Bloodborne Pathogens:
Breaking the Chain of Infection
Interactive Television (ITV) Workshop

Presented by
Bureau of Indian Affairs Division of Safety and Risk Management
Bureau of Land Management National Safety Office
National Park Service Risk Management Division
U.S. Fish and Wildlife Service Division of Safety and Health
The National Indian Programs Training Center

Participant’s Guide
Revised December 17, 2008
Bloodborne Pathogens: Breaking the Chain of Infection
Course Map

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Summary
How to Interact with the Instructor

We encourage you to ask questions and share your comments with the instructors throughout this interactive television (ITV) course.

If you were physically in the classroom with the instructor, you would raise your hand to let him know you had a question or comment. Then you would wait for the instructor to recognize you and ask for your question. We are all familiar with that “protocol” for asking questions or making comments.

With ITV courses there is also a “protocol” to follow to ensure you can easily ask questions and others can participate as well. It may seem a little strange at first asking a question of a TV monitor. Remember, it is the instructor you are interacting with and not the monitor. As you ask more questions and participate in more ITV courses, you will soon be focusing only on the content of your question and not the equipment you are using to ask it.

As part of the distance learning equipment at your location, there are several push to talk microphones. Depending on the number of students at your location, you may have one directly in front of you or you may be sharing one with other students at your table.

When you have a question, press the push to talk button and say, “Excuse me [instructor’s first name], this is [your first name] at [your location]. I have a question (or I have a comment).” Then release the push to talk button. This is important. Until you release the button, you will not be able to hear the instructor.

The instructor will acknowledge you and then ask for your question or comment. Stating your name and location not only helps the instructor, but also helps other students who are participating at different locations to get to know their classmates.
Course Objectives

At the conclusion of this course, you should be able to--

1. Define bloodborne pathogen (BBP), list the major BBP’s that can be transmitted by an occupational exposure, and explain the role of blood and other potential infectious materials (OPIMs) as vehicles in transmitting pathogens.

2. Describe how to conduct an employee exposure determination, and identify which job classifications or tasks and procedures at your site could result in an occupational exposure.

3. Recognize an occupational exposure and an exposure incident.

4. Describe the universal precautions that should be taken to reduce the risk of exposure.

5. List the controls that should be taken to reduce the risk of occupational exposure.

6. Know the basic requirements for handling materials contaminated with blood or OPIM.

7. Know the labeling requirements for regulated waste or containers with OPIM.

8. Identify the personal protective equipment (PPE) used to prevent exposure to BBP.

9. Identify the requirements for HBV vaccination.

10. List the topics to be covered in required employee training sessions.

11. List the steps to take in the event of an exposure incident.

12. Know the reporting requirements for needle stick injuries and cuts from sharp objects.

13. Explain what is to be included in a written exposure control plan.

14. Know the record keeping requirements for medical records, training records, and the sharps injury logs.
The Dangers of BBPs and OPIMs

What is there in blood that makes us worried about being exposed to it?

Important Definitions:

**Bloodborne Pathogens** are 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), hepatitis C (HCV), and human immunodeficiency virus (HIV).

**Hepatitis B (HBV)**

- Caused by a virus that attacks the liver
- Cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure, and death
- In 2003, an estimated 73,000 people were infected with HBV

**Hepatitis C (HCV)**

- A liver disease caused by the hepatitis C virus
- 1.6% of the U.S. adult population has evidence of infection
- HCV infection sometimes results in an acute illness, but most often becomes a chronic condition that can lead to cirrhosis of the liver and liver cancer

**Human immunodeficiency virus (HIV)**

- 40 million world wide
- Estimated 1,106,400 adults and adolescents in America (CDC 2006)
The Dangers of BBPs and OPIMs (cont.)

Other Potentially Infectious Materials (OPIM) are any of the following:

- 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;
- Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and
- 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.

Regulated Waste is a liquid or semi-liquid blood or other potentially infectious material; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.

The Modes of Transmission: Exposures occur when these infectious materials come in contact with a person’s eye, mouth, other mucous membrane, or non-intact skin, or when parenteral contact is made with the blood.

Parenteral contact is ________________________________.

What Steps Would You Take?

Brainstorm and list some steps that you as a supervisor would want to take before allowing an employee to perform a task that poses a potential for hazardous exposure to BBPs or OPIMs.

Take 2 or 3 minutes, and then we’ll share some of your ideas.
The Program Elements

The following references provide requirements and guidance for a BBP Exposure Control Program:

- 29 CFR 1910.1030 Blood-Borne Pathogens
- 29 CFR 1904.8 Reporting Criteria for Needle Stick and Sharps Injuries.
- Specific agency guidelines.

The Bloodborne Pathogen Exposure Control Elements are:

1. Employee Exposure Determination
2. Exposure Control Plan
3. Universal Precautions
4. Engineering Controls
5. Work Practice and Other Controls
6. Labeling
7. Personal Protective Equipment
8. Hepatitis B Vaccination
9. Post-Exposure Incident Follow-up
10. Reporting
11. Employee Training
12. Record Keeping
13. Waste Management
Recognizing Occupational Exposures and Exposure Incidents

An occupational exposure is a ________ _________ contact with an infectious material that _____ result, whereas an exposure incident is a ________ ________ in which contact ____ ________ with an infectious material.

You Make the Call!

Below are five scenarios involving controversial exposure groups. Read through each scenario at your site and determine whether or not the tasks and procedures of that group involve an occupational exposure.

Scenario One: Custodial Workers and Feminine Hygiene Products
Custodians at your site have the daily duty of picking up and disposing of feminine hygiene products. Do these fall into the category of regulated waste, and does that task involve an occupational exposure? Yes / No

Scenario Two: Maintenance Plumbers
Your site employs plumbers who perform repairs on pipes or drains in laboratories. Are they involved in occupational exposure? Yes / No

Scenario Three: First Aid Responders
Your site has employees trained in first aid and designated responsible for rendering medical assistance as part of their job duties. As part of several tasks at the site, you can reasonably expect abrasion hazards, laceration hazards, electrical hazards, and a myriad of other accidents that could result in exposure to blood and saliva during first aid or CPR emergency assistance.

Do these employees fall under the occupational exposure hazard? Yes / No

What if no one has been designated as a first aid provider at your site? Is he or she considered under risk of occupational exposure? Yes / No

Scenario Four: Excavator
An excavator or driller employed by your site accidentally ruptures a sewage line, resulting in the release of raw sewage. Is he or she involved in an occupational exposure? Yes / No

Scenario Five: Waste Management
Employees responsible for solid waste management at your site have experienced a very low number of needle sticks in the past several years. Should they be considered as being involved in occupational exposure? Yes / No
Recognizing Occupational Exposures and Exposure Incidents (continued)

An *exposure incident* is a __________  _________ in which contact ____  ________ with an infectious material.

**Exposure Incident?**
Discuss the following four scenarios at your site and determine whether or not an *exposure incident* has occurred.

### Scenario One

A law enforcement officer breaks up a fight between two men and gets blood on his hands. He finds the blood has made contact with an abrasion he received from a recreational accident on his personal motorcycle the day before.

Yes  /  No

### Scenario Two

A maintenance supervisor removes a used syringe from a garden area at your site and places it in a sharps container for disposal.

Yes  /  No

### Scenario Three

A volunteer AED responder deploys an AED to a fellow employee who has had a heart attack. Upon arrival the AED responder finds vomitus with visible blood in the employee’s mouth. The responder applies abdominal thrusts to the employee to clear the airway. The vomitus hits the responder in the eyes.

Yes  /  No

### Scenario Four

A maintenance worker comes across a visitor sleeping for the night in a public area of your site. He wakes up the visitor, who swears and spits in the worker’s face.

What if there is visible blood in the sputum?  
Yes  /  No

What if there is not visible blood?  
Yes  /  No
How to Conduct an Employee Exposure Determination

Conducting an employee exposure determination consists of making three lists:

1) A list of all job classifications in which all employees have occupational exposure, and

2) A list of job classifications in which some employees have occupational exposure.

3) This second list will be accompanied by a list of all tasks and procedures that are performed by employees that could result in an occupational exposure in that list. Determination is made without regard to the use of personal protective equipment.

What Employees at Your Site Have Occupational Exposure?

Refer to Appendix D at the back of this guide.

Complete each of the tables for job classifications at your site.
Universal Precautions

Universal precautions is the concept of bloodborne disease control which requires that all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

Universal precautions include

1. Wearing ________ to touch patients’ blood and body fluids, mucous membranes, or broken skin; to handle items or surfaces soiled with blood or body fluids; and to perform venipuncture and other vascular access procedures. Personnel will change gloves after contact with each patient. Personnel will wear masks and protective eyewear or face shields during procedures likely to generate blood droplets or other body fluids to prevent exposure to oral, nasal, or optic mucous membranes. Personnel will wear gowns or aprons during procedures likely to generate blood splashes or other body fluids.

2. If contaminated with blood or other body fluids, personnel immediately will ______ hands and other skin surfaces thoroughly. All persons shall wash their hands after completing activities likely to expose them to BBPs and remove protective clothing before leaving the work area.

3. All health care workers will take precautions to prevent ________ caused by needles, scalpels, and other sharp instruments or devices during procedures or when cleaning used instruments, disposing of used needles, and handling sharp instruments after procedures. To prevent needle stick injuries, personnel will not by hand directly recap needles, purposely bend or break them, remove them from disposable syringes, or otherwise manipulate them. After using disposable syringes and needles, scalpel blades, and other sharp items, personnel will dispose of them by placing them in puncture-resistant containers located as close to the use area as practical. Reusable needles will not be used.

