

# BLOODBORNE PATHOGENS

## PROTECTING WORKERS AGAINST BLOODBORNE PATHOGENS

According to OSHA, protection is needed for the more than five million workers who are at risk of being exposed to bloodborne pathogens. A bloodborne pathogen is a microorganism or substance carried in the blood and capable of producing a disease. Examples are HIV (human immuno-deficiency virus) which leads to AIDS, HBV (hepatitis B virus), malaria, and syphilis.

The bloodborne pathogen standard, (29 CFR, 1910.1030), which went into effect in July 1992, applies to **any employee who has an occupational exposure to blood or other potentially infectious material (OPIM)**. OSHA's definition of "occupational exposure" is: "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties." A parenteral is the piercing of mucous membranes or the skin barrier - needle sticks, human bites, cuts and abrasions, etc.

It is quite obvious that physicians, nurses, dentists, health care employees, and emergency medical technicians would come under the standard: workers who handle such equipment as oxygen cylinders or other medical gas equipment contaminated with blood or other body fluid, and those employees assigned to provide emergency first aid, would also be covered. In the latter case, if an employee is trained in first aid and designated by the employer as responsible for rendering medical assistance as part of his/her job duties, that employee is covered by the standard.

The basic elements of the standard are as follows:

1. **EXPOSURE CONTROL PLAN:** This written plan must identify employees who are occupationally exposed to bloodborne pathogens. The plan must include a list of all job classifications where all or some employees have exposure; and the tasks and procedures where occupational exposure may occur have to be identified. The plan must also include a schedule for implementation of the standard, which involves training, hepatitis B vaccinations, postexposure evaluation and follow-up, engineering and workplace controls, and record keeping. The plan must be updated annually, or whenever new information becomes available or employee tasks are revised.
2. **METHODS OF COMPLIANCE:** Methods to protect employees are 1) engineering and work practice controls, 2) personal protective equipment, and 3) specific housekeeping practices.

**Engineering controls** would include items such as self-sheathing needles, special containers for contaminated items, shielding type "mouth-to-mouth" resuscitation devices, biosafety cabinets, or other items that protect the worker from exposure.

**Work practice controls** cover such things as 1) washing hands after each procedure, when gloves are removed or immediately after skin contact with blood or OPIM, 2) prohibition against eating, smoking, applying cosmetics, or handling contact lenses in areas where there is reasonable likelihood of exposure.

**Personal Protective equipment** includes gloves, face shields, masks, eye protection, gowns, aprons and other items which would prevent blood or OPIM from contaminating an employee's work clothes, skin, eyes, mouth, or mucous membranes.

**Housekeeping practices** requirements include a written schedule of cleaning, a list of surfaces to be cleaned, and specific responses to surface contact with blood and OPIM. In addition, special care is required in the laundering of protective clothing and items. It is the **employer's** responsibility to control the laundering and cleaning that is required. Employees are not permitted to take these items home for laundering or cleaning.

3. **TRAINING:** The hazards of bloodborne pathogens must be communicated to at-risk employees. Training must be conducted during working hours at the time of initial assignment, annually, and whenever a new position or task changes. The trainer must be knowledgeable in the subject matter and the program must be an interactive one where questions can be asked of, and answered by the trainer. Training records must document the dates and contents of training, the names and titles of employees trained, and the name and qualifications of the trainer. Training records must be kept for three years.
4. **HEPATITIS B VACCINATION:** Employers must make available, at no cost to the employees at risk, a series of three hepatitis B vaccinations. The offer of vaccination must be made after employees have received training, and within 10 days of initial assignment. The offer of vaccination can be declined by the employee, who must then sign a declination form (as shown in the standard). The employee has a right to change his/her mind and receive the vaccination later at the employer's expense. OSHA has recognized the lesser risk to personnel who provide first aid as a adjunct to their normal work duties, and is allowing such employees to be vaccinated within 24 hours following a contact with blood or OPIM, as opposed to receiving it within the first 10 days of assignment.

5. **POSTEXPOSURE EVALUATION AND FOLLOW-UP:** Immediately after an exposure incident, the employer must provide the employee with a confidential medical exam. All results are confidential between the physician and the employee; however, the employer will get a copy of the physician's opinion, indicating that the employee was informed of the results and whether further follow-up is required.
6. **RECORD KEEPING:** Aside from training records, employers must retain all medical records, and records regarding exposures. Confidential medical records must be retained for 30 years following the employee's duration of employment. The records must include the employee's name, social security number, hepatitis B vaccination status, results of medical exams, tests, and follow-ups, physician's written opinions, and copies of information provided to a physician.

Whether you are required to adhere to the OSHA standard on bloodborne pathogens depends on the types of exposures employees might receive while servicing a hospital or medical facility, handling contaminated equipment or cylinders, and/or whether any of your employees are expected to render first aid which could put them at risk of exposure to blood or OPIM. NWSA members are advised to work out arrangements with medical facilities to prevent contamination of cylinders by careful placement or, alternatively, by packaging them in plastic bags that can be removed at the medical facility and included with their waste before the empty cylinders are picked up. If you have employees who are liable to be at risk or are expected to render first aid, you probably should contact a health consultant to assist in setting up a program that will meet the standard for your operation. A model bloodborne pathogen exposure control plan is available by sending a self-addressed envelope to OSHA Region III, Gateway Building, Suite 2100, 3535 Market Street, Philadelphia, PA 19104, or by calling 215-596-1201, to request the plan.

This review is only the high-lights of the bloodborne pathogen standard. Those who think they may be required to adhere to the standard should obtain the complete text of 29 CFR, 1910.1030, to determine those areas that apply.