



Bloodborne and Airborne Pathogens (Universal Precautions)

Universal precautions

Universal precautions are safety guidelines in which all blood and other potentially infectious materials (OPIM) are handled as if they were contaminated. This includes:

- Blood
- Semen
- Vaginal secretions
- · Saliva that may contain blood
- Cerebrospinal fluid
- · Synovial fluid
- · Pleural fluid
- · Any body fluid where blood is visible
- · Any body fluid that cannot be identified

Following universal precautions means using personal protective equipment and following safe work practice controls.

Universal precautions and all body fluids

Previously, universal precautions did not apply to other body fluids, such as nasal secretions, sweat, tears, urine and feces. However, an OSHA written interruption now states that universal precautions should apply to all body fluids because it is impossible to know by looking whether they contain traces of blood.

Emergency procedures for an unexpected exposure incident If you are exposed, take the following actions:

- If blood or OPIM splashes in your eyes or other mucous membranes, flush the area with running water for 20 minutes if possible.
- Wash any exposed area well, preferably with an antibacterial soap.
- Treat any scabs and sores gently when cleaning your skin.
- Report the exposure to your supervisor as soon as possible.
- · Save any potentially contaminated object for testing purposes.
- Seek medical care as soon as possible.

Employers are required to inform you on how to make an incident report in case you are exposed. After receiving your report, an employer must do the following:

- Identify and document the person or other source of the blood or OPIM
- Obtain consent to test the source person's blood and arrange for the testing of that person (unless he or she is already known to be infectious)
- · Inform you of the test results
- · Arrange for you to have your blood tested, if you consent
- Arrange for you to receive counseling and medical care as needed

The treatment and follow-up medical care depend on the type of exposure: the substance involved, the route of transmission and the severity of the exposure.

OSHA requirements for reporting exposure incidents

• Date and time of exposure

- Your job title/classification
- Your work location where the exposure occurred
- · Activity you were performing at the time of the exposure
- · Your training for that activity
- Engineering controls (devices, equipment) used at the time of the exposure
- Preventive work practice controls used at the time of the exposure
- Personal protective equipment used at the time of the exposure

What are airborne pathogens?

There are three types of airborne pathogens: viral, bacterial, and fungal. Meningitis, influenza, pneumonia and tuberculosis are all examples of diseases transmitted through the air. An infectious person's cough or sneeze can send tiny droplets of moisture into the air that contain the pathogen. These contaminants can remain airborne for several hours. Exposure does not always result in infection. The likelihood of transmission depends on the following:

- · How contagious the infectious person is
- · Where the exposure occurs
- How long the exposure lasts
- · How healthy you are at the time of the exposure

Tuberculosis

Tuberculosis usually affects the lungs, but can also affect the brain, spine or kidneys. Many people with a TB infection may not be sick because their bodies are effectively fighting the bacteria, and they are not contagious. Later, however, they may develop TB disease and become contagious. The risk is greatest one to two years after infection and is higher for people with certain medical conditions such as:

- HIV
- · Diabetes mellitus
- · Severe kidney disease
- · Low body weight
- Certain types of cancer (leukemia, Hodgkin's disease, or cancer of the head or neck)

According to the Centers for Disease Control and Prevention, employees in certain workplaces also face a greater risk of exposure. These workplaces include:

- Commercial airlines
- Correctional facilities
- Drug and treatment centers
- Health care facilities
- Homeless shelters
- Long-term care facilities

Prevention of TB Infection

Engineering controls may include isolation of TB patients, UV lighting to destroy environmental bacteria (a method still being researched), special air filters, and fitted face masks and respirators for use around people known to have TB.