4. Although research has not definitively implicated saliva in HIV transmission, it is prudent to use ___________, resuscitation bags, or other ventilation devices instead of mouth-to-mouth resuscitation. These devices must be available for use in areas where the need for resuscitation is predictable.
**Universal Precautions**

5. Health care workers who have exuding lesions or weeping dermatitis will not provide any direct patient care or handle patient care equipment until the condition resolves.

6. Eating, drinking, smoking, applying cosmetics or lip balm, and handling _______ are prohibited in work areas with a reasonable likelihood of occupational exposure to BBPs.

7. Personnel shall not keep food and drink in refrigerators, freezers, shelves, drug storage areas, or cabinets or on countertops or bench tops where _______ or other potentially infectious materials are present.

8. Personnel shall perform all procedures involving blood or other potentially infectious materials in a manner that prevents _______ of these substances from splashing, spraying, splattering, and generating.
### Controls for Reducing Exposure

**Engineering Controls** reduce employee exposure in the workplace by either removing or isolating the hazard or isolating the worker from the exposure.

Example: Use of puncture resistant disposal containers for contaminated sharp instruments.

**Administrative Controls** are policies and procedures that an agency adopts in order to reduce employee exposure.

Example: Providing the Hepatitis B vaccination for employees who face potential exposure.

**Work Practice Controls** change how a task is carried out. A supervisor can decrease potential exposure by requiring that employees perform tasks in certain ways. (List examples below.)

Example: Having employees observe universal precautions.

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#### What Controls Can You Use at Your Site?

Take a few minutes and list 3-5 controls that you can use at your site to reduce the risk of employee exposure to bloodborne pathogens.

After listing the control, identify whether it is an engineering control (E), an administrative control (A) or a work practice control (W)

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### Handling Contaminated Materials

**Contaminated materials** can include but are not limited to:
- used needles
- soiled scalpels
- disposable resuscitators
- intubation equipment
- used bandages
- disposed personal protective equipment
- other potentially infectious materials.

**Contaminated materials** must be discarded in containers that are:
- Closeable
- Puncture-resistant, if discarded materials have the potential to penetrate the container
- Leak-proof, if the potential for fluid spill or leakage exists
- Red in color or labeled with the appropriate biohazard warning label
- As close as possible to the source of the waste.

### How Do I Clean and Decontaminate Equipment and Spills of Blood or Other Body Fluids?

1. Wear gloves, protective eyewear and gown or apron to prevent contact in case of splashing.
2. Remove visible material with disposable towels or other appropriate means that prevent direct contact with blood.
3. Decontaminate the area using EPA-approved germicide or recommended surface disinfectant agent.
4. Clean and decontaminate soiled cleaning equipment or put it in an appropriate container and dispose of it according to clinic policy.
5. Remove contaminated items from the spill site using plastic bags clearly labeled as containing infectious waste.
6. Remove gloves and other PPE; then wash hands.
7. All blood-contaminated cleaning supplies/materials must be placed in a red bag, properly labeled and packaged for disposal.
8. Report all incidents immediately to supervisor.
**Labeling Requirements**

How must all containers of regulated waste or any container used to transport or store blood or other infectious material be labeled? List two possible ways.

1. 
2. 

Notes
A **PPE T/F Quiz**: 

___ 1. The employee must pay for PPE.

___ 2. Work areas and emergency response vehicles must be equipped with the appropriate PPE.

___ 3. It is the supervisor’s responsibility to inspect and repair PPE.

___ 4. All potentially contaminated personal protective equipment is to be removed after leaving a work area or accident/incident site, if possible.

___ 5. Employees must receive training to use PPE, and that is the supervisor’s responsibility.

**Can You Name Five** of the pieces of Personal Protective Equipment used to reduce the risk of exposure to BBPs and OPIMs?

1.

2.

3.

4.

5.
HBV Vaccinations

One of the most critical administrative controls is the pre-exposure administration of the HBV vaccination. 29 CFR 1910.1030 mandates that Hepatitis B vaccination will be made available to all site employees who have occupational exposure.

- The vaccine will be provided within 10 working days of assignment, at a reasonable time and place, at no cost to the employee (including travel expenses).

- It will be performed by or under the supervision of a licensed physician or other licensed health care professional whose scope of practice allows him or her to independently perform those activities (e.g., nurse practitioner). All vaccinations must be administered according to the recommendations of the U.S. Public Health Service.

- The only exception to providing vaccination would be
  
  A. if the site employee has previously received the complete Hepatitis “B” vaccination series,
  B. antibody testing reveals that the employee is immune, or
  C. medical reasons prohibit the employee from taking the vaccine.

- Any site employee who chooses not to receive the Hepatitis “B” vaccination series must complete and sign the Declination Form provided in Appendix E, page 43 of your participant guide. However, if this individual changes his/her mind at a later date, he or she will still be able to receive the HBV vaccination series.

- If the vaccination series is interrupted after the first dose, the second dose should be administered as soon as possible. The second and third doses should be separated by at least 2 months. If only the third dose is delayed, it should be administered when convenient.

See Appendix G for additional guidance on HBV vaccinations.
Responding to An Exposure Incident

Step by Step:

**Employee Responsibilities**

1. Initiate appropriate cleaning and/or first aid at exposure site;
2. Identify the source of exposure;
3. Report incident to immediate supervisor.

**Site Responsibilities**

1. The site must make immediately available to the employee a confidential medical examination and follow-up consultation.
2. Source Individual Testing: The site must identify and document the source individual if known, unless it can establish that identification is not feasible or is prohibited by state or local law. The source individual’s blood must be tested as soon as feasible, after consent is obtained, in order to determine HIV and HBV infectivity. The information of the source individual’s HIV and HBV testing must be provided to the evaluating health care professional. The results of the testing must be provided to the exposed employee. He or she must be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
3. Counseling: The site must provide the health care provider with the following documents and information:

   - a copy of the standard;
   - a description of the employee’s duties as they relate to the exposure incident;
   - documentation of the route(s) and circumstances of the exposure;
   - results of the source individual’s blood testing if available;
   - all medical records relevant to the appropriate treatment of the employee, including vaccination status, which are the employer’s responsibility to maintain.
Responding to An Exposure Incident

4. Post-exposure prophylaxis (treatment) with *Hepatitis B Immune Globulin (HBIG)* (passive immunization) and/or vaccine (active immunization) should be used when indicated (e.g., after any site employee has a percutaneous (needle stick or cut from sharps) or mucous membrane exposure to blood (known or suspected) to be HbsAg-positive).

5. Needle stick or other percutaneous exposures of unvaccinated persons should lead to initiation of the *Hepatitis “B” vaccination series*. Post-exposure prophylaxis should be considered for any percutaneous, ocular (eye), or mucous membrane exposure to blood in the workplace and is determined by the HbsAg status of the source and the vaccination and vaccine-response status of the exposed site employee.

6. If the source of exposure is *HbsAg positive* and the exposed person is unvaccinated, HBIG should also be administered as soon as possible after exposure (within 24 hours) and the vaccine series started. The effectiveness of HBIG when administered >7 days after an exposure incident is unknown. If the exposed site employee had an adequate antibody response (>=10 mIU/mL documented after the vaccination series through post-titer testing) no testing or treatment is needed, although administration of a booster dose of vaccine can be considered.

7. If the employee does not respond to the primary vaccine series (confirmed through post-titer testing), he or she should complete a second three-dose vaccine series or be evaluated to determine if she is HbsAg-positive. Re-vaccinated employees should be re-tested at the completion of the second vaccine series. Site employees who prove to be HbsAg-positive must be counseled by their physician.
Responding to An Exposure Incident

8. HIV (AIDS) Testing: An exposed employee has the opportunity for future testing without the need for an immediate decision. Employees involved in an exposure incident have at least 90 days following baseline blood collection to decide if they wish to have their blood tested for HIV. To the employee, HIV testing may present adverse ramifications, (e.g., confidentiality, employment, prejudice, or lack of medical information). Therefore, the 90-day time frame allows the potentially exposed employee the opportunity to participate in education, counseling, or further discussions involving the exposure incident. Employers are required to preserve the blood that the employee consented to have drawn, if it was not tested for HIV initially, for at least the 90-day period.
Reporting Requirements for Percutaneous Exposures

When there occurs any work-related needle stick injury or cut from sharp objects that are contaminated with another person’s blood or OPIM, the site must record the incident.

To Report or Not to Report? Checkmark each piece of information that should be included in the report of any percutaneous exposure incident (See “Appendix H: Exposure Incident Reporting Requirements” for help):

___ date and time of exposure
___ procedural details
___ where the exposure occurred
___ how the exposure occurred
___ type and brand of device
___ price paid for device
___ exposure details
___ type and amount of fluid exposed to
___ severity of exposure; for example, depth of injury or condition of skin
___ description of source material
___ description of source’s therapy and condition if HIV-infected
___ vaccination status of exposed person
___ details about counseling, post-exposure management, follow-up
___ exposed employee’s name on the OSHA 300 Log
___ update if case results in death, days away from work, restricted work, or job transfer
___ update to identify infectious disease
___ update of change in case classification from injury to illness

Are the “OSHA 300 Log” and the “Sharps Injury Log” separate reports?

The site is required to obtain a written opinion from the Health Care Facility concerning the exposure incident and provide that opinion to the employee within ___ working days of completion of the original evaluation.
Employee Training

The Employee Training “Musts” are:

Who requires training?
All employees with the potential for occupational exposure to bloodborne pathogens must participate in a bloodborne pathogens training program.

When will the training happen?
Initial training will be provided at the time of assignment. Annual refresher training will be provided for as long as occupational exposure potential exists.

