OSHA Required Training – Bloodborne Pathogens – 29 CFR 1910.1030

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2020
OSHA Required Training

Bloodborne Pathogens

29 CFR 1030
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OSHA DOCUMENT #: 3186

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1.0 OSHA Overview

The Occupational Safety and Health Administration (OSHA) was created by the United States Congress in 1971 as a federal agency in the Department of Labor. OSHA's mission is to assure the safety and health of America's workers by setting and enforcing standards; providing training, outreach, and education; establishing partnerships; and encouraging continual improvement in workplace safety and health. Since its inception, OSHA has helped to cut workplace fatalities by more than 60 percent and occupational injury and illness rates by 40 percent. At the same time, U.S. employment has doubled from 56 million workers at 3.5 million worksites to more than 115 million workers at 7.2 million sites.

1.1 Employer Responsibilities

OSHA has stipulated specific responsibilities for employers which include, but not are limited to, the following:

- Furnish employees a place of employment free from recognized hazards;
- Comply with the occupational safety and health standards issued under the OSH Act;
- Provide required employee training, as applicable to the workplace; and,
- Correct any workplace hazards documented and verified by OSHA and certify that these hazards have been reduced or eliminated.

1.2 Employee Rights and Responsibilities

OSHA has also regulated rights and responsibilities for employees which include, but are not limited to, the following:

- The right to notify your employer or OSHA, even anonymously, about workplace hazards;
- The right to request an OSHA inspection if you believe that there are unhealthy or unsafe conditions in your workplace. You or your representative may participate in the inspection;
- The right to file a complaint with OSHA within 30-days of retaliation or discrimination by your employer for making safety and/or health complaints or for exercising your rights under the OSH Act;
• The right to see OSHA citations issued to our employer. Your employer must post the citations at or near the site of the alleged violations;
• The right to copies of your medical records and records of your exposure to toxic and harmful substances or conditions.
• Employees must comply with all occupational safety and health standards issued under the OSH Act that apply to their own actions and conduct on the job.

2.0 OSHA's Bloodborne Pathogen Standard – Introduction

Bloodborne pathogens are microorganisms present in human blood or other potentially infectious materials (OPIM) that can cause disease in individuals who are exposed to the blood containing the pathogen. Many are relatively rare, such as malaria and syphilis. Others are common, such as the hepatitis virus and the human immunodeficiency virus (HIV), which causes acquired immune deficiency (AIDS). In addition to blood, potentially infectious materials include the following:

• Semen;
• Cerebrospinal fluid;
• Saliva;
• Synovial (joint) fluid;
• Peritoneal fluid (fluid that fills the abdominal cavity)
• Vaginal secretions;
• Pleural (lung) fluid;
• Tears;
• Amniotic (uterine) fluid

In March 1992, OSHA's Bloodborne Pathogen Standard, 29 CFR 1910.1030 took effect. This standard was designed to prevent more than 200 deaths and 9,000 bloodborne infections every year. While the standard was primarily aimed at hospitals, funeral homes, nursing homes, clinics, law enforcement agencies, emergency responders, and HIV/HBV research laboratories, anyone who can "reasonably expect to come in contact with blood or potentially infectious materials" as part of their job is covered by the standard.
3.0 OSHA's Bloodborne Pathogen Standard – Summary of Key Provisions

3.1 Purpose

Purpose: Limits occupational exposure to blood and other potentially infectious materials since any exposure could result in transmission of bloodborne pathogens which could lead to disease or death.

3.2 Scope

Scope: Covers all employees who could be "reasonably anticipated" as the result of performing their job duties to face contact with blood and other potentially infectious materials. OSHA has not attempted to list all occupations where exposures could occur. "Good Samaritan" acts such as assisting a co-worker with a nosebleed would not be considered occupational exposure.

Infectious materials include semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, any body fluid visibly contaminated with blood and all body fluids in situations where it is difficult or impossible to differentiate between body fluids. They also include any unfixed tissue or organ other than intact skin from a human (living or dead), human immunodeficiency virus (HIV)-containing cell or tissue cultures, organ cultures and HIV or hepatitis B (HBV)-containing culture medium or other solutions as well as blood, organs or other tissues from experimental animals infected with HIV or HBV.

While a person’s unbroken skin is the best natural defensive barrier against infectious materials, bloodborne pathogens can enter the body through the following ways:

- Exposure contact to breaks in the skin such as: cuts, scrapes, abrasions, & sores;
- Exposure contact to mucus membranes such as: eyes, lips, mouth, inner nose, & ears; and
- Exposure contact to blood or internal body parts.

3.3 Exposure Control Plan

Exposure Control Plan: Requires employers to identify, in writing, tasks and procedures as well as job classifications where occupational exposure to blood occurs – without regard to personal
protective clothing and equipment. It must also set forth the schedule for implementing other provisions of the standard and specify the procedure for evaluating circumstances surrounding exposure incidents. The plan must be accessible to employees and available to OSHA. Employers must review and update it at least annually--more often if necessary to accommodate workplace changes.

3.4 Methods of Compliance

Methods of Compliance: Mandates Universal/Standard Precautions, (treating body fluids/materials as if infectious) emphasizing engineering and work practice controls. The standard stresses handwashing and requires employers to provide facilities and ensure that employees use them following exposure to blood. It sets forth procedures to minimize needlesticks, minimize splashing and spraying of blood, ensure appropriate packaging of specimens and regulated wastes and decontaminate equipment or label it as contaminated before shipping to servicing facilities. The standard specifies methods for disposing of contaminated sharps and sets forth standards for containers for these items and other regulated waste, as well as, provisions for handling contaminated laundry to minimize exposures.

Employers must provide, at no cost, and require employees to use appropriate personal protective equipment (PPE) such as gloves, gowns, masks, mouthpieces and resuscitation bags and must clean, repair and replace these when necessary. Gloves are not necessarily required for routine phlebotomies in volunteer blood donation centers but must be made available to employees who want them. PPE rules to follow include, but are not limited to, the following:

- Know how to use the equipment;
- Always wear PPE in exposure situations;
- Remove and replace PPE that is torn, punctured, or has lost its ability to function;
- Remove clothing that becomes contaminated with blood or body fluids as soon as possible;
- Remove PPE before leaving the work area;
- Handle contaminated PPE in appropriately labeled bags or containers until disposed of, decontaminated, or laundered; and,
- Know where these bags or containers are located in your work area.
Additionally, if you are working in an area where there is reasonable likelihood of exposure, you should never:

- Eat
- Smoke
- Handle contact lenses
- Drink
- Apply cosmetics or lip balm

No food or drink should be kept in refrigerators, freezers, shelves, cabinets, or on counter tops where blood or potentially infectious materials are present.

3.5 HIV and HBV Research Laboratories and Productive Facilities

HIV and HBV Research Laboratories and Productive Facilities: Calls for these facilities to follow standard microbiological practices and specifies additional practices intended to minimize exposures of employees working with concentrated viruses and reduce the risk of accidental exposure for other employees at the facility. These facilities must include required containment equipment and an autoclave for decontamination of regulated waste and must be constructed to limit risks and enable easy clean up. Additional training and experience requirements apply to workers in these facilities.

3.6 Hepatitis B Vaccination

Hepatitis B Vaccination: Requires vaccinations to be made available to all employees who have occupational exposure to blood within 10 working days of assignment, at no cost, at a reasonable time and place, under the supervision of licensed physician/licensed healthcare professional and according to the latest recommendations of the U.S. Public Health Service (USPHS).

Prescreening may not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. Should booster doses be recommended by the USPHS at a later time, then employees must be offered them.
3.7 Post-Exposure Evaluation and Follow-Up

Post-Exposure Evaluation and Follow-Up: Specifies procedures to be made available to all employees who have had an exposure incident plus any laboratory tests must be conducted by an accredited laboratory at no cost to the employee. Follow-up must include a confidential medical evaluation documenting the circumstances of exposure, identifying and testing the source individual if feasible, testing the exposed employee's blood if he/she consents, post-exposure prophylaxis, counseling and evaluation of reported illnesses. Healthcare professionals must be provided specified information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer. All diagnoses must remain confidential.

3.8 Hazard Communication

Hazard Communication: Requires warning labels including the orange or orange-red biohazard symbol affixed to containers of regulated waste, refrigerators and freezers and other containers which are used to store or transport blood or other potentially infectious materials. Red bags or containers may be used instead of labeling. When a facility uses Universal/Standard Precautions in its handling of all specimens, labeling is not required within the facility. Likewise, when all laundry is handled with Universal/Standard Precautions, the laundry need not be labeled. Blood which has been tested and found free of HIV or HBV and released for clinical use, and regulated waste which has been decontaminated, need not be labeled. Signs must be used to identify restricted areas in HIV and HBV research laboratories and production facilities.

3.9 Information and Training

Information and Training: Mandates training initially upon assignment and annually for employees who have received appropriate training within the past year need only receive additional training in items not previously covered. The training program shall contain at a minimum the following elements:

- An accessible copy of the regulatory text of the standard and an explanation of its contents;
- A general explanation of the epidemiology and symptoms of bloodborne diseases;
• An explanation of the modes of transmission of bloodborne pathogens;
• An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;
• An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;
• An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
• Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;
• An explanation of the basis for selection of personal protective equipment;
• Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
• Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
• An explanation of the procedure to follow if an exposure incident occurs, including the method or reporting the incident and the medical follow-up that will be made available;
• Information on the post-exposure evaluation and follow-up that the employer is required to provide for the employee following an exposure incident;
• An explanation of the signs and labels and/or color coding required; and,
• An opportunity for interactive questions and answers with the person conducting the training session.

Training must include making accessible a copy of the regulatory text of the standard and explanation of its contents, general discussion on bloodborne diseases and their transmission, exposure control plan, engineering and work practice controls, personal protective equipment, hepatitis B vaccine, response to emergencies involving blood, how to handle exposure incidents, the post-exposure evaluation and follow-up program, signs/labels/color-coding. There must be opportunity for questions and answers, and the trainer must be knowledgeable in the subject matter. Laboratory and production facility workers must receive additional specialized initial training.
3.10 Recordkeeping

**Recordkeeping**: Calls for medical records to be kept for each employee with occupational exposure for the duration of employment plus 30 years, must be confidential and must include name and social security number; hepatitis B vaccination status (including dates); results of any examinations, medical testing and follow-up procedures; a copy of the healthcare professional’s written opinion; and a copy of information provided to the healthcare professional. Training records must be maintained for three years and must include dates, contents of the training program or a summary, trainer’s name and qualifications, names and job titles of all persons attending the sessions. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH – they are not available to the employer. Disposal of records must be in accord with OSHA’s standard covering access to records.

4.0 OSHA’s Bloodborne Pathogen Standard – Required Training

OSHA regulations 29 CFR 1910.1030 (g) (2) documents the training requirements for bloodborne pathogens. This excerpt is provided below:

1910.1030(g)(2) **Information and Training.**

- **1910.1030(g)(2)(i)** The employer shall train each employee with occupational exposure in accordance with the requirements of this section. Such training must be provided at no cost to the employee and during working hours. The employer shall institute a training program and ensure employee participation in the program.

- **1910.1030(g)(2)(ii)** Training shall be provided as follows:
  - **1910.1030(g)(2)(ii)(A)** At the time of initial assignment to tasks where occupational exposure may take place;
  - **1910.1030(g)(2)(ii)(B)** At least annually thereafter.

- **1910.1030(g)(2)(iii)** [Reserved]

- **1910.1030(g)(2)(iv)** Annual training for all employees shall be provided within one year of their previous training.
• **1910.1030(g)(2)(v)** Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee’s occupational exposure. The additional training may be limited to addressing the new exposures created.

• **1910.1030(g)(2)(vi)** Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

• **1910.1030(g)(2)(vii)** The training program shall contain at a minimum the following elements:
  - **1910.1030(g)(2)(vii)(A)** An accessible copy of the regulatory text of this standard and an explanation of its contents;
  - **1910.1030(g)(2)(vii)(B)** A general explanation of the epidemiology and symptoms of bloodborne diseases;
  - **1910.1030(g)(2)(vii)(C)** An explanation of the modes of transmission of bloodborne pathogens;
  - **1910.1030(g)(2)(vii)(D)** An explanation of the employer’s exposure control plan and the means by which the employee can obtain a copy of the written plan;
  - **1910.1030(g)(2)(vii)(E)** An explanation of the appropriate methods for recognizing tasks and other activities that may involve exposure to blood and other potentially infectious materials;
  - **1910.1030(g)(2)(vii)(F)** An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;
  - **1910.1030(g)(2)(vii)(G)** Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;
  - **1910.1030(g)(2)(vii)(H)** An explanation of the basis for selection of personal protective equipment;
  - **1910.1030(g)(2)(vii)(I)** Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;
  - **1910.1030(g)(2)(vii)(J)** Information on the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials;
An explanation of the procedure to follow if an exposure incident occurs, including the method of reporting the incident and the medical follow-up that will be made available;

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

An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

An opportunity for interactive questions and answers with the person conducting the training session.

The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.

The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.
What are bloodborne pathogens?

Bloodborne pathogens are infectious materials in blood that can cause disease in humans, including hepatitis B and C and human immunodeficiency virus, or HIV. Workers exposed to these pathogens risk serious illness or death.

What protections does OSHA's Bloodborne Pathogen standard provide?

The full text of OSHA’s Bloodborne Pathogens standard, published in Title 29 of the Code of Federal Regulations 1910.1030, details what employers must do to protect workers whose jobs put them at a reasonable risk of coming into contact with blood and other potentially infectious materials. The standard requires employers to do the following:

■ Establish an exposure control plan. This is a written plan to eliminate or minimize employee exposures. Employers must update the plan annually to reflect technological changes that will help eliminate or reduce exposure to bloodborne pathogens. In the plan, employers must document annually that they have considered and implemented safer medical devices, if feasible, and that they have solicited input from frontline workers in identifying, evaluating, and selecting engineering controls.

■ Use engineering controls. These are devices that isolate or remove the bloodborne pathogen hazard from the workplace. They include sharps disposal containers, self-sheathing needles, and safer medical devices such as sharps with engineered sharps-injury protection and needleless systems.

■ Enforce work practice controls. These are practices that reduce the likelihood of exposure by changing the way a task is performed. They include appropriate procedures for hand washing, sharps disposing, lab specimen packaging, laundry handling, and contaminated material cleaning.

■ Provide personal protective equipment such as gloves, gowns, and masks. Employers must clean, repair, and replace this equipment as needed.

■ Make available Hepatitis B vaccinations to all employees with occupational exposure to bloodborne pathogens within 10 days of assignment.

■ Provide post-exposure followup to any worker who experiences an exposure incident, at no cost to the worker. This includes conducting laboratory tests; providing confidential medical evaluation, identifying, and testing the source individual, if feasible; testing the exposed employee’s blood, if the worker consents; performing post-exposure prophylaxis; offering counseling; and evaluating reported illnesses. All diagnoses must remain confidential.

■ Use labels and signs to communicate hazards. The standard requires warning labels affixed to containers of regulated waste, refrigerators and freezers, and other containers used to store or transplant blood or other potentially infectious materials. Facilities may use red bags or containers instead of labels. Employers also must post signs to identify restricted areas.

■ Provide information and training to employees. Employers must ensure that their workers receive regular training that covers the dangers of bloodborne pathogens, preventive practices, and post-exposure procedures. Employers must offer this training on initial assignment, then at least annually. In addition, laboratory and production facility workers must receive specialized initial training.

■ Maintain employee medical and training records. The employer also must maintain a Sharps Injury Log unless classified as an exempt industry under OSHA’s standard on Recording and Reporting Occupational Injuries and Illnesses.

How can I get more information?

OSHA’s website provides more indepth information about bloodborne pathogens on the Bloodborne Pathogens webpage at www.osha.gov/SLTC/bloodbornewpathogens and

In addition, OSHA has various publications, standards, technical assistance, and compliance tools to help you, and offers extensive assistance through its many safety and health programs: workplace consultation, voluntary protection programs, grants, strategic partnerships, state plans, training, and education. Documents such as OSHA’s Safety and Health Management Guidelines provide information about elements that are critical to the development of a successful safety and health management system. This and other information are available on OSHA’s website.

For one free copy of OSHA publications, send a self-addressed mailing label to this address:

OSHA Publications Office, P.O. Box 37535, Washington, D.C. 20013-7535; or send a request to our fax at (202) 693-2498, or call (202) 693-1888.

Order OSHA publications online at www.osha.gov. Go to Publications and follow the instructions for ordering.

To file a complaint by phone, report an emergency, or get OSHA advice, assistance, or products, contact your nearest OSHA office under the “U.S. Department of Labor” listing in your phone book, or call us toll-free at (800) 321-OSHA (6742). The teletypewriter (TTY) number is (877) 889-5627.

