop.gov/policy/om/007_2014.pdf and http://www.bop.gov/resources/pdfs/exposures.pdf

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Methicillin Resistant Staphylococcus aureous (MRSA)

Staphylococcus aureous (staph) is a bacteria commonly found on the skin and in the nose of healthy people. Some staph bacteria have developed resistance to the antibiotics most commonly used to treat infections, and are called Methicillin Resistant Staphylococcus aureus, or MRSA. Staph, including MRSA, can cause minor infections such as pimples and boils, or it can cause more serious infections, such as abscesses, pneumonia and bone or bloodstream infections. The only way to know if a skin infection is caused by MRSA is to have it cultured and tested by a lab.

MRSA is almost always spread person-to-person by skin-to-skin contact. It can also be spread by objects, such as towels and clothing that have been contaminated with the bacteria. Correctional facilities have a higher prevalence of MRSA than the general population. Outbreaks have been documented in CA, GA, IL, MO, MS, NY and TX.

The best way to fight staph and MRSA infections is to prevent bacterial growth on surfaces and limit direct contact with infected individuals. Frequent hand-washing, or the use of alcohol-based hand sanitizers if soap and water are not available, is most effective in controlling the spread of the bacteria. Regular cleaning and disinfection of surfaces, such as toilets, shower areas and fitness equipment is essential. Gloves should be worn during pat downs. When open skin contact is likely, gloves should be changed after contact with each inmate.

Correctional officers should take care to protect their skin and to cover any open sores or wounds. Standard precautions should be practiced.

Worker education is critical in preventing the spread of MRSA. The National Institute of Occupational Safety and Health (NIOSH) provides educational materials for correctional and detention facilities. <u>http://www.cdc.gov/niosh/topics/mrsa.</u> In addition, the Federal Bureau of Prisons has developed guidance protocols for MRSA. <u>http://www.bop.gov/resources/pdfs/mrsa.pdf</u>

Tuberculosis

Tuberculosis (TB) is a bacterial disease that can affect several parts of the body. The most common form of TB disease is pulmonary (lung) tuberculosis, which can cause severe damage to the lungs, disability and death. The symptoms include fever, fatigue, night sweats and dramatic weight loss. Coughing up blood, severe chest pain and hoarseness appear in the later stages of the disease.

Tuberculosis is transmitted through the air (airborne) by microscopic droplets of saliva or sputum containing the TB bacteria. Individuals with active TB disease spread infectious droplets by coughing, sneezing, singing or even talking. These droplets can be inhaled by anyone in the

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area. The bacteria can survive in moist or dried sputum for up to six weeks, but TB is killed by sunlight or ultraviolet light (UV) in a few hours.

TB can only be spread by individuals with active tuberculosis disease. People who have been infected with TB but do not have active disease are not contagious.

Fortunately, the number of adult cases of TB in correctional facilities in the United States has decreased from a high of 1,117 cases in 1994 to 359 cases in 2013.

Because inmates and corrections officers are in close contact, it is extremely important that TB screenings are conducted annually. New inmates must have recent TB screening information included in their medical records to ensure that individuals with active cases are promptly isolated in a negative pressure room. Correctional facilities should follow the Federal Bureau of Prisons guidelines for Tuberculosis. <u>http://www.bop.gov/resources/pdfs/tuberculosis.pdf</u>

Additional Resources

Fact sheets covering these infectious diseases in more depth are available on the AFSCME website at: http://www.afscme.org/news/publications/workplace-health-and-safety/fact-sheets

For more information on bloodborne pathogens, including Ebola, go to the following links:

http://www.cdc.gov/niosh/topics/correctionalhcw/plan.html

http://www.cdc.gov/vhf/ebola/

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For more information about protecting workers from occupational hazards, please contact the AFSCME Department of Research and Collective Bargaining Services at 1625 L Street, NW, Washington, DC 20036 or <u>osha@afscme.org</u>