What will the training be about?
The training at a minimum must include the following:
- tasks which may cause exposure to blood or other potentially infectious material;
- the site’s Bloodborne Pathogen Plan and how to access the plan;
- biohazard warning labels and their use;
- personal protective equipment;
- emergency actions to be taken during an exposure incident;
- universal precautions;
- the site’s vaccination program;
- post-exposure evaluation and follow-up;
- regulated waste disposal procedures.

Who will do the training and what will he or she provide?
Training will be conducted by persons knowledgeable in the subject matter, will provide an opportunity for interactive questions and answers, and will include the following:
- a copy of 29 CFR 1910.1030
- epidemiology and symptoms of bloodborne diseases
- methods of transmission
- an explanation of the Site’s Exposure Control Plan and how to obtain a copy
- recognition of tasks which present an exposure risk
- use, selection, and limitations of protective measures
- information and Hepatitis B vaccine
- appropriate emergency actions.
- post exposure incident procedures, medical examination, and follow-up
- signs and labels
Record Keeping

If It’s Not Recorded, It Didn’t Happen (fill in the blanks below):

Medical Records

Medical record will include: training records, liability declinations, immunization records, and exposure records including exposure evaluations. Medical records will be made available for employee review during normal work hours. Disclosure of this information without the employee’s written consent by the Personnel Department is a violation of the Privacy Act. All employee records must be secured at all times and labeled “Confidential”. Medical records will be kept for the duration of employment plus ___ years.

Training Records

Training records will include the employee’s name and job title, topics covered, date, and the name and qualifications of the trainer. Training records must be maintained for a period of ___ years from the date the training occurred.

Sharps Injury Log

The Sharps Injury Log will be maintained for ___ years beyond the end of the calendar year reported by the log.
The Written Exposure Control Plan

See Appendix B for the “Sample Written Exposure Control Plan.”

Review the plan and make a note of any questions you have about

(1) the contents of each section, and

(2) where you can go to get that information relating to your specific site.

Write Your Plan.

Now you should feel prepared to write the first draft of your site’s Exposure Control Plan.

Complete your draft written plan within 15 days and email to:

BIA/BIE - Paul Holley, National Indian Programs Training Center, email john_r_gividen@nbc.gov

BLM - Ed Perez, BLM National Safety Office, email Edward_Perez@blm.gov

NPS - Mike May, NPS Risk Management Division, email Michael_May@nps.gov

What should supervisors oversee regularly to ensure that the site’s Exposure Control Plan remains as effective and responsive as it can be?
Resources

OSHA. Bloodborne Pathogens and Needle Stick Prevention Site


NIOSH Bloodborne Infectious Diseases HIV/AIDS, Hepatitis B Virus, and Hepatitis C Virus

http://www.cdc.gov/niosh/topics/bbp/

NPS Risk Management Home Page
**Workshop Summary**

**Where do we go from here?**

Take a look at the objectives we said we would cover at the beginning of the course (page 3). Make a note of

1. Any objectives you are still unclear about. . .

2. Any items you want to take action on in order to put what you've learned into effect. . .
Appendix A: OSHA Determination Letter

Standard Number: 1910.1030

October 22, 1992

Mr. Larry G. Richardson  
Director of Safety and Training Noble Drilling Services, Inc.  
Suite 400 10370 Richmond Avenue  
Houston, Texas 77042

Dear Mr. Richardson:

This is in response to your letter of August 31, regarding the applicability of 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens", to drilling operations. We apologize for the delay in this response. The bloodborne pathogens standard addresses the broad issue of occupational exposure to blood and other potentially infectious materials and is not meant solely for employees in health care settings. Since there is no population that is risk free for human immunodeficiency virus and hepatitis B virus infectivity, any employee who has occupational exposure to blood or other potentially infectious materials is included within the scope of this standard.

It is important to note that the definition of "occupational exposure" comprises the reasonable anticipation that the employee will come into contact with these fluids during the course of performing his or her work duties. Therefore, OSHA anticipates that this standard will impact upon all non-health care industries in a similar fashion, i.e., that employees who are designated as responsible for rendering first aid or medical assistance as part of their job duties are to be covered by this standard. This is because it is reasonable to anticipate that an employee designated to render first aid will have occupational exposure to blood or other potentially infectious materials.

Employees who perform "Good Samaritan" acts are not, per se, covered by this standard, although OSHA would encourage an employer to offer follow-up procedures to an employee who experiences an exposure incident as the result of performing a "Good Samaritan" act. This is because such an action does not constitute "occupational exposure", as defined by the standard. The key to this issue is not whether employees have been trained in first aid, but whether they are also designated as responsible for rendering medical assistance. While many workers may be trained in first aid and CPR, not all of these employees would necessarily be designated to render first aid.

Please note that OSHA has recently issued a policy statement specifying that failure to offer the hepatitis B vaccine pre-exposure to persons who render first aid only as a collateral duty, will be considered a technical violation carrying no penalties, provided that a number of conditions are met. These conditions are described in the enclosed news release.

We hope this information is responsive to your concerns. Thank you for your interest in employee safety and health.

Sincerely,

Roger A. Clark  
Director  
Directorate of Compliance Programs
Appendix B: Sample Written Bloodborne Pathogens Exposure Control Program

Caution: Although such general guidance may be helpful, you must remember that the written program must reflect the conditions at your workplace. Therefore, if you use a generic program it must be adapted to address the facility it covers. For example, the written plan must indicate who is to be responsible for the various aspects of the program at your site, define job classifications for which exposures are possible, and provide site-specific exposure response procedures.

Bloodborne Pathogens Exposure Control Plan
Your Park

Policy

Your National Park is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this endeavor, the following bloodborne pathogens exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA standard 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens" and RM50B.

The ECP is a key document to assist our Your Park in implementing and ensuring compliance with the standard, thereby protecting our employees. This ECP includes:

- Responsibilities and program evaluation requirements
- Determination of employee exposure
- Implementation of various methods of exposure control, including:
  - Universal precautions
  - Engineering and work practice controls
  - Personal protective equipment
  - Housekeeping
  - Regulated (biohazard) waste handling procedures
  - Labeling
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Employee information and training
- Recordkeeping

1. Responsibilities.

   a. John Hunter, EMS coordinator, is responsible for the implementation of the ECP and will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures. Mr. Hunter may be contacted at (123) 234-6485.

   b. 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 this ECP.
c. The following individuals will maintain and provide all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard:

1) John Hunter, EMS coordinator, will ensure that adequate supplies of the aforementioned equipment is available for all health clinic and emergency services personnel in the appropriate sizes. Mr. Hunter may be contacted at the health clinic at Headquarters Building 101, (123) 234-6485.

2) Susan Smith, Chief Maintenance Division, will ensure adequate supplies of the aforementioned equipment is available for all maintenance and interpretive staff in the appropriate sizes as required. Ms. Smith may be contacted at Building 202, Maintenance yard, (123) 234-7890.

d. John Hunter will be responsible for ensuring that all medical actions required are performed and that appropriate employee health and OSHA records are maintained. Contact location/phone number (123) 234-5678.

e. Edward Miller, Safety Officer, will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives. Contact location/phone number: (123) 234-6485.

2. Determination of Employee Exposure

a. The following is a list of all job classifications at Your Park in which all employees have occupational exposure:

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<th>Classification</th>
<th>Description</th>
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<td>GS-025 Park Ranger, Law Enforcement</td>
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<tr>
<td>GS-070 Correctional Officer</td>
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<tr>
<td>GS-081 Fire Fighter</td>
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<td>GS-083 Police Officer</td>
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<tr>
<td>GS-085 Security Guard</td>
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<tr>
<td>GS-189 Recreation Aide/Technician (Lifeguard)</td>
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<tr>
<td>GS-610 Occupational Health Nurse</td>
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<tr>
<td>GS-1811 Criminal Investigator</td>
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<tr>
<td>SP-083 Park Police</td>
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</tbody>
</table>

b. The following is a list of job classifications in which some employees at Your Park have occupational exposure. Included is a list of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for these individuals:

<table>
<thead>
<tr>
<th>Classification</th>
<th>Description</th>
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<tbody>
<tr>
<td>GS-025 Park Ranger, Interpretation</td>
<td></td>
</tr>
<tr>
<td>GS-025 Park Ranger, Resource Management</td>
<td></td>
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<tr>
<td></td>
<td>Park Volunteers</td>
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</tbody>
</table>

c. The following tasks or closely related tasks may result in employee contact with blood or other potentially infectious material resulting in exposure to bloodborne pathogens.
• Drawing patient blood
• Handling patient solid waste, linen and other materials
• Examining patients, including contact with blood, body fluids and mucous membranes
• Intubation.
• Performing procedures that produce extensive spattering of blood or body fluids.
• Working with victims of accidents, violence, or illness.
• Cleaning up medical and rescue equipment after use.
• Restraining combative individuals.
• Providing first aid for injured individual (Designated First Responders).
• Examining criminal evidence contaminated with blood and body fluids.
• Handling regulated waste containing contaminated bandages, personal protection equipment and other supplies.
• Handling needles, sharps, or other waste that is considered regulated (biohazard) waste.

3. Exposure Control

a. Universal Precautions. All employees will utilize universal precautions.

b. Engineering and Work Practice Controls

1) Engineering and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens.

2) Engineering controls will be examined, maintained, or replaced at least annually by the Park Emergency Medical Services Coordinator or at any time a defect or problem is suspected. The Park EMS Coordinator will periodically review tasks and other duties of employees, as well as procedures performed, to assess the need for engineering control updates. An inspection will be conducted annually prior to the Exposure Control Plan Review to examine:

   i. Operations where engineering controls are currently employed.
   ii. Operations where engineering controls can be updated/replaced.
   iii. Operations currently in need of engineering controls.

