

CESAS-SO

DEPARTMENT OF THE ARMY
SAVANNAH DISTRICT, CORPS OF ENGINEERS
PO BOX 889
SAVANNAH, GEORGIA 31402-0889

DISTRICT REGULATION
No. 385-1-10

9 Oct 01

Safety and Occupational Health
BLOODBORNE PATHOGEN PREVENTION PROGRAM

1. Purpose. To prevent and limit occupational exposure to blood and other potentially infectious materials (OPIM) such as Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV) to Savannah District team members.
2. Applicability. The Bloodborne Pathogen Prevention Program applies to all Savannah District team members who could be reasonably anticipated, through occupational exposure, to come in contact with blood and other potentially infectious materials.
3. References.
 - a. Occupational Safety and Health Administration (OSHA) CFR 29, Part 1910.1030, Bloodborne Pathogens, 1 Jul 01.
 - b. MMWR 47 (RR-7); 1:28, Public Health Service Guidelines for the Management of Healthcare and Worker Exposures to HIV and Recommendations for Post-Exposure Prophylaxis, 29 Jun 01.
4. Discussion. Certain team members due to the course of their employment may be exposed to blood or bodily fluids by rendering first aid/CPR to the general public. The victims may be infected with bloodborne pathogens (BBP) such as Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV). Any exposure to blood could result in transmission of bloodborne pathogens which could lead to disease (liver failure, AIDS) or death. Control measures must be established to protect team members. The OSHA standard is primarily directed toward health care workers with occupational exposures to blood but is also intended to cover public service personnel such as fire, rescue, and park rangers, who may perform immediate, on-site emergency medical treatment to injured individuals.

This DR supersedes DR 385-1-10, dated 24 March 1993.

5. Policy. A comprehensive bloodborne pathogen program called an Exposure Control Plan to aid in the prevention of and protection against bloodborne disease shall be provided with the following program elements:

a. Exposure Determination. The Savannah District team members who would be affected by the bloodborne pathogens standard, because they must be qualified and protected to perform immediate, on-site emergency medical treatment to injured individuals, would be the Park Rangers. Each newly hired Park Ranger or team member affected by OSHA 29 CFR 1910.1030 will be informed of the above classification procedures by their supervisors during orientation. Team member's Job Hazard Analysis (JHA) must reflect exposure to bloodborne pathogens. "Good Samaritan" acts such as assisting a team member with a nosebleed would not be considered occupational exposure. Any first aid rendered by team members that's performed only as a collateral duty, responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred, would not be considered a primary job. Appendix A contains a determination worksheet that can be used in determining the risk of exposure.

b. Methods of Compliance. Universal precautions, work practice controls, personal protective equipment, personal hygiene, sharps control (not applicable to Savannah District), initial and annual training and waste cleanup, labeling and disposal are methods that will be used as appropriate.

c. Prophylaxis, Post-Exposure Evaluation and Follow-up. Hepatitis B immunizations shall be offered to District team members meeting the high risk categories of I and II. The team member will either accept the offer or sign a declination statement. If an exposure event occurs the team member will be offered treatment (at no cost to the team member) and counseling in accordance with Public Health Service (CDC) guidelines. Appendix B contains the HBV Acceptance/Declination Statement. Appendix C contains the Public Health Service/CDC Guidelines for Post-Exposure treatment adopted by USACE.

d. Communication of hazard to affected employees. Through response to medical emergencies, Park Rangers may come into contact with blood or body fluids which could be infected with Hepatitis B Virus (HBV) or Human Immunodeficiency Virus (HIV). Park rangers should recognize the potential hazards of spilled blood and body fluids and use appropriate control measures. Annual training, usually conducted by the local Red Cross Chapter, provides further emphasis on communicating risk and reinforces the use of Personal Protective Equipment (PPE).

e. Exposure recordkeeping and evaluation. Exposure incident reports, identification of the source individual, consensual blood draw from source and team member, results of analysis and the healthcare providers written opinion concerning findings/diagnosis pertaining to the exposure event shall be documented and kept.

6. Glossary. A glossary of terms used in this regulation is provided as Appendix D.

7. Responsibilities.

a. The District Safety & Occupational Health Office (SO) shall:

- (1) Manage the Districts BBP/Exposure Control program.
- (2) Review the District and local programs on an annual basis.
- (3) Review the post-exposure evaluations and confidential medical reports.

b. Operations Managers shall:

(1) Select a team member to serve as BBP Coordinator for each facility. The coordinator must be properly qualified through training (first aid/CPR/BBP), experience, and serves the point of contact in all BBP activities.

