

SAFETY MATTERS



BLOODBORNE PATHOGENS AND NEEDLESTICK SAFETY

Workers in many different occupations are at risk of exposure to bloodborne pathogens, including Hepatitis B, Hepatitis C, and HIV/AIDS. First aid providers, housekeeping personnel, and nurses are examples of workers who may be at risk of exposure.

In 1991, OSHA issued the Bloodborne Pathogens Standard to protect workers from this risk. In 2001, in response to the Needlestick Safety and Prevention Act, OSHA revised the Bloodborne Pathogens Standard, 29 CFR 1910.1030. The revised standard clarifies the need for employers to select safer needle devices and to involve employees in identifying and choosing these devices. The updated standard also requires employers to maintain a log of injuries from contaminated sharps.



The Bloodborne Pathogens Standard

OSHA regulation 29 CFR 1910.1030 deals with exposure to blood borne pathogens; it states that the employer's responsibility is to:

- Create an exposure control plan.
- Provide training to workers who have a risk of exposure due to their job duties.
- Institute engineering and work practice controls.
- Enforce the use of personal protective equipment.
- Offer a Hepatitis B Vaccine.
- Conduct regular exposure evaluations and follow-ups.
- Use signs and labels to warn workers of potential hazards.

The OSHA Bloodborne Pathogens Standard applies to health professionals, designated first aid providers and to other employees such as maintenance and housekeeping workers **where there is a likely exposure** to bloodborne pathogens.

Hazard Recognition

OSHA estimates that 5.6 million workers in the health care industry and related occupations are at risk of occupational exposure to bloodborne pathogens, including Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and others. All occupational exposure to blood or other potentially infectious materials place workers at risk for infection with bloodborne pathogens.

OSHA defines blood to mean human blood, human blood components, and products made from human blood. Other potentially infectious materials include:

(1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

(2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead).

(3) HIV-containing cell or tissue cultures, organ cultures and HIV- or HBV-containing culture medium or other solutions; blood, organs, or other tissues from experimental animals infected with HIV or HBV.



Prevention of Exposure to Bloodborne Pathogens

The best approach is to follow Universal Precautions – treating all blood and body fluids as potential contaminants.

- Wear latex gloves if you are going to be in contact with body fluids.
- Wear a pocket mask if CPR is needed.
- Apply a bandage to cuts, scrapes and broken skin.
- Wash hands thoroughly after handling contaminants.
- Discard needles and contaminated materials in appropriate containers.
- When handling refuse bags be alert to sharps and wear hand protection.
- Never pick up glass with hands – use a broom and dust pan instead.
- Discard all clothing, shoes and protective wear that have come in contact with contaminants.
- Do not bring contaminated clothing or protective wear out of the workplace.
- Never blindly reach into refuse containers.
- When handling bed sheets and linen, hotel employees should use caution and wear hand protection.
- Do not share razors.



Needlestick Safety

Studies show that nurses sustain the most needlestick injuries. According to the NIOSH Alert Preventing Needlestick Injuries in Health Care Settings, it is estimated that 600,000 to 800,000 needlestick injuries and other percutaneous injuries occur annually among health care workers. As many as one-third of all sharps injuries occur during disposal.

The Centers for Disease Control and Prevention estimate that 62 to 88 percent of sharps injuries can be prevented simply by using safer medical devices. In addition, one should never break, bend or recap used needles or other sharp objects.



Post-Exposure Evaluation

Besides needlesticks, additional exposure incidents include splashes and other contact with mucous membranes or non-intact skin. Post-exposure management is an integral part of a complete program for preventing infection following exposure incidents.

OSHA mandates post-exposure and follow-up procedures for employees covered under the Bloodborne Pathogens Standard who are reporting an exposure incident.

These include:

- Prompt medical evaluation.
- Document how the exposure took place.
- Identify and test the source individual if feasible. In some jurisdictions **consent may be needed**.
- Test the exposed employee's blood **if consent is granted**.
- Provide necessary counseling.
- Evaluate, treat and follow up on any reported illness.