3) Specific engineering controls and work practice controls that will be employed at Your Park are listed below:

   i. Hand washing facilities (or antiseptic hand cleansers and towels, or antiseptic towelettes) that are readily accessible to all employees who have the potential for exposure.

   ii. Containers for contaminated sharps that have the following characteristics:

       1. Puncture-resistant
       2. Color-coded or labeled with a biohazard warning label
3. Leak-proof on the sides and bottom
4. Sharps disposal containers are inspected and maintained or replaced by John Hunter or Susan Smith each quarter or whenever necessary to prevent overfilling.

iii. Specimen/evidence and secondary containers that are:

1. Leak-proof
2. Color-coded or labeled with a biohazard warning label
3. Puncture-resistant (when necessary)

4) Work Practice Controls. Work practice controls are established to ensure minimum exposure to Bloodborne pathogens. All supervisors, in conjunction with the Park EMS Coordinator, are responsible for overseeing the compliance with the work practice controls. The following work practice controls must be followed by all employees at GGNRA Bloodborne Pathogen Control Program:

i. Hand washing:

1. Hands should be washed with soap under running water for at least 10-15 seconds prior to providing health or medical care to any person whenever feasible.
2. Employees must wash their hands immediately, or as soon as possible, after removal of potentially contaminated disposable gloves or other personal protective equipment. If washing of the hands is not feasible, an antiseptic hand cleaner or waterless de-germers with clean paper towels, or antiseptic towelettes will be used until hand washing is possible.
3. Following any contact with blood or any other potentially infectious materials, employees must wash their hands and any other exposed skin with soap and water as soon as possible. Exposed mucous membranes must be flushed with water as soon as possible following contact.

ii. Sharps:

1. Contaminated needles and other contaminated sharps are not to be bent, sheared, broken, recapped, or removed (needles from syringes) unless there is a demonstrated need for this action (e.g., required by the medical procedure).
2. Contaminated evidence, sharps and/or specimens shall be placed in appropriate containers immediately, or as soon as possible, after use.
3. If outside contamination of a primary sharps container occurs, that container shall be placed within a second container, appropriately labeled for handling and storage. If the sharps can puncture the primary container, the secondary container must be puncture resistant as well.
iii. Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable risk of occupational exposure. The same is prohibited immediately after exposure until hands are washed.

iv. Food, drink and medications must not be kept in refrigerators, freezers, shelves, cabinets, or on counter tops or bench tops where blood or other potential infectious materials are present.

v. Mouth pipetting/suctioning of blood or other infectious materials is prohibited.

vi. All procedures involving blood or other potentially infectious materials shall be performed to minimize splashing, spraying, spattering, and generation of droplets of the materials.

vii. Contaminated evidence, specimens of blood, or other material shall be placed in designated leak-proof containers and appropriately labeled for handling and storage.

viii. Equipment that becomes contaminated must be examined prior to servicing or shipping and decontaminated as necessary. If the equipment cannot be decontaminated, then an appropriate biohazard warning label must be attached to any contaminated equipment, identifying the contaminated portions. Information regarding the remaining contamination shall be conveyed to all affected employees, the equipment service representative, and/or the equipment manufacturer prior to handling, servicing, or shipping. Equipment that cannot be decontaminated should be listed in park SOP's and included in the Hazard Communication program.

ix. All at-risk park employees shall be trained regarding any work practice controls with which they are unfamiliar or not experienced.

x. All contaminated trash shall be considered as regulated or biohazard waste and disposed of as prescribed in accordance with applicable Federal, State, and local regulations.

c. Personal Protection Equipment.

1) Personal protective equipment will be provided, at no cost to the employee, in order to eliminate or minimize bloodborne pathogen hazards.

2) All work areas, including emergency response vehicles, shall be equipped with required personal protective equipment of appropriate size, quantity, and quality.
3) To insure that PPE is not contaminated, and is in the proper condition, the following practices shall be adhered to:

i. All appropriate PPE is inspected by the responsible employee each day and repaired or replaced as needed to maintain its effectiveness.

ii. Reusable PPE is cleaned, laundered, and decontaminated as needed.

iii. Single-use PPE (or equipment that cannot, for whatever reason, be decontaminated) is disposed of as prescribed in this Plan for biohazard material disposal.

4) All potentially contaminated personal protective equipment is to be removed prior to leaving a work area or accident/incident site if possible, or as soon as practical.

5) Employees must receive training in the use and care of appropriate personal protective equipment. Personal protective equipment shall be used as required unless the use of the protective equipment will prevent the delivery of health care, public safety services, or pose an increase safety hazard.

6) This equipment includes, but is not limited to:

i. **Gloves**

   1. Gloves are worn whenever employees anticipate hand contact with potentially infectious materials. They are worn when handling or touching contaminated items or surfaces.

   2. Hypoallergenic gloves, glove liners, and similar alternatives are readily available to employees who are allergic to the gloves normally provided. Gloves must be of appropriate material, latex or vinyl, and of appropriate size for each employee.

   3. Gloves should be changed with each new patient, or if torn, punctured, or any loss of effectiveness as an exposure barrier.

   4. Utility gloves must be decontaminated for reuse unless they are cracked, peeling, torn, or exhibit other signs of deterioration, at which time they must be disposed of.

iv. **Face Masks, Eye Protection, and Face Shields.** Masks, eye protection, or face shields shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, mouth contamination can be reasonably anticipated.
v. **Gowns.** Gowns, aprons, and other protective body clothing shall be worn whenever potential exposure to the body is anticipated. Any garments penetrated by blood or other infectious materials are removed immediately, or as soon as practical. Contaminated protective clothing will be disposed of as biohazard waste.

vi. **Resuscitation Equipment.** Whenever practical, resuscitation (CPR) masks should be used.

d. **Housekeeping.** Equipment and facilities in a clean and sanitary condition is an important part of the compliance of the Exposure Control Plan. To help ensure a clean environment, the following practices shall be employed:

i. All equipment and surfaces must be cleaned and decontaminated after contact with blood or other potentially infectious material:

   1. After the completion of an examination of contaminated evidence.
   2. Immediately, or as soon as feasible, after surfaces are overtly contaminated.
   3. After a spill of blood or infectious materials.
   4. At the end of the work shift if the surface may have been contaminated during that shift.
   5. Protective coverings (such as linens, plastic trash bags or wrap, aluminum foil, or absorbent paper) must be removed and replaced as soon as possible when overtly contaminated or at the end of the work shift if they may have been contaminated during the shift.

ii. All trash containers, pails, bins, and other receptacles intended for use must be routinely inspected, cleaned, and decontaminated as soon as possible if visibly contaminated.

iii. All reusable emergency service equipment, such as resuscitation devices that have contacted the skin or mucous membranes, should be soaked in an appropriate commercial disinfecting product, which meets Environmental Protection Agency (EPA) requirements. Equipment surfaces (ambulance floors, walls, tables, gurneys, stretchers, MAST suits, backboards, etc.) that cannot be soaked must have a thorough physical cleaning that includes removal of any contaminated products.

iv. Broken glassware that may be contaminated must be picked up using mechanical means (such as broom and dustpan, tongs, forceps), but not by hand.

e. **Laundry**

   i. Employees shall remove any clothing that becomes contaminated. Clothing grossly contaminated with blood or other potentially
infectious material will **not** be taken home for cleaning. This clothing will be discarded as contaminated waste material and replaced by the employer through normal procedures.

1. Employees can decontaminate clothing lightly contaminated by washing (hot water, detergent, and a small amount of bleach) or by professional dry cleaning (point out the contaminated area to the dry cleaner).
2. All contaminated linen and clothing shipped to any facility shall be placed in water-impervious bags and clearly labeled or color-coded with biohazard warnings.
3. The following contaminated articles will be laundered by this company: Acme Cleaners, 101 Main Street, Downtown, PA (list).
4. All other laundering will be performed by Jim Parker at the Maintenance facility laundry on Monday a.m.
5. The following laundering requirements must be met:
   a. handle contaminated laundry as little as possible, with minimal agitation
   b. place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use *(red bags or bags marked with biohazard symbol)* for this purpose. Wear the following PPE when handling and/or sorting contaminated laundry:
      1. nitrile gloves
      2.

ii. Cleaning blood and/or body fluid spills:

   1) For blood or other potentially infectious material, use an absorbent barrier to contain the spill.
   2) Collect absorbent materials using items such as a dustpan and tongs. **Do not pick up items by hand.** All soiled materials are to be placed in a puncture-resistant and leak-proof container.
   3) Once body fluids have been removed from the area, wash area thoroughly with water.
   4) Rinse with a 10 percent chlorine bleach and water solution.
   5) Rinse a second time with water.

f. **Regulated (Biohazard) Waste Management Procedures.**

i. Contaminated items will be disposed of in containers specifically manufactured, labeled, and approved for biohazard material as described below. The containers must then be disposed of according to in accordance with applicable Federal, State, and local regulations.
ii. Contaminated materials can include but are not limited to: used needles, soiled scalpels, disposable resuscitators, intubation equipment, used bandages, disposed personal protective equipment, and other potentially infectious materials.

iii. Contaminated materials must be discarded in containers that are:

1) Closeable
2) Puncture-resistant, if discarded materials have the potential to penetrate the container
3) Leak-proof, if the potential for fluid spill or leakage exists
4) Red in color or labeled with the appropriate biohazard warning label
5) Containers for regulated waste must be placed in appropriate locations in emergency response vehicles and facilities within easy access of employees and as close as possible to the source of the waste.

g. Program Review. Your Park identifies the need for changes in engineering control and work practices through Review of OSHA records, employee interviews, committee activities. New procedures or new products will be evaluated during regular safety committee meetings. Employees are encouraged to provide supervisors or safety committee members’ suggestions for improved engineering and work practice controls.

h. Labels. Supervisors will ensure warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into the facility. Employees are to notify John Hunter, EMS Coordinator at (123) 234-5678 or Edward Miller, Safety Officer, at (123) 234-6485 if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc. without proper labels.