To file a complaint online or obtain more information on OSHA federal and state programs, visit OSHA’s website.
A needlestick or a cut from a contaminated scalpel can lead to infection from hepatitis B virus (HBV) or human immunodeficiency virus (HIV) which causes AIDS. Although few cases of AIDS have been documented from occupational exposure, approximately 8,700 health care workers each year contract hepatitis B. About 200 will die as a result. The new OSHA standard covering bloodborne pathogens specifies measures to reduce these risks of infection.

**PROMPT DISPOSAL**

The best way to prevent cuts and sticks is to minimize contact with sharps. That means disposing of them immediately after use. Puncture-resistant containers must be available nearby to hold contaminated sharps--either for disposal or, for reusable sharps, later decontamination for re-use. When reprocessing contaminated reusable sharps, employees must not reach by hand into the holding container. Contaminated sharps must never be sheared or broken.

Recapping, bending, or removing needles is permissible only if there is no feasible alternative or if required for a specific medical procedure such as blood gas analysis. If recapping, bending, or removal is necessary, workers must use either a mechanical device or a one-handed technique. If recapping is essential—for example, between multiple injections for the same patient—employees must avoid using both hands to recap. Employees might recap with a one-handed "scoop" technique, using the needle itself to pick up the cap, pushing cap and sharp together against a hard surface to ensure a tight fit. Or they might hold the cap with tongs or forceps to place it on the needle.

**SHARPS CONTAINERS**

Containers for used sharps must be puncture resistant. The sides and the bottom must be leakproof. They must be labeled or color coded red to ensure that everyone knows the contents are hazardous. Containers for disposable sharps must have a lid, and they must be maintained upright to keep liquids and the sharps inside.

Employees must never reach by hand into containers of contaminated sharps. Containers for reusable sharps could be equipped with wire basket liners for easy removal during reprocessing, or employees could use tongs or forceps to withdraw the contents. Reusable sharps disposal containers may not be opened, emptied, or cleaned manually.

Containers need to be located as near to as feasible the area of use. In some cases, they may be placed on carts to prevent access to mentally disturbed or pediatric patients. Containers also should be available wherever sharps may be found, such as in laundries. The containers must be replaced routinely and not be overfilled, which can increase the risk of needlesticks or cuts.

**HANDLING CONTAINERS**

When employees are ready to discard containers’ they should first close the lids. If there is a chance of leakage from the primary container, the employees should use a secondary container that is closable, labeled, or color coded and leak resistant.

Careful handling of sharps can prevent injury and reduce the risk of infection. By following these work practices, employees can decrease their chances of contracting bloodborne illness.
SELECTING PPE

Personal protective clothing and equipment must be suitable. This means the level of protection must fit the expected exposure. For example, gloves would be sufficient for a laboratory technician who is drawing blood, whereas a pathologist conducting an autopsy would need considerably more protective clothing.

PPE may include gloves, gowns, laboratory coats, face shields or masks, eye protection, pocket masks, and other protective gear. The gear must be readily accessible to employees and available in appropriate sizes.

If an employee is expected to have hand contact with blood or other potentially infectious materials or contaminated surfaces, he or she must wear gloves. Single use gloves cannot be washed or decontaminated for reuse. Utility gloves may be decontaminated if they are not compromised. They should be replaced when they show signs of cracking, peeling, tearing, puncturing, or deteriorating. If employees are allergic to standard gloves, the employer must provide hypoallergenic gloves or similar alternatives.

Routine gloving is not required for phlebotomy in voluntary blood donation centers, though it is necessary for all other phlebotomies. In any case, gloves must be available in voluntary blood donation centers for employees who want to use them. Workers in voluntary blood donation centers must use gloves (1) when they have cuts, scratches or other breaks in their skin, (2) while they are in training; and (3) when they believe contamination might occur.

Employees should wear eye and mouth protection such as goggles and masks, glasses with solid side shields, and masks or chin-length face shields when splashes, sprays, splatters, or droplets of potentially infectious materials pose a hazard through the eyes, nose or mouth. More extensive coverings such as gowns, aprons, surgical caps and hoods, and shoe covers or boots are needed when gross contamination is expected. This often occurs, for example, during orthopedic surgery or autopsies.

Employers must provide the PPE and ensure that their workers wear it. This means that if a lab coat is considered PPE, it must be supplied by the employer rather than the employee. The employer also must clean or launder clothing and equipment and repair or replace it as necessary.

Additional protective measures such as using PPE in animal rooms and decontaminating PPE before laundering are essential in facilities that conduct research on HIV or HBV.

EXCEPTION

There is one exception to the requirement for protective gear. An employee may choose, temporarily and briefly, under rare and extraordinary circumstances, to forego the equipment. It must be the employee's professional judgment that using the protective equipment would prevent the delivery of health care or public safety services or would pose an increased hazard to the safety of the worker or co-worker. When one of these excepted situations occurs, employers are to investigate and document the circumstances to determine if there are ways to avoid it in the future. For example, if a firefighter's resuscitation device is damaged, perhaps another type of device should be used or the device should be carried in a different manner. Exceptions must be limited--this is not a blanket exemption.

DECONTAMINATING AND DISPOSING OF PPE

Employees must remove personal protective clothing and equipment before leaving the work area or when the PPE becomes contaminated. If a garment is penetrated, workers must remove it immediately or as soon as feasible. Used protective clothing and equipment must be placed in designated containers for storage, decontamination, or disposal.

OTHER PROTECTIVE PRACTICES

If an employee's skin or mucous membranes come into contact with blood, he or she is to wash with soap and water and flush eyes with water as soon as feasible. In addition, workers must wash their hands immediately or as soon as feasible after removing protective equipment. If soap and water are not immediately available, employers may provide other handwashing measures such as moist towelettes. Employees still must wash with soap and water as soon as possible.

Employees must refrain from eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses in areas where they may be exposed to blood or other potentially infectious materials.
OSHA's new bloodborne pathogens standard includes provisions for medical follow-up for workers who have an exposure incident. The most obvious exposure incident is a needlestick. But any specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials is considered an exposure incident and should be reported to the employer.

Exposure incidents can lead to infection from hepatitis B virus (HBV) or human immunodeficiency virus (HIV) which causes AIDS. Although few cases of AIDS are directly traceable to workplace exposure, every year about 8,700 health care workers contract hepatitis B from occupational exposures. Approximately 200 will die from this bloodborne infection. Some will become carriers, passing the infection on to others.

WHY REPORT?

Reporting an exposure incident right away permits immediate medical follow-up. Early action is crucial. Immediate intervention can forestall the development of hepatitis B or enable the affected worker to track potential HIV infection. Prompt reporting also can help the worker avoid spreading bloodborne infection to others. Further, it enables the employer to evaluate the circumstances surrounding the exposure incident to try to find ways to prevent such a situation from occurring again.

Reporting is also important because part of the follow-up includes testing the blood of the source individual to determine HBV and HIV infectivity if this is unknown and if permission for testing can be obtained. The exposed employee must be informed of the results of these tests.

Employers must tell the employee what to do if an exposure incident occurs.

MEDICAL EVALUATION AND FOLLOW-UP

Employers must provide free medical evaluation and treatment to employees who experience an exposure incident. They are to refer exposed employees to a licensed health care provider who will counsel the individual about what happened and how to prevent further spread of any potential infection. He or she will prescribe appropriate treatment in line with current U.S. Public Health Service recommendations. The licensed health care provider also will evaluate any reported illness to determine if the symptoms may be related to HIV or HBV development.

The first step is to test the blood of the exposed employee. Any employee who wants to participate in the medical evaluation program must agree to have blood drawn. However, the employee has the option to give the blood sample but refuse permission for HIV testing at that time. The employer must maintain the employee's blood sample for 90 days in case the employee changes his or her mind about testing--should symptoms develop that might relate to HIV or HBV infection.

The health care provider will counsel the employee based on the test results. If the source individual was HBV positive or in a high risk category, the exposed employee may be given hepatitis B immune globulin and vaccination, as necessary. If there is no information on the source individual or the test is negative, and the employee has not been vaccinated or does not have immunity based on his or her test, he or she may receive the vaccine. Further, the health care provider will discuss any other findings from the tests.

Employers must tell the employee what to do if an exposure incident occurs.

CONFIDENTIALITY

Medical records must remain confidential. They are not available to the employer. The employee must give specific written consent for anyone to see the records. Records must be maintained for the duration of employment plus 30 years in accordance with OSHA's standard on access to employee exposure and medical records.
This is one of a series of fact sheets that discusses various requirements of the Occupational Safety and Health Administration's standard covering exposure to bloodborne pathogens. Single copies of fact sheets are available from OSHA Publications, Room N-3101, 200 Constitution Avenue, N.W., Washington, DC 20210 and from OSHA regional offices.
WHAT IS HBV?

Hepatitis B virus (HBV) is a potentially life-threatening bloodborne pathogen. Centers for Disease Control estimates there are approximately 280,000 HBV infections each year in the U.S.

Approximately 8,700 health care workers each year contract hepatitis B, and about 200 will die as a result. In addition, some who contract HBV will become carriers, passing the disease on to others. Carriers also face a significantly higher risk for other liver ailments which can be fatal, including cirrhosis of the liver and primary liver cancer.

HBV infection is transmitted through exposure to blood and other infectious body fluids and tissues. Anyone with occupational exposure to blood is at risk of contracting the infection.

Employers must provide engineering controls; workers must use work practices and protective clothing and equipment to prevent exposure to potentially infectious materials. However, the best defense against hepatitis B is vaccination.

WHO NEEDS VACCINATION?

The new OSHA standard covering bloodborne pathogens requires employers to offer the three-injection vaccination series free to all employees who are exposed to blood or other potentially infectious materials as part of their job duties. This includes health care workers, emergency responders, morticians, first-aid personnel, law enforcement officers, correctional facilities staff, launderers, as well as others.

The vaccination must be offered within 10 days of initial assignment to a job where exposure to blood or other potentially infectious materials can be "reasonably anticipated." The requirements for vaccinations of those already on the job take effect July 6, 1992.

WHAT DOES VACCINATION INVOLVE?

The hepatitis B vaccination is a noninfectious, yeast-based vaccine given in three injections in the arm. It is prepared from recombinant yeast cultures, rather than human blood or plasma. Thus, there is no risk of contamination from other bloodborne pathogens nor is there any chance of developing HBV from the vaccine.

The second injection should be given one month after the first, and the third injection six months after the initial dose. More than 90 percent of those vaccinated will develop immunity to the hepatitis B virus. To ensure immunity, it is important for individuals to receive all three injections. At this point it is unclear how long the immunity lasts, so booster shots may be required at some point in the future.

The vaccine causes no harm to those who are already immune or to those who may be HBV carriers. Although employees may opt to have their blood tested for antibodies to determine need for the vaccine, employers may not make such screening a condition of receiving vaccination nor are employers required to provide prescreening.

Each employee should receive counseling from a health care professional when vaccination is offered. This discussion will help an employee determine whether inoculation is necessary.

WHAT IF I DECLINE VACCINATION?

Workers who decide to decline vaccination must complete a declination form. Employers must keep these forms on file so that they know the vaccination status of everyone who is exposed to blood. At any time after a worker initially declines to receive the vaccine, he or she may opt to take it.

WHAT IF I AM EXPOSED BUT HAVE NOT YET BEEN VACCINATED?

If a worker experiences an exposure incident, such as a needlestick or a blood splash in the eye, he or she must receive confidential medical evaluation from a licensed health care professional with appropriate follow-up. To the extent possible by law, the employer is to determine the source individual for HBV as well as human immunodeficiency virus (HIV) infectivity. The worker's blood will also be screened if he or she agrees.

The health care professional is to follow the guidelines of the U.S. Public Health Service in providing treatment. This would include hepatitis B vaccination. The health care professional must give a written opinion on whether or not vaccination is recommended and whether the employee received it. Only this information is reported to the employer. Employee medical records must remain confidential. HIV or HBV status must NOT be reported to the employer.
bloodborne pathogens. Single copies of fact sheets are available from OSHA Publications, Room N-3101, 200 Constitution Avenue N.W., Washington DC 20210 and from OSHA regional offices.
DECONTAMINATION

Every employer whose employees are exposed to blood or other potentially infectious materials must develop a written schedule for cleaning each area where exposures occur. The methods of decontaminating different surfaces must be specified, determined by the type of surface to be cleaned, the soil present and the tasks or procedures that occur in that area.

For example, different cleaning and decontamination measures would be used for a surgical operatory and a patient room. Similarly, hard surfaced flooring and carpeting require separate cleaning methods. More extensive efforts will be necessary for gross contamination than for minor spattering. Likewise, such varied tasks as laboratory analyses and normal patient care would require different techniques for clean-up.

Employees must decontaminate working surfaces and equipment with an appropriate disinfectant after completing procedures involving exposure to blood. Many laboratory procedures are performed on a continual basis throughout a shift. Except as discussed below, it is not necessary to clean and decontaminate between procedures. However, if the employee leaves the area for a period of time, for a break or lunch, then contaminated work surfaces must be cleaned.

Employees also must clean (1) when surfaces become obviously contaminated; (2) after any spill of blood or other potentially infectious materials; and (3) at the end of the work shift if contamination might have occurred. Thus, employees need not decontaminate the work area after each patient care procedure, but only after those that actually result in contamination.

If surfaces or equipment are draped with protective coverings such as plastic wrap or aluminum foil, these coverings should be removed or replaced if they become obviously contaminated. Reusable receptacles such as bins, pails and cans that are likely to become contaminated must be inspected and decontaminated on a regular basis. If contamination is visible, workers must clean and decontaminate the item immediately, or as soon as feasible.

Should glassware that may be potentially contaminated break, workers need to use mechanical means such as a brush and dustpan or tongs or forceps to pick up the broken glass—never by hand, even when wearing gloves.

Before any equipment is serviced or shipped for repairing or cleaning, it must be decontaminated to the extent possible. The equipment must be labeled, indicating which portions are still contaminated. This enables employees and those who service the equipment to take appropriate precautions to prevent exposure.

REGULATED WASTE

In addition to effective decontamination of work areas, proper handling of regulated waste is essential to prevent unnecessary exposure to blood and other potentially infectious materials. Regulated waste must be handled with great care --i.e., liquid or semi liquid blood and other potentially infectious materials, items caked with these materials, items that would release blood or other potentially infected materials if compressed, pathological or microbiological wastes containing them and contaminate sharps.

Containers used to store regulated waste must be closable and suitable to contain the contents and prevent leakage of fluids. Containers designed for sharps also must be puncture resistant. They must be labeled or color coded to ensure that employees are aware of the potential hazards. Such containers must be closed before removal to prevent the contents from spilling. If the outside of a container becomes contaminated, it must be placed within a second suitable container.

Regulated waste must be disposed of in accordance with applicable state and local laws.

LAUNDRY

Laundry workers must wear gloves and handle contaminated laundry as little as possible, with a minimum of agitation. Contaminated laundry should be bagged or placed in containers at the location where it is used, but not sorted or rinsed there.

Laundry must be transported within the establishment or to outside laundries in labeled or red color-coded bags. If the facility uses Universa Precautions for handling all soiled laundry, then alternate labeling or color coding that can be recognized by the employees may be used. If laundry is wet and it might soak through laundry bags, then workers must use bags that prevent leakage to transport it.

RESEARCH FACILITIES

More stringent decontamination requirements apply to research laboratories and production facilities that work with concentrated strains of HIV and HBV.
from OSHA regional offices.
Securing Medical Catheters

What are medical catheters?
Medical catheters are tubes used in healthcare to deliver intravenous fluids and medications or to drain body fluids. Examples include vascular access devices and chest drainage tubes.

What hazards do medical catheters pose to healthcare workers?
Catheters used for vascular access must be inserted with a needle. Inserting a catheter exposes the healthcare worker to the risk of a needlestick. Sharps with engineered sharps injury protection (SESIPs) reduce workers’ risk of needlesticks, but, unless they are effectively secured, intravenous catheters may migrate or become dislodged and require reinsertion.

Some vascular access devices and chest drainage tubes have traditionally been secured with sutures. This process directly exposes the healthcare worker to the risk of a needlestick from the suture needle. Therefore, for healthcare workers using medical catheters, the process of suturing these devices presents needlestick hazards.

Who is at risk?
Healthcare workers who insert and suture in place medical catheters such as vascular devices and chest tubes face needlestick risks. These workers may include physicians, nurses, physician assistants, and emergency responders.

What are the options for securing medical catheters?
Generally, OSHA does not require the use of specific engineering controls or work practices. OSHA relies on the professional judgment of healthcare workers who insert and secure catheters to assess each situation and determine the appropriate methods and work practices to secure catheters and minimize risk of dislodgment.

