OSHA FactSheet

Hepatitis B Vaccination Protection

Hepatitis B virus (HBV) is a pathogenic microorganism that can cause potentially lifethreatening disease in humans. HBV infection is transmitted through exposure to blood and other potentially infectious materials (OPIM), as defined in the OSHA Bloodborne Pathogens standard, 29 CFR 1910.1030.

Any workers who have reasonably anticipated contact with blood or OPIM during performance of their jobs are considered to have occupational exposure and to be at risk of being infected. Workers infected with HBV face a risk for liver ailments which can be fatal, including cirrhosis of the liver and primary liver cancer. A small percentage of adults who get hepatitis B never fully recover and remain chronically infected. In addition, infected individuals can spread the virus to others through contact with their blood and other body fluids.

An employer must develop an exposure control plan and implement use of universal precautions and control measures, such as engineering controls, work practice controls, and personal protective equipment to protect all workers with occupational exposure. In addition, employers must make hepatitis B vaccination available to these workers. Hepatitis B vaccination is recognized as an effective defense against HBV infection.

HBV Vaccination

The standard requires employers to offer the vaccination series to all workers who have occupational exposure. Examples of workers who may have occupational exposure include, but are not limited to, healthcare workers, emergency responders, morticians, first-aid personnel, correctional officers and laundry workers in hospitals and commercial laundries that service healthcare or public safety institutions. The vaccine and vaccination must be offered at no cost to the worker and at a reasonable time and place.

The hepatitis B vaccination is a non-infectious, vaccine prepared from recombinant yeast cultures, rather than human blood or plasma. There is no risk of contamination from other bloodborne

pathogens nor is there any chance of developing HBV from the vaccine.

The vaccine must be administered according to the recommendations of the U.S. Public Health Service (USPHS) current at the time the procedure takes place. To ensure immunity, it is important for individuals to complete the entire course of vaccination contained in the USPHS recommendations.

The great majority of those vaccinated will develop immunity to the hepatitis B virus. The vaccine causes no harm to those who are already immune or to those who may be HBV carriers. Although workers may desire to have their blood tested for antibodies to see if vaccination is needed, employers cannot make such screening a condition of receiving vaccination and employers are not required to provide prescreening.

Employers must ensure that all occupationally exposed workers are trained about the vaccine and vaccination, including efficacy, safety, method of administration, and the benefits of vaccination. They also must be informed that the vaccine and vaccination are offered at no cost to the worker. The vaccination must be offered after the worker is trained and within 10 days of initial assignment to a job where there is occupational exposure, unless the worker has previously received the vaccine series, antibody testing has revealed that the worker is immune, or the vaccine is contraindicated for medical reasons. The employer must obtain a written opinion from the licensed healthcare professional within 15 days of the completion of the evaluation for vaccination. This written opinion is limited to whether hepatitis B vaccination is indicated for the worker and if the worker has received the vaccination.

Declining the Vaccination

Employers must ensure that workers who decline vaccination sign a declination form. The purpose of this is to encourage greater participation in the vaccination program by stating that a worker declining the vaccination remains at risk of acquiring hepatitis B. The form also states that if a worker initially declines to receive the vaccine, but at a later date decides to accept it, the employer is required to make it available, at no cost, provided the worker is still occupationally exposed.

Additional Information

For more information, go to OSHA's Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics web page at: https://www.osha.gov/SLTC/bloodbornepathogens/index.html.

To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office under the "U.S. Department of Labor" listing in your phone book, or call us toll-free at (800) 321-OSHA (6742).

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

For assistance, contact us. We can help. It's confidential.



Occupational Safety and Health Administration www.osha.gov 1-800-321-6742

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OSHA FactSheet

OSHA's Bloodborne Pathogens Standard

Bloodborne pathogens are infectious microorganisms present in blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV), the virus that causes AIDS. Workers exposed to bloodborne pathogens are at risk for serious or life-threatening illnesses.

