

Bloodborne Pathogens (BBP)

Bloodborne Pathogens Standard

The OSHA bloodborne pathogens standard 29 CFR 1910.1030 protects employees who work in occupations where they are at risk of exposure to blood or other potentially infectious materials. This standard requires employers to develop a written exposure control plan (ECP) that explains how they will implement the standard, provide training to employees, and protect the health and safety of their workers and volunteers. Without this plan, employers have no program and there is little hope to properly protecting their workers. This article can assist in creating an exposure control plan to meet the requirements of the OSHA bloodborne pathogens standards.

This article provides general guidance, **you must tailor your plan to the specific requirements of your establishment.** Your written plans must be accessible to all employees, either on-line or in an area where they are available for review on all shifts.

There are 7 elements of an exposure control plan. These elements include exposure determination, methods of implementation and control, Hepatitis B Vaccine, post-exposure evaluation and follow-up, communication of hazards and training, recordkeeping, and administration of post-exposure incidents.

Program Administration

In order for the plan to be successful, there should be responsible people or departments selected for implementing the plan. This success will also require employee understanding and accordance with the ECP.

- Implementation of the ECP: A designated person or department should maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures.
- Employees who are determined to have occupational exposure to blood or other potentially infectious materials (OPIM) must comply with the procedures and work practices outlined in the ECP.
- A designated person or department should be responsible for providing and maintaining all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard.
- A designated person or department should be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained.
- A designated person or department should be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives.

For each responsible person or department for the program administrations, their location and name should also be provided.

Exposure Determination

The exposure determination should contain the following:

- A list of all job classifications in which all employees in those job classifications have occupational exposure
- A list of job classifications in which some employees have occupational exposure
- A list of all tasks and procedures in which occupational exposure occurs and that are performed by employees in job classifications that may have occupational exposure

The exposure determination shall be made without regard to the use of personal protective equipment.

Methods of Implementation and Control

Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials.

There are several elements that can help reduce the potential for exposure to employees. Ensure you use each of these proactive measures as much as possible as well as include them in the plan.

- **Exposure Control Plan:** The ECP should be a **written plan** outlining processes and procedures to prevent and correct exposure of potential infectious diseases. Employees covered by the bloodborne pathogens standard should receive an explanation of the ECP during their initial training session. It should also be reviewed in their annual refresher training. All employees must have the ability to review this plan at any time during their work shifts by contacting the provided responsible person/department.
- **Engineering and Work Practice Controls:** Engineering controls and work practice controls should be used to prevent or minimize exposure to bloodborne pathogens. These controls/methods include sharps disposal, hand hygiene, safer medical devices, review of work practices, and employee involvement and awareness.
- **Personal Protective Equipment:** Supplies shall be provided to employees who fall under the plan including gloves, gowns, face protection, and goggles, as well as the training, education, and use of PPE. The different types of PPE as well as the location of it should be included in the plan.
- **Housekeeping:** Housekeeping should outline the proper use and procedures to handle, clean, and dispose of contaminated materials that are considered potentially infectious. This section should also include that immediate cleaning and decontamination for bins and pails is required after visible contamination, and the proper way of cleaning/decontaminating them. It is important that broken glassware which may be contaminated shall not be picked up directly with hands, rather with mechanical means such as a brush and dustpan.
- **Laundry:** The ECP should follow the standard requirements for laundering. Contaminated laundry should be handled as little as possible, with minimal agitation. Wet contaminated laundry should be put in leak-proof, labeled or color-coded containers before transport. Ensure the

location of the containers are provided in the ECP. A list of appropriate and required PPE, when handling and/or sorting contaminated laundry, should be given.

- **Labels:** Choose a labeling method and provide the method requirements in the ECP. Equipment including waste receptacles, refrigerators and other locations where potentially infectious materials are located must be labeled with identifying tags, stickers or markings according to the standard to help identify them as hazardous and warn employees. Red biohazard bags are commonly used for disposal. With the labeling method(s), this section should also provide who is responsible for ensuring that warning labels are affixed, or red bags are used as required if regulated waste or contaminated equipment is brought into the facility. There should also be a responsible person or department which employees are to notify if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels.

Hepatitis B Vaccine

This section should provide the name and contact information of the responsible person or department for training and vaccinations to employees who, as part of their job will be exposed to potentially infectious bodily fluids.