(2) Ensure that team members involved in first aid/CPR work receive the proper BBP training, have the appropriate Personal Protective Equipment (PPE) and Hepatitis B immunizations (or declination statement).

(3) Ensure that first aid providers (park rangers) receive annual BBP refresher training, or initial training for new hires. Ensure the new hires are afforded an opportunity to accept/decline the HBV vaccine.

(4) Inventory PPE on an annual basis and after an exposure event and replace PPE that cannot be decontaminated and has been discarded.

(5) Ensure body fluid spills are properly decontaminated, cleaned-up and that BBP waste is properly bagged, labeled and disposed of.

(6) Prepare incident report and furnish copies to SO and healthcare provider.

(7) Ensure exposed team member is seen by the healthcare provider for post-exposure health care and counseling.

(8) Provide a local Standard Operating Procedure (SOP) if necessary to provide supplemental guidance.

d. First aid providers:

(1) Wear appropriate PPE (universal precautions) and use appropriate barriers (ambu bag, CPR mask) when responding to emergencies.

(2) Report to healthcare provider for post-exposure health care and counseling.

e. Healthcare Provider:

(1) Provide post-exposure health care and counseling in accordance with USACE/CDC guidelines.

(2) Provide written report containing exposure status/counseling of exposed team member and forward to the SO.

8. Work Practices Controls. Medical history and examination cannot reliably identify all persons infected with Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV), or other bloodborne pathogens. Hence, all blood and body fluids from all persons should be considered to be potentially infectious. Team members must rigorously adhere to the following infection control precautions to minimize exposure to blood and body fluids.

a. Personal Protective Equipment (PPE).

(1) Gloves must be worn for touching blood/body fluids; mucous membranes or non-intact skin; and for handling items or surfaces soiled with blood/body fluids. High risk body fluids include wound drainage, semen, vaginal secretions, and breast milk. Body fluids of lesser risk include urine, feces, saliva and vomit. If the fluid cannot be identified, it must be assumed to be of high risk.

(2) Masks and protective eyewear/face shields must be worn during procedures that may splatter blood/body fluids on an employee's mouth, nose or eyes.

(3) Barrier Precautions. Use appropriate barrier precautions when contact with blood/body fluids is anticipated. Ambu bags or similar shielding devices must be readily available and used for resuscitation. It is recommended that each CPR provider be furnished a device for personal use in order that familiarity with the device be established. A good face-to-bag is easier to achieve with a familiar device, therefore assuring that the device is used properly when necessary.

b. Personal Hygiene Practices.

(1) Hands or other skin surfaces should be washed immediately if soiled with blood/body fluids. Hands should thoroughly washed with soap and water or a waterless disinfectant hand cleaner immediately after gloves are removed.

(2) Team members with exudative lesions (draining cuts or sores), or chapped or abraded skin should not provide emergency care or handle contaminated waste or items until the condition is resolved.

c. Spill and Clothing Decontamination.

(1) A fresh chlorine bleach solution (1 part bleach to 10 parts water) should be used to decontaminate surfaces soiled with blood/body fluids. Visible material should first be removed and the area should then be thoroughly cleaned with this solution.

(2) As soon as is practicable, clothing saturated with blood/body fluids should be removed and place in a plastic bag. A shower should be taken before donning fresh clothing. Soiled clothing can be washed at home using hot water and usual detergent. It is recommended that the clothing not be handled during placement into the washer, and washed separate from other laundry items.

9. Training. Initial and annual training programs will be established for all team members who perform Category I and II tasks as outlined in Appendix A. No team member should engage in any Category I or II tasks before receiving training pertaining to work practices and personal protective equipment.

a. The training program shall include:

(1) Modes of transmission of HBV and HIV.

- (2) Types of protective clothing and equipment appropriate for Category I and/or II tasks.
- (3) Engineering and work practice controls.
- (4) Hepatitis B vaccine information.
- (5) Response guidelines to emergencies involving blood.
- (6) Post-exposure healthcare options and counseling topics.