4. Hepatitis B Vaccination

a. Edward Miller, Safety Officer, will provide training to employees on hepatitis B vaccinations, addressing the safety, benefits, efficacy, methods of administration, and availability.

b. The hepatitis B vaccination series is available at no cost after training and within 10 days of initial assignment to employees identified in the exposure determination section of this plan. Vaccination is 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. However, if an employee chooses to decline vaccination, the employee must sign a declination form. Employees who decline may request and obtain the vaccination at a later date at no cost. Documentation of refusal of the vaccination is kept with the employee’s medical records in the personnel office.

c. Vaccination will be provided by Federal Occupational Health (FOH) at the Main Street clinic.
d. Following the medical evaluation, a copy of the health care professional's Written Opinion will be obtained and provided to the employee. It will be limited to whether the employee requires the hepatitis vaccine, and whether the vaccine was administered.


a. Should an exposure incident occur, contact your supervisor and John Hunter, EMS Coordinator, at (123)234-5678.

b. An immediately available confidential medical evaluation and follow-up will be conducted by FOH at the Main Street clinic.

c. Following the initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:

   i. Document the routes of exposure and how the exposure occurred.
   ii. Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
   iii. Obtain consent and make arrangements to have the source individual tested as soon as possible to determine HIV, HCV, and HBV infectivity; document that the source individual's test results were conveyed to the employee's health care provider.
   iv. If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
   v. Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual (e.g., laws protecting confidentiality).
   vi. After obtaining consent, collect exposed employee's blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
   vii. If the employee does not give consent for HIV serological testing during collection of blood for baseline testing, preserve the baseline blood sample for at least 90 days; if the exposed employee elects to have the baseline sample tested during this waiting period, perform testing as soon as feasible.

d. Administration of Post-Exposure Evaluation and follow-up.

   i. John Hunter, EMS Coordinator will ensures that health care professional(s) responsible for employee's hepatitis B vaccination and post-exposure evaluation and follow-up are given a copy of OSHA's bloodborne pathogens standard.

       1) The exposed employee’s supervisor will collect the following information and provide it to Mr. Hunter who will ensure that it is provided to the health care professional evaluating an employee after an exposure incident:
a. a description of the employee's job duties relevant to the exposure incident
b. route(s) of exposure circumstances of exposure
c. if possible, results of the source individual's blood test relevant employee medical records, including vaccination status
d. Within 15 days following the evaluation, Mr. Hunter will provide the employee with a copy of the evaluating health care professional's written.

e. Exposure Incident Evaluation Procedures.

i. The employee’s supervisor and Mr. Hunter, will review the circumstances of all exposure incidents to determine:

1) engineering controls in use at the time
2) work practices followed
3) a description of the device being used (including type and brand)
4) protective equipment or clothing that was used at the time of the exposure incident (gloves, eye shields, etc.)
5) location of the incident (O.R., E.R., patient room, etc.)
6) procedure being performed when the incident occurred
7) employee’s training

i. Edward Miller, Safety Officer will record all percutaneous injuries from contaminated sharps in the Sharps Injury Log.

ii. If it is determined that revisions need to be made, Mr. Hunter will ensure that appropriate changes are made to this ECP. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

6. Employee Information and Training

a. Employees covered by the bloodborne pathogens standard receive an explanation of this ECP during their initial training session. It will also be reviewed in their annual refresher training. All employees will have an opportunity to review this plan at any time during their work shifts by contacting their supervisor. Copies will be provided on request.

b. All employees who have occupational exposure to bloodborne pathogens receive training conducted by Edward Hunter, Safety Officer. Mr. Hunter has completed the FOH Bloodborne Pathogens train the trainer course.

c. All employees who have occupational exposure to bloodborne pathogens will receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:
i. a copy and explanation of the standard
ii. an explanation of our ECP and how to obtain a copy
iii. an explanation of methods to recognize tasks and other activities that may involve exposure to blood and OPIM, including what constitutes an exposure incident
iv. an explanation of the use and limitations of engineering controls, work practices, and PPE
v. an explanation of the types, uses, location, removal, handling, decontamination, and disposal of PPE
vi. an explanation of the basis for PPE selection
vii. 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
viii. information on the appropriate actions to take and persons to contact in an emergency involving blood or OPIM
ix. 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
x. information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident
xi. an explanation of the signs and labels and/or color coding required by the standard and used at this facility
xii. an opportunity for interactive questions and answers with the person conducting the training session.
d. Training materials for this facility are available at the Safety Office.

7. Recordkeeping

a. Training Records.

i. Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at the Safety Office. The training records will include:

1) the dates of the training sessions
2) the contents or a summary of the training sessions
3) the names and qualifications of persons conducting the training
4) the names and job titles of all persons attending the training sessions

ii. 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 safety officer.

b. Medical Records

iii. Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, "Access to Employee Exposure and Medical Records."
iv. The personnel office is responsible for maintenance of the required medical records. These confidential records are kept at the personnel office for at least the duration of employment plus 30 years.

v. 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 Your Park Personnel Office.

c. OSHA Recordkeeping

vi. An exposure incident is evaluated to determine if the case meets OSHA’s Recordkeeping Requirements (29 CFR 1904). This determination and the recording activities are done by the Safety Officer.


1) In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in the Sharps Injury Log. All incidences must include at least:
   a. the date of the injury
   b. the type and brand of the device involved
   c. the department or work area where the incident occurred
   d. an explanation of how the incident occurred.

2) 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.
Appendix C: Special Guidance for Determining Occupational Exposure

Housekeepers, Custodians, Janitors

Individuals who perform housekeeping duties, particularly in patient care and laboratory areas, may be at increased risk for exposure when they perform tasks such as cleaning blood spills and handling infectious wastes. However, OSHA does not generally consider maintenance personnel and janitorial staff employed in non-health care facilities to have occupational exposure. Still each site must determine which job classifications or specific tasks and procedures involve occupational exposure.

For example, OSHA expects products such as discarded sanitary napkins, to be discarded into waste containers which are lined in such a way as to prevent contact with the contents. But at the same time, the employer must determine if employees can come into contact with blood during the normal handling of such products from initial pick-up through disposal in the outgoing trash. OSHA does not generally consider discarded feminine hygiene products, used to absorb menstrual flow, to fall within the definition of regulated waste. The intended function of products such as sanitary napkins is to absorb and contain blood; the absorbent material of which they are composed would, under most circumstances, prevent the release of liquid or semi-liquid blood or the flaking off of dried blood. OSHA expects these products to be discarded into waste containers which are lined in such a way as to prevent contact with the contents.

All site personnel who may come into contact with potentially contaminated laundry or trash bags must use extreme caution. Pick up the bag from the top to carry. Do not place your hands on the bottom of the bag because of the potential for discarded needles or syringes piercing the bag.

In other words, custodial workers cleaning rest rooms would not be considered occupationally exposed under normal or routine circumstances. Please note, however, that sites must determine on a case by case basis whether their employees can come into contact with blood during the normal handling of such products from initial pick-up through disposal in the outgoing trash.

Maintenance Workers/Plumbers

Trades such as plumbers, pipe fitters and others who may at times be engaged in maintenance activities are not generally considered to have occupational exposure as defined by the OSHA BBP standard. Although contact with raw sewage, such as during the accidental rupture of a sewage line (not originating directly from a health care facility) poses a number of health hazards, these hazards are not related to bloodborne pathogens and so this exposure is not regulated under the BBP standard.

Still, the sites must determine which job classifications or specific tasks and procedures may place employees at risk. For example, plumbers performing repairs on pipes or drains in laboratories, operating rooms, or mortuaries may have occupational exposure to blood or other potentially infectious materials.
Appendix D: Employee Exposure Determination Worksheet

a. The following is a list of all job classifications at _________________ (site name) in which all employees have occupational exposure:

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<thead>
<tr>
<th>Example: GS-025</th>
<th>Park Ranger, Law Enforcement</th>
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b. The following is a list of job classifications at _________________ (site name) in which some employees have occupational exposure:

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c. List of tasks and procedures, or groups of closely related tasks and procedures, in which occupational exposure may occur for the employees listed in Part B above:

- Example: Handling needles, sharps, or other waste that are considered regulated (biohazard) waste.
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Appendix E: Intentionally Left Blank
Appendix F: Disinfection Methods/Compounds

Disinfectants must have EPA registration as a sterilant (representing the highest level of anti-microbial activity that destroys all viruses), tuberculocidal disinfectants (effective against tuberculosis bacteria and specific viruses named on the product label as well as HIV/HBV efficacy claims). All disinfectants must be applied in accordance with the manufacturer’s label instructions.

Diluted Household Bleach (½ cup per gallon of water 5.25% Sodium Hypochlorite) is the disinfection method of choice. Fresh solutions of diluted household bleach must be made up daily (every 24 hours). Household bleach is considered appropriate for disinfection of environmental surfaces and for decontamination of sites following initial cleanup (i.e. wiping up spills of blood or other contaminated materials). Contact time for bleach is generally considered to be the time it takes for the product to air dry. Solutions of bleach should not be stored in glass containers, but in material such as plastic. Bleach may cause damage to some medical instruments and tools so care must be taken. Gross contamination should first be washed with a soap and water solution, to ensure that the disinfectant is completely effective.

Iodine and quaternary ammonia products registered by the EPA can be used as substitutes for household bleach if registered on the label for the virus or bacteria of concern and only if the manufacturer’s instructions for use are strictly adhered to.