Healthcare workers have customarily used tape or sutures to secure medical catheters. Typically, they use sutures for central venous catheters, arterial catheters, and chest tubes. Engineering controls, such as improved adhesive products and securement devices, may decrease or eliminate the need for sutures and thus directly reduce needlestick risk.

For catheters that do not require sutures for securement, such as peripheral intravenous catheters, healthcare workers typically use tape. Careful and thorough catheter securement is essential since ineffective securement may result in catheter dislodgment. A variety of tapes, adhesive products, and catheter securement devices are available. Appropriate products and effective work practices are essential to provide increased catheter stability. Such products and work practices may reduce catheter dislodgment and the necessity of reinsertion with its associated needlestick risk.

What OSHA requirements cover medical catheters?
OSHA’s bloodborne pathogens standard (29 CFR 1910.1030) requires that employers of workers with occupational exposure to blood or other potentially infectious materials annually consider and implement appropriate, available, and effective safer medical devices designed to eliminate or minimize that exposure [See 29 CFR 1910.1030 (c)(1)(iv)(B)]. Engineering controls that reduce the potential for needlesticks by eliminating the need to suture medical catheters in place are one option for healthcare employers to consider. As part of their annual review of methods to reduce needlesticks, employers must review options for securing medical catheters and consider appropriate engineering and work practice controls.

In this review, employers must include the input of non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls [See 29 CFR 1910.1030(c)(1)(v)].
How can I get more information?
Information on needlestick hazards, including the full text of OSHA’s bloodborne pathogens standard, is available on OSHA’s website at http://www.osha.gov/SLTC/bloodbornepathogens/index.html

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

Think Safety!
For more complete information:
OSHA
U.S. Department of Labor
www.osha.gov
(800) 321-OSHA
Standard Interpretations

02/01/1993 - Most frequently asked questions concerning the bloodborne pathogens standard.

Standard Interpretations - Table of Contents

- Standard Number: 1910.1030

Most Frequently Asked Questions Concerning The Bloodborne Pathogens Standard

Disclaimer

The information contained in this booklet is not considered a substitute for any provisions of the Occupational Safety and Health Act of 1970 or the requirements 29 CFR 1910.1030, Occupational Exposure to Bloodborne Pathogens.

Federal/State OSHA Authority

Federal Authority extends to all private sector employers with one or more employees, as well as federal civilian employees. In addition, many states administer their own occupational safety and health programs through plans approved under section 18(b) of the OSH Act. These plans must adopt standards and enforce requirements that are at least as effective as federal requirements. Of the current [26] state plan states and territories, [22] cover the private and public (state and local governments) sectors and [4] cover the public sector only. ([See listing on page 28]).


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Introduction

On December 6, 1991, the Occupational Safety and Health Administration (OSHA) promulgated the Occupational Exposure to Bloodborne Pathogens Standard. This standard is
designed to protect approximately 5.6 million workers in the health care and related occupations from the risk of exposure to bloodborne pathogens, such as the Human Immunodeficiency Virus (HIV) and the Hepatitis B Virus (HBV).

As a result of the standard, numerous questions have been received on how to implement the provisions of the standard. The purpose of this handout is to provide answers to some of the more commonly asked questions related to the Bloodborne Pathogens Standard. It is not intended to be used as a substitute for the standard's requirements. Please refer to the standard for the complete text.

Scope

Q1. **Who is covered by the standard?**

A1. The standard applies to all employees who have occupational exposure to blood or other potentially infectious materials (OPIM).

- Occupational exposure is defined as "reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or OPIM that may result from the performance of the employee's duties."

- Blood is defined as human blood, human blood components, and products made from human blood.

- OPIM is defined as the following human body fluids: saliva in dental procedures, semen, vaginal secretions, cerebrospinal, synovial, pleural, pericardial, peritoneal, and amniotic fluids; body fluids visibly contaminated with blood; along with all body fluids in situations where it is difficult or impossible to differentiate between body fluids; unfixed human tissues or organs (other than intact skin); HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture media or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

Q2. **Will the Bloodborne Pathogens Standard apply to employees in agriculture, maritime, and construction industries?**

A2. The standard will not apply to agriculture. The standard applies to maritime in shipyards and boatyards (where 29 CFR 1910 applies), in commercial fishing vessels, towboats, barges, tugs and other vessels where OSHA has jurisdiction. However, the standard does not apply to longshoring and marine terminals. The construction industry is not covered by the standard. However, the General Duty Clause (Section 5(a)(1) of the OSH Act) will be used to protect employees from bloodborne hazards in construction.

Q3. **Are volunteers and students covered by the standard?**

A3. Volunteers and students may be covered by the standard depending on a variety of factors including compensation.

Q4. **Are physicians who are not employees of the hospital in which they work covered by the standard?**

A4. Physicians of professional corporations are considered employees of that corporation. The corporation which employs these physicians may be cited by OSHA for violations affecting those physicians. The hospital where the physician practices may also be held responsible as the employer who created or controlled the hazard. Physicians who are sole practitioner or partners are not considered employees under the OSH Act, and therefore, are not covered by the protections of the standard. However, if a non-incorporated physician were to create a hazard to which hospital employees were exposed, it would be consistent with current OSHA policy to cite the employer of the exposed employees for failure to provide the protections of the Bloodborne Pathogens Standard.

Q5. **My company supplies contract employees to health care facilities. What are my responsibilities under the Bloodborne Pathogens Standard?**
A5. OSHA considers personnel providers, who send their own employees to work at other facilities, to be employers whose employees may be exposed to hazards. Since your company maintains a continuing relationship with its employees, but another employer (your client) creates and controls the hazard, there is a shared responsibility for assuring that your employees are protected from workplace hazards. The client employer has the primary responsibility for such protection, but the “lessor employer” likewise has a responsibility under the Occupational Safety and Health Act. In the context of OSHA’s standard on Bloodborne Pathogens, 29 CFR 1910.1030, your company would be required, for example, to provide the general training outlined in the standard; ensure that employees are provided with the required vaccinations; and provide proper follow-up evaluations following an exposure incident. Your clients would be responsible, for example, for providing site-specific training and personal protective equipment, and would have the primary responsibility regarding the control of potential exposure conditions. The client, of course, may specify what qualifications are required for supplied personnel, including vaccination status. It is certainly in the interest of the lessor employer to ensure that all steps required under the standard have been taken by the client employer to ensure a safe and healthful workplace for the leased employees. Toward that end, your contracts with your clients should clearly describe the responsibilities of both parties in order to ensure that all requirements of the regulation are met.

Q6. We have employees who are designated to render first aid. Are they covered by the standard?

A6. Yes. If employees are trained and designated as responsible for rendering first aid or medical assistance as part of their job duties, they are covered by the protections of the standard. However, OSHA will consider it a de minimis violation - a technical violation carrying no penalties - if employees, who administer first aid as a collateral duty to their routine work assignments, are not offered the pre-exposure hepatitis B vaccination, provided that a number of conditions are met. In these circumstances, no citations will be issued.

The de minimis classification for failure to offer hepatitis B vaccination in advance of exposure does not apply to personnel who provide first aid at a first aid station, clinic, or dispensary, or to the health care, emergency response or public safety personnel expected to render first aid in the course of their work. Exceptions are limited to persons who render first aid only as a collateral duty, responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred. To merit the de minimis classification, the following conditions also must be met:

- Reporting procedures must be in place under the exposure control plan to ensure that all first aid incidents involving exposure are reported to the employer before the end of the work shift during which the incident occurs.

- Reports of first aid incidents must include the names of all first aid providers and a description of the circumstances of the accident, including date and time, as well as a determination of whether an exposure incident, as defined in the standard, has occurred.

- Exposure reports must be included on a list of such first aid incidents that is readily available to all employees and provided to OSHA upon request.

- First aid providers must receive training under the Bloodborne Pathogens Standard that covers the specifics of the reporting procedures.

- All first aid providers who render assistance in any situation involving the presence of blood or other potentially infectious materials, regardless of whether or not a specific exposure incident occurs, must have the vaccine made available to them as soon as possible but in no event later than 24 hours after the exposure incident. If an exposure incident as defined in the standard has taken place, other post-exposure follow-up procedures must be initiated immediately, per the requirements of the standard.

[This document was edited on 2/7/03 to strike information that no longer reflects current OSHA policy.]
Q7. Are employees such as housekeepers, maintenance workers, or janitors covered by the standard?

A7. Housekeeping workers in health care facilities may have occupational exposure to bloodborne pathogens, as defined by the standard. Individuals who perform housekeeping duties, particularly in patient care and laboratory areas, may perform tasks, such as cleaning blood spills and handling regulated wastes, which constitute occupational exposure.

While OSHA does not generally consider maintenance personnel and janitorial staff employed in non-health care facilities to have occupational exposure, it is the employer’s responsibility to 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. If OSHA determines, on a case-by-case basis, that sufficient evidence of reasonably anticipated exposure exists, the employer will be held responsible for providing the protections of 29 CFR 1910.1030 to the employees with occupational exposure.

Exposure Control

Q8. What is an exposure control plan?

A8. The exposure control plan is the employer’s written program that outlines the protective measures an employer will take to eliminate or minimize employee exposure to blood and OPIM.

The exposure control plan must contain at a minimum:

1. The exposure determination which identifies job classifications and, in some cases, tasks and procedures where there is occupational exposure to blood and OPIM;
2. The procedures for evaluating the circumstances surrounding an exposure incident; and
3. A schedule of how and when other provisions of the standard will be implemented, including methods of compliance, HIV and HBV research laboratories and production facilities requirements, hepatitis B vaccination and post-exposure follow-up, communication of hazards to employees, and recordkeeping. [The Needlestick Safety and Prevention Act, published January 18, 2001 to amend 29 CFR 1910.1030, established additional requirements. See 29 CFR 1910.1030(c)(1)(v) for the additional requirements.]

Q9. In the exposure control plan, are employers required to list specific tasks that place the employee at risk for all job classifications?

A9. No. If all the employees within a specific job classification perform duties where occupational exposure occurs, then a list of specific tasks and procedures is not required for that job classification. However, the job classification (e.g., "nurse") must be listed in the plan’s exposure determination and all employees within the job classification must be included under the requirements of the standard.

Q10. Can tasks and procedures be grouped for certain job classifications?

A10. Yes. Tasks and procedures that are closely related may be grouped. However, they must share a common activity, such as "vascular access procedure," or "handling of contaminated sharps."

Q11. Does the exposure control plan need to be a separate document?

A11. No. The exposure control plan may be part of another document, such as the facility's health and safety manual, as long as all components are included. However, in order for the plan to be accessible to employees, it must be a cohesive entity by itself or there must be a guiding document which states the overall policy and goals and references the elements of

existing separate policies that comprise the plan. For small facilities, the plan's schedule and method of implementation of the standard may be an annotated copy of the final standard that states on the document when and how the provisions of the standard will be implemented. Larger facilities could develop a broad facility program, incorporating provisions from the standard that apply to their establishments.

Q12. How often must the exposure control plan be reviewed?

A12. The standard requires an annual review of the exposure control plan. In addition, whenever changes in tasks, procedures, or employee positions affect or create new occupational exposure, the existing plan must be reviewed and updated accordingly.

Q13. Must the exposure control plan be accessible to employees?

A13. Yes, the exposure control plan must be accessible to employees, as well as to OSHA and NIOSH representatives. The location of the plan may be adapted to the circumstances of a particular workplace, provided that employees can access a copy at the workplace during the workshift. If the plan is maintained solely on computer, employees must be trained to operate the computer.

A hard copy of the exposure control plan must be provided within 15 working days of the employee's request in accordance with 29 CFR 1910.1020.

Q14. What should be included in the procedure for evaluating an exposure incident?

A14. The procedure for evaluating an exposure incident shall include:

- The engineering controls and work practices in place
- The protective equipment or clothing used at the time of the exposure incident
- An evaluation of the policies and "failures of controls" at the time of the exposure incident.

Methods of Control

Universal Precautions

Q15. What is meant by the term Universal Precautions?

A15. Universal Precautions is OSHA's required method of control to protect employees from exposure to all human blood and OPIM. The term, "Universal Precautions," refers to a 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.

Q16. Can Body Substance Isolation (BSI) be adopted in place of Universal Precautions?

A16. Yes. Body Substance Isolation is a control method that defines all body fluids and substances as infectious. BSI incorporates not only the fluids and materials covered by the standard but expands coverage to include all body substances. BSI is an acceptable alternative to Universal Precautions, provided facilities utilizing BSI adhere to all other provisions of the standard.

Engineering Controls

Q17. What are engineering controls?

A17. The term, "Engineering Controls," refers to [controls (e.g., sharps disposal containers, self-sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace].
Q18. What are some examples of safer devices or alternatives that could be used in lieu of exposed needles?

A18. Some examples of such devices or alternatives include stop cocks (on-off switch), needleless systems, needle-protected systems, and "selfsheathing" needles.

Q19. Are employers required to provide these needle devices?

A19. The standard requires that engineering and work practice controls be used to eliminate or minimize employee exposure. While employers do not automatically have to institute the most sophisticated controls (such as the ones listed in the above question), it is the employer’s responsibility to evaluate the effectiveness of existing controls and review the feasibility of instituting more advanced engineering controls.

Q20. Is recapping of needles allowed?

A20. Bending, recapping, or removing contaminated needles is prohibited, except under certain circumstances. In those situations where bending, removal or recapping is required by a specific medical procedure or no alternative is feasible, such actions are permitted but must be accomplished by some method other than the traditional two-handed procedure (e.g., a mechanical device or a one hand scoop method). For example, these actions may be necessary when performing blood gas analyses; when inoculating a blood culture bottle; administering incremental doses of a medication to the same patient; or removing the needle from a phlebotomy collection apparatus, such as a vacutainer. An acceptable means of demonstrating that no alternative to bending, recapping, or removing contaminated needles is feasible or that such action is required by a specific medical procedure would be a written justification included as part of the exposure control plan. This justification must state the basis for the employer's determination that no alternative is feasible or must specify that a particular medical procedure requires, for example, the bending of the needle and the use of forceps to accomplish this. Shearing or breaking contaminated needles is completely prohibited by the standard.

Q21. How should reusable sharps (e.g., large bore needles, scalpels, saws, etc.) be handled?

A21. Reusable sharps must be placed in containers which are puncture-resistant, leakproof on the sides and bottom, and properly labeled/color-coded until they are reprocessed.

Contaminated reusable sharps must not be stored or reprocessed in a manner that would require the employee to reach by hand into containers.

Work Practices

Q22. Can employees of an ambulance medical rescue service eat or drink inside the cab of the unit?

A22. Employees are allowed to eat and drink in an ambulance cab only if the employer has implemented procedures to permit employees to wash up and change contaminated clothing prior to entering the ambulance cab, has prohibited the consumption, handling, storage, and transport of food and drink in the rear of the vehicle, and has procedures to ensure that
patients and contaminated materials remain behind the separating partition.

Q23. What alternatives are acceptable if soap and running water are not available for handwashing?

A23. Antiseptic hand cleaner in conjunction with clean cloth/paper towels or antiseptic towelettes are examples of acceptable alternatives to running water. However, when these types of alternatives are used, employees must wash their hands (or other affected areas) with soap and running water as soon as feasible. This alternative would only be acceptable at worksites where soap and running water are not feasible.

Q24. What are the labeling exemptions for specimens?

A24. The labeling exemption, listed in section (d)(2)(xiii)(A) of the standard, applies to facilities that handle all specimens with Universal Precautions provided the containers are recognizable as containing specimens. This exemption applies only while these specimens remain within the facility. Also, all employees who will have contact with the specimens must be trained to handle all specimens with Universal Precautions. If the specimens leave the facility (e.g., during transport, shipment, or disposal), a label or red color-coding is required.

Q25. Do specimens have to be double-bagged?

A25. Secondary containers or bags are only required if the primary container is contaminated on the outside. Also, if the specimen could puncture the primary container, a secondary puncture-resistant container is required. All specimen containers, primary and secondary, must be closed, properly labeled or color-coded (except as described above) and must prevent leakage.

Q26. Are employers required to decontaminate equipment prior to servicing or shipping?

A26. The standard requires that all equipment that may be contaminated must be examined and decontaminated as necessary prior to servicing or shipping. If complete decontamination is not feasible, the equipment must be labeled with the required biohazard label which also specifically identifies which portions of the equipment remain contaminated. In addition, the employer must ensure that this information is conveyed to the affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping.

Personal Protective Equipment

Q27. What type of personal protective equipment (PPE) should employees in a dental office wear?

A27. The standard requires that PPE be "appropriate." PPE will be considered "appropriate" only if it does not permit blood or OPIM to pass through to, or reach, the skin, employees' underlying garments, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time that the PPE will be used. This allows the employer to select PPE based on the type of exposure and the quantity of blood or OPIM which can be reasonably anticipated to be encountered during performance of a task or procedure.

