

Exposure Control Program (Bloodborne Pathogens)

Control Plan for USGS Employees with Limited Potential For Exposure to BBP's

This Exposure Control Plan (ECP) for Occupational Bloodborne Pathogen (BBP) exposure has been developed in accordance with the Center for Disease Control (CDC) guidelines and the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030) to help protect U.S. Geological Survey (USGS) employees from occupational exposure to human blood and/or other potentially infectious materials (OPIM). This plan must be reviewed and updated annually.

This plan has been developed for: WVWSC offices.

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Exposure Determination

The OSHA BBP Standard requires a determination be made as to which employees may be at risk for occupational exposure to BBP. This section identifies those job classifications and work activities at the above named facility for which there is a risk of exposure. Employees determined to be at risk need to be included in special programs designated by the standard. Such programs include special training, issuance of personal protective gear (i.e., gloves and airways for Cardiopulmonary Resuscitation (CPR)), and immunization for hepatitis B virus (HBV). Employees in the following job classifications have the potential for exposure to BBP in the course of their assigned duties:

Designated first aid responders. These employees do not have responsibilities or duties which may expose them to BBP during the normal course of their duties; however, they have either volunteered to respond to emergencies or due to the remoteness of their duty locations from medical care, have been designated to provide emergency first aid when required.

"Good Samaritan" first aid providers. A distinction should be made between employees described above, who are *expected* to provide first aid as a part of their jobs and are in the increased risk group, versus employees who receive first aid training primarily for their own benefit, and are not expected to perform first aid as part of their job. Such employees may at times perform first aid on a voluntary basis as "good Samaritans." Since they are not required to provide first aid as part of their jobs, they would be considered in a low risk group. However, if these employees should become exposed at work, even because of voluntary or "good Samaritan" actions, they would still be covered by parts of the standard dealing with exposure treatment and post-exposure monitoring. In addition, first aid training for all groups should cover the issue of BBP exposure and preventive measures.

Compliance Methods

1. Universal precautions should be used by all employees whenever the potential for exposure to BBP's exists. Universal precautions are defined as an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials. These may involve standard work practices and the use of personal protective equipment (PPE), such as gloves, protective clothing, eye protection, and/or masks. Employees should adhere rigorously to the infection control precautions noted in this section in order to minimize the risk of exposure to blood and other body fluids.
2. The OSHA standard requires three forms of precautions or controls to minimize/reduce the exposure to BBP's. These are engineering controls, work practices (procedures), and PPE. Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, PPE shall be used.
 - a. Engineering controls offer the greatest risk reduction. The premise behind engineering controls is to prevent the hazard from occurring through design. The most common form of BBP engineering control is the sharps container. Other forms considered by the standard as engineering controls are self-sheathing needles and needleless systems. Engineering controls used at this facility are:
 - Although needles are not used at this facility, sharps containers are placed in the laboratory, kitchen area, battery-charging area, and warehouse bench for disposal of other potentially sharp objects or rare use of needles. Needles are used in the field for some types of water-quality sampling. Sharps containers will be made available to field sampling teams that use needles and will be transported in the field vehicle to all sampling sites with sampling protocols requiring the use of needles.
 - b. The second level of hazard control is work practices or procedures. Work practices are designed to minimize the possibility of a hazard through the use of a specific set of procedures. Since this method of hazard control relies on the individual to correctly carry out the procedures, it is not considered as effective as engineering controls for managing a hazard. This is because humans make errors, may ignore or circumvent the procedures, or the procedures may not be written to cover all contingencies. If needles are used, they will be immediately disposed of into a readily accessible sharps container.
 - c. The third level of hazard control is PPE. It does not prevent the hazard from occurring, but provides protection to the worker if the hazard occurs. Because it does not prevent the hazard, the use of PPE is not considered as effective as engineering controls. Generally PPE is used as a secondary or back-up means of hazard control. However, in the case of exposure to BBP, especially as the result of an emergency or unplanned event, engineering control measures may not be

available or practical, and PPE would be the primary means of control. Personal protective equipment used at this facility is:

- Non-latex gloves (i.e. nitrile or vinyl)
- Aprons
- Smocks
- Goggles
- Face shields
- One-way valve resuscitation shields for CPR

(1) PPE shall be supplied, cleaned, disposed of, repaired, or replaced by the agency. PPE will be chosen based on the anticipated exposure to blood or other potentially infectious materials (OPIM). Acceptable PPE for bloodborne pathogen exposure is that which prevents blood or OPIM from coming into contact with the employee's clothing, skin, eyes, mouth, or other mucous membranes under normal conditions of use.

(2) Disposable nitrile or vinyl gloves will be worn whenever there is a reasonable expectation that the employee will have hand contact with blood, OPIM, nonintact skin, or mucous membranes. Disposable gloves will not be washed or reused once they have been soiled. Disposable gloves will be kept on hand in various sizes.

d. Readily available handwashing facilities are available for employees occupationally exposed to bloodborne pathogens. In remote locations where handwashing facilities are not feasible, employees shall be provided with either an antiseptic cleanser and clean cloth/paper towels or with antiseptic towelettes. Should an exposure occur while in this remote location, the hands should be washed with soap and running water as soon as possible.

e. Employees will not eat, drink, smoke, or apply cosmetics in areas where there is a reasonable likelihood of exposure to blood or OPIM. Food and drink shall never be stored in refrigerators, freezers, or other areas used to store or process biological materials such as blood, OPIM, or any other hazardous materials.

