Basics of Bloodborne Pathogens

By Mike Huss
Loss Control Supervisor

By definition, a pathogen is any agent that can cause disease -- Bloodborne Pathogens (BBP) are microorganisms in blood or other bodily fluids that can cause illness and disease in people through contact with contaminated blood and body fluids. The standard on which all Bloodborne Pathogen programs are based is OSHA Standard 29 CFR 1910.1030 “Bloodborne Pathogens.”

Means of Transmission

BBP’s are transmitted when contaminated blood or body fluids enter the body of another person. This can occur through a number of pathways, such as:

- An accidental puncture by a sharp object (needles, scalpels, broken glass, razor blades) contaminated with a pathogen
- Open cuts or skin abrasions that come in contact with contaminated blood or body fluids
- Sexual contact
- Indirect transmission (touching blood, including dried blood then touching the eyes, mouth, nose or an open cut)

The Centers for Disease Control and Prevention (CDC) estimates that between 600,000 and 800,000 occupational needle stick injuries occur each year, many of which are unreported. Of these, roughly 385,000 needle stick and other sharps-related injuries are sustained by healthcare personnel in hospital settings. Among the 35 million healthcare workers worldwide, about 3 million receive percutaneous (through the skin) exposure to BBP annually, according to the World Health Organization (WHO). About 2 million of these incidents involve hepatitis B (HBV); 900,000 involve hepatitis C (HCV); and 170,000 involve human immunodeficiency virus (HIV). Symptoms of a bloodborne infection sometimes are not apparent for weeks or months following exposure.

Minimizing Exposure

The BBP standard is composed of:
- a written plan (entitled the Exposure Control Plan), training requirements and recordkeeping guide-lines. Employers must minimize the exposure of employees to BBP whenever the potential for that exposure exists. OSHA has taken the position that there are no “risk-free” populations, and enforcement of OSHA’s “general duty clause” implies that employers must be knowledgeable of and comply with the BBP standard. Risk can be minimized through improved engineering design and with work practices (administrative controls) through the use of appropriate personal protective equipment (PPE), and by addressing housekeeping issues.

Do:

- Use appropriate PPE when working with blood or infectious materials
- Check for damage
- Remove PPE carefully to avoid self-contamination
- Dispose of contaminated PPE correctly
- Ensure you are trained in the use of PPE and document it
- Use good personal hygiene
- Wash exposed skin immediately with soap and water
- Wash thoroughly after removing PPE
- Flush exposed eyes, nose or mouth quickly and thoroughly with water
- Cover open cuts

Use good work practices

- Minimize splashing of infectious materials
- Clean up spills immediately
- Clean and decontaminate all equipment and surfaces in contact with blood or other infectious material

Don’t:

- Have unprotected sex, use illicit drugs or share needles
- Worry about getting one of these diseases through casual contact
- Eat or drink or keep food and drinks in areas where infectious materials are used
- Break, bend or recap contaminated needles
- Clean up broken glass by hand, use a broom and dustpan

Safety Calendar

By Kim Coonrod
Loss Control Manager

August – Eye Health and Safety Month
September – National Preparedness Month
October – National Crime Prevention Month
New OSHA Residential Construction Regulation in 2011

On June 9th, OSHA announced a three-month enforcement phase-in period to allow residential construction employers to come into compliance with the agency’s new directive to provide residential construction workers with fall protection. During the phase-in period June 16 - September 15, if an employer is in full compliance with the old directive (STD 03-00-001), OSHA will not issue citations, but will instead issue a hazard alert letter informing the employer of the feasible methods that can be used to comply with OSHA’s fall protection standard or implement a written fall protection plan. If the employer’s practices do not meet the requirements set in the old directive, OSHA will issue appropriate citations. If an employer fails to implement the fall protection measures outlined in a hazard alert letter, and OSHA finds violations involving the same hazards during a subsequent inspection of one of the employer’s workplaces, the Area Office will issue appropriate citations.

New NIOSH Fact Sheet Highlights Trenching Safety

From 2000–2009, 350 workers died in trenching or excavation cave-ins—an average of 35 fatalities per year. NIOSH recently released a fact sheet detailing how to prevent worker deaths from trench cave-ins. Workers are at risk of death from cave-ins during trenching and excavation activities. NIOSH recommends engineering controls, protective equipment, and safe work practices to minimize hazards for workers.

New OSHA Campaign Targets Heat Illness

OSHA recently launched a national outreach initiative to educate workers and employers about the hazards of working outdoors in the heat. The campaign focuses on the importance of providing workers with water, rest, and shade, which are core components of the heat illness prevention standard adopted by California’s Division of Occupational Safety and Health.

Lessons from Losses

By Nick Gustafson
Loss Control Coordinator

A nurse was giving an infant patient an immunization shot. Immediately after administering the vaccine, the nurse was kicked in the hand by the infant, causing the used needle to puncture her left index finger. Luckily, she was not exposed to any serious infections. Nonetheless, treatment and lost work time cost nearly $13,000.

Lesson: Always use caution when working with or around any sharp objects, particularly needles. The risk of contamination is extremely high, and in some cases could cause lifelong illness or disability for employees. Never re-use needles and always be sure to use any safety measures available.

For more information about the risk of needlestick injuries and how to avoid them, please contact the FirstComp Loss Control department.

FirstComp employs a dedicated team of loss control professionals who are ready and able to provide advice and answer questions pertaining to all areas of workplace safety. The Loss Control staff has over fifty years of experience providing safety & health advice to employers around the country. The staff is available to assist with training programs, safety resources and compliance concerns.

Policyholders in western states (CA, AK, HI, NM, NV and CO) can contact Mike Huss in our Nevada office. Midwestern policyholders (AR, IA, KS, MN, MO, NE, OK, SD and TX) can contact Nick Gustafson in Omaha. Eastern state policyholders (AL, CT, DE, FL, IN, LA, MI, MS, NH, NC, PA, RI, SC, TN, VT, VA and WV) can contact Courtney Rosengartner in Omaha.

For information about any of FirstComp’s Loss Control Services, please call (888) 500-3344 or email losscontrol@firstcomp.com

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