DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE MANUAL

TRANSMITTAL SHEET

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SUBJECT: Administrative Series
Part 485 Safety and Occupational Health Management Program
Chapter 10 Bloodborne Pathogen Program

EXPLANATION OF MATERIAL TRANSMITTED:

This chapter provides policy and responsibilities for all employees who may handle, store, use, process, or dispose of infectious medical wastes or may be exposed to blood or bodily fluids in the conduct of their job.

Director

FILING INSTRUCTIONS:

REMOVE:

Part	Chapter	Pages	Release

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Part	Chapter	Pages	Release
485	10	19	328

OPR: Office of the Associate Director for Administration and Budget

Minerals Management Service
Minerals Management Service Manual

Effective Date: September 16, 2009
Series: Administrative
Part 485: Safety and Occupational Health Management Program
Chapter 10: Bloodborne Pathogen Program

Originating Office: Chief of Staff, Administration and Budget

1. Purpose. This chapter provides policy and responsibilities for all employees who may handle, store, use, process, or dispose of infectious medical wastes or may be exposed to blood or bodily fluids in the conduct of their job. This plan shall include requirements for personal protective equipment, housekeeping, training, and a procedure for reporting exposures. Employees who provide first aid response as part of their duties must be included in the program. This program does not replace prompt immediate activation of the site comprehensive Occupant Emergency Plan or the local 911/Emergency Medical Services (EMS) system.

2. Authorities.

A. Public Health Improvement Act, Public Law 106-505 (November 13, 2000).

B. Code of Federal Regulations (CFR) Title 5, Medical Determinations Related to Employability (5 CFR).

C. Code of Federal Regulations (CFR) Title 5 Sick Leave, Supporting Evidence (5 CFR 630.403, Subpart D).

D. Code of Federal Regulations (CFR) Title 29, Access to Employee Exposure and Medical Records (29 CFR 1910.1020).

E. Code of Federal Regulations (CFR) Title 21, Prescription Devices (21 CFR 801.109).

F. Code of Federal Regulations (CFR) Title 21, DC-Defibrillator (21 CFR 870.5300).

G. Code of Federal Regulations (CFR) Title 29, Bloodborne Pathogen Standard (29 CFR 1910.1030).

H. Guidelines for Public Access Defibrillation Programs in Federal Facilities, Cardiac Survival Act (Federal Register: May 23, 2001 (Volume 66, Number 100) (Notices) (Pages 28495-28511).

I. Individual State legislation for Automated External Defibrillators (AED) (commonly referred to as Good Samaritan Laws).

J. American Heart Association's Guidelines for Cardiopulmonary Resuscitation (CPR) and Emergency Cardiovascular Care (ECC) Guidelines.

K. Minerals Management Service Manual Chapter 485.6

3. Definitions/Acronyms/Abbreviations.

A. Automated External Defibrillator (AED). A semi-automatic medical device programmed to analyze heart rhythms, recognize rhythms that require defibrillation, and provide visual and voice prompts to the device operator. The AED instructs the operator to deliver an electric shock, if indicated, after ensuring all personnel are clear.

B. AED Program. A Public Access to Defibrillation (PAD) Program providing AED's in MMS facilities.

C. AED Team. A volunteer group of employees, called Lay Responders, who have been trained to use an AED, CPR, and First Aid in the event of a medical emergency in an MMS facility.

D. Biological Hazard. The term biological hazard or biohazard is taken to mean any viable infectious agent that presents a risk, or a potential risk, to the well-being of humans.

E. Bloodborne Pathogens (BBP). Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, Hepatitis B Virus (HBV) and the Human Immunodeficiency Virus (HIV).

F. CDC. Centers for Disease Control and Prevention

G. CFR. Code of Federal Regulations

H. Contaminated. The presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

I. Contaminated Laundry. Laundry which has been soiled with blood or other infectious materials or may contain contaminated sharps.

J. Contaminated Sharps. Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and the exposed ends of dental wires.

K. Decontamination. The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

L. EMS. Emergency Medical Service.

M. Exposure Incident. A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties, during an emergency response or through an accidental exposure.

N. Exposure Control Plan. A plan that is compliant with Occupational Safety and Health Administration (OSHA) regulations and that explain ways to minimize or eliminate exposure of humans to bloodborne pathogens.