10. Post Exposure Evaluation and Follow-up. Post exposure evaluation and follow-up procedures shall be made available to all team members who have had an occupational exposure incident with blood or OPIM. The evaluation process consists of:

- a. An incident report shall be filled out and sent to the SO. Contact will be made with healthcare provider, and furnished a copy of the report and arrangements will be made for the exposed team member to receive appropriate healthcare and/or counseling. The report shall contain information on the route of exposure, the circumstances under which the exposure incident occurred, and identification of the source individual, unless infeasible or prohibited by law.
- b. The exposed team member's and source's blood shall be collected as soon as possible and tested after consent is obtained. Test results shall be made available to the team member at a reasonable time. All lab tests shall be performed by an accredited laboratory under the supervision of a licensed physician or health care professional.
- c. The Hepatitis B vaccine and vaccination series shall be made to all team members who have an occupational exposure incident.
- d. The vaccination, laboratory test, and medical counseling shall be at no cost to the team member.
- e. Confidential medical examination which consists of: Circumstance of exposure, testing source individual, testing team member's blood, post exposure prophylaxis, and counseling. Results of the source individual testing shall be made available to the exposed team member, and the team member shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

11. Records. Records shall be maintained documenting:

- a. Job classification findings.
- b. Training records indicating dates of training sessions, names of team members conducting and receive training, and content of training.
- c. Conditions associated with each incident of exposure to mucous membrane or body fluids or tissues, and a description of any corrective measures taken to prevent a recurrence or other similar exposure.
- d. Vaccination records of team members classified as doing Category I and/or II tasks.
- e. Declination forms signed by team members who, although classified as performing Category I or II tasks, have chosen not to receive the Hepatitis B vaccine.

12. Program Evaluations. The Bloodborne Pathogen Prevention Program will be evaluated annually by the SO. The SO will review vaccination records, incidence, and post exposure reports.

4 Appendices	/s/
App A – Risk of Exposure, CESAS Form 1319	ROGER A. GERBER
App B - HBV Acceptance/Declination Statement, CESAS Form 1320	COL, EN
App C - Post-Exposure Guidelines & Physician Confidential Request for Medical Attention, CESAS Form 1320	Commanding
App D - Glossary	
Distribution C & D	

**RISK OF EXPOSURE TO HEPATITIS B VIRUS OR
 HUMAN IMMUNODEFICIENCY VIRUS**

Employee Name _____ Job Title _____

Location _____

A. Category I - The team member performs tasks that involve an inherent potential for mucous membrane or skin contact with blood, body fluids, or tissues or a potential for spills or splashes. Universal precautions should be applied for all procedures when it is likely that the team member will have contact with blood or body fluids to prevent transmission of bloodborne pathogens. Hepatitis B vaccine is highly recommended for these team members.

Category II - The team member performs tasks that involve no exposure to blood, body fluids, or tissues during the normal work routine, but the team member may be required to perform unplanned Category I tasks. Universal precautions should be used to perform any Category I procedures. Hepatitis B vaccine is recommended for these team members.

Category III - The team member performs tasks that involve no exposure to blood, body fluids, or tissues during the normal work routine. No special precautions are necessary to prevent transmission of bloodborne pathogens.

B. This team member's position involves the following work-related tasks:

	Category I	Category II	Category III
	YES - Routine Task	NO -But May Be Required	NO - Never Done
Administers first aid to accident victims	_____	_____	_____
Applies dressing or bandages to wounds or lacerations	_____	_____	_____
Administers mouth-to-mouth resuscitation	_____	_____	_____
Cleans or performs maintenance on Items or equipment which may be Contaminated with potentially infectious materials (raw sewage, vomits, blood, etc.)	_____	_____	_____
Picks up or processes waste which may contain items contaminated by blood or body fluids.	_____	_____	_____

C. I have read the above information and had an opportunity to provide additional information and ask questions. I understand that I may obtain further information about policies and procedures to minimize the risk of transmission of HBV/HIV from the Bloodborne Pathogen Program or by contacting the District Safety Office.

Employee's Signature _____ Date _____

Supervisor's Signature _____ Date _____

HBV ACCEPTANCE/DECLINATION STATEMENT

Employee's Name _____ Job Title _____

Location _____

A. Hepatitis B is a viral infection caused by the hepatitis B virus (HBV) which causes death in 1-2% of patients. Most people with hepatitis B recover completely, but approximately 5-10% become chronic carriers of the virus. Most of these people have no symptoms, but can continue to transmit the disease to others. Some may develop chronic active hepatitis and cirrhosis. HBV also appears to be a causative factor in the development of liver cancer. Thus, immunization against Hepatitis B can prevent acute hepatitis and also reduce sickness and death from chronic active hepatitis, cirrhosis and liver cancer.