Q28. Who is responsible for providing PPE?

A28. The financial responsibility for repairing, replacing, cleaning, and disposing of PPE rests with the employer. The employer is not obligated under the standard to provide general work clothes to employees, but is responsible for providing PPE. If laboratory jackets or uniforms are intended to protect the employee's body or clothing from contamination, they are to be provided by the employer.

Q29. Does protective clothing need to be removed before leaving the work area?

A29. Yes. OSHA requires that personal protective equipment be removed prior to leaving the work area. While "work area" must be determined on a case-by-case basis, a work area is generally considered to be an area where work involving occupational exposure occurs or where the contamination of surfaces may occur.
**Q30. What type of eye protection do I need to wear when working with blood or OPIM?**

A30. The use of eye protection would be based on the reasonable anticipation of facial exposure. Masks in combination with eye protection devices such as glasses with solid side shields, goggles, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or OPIM may be generated, and eye, nose, or mouth contamination can be reasonably anticipated.

**Gloves**

**Q31. Are gloves required during phlebotomy procedures?**

A31. Gloves must be worn by employees whenever any vascular access procedure is performed, including phlebotomy. Volunteer blood donation centers are the only instance where some flexibility is permitted and even then certain requirements must be fulfilled. If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer must (1) periodically reevaluate this policy; (2) make gloves available to all employees who wish to use them for phlebotomy; (3) not discourage the use of gloves for phlebotomy; and (4) require that gloves be used for phlebotomy when the employee has cuts, scratches, or other breaks in the skin; when the employee judges that hand contamination with blood may occur (e.g., performing phlebotomy on an uncooperative source individual); or when the employee is receiving training in phlebotomy.

**Q32. When should gloves be changed?**

A32. Disposable gloves shall be replaced as soon as practical after they have become contaminated, or as soon as feasible if they are torn, punctured, or their ability to function as a barrier is compromised. Hands must be washed after the removal of gloves used as PPE, whether or not the gloves are visibly contaminated.

**Q33. Are gloves required when giving an injection?**

A33. Gloves are not required to be worn when giving an injection as long as hand contact with blood or other potentially infectious materials is not reasonably anticipated.

**Q34. What are some alternatives when an employee is allergic to the gloves provided?**

A34. Hypoallergenic gloves, glove liners, powderless gloves or other similar alternatives must be provided for employees who are allergic to the gloves that are normally provided.

**Housekeeping**

**Q35. What type of disinfectant can be used to decontaminate equipment or working surfaces which have come in contact with blood or OPIM?**

A35. EPA registered tuberculocidal disinfectants are appropriate for the cleaning of blood or OPIM. A solution of 5.25 percent sodium hypochlorite, (household bleach), diluted between 1:10 and 1:100 with water, is also acceptable for cleaning contaminated surfaces.

Quaternary ammonium products are appropriate for use in general housekeeping procedures that do not involve the cleanup of contaminated items or surfaces.

The particular disinfectant used, as well as the frequency with which it is used, will depend upon the circumstances in which a given housekeeping task occurs (i.e., location within the facility, type of surface to be cleaned, type of soil present, and tasks and procedures being performed). The employer's written schedule for cleaning and decontamination should identify such specifics on a task-by-task basis.

**Regulated Waste**

**Q36. What does OSHA mean by the term "regulated waste"?**
A36. The Bloodborne Pathogens Standard uses the term, "regulated waste," to refer to the following categories of waste which require special handling at a minimum; (1) liquid or semi-liquid blood or OPIM; (2) items contaminated with blood or OPIM and which would release these substances in a liquid or semi-liquid state if compressed; (3) items that are caked with dried blood or OPIM and are capable of releasing these materials during handling; (4) contaminated sharps; and (5) pathological and microbiological wastes containing blood or OPIM.

Q37. Are feminine hygiene products considered regulated waste?

A37. 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 properly lined with plastic or wax paper bags. Such bags should protect the employees from physical contact with the contents.

At the same time, it is the employer's responsibility to determine the existence of regulated waste. This determination is not based on actual volume of blood, but rather on the potential to release blood, (e.g., when compacted in the waste container). If OSHA determines, on a case-by-case basis, that sufficient evidence of regulated waste exists, either through observation, (e.g., a pool of liquid in the bottom of a container, dried blood flaking off during handling), or based on employee interviews, citations may be issued.

Q38. How should sharps containers be handled?

A38. Each sharps container must either be labeled with the universal biohazard symbol and the word "biohazard" or be color-coded red. Sharps containers shall be maintained upright throughout use, replaced routinely, and not be allowed to overfill when removing sharps containers from the area of use, the containers shall be:

- Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;
- Placed in a secondary container if leakage is possible. The second container shall be:
  - Closable;
  - Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
  - Labeled or color-coded according to paragraph (g)(1)(i) of the standard.

- Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

Upon closure, duct tape may be used to secure the lid of a sharps container as long as the tape does not serve as the lid itself.

Q39. Where should sharps containers be located?

A39. Sharps containers must be easily accessible to employees and located as close as feasible to the immediate area where sharps are used (e.g., patient care areas) or can be reasonably anticipated to be found (e.g., laundries).

In areas, such as correctional facilities and psychiatric units, there may be difficulty placing sharps containers in the immediate use area. If a mobile cart is used in these areas, an alternative would be to lock the sharps container in the cart.
Q40. What type of container should be purchased to dispose of sharps?

A40. Sharps containers are made from a variety of products from cardboard to plastic. As long as they meet the definition of a sharps container, (i.e., containers must be closable, puncture resistant, leakproof on sides and bottom, and labeled or color-coded), OSHA would consider them to be of an acceptable composition.

Q41. How do I dispose of regulated waste?

A41. Regulated waste shall be placed in containers which are:

- Closable;
- Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;
- Labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard; and
- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second container shall be:

- Closable;
- Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport, or shipping;
- Labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard; and
- Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

Disposal of all regulated waste shall be in accordance with applicable regulations of the United States, States and Territories, and political subdivisions of States and Territories.

Q42. Do I need to autoclave waste before disposing?

A42. There is no specific requirement to autoclave waste before disposal. However, under the section on HIV and HBV Research Laboratories and Production Facilities, there is a requirement stating that all regulated waste from the facilities must be either incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens. In addition, research laboratories must have an autoclave available for decontamination of regulated waste while production facilities must have an autoclave available within or as near as possible to the work area, also for the decontamination of regulated waste.

Laundry

Q43. What does OSHA mean by the term "contaminated laundry"?

A43. Contaminated laundry means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

Q44. How should contaminated laundry be handled?

A44. Contaminated laundry shall be handled as little as possible with a minimum of agitation. Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use. Other requirements include:
Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.

Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i) of the standard.

Q45. Are employees allowed to take their protective equipment home and launder it?

A45. Employees are not permitted to take their protective equipment home and launder it. It is the responsibility of the employer to provide, launder, repair, replace, and dispose of personal protective equipment.

Q46. Do employers have to buy a washer and dryer to clean employees' personal protective equipment?

A46. There is no OSHA requirement stipulating that employers must purchase a washer and dryer to launder protective clothing. It is an option that employers may consider. Another option is to contract out the laundering of protective clothing. Finally, employers may choose to use disposable personal protective clothing and equipment.

Q47. Are there guidelines to be followed when laundering personal protective equipment? What water temperature and detergent types are acceptable?

A47. The decontamination and laundering of protective clothing should be handled by washing and drying the garments according to the clothing manufacturer’s instructions.

HIV and HBV Research Laboratories and Production Facilities

Q48. Are academic research laboratories included in the definition of a research laboratory under the standard?

A48. Academic research laboratories are included in the definition of a research laboratory under the standard. A research laboratory produces or uses research laboratory scale amounts of HIV and HBV. Although research laboratories may not have the volume found in production facilities, they deal with solutions containing higher viral titers than those normally found in patients' blood.

Q49. Is animal blood used in research covered under the laboratory section of the standard?

A49. The standard covers animal blood only for those animals purposely infected with HIV or HBV. Although the standard does not apply to animal blood unless the animal has been purposely infected with HIV or HBV, persons handling animals or animal blood should follow general precautions as recommended by the Centers for Disease Control/National Institutes of Health Publication, Biosafety in Microbiological and Biomedical Laboratories (Publication No. 88-8395).

Hepatitis B Vaccination and Post-Exposure Follow-up Procedures

Q50. Who must be offered the hepatitis B vaccination?
A50. The hepatitis B vaccination series must be made available to all employees who have occupational exposure. The employer does not have to make the hepatitis B vaccination available to employees who have previously received the vaccination series, who are already immune as their antibody tests reveal, or who are prohibited from receiving the vaccine for medical reasons.

Q51. When should the hepatitis B vaccination be offered to employees?

A51. The hepatitis B vaccination must be made available within 10 working days of initial assignment, after appropriate training has been completed. This includes arranging for the administration of the first dose of the series. In addition, see [Question 6] for vaccination of designated first aiders.

Q52. Can pre-screening be required for hepatitis B titer? Post-screening?

A52. No. The employer cannot require an employee to take a pre-screening or post-vaccination serological test. An employer may, however, decide to make pre-screening available at no cost to the employee. Routine post-vaccination serological testing is not currently recommended by the CDC unless an employee has had an exposure incident, and then it is also to be offered at no cost to the employee.

This document was edited on 08/13/2003 to strike information that no longer reflects current OSHA policy. See the revised policy in 29 CFR 1910.1030(f)(1)(ii)(D) and OSHA Directive CPL 2-2.69, Section XIII.F.5.

Q53. If an employee declines the hepatitis B vaccination, can the employer make up a declination form?

A53. If an employee declines the hepatitis B vaccination, the employer must ensure that the employee signs a hepatitis B vaccine declination. The declination's wording must be identical to that found in Appendix A of the standard. A photocopy of the Appendix may be used as a declination form, or the words can be typed or written onto a separate document.

Q54. Can employees refuse the vaccination?

A54. Employees have the right to refuse the hepatitis B vaccine and/or any post-exposure evaluation and follow-up. It is important to note, however, that the employee needs to be properly informed of the benefits of the vaccination and post-exposure evaluation through training. The employee also has the right to decide to take the vaccination at a later date if he or she so chooses. The employer must make the vaccination available at that time.

Q55. Can the hepatitis B vaccination be made a condition of employment?

A55. OSHA does not have jurisdiction over this issue.

Q56. Is a routine booster dose of hepatitis B vaccine required?

A56. Because the U.S. Public Health Service (USPHS) does not recommend routine booster doses of hepatitis B vaccine, they are not required at this time. However, if a routine booster dose of hepatitis B vaccine is recommended by the USPHS at a future date, such booster doses must be made available at no cost to those eligible employees with occupational exposure.

Q57. Whose responsibility is it to pay for the hepatitis B vaccine?

A57. The responsibility lies with the employer to make the hepatitis B vaccine and vaccination, including post-exposure evaluation and follow-up, available at no cost to the employees.

Q58. What information must the employer provide to the health care professional following an exposure incident?

A58. The health care professional must be provided with a copy of the standard, as well as the following information:
- A description of the employee's duties as they relate to the exposure incident;
- Documentation of the route(s) and circumstances of the exposure;
- The results of the source individual's blood testing, if available; and
- All medical records relevant to the appropriate treatment of the employee, including vaccination status, which are the employer's responsibility to maintain.

**Q59. What serological testing must be done on the source individual?**

A59. The employer must identify and document the source individual if known, unless the employer 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 on the source individual's HIV and HBV testing must be provided to the evaluating health care professional. Also, the results of the testing must be provided to the exposed employee. The exposed employee must be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

**Q60. What if consent cannot be obtained from the source individual?**

A60. If consent cannot be obtained and is required by state law, the employer must document in writing that consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood if available shall be tested and the results documented.

**Q61. When is the exposed employee's blood tested?**

A61. After consent is obtained, the exposed employee's blood is collected and tested as soon as feasible for HIV and HBV serological status. If the employee consents to the follow-up evaluation after an exposure incident, but does not give consent for HIV serological testing, the blood sample must be preserved for 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested for HIV, testing must be done as soon as feasible.

**Q62. What information does the health care professional provide to the employer following an exposure incident?**

A62. The employer must obtain and provide to the employee a copy of the evaluating health care professional's written opinion within 15 days of completion of the evaluation. The health care professional's written opinion for hepatitis B is limited to whether hepatitis B vaccination is indicated and if the employee received the vaccination. The written opinion for post-exposure evaluation must include information that the employee has been informed of the results of the evaluation and told about any medical conditions resulting from exposure that may further require evaluation and treatment. All other findings or diagnoses must be kept confidential and not included in the written report.

**Q63. What type of counseling is required following an exposure incident?**

A63. The standard requires that post-exposure counseling be given to employees following an exposure incident. Counseling should include USPHS recommendations for transmission and prevention of HIV. These recommendations include refraining from blood, semen, or organ donation; abstaining from sexual intercourse or using measures to prevent HIV transmission during sexual intercourse; and refraining from breast feeding infants during the follow-up period. In addition, counseling must be made available regardless of the employee's decision to accept serological testing.

**Q64. What information about exposure incidents is recorded on the OSHA 200 log?**

A64. All occupational bloodborne pathogens exposure incidents, (e.g., needlesticks, lacerations, splashes), must be recorded on the OSHA 200 log as an injury if the incident results in one of the following:
The incident is work-related and involves the loss of consciousness, a transfer to another job, or restriction of work or motion.

The incident results in a recommendation of medical treatment, (e.g., hepatitis B immune globulin, hepatitis B vaccine, or zidovudine).

The incident results in a diagnosis of seroconversion. The serological status of the employee is not recorded on the OSHA 200 log. If a case of seroconversion is known, it is recorded on the 200 as an injury, (e.g., "needlestick"), rather than "seroconversion".

[This document was edited on 2/7/03 to strike information that no longer reflects current OSHA policy. Please see the revised Injury and Illness Recordkeeping Standard, 1904, and the associated OSHA Instruction CPL 2-0.131 Recordkeeping Policies and Procedures Manual (RKM) on OSHA's Recordkeeping Page.]

Communication of Hazard to Employees

Q65. When are labels required?

A65. A warning label that includes the universal biohazard symbol, followed by the term "biohazard," must be included on bags/containers of contaminated laundry, on bags/containers of regulated waste, on refrigerators and freezers that are used to store blood or OPIM, and on bags/containers used to store, dispose of, transport, or ship blood or OPIM (e.g., specimen containers). In addition, contaminated equipment which is to be serviced or shipped must have a readily observable label attached which contains the biohazard symbol and the word "biohazard" along with a statement relating which portions of the equipment remain contaminated.

Q66. What are the required colors for the labels?

A66. The background must be fluorescent orange or orange-red or predominantly so, with symbols and lettering in a contrasting color. The label must be either an integral part of the container or affixed as close as feasible to the container by a string, wire, adhesive, or other method to prevent its loss or unintentional removal.

Q67. Can there be substitutes for the labels?

A67. Yes. Red bags or red containers may be substituted for the biohazard labels.

Q68. What are the exceptions to the labeling requirement?

A68. Labeling is not required for:

- Containers of blood, blood components, and blood products bearing an FDA required label that have been released for transfusion or other clinical uses.

- Individual containers of blood or OPIM that are placed in secondary labeled containers during storage, transport, shipment, or disposal.

- Specimen containers, if the facility uses Universal Precautions when handling all specimens, the containers are recognizable as containing specimens, and the containers remain within the facility.

- Laundry bags or containers, containing contaminated laundry, may be marked with an alternative label or color-coded provided the facility uses Universal Precautions for handling all soiled laundry and the alternative marking permits all employees to recognize the containers as requiring compliance with Universal Precautions. If contaminated laundry is sent off-site for cleaning to a facility which does not use Universal Precautions in the handling of all soiled laundry, it must be placed in a bag or container which is red in color or labeled with the biohazard label described above.

- Regulated waste that has been decontaminated.
Q69. Does OSHA accept Department of Transportation's (DOT) labels for waste and specimens which will be shipped or transported?

A69. The labeling requirements do not preempt either the U.S. Postal Service labeling requirements (39 CFR Part III) or the Department of Transportation's Hazardous Materials Regulations (49 CFR Parts 171-181).

DOT labeling is required on some transport containers (i.e., those containing "known infectious substances"). It is not required on all containers for which 29 CFR 1910.1030 requires the biohazard label. Where there is an overlap between the OSHA-mandated label and the DOT-required label, the DOT label will be considered acceptable on the outside of the transport container provided the OSHA-mandated label appears on any internal containers which may be present. Containers serving as collection receptacles within a facility must bear the OSHA label since these are not covered by the DOT requirements.

Q70. Which employees must be trained?

A70. All employees with occupational exposure must receive initial and annual training.

Q71. Should part-time and temporary employees be trained?

A71. Part-time and temporary employees are covered and are also to be trained on company time.