O. First Aid. Emergency treatment administered to an injured or sick person before professional medical care is available.

P. HCV. Hepatitis C virus

Q. HBV. Hepatitis B Virus

R. HIV. Human Immunodeficiency Virus

S. Lay Responder. A voluntary response team member trained in CPR, AED, and BBP. Responders are covered under local and state Good Samaritan Laws and the Public Health Improvement Act, Public Law 106-505 (November 13, 2000).

T. Licensed Healthcare Professional. A person whose legally permitted scope of action allows him or her to independently perform the activities required for Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-Up Evaluation.

U. Occupant Emergency Plan. Policies and procedures formulated by MMS, in accordance with guidelines established by the Federal Protective Service, regarding responsibilities and actions to be taken in the event of an emergency in a Government occupied facility.

V. Occupational Exposure. 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.

W. Other Potentially Infectious Materials (OPIM). (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic 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 fluid; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- and HBV-containing culture medium or other solutions; and blood organs or other tissues from experimental animals infected with HIV or HBV.

X. Medical Wastes/Infectious Wastes. All waste emanating from human or animal tissues, blood or blood products or fluids. This includes used first aid bandages, syringes, needles, sharps, material used in spill cleanup and contaminated Personal Protective Equipment (PPE) or

clothing.

Y. Parenteral. Piercing mucous membranes of the skin barrier through such events as needlesticks, human bites, cuts or abrasions.

Z. Personal Protective Equipment (PPE). Specialized clothing or equipment worn by an employee for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts, or blouses) not intended to function against a hazard are not considered to be personal protective equipment.

AA. Program Administrator. An individual appointed to supervise and administer the AED and BBP programs in an MMS occupied facility.

BB. Public Access to Defibrillation (PAD). The availability of AEDs in public places where people gather or work.

CC. Source Individual. Any individual, living or dead, whose blood or other potentially infectious materials may be a source of occupational exposure to the employee. Examples include but are not limited to, hospital and clinic patients; clients in an institution for the developmentally disabled; trauma victims; clients of drug or alcohol treatment facilities; residents of hospices and nursing homes; human remains; and individuals who donate or sell blood or blood components.

DD. Sterilize. The use of physical or chemical procedures to destroy all microbial life including resistant bacterial endospores.

EE.Universal Precautions. This is a system of infectious disease controls that assumes that every direct contact with body fluids is infectious and requires every employee exposed to be protected as though such body fluids were infected with bloodborne pathogens. All infectious/medical material must be handled according to Universal Precautions (OSHA Instruction CPL 2-2.44A).

FF. Sudden Cardiac Arrest (SCA)**.** A significant life-threatening event when a person's heart stops or fails to produce a pulse.

GG. Designated Official. The highest ranking MMS official in the facility or, alternatively, a designee selected by mutual agreement of occupant agency officials.

4. Scope.

A. This program shall apply to all MMS employees, volunteers, contractors, and cooperators who may come into contact with human blood or other potentially infectious materials (OPIM) during the conduct of their duties. This includes employees who are required to be trained in first aid, CPR, or AED usage as part of their duties.

B. While HBV and HIV are specifically identified in the Bloodborne Pathogen (BBP) standard (29 CFR 1910.1030), the term includes any pathogenic microorganism that is present in human blood or OPIM and can infect and cause disease in persons who are exposed to blood containing the pathogen. Pathogenic microorganisms can also cause diseases such as Hepatitis C, malaria, syphilis, babesiosis, brucellosis, leptospirosis, arboviral infections, relapsing fever, adult T-cell leukemia/lymphoma (caused by HTLV-I), HTLV-I associated myelopathy, diseases associated with HTLV-II, viral hemorrhagic fever, and West Nile Virus. Although not a microorganism, Creutzfeldt-Jakob disease can be transmitted through blood.

Note: According to the Centers for Disease Control and Prevention (CDC), HCV infection is the most common chronic bloodborne infection in the United States. (Morbidity and Mortality Weekly Report: Recommendations for Prevention and Control of HCV Infection and HCV-Related Chronic Disease, October 16, 1998/Vol.47/No. RR-19.)

HCV is a viral infection of the liver that is transmitted primarily by exposure to blood. Currently there is no vaccine effective against HCV.