B. The Hepatitis B vaccine is a recombinant vaccine derived from yeast cells. A high percentage of healthy people who receive three doses of vaccine achieve protection against hepatitis B infection. Full immunization requires 3 doses of vaccine over a six-month period, although some persons may not develop immunity even after 3 doses. The vaccine is given in the upper arm in the deltoid muscle. There is no evidence that the vaccine has ever caused hepatitis B or AIDS. However, persons who have been infected with HBV prior to receiving the vaccine may go on to develop clinical hepatitis in spite of immunization. The duration of immunity is unknown at this time, but is probably long-term.

C. Persons who have a known hypersensitivity to yeast should not receive this vaccine. Another type of vaccine will be made available for these personnel. The vaccine is also not recommended for pregnant women or nursing mothers.

D. Very few adverse reactions have been recorded. The most typically reported reactions are local site soreness, swelling and tenderness. Some other reactions reported are nausea, vomiting, abdominal pain/cramps, headache, lightheadedness, fatigue and weakness. There have been no reported deaths associated with this vaccine.

ACCEPTANCE: I understand that due to my occupational exposure to blood or other potentially infectious materials I may be risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no cost to myself. I wish to receive the Hepatitis VB vaccine.

Employee's Signature _____ Date _____

Supervisor's Signature _____ Date _____

DECLINATION: I understand that due to my occupational exposure to blood or other potentially infectious material I may be at risk of acquiring hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. It in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no cost to me.

Employee's Signature _____ Date _____

Supervisor's Signature _____ Date _____

APPENDIX C

POST-EXPOSURE GUIDELINES

1. General Information. The following guidelines are for employees who experience an exposure to blood or body fluids while in the performance of their normal duties.

a. An exposure is defined as a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials. This includes the following human body fluids: Semen, vaginal secretions, amniotic fluid, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. Special attention should be paid to non-intact skin, especially when the skin is chapped, abraded, or afflicted with dermatitis. Any unfixed tissue organ (other than intact skin) from a human (living or dead) is also included.

b. Enrollment into the HIV, Hepatitis B or Hepatitis C Post-Evaluation Program is voluntary but strongly encouraged for all with an exposure to blood or body fluid.

c. Following consent, the source of the exposure should be tested for antibody to Human Immunodeficiency Virus (HIV-I, Labcorp # 83824), for Hepatitis B Surface Antigen (HbsAg- Labcorp # 006510) and Hepatitis C Virus Antibody Screen (Labcorp # 140608).

d. The employee or person exposed will be tested for Hepatitis B Surface Antibody (Labcorp #146001 or 006395), Hepatitis C Virus Antibody Screen (Labcorp # 140608), and encouraged to be tested for antibody to HIV-I (Labcorp # 83824).

2. The ***Public Health Service Guidelines for Management of Healthcare and Worker Exposures***, (publication held by most healthcare clinics and downloadable from the web at www.cdc.gov/mmwr/preview/mmwrhtml/00052722.htm) contains an algorithm which may be used in facilitating initial decisions regarding the extent of the exposure and the need for HIV Post-Exposure Prophylaxis (PEP) after an occupational exposure. Additional guidance may be obtained by calling the ***National Clinician's Post-Exposure Hotline at 1-888-448-4911***. The Hotline can assist clinicians with the management of an occupational exposure when local resources are not available.

DR 385-1-10

APP C

9 Oct 01

a. The text of the PHS Guidelines contains a comprehensive discussion of the Rationale for PEP, Assessment of Infection Risk, Evaluation and HIV Testing Protocol, PEP Regimen and Counseling and Education for the exposed employee. The guideline is not included in this regulation due to its size and complexity. It is prepared for healthcare providers and not necessarily for layman.

b. Any exposure deemed worthy of initiating PEP should be regarded as an urgent medical concern and PEP should be initiated as soon as possible after the exposure (within hours rather than days and preferably before 24 hours has passed). Benefit of PEP is questionable when implemented beyond 36 hours.

c. Physicians are asked to refer employees to an appropriate source, such as the local hospital pharmacy or infectious disease specialist, if this will facilitate the implementation of PEP in a timely manner.

d. All employees with occupational exposure to HIV should receive follow-up counseling, post-exposure testing, and medical evaluation regardless of whether they receive PEP. HIV-antibody testing should be performed for at least 6 months post-exposure (e.g., baseline, at 6 weeks, 12 weeks, and 6 months).