Q72. Who has the responsibility for training workers employed by agencies which provide personnel (e.g., nurses) to other employers?

A72. As stated in a similar answer [in Question 5], OSHA considers personnel providers, who send their own employees to work at other facilities, to be employers whose employees may be exposed to hazards. Since personnel providers maintain a continuing relationship with their employees, but another employer (your client) creates and controls the hazard, there is a shared responsibility for assuring that your employees are protected from workplace hazards. The client employer has the primary responsibility for such protection, but the "lessor employer" likewise has a responsibility under the Occupational Safety and Health Act.

In the context of OSHA's standard on Bloodborne Pathogens, the personnel provider would be required to provide the general training outlined in the standard, the client employer would be responsible for providing site-specific training.

The contract between the personnel provider and the client should clearly describe the training responsibilities of both parties in order to ensure that all training requirements of the standard are met.

Q73. What are the qualifications that a person must possess in order to conduct employee training regarding bloodborne pathogens?

A73. The person conducting the training is required to be knowledgeable in the subject matter covered by the elements in the training program and be familiar with how the course topics apply to the workplace that the training will address. The trainer must demonstrate expertise in the area of occupational hazards of bloodborne pathogens.

Q74. Where could information be obtained for conducting training on the Bloodborne Pathogens Standard?

A74. OSHA's Office of Information and Consumer Affairs (OICA) has developed brochures, factsheets, and a videotape on the standard. Single copies of the brochure and factsheets can be obtained by writing OSHA Publications, 200 Constitution Avenue, NW, Room N3101, Washington, DC 20210 or by calling (202) 219-8148. The videotape is available through the National Audio Visual Center, and the number is (301) 763-1896. All information available through OICA should be used as a supplement to the employer's training program. Other sources of information include local Area and Regional OSHA Offices. In addition, each Regional Office has a Bloodborne Pathogens Coordinator who answers compliance and related questions on the standard.

Q75. Who are some examples of persons who could conduct training on the
bloodborne standard?

A75. Examples of health care professionals include infection control practitioners, nurse practitioners, and registered nurses. Non-health care professionals include industrial hygienists, epidemiologists or professional trainers, provided that they can demonstrate evidence of specialized training in the area of bloodborne pathogens.

Recordkeeping

Q76. What is contained in the medical record?

A76. The medical record includes the name and social security number of the employee; a copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations, and any medical records relative to the employee's ability to receive the vaccination; copies of all results of examinations, medical testing, and the follow-up procedures; copies of the healthcare professional's written opinion; and a copy of the information provided to the healthcare professional. [The Needlestick Safety and Prevention Act, published January 18, 2001 to amend 29 CFR 1910.1030, established the additional requirement to maintain a sharps injury log. See 29 CFR 1910.1030(h)(5) for the additional requirements.]

Q77. Who keeps the medical records?

A77. The employer is responsible for the establishment and maintenance of medical records. However, these records may be kept off-site at the location of the healthcare provider.

Q78. How long must the medical records be kept?

A78. Medical records must be kept for the duration of employment plus 30 years.

Q79. What is included in the training record?

A79. The training record contains the dates of the training, the contents or a summary of the training sessions, the names and job titles of all persons attending the training, and the names and qualifications of the persons conducting the training.

Q80. How long must the training records be kept?

A80. Training records must be retained for 3 years from the training date.

[U.S. Department of Labor
Occupational Safety and Health Administration
Listing of Regional Offices]

Region I
(CT, * ME, MA, NH, RI, VT*)
JFK Federal Building, Room E340
Boston, MA 02203
(617) 565-9860

Region II
(NJ, * NY, * PR, * VI*)
201 Varick Street, Room 670
New York, NY 10014
(212) 337-2378

Region III
(DE, DC, MD, * PA, VA, * WV)
The Curtis Center
170 S. Independence Mall West
Suite 740 West

Region VI
(AR, LA, NM, * OK, TX)
525 Griffin Street, Room 602
Dallas, TX 75202
(214) 767-4731 or 4736 x224

Region VII
(IA, * KS, MO, NE)
City Center Square
1100 Main Street, Suite 800
Kansas City, MO 64105
(816) 426-5861

Region VIII
(CO, MT, ND, SD, UT, * WY*)
1999 Broadway, Suite 1690
PO Box 46550
Denver, CO 80202-5716
Most frequently asked questions concerning the bloodborne pathogens stan...
Model Plans and Programs for the OSHA Bloodborne Pathogens and Hazard Communications Standards

OSHA 3186-06R 2003
This informational booklet provides a general overview of a particular topic related to OSHA standards. It does not alter or determine compliance responsibilities in OSHA standards or the *Occupational Safety and Health Act of 1970*. Because interpretations and enforcement policy may change over time, you should consult current OSHA administrative interpretations and decisions by the Occupational Safety and Health Review Commission and the Courts for additional guidance on OSHA compliance requirements.

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This information is available to sensory impaired individuals upon request. Voice phone: (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.
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Introduction

The mission of the Occupational Health and Safety Administration (OSHA) is to save lives, prevent injuries, and protect the health of America’s workers. As part of the Department of Labor, OSHA promotes worker safety and health in every workplace in the United States.

OSHA’s bloodborne pathogens standard protects employees who work in occupations where they are at risk of exposure to blood or other potentially infectious materials. OSHA’s hazard communication standard protects employees who may be exposed to hazardous chemicals. Both standards require employers to develop written documents to explain how they will implement each standard, provide training to employees, and protect the health and safety of their workers.

This publication includes a model exposure control plan to meet the requirements of the OSHA bloodborne pathogens standard and a model hazard communication program to meet the requirements of the hazard communication standard. The full text of these two OSHA standards, including the requirement for the written documents, is found in 29 CFR 1910.1030 and 29 CFR 1910.1200, respectively. You can access the full text of these standards through the OSHA website (www.osha.gov) by using the alphabetical index (click on “B” for the bloodborne pathogen standard; click on “H” for the hazard communication standard).

These model documents can be used as templates for your own workplace exposure control plan and hazard communication program, but you must tailor them to the specific requirements of your establishment. These sample plans contain all elements required by the bloodborne pathogens and hazard communication standards, so you should not eliminate any items when converting them for your own use. Your written plans must be accessible to all employees, either on-line or in an area where they are available for review on all shifts.

This publication provides general guidance on preparing written plans required by OSHA standards, but should not be considered a definitive interpretation for compliance with OSHA requirements. The reader should consult the OSHA bloodborne pathogens and hazard communication standards in their entirety for specific compliance requirements.
Part 1  Bloodborne Pathogens Standard

The following model for an Exposure Control Plan includes all elements required by the OSHA bloodborne pathogens standard (29 CFR 1910.1030). The intent of this model is to provide employers with an easy-to-use format that may be used as a template to develop a written exposure control plan tailored to the individual requirements of their establishments.

Model Exposure Control Plan

POLICY

The (Your facility name) is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this goal, the following 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.”

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

- Determination of employee exposure
- Implementation of various methods of exposure control, including:
  - Universal precautions
  - Engineering and work practice controls
  - Personal protective equipment
  - Housekeeping
- Hepatitis B vaccination
- Post-exposure evaluation and follow-up
- Communication of hazards to employees and training
- Recordkeeping
- Procedures for evaluating circumstances surrounding exposure incidents

Implementation methods for these elements of the standard are discussed in the subsequent pages of this ECP.
PROGRAM ADMINISTRATION

- (Name of responsible person or department) is (are) responsible for implementation of the ECP. (Name of responsible person or department) will maintain, review, and update the ECP at least annually, and whenever necessary to include new or modified tasks and procedures. Contact location/phone number: ____________.

- Those 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.

- (Name of responsible person or department) will provide and maintain all necessary personal protective equipment (PPE), engineering controls (e.g., sharps containers), labels, and red bags as required by the standard. (Name of responsible person or department) will ensure that adequate supplies of the aforementioned equipment are available in the appropriate sizes. Contact location/phone number: ____________.

- (Name of responsible person or department) will be responsible for ensuring that all medical actions required by the standard are performed and that appropriate employee health and OSHA records are maintained. Contact location/phone number: ____________.

- (Name of responsible person or department) will be responsible for training, documentation of training, and making the written ECP available to employees, OSHA, and NIOSH representatives. Contact location/phone number: ____________.

EMPLOYEE EXPOSURE DETERMINATION

The following is a list of all job classifications at our establishment in which all employees have occupational exposure:

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Department/Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Example: Phlebotomists)</td>
<td>(Clinical Lab)</td>
</tr>
</tbody>
</table>

(use as many lines as necessary)
The following is a list of job classifications in which some employees at our establishment 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:

**Example:**

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Department/Location</th>
<th>Task/Procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housekeeper</td>
<td>Environmental Services</td>
<td>Handling Regulated Waste</td>
</tr>
</tbody>
</table>

**NOTE:** Part-time, temporary, contract and per diem employees are covered by the bloodborne pathogens standard. The ECP should describe how the standard will be met for these employees.

**METHODS OF IMPLEMENTATION AND CONTROL**

**Universal Precautions**

All employees will utilize universal precautions.

**Exposure Control Plan**

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 can review this plan at any time during their work shifts by contacting (Name of responsible person or department). If requested, we will provide an employee with a copy of the ECP free of charge and within 15 days of the request.

(Name of responsible person or department) is responsible for reviewing and updating the ECP annually or more frequently if necessary to reflect any new or modified tasks and procedures that affect occupational exposure and to reflect new or revised employee positions with occupational exposure.

**Engineering Controls and Work Practices**

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The
Specific engineering controls and work practice controls used are listed below:

- (For example: non-glass capillary tubes, SESIPs, needleless systems)
- __________________________________________________________
- __________________________________________________________

Sharps disposal containers are inspected and maintained or replaced by (Name of responsible person or department) every (list frequency) or whenever necessary to prevent overfilling.

This facility identifies the need for changes in engineering controls and work practices through (Examples: Review of OSHA records, employee interviews, committee activities, etc.)

We evaluate new procedures and new products regularly by (Describe the process, literature reviewed, supplier info, products considered)

________________________________________________________________

Both front-line workers and management officials are involved in this process in the following manner: (Describe employees’ involvement)

(Name of responsible person or department) is responsible for ensuring that these recommendations are implemented.

**Personal Protective Equipment (PPE)**

PPE is provided to our employees at no cost to them. Training in the use of the appropriate PPE for specific tasks or procedures is provided by (Name of responsible person or department).

The types of PPE available to employees are as follows:
(gloves, eye protection, etc.)

________________________________________________________________

PPE is located (List location) and may be obtained through (Name of responsible person or department). (Specify how employees will obtain PPE and who is responsible for ensuring that PPE is available.)

All employees using PPE must observe the following precautions:
Wash hands immediately or as soon as feasible after removing gloves or other PPE.

Remove PPE after it becomes contaminated and before leaving the work area.

Used PPE may be disposed of in (List appropriate containers for storage, laundering, decontamination, or disposal.)

Wear appropriate gloves when it is reasonably anticipated that there may be hand contact with blood or OPIM, and when handling or touching contaminated items or surfaces; replace gloves if torn, punctured or contaminated, or if their ability to function as a barrier is compromised.

Utility gloves may be decontaminated for reuse if their integrity is not compromised; discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.

Never wash or decontaminate disposable gloves for reuse.

Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or OPIM pose a hazard to the eye, nose, or mouth.

Remove immediately or as soon as feasible any garment contaminated by blood or OPIM, in such a way as to avoid contact with the outer surface.

The procedure for handling used PPE is as follows:

(may refer to specific procedure by title or number and last date of review; include how and where to decontaminate face shields, eye protection, resuscitation equipment)

---

**Housekeeping**

Regulated waste is placed in containers which are closable, constructed to contain all contents and prevent leakage, appropriately labeled or color-coded (see the following section “Labels”), and closed prior to removal to prevent spillage or protrusion of contents during handling.
The procedure for handling sharps disposal containers is: *(may refer to specific procedure by title or number and last date of review)*

The procedure for handling other regulated waste is: *(may refer to specific procedure by title or number and last date of review)*

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on sides and bottoms, and appropriately labeled or color-coded. Sharps disposal containers are available at *(must be easily accessible and as close as feasible to the immediate area where sharps are used)*.

Bins and pails (e.g., wash or emesis basins) are cleaned and decontaminated as soon as feasible after visible contamination.

Broken glassware that may be contaminated is only picked up using mechanical means, such as a brush and dustpan.

**Laundry**

The following contaminated articles will be laundered by this company:

Laundering will be performed by *(Name of responsible person or department)* at *(time and/or location)*.

The following laundering requirements must be met:

- handle contaminated laundry as little as possible, with minimal agitation
- place wet contaminated laundry in leak-proof, labeled or color-coded containers before transport. Use *(specify either red bags or bags marked with the biohazard symbol)* for this purpose.
- wear the following PPE when handling and/or sorting contaminated laundry: *(List appropriate PPE).*
**Labels**

The following labeling methods are used in this facility:

<table>
<thead>
<tr>
<th>Equipment to be Labeled</th>
<th>Label Type (size, color)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(specimens, contaminated laundry, etc.)</td>
<td>(red bag, biohazard label)</td>
</tr>
</tbody>
</table>

(Name of responsible person or department) is responsible for ensuring that warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into the facility. Employees are to notify (Name of responsible person or department) if they discover regulated waste containers, refrigerators containing blood or OPIM, contaminated equipment, etc., without proper labels.

**HEPATITIS B VACCINATION**

(Name of responsible person or department) will provide training to employees on hepatitis B vaccinations, addressing safety, benefits, efficacy, methods of administration, and availability.

The hepatitis B vaccination series is available at no cost after initial employee training and within 10 days of initial assignment to all employees identified in the exposure determination section of 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 declines the 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 at (List location).

Vaccination will be provided by (List health care professional responsible for this part of the plan) at (location).

Following the medical evaluation, a copy of the health care professional’s written opinion will be obtained and provided to the employee within 15 days of the completion of the evaluation. It will be limited to whether the employee requires the hepatitis vaccine and whether the vaccine was administered.
POST-EXPOSURE EVALUATION AND FOLLOW-UP

Should an exposure incident occur, contact (Name of responsible person) at the following number ____________________.

An immediately available confidential medical evaluation and follow-up will be conducted by (name of licensed health care professional). Following initial first aid (clean the wound, flush eyes or other mucous membrane, etc.), the following activities will be performed:

- Document the routes of exposure and how the exposure occurred.
- Identify and document the source individual (unless the employer can establish that identification is infeasible or prohibited by state or local law).
- 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.
- If the source individual is already known to be HIV, HCV and/or HBV positive, new testing need not be performed.
- 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).
- After obtaining consent, collect exposed employee’s blood as soon as feasible after exposure incident, and test blood for HBV and HIV serological status
- 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.
ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW-UP

(Name of responsible person or department) 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.

(Name of responsible person or department) ensures that the health care professional evaluating an employee after an exposure incident receives the following:

- a description of the employee’s job duties relevant to the exposure incident
- route(s) of exposure
- circumstances of exposure
- if possible, results of the source individual’s blood test
- relevant employee medical records, including vaccination status

(Name of responsible person or department) provides the employee with a copy of the evaluating health care professional’s written opinion within 15 days after completion of the evaluation.

PROCEDURES FOR EVALUATING THE CIRCUMSTANCES SURROUNDING AN EXPOSURE INCIDENT

(Name of responsible person or department) will review the circumstances of all exposure incidents to determine:

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

(Name of Responsible Person) will record all percutaneous injuries from contaminated sharps in a Sharps Injury Log.
If revisions to this ECP are necessary (Responsible person or department) will ensure that appropriate changes are made. (Changes may include an evaluation of safer devices, adding employees to the exposure determination list, etc.)

EMPLOYEE TRAINING

All employees who have occupational exposure to bloodborne pathogens receive initial and annual training conducted by (Name of responsible person or department). (Attach a brief description of their qualifications.)

All employees who have occupational exposure to bloodborne pathogens receive training on the epidemiology, symptoms, and transmission of bloodborne pathogen diseases. In addition, the training program covers, at a minimum, the following elements:

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

Training materials for this facility are available at (name location).

**RECORDKEEPING**

**Training Records**

Training records are completed for each employee upon completion of training. These documents will be kept for at least three years at (Location of records).

The training records include:
- the dates of the training sessions
- the contents or a summary of the training sessions
- the names and qualifications of persons conducting the training
- the names and job titles of all persons attending the training sessions

Employee training records are provided upon request to the employee or the employee’s authorized representative within 15 working days. Such requests should be addressed to (Name of responsible person or department).

**Medical Records**

Medical records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020, “Access to Employee Exposure and Medical Records.”

(Name of Responsible person or department) is responsible for maintenance of the required medical records. These confidential records are kept in (List location) for at least the duration of employment plus 30 years.