C. Examples of possible exposures due to MMS occupations include, but are not limited to, the following employees and situations: :

(1) *First Aid Responders.*

(a) Employees who receive training in first aid because they work in areas that are more than a 15-minute travel from a hospital, clinic, or ambulance service.

(b) Employees who volunteer as Lay Responders for MMS Automated External Defibrillator (AED) teams.

(2) *Accidental Exposures.*

(a) Employees who are cut, stuck, or otherwise exposed by coming into contact with used syringes from illicit drug use, various types of sharp objects, or trash that may be contaminated with human blood.

(b) Employees who are exposed when providing assistance as a “Good Samaritan” act.

5. Responsibilities.

A. *Bureau Safety Manager.*

(1) Ensuring that a BBP program including an Exposure Control Plan (ECP) is enacted wherever an AED program is in place.

(2) Provides Bureau-wide oversight and direction for the BBP program.

(3) Conducts reviews and evaluates the effectiveness of BBP programs and modifies policy and procedures as applicable.

(4) Provides assistance to Program Coordinators in development of BBP programs.

(5) Ensures that funding for PPE is provided to all MMS facilities with an AED/BBP Program.

B. Program Coordinators.

(1) Provide local direction and oversight for the administration of an appropriate BBP, serving as the focal point for program development.

(2) Determine which personnel potentially have occupational exposure to BBP and ensure that these employees receive required annual training and that training is properly documented. MMS personnel who are responsible for rendering first aid or medical assistance will be considered to have possible occupational exposure to BBP and will be covered under 29 CFR 1910.1030 and this chapter.

(3) Ensure proper conduct of the program though inspections, record keeping and periodic audit.

(4) Procure PPE for each member of the Lay Responder team in their facility and at least one readily available contaminated Sharps container for disposal of contaminated Sharps items.

(5) Maintain training and inspection records for this program.

(6) Upon request and in coordination with the proper MMS Human Resources (MMS HR) staff, arrange for access to personnel medical records for employees' own records and to others with written consent of the employee in accordance with 29 CFR1910.1020.

(7) Provide access for employees to vaccination and medical evaluation as required and in coordination with the proper MMS HR staff, maintain records as part of the employees' permanent records.

(8) Develop an exposure control plan (see Appendix A) for operations where potential BBP incidents could occur covering appropriate decontamination and disposal procedures, personal protective equipment, engineering controls, and appropriate work practices.

(9) Review and update the exposure control plan at least annually and whenever necessary to reflect new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with potential occupational exposure.

(10) Ensure that a backup program coordinator is available in their absence.

C. MMS Employees Who Provide First Aid as Part of Their Duties and MMS Employees Who Volunteer as Lay Responders

(1) Participate in all required training programs.

(2) Read and be familiar with the facility's Exposure Control Plan (see Appendix A) and all other protocols related to BBP.

(3) Maintain PPE so that they are readily accessible and alert Program Coordinator when PPE have been used or have reached their expiration date.

(4) Wear appropriate PPE and observe appropriate work practice controls, including universal precautions when responding to an emergency.

(5) Sign a consent or declination form for the Hepatitis B vaccine (see Appendix B, Hepatitis B Vaccination Information and Consent/Declination Form).

(6) Report all first aid incidents involving the presence of blood or OPIM to the supervisor or manager before the end of the work shift during which the incident occurred.

6. Additional Resources.

A. OSHA Technical Resources, http://www.osha-slc.gov/SLTC/bloodbornepathogens/index.html

B. Oklahoma State University On-Line Training Program, http://www.pp.okstate.edu/ehs/modules/bbp/Intro.htm

C. CalOSHA Exposure Control Plan for Bloodborne Pathogens, http://www.dir.ca.gov/dosh/dosh_publications/expplan2.pdf

D. Hepatitis Network, http://www.hepnet.com/

Exposure Control Plan

This exposure control plan applies to all employees who may handle, store, use, process, or dispose of infectious medical wastes or may be exposed to blood or bodily fluids in the conduct of their job. This plan shall include requirements for personal protective equipment, housekeeping, training, and a procedure for reporting exposures. Employees who provide first aid response as part of their duties must be included in the program. This plan has been developed in accordance with the Centers for Disease Control and Prevention (CDC) guidelines and the Occupational Safety and Health Administration (OSHA) Bloodborne Pathogens Standard (29 CFR 1910.1030) to help protect employees from bloodborne pathogens (BBP). This plan will be reviewed and updated annually.