More information on anti-microbial materials may be found on the following EPA web site:

http://www.epa.gov/oppad001/
Appendix G: Guidelines for Pre-Exposure Administration of HBV Vaccination

Authority: 29 CFR 1910.1030 mandates that Hepatitis B vaccination will be made available to all site employees who have occupational exposure.

- The vaccine will be provided within 10 working days of assignment, at a reasonable time and place, at no cost to the employee (including travel expenses).

- It will be performed by or under the supervision of a licensed physician or other licensed health care professional whose scope of practice allows him or her to independently perform those activities (e.g., nurse practitioner). All vaccinations must be administered according to the recommendations of the U.S. Public Health Service.

- The only exception to providing vaccination would be
  
  D. if the site employee has previously received the complete Hepatitis “B” vaccination series,
  
  E. antibody testing reveals that the employee is immune, or
  
  F. medical reasons prohibit the employee from taking the vaccine.

- Any site employee who chooses not to receive the Hepatitis “B” vaccination series must complete and sign the Declination Form provided in Appendix ___ of your participant guide. However, if this individual changes his/her mind at a later date, he or she will still be able to receive the HBV vaccination series.

- If the vaccination series is interrupted after the first dose, the second dose should be administered as soon as possible. The second and third doses should be separated by at least 2 months. If only the third dose is delayed, it should be administered when convenient.

Special Guidance for HBV Vaccine and First Aid Providers

OSHA has provided an exception in its enforcement policy ([CPL 2-2.69] Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens) relating to Hepatitis B vaccination. Under this guidance, the site would not be cited if they have not offered the Hepatitis B vaccination series to an employee whose only exposure to blood would be responding to injuries resulting from workplace incidents as long as this is only a collateral duty of the employee and certain other requirements have been met. Members of your AED Team will also fall under this category if the same conditions exist.

For this exception to be allowed, the first aid rendered must be rendered only as a collateral duty, responding solely to injuries resulting from workplace incidents, and generally at the location where the incident occurs.

NOTE: This exception does not apply to designated first aid providers who render assistance on a regular basis, for example, at a first aid station, clinic, dispensary or other location where injured employees routinely go for assistance; nor does it apply to
any healthcare, emergency, or public safety personnel who are expected to render first aid in the course of their work. These employees must be offered the vaccine prior to exposure.

The site’s exposure control plan must specifically address the provision of the Hepatitis B vaccine to all unvaccinated first aid providers who render assistance in any situation involving the presence of blood or OPIM. The plan must include:

- Provision for a reporting procedure that ensures that all first aid incidents involving the presence of blood or OPIM will be reported before the end of the work shift during which the incident occurred. The report must include the names of all first aid providers who rendered assistance, regardless of whether personal protective equipment was used and must describe the first aid incident, including time and date. 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 are made available immediately, whenever there has been an "exposure incident" as defined by the standard.

- A report that lists all such first aid incidents and is readily available, upon request, to all employees and to the Assistant Secretary.

- Provision for the bloodborne pathogens training program for designated first aide providers to include the specifics of this reporting procedure.

Provision for the full Hepatitis B vaccination series to be made available as soon as possible, but in no event later than 24 hours, to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood or OPIM, regardless of whether or not a specific exposure incident, as defined by the standard, has occurred.
Appendix H: Exposure Incident Reporting Requirements

The Exposure Incident Report contains the results of the exposure incident evaluation along with the following information:

- date and time of exposure;
- details of the procedure being performed, including where and how the exposure occurred; if related to a sharp device, the type and brand of device and how and when in the course of handling the device the exposure occurred;
- details of the exposure, including the type and amount of fluid or material and the severity of the exposure. For example, for a percutaneous (through the skin) exposure, depth of injury and whether fluid was injected; for a skin or mucous membrane exposure, the estimated volume of material and the condition of the skin (chapped, abraded, intact);
- details about the exposure source. For example, whether the source material contained HBV, HCV, or HIV. If the source is HIV-infected, the stage of disease, history of antiretroviral therapy, viral load, and antiretroviral resistance information, if known;
- details about the exposed person. For example, the status of hepatitis B vaccination and vaccine-response status; and
- details about counseling, post exposure management and follow-up.

The case must be entered on the OSHA 300 Log as an injury. To protect the employee’s privacy, you may not enter the employee’s name on the OSHA 300 Log, but will maintain a “Sharps Injury Log.” The sharps injury log must contain, at a minimum:

- the type and brand of device involved in the incident,
- the department or work area where the exposure incident occurred, and
- an explanation of how the incident occurred.

The classification of the case must be updated on the OSHA Log if the case results in death, days away from work, restricted work, or job transfer. You must also update the description to identify the infectious disease and change the classification of the case from an injury to an illness.

Physician-Supplied Information.

Post-exposure evaluation and follow-up are to be provided to the employee consistent with the requirements outlined in 29 CFR 1910.1030 (Bloodborne Pathogen Standard). The site is required to obtain a written opinion from the Health Care Facility concerning the exposure incident and provide that opinion to the employee within 15 working days of completion of the original evaluation.

Employer access to the physician’s written opinion is specifically allowed under the standard. However, the treatment facility’s written opinion must be limited to very specific information regarding the employee’s Hepatitis B vaccination status, including indication for such vaccine and whether such vaccine was administered (i.e., first shot had been given).
### Appendix I: Bureau Safety Personnel

<table>
<thead>
<tr>
<th>Region</th>
<th>Manager/Officer</th>
<th>Address/Office</th>
<th>Phone</th>
<th>Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GREAT PLAINS REGION</strong></td>
<td>Wayne LaBelle, Safety Manager</td>
<td>115 4th Ave SE</td>
<td>605-226-7467</td>
<td>605-226-7627</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Aberdeen, SD 57401</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SOUTHWEST REGION</strong></td>
<td>Vacant</td>
<td>1001 Indian School Rd NW</td>
<td>505-563-3308</td>
<td>505-563-3044</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Albuquerque, NM 87104</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>SOUTHERN PLAINS REGION</strong></td>
<td>John Ketcher, Safety Manager</td>
<td>PO Box 368</td>
<td>405-247-5059 ext. 241</td>
<td>405-247-6989</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anadarko, OK 73005</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EASTERN REGION</strong></td>
<td>Starla Garrett, Safety Manager</td>
<td>545 Marriott Drive, Suite 700</td>
<td>615-564-6842</td>
<td>615-564-6571</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nashville, TN 37214</td>
<td></td>
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<tr>
<td><strong>HASKELL INDIAN NATIONS UNIVERSITY</strong></td>
<td>Debra Thompson, CDSO</td>
<td>155 Indian Ave 5004</td>
<td>785-832-6608</td>
<td>785-749-8483</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lawrence, KS 66046</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NAVAJO REGION</strong></td>
<td>Alfred Abeita, Safety Manager</td>
<td>PO Box 1060</td>
<td>505-863-8316</td>
<td>505-863-8338</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gallup, NM 87301</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>WESTERN REGION</strong></td>
<td>Vacant</td>
<td>400 North 5th St, 2 AZ Center, 12th Floor</td>
<td>602-379-6649</td>
<td>602-379-6844</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phoenix, AZ 85004</td>
<td></td>
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</tr>
</tbody>
</table>

**NAVAJO AGENCY SAFETY OFFICERS:**

- CHINLE - Howard Tungovia 928-674-5120
- EASTERN - Harrison Nez 505-786-6191
- FT. DEFIANCE - Vacant 520-729-7234
- SHIPROCK - Bill Manus 505-368-3330
- WESTERN - Vacant 928-283-2310