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 (Name of responsible person or department and address).
OSHA Recordkeeping

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 (Name of responsible person or department).

Sharps Injury Log

In addition to the 1904 Recordkeeping Requirements, all percutaneous injuries from contaminated sharps are also recorded in a Sharps Injury Log. All incidences must include at least:

- date of the injury
- type and brand of the device involved (syringe, suture needle)
- department or work area where the incident occurred
- explanation of how the incident occurred.

This log is reviewed as part of the annual program evaluation and maintained for at least five years following the end of the calendar year covered. If a copy is requested by anyone, it must have any personal identifiers removed from the report.

HEPATITIS B VACCINE DECLINATION (MANDATORY)

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Signed: (Employee Name)________________ Date:________________

The hazard communication standard requires you to develop a written hazard communication program. The following is a sample hazard communication program that you may use as a guide in developing your program.
Part 2 Hazard Communication Standard

The following model Hazard Communication Program is based on the requirements of the OSHA Hazard Communications Standard, 29 CFR 1910.1200. The intent of this model is to provide an easy-to-use format to tailor to the specific requirements of your establishment.

Model Hazard Communication Program

1. Company Policy

To ensure that information about the dangers of all hazardous chemicals used by (Name of Company) is known by all affected employees, the following hazardous information program has been established. Under this program, you will be informed of the contents of the OSHA Hazard Communications standard, the hazardous properties of chemicals with which you work, safe handling procedures and measures to take to protect yourself from these chemicals.

This program applies to all work operations in our company where you may be exposed to hazardous chemicals under normal working conditions or during an emergency situation. All work units of this company will participate in the Hazard Communication Program. Copies of the Hazard Communication Program are available in the (location) for review by any interested employee.

(Name of responsible person and/or position) is the program coordinator, with overall responsibility for the program, including reviewing and updating this plan as necessary.

2. Container Labeling

(Name of responsible person and/or position) will verify that all containers received for use will be clearly labeled as to the contents, note the appropriate hazard warning, and list the manufacturer’s name and address.

The (name of responsible person and/or position) in each section will ensure that all secondary containers are labeled with either an extra copy of the original manufacturer’s label or with labels marked with the identity and the appropriate hazard warning. For help with labeling, see (name of responsible person and/or position).
On the following individual stationary process containers, we are using (description of labeling system used) rather than a label to convey the required information:

(List containers here).

We are using an in-house labeling system that relies on (describe any in-house system which uses numbers or graphics to convey hazard information).

The (name of responsible person and/or position) will review the company labeling procedures every (provide a time period) and will update labels as required.

3. Material Safety Data Sheets (MSDSs)

The (name of responsible person and/or position) is responsible for establishing and monitoring the company MSDS program. He/she will ensure that procedures are developed to obtain the necessary MSDSs and will review incoming MSDSs for new or significant health and safety information. He/she will see that any new information is communicated to affected employees. The procedure below will be followed when an MSDS is not received at the time of initial shipment:

(Describe procedure to be followed here)

Copies of MSDSs for all hazardous chemicals to which employees are exposed or are potentially exposed will be kept in (identify location).

MSDSs will be readily available to all employees during each work shift. If an MSDS is not available, contact (name of responsible person and/or position).

MSDSs will be readily available to employees in each work area using the following format:

(Describe company format here)

Note: If an alternative to paper copies of MSDSs is used, describe the format and how employees can access them.

When revised MSDSs are received, the following procedures will be followed to replace old MSDSs:

(Describe procedures)
4. Employee Training and Information

(Name of responsible person and/or position) is responsible for the Hazard Communication Program and will ensure that all program elements are carried out.

Everyone who works with or is potentially exposed to hazardous chemicals will receive initial training on the hazard communication standard and this plan before starting work. Each new employee will attend a health and safety orientation that includes the following information and training:

- An overview of the OSHA hazard communication standard
- The hazardous chemicals present at his/her work area
- The physical and health risks of the hazardous chemicals
- Symptoms of overexposure
- How to determine the presence or release of hazardous chemicals in the work area
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices and personal protective equipment
- Steps the company has taken to reduce or prevent exposure to hazardous chemicals
- Procedures to follow if employees are overexposed to hazardous chemicals
- How to read labels and MSDSs to obtain hazard information
- Location of the MSDS file and written Hazard Communication program

Prior to introducing a new chemical hazard into any section of this company, each employee in that section will be given information and training as outlined above for the new chemical hazard. The training format will be as follows:

(Describe training format, such as audiovisuals, interactive computer programs, classroom instruction, etc.)

5. Hazardous Non-routine Tasks

Periodically, employees are required to perform non-routine tasks that are hazardous. Examples of non-routine tasks are: confined space entry, tank cleaning, and painting reactor vessels.
Prior to starting work on such projects, each affected employee will be given information by (name of responsible person and/or position) about the hazardous chemicals he or she may encounter during such activity. This information will include specific chemical hazards, protective and safety measures the employee should use, and steps the company is taking to reduce the hazards, including ventilation, respirators, the presence of another employee (buddy systems), and emergency procedures.

Examples of non-routine tasks performed by employees of this company are:

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<thead>
<tr>
<th>Task</th>
<th>Hazardous Chemical</th>
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6. Informing Other Employers/Contractors

It is the responsibility of (Name of responsible person and/or position) to provide other employers and contractors with information about hazardous chemicals that their employees may be exposed to on a job site and suggested precautions for employees. It is the responsibility of (name of responsible person and/or position) to obtain information about hazardous chemicals used by other employers to which employees of this company may be exposed.

Other employers and contractors will be provided with MSDSs for hazardous chemicals generated by this company’s operations in the following manner:

(Describe company policy here)

In addition to providing a copy of an MSDS to other employers, other employers will be informed of necessary precautionary measures to protect employees exposed to operations performed by this company.

Also, other employers will be informed of the hazard labels used by the company. If symbolic or numerical labeling systems are
used, the other employees will be provided with information to understand the labels used for hazardous chemicals for which their employees may have exposure.

7. List of Hazardous Chemicals

A list of all known hazardous chemicals used by our employees is attached to this plan. This list includes the name of the chemical, the manufacturer, the work area in which the chemical is used, dates of use, and quantity used. Further information on each chemical may be obtained from the MSDSs, located in (identify location).

When new chemicals are received, this list is updated (including date the chemicals were introduced) within 30 days. To ensure any new chemical is added in a timely manner, the following procedures shall be followed:

(Identify procedures to be followed)

The hazardous chemical inventory is compiled and maintained by (Name of responsible person and/or position and telephone number).

8. Chemicals in Unlabeled Pipes

Work activities are sometimes performed by employees in areas where chemicals are transferred through unlabeled pipes. Prior to starting work in these areas, the employee shall contact (name of responsible person and/or position) for information regarding:

- The chemical in the pipes
- Potential hazards
- Required safety precautions.

Include here the chemical list developed during the inventory. Arrange this list so that you are able to cross-reference it with your MSDS file and the labels on your containers. Additional useful information, such as the manufacturer’s telephone number, an emergency number, scientific name, CAS number, the associated task, etc., can be included.

9. Program Availability

A copy of this program will be made available, upon request, to employees and their representatives.
OSHA assistance

OSHA can provide extensive help through a variety of programs, including technical assistance about effective safety and health programs, state plans, workplace consultations, voluntary protection programs, strategic partnerships, and training and education, and more. An overall commitment to workplace safety and health can add value to your business, to your workplace, and to your life.

Safety and health management system guidelines

Effective management of worker safety and health protection is a decisive factor in reducing the extent and severity of work-related injuries and illnesses and their related costs. In fact, an effective safety and health program forms the basis of good worker protection and can save time and money (about $4 for every dollar spent) and increase productivity and reduce worker injuries, illnesses, and related worker compensation costs.

To assist employers and employees in developing effective safety and health programs, OSHA published recommended Safety and Health Program Management Guidelines (Federal Register 54 (16): 3904-3916, January 26, 1989). These voluntary guidelines can be applied to all places of employment covered by OSHA.

The guidelines identify four general elements critical to the development of a successful safety and health management system:

- Management leadership and employee involvement.
- Workplace analysis.
- Hazard prevention and control.
- Safety and health training.

The guidelines recommend specific actions, under each of these general elements, to achieve an effective safety and health program. The Federal Register notice is available online at www.osha.gov.
State programs

There are 26 state plans and jurisdictions that operate their own occupational safety and health programs under plans approved by OSHA (23 cover both the private sector and state and local government employees, and three cover public employees only). These “state plan states” have standards which are identical to or at least as effective as federal OSHA standards, including the bloodborne pathogens and hazard communications standards. State plan states are required to extend their coverage to state and local government workers, including health care workers.

Additional information about state plans, and a list of those programs including contact information are available on OSHA’s website.

OSHA consultation services

Consultation assistance is available on request to employers who want help in establishing and maintaining a safe and healthful workplace. Largely funded by OSHA, the service is provided at no cost to the employer. Primarily developed for smaller employers with more hazardous operations, the consultation service is delivered by state governments employing professional safety and health consultants. Comprehensive assistance includes an appraisal of all-mechanical systems, work practices, and occupational safety and health hazards of the workplace and all aspects of the employer’s present job safety and health program. In addition, the service offers assistance to employers in developing and implementing an effective safety and health program. No penalties are proposed or citations issued for hazards identified by the consultant. OSHA provides consultation assistance to the employer with the assurance that his or her name and firm and any information about the workplace will not be routinely reported to OSHA enforcement staff.

Under the consultation program, certain exemplary employers may request participation in OSHA’s Safety and Health Achievement Recognition Program (SHARP). Eligibility for participation in SHARP includes receiving a comprehensive consultation visit, demonstrating exemplary achievements in workplace safety
and health by abating all identified hazards, and developing an excellent safety and health program.

Employers accepted into SHARP may receive an exemption from programmed inspections (not complaint or accident investigation inspections) for a period of one year. For more information concerning consultation assistance, see the list of consultation projects listed at the end of this publication.

The OSHA Voluntary Protection Program (VPP)

Voluntary Protection Programs and onsite consultation services, when coupled with an effective enforcement program, expand worker protection to help meet the goals of the OSH Act. The three VPP program levels include Star, Merit, and Demonstration and are designed to recognize outstanding achievements by companies that have successfully incorporated comprehensive safety and health programs into their total management system. The VPP motivate others to achieve excellent safety and health results in the same outstanding way as they establish a cooperative relationship between employers, employees, and OSHA.

For additional information on VPP and how to apply, contact the OSHA regional offices listed at the end of this publication.

Strategic Partnership Programs

OSHA’s Strategic Partnership Program, the newest member of OSHA’s cooperative programs, helps encourage, assist, and recognize the efforts of partners to eliminate serious workplace hazards and achieve a high level of worker safety and health. Whereas OSHA’s Consultation Program and VPP entail one-on-one relationships between OSHA and individual work sites, most strategic partnerships seek to have a broader impact by building cooperative relationships with groups of employers and employees. These partnerships are voluntary, cooperative relationships between OSHA, employers, employee representatives, and others (e.g., trade unions, trade and professional associations, universities, and other government agencies).

For more information on this and other cooperative programs, contact your nearest OSHA office, or visit www.osha.gov.
The OSHA Alliance Program

Alliances enable organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses in the workplace. OSHA and its allies work together to reach out to, educate, and lead the nation’s employers and their employees in improving and advancing workplace safety and health.

Alliances are open to all, including trade or professional organizations, businesses, labor organizations, educational institutions, and government agencies. In some cases, organizations may be building on existing relationships with OSHA through other cooperative programs.

There are few formal program requirements for alliances, which are less structured than other cooperative agreements, and the agreements do not include an enforcement component. However, OSHA and the participating organizations must define, implement, and meet a set of short- and long-term goals that fall into three categories: training and education; outreach and communication; and promotion of the national dialogue on workplace safety and health.

OSHA training and education

OSHA area offices offer a variety of information services, such as compliance assistance, technical advice, publications, audiovisual aids and speakers for special engagements. OSHA’s Training Institute in Des Plaines, IL, provides basic and advanced courses in safety and health for federal and state compliance officers, state consultants, federal agency personnel, and private sector employers, employees, and their representatives.

The OSHA Training Institute also has established OSHA Training Institute Education Centers to address the increased demand for its courses from the private sector and from other federal agencies. These centers are nonprofit colleges, universities, and other organizations that have been selected after a competition for participation in the program.
OSHA also provides funds to nonprofit organizations, through grants, to conduct workplace training and education in subjects where OSHA believes there is a lack of workplace training. Grants are awarded annually. Grant recipients are expected to contribute 20 percent of the total grant cost.

For more information on grants, training, and education, contact the OSHA Training Institute, Office of Training and Education, 1555 Times Drive, Des Plaines, IL 60018, (847) 297-4810. For further information on any OSHA program, contact your nearest OSHA area or regional office listed at the end of this publication.

Information available electronically

OSHA has a variety of materials and tools available on its website at www.osha.gov. These include e-Tools such as Expert Advisors, Electronic Compliance Assistance Tools (e-cats), Technical Links; regulations, directives, publications; videos, and other information for employers and employees. OSHA’s software programs and compliance assistance tools walk you through challenging safety and health issues and common problems to find the best solutions for your workplace.

OSHA publications

OSHA has an extensive publications program. For a listing of free or sales items, visit OSHA’s website at www.osha.gov or contact the OSHA Publications Office, U.S. Department of Labor, 200 Constitution Avenue NW, N-3101, Washington, DC 20210. Telephone (202) 693-1888 or fax to (202) 693-2498.

Contacting OSHA

To report an emergency, file a complaint, or seek OSHA advice, assistance, or products, call (800) 321-OSHA or contact your nearest OSHA regional or area office listed at the end of this publication. The teletypewriter (TTY) number is (877) 889-5627.

You can also file a complaint online and obtain more information on OSHA federal and state programs by visiting OSHA’s website at www.osha.gov.
For more information on grants, training, and education, contact the OSHA Training Institute, Office of Training and Education, 1555 Times Drive, Des Plaines, IL 60018, (847) 297-4810, or see Outreach on OSHA’s website at www.osha.gov.
These states and territories operate their own OSHA-approved job safety and health programs (Connecticut, New Jersey, and New York plans cover public employees only). States with approved programs must have a standard that is identical to, or at least as effective as, the federal standard.

Note: To get contact information for OSHA Area Offices, OSHA-approved state plans, and OSHA Consultation Projects, please visit us online at www.osha.gov or call us at (800) 321-OSHA.
1910.1030(a)

Scope and Application. This section applies to all occupational exposure to blood or other potentially infectious materials as defined by paragraph (b) of this section.

1910.1030(b)

Definitions. For purposes of this section, the following shall apply:

Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, or designated representative.

Blood means human blood, human blood components, and products made from human blood.

Bloodborne Pathogens means pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Clinical Laboratory means a workplace where diagnostic or other screening procedures are performed on blood or other potentially infectious materials.

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

Contaminated Laundry means laundry which has been soiled with blood or other potentially infectious materials or may contain sharps.

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

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

Director means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designated representative.

Engineering Controls means controls (e.g., sharps disposal containers, self-
sheathing needles, safer medical devices, such as sharps with engineered sharps injury protections and needleless systems) that isolate or remove the bloodborne pathogens hazard from the workplace.

**Exposure Incident** means a specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an employee's duties.

**Handwashing Facilities** means a facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.

**Licensed Healthcare Professional** is a person whose legally permitted scope of practice allows him or her to independently perform the activities required by paragraph (f) Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up.

**HBV** means hepatitis B virus.

**HIV** means human immunodeficiency virus.

**Needleless systems** means a device that does not use needles for:

1. The collection of bodily fluids or withdrawal of body fluids after initial venous or arterial access is established;
2. The administration of medication or fluids; or
3. Any other procedure involving the potential for occupational exposure to bloodborne pathogens due to percutaneous injuries from contaminated sharps.

**Occupational Exposure** means reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee's duties.

**Other Potentially Infectious Materials** means (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, amniotic fluid, saliva in dental procedures, any body fluid that is visibly contaminated with blood, and all body fluids in situations where it is difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

**Parenteral** means piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts, and abrasions.

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

**Production Facility** means a facility engaged in industrial-scale, large-volume or high concentration production of HIV or HBV.

**Regulated Waste** means liquid or semi-liquid blood or other potentially infectious materials; 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.

**Research Laboratory** means a laboratory producing or using research-laboratory-scale amounts of HIV or HBV. Research laboratories may produce high concentrations of HIV or HBV but not in the volume found in production facilities.

**Sharps with engineered sharps injury protections** means a nonneedle
sharp or a needle device used for withdrawing body fluids, accessing a vein or artery, or administering medications or other fluids, with a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident.