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 with risk of exposure. All employees whose duties require them to be trained to use first aid have the potential for exposure to BBP in the course of their duties, e.g. Lay Responders, Inspectors, and all permanent employees assigned to work in a location where the nearest emergency medical treatment facilities require travel time in excess of 15 minutes.

Compliance Methods

1. Universal Precautions will be used by all employees whenever the potential for exposure to BBP 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 human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV), and other BBP. 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 must 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. 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 must 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 needle-less systems. Sharps such as the disposable razor in the AED kit, scissors to cut away clothing, and broken glass will be disposed

of in a strong plastic container such as an empty bleach bottle when a sharps container is not readily available. The containers must be puncture resistant, leak-proof on the sides and bottom, and labeled as shown below with a fluorescent orange or orange-red label and lettering and symbols in a contrasting color. The container of sharps will be disposed of as regulated waste. The BBP Program Coordinator will prepare the waste for shipping.

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 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. Sharps such as razors, scissors, and broken glass 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. The PPE that may be used by the AED team are:

Recommended Personal Protective Equipment for Worker Protection*

TASK	NON-LATEX DISPOSABLE GLOVES	PLASTIC DISPOSABLE APRON	ONE-WAY RESUSCITATION SHIELDS	EYEWEAR
Performing CPR	X		X	
Control of Bleeding w/ spurting blood	X	X	X	X
Bleeding control with minimal bleeding	X			
Emergency Child Birth	X	X	X	X
Handling & Cleaning Instruments	X			X
Cleaning Bio Spills	X			X

***** The examples provided in this table are based on application of Universal Precautions. Universal Precautions are intended to supplement rather than replace recommendation for routine infection control, such as hand washing and using gloves to prevent gross microbial contamination of hands (e.g., contact with urine or feces).

PPE

1. At a minimum, MMS is responsible for providing non-latex disposable gloves and one-way resuscitation shields to all MMS employees who provide first aid response as part of their duties. Plastic disposable aprons and goggles are recommended but are not required.

2. The MMS will replace PPE and used items after an exposure incident.

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

4. Employees will not eat, drink, smoke, or apply cosmetics in areas where there is a reasonable likelihood of exposure to blood or other potentially infectious materials.

5. Although regulated medical waste is not normally generated by this organization, when it is, it will be disposed of in accordance with the Waste Disposal Plan which will conform to all applicable Federal, State, and local requirements.

Waste Disposal Plan

1. Disposable nitrile or vinyl gloves will be worn whenever there is a reasonable expectation that the employee will have hand contact with blood, other potentially infectious materials, non-intact 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.

2. Medical/Infectious waste must be segregated from other waste at the point of origin.

3. Medical/Infectious waste, except for sharps (e.g. razor blades, broken glass, needles, etc.) capable of puncturing or cutting must be contained in double disposable red bags conspicuously labeled with the words, "INFECTIOUS WASTE -- BIOHAZARD."

4. Infectious sharps must be contained for disposal in leak-proof, rigid puncture resistant containers.

5. Infectious waste thus contained as described in procedures 2 and 3 above must be placed in reusable or disposable leak-proof bins or barrels which must be conspicuously labeled with the words, "INFECTIOUS WASTE -- BIOHAZARD." These waste barrels are to be picked up by non-MMS organization licensed to handle infectious wastes.

6. Spills/Disinfectants: a solution of sodium hypo chlorite (household bleach) diluted with water (1 part bleach to 9 parts water) or an equivalent cleaning solution must be used to disinfect, following initial cleanup of a spill with a chemical germicide approved as a hospital disinfectant.

Spills must be cleaned up immediately.

7. After removing gloves, and/or after contact with body fluids, hands and other skin surfaces must be washed thoroughly and immediately with soap or other disinfectant in hot water.

8. Other biological wastes that do not contain radioactive or hazardous substances may be disinfected by steam sterilization (autoclave) and then disposed of in the regular trash. If steam sterilization is not feasible biological wastes shall be disposed of as biohazardous material.