**PACIFIC REGION**

- Larry Blevins, CDSO 916-978-6027
- 2800 Cottage Way
- Sacramento, CA 95825
- FAX: 916-978-6055
<table>
<thead>
<tr>
<th>State</th>
<th>Name &amp; Title</th>
<th>Address</th>
<th>Contact Information</th>
<th>Email Address</th>
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<tbody>
<tr>
<td>WO-740</td>
<td>Louis R. Rowe Division Chief</td>
<td>1120 20th Street, NW North Bldg, Suite 300</td>
<td>202-254-3319 Office</td>
<td><a href="mailto:louis_rowe@blm.gov">louis_rowe@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 Washington, DC 20036</td>
<td>202-418-3003 Fax</td>
<td></td>
</tr>
<tr>
<td>WO-740</td>
<td>Kathy Greer Safety Program Manager</td>
<td>1120 20th Street, NW North Bldg, Suite 300</td>
<td>202-254-3320 Office</td>
<td><a href="mailto:kathy_greer@blm.gov">kathy_greer@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 Washington, DC 20036</td>
<td>202-418-3003 Fax</td>
<td></td>
</tr>
<tr>
<td>WO-740</td>
<td>CDR. Edward Perez Occupational Health Program Mgr.</td>
<td>1120 20th Street, NW North Bldg, Suite 300</td>
<td>202-254-3322 Office</td>
<td><a href="mailto:edward_perez@blm.gov">edward_perez@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 Washington, DC 20036</td>
<td>202-418-3003 Fax</td>
<td></td>
</tr>
<tr>
<td>WO-740</td>
<td>Ken Somolinos Program Management Analyst</td>
<td>1120 20th Street, NW North Bldg, Suite 300</td>
<td>202-254-3321 Office</td>
<td><a href="mailto:Ken_somolinos@blm.gov">Ken_somolinos@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>300 Washington, DC 20036</td>
<td>202-418-3003 Fax</td>
<td></td>
</tr>
<tr>
<td>WO-740</td>
<td>Lakesha Spratley Staff Assistant</td>
<td>1120 20th Street, NW North Bldg, Suite 300</td>
<td>202-254-3307 Office</td>
<td><a href="mailto:lakesha_spratley@blm.gov">lakesha_spratley@blm.gov</a></td>
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<tr>
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<td></td>
<td>300 Washington, DC 20036</td>
<td>202-418-3003 Fax</td>
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</tr>
<tr>
<td>AK-950</td>
<td>Ken Higgins State Safety Manager</td>
<td>Alaska State Office 222 W. 7th Ave. #13</td>
<td>907-271-6370 Office</td>
<td><a href="mailto:Ken_higgins@blm.gov">Ken_higgins@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Anchorage, AK 99513-7599</td>
<td>907-271-4595 Fax</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>907-242-3532 Cell</td>
<td></td>
</tr>
<tr>
<td>AZ-950</td>
<td>Bill Huntington State Safety Manager</td>
<td>Arizona State Office One North central Ave.</td>
<td>602-417-9261 Office</td>
<td><a href="mailto:bill_huntington@blm.gov">bill_huntington@blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Phoenix, Arizona 85004</td>
<td>602-417-9588 Fax</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>602-206-3167 Cell</td>
<td></td>
</tr>
<tr>
<td>CA-940</td>
<td>Jim Anger State Safety Manager</td>
<td>California State Office 2800 Cottage Way</td>
<td>916-978-4521 Office</td>
<td><a href="mailto:James_anger@ca.blm.gov">James_anger@ca.blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sacramento, CA 95825</td>
<td>916-978-4444 Fax</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>916-716-4119 Cell</td>
<td></td>
</tr>
<tr>
<td>CO-951</td>
<td>John DeVore State Safety Manager</td>
<td>Colorado State Office 2850 Youngfield Street</td>
<td>303-239-3650 Office</td>
<td><a href="mailto:John_devore@co.blm.gov">John_devore@co.blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lakewood, CO 80215</td>
<td>303-239-3699 Fax</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>970-412-0825 Cell</td>
<td></td>
</tr>
<tr>
<td>ES-930</td>
<td>Bill Forbes</td>
<td>Eastern States Office 7450 Boston Blvd</td>
<td>703-440-1588 Office</td>
<td><a href="mailto:bill_forbes@es.blm.gov">bill_forbes@es.blm.gov</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Springfield, VA 22153</td>
<td>703-440-1599 Fax</td>
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<td></td>
<td></td>
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<tr>
<td>FAD-300</td>
<td>Michelle Ryerson FAD Safety Manager</td>
<td>Fire and Aviation Directorate 3833 S. Development Ave.</td>
<td>208-387-5175 Office</td>
<td><a href="mailto:Michelle_ryerson@blm.gov">Michelle_ryerson@blm.gov</a></td>
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<tr>
<td></td>
<td></td>
<td>Boise, ID 83705-5354</td>
<td>208-387-5923 Fax</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>208-484-7758 Cell</td>
<td></td>
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<tr>
<td>ID-914</td>
<td>Jan Peterson</td>
<td>Idaho State Office</td>
<td>208-373-4030</td>
<td><a href="mailto:Janette_peterson@blm.gov">Janette_peterson@blm.gov</a></td>
</tr>
<tr>
<td>State Safety Manager</td>
<td>Address</td>
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<tr>
<td><strong>MT-930</strong></td>
<td><strong>Karilynn Volk</strong> State Safety Manager</td>
<td>Montana State Office 5001 Southgate Drive Billings, MT 59101</td>
<td>406-896-5190 Office 406-896-5296 Fax 406-855-3430 Cell <a href="mailto:Karilynn_volk@blm.gov">Karilynn_volk@blm.gov</a></td>
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</tr>
<tr>
<td><strong>NIFC-FA203</strong></td>
<td><strong>Stan Palmer</strong> NIFC Safety Manager</td>
<td>National Interagency Fire Center 3833 S. Development Ave. Boise, ID 83705-5354</td>
<td>208-387-5507 Office 208-387-5798 Fax 208-484-7761 Cell <a href="mailto:Stan_palmer@blm.gov">Stan_palmer@blm.gov</a></td>
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</tr>
<tr>
<td><strong>NV-950</strong></td>
<td><strong>Dave Griggs</strong> State Safety Manager</td>
<td>Nevada State Office 1340 Financial Blvd, Reno, NV 89502-7147</td>
<td>775-861-6405 Office 775-861-6678 Fax 775-240-1449 Cell <a href="mailto:David_griggs@nv.blm.gov">David_griggs@nv.blm.gov</a></td>
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<tr>
<td><strong>NM-950</strong></td>
<td><strong>Charles “Buddy” Byrd</strong> Regional Safety Manager</td>
<td>New Mexico State Office 1474 Rodeo Road P.O. Box 27115 Santa Fe, NM 87502-0115</td>
<td>505-438-7678 Office 505-438-7432 Fax 503-816-7243 Cell <a href="mailto:Charles_Byrd@blm.gov">Charles_Byrd@blm.gov</a></td>
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<tr>
<td><strong>OR-950</strong></td>
<td><strong>CDR Ann M. Krake, M.S. Regional Occupational Health &amp; Safety Manager</strong></td>
<td>Oregon State Office 333 SW 1st Avenue Portland, OR 97204</td>
<td>503-808-6249 Office 503-808-6421 Fax 503-467-8585 Cell <a href="mailto:Ann_krake@blm.gov">Ann_krake@blm.gov</a></td>
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<tr>
<td><strong>UT-950</strong></td>
<td><strong>Travis Kilpack</strong> State Safety Manager</td>
<td>Utah State Office 440 West 200 South, Suite 500 Salt Lake City, UT 84101</td>
<td>801-539-4176 Office 801-539-4013 Fax <a href="mailto:travis_kilpack@blm.gov">travis_kilpack@blm.gov</a></td>
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<tr>
<td><strong>WY-950</strong></td>
<td><strong>Shorty Lowdermilk</strong> State Safety Manager</td>
<td>Wyoming State Office 5353 Yellowstone Rd. Cheyenne, WY 82009</td>
<td>307-775-6269 Office 307-775-6096 Fax 307-631-9502 Cell <a href="mailto:Shorty_lowdermilk@blm.gov">Shorty_lowdermilk@blm.gov</a></td>
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National Park Service

<table>
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<tr>
<th>NPS Risk Management Division (WASO)</th>
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<tbody>
<tr>
<td>Richard Powell</td>
</tr>
<tr>
<td>Chief, Risk Management Division</td>
</tr>
<tr>
<td><a href="mailto:Richard_Powell@nps.gov">Richard_Powell@nps.gov</a></td>
</tr>
<tr>
<td>202 513 7218</td>
</tr>
<tr>
<td>Michael May</td>
</tr>
<tr>
<td>Director Occupational Safety and Health</td>
</tr>
<tr>
<td><a href="mailto:Michael_May@nps.gov">Michael_May@nps.gov</a></td>
</tr>
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<th>Regional Risk Managers</th>
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<tbody>
<tr>
<td>Northeast Region</td>
</tr>
<tr>
<td>Dave Schuller</td>
</tr>
<tr>
<td><a href="mailto:Dave_Schuller@nps.gov">Dave_Schuller@nps.gov</a></td>
</tr>
<tr>
<td>215 597 5368</td>
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<tr>
<td>National Capital Region</td>
</tr>
<tr>
<td>Rose Capers-Webb</td>
</tr>
<tr>
<td><a href="mailto:Rose_Capers-Webb@nps.gov">Rose_Capers-Webb@nps.gov</a></td>
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<tr>
<td>202 619 7266</td>
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<tr>
<td>Southeast Region</td>
</tr>
<tr>
<td>Vacant</td>
</tr>
<tr>
<td><a href="mailto:Linda_Giles@nps.gov">Linda_Giles@nps.gov</a></td>
</tr>
<tr>
<td>404 562 3108 ext 650</td>
</tr>
<tr>
<td>Midwest Region</td>
</tr>
<tr>
<td>Dickie Brown</td>
</tr>
<tr>
<td><a href="mailto:Dickie_Brown@nps.gov">Dickie_Brown@nps.gov</a></td>
</tr>
<tr>
<td>402 221 3419</td>
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<tr>
<td>Intermountain Region</td>
</tr>
<tr>
<td>David DiTomaso</td>
</tr>
<tr>
<td><a href="mailto:David_DiTomaso@nps.gov">David_DiTomaso@nps.gov</a></td>
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<tr>
<td>303 396-4060</td>
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<tr>
<td>Pacific West Region</td>
</tr>
<tr>
<td>Larry Nolen</td>
</tr>
<tr>
<td><a href="mailto:Larry_Nolen@nps.gov">Larry_Nolen@nps.gov</a></td>
</tr>
<tr>
<td>206 220 4246</td>
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<tr>
<td>Alaska Region</td>
</tr>
<tr>
<td>Jay Cable</td>
</tr>
<tr>
<td><a href="mailto:Jay_Cable@nps.gov">Jay_Cable@nps.gov</a></td>
</tr>
<tr>
<td>907 969 2702</td>
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<th>Regional Industrial Hygienists</th>
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<tr>
<td>Intermountain Region</td>
</tr>
<tr>
<td>Jay Grass</td>
</tr>
<tr>
<td><a href="mailto:Jay_Grassl@nps.gov">Jay_Grassl@nps.gov</a></td>
</tr>
<tr>
<td>303 969 2702</td>
</tr>
<tr>
<td>Region 1:</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Portland, Oregon</td>
</tr>
<tr>
<td>Fax: (503) 231-2147</td>
</tr>
<tr>
<td>Martin Valdez, Safety Manager</td>
</tr>
<tr>
<td>Phone: (505) 248-6841, cell: (505) 803-0888</td>
</tr>
</tbody>
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<table>
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<tr>
<th>Region 2:</th>
<th>Region 5:</th>
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</thead>
<tbody>
<tr>
<td>PO Box 1306</td>
<td>300 Westgate Center Drive</td>
</tr>
<tr>
<td>Fedex: 500 Gold Ave, SW, Suite 9000</td>
<td>Hadley, Massachusetts</td>
</tr>
<tr>
<td>Alan Williams, Safety Specialist</td>
<td>Fax: (413) 253-8451</td>
</tr>
<tr>
<td>Phone: (505) 231-2327, cell: (505) 803-0889</td>
<td>John Guiel, Safety Manager</td>
</tr>
<tr>
<td>Bob Van Buskirk, Safety Specialist</td>
<td>Phone: (413) 253-8311, cell: (413) 531-7936</td>
</tr>
<tr>
<td>Phone: (503) 231-2347, cell: (503) 781-9443</td>
<td>Ed Kaiser, Industrial Hygienist</td>
</tr>
<tr>
<td>Phone: (503) 248-6841, cell: (503) 263-3010</td>
<td>Phone: (413) 253-8287</td>
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<thead>
<tr>
<th>Region 3:</th>
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<tbody>
<tr>
<td>Bishop Henry Whipple Federal Building</td>
<td>PO Box 25486, DFC</td>
</tr>
<tr>
<td>Fort Snelling, Minnesota</td>
<td>MS60184</td>
</tr>
<tr>
<td>Fax: (612) 713-5291</td>
<td>Denver, Colorado</td>
</tr>
<tr>
<td>Patrick McDermott, Safety Manager</td>
<td>Fedex: USFWS - ABA/SOH</td>
</tr>
<tr>
<td>Phone: (612) 713-5235, cell: (952) 200-2074</td>
<td>134 Union Blvd, Suite 210</td>
</tr>
<tr>
<td>John Hoffman, Safety Specialist</td>
<td>Lakewood, CO</td>
</tr>
<tr>
<td>Phone: (612) 713-5236</td>
<td>Fax: (303) 236-6958</td>
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<thead>
<tr>
<th>Region 7:</th>
<th>Region 5:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1011 East Tudor Road</td>
<td>300 Westgate Center Drive</td>
</tr>
<tr>
<td>Anchorage, Alaska</td>
<td>Hadley, Massachusetts</td>
</tr>
<tr>
<td>Fax: (907) 786-3370</td>
<td>01035-9589</td>
</tr>
<tr>
<td>Safety Manager, Charity Haring</td>
<td>Fax: (303) 236-6958</td>
</tr>
<tr>
<td>Phone: (907) 786-3588, BB: (907) 230-2925</td>
<td>Jim Chandler, Safety Manager</td>
</tr>
<tr>
<td>Safety Specialist, Vacant</td>
<td>Phone: (303) 236-8193, BB: (303) 406-8770</td>
</tr>
</tbody>
</table>