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

**Sterilize** means the use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.

**Universal Precautions** is an approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other bloodborne pathogens.

**Work Practice Controls** means controls that reduce the likelihood of exposure by altering the manner in which a task is performed (e.g., prohibiting recapping of needles by a two-handed technique).

1910.1030(c)

**Exposure Control --**

1910.1030(c)(1)

**Exposure Control Plan.**

1910.1030(c)(1)(i)

Each employer having an employee(s) with occupational exposure as defined by paragraph (b) of this section shall establish a written Exposure Control Plan designed to eliminate or minimize employee exposure.

1910.1030(c)(1)(ii)

The Exposure Control Plan shall contain at least the following elements:

1910.1030(c)(1)(ii)(A)

The exposure determination required by paragraph (c)(2),

1910.1030(c)(1)(ii)(B)

The schedule and method of implementation for paragraphs (d) Methods of Compliance, (e) HIV and HBV Research Laboratories and Production Facilities, (f) Hepatitis B Vaccination and Post-Exposure Evaluation and Follow-up, (g) Communication of Hazards to Employees, and (h) Recordkeeping, of this standard, and

1910.1030(c)(1)(ii)(C)

The procedure for the evaluation of circumstances surrounding exposure incidents as required by paragraph (f)(3)(i) of this standard.

1910.1030(c)(1)(iii)

Each employer shall ensure that a copy of the Exposure Control Plan is accessible to employees in accordance with 29 CFR 1910.1020(e).
The Exposure Control Plan shall be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. The review and update of such plans shall also:

- Reflect changes in technology that eliminate or reduce exposure to bloodborne pathogens; and
- Document annually consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure.

An employer, who is required to establish an Exposure Control Plan shall solicit input from non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls and shall document the solicitation in the Exposure Control Plan.

The Exposure Control Plan shall be made available to the Assistant Secretary and the Director upon request for examination and copying.

**Exposure Determination.**

- A list of all job classifications in which all employees in those job classifications have occupational exposure;
- A list of job classifications in which some employees have occupational exposure, and
- A list of all tasks and procedures or groups of closely related task and procedures in which occupational exposure occurs and that are performed by employees in job classifications listed in accordance with the provisions of paragraph (c)(2)(i)(B) of this standard.

This exposure determination shall be made without regard to the use of personal protective equipment.
1910.1030(d)

Methods of Compliance --

1910.1030(d)(1)

General. Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.

1910.1030(d)(2)

Engineering and Work Practice Controls.

1910.1030(d)(2)(i)

Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.

1910.1030(d)(2)(ii)

Engineering controls shall be examined and maintained or replaced on a regular schedule to ensure their effectiveness.

1910.1030(d)(2)(iii)

Employers shall provide handwashing facilities which are readily accessible to employees.

1910.1030(d)(2)(iv)

When provision of handwashing facilities is not feasible, the employer shall provide either an appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands shall be washed with soap and running water as soon as feasible.

1910.1030(d)(2)(v)

Employers shall ensure that employees wash their hands immediately or as soon as feasible after removal of gloves or other personal protective equipment.

1910.1030(d)(2)(vi)

Employers shall ensure that employees wash hands and any other skin with soap and water, or flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.

1910.1030(d)(2)(vii)

Contaminated needles and other contaminated sharps shall not be bent, recapped, or removed except as noted in paragraphs (d)(2)(vii)(A) and (d)(2)(vii)(B) below. Shearing or breaking of contaminated needles is prohibited.

1910.1030(d)(2)(vii)(A)

Contaminated needles and other contaminated sharps shall not be bent, recapped or removed unless the employer can demonstrate that no alternative is feasible or that such action is required by a specific medical or dental procedure.
1910.1030(d)(2)(vii)(B)

Such bending, recapping or needle removal must be accomplished through the use of a mechanical device or a one-handed technique.

1910.1030(d)(2)(viii)

Immediately or as soon as possible after use, contaminated reusable sharps shall be placed in appropriate containers until properly reprocessed. These containers shall be:

1910.1030(d)(2)(viii)(A)

Puncture resistant;

1910.1030(d)(2)(viii)(B)

Labeled or color-coded in accordance with this standard;

1910.1030(d)(2)(viii)(C)

Leakproof on the sides and bottom; and

1910.1030(d)(2)(viii)(D)

In accordance with the requirements set forth in paragraph (d)(4)(ii)(E) for reusable sharps.

1910.1030(d)(2)(ix)

Eating, drinking, smoking, applying cosmetics or lip balm, and handling contact lenses are prohibited in work areas where there is a reasonable likelihood of occupational exposure.

1910.1030(d)(2)(x)

Food and drink shall not be kept in refrigerators, freezers, shelves, cabinets or on countertops or benchtops where blood or other potentially infectious materials are present.

1910.1030(d)(2)(xi)

All procedures involving blood or other potentially infectious materials shall be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets of these substances.

1910.1030(d)(2)(xii)

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

1910.1030(d)(2)(xiii)

Specimens of blood or other potentially infectious materials shall be placed in a container which prevents leakage during collection, handling, processing, storage, transport, or shipping.

1910.1030(d)(2)(xiii)(A)

The container for storage, transport, or shipping shall be labeled or color-coded according to paragraph (g)(1)(i) and closed prior to being stored, transported, or shipped. When a facility utilizes Universal Precautions in the handling of all
specimens, the labeling/color-coding of specimens is not necessary provided containers are recognizable as containing specimens. This exemption only applies while such specimens/containers remain within the facility. Labeling or color-coding in accordance with paragraph (g)(1)(i) is required when such specimens/containers leave the facility.

1910.1030(d)(2)(xiii)(B)

If outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage during handling, processing, storage, transport, or shipping and is labeled or color-coded according to the requirements of this standard.

1910.1030(d)(2)(xiii)(C)

If the specimen could puncture the primary container, the primary container shall be placed within a secondary container which is puncture-resistant in addition to the above characteristics.

1910.1030(d)(2)(xiv)

Equipment which may become contaminated with blood or other potentially infectious materials shall be examined prior to servicing or shipping and shall be decontaminated as necessary, unless the employer can demonstrate that decontamination of such equipment or portions of such equipment is not feasible.

1910.1030(d)(2)(xiv)(A)

A readily observable label in accordance with paragraph (g)(1)(i)(H) shall be attached to the equipment stating which portions remain contaminated.

1910.1030(d)(2)(xiv)(B)

The employer shall ensure that this information is conveyed to all affected employees, the servicing representative, and/or the manufacturer, as appropriate, prior to handling, servicing, or shipping so that appropriate precautions will be taken.

1910.1030(d)(3)

**Personal Protective Equipment --**

1910.1030(d)(3)(i)

**Provision.** When there is occupational exposure, the employer shall provide, at no cost to the employee, appropriate personal protective equipment such as, but not limited to, gloves, gowns, laboratory coats, face shields or masks and eye protection, and mouthpieces, resuscitation bags, pocket masks, or other ventilation devices. Personal protective equipment will be considered "appropriate" only if it does not permit blood or other potentially infectious materials to pass through to or reach the employee's work clothes, street clothes, undergarments, skin, eyes, mouth, or other mucous membranes under normal conditions of use and for the duration of time which the protective equipment will be used.

1910.1030(d)(3)(ii)

**Use.** The employer shall ensure that the employee uses appropriate personal protective equipment unless the employer shows that the employee temporarily and briefly declined to use personal protective equipment when, under rare and extraordinary circumstances, it was the employee's professional judgment that in the specific instance its use would have prevented the delivery of health care or public safety services or would have posed an increased hazard to the safety
of the worker or co-worker. When the employee makes this judgement, the circumstances shall be investigated and documented in order to determine whether changes can be instituted to prevent such occurrences in the future.

1910.1030(d)(3)(iii)

**Accessibility.** The employer shall ensure that appropriate personal protective equipment in the appropriate sizes is readily accessible at the worksite or is issued to employees. Hypoallergenic gloves, glove liners, powderless gloves, or other similar alternatives shall be readily accessible to those employees who are allergic to the gloves normally provided.

1910.1030(d)(3)(iv)

**Cleaning, Laundering, and Disposal.** The employer shall clean, launder, and dispose of personal protective equipment required by paragraphs (d) and (e) of this standard, at no cost to the employee.

1910.1030(d)(3)(v)

**Repair and Replacement.** The employer shall repair or replace personal protective equipment as needed to maintain its effectiveness, at no cost to the employee.

1910.1030(d)(3)(vi)

If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) shall be removed immediately or as soon as feasible.

1910.1030(d)(3)(vii)

All personal protective equipment shall be removed prior to leaving the work area.

1910.1030(d)(3)(viii)

When personal protective equipment is removed it shall be placed in an appropriately designated area or container for storage, washing, decontamination or disposal.

1910.1030(d)(3)(ix)

**Gloves.** Gloves shall be worn when it can be reasonably anticipated that the employee may have hand contact with blood, other potentially infectious materials, mucous membranes, and non-intact skin; when performing vascular access procedures except as specified in paragraph (d)(3)(ix)(D); and when handling or touching contaminated items or surfaces.

1910.1030(d)(3)(ix)(A)

Disposable (single use) gloves such as surgical or examination gloves, shall be replaced as soon as practical when contaminated or as soon as feasible if they are torn, punctured, or when their ability to function as a barrier is compromised.

1910.1030(d)(3)(ix)(B)

Disposable (single use) gloves shall not be washed or decontaminated for re-use.

1910.1030(d)(3)(ix)(C)

Utility gloves may be decontaminated for re-use if the integrity of the glove is
not compromised. However, they must be discarded if they are cracked, peeling, torn, punctured, or exhibit other signs of deterioration or when their ability to function as a barrier is compromised.

1910.1030(d)(3)(ix)(D)

If an employer in a volunteer blood donation center judges that routine gloving for all phlebotomies is not necessary then the employer shall:

1910.1030(d)(3)(ix)(D)(1)

Periodically reevaluate this policy;

1910.1030(d)(3)(ix)(D)(2)

Make gloves available to all employees who wish to use them for phlebotomy;

1910.1030(d)(3)(ix)(D)(3)

Not discourage the use of gloves for phlebotomy; and

1910.1030(d)(3)(ix)(D)(4)

Require that gloves be used for phlebotomy in the following circumstances:


When the employee has cuts, scratches, or other breaks in his or her skin;


When the employee judges that hand contamination with blood may occur, for example, when performing phlebotomy on an uncooperative source individual; and


When the employee is receiving training in phlebotomy.

1910.1030(d)(3)(x)

Masks, Eye Protection, and Face Shields. Masks in combination with eye protection devices, such as goggles or glasses with solid side shields, or chin-length face shields, shall be worn whenever splashes, spray, spatter, or droplets of blood or other potentially infectious materials may be generated and eye, nose, or mouth contamination can be reasonably anticipated.

1910.1030(d)(3)(xi)

Gowns, Aprons, and Other Protective Body Clothing. Appropriate protective clothing such as, but not limited to, gowns, aprons, lab coats, clinic jackets, or similar outer garments shall be worn in occupational exposure situations. The type and characteristics will depend upon the task and degree of exposure anticipated.

1910.1030(d)(3)(xii)

Surgical caps or hoods and/or shoe covers or boots shall be worn in instances when gross contamination can reasonably be anticipated (e.g., autopsies, orthopaedic surgery).
**Housekeeping** --

**1910.1030(d)(4)(i)**

**General.** Employers shall ensure that the worksite is maintained in a clean and sanitary condition. The employer shall determine and implement an appropriate written schedule for cleaning and method of decontamination based upon the location within the facility, type of surface to be cleaned, type of soil present, and tasks or procedures being performed in the area.

**1910.1030(d)(4)(ii)**

All equipment and environmental and working surfaces shall be cleaned and decontaminated after contact with blood or other potentially infectious materials.

**1910.1030(d)(4)(ii)(A)**

Contaminated work surfaces shall be decontaminated with an appropriate disinfectant after completion of procedures; immediately or as soon as feasible when surfaces are overtly contaminated or after any spill of blood or other potentially infectious materials; and at the end of the work shift if the surface may have become contaminated since the last cleaning.

**1910.1030(d)(4)(ii)(B)**

Protective coverings, such as plastic wrap, aluminum foil, or imperviously-backed absorbent paper used to cover equipment and environmental surfaces, shall be removed and replaced as soon as feasible when they become overtly contaminated or at the end of the workshift if they may have become contaminated during the shift.

**1910.1030(d)(4)(ii)(C)**

All bins, pails, cans, and similar receptacles intended for reuse which have a reasonable likelihood for becoming contaminated with blood or other potentially infectious materials shall be inspected and decontaminated on a regularly scheduled basis and cleaned and decontaminated immediately or as soon as feasible upon visible contamination.

**1910.1030(d)(4)(ii)(D)**

Broken glassware which may be contaminated shall not be picked up directly with the hands. It shall be cleaned up using mechanical means, such as a brush and dust pan, tongs, or forceps.

**1910.1030(d)(4)(ii)(E)**

Reusable sharps that are contaminated with blood or other potentially infectious materials shall not be stored or processed in a manner that requires employees to reach by hand into the containers where these sharps have been placed.

**1910.1030(d)(4)(iii)**

**Regulated Waste --**

**1910.1030(d)(4)(iii)(A)**

**Contaminated Sharps Discarding and Containment.**

**1910.1030(d)(4)(iii)(A)(1)**

Contaminated sharps shall be discarded immediately or as soon as feasible in
containers that are:

Closable;

Puncture resistant;

1910.1030(d)(4)(iii)(A)(1)(iii)
Leakproof on sides and bottom; and

Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard.

1910.1030(d)(4)(iii)(A)(2)

During use, containers for contaminated sharps shall be:

Easily accessible to personnel and located as close as is feasible to the immediate area where sharps are used or can be reasonably anticipated to be found (e.g., laundries);

Maintained upright throughout use; and

Replaced routinely and not be allowed to overfill.

1910.1030(d)(4)(iii)(A)(3)

When moving containers of contaminated sharps from the area of use, the containers shall be:

Closed immediately prior to removal or replacement to prevent spillage or protrusion of contents during handling, storage, transport, or shipping;

Placed in a secondary container if leakage is possible. The second container shall be:

Closable;

Constructed to contain all contents and prevent leakage during handling, storage, transport, or shipping; and
Labeled or color-coded according to paragraph (g)(1)(i) of this standard.

1910.1030(d)(4)(iii)(A)(4)

Reusable containers shall not be opened, emptied, or cleaned manually or in any other manner which would expose employees to the risk of percutaneous injury.

1910.1030(d)(4)(iii)(B)

Other Regulated Waste Containment --

1910.1030(d)(4)(iii)(B)(1)

Regulated waste shall be placed in containers which are:


Closable;


Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

1910.1030(d)(4)(iii)(B)(1)(iii)

Labeled or color-coded in accordance with paragraph (g)(1)(i) this standard; and


Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

1910.1030(d)(4)(iii)(B)(2)

If outside contamination of the regulated waste container occurs, it shall be placed in a second container. The second container shall be:


Closable;


Constructed to contain all contents and prevent leakage of fluids during handling, storage, transport or shipping;

1910.1030(d)(4)(iii)(B)(2)(iii)

Labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard; and


Closed prior to removal to prevent spillage or protrusion of contents during handling, storage, transport, or shipping.

1910.1030(d)(4)(iii)(C)

Disposal of all regulated waste shall be in accordance with applicable
regulations of the United States, States and Territories, and political subdivisions of States and Territories.

1910.1030(d)(4)(iv)

**Laundry.**

1910.1030(d)(4)(iv)(A)

Contaminated laundry shall be handled as little as possible with a minimum of agitation.

1910.1030(d)(4)(iv)(A)(1)

Contaminated laundry shall be bagged or containerized at the location where it was used and shall not be sorted or rinsed in the location of use.

1910.1030(d)(4)(iv)(A)(2)

Contaminated laundry shall be placed and transported in bags or containers labeled or color-coded in accordance with paragraph (g)(1)(i) of this standard. When a facility utilizes Universal Precautions in the handling of all soiled laundry, alternative labeling or color-coding is sufficient if it permits all employees to recognize the containers as requiring compliance with Universal Precautions.


Whenever contaminated laundry is wet and presents a reasonable likelihood of soak-through of or leakage from the bag or container, the laundry shall be placed and transported in bags or containers which prevent soak-through and/or leakage of fluids to the exterior.

1910.1030(d)(4)(iv)(B)

The employer shall ensure that employees who have contact with contaminated laundry wear protective gloves and other appropriate personal protective equipment.

1910.1030(d)(4)(iv)(C)

When a facility ships contaminated laundry off-site to a second facility which does not utilize Universal Precautions in the handling of all laundry, the facility generating the contaminated laundry must place such laundry in bags or containers which are labeled or color-coded in accordance with paragraph (g)(1)(i).

