



Blood Borne Pathogens

29 CFR 1910.1030

Question and Answer

1. What are Blood borne pathogens?

A **pathogen** or **infectious agent** is a [biological agent](#) that causes [disease](#) or [illness](#) to its [host](#). The term *pathogen* is derived from the [Greek](#) "that which produces suffering."
Pathogen examples: Parasite, Bacteria, Virus, Fungus.

2. How are Blood borne pathogens harmful?

Blood Borne pathogens cause diseases that live within the bloodstream. These diseases cause lifelong health problems and some diseases shorten life expectancy.

3. How do you come into contact with Blood-borne pathogens?

Blood borne pathogens are transmitted when contaminated blood or body fluids enter the body of another person. In the workplace setting, transmission is most likely to occur through: **a.** Accidental puncture by a sharp object, such as a needle, broken glass, or other "sharps", contaminated with the pathogen.

b. Contact between broken or damaged skin and infected body fluids.

c. Contact between mucous membranes and infected body fluids.

4. How do I protect myself?

Always wear Personal Protective Equipment (PPE) when coming into contact with blood, mucus or other bodily fluids. Treat all bodily fluids as if known to be contaminated.

Blood Borne Diseases

- Human Immunodeficiency Virus (HIV)
- Hepatitis B (HBV)
- Hepatitis C (HCV)

Hepatitis B is a liver disease. It ranges in severity from a mild illness, lasting a few weeks, to a serious long-term illness that can lead to liver disease or liver cancer.

Transmission: Contact with infectious blood, semen, and other body fluids from having sex with an infected person, sharing contaminated needles to inject drugs, or from an infected mother to her newborn.

Vaccination: Hepatitis B vaccination is recommended for all infants, older children and adolescents who were not vaccinated previously, and adults at risk for HBV infection.

Hepatitis C a liver disease caused by the hepatitis C virus (HCV). HCV infection sometimes results in an acute illness, but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer.

Transmission: Contact with the blood of an infected person, primarily through sharing contaminated needles to inject drugs.

Vaccination: There is no vaccine for hepatitis C.

Human immunodeficiency virus (HIV) is a lentivirus (a member of the retrovirus family) that can lead to [*acquired immunodeficiency syndrome*](#) (AIDS), a condition in humans in which the immune system begins to fail, leading to life-threatening opportunistic infections.

Transmission: Contact with infectious blood, and semen from having sex with an infected person, sharing contaminated needles to inject drugs, or from an infected mother to her newborn.

Vaccination: There is currently no vaccine or cure for HIV or AIDS. The only known method of prevention is avoiding exposure to the virus. However, a course of antiretroviral treatment administered immediately after exposure, referred to as post-exposure prophylaxis, is believed to reduce the risk of infection if begun as quickly as possible.

Exposure control Plan

- Exposure determination Controls
- Universal precautions (or equivalent system)
- Engineering controls
- Work practices
- Personal protective equipment
- Housekeeping
- Hepatitis B vaccination
- Post exposure evaluation & follow-up
- Communication and training
- Recordkeeping

Universal precautions

Human body fluids and all human blood are to be treated as if known to be infectious.

This method removes all guessing as to what PPE should be worn when handling blood and body fluids.

When working potentially infectious blood always wear the approved rubber gloves and safety glasses.

Engineering controls

Sharps disposal containers: Closable, Puncture resistant, Leak proof and Labeled.

Never recap sharps!

Work place practices

- Prohibit two-handed needle recapping
- Do not bend, break or remove needles.
- Wash hands between glove use
- Flush body parts with water after contact with blood or OPIM
- Remove PPE before leaving work area

Personal Protective equipment

- Gloves
- Gowns
- Face shields and/or masks
- Eye protection
- Resuscitation devices
- Lab coats

House keeping

- Written cleaning and decontamination schedule
- Contaminated waste disposal methods
- Laundry

Identify Biological Waste

- Blood or OPIM
- Liquid
- Semi-Liquid
- Contaminated sharps
- Lab or medical waste
- Other items caked with dried blood or OPIM

Biological waste containers

- Easily accessible
- Leak proof
- Maintained upright
- Labeled
- Replaced routinely (no overfill!!!)
- County or City Health Dept. Regulations for disposal

Hepatitis B Vaccine

- Is a 3 shot series that has 95% effectiveness for adults
- Make Hepatitis B vaccination available
- No cost to employees
- Reasonable time and place
- If series is interrupted, continue at any time rather than restart series

Incident exposure

- Cuts, puncture, needle sticks
- Mucous membrane
- Eye
- Non-intact skin

Exposures Evaluation

- Provide medical evaluation and testing for HBV, HCV, and HIV
- Identify source individual of exposure, if possible.
- Provide information to healthcare provider for routes of entry of exposure.
- Insure that the healthcare provides
- Results of the employee's test (if legal)
- Post exposure treatment as needed
- Provided at no cost to employee

Follow up

- Provide in writing to employer:
- Employee has been informed of the results
- Employee has been informed of any medical conditions resulting from exposure
- All specific findings or diagnoses are confidential to employee

Recordkeeping

- HBV vaccination status
- Written medical opinion of exposure incidents
- Exposure incident details
- Maintain for length of employment + 30 years

Communicate with Signs and Labels

Regulated waste
Containers with blood or OPIM
Biohazard symbol



I have received, read, and understand all information given to me in this Blood Borne Pathogen training meeting. I understand that it is my responsibility to ensure the safety of myself, coworkers, and students when working with potentially infectious materials. I understand it is my responsibility to wear PPE personal protective equipment and clothing when potentially infectious materials are being used, transported or handled.

Signature: _____ Date: _____

Department: _____