The hepatitis B vaccination series should be available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of the plan. There are a few reasons an employee would not be required to be vaccinated but generally, everyone should be. Vaccination shall be encouraged unless: 1) documentation exists that the employee has previously received the series; 2) antibody testing reveals that the employee is immune; or 3) medical evaluation shows that vaccination is contraindicated.

Ensure you include in the ECP that any employee who declines the vaccination must sign a document of refusal to be kept with the other bloodborne pathogens program records. The location of the documented refusal forms should be provided.

The health care professional responsible for providing the vaccination, and their location, should be included in the plan as well.

Post-Exposure Evaluation and Follow-up

Should an exposure incident occur, provide the contact information for the person or department who are responsible for reporting and documenting this information. Immediately after an event of exposure, a confidential medical evaluation and follow-up shall be conducted. Provide the name of the licensed health care professional that will be conducting this evaluation and follow-up.

A responsible person should be chosen to ensure that the health care professional evaluating an employee after an exposure incident receives the following:

- A description of the employee's job duties relevant to the exposure incident

- Route(s) of exposure
- Circumstances of exposure
- If possible, results of the source individual's blood test
- Relevant employee medical records, including vaccination status

The employee should be provided with a copy of the evaluating health care professional's written opinion within 15 days after completion of the evaluation.

Procedures for Evaluating the Circumstances Surrounding an Exposure Incident

Choose a responsible person or department who reviews the circumstances of all exposure incidents to determine:

- Engineering controls in use at the time
- Work practices followed
- A description of the device being used (including type and brand)
- Protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
- Location of the incident (O.R., E.R., patient room, etc.)
- Procedure being performed when the incident occurred
- Employee's training

Include in the plan who is responsible for determining these exposure incident circumstances.

Ensure the ECP also includes who is responsible for recording all percutaneous injuries from contaminated sharps in a Sharps Injury Log. Also include the individual or department responsible for necessary revisions of the ECP, to ensure that appropriate changes are made. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

Communication of Hazards and Training

All employees who have occupational exposure to bloodborne pathogens should receive initial and annual training, provide the name and contact information for the person or department that is responsible for this training. There should also be a brief description of their qualifications listed in this section.

All employees who have occupational exposure to bloodborne pathogens must receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. Ensure the ECP includes the chosen training program methods. Typical training programs cover the following elements, at a minimum:

- A copy and explanation of the OSHA bloodborne pathogen standard
- An explanation of the ECP and how to obtain a copy
- An explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident

- An explanation of the use and limitations of engineering controls, work practices, and PPE
- An explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
- An explanation of the basis for PPE selection
- Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine will be offered free of charge
- Information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
- An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available
- Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
- An explanation of the signs and labels and/or color coding required by the standard and used at this facility
- An opportunity for interactive questions and answers with the person conducting the training session

Include the location in which training materials for the facility are available.

Recordkeeping

There are 4 types of records OSHA requires. Training, medical, incident, and sharps injury records all must be managed and maintained. Ensure you include in the plan who is responsible for maintaining these.

The length of time the records must be maintained varies based on record type. For example, training records must be kept for three years while medical records must be kept for thirty years after the employee is no longer employed at the facility.

Training Records

Ensure the ECP explains that training records shall be completed for each employee upon completion of training. These documents must be kept for at least three years, provide the location these will be kept.

Medical Records

Medical records shall be maintained for each employee with occupational exposure in accordance with 29 *CFR* 1910.1020, "Access to Employee Exposure and Medical Records."

Provide the responsible person or department for maintaining the required medical records. List the location where these confidential records will be kept, and how long they will be (in accordance with the standard, they should be kept for at least the duration of employment plus 30 years.)

OSHA Recordkeeping/Injury Records

An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements (29 *CFR* 1904). Provide who is responsible for the determination and the recording activities.

Sharps Injury Records

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps should also be recorded in a Sharps Injury Log. Provide a list of information that needs to be included with incidences (date of injury, type and brand of device involved, department of work area where the incident occurred, explanation of how the incident occurred, etc.)

Sharp Injury Logs shall be reviewed as part of the annual program evaluation and maintained for at least 5 years following the end of the calendar year covered.