Protections Provided by OSHA's Bloodborne Pathogens Standard

All of the requirements of OSHA's Bloodborne Pathogens standard can be found in Title 29 of the Code of Federal Regulations at 29 CFR 1910.1030. The standard's requirements state what employers must do to protect workers who are occupationally exposed to blood or other potentially infectious materials (OPIM), as defined in the standard. That is, the standard protects workers who can reasonably be anticipated to come into contact with blood or OPIM as a result of doing their job duties.

In general, the standard requires employers to:

- Establish an exposure control plan. This is a
 written plan to eliminate or minimize occupational exposures. The employer must prepare
 an exposure determination that contains a list
 of job classifications in which all workers have
 occupational exposure and a list of job classifications in which some workers have occupational exposure, along with a list of the tasks
 and procedures performed by those workers
 that result in their exposure.
- Employers must update the plan annually to reflect changes in tasks, procedures, and positions that affect occupational exposure, and also technological changes that eliminate or reduce occupational exposure. In addition, employers must annually document in the plan that they have considered and begun using appropriate, commercially-available effective safer medical devices designed to eliminate or minimize occupational exposure. Employers must also document that they have solicited input from frontline workers in identifying, evaluating, and selecting effective engineering and work practice controls.

- Implement the use of universal precautions (treating all human blood and OPIM as if known to be infectious for bloodborne pathogens).
- Identify and use engineering controls. These
 are devices that isolate or remove the bloodborne pathogens hazard from the workplace.
 They include sharps disposal containers, selfsheathing needles, and safer medical devices,
 such as sharps with engineered sharps-injury
 protection and needleless systems.
- Identify and ensure the use of work practice controls. These are practices that reduce the possibility of exposure by changing the way a task is performed, such as appropriate practices for handling and disposing of contaminated sharps, handling specimens, handling laundry, and cleaning contaminated surfaces and items.
- Provide personal protective equipment (PPE), such as gloves, gowns, eye protection, and masks. Employers must clean, repair, and replace this equipment as needed. Provision, maintenance, repair and replacement are at no cost to the worker.
- Make available hepatitis B vaccinations to all workers with occupational exposure. This vaccination must be offered after the worker has received the required bloodborne pathogens training and within 10 days of initial assignment to a job with occupational exposure.
- Make available post-exposure evaluation and follow-up to any occupationally exposed worker who experiences an exposure incident. An exposure incident is a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM. This evaluation and follow-up must be at no cost to the worker and includes documenting the route(s) of exposure and the circumstances

under which the exposure incident occurred; identifying and testing the source individual for HBV and HIV infectivity, if the source individual consents or the law does not require consent; collecting and testing the exposed worker's blood, if the worker consents; offering post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. The healthcare professional will provide a limited written opinion to the employer and all diagnoses must remain confidential.

- Use labels and signs to communicate hazards. Warning labels must be affixed to containers of regulated waste; containers of contaminated reusable sharps; refrigerators and freezers containing blood or OPIM; other containers used to store, transport, or ship blood or OPIM; contaminated equipment that is being shipped or serviced; and bags or containers of contaminated laundry, except as provided in the standard. Facilities may use red bags or red containers instead of labels. In HIV and HBV research laboratories and production facilities, signs must be posted at all access doors when OPIM or infected animals are present in the work area or containment module.
- Provide information and training to workers.
 Employers must ensure that their workers receive regular training that covers all elements of the standard including, but not limited to: information on bloodborne pathogens and diseases, methods used to control occupational

- exposure, hepatitis B vaccine, and medical evaluation and post-exposure follow-up procedures. Employers must offer this training on initial assignment, at least annually thereafter, and when new or modified tasks or procedures affect a worker's occupational exposure. Also, HIV and HBV laboratory and production facility workers must receive specialized initial training, in addition to the training provided to all workers with occupational exposure. Workers must have the opportunity to ask the trainer questions. Also, training must be presented at an educational level and in a language that workers understand.
- Maintain worker medical and training records.
 The employer also must maintain a sharps injury log, unless it is exempt under Part 1904 Recording and Reporting Occupational Injuries and Illnesses, in Title 29 of the Code of Federal Regulations.

Additional Information

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