9. Liquid biohazard waste may be disposed of in the sewage system following chemical decontamination.

10. Reusable glassware must be decontaminated in sodium hyper chlorite (household bleach) solution (1 part bleach to 9 parts water) or equivalent cleaning solution prior to rinsing and acid washing. Then the glassware must be sterilized in an autoclave.

11. Employees will be asked to dispose of personal clothing that may become contaminated by blood. The clothing will be covered with a 10 percent bleach solution and allowed to soak for at least 20 minutes before disposal.

Hepatitis B Vaccine

1. All AED team members have possible occupational exposure to BBP and will 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 AED team.

2. 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 (see Appendix B) 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.

Post-exposure Evaluation and Follow-up

When an employee experiences an exposure incident it will be reported to his or her 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:

1. Document the route of exposure and the circumstances under which the exposure incident occurred.

2. Identify and document the source individual, unless the supervisor can establish that identification is infeasible or prohibited by state or local law.

3. 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.

4. 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.

5. The exposed employee's blood will be collected as soon as feasible and tested after consent is obtained.

6. 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.

7. The employee will be provided with post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

8. The employee will be provided with post exposure counseling and evaluation of reported illnesses.

Training for MMS Employees Who Provide First Aid as Part of Their Duties

Training for AED team members will be conducted prior to their initial assignment to a task where exposure may occur. There will be an opportunity for interactive questions and answers with the person conducting the training session. Employees will receive annual refresher training. Training will include:

1. How to access a copy of the regulatory text of the BBP standard on the OSHA web page (1910.1030 - Bloodborne pathogens) and an explanation of the standard and its requirements;

2. A general discussion of the epidemiology and bloodborne diseases and their symptoms, and an explanation of how the diseases can be transmitted;

3. An explanation of this exposure control plan and how to access a copy of the written plan on the MMS Pipeline web page;

4. An explanation of the appropriate methods for recognizing activities that may involve exposure to blood and other potentially infectious materials;

5. How to prevent or reduce occupational exposures, including appropriate engineering controls, work practices, and PPE;

6. Information on the types, proper use, location, removal, handling, decontamination, and disposal of PPE;

7. An explanation of the basis for selection of PPE;

8. The benefits of the hepatitis B vaccine and that the vaccine and vaccination will be offered free of charge; and

9. The reporting and follow-up procedures following an actual exposure incident including:

A. Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;

B. 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; and

C. Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident.

10. An explanation of the required signs and labels and/or color coding.

Recordkeeping

The Bureau Industrial Hygienist or the Bureau Safety Manager is responsible for ensuring that this policy is effectively implemented and for maintaining the records related to this policy.

1. 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 the Cost Center Manager.

2. Training records will be maintained for 3 years after the training date. 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 the Cost Center Manager.

3. Exposure incidents are evaluated to determine if they are a “recordable” under OSHA’s Recordkeeping requirements. The Collateral Duty Safety Program Coordinator will determine if an exposure incident is recordable.

4. Sharps Injury Log. In addition, all percutaneous injuries from contaminated sharps are also recorded in the Sharps Injury Log as shown below. All incidents will 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, and an explanation of how the incident occurred. The Bureau Safety Officer (BSO) will maintain the sharps injury log and will review it at least annually as part of the annual evaluation of the program. The log will be maintained for at least 5 years following the end of the calendar year. If a copy is requested by anyone, it will have any personal identifiers removed from the report.

Sharps Injury Log

Date of Injury	Device (sharp) used - type and brand	Office or Cost Center	Location where incident occurred	Explain how incident occurred

5. OSHA 300 Log. Any reports required by OSHA will be maintained by the Program Coordinator or designee. Occupationally contracted HBV or HIV will be recorded on the OSHA 300 Log of Occupational Injuries and Illnesses as an illness. Exposures to blood-borne pathogens from contact with sharps will be recorded on the OSHA 300 Log of Occupational Injuries and Illnesses if treatment such as gamma globulin, hepatitis B immune globulin, or hepatitis B vaccine is prescribed by a physician.

Post Exposure Treatment and Notification Procedures

1. Should an affected employee or an employee acting as a "Good Samaritan" be occupationally exposed to HIV/HAV/HBV the affected employee will report the exposure to their BBP Program Coordinator. The MMS will provide for the employee to be tested for HIV/HAV/HBV at the expense of MMS. Following the initial blood test at time of exposure, seronegative employees will be retested at 6 weeks, 12 weeks, and 6 months to determine if transmission has occurred. During this period, the employee will follow the recommendations provided by the Physician or the U. S. Public Health Service.