PHYSICIAN
CONFIDENTIAL REQUEST FOR MEDICAL ATTENTION

PART A.

_____ (Employee's Name), of the U.S. Army Corps of Engineers, Savannah District, _____
(office name), has received an on the job exposure to potentially infectious materials. This employee needs prompt medical attention.

A confidential medical evaluation to determine if the employee has had a true exposure to bloodborne pathogens or other potentially infectious body fluids is necessary. If it is determined that the employee has had a true exposure, the guidelines for Post Exposure to Blood and Body Fluids (found in the Public Health Service Guidelines for Management of Healthcare and Worker Exposures discussed in DR 385-1-10, Appendix C, para 2) should be followed.

An exposure is defined as a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials. This includes the following human body fluids: Semen, vaginal secretions, amniotic fluid, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. Any unfixed tissue organ (other than intact skin) from a human (living or dead) is also included.

An additional quick resource is the HIV National Clinician's Post-Exposure Hotline (PEPLINE), available at 1-888-448-4911. This service is available to all clinicians in need of assistance or desiring additional information for the handling of a bloodborne exposure. Since post-exposure prophylactic treatment may be advised within the first few hours post-exposure, consultation with this service is highly recommended for physicians who are asked to render an opinion for appropriate follow-up.

PART B

1. The attending physician is asked to complete this form and return one copy to the employee and the other copy to:

U.S. Army Corps of Engineers, Savannah District
Attn: CESAS-SO
100 W. Oglethorpe Avenue
P.O. Box 889
Savannah GA 31402-0889

2. The medical evaluation and follow-up will include the following:

- a. Documenting the route(s) of exposure and the circumstances under which the exposure incident occurred.
- b. Identification and documentation of the source individual, unless infeasible or prohibited by state or local law. If consent is obtained (where required), the source individual's blood shall be tested and the results documented. If the source individual is known to be infected with HIV or HBV, this shall be documented without a repeat test.
- c. results of the source individual's testing shall be made available to the exposed employee, along with applicable laws and regulations concerning disclosure of identity and infectious status of the source individual.
- d. The exposed employee's blood shall be tested as soon as feasible after consent is obtained. If the employee consents to baseline blood collection but does not give consent for HIV serologic testing, the sample shall be preserved for 90 days.
- e. Counseling will be made available to the employee upon request.
- f. Evaluation of reported illnesses.
- g. Post-Exposure prophylaxis will be provided according to the protocol outlined by the U.S. Army Corps of Engineers.

PART C

1. In addition, OSHA requires that you, as the attending physician, provide a written opinion to this employer within 15 days of completion of the medical evaluation. This information will be limited to the following information:

- a. That the employee has been informed of the results of the medical evaluation.
- b. That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious material which require further evaluation or treatment.
- c. Whether Hepatitis B vaccine is indicated and if vaccine was received.

2. All other findings or diagnosis must remain confidential and cannot be included in this written report. Please return copy of your written medical opinion to:

U.S. Army Corps of Engineers, Savannah District
Attn: CESAS-SO
100 W. Oglethorpe Avenue
P.O. Box 889,
Savannah GA 31402-0889

APPENDIX D

GLOSSARY

Bloodborne Pathogen: Pathogenic microorganisms (i.e. HIV, Hepatitis B) that are present in human blood and can cause disease in humans.

Contaminated: The presence of blood or other body fluid on a surface or item.

Decontaminated: The use of physical and chemical means to remove, inactivate or destroy the bloodborne pathogen. Usually a 1 to 10 part bleach solution is used but other antiviral solutions can be used.

Exposure Incident: A specific skin or mucous membrane contact with blood or body fluid resulting from the performance of the employees' duties.

HBV: Hepatitis B Virus.

HIV: Human Immunodeficiency Virus.

Prophylaxis: Measures designed to protect health and promote life and prevent the spread of disease. In the case of bloodborne pathogens this is the hepatitis B vaccine, and the post exposure antiretroviral drugs and protease inhibitors.

Source: Any person, living or dead, whose blood or other body fluid is spilled and may be potentially infectious and comes into contact with the employee rendering aid.

Universal Precautions: Concept in which all blood or body fluids is treated as potentially infectious and is handled with PPE, barriers and other work practice controls.