3. Proper housekeeping procedures require that decontamination of the contaminated areas using either a 1 to 10% bleach solution or an USEPA-registered germicide.
4. Although regulated medical waste is not normally generated by this organization, when it is, it shall be disposed of in accordance with all applicable Federal, State, and local requirements.
5. All employees who have been identified as having possible occupational exposure to bloodborne pathogens shall be offered the hepatitis B vaccine. The vaccine will be offered to the employee at no cost and will be available to the employee within 10 working days after their assignment to the position involving the potential exposure.
6. Employees will be provided information concerning the positive benefits and potential side effects to make an informed decision about whether or not to be vaccinated. Employees that decide to be vaccinated will sign a written consent form before starting the hepatitis B vaccination series. A written medical opinion will be

obtained from the physician providing the vaccine prior to its administration to the employee. Employees that do not wish to be vaccinated must sign a written declination form. Both forms will become part of the employee's official occupational health record. Declination of the vaccine does not preclude the employee from being vaccinated at a later date should the employee change his or her mind.

7. Designated First Aid Responders.

a. Individuals whose primary job is unrelated to the rendering of first aid but who may be called upon to render first aid or medical assistance as a collateral duty are considered to have occupational exposure and are covered by all the protections under this standard. This facility has chosen to defer vaccinating these designated first aid responders until after their involvement in a first aid incident.

b. If the facility chooses to defer vaccination until after a first aid incident the following conditions must be met to comply with the bloodborne pathogen standard:

(1) A reporting procedure must be instituted to report all first aid incidents involving the presence of human blood or OPIM by the end of the work shift when the incident occurred. The report will include the names of all first aid providers who rendered assistance and the time and date of the incident, regardless of whether personal protective equipment was used and must describe the first aid incident, and the time and date of the incident. The description must include a determination of whether or not, in addition to the presence of blood or other potentially infectious materials, an "exposure incident," as defined by the standard, occurred. This determination is necessary in order to ensure that the proper post-exposure evaluation, prophylaxis, and follow-up procedures required by paragraph 29 CFR 1910.1030(f)(3) are made available immediately, whenever there has been an "exposure incident" as defined by the standard.

(2) The first aid training provided to the first aid responders must include the specifics of how to report a first aid incident. A report will be maintained that lists all such first aid incidents. The report will not include Privacy Act information such as social security numbers. This report will be readily available, upon request, to all employees and to OSHA Compliance Officers. Records in the Safety Management Information System (SMIS) meet this requirement.

(3) The full hepatitis vaccination series will be made available within 24 hours to all unvaccinated first aid responders who have rendered assistance in any situation involving human blood or OPIM, regardless of whether or not an actual exposure incident occurred.

8. Post-exposure Evaluation and Follow-up

When an employee experiences an exposure incident it will be reported to their supervisor.

Following a report of an exposure incident, the supervisor shall make immediately available to the exposed employee a confidential medical evaluation and follow-up, including at least the following elements:

- a. Document the route of exposure and the circumstances under which the exposure incident occurred
- b. Identify and document of the source individual, unless the supervisor can establish that identification is infeasible or prohibited by state or local law
- c. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.
- d. Results of the source individual's testing will be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
- e. The exposed employee's blood will be collected as soon as feasible and tested after consent is obtained.
- f. If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample will be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing will be done as soon as feasible.
- g. The employee will be provided with post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service; counseling; and will have reported illnesses evaluated.

9. Training.

Training for all employees with occupational exposure to bloodborne pathogens will be conducted prior to their initial assignment to a task where exposure may occur. The DOI Learn online class entitled "Bloodborne Pathogens" will suffice for this training. Employees will receive annual refresher training. Training shall include an accessible copy of the regulatory text of the Bloodborne Pathogens standard, an explanation of the BBP standard and its requirements, a general discussion of the epidemiology and bloodborne diseases and their symptoms, and an explanation for how the diseases can be transmitted; an explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan; an explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials. The training must also cover what the employer will do to prevent or reduce occupational exposures, including appropriate engineering controls, work practices, and personal protective equipment; Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment; an explanation of the basis for selection of personal protective equipment; the benefits of the hepatitis B vaccine and that the vaccine and vaccination will be

offered free of charge; and the reporting and follow-up procedures following a first aid response or an actual exposure incident including: Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials; 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. Training must also include an explanation of the required signs and labels and/or color coding. There will be an opportunity for interactive questions and answers with the person conducting the training session.

10. Recordkeeping.

CDSO is responsible for ensuring that this policy is effectively implemented and for maintaining the records related to this policy.

a. Medical records will be maintained for 30 years post employment.

Employee medical records are provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to CDSO.

b. Training records will be maintained for three years after the date trained. The training records include: the dates of the training sessions, the contents or a summary of the training sessions, the names and qualifications of persons conducting the training, the names and job titles of all persons attending the training sessions. Employee training records are provided upon request to the employee or the employee's authorized representative within 15 working days. Such requests should be addressed to CDSO.

c. An exposure incident is evaluated to determine if the case meets OSHA's Recordkeeping Requirements. This determination and the recording activities are done by CDSO.

d. Sharps Injury Log In addition to the Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in the Sharps Injury Log. All incidences must include at least: the date of the injury, the type and brand of the device, involved, the department or work area where the incident occurred, an explanation of how the incident occurred. This log is reviewed at least annually as part of the annual evaluation of the program and is maintained for at least five years following the end of the calendar year that they cover. If a copy is requested by anyone, it must have any personal identifiers removed from the report. -- Needles are not generally used at this facility, but may be used at remote field sites during water-quality sampling.

Date: 4/15/14

Signature of Responsible Manager: Ma. Q. R. Bennett, Director