2. An "occupational exposure" is defined as blood or body fluid contact from an injured or ill employee to an open wound, or mucous membrane of the affected employee, or an injury by a contaminated sharp object. Following the report of exposure, the BSO will contact the exposure source and request that person be tested for HIV/HAV/HBV at the facility’s expense. The request is not mandatory and if refused will not effect that employee's future employment. The source individual's blood is tested as soon as possible and after consent is obtained to determine HBV and HIV infectivity (hepatitis B surface Antigen, hepatitis C antibody, and HIV Screen).

3. The exposed employee's blood shall be collected as soon as feasible and tested for HBV (hepatitis Bs antibody, hepatitis C antibody) and HIV serological status after consent is obtained (Employee Consent for HIV Antibody Testing).

4. During all phases of post-exposure, the confidentiality of the affected employee and exposure source will be maintained on a "need to know basis." The Blood-Borne Pathogens Exposure and Treatment form is used to document the exposure and offer medical assistance to the affected employee. The Medical Consent for Blood-Borne Pathogens Testing form is used for the exposure source. The results of any HIV/HAV/HBV tests conducted will be provided to the exposed and source employees within 5 business days of receipt.

Cuts

If an employee has a needle stick, cut, or mucous membrane exposure to another person's body fluids he/she must report the incident immediately to their supervisor or BBP Program Coordinator.

Blood Exposure

All employees exposed to human blood and blood products must report to the BBP Program Coordinator for information and possible inclusion in the Hepatitis B Immunization Program.

Glossary

AED - Automated External Defibrillator

BBP - Bloodborne Pathogens

BSO - Bureau Safety Officer

CDC - Centers for Disease Control and Prevention

CDSO - Collateral Duty Safety Officer

CFR - Code of Federal Regulations

First Aid - Emergency treatment administered to an injured or sick person before professional medical care is available.

HAV - Hepatitis A virus

HBV - Hepatitis B virus

HCV - Hepatitis C virus

HIV - Human Immunodeficiency Virus

MMS - Minerals Management Service

OSHA - Occupational Safety and Health Administration

OPIM - Other Potentially Infectious Materials - (1) the following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic 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; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

PPE - personal protective equipment

Universal Precautions - 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 BBP.

APPENDIX B

HEPATITIS B VACCINATION INFORMATION AND CONSENT/DECLINATION FORMS

The Minerals Management Service (MMS) offers free vaccination against hepatitis B virus for all employees who are at increased risk for blood borne pathogen exposures at work. Employees are at increased risk and should consider vaccination if they (1) have direct contact with human blood or other body tissues or (2) are at risk of trauma, needle sticks, cuts, or abrasions that may result in percutaneous exposure to materials infected with hepatitis B virus.

The Disease

Hepatitis B, formerly called serum hepatitis, is a disease caused by the hepatitis B virus (HBV). There is no specific treatment for hepatitis B infection other than supportive measures. Most persons who become infected with hepatitis B recover completely and are immune to subsequent exposures. However, of all those who develop hepatitis B infection, about 0.1 percent die of fulminating hepatitis. The prognosis depends on age, dose, and severity of underlying disease. Five to 10 percent of cases become chronic lifetime carriers who are capable of transmitting the disease to others and are at risk of developing chronic active hepatitis B, cirrhosis (2 percent), or liver cancer (0.4 percent).

Risks of Hepatitis B Infection for Health Care Workers

Health care workers who have contact with blood, infected tissue or secretions, and regular exposure to trauma, needle sticks, cuts, and abrasions are most at risk for acquiring hepatitis B. In the United States, about 5 percent of the general population show evidence of past or present hepatitis B infection, while up to 30 percent or more health care workers in high-risk areas show evidence of past hepatitis B infection.