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**U.S. Fish and Wildlife Service**

**WASHINGTON OFFICE:**
4401 N. Fairfax Dr, MS 43-7096
Arlington, Virginia 22203
Fax - (703) 358-1875
Mary Parkinson, Safety Manager
Phone - (703) 358-2255, Home - (443) 949-7066
BB - (703) 254-6623
Chip Murphy, Region 9 Safety Manager
Phone - (703) 358-2254, BB - (703) 254-8484

**REGION 1:**
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Portland, Oregon 97232-4181
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Gary Wilson, Safety Manager
Phone - (503) 231-2330, cell: (503) 803-0888
Alan Williams, Safety Specialist
Phone: (503) 231-2327, cell: (503) 803-0889
Bob Van Buskirk, Safety Specialist
Phone: (503) 231-2347, cell: (503) 781-9443

**REGION 2:**
PO Box 1306
FedEx: 500 Gold Ave, SW, Suite 9000
Albuquerque, New Mexico 87103
Fax: (505) 248-6924
Martin Valdez, Safety Manager
Phone: (505) 248-6841, cell: (505) 263-3010

**REGION 3:**
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1 Federal Drive
Fort Snelling, Minnesota 55111-4056
Fax: (612) 713-5291
Patrick McDermott, Safety Manager
Phone: (612) 713-5235, cell: (952) 200-2074
John Hoffman, Safety Specialist
Phone: (612) 713-5236

**REGION 4:**
1875 Century Blvd, Suite 270
Atlanta, Georgia 30345
General Office – (404) 679-7316,
Fax: (404) 679-4183
Brian Hardison, Safety Manager
Phone: (404) 679-4185, BB: (404) 376-3035
Terri Nallett, Safety Specialist
Phone: (404) 679-4186, BB: (404) 376-3036
Jim Spano, Safety Specialist
Phone: (404) 679-4081, BB: (770) 881-4222
John Morrow, Safety Specialist
Phone: (404) 679-4036/4185, BB: (404) 408-7226

**REGION 5:**
300 Westgate Center Drive
Hadley, Massachusetts 01035-9589
Fax: (413) 253-8451
John Guiel, Safety Manager
Phone: (413) 253-8311, cell: (413) 531-7936
Ed Kaiser, Industrial Hygienist
Phone: (413) 253-8287

**REGION 6:**
PO Box 25486, DFC
MS60184
Denver, Colorado 80225
Fedex: USFWS - ABA/SOH
134 Union Blvd, Suite 210
Lakewood, CO 80228
Fax: (303) 236-6958
Jim Chandler, Safety Manager
Phone: (303) 236-8193, BB: (303) 406-8770
Jim Behrmann, Industrial Hygienist
Phone: (303) 236-4526
Terry Black, Safety Specialist
Phone: (303) 236-8115

**REGION 7:**
1011 East Tudor Road
Anchorage, Alaska 99503
Fax: (907) 786-3370
Safety Manager, Charity Haring
Phone: (907) 786-3588, BB: (907) 230-2925
Safety Specialist, Vacant
Appendix J: Breaking the Chain of Disease Diagram

1. Disease-Causing Agent
2. HIV, HBV, HCV Exist in the Population
3. Workers in Proximity of Disease Agent
4. Workers Make Specific Contact
5. Disease Agent Multiplies in Body
6. Disease Agent Causes Symptoms
7. Disease Agent Causes Death
8. Disease
9. Death
10. Growth and Development in Host
11. Transmission: “Exposure Incident”
12. “Occupational Exposure”
13. Disease-Causing Agent

Chainbreakers:
- Public Health Control of Disease in Populations
- Barrier Controls, PPE, Admin./Engineer/Work Practice Controls, Training
- Vaccination: Antibodies in Place
- Follow-up Preventive Treatments

Chainmakers:
- Disease Agent Multiplies in Body
- Disease Agent Causes Symptoms
- Disease Agent Causes Death
- Disease
- Death
- Growth and Development in Host
- Transmission: “Exposure Incident”
- “Occupational Exposure”
- Disease-Causing Agent
- HIV, HBV, HCV Exist in the Population
- Workers in Proximity of Disease Agent
- Workers Make Specific Contact
Workshop Evaluation  (Page 1 of 2)
Bloodborne Pathogens: Breaking the Chain of Infection  Dec 18, 2008  1-4PM Eastern Time

1. Enter your email address: 

2. At what site did you attend the training? 

3. How well did you know the course material before beginning the course?
   - Not well at all  ○ 1
   -  ○ 2
   -  ○ 3
   -  ○ 4
   -  ○ 5
   - Very well

4. How much more did you learn about bloodborne pathogens?
   - Not much at all  ○ 1
   -  ○ 2
   -  ○ 3
   -  ○ 4
   -  ○ 5
   - A lot

5. How often do you expect to apply this knowledge in the next 30 days?
   - Not at all  ○ 1
   -  ○ 2
   -  ○ 3
   -  ○ 4
   -  ○ 5
   - Very often

6. Have you had any previous training on bloodborne pathogens?
   - ○ Yes
   - ○ No

7. How many other interactive television (ITV) courses have you previously participated in?
   - None  ○
   -  ○ 1
   -  ○ 2 or 3
   -  ○ 4 or 5
   -  ○ 6 or more
   - For your job?  ○
   -  ○
   -  ○
   -  ○
   -  ○
   - For your education?  ○
   -  ○
   -  ○
   -  ○
   -  ○

8. Please assign a rating on a scale from 1 to 5, where 1 represents “Poor” and 5 represents “Excellent”, to each of the following areas:

<table>
<thead>
<tr>
<th>Area</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Registration Process</td>
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<td>○</td>
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<tr>
<td>Participant Guide</td>
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<tr>
<td>Quality of the audio/video</td>
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<tr>
<td>Accomplishment of Course Objectives</td>
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<td>Effectiveness of the Instructors</td>
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<td>Opportunity to Ask Questions</td>
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<td>Responsiveness to Student Questions</td>
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<td>Relevance of Course to Your Job Duties</td>
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<td>Overall Effectiveness of Instruction</td>
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Complete this evaluation (both pages) and fax to (505)563-5419. No cover sheet required.
Workshop Evaluation (Page 2 of 2)
Bloodborne Pathogens: Breaking the Chain of Infection  Dec 18, 2008  1-4PM Eastern Time

9. How long did it take you to get from your workplace to the location where you participated in this ITV course?
   - I participated at my workplace
   - 5-15 minutes
   - 16-30 minutes
   - 31-59 minutes
   - 1 hour or more

10. What parts of the course did you find most helpful?

11. What recommendations do you have for improving the course?

12. Please list the top 3 occupational safety topics that you would like to see addressed in future training:
   1. 
   2. 
   3. 

Complete this evaluation (both pages) and fax to (505)563-5419. No cover sheet required.