Biohazard Exposure

Exposure to medical, biological, and/or other potential infectious material (OPIM) can pose a significant health hazard to employees. Protective equipment, such as safety glasses, face shields, respirators, dust masks, boot covers, or impervious clothing may be necessary, if the potential for splashing, splattering, or a spill exists. The following procedures should be implemented whenever the possibility of exposure exists.

Preventative Measure

- Cover all cuts, abrasions, and other areas of non-intact skin.
- Cover all exposed skin with clothing or PPE.
- Never handle wastes with bare hands; leather provides better protection than rubber gloves.
- Avoid physical contact with bio-hazardous waste, whether in red bags or sharps containers. Always wear gloves to move these items and avoid direct contact with hazardous material.
- Be aware of the possible presence of bio-hazardous waste or OPIM when cleaning machinery or equipment. In particular, be aware that sharps can become stuck in equipment, and can pose hazards to operators and maintenance workers. Where possible, use some implement or cleaning method other than your hands. If you do have to use your hands, wear gloves and NEVER REACH WHERE YOU CAN'T SEE.
- Always wash hands after removing gloves, even if you have not been in direct contact with hazardous materials.
- Always wash before eating, drinking, smoking, or putting anything in your mouth.

Reactive Measures

- If exposed to blood or OPIM; report the incident and immediately take actions to prevent further exposure and limit contamination to others.
- If you come in contact with infectious waste, wash your hands and any exposed skin thoroughly in warm water and soap or in waterless antiseptic cleaner.
- Remove clothing, boots, and gloves that have been in contact with infectious waste as soon as possible, taking care to avoid contact with skin surfaces. Use gloves to remove items.
- The risk of disease from contaminated clothing is very low but should still be handled as little as possible. While wearing gloves, place clothes in a leak proof bag and laundered according to manufacturer's instructions. Boots and leather goods may be brush-scrubbed with soap and hot water to remove contamination.

Employers are obligated to comply with OSHA regarding occupational exposure to bloodborne pathogens. The common pathogens include, but are not limited to, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus (HIV).

Although cadavers are treated with Formaldehyde to destroy bloodborne pathogens, sharps containers and other bio-medical waste is potentially hazardous. It is the responsibility of supervisors to assess the likelihood of employees being exposed.

Summary of OSHA Regulations

The following is a partial summary of OSHA regulations regarding occupational exposure to bloodborne pathogens, OSHA 29 C.F.R. 1910.1030. Employers that have employees who can be reasonably anticipated to be exposed to infectious material must follow this OSHA regulation.

According to OSHA's written enforcement procedures, employees who handle medical waste are considered to have occupational exposure. In general, the rules require employers to develop exposure control plans, to adopt engineering controls and work practices that minimize exposures, to provide hand washing facilities and personal protective equipment, to provide training to workers, to provide hepatitis B vaccines free of charge, to provide medical evaluation and follow-up to exposed workers, and to maintain medical and training records.

Under the OSHA rule, exposure means skin, eye, mucous membrane (mouth and nasal) contact with blood or other potentially infectious materials (OPIM). Blood means human blood, blood products, or blood components. OPIM includes all body fluids in situations where it is difficult or impossible to differentiate between body fluids.

This primarily applies to employees routinely exposed to blood or OPIM such as; first responders, healthcare/medical treatment providers, etc. Annual education/awareness on this subject, to include an emphasis on proper PPE, should be implemented and documented by applicable departments.

Employees Who Rarely Come in Contact with Blood or OPIM

Employers with employees who are not routinely exposed to blood or OPIM may fall under the standard, in which case the hepatitis B vaccination would not need to be offered until an incident involving the presence of blood or OPIM occurs. In order for an employer to meet the requirements of the standard, the following conditions must be met:

- Reporting procedures must be in place under your organization's exposure control plan to ensure that all incidents involving blood or OPIM are reported before the end of the work shift during which the incident occurred.
- Reports of incidents must include the names of all involved employees; a description of the circumstances of the incident, including the date and time; and a determination of whether an exposure incident, as defined by the standard, has occurred.
- Exposure reports must be included on a list of such incidents, be readily available to all employees, and provided to OSHA upon request.
- The specifics of the reporting procedure must be included in bloodborne pathogens training.
- All employees involved in situations involving the presence of blood or OPIM, regardless of whether a specific exposure incident occurs, must be offered the full hepatitis B vaccination series as soon as possible, but no later than 24 hours after the incident. If an exposure incident occurs, all other post-exposure follow-up procedures must be initiated immediately, and the employer must ensure the medical provider is familiar with and follows the recommendations for post-exposure follow-up set forth by the Centers for Disease Control.
- Bloodborne pathogens training must be provided to all affected employees.
- Appropriate personal protective equipment, clean-up materials, and equipment must be provided