The Vaccine

A genetically engineered hepatitis B vaccine was first licensed by the Food and Drug Administration (FDA) in July of 1986. Genetically engineered vaccine is the vaccine offered to MMS employees. The vaccine, referred to as recombinant HB vaccine (“Recombivax HB” or “Engerix-B”) is very comparable, immunologically, to the earlier “Heptovax B” vaccine which was introduced in 1981. The difference between the two vaccines relates to their methods of derivation. Recombinant HB vaccine is genetically engineered from common baker's yeast into which a plasmid containing the gene for the hepatitis B surface antigen (HBsAg) and has been inserted. The first available plasma derived hepatitis B vaccine (“Heptovax B”) is derived from highly purified plasma of chronic HBV carriers and then inactivated so that it is not infectious. The plasma derived vaccine is no longer produced in the United States.

The full vaccination series for hepatitis B includes an initial vaccination followed by repeat doses 1 month and 6 months later. Over 95 percent of susceptible healthy adults (20-39 years of age) who receive the full vaccination series achieve high levels (titers) of hepatitis B surface antibody

(anti-HBs) and are considered to be immune from hepatitis B infection. The vaccine produces somewhat lower antibody responses in older adults than in younger adults.

The dose is 10Fg (1 ml) injected into the deltoid muscle. There is no evidence that the vaccine has ever caused hepatitis B. Administration of the vaccine to persons already positive has no effect, good or bad. Administration of hepatitis B hyperimmune globulin (HBIG) given prophylactically does not interfere with the development of antibodies to the vaccine. Persons already incubating hepatitis B prior to receiving the vaccine may go on to develop clinical hepatitis in spite of the immunization, although the vaccination may reduce the severity of the illness.

Vaccine Risks and Possible Side Effects

The incidence of side effects is very low, usually limited to soreness at the injection site and mild systemic symptoms (fever, headache, fatigue, and nausea).

There is no danger of acquiring any bloodborne disease from the hepatitis B vaccine itself. Early concerns about safety of plasma-derived HB vaccine (no longer in use here), especially the concern that infectious agents such as human immunodeficiency virus (HIV) present in donor plasma pools might contaminate the final product, have proven to be unfounded. The recombinant HB vaccine does not contain infectious materials.

Post vaccination antibody testing for immune response. It is currently recommended that titers of anti-HB's (hepatitis B antibody) be tested 1 to 2 months after the completion of the full vaccination series for hepatitis B. Those with positive antibody titers (i.e. a titer of 10 milli-international units per milliliter of blood) at that time are considered to be immune. It is not known how long this immunity will last, but the current thinking is that immunity will last for at least 5 to 7 years and may be lifelong. At this time, the CDC is not recommending any booster shots for these and it is hoped that this immunity will be permanent. Further data on the need for booster shots may be available in coming years.

Individuals who have a low antibody titer when tested (i.e., < 10 MIU/ml) 1 to 2 months after completion of the full vaccination series should receive further vaccinations and testing as noted. They should receive a fourth injection (at the same dose as the original injection) just after the negative test results are received and 1 to 2 months later should be tested again for anti-HB's titers. If the titers are positive, the person should be considered immune. If the titers are still low, a fifth vaccination should be given at that time and anti-HB's titers tested once more 1 to 2 months later. If these titers are positive, the individual is considered immune. If antibody titers remain low after five injections, it is presumed the individual will not be able to develop an immune response and no further injections are indicated. In these cases, the individual is considered a *nonresponder* to hepatitis B vaccinations and a physician should be consulted regarding the need for medical work restrictions.

APPENDIX B

HEPATITIS B VACCINATION INFORMATION AND CONSENT/DECLINATION FORMS

Hepatitis B Vaccination: Consent Form

I have read the information about hepatitis B and the hepatitis B vaccine. I have had the opportunity to ask questions and understand the benefits and risks of hepatitis B immunization. I agree to receive the three doses required for the optimum immune response. However, as with all medical treatment, I understand there is no guarantee that I will become immune or that I will not experience adverse side effects from the vaccine. Please print.

Name of person to receive HB vaccine	Social Security Number
Signature of person receiving vaccine	Witness
Date	Date

Hepatitis B Vaccination Record

	DATE	GIVEN BY	LOT #
Primary dose			
1 month after primary dose			
6 months after primary dose			

Hepatitis B Vaccination: Declination Form

I understand that, due to my occupational exposure to blood or other potentially infectious materials, I may be at 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 me. 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. If 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.

Print Name _____ Signature _____

Home Address _____

Work Address _____

Date _____