1910.1030(e)

**HIV and HBV Research Laboratories and Production Facilities.**

1910.1030(e)(1)

This paragraph applies to research laboratories and production facilities engaged in the culture, production, concentration, experimentation, and manipulation of HIV and HBV. It does not apply to clinical or diagnostic laboratories engaged solely in the analysis of blood, tissues, or organs. These requirements apply in addition to the other requirements of the standard.

1910.1030(e)(2)

Research laboratories and production facilities shall meet the following criteria:
1910.1030(e)(2)(i)

**Standard Microbiological Practices.** All regulated waste shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.

1910.1030(e)(2)(ii)

**Special Practices.**

1910.1030(e)(2)(ii)(A)

Laboratory doors shall be kept closed when work involving HIV or HBV is in progress.

1910.1030(e)(2)(ii)(B)

Contaminated materials that are to be decontaminated at a site away from the work area shall be placed in a durable, leakproof, labeled or color-coded container that is closed before being removed from the work area.

1910.1030(e)(2)(ii)(C)

Access to the work area shall be limited to authorized persons. Written policies and procedures shall be established whereby only persons who have been advised of the potential biohazard, who meet any specific entry requirements, and who comply with all entry and exit procedures shall be allowed to enter the work areas and animal rooms.

1910.1030(e)(2)(ii)(D)

When other potentially infectious materials or infected animals are present in the work area or containment module, a hazard warning sign incorporating the universal biohazard symbol shall be posted on all access doors. The hazard warning sign shall comply with paragraph (g)(1)(ii) of this standard.

1910.1030(e)(2)(ii)(E)

All activities involving other potentially infectious materials shall be conducted in biological safety cabinets or other physical-containment devices within the containment module. No work with these other potentially infectious materials shall be conducted on the open bench.

1910.1030(e)(2)(ii)(F)

Laboratory coats, gowns, smocks, uniforms, or other appropriate protective clothing shall be used in the work area and animal rooms. Protective clothing shall not be worn outside of the work area and shall be decontaminated before being laundered.

1910.1030(e)(2)(ii)(G)

Special care shall be taken to avoid skin contact with other potentially infectious materials. Gloves shall be worn when handling infected animals and when making hand contact with other potentially infectious materials is unavoidable.

1910.1030(e)(2)(ii)(H)

Before disposal all waste from work areas and from animal rooms shall either be incinerated or decontaminated by a method such as autoclaving known to effectively destroy bloodborne pathogens.
Vacuum lines shall be protected with liquid disinfectant traps and high-efficiency particulate air (HEPA) filters or filters of equivalent or superior efficiency and which are checked routinely and maintained or replaced as necessary.

1910.1030(e)(2)(ii)(j)

Hypodermic needles and syringes shall be used only for parenteral injection and aspiration of fluids from laboratory animals and diaphragm bottles. Only needle-locking syringes or disposable syringe-needle units (i.e., the needle is integral to the syringe) shall be used for the injection or aspiration of other potentially infectious materials. Extreme caution shall be used when handling needles and syringes. A needle shall not be bent, sheared, replaced in the sheath or guard, or removed from the syringe following use. The needle and syringe shall be promptly placed in a puncture-resistant container and autoclaved or decontaminated before reuse or disposal.

1910.1030(e)(2)(ii)(k)

All spills shall be immediately contained and cleaned up by appropriate professional staff or others properly trained and equipped to work with potentially concentrated infectious materials.

1910.1030(e)(2)(ii)(l)

A spill or accident that results in an exposure incident shall be immediately reported to the laboratory director or other responsible person.

1910.1030(e)(2)(ii)(m)

A biosafety manual shall be prepared or adopted and periodically reviewed and updated at least annually or more often if necessary. Personnel shall be advised of potential hazards, shall be required to read instructions on practices and procedures, and shall be required to follow them.

1910.1030(e)(2)(iii)

Containment Equipment.

1910.1030(e)(2)(iii)(a)

Certified biological safety cabinets (Class I, II, or III) or other appropriate combinations of personal protection or physical containment devices, such as special protective clothing, respirators, centrifuge safety cups, sealed centrifuge rotors, and containment caging for animals, shall be used for all activities with other potentially infectious materials that pose a threat of exposure to droplets, splashes, spills, or aerosols.

1910.1030(e)(2)(iii)(b)

Biological safety cabinets shall be certified when installed, whenever they are moved and at least annually.

1910.1030(e)(3)

HIV and HBV research laboratories shall meet the following criteria:

1910.1030(e)(3)(i)

Each laboratory shall contain a facility for hand washing and an eye wash facility which is readily available within the work area.

1910.1030(e)(3)(ii)
An autoclave for decontamination of regulated waste shall be available.

1910.1030(e)(4)

HIV and HBV production facilities shall meet the following criteria:

1910.1030(e)(4)(i)

The work areas shall be separated from areas that are open to unrestricted traffic flow within the building. Passage through two sets of doors shall be the basic requirement for entry into the work area from access corridors or other contiguous areas. Physical separation of the high-containment work area from access corridors or other areas or activities may also be provided by a double-doored clothes-change room (showers may be included), airlock, or other access facility that requires passing through two sets of doors before entering the work area.

1910.1030(e)(4)(ii)

The surfaces of doors, walls, floors and ceilings in the work area shall be water resistant so that they can be easily cleaned. Penetrations in these surfaces shall be sealed or capable of being sealed to facilitate decontamination.

1910.1030(e)(4)(iii)

Each work area shall contain a sink for washing hands and a readily available eye wash facility. The sink shall be foot, elbow, or automatically operated and shall be located near the exit door of the work area.

1910.1030(e)(4)(iv)

Access doors to the work area or containment module shall be self-closing.

1910.1030(e)(4)(v)

An autoclave for decontamination of regulated waste shall be available within or as near as possible to the work area.

1910.1030(e)(4)(vi)

A ducted exhaust-air ventilation system shall be provided. This system shall create directional airflow that draws air into the work area through the entry area. The exhaust air shall not be recirculated to any other area of the building, shall be discharged to the outside, and shall be dispersed away from occupied areas and air intakes. The proper direction of the airflow shall be verified (i.e., into the work area).

1910.1030(e)(5)

**Training Requirements.** Additional training requirements for employees in HIV and HBV research laboratories and HIV and HBV production facilities are specified in paragraph (g)(2)(ix).

1910.1030(f)

**Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up --**

1910.1030(f)(1)

**General.**

1910.1030(f)(1)(i)
The employer shall make available the hepatitis B vaccine and vaccination series to all employees who have occupational exposure, and post-exposure evaluation and follow-up to all employees who have had an exposure incident.

**1910.1030(f)(1)(ii)**

The employer shall ensure that all medical evaluations and procedures including the hepatitis B vaccine and vaccination series and post-exposure evaluation and follow-up, including prophylaxis, are:

**1910.1030(f)(1)(ii)(A)**

Made available at no cost to the employee;

**1910.1030(f)(1)(ii)(B)**

Made available to the employee at a reasonable time and place;

**1910.1030(f)(1)(ii)(C)**

Performed by or under the supervision of a licensed physician or by or under the supervision of another licensed healthcare professional; and

**1910.1030(f)(1)(ii)(D)**

Provided according to recommendations of the U.S. Public Health Service current at the time these evaluations and procedures take place, except as specified by this paragraph (f).

**1910.1030(f)(1)(iii)**

The employer shall ensure that all laboratory tests are conducted by an accredited laboratory at no cost to the employee.

**1910.1030(f)(2)**

**Hepatitis B Vaccination.**

**1910.1030(f)(2)(i)**

Hepatitis B vaccination shall be made available after the employee has received the training required in paragraph (g)(2)(vii)(I) and within 10 working days of initial assignment to all employees who have occupational exposure unless the employee has previously received the complete hepatitis B vaccination series, antibody testing has revealed that the employee is immune, or the vaccine is contraindicated for medical reasons.

**1910.1030(f)(2)(ii)**

The employer shall not make participation in a prescreening program a prerequisite for receiving hepatitis B vaccination.

**1910.1030(f)(2)(iii)**

If the employee initially declines hepatitis B vaccination but at a later date while still covered under the standard decides to accept the vaccination, the employer shall make available hepatitis B vaccination at that time.

**1910.1030(f)(2)(iv)**

The employer shall assure that employees who decline to accept hepatitis B vaccination offered by the employer sign the statement in Appendix A.
If a routine booster dose(s) of hepatitis B vaccine is recommended by the U.S. Public Health Service at a future date, such booster dose(s) shall be made available in accordance with section (f)(1)(ii).

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

1. Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred;

2. Identification and documentation of the source individual, unless the employer can establish that identification is infeasible or prohibited by state or local law;

   A. The source individual's blood shall be tested as soon as feasible and after consent is obtained in order to determine HBV and HIV infectivity. If consent is not obtained, the employer shall establish that legally required consent cannot be obtained. When the source individual's consent is not required by law, the source individual's blood, if available, shall be tested and the results documented.

   B. When the source individual is already known to be infected with HBV or HIV, testing for the source individual's known HBV or HIV status need not be repeated.

   C. Results of the source individual's testing shall be made available to the exposed employee, and the employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.

3. Collection and testing of blood for HBV and HIV serological status;

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

   B. If the employee consents to baseline blood collection, but does not give consent at that time for HIV serologic testing, the sample shall be preserved for at least 90 days. If, within 90 days of the exposure incident, the employee elects to have the baseline sample tested, such testing shall be done as soon as feasible.
Post-exposure prophylaxis, when medically indicated, as recommended by the U.S. Public Health Service;

1910.1030(f)(3)(v)

Counseling; and

1910.1030(f)(3)(vi)

Evaluation of reported illnesses.

1910.1030(f)(4)

Information Provided to the Healthcare Professional.

1910.1030(f)(4)(i)

The employer shall ensure that the healthcare professional responsible for the employee's Hepatitis B vaccination is provided a copy of this regulation.

1910.1030(f)(4)(ii)

The employer shall ensure that the healthcare professional evaluating an employee after an exposure incident is provided the following information:

1910.1030(f)(4)(ii)(A)

A copy of this regulation;

1910.1030(f)(4)(ii)(B)

A description of the exposed employee's duties as they relate to the exposure incident;

1910.1030(f)(4)(ii)(C)

Documentation of the route(s) of exposure and circumstances under which exposure occurred;

1910.1030(f)(4)(ii)(D)

Results of the source individual's blood testing, if available; and

1910.1030(f)(4)(ii)(E)

All medical records relevant to the appropriate treatment of the employee including vaccination status which are the employer's responsibility to maintain.

1910.1030(f)(5)

Healthcare Professional's Written Opinion. The employer shall obtain and provide the employee with a copy of the evaluating healthcare professional's written opinion within 15 days of the completion of the evaluation.

1910.1030(f)(5)(i)

The healthcare professional's written opinion for Hepatitis B vaccination shall be limited to whether Hepatitis B vaccination is indicated for an employee, and if the employee has received such vaccination.
The healthcare professional’s written opinion for post-exposure evaluation and follow-up shall be limited to the following information:

1910.1030(f)(5)(ii)(A)

That the employee has been informed of the results of the evaluation; and

1910.1030(f)(5)(ii)(B)

That the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials which require further evaluation or treatment.

1910.1030(f)(5)(iii)

All other findings or diagnoses shall remain confidential and shall not be included in the written report.

1910.1030(f)(6)

Medical Recordkeeping. Medical records required by this standard shall be maintained in accordance with paragraph (h)(1) of this section.

1910.1030(g)

Communication of Hazards to Employees --

1910.1030(g)(1)

Labels and Signs --

1910.1030(g)(1)(i)

Labels.

1910.1030(g)(1)(i)(A)

Warning labels shall be affixed to containers of regulated waste, refrigerators and freezers containing blood or other potentially infectious material; and other containers used to store, transport or ship blood or other potentially infectious materials, except as provided in paragraph (g)(1)(i)(E), (F) and (G).

1910.1030(g)(1)(i)(B)

Labels required by this section shall include the following legend:

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BIOHAZARD
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1910.1030(g)(1)(i)(C)

These labels shall be fluorescent orange or orange-red or predominantly so, with lettering and symbols in a contrasting color.
Labels shall be affixed as close as feasible to the container by string, wire, adhesive, or other method that prevents their loss or unintentional removal.

Red bags or red containers may be substituted for labels.

Containers of blood, blood components, or blood products that are labeled as to their contents and have been released for transfusion or other clinical use are exempted from the labeling requirements of paragraph (g).

Individual containers of blood or other potentially infectious materials that are placed in a labeled container during storage, transport, shipment or disposal are exempted from the labeling requirement.

Labels required for contaminated equipment shall be in accordance with this paragraph and shall also state which portions of the equipment remain contaminated.

Regulated waste that has been decontaminated need not be labeled or color-coded.

Signs.

The employer shall post signs at the entrance to work areas specified in paragraph (e), HIV and HBV Research Laboratory and Production Facilities, which shall bear the following legend:

(Name of the Infectious Agent)
(Special requirements for entering the area)
(Name, telephone number of the laboratory director or other responsible person.)

These signs shall be fluorescent orange-red or predominantly so, with lettering and symbols in a contrasting color.
Information and Training.

The employer shall train each employee with occupational exposure in accordance with the requirements of this section. Such training must be provided at no cost to the employee and during working hours. The employer shall institute a training program and ensure employee participation in the program.

Training shall be provided as follows:

1910.1030(g)(2)(ii)(A)

At the time of initial assignment to tasks where occupational exposure may take place;

1910.1030(g)(2)(ii)(B)

At least annually thereafter.

1910.1030(g)(2)(iii)

[Reserved]

1910.1030(g)(2)(iv)

Annual training for all employees shall be provided within one year of their previous training.

1910.1030(g)(2)(v)

Employers shall provide additional training when changes such as modification of tasks or procedures or institution of new tasks or procedures affect the employee's occupational exposure. The additional training may be limited to addressing the new exposures created.

1910.1030(g)(2)(vi)

Material appropriate in content and vocabulary to educational level, literacy, and language of employees shall be used.

1910.1030(g)(2)(vii)

The training program shall contain at a minimum the following elements:

1910.1030(g)(2)(vii)(A)

An accessible copy of the regulatory text of this standard and an explanation of its contents;

1910.1030(g)(2)(vii)(B)

A general explanation of the epidemiology and symptoms of bloodborne diseases;
An explanation of the modes of transmission of bloodborne pathogens;

1910.1030(g)(2)(vii)(D)

An explanation of the employer's exposure control plan and the means by which the employee can obtain a copy of the written plan;

1910.1030(g)(2)(vii)(E)

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

1910.1030(g)(2)(vii)(F)

An explanation of the use and limitations of methods that will prevent or reduce exposure including appropriate engineering controls, work practices, and personal protective equipment;

1910.1030(g)(2)(vii)(G)

Information on the types, proper use, location, removal, handling, decontamination and disposal of personal protective equipment;

1910.1030(g)(2)(vii)(H)

An explanation of the basis for selection of personal protective equipment;

1910.1030(g)(2)(vii)(I)

Information on the hepatitis B vaccine, including information on its efficacy, safety, method of administration, the benefits of being vaccinated, and that the vaccine and vaccination will be offered free of charge;

1910.1030(g)(2)(vii)(J)

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

1910.1030(g)(2)(vii)(K)

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;

1910.1030(g)(2)(vii)(L)

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

1910.1030(g)(2)(vii)(M)

An explanation of the signs and labels and/or color coding required by paragraph (g)(1); and

1910.1030(g)(2)(vii)(N)

An opportunity for interactive questions and answers with the person conducting the training session.
The person conducting the training shall be knowledgeable in the subject matter covered by the elements contained in the training program as it relates to the workplace that the training will address.

1910.1030(g)(2)(ix)

Additional Initial Training for Employees in HIV and HBV Laboratories and Production Facilities. Employees in HIV or HBV research laboratories and HIV or HBV production facilities shall receive the following initial training in addition to the above training requirements.

1910.1030(g)(2)(ix)(A)

The employer shall assure that employees demonstrate proficiency in standard microbiological practices and techniques and in the practices and operations specific to the facility before being allowed to work with HIV or HBV.

1910.1030(g)(2)(ix)(B)

The employer shall assure that employees have prior experience in the handling of human pathogens or tissue cultures before working with HIV or HBV.

1910.1030(g)(2)(ix)(C)

The employer shall provide a training program to employees who have no prior experience in handling human pathogens. Initial work activities shall not include the handling of infectious agents. A progression of work activities shall be assigned as techniques are learned and proficiency is developed. The employer shall assure that employees participate in work activities involving infectious agents only after proficiency has been demonstrated.

1910.1030(h)

Recordkeeping --

1910.1030(h)(1)

Medical Records.

1910.1030(h)(1)(i)

The employer shall establish and maintain an accurate record for each employee with occupational exposure, in accordance with 29 CFR 1910.1020.

1910.1030(h)(1)(ii)

This record shall include:

1910.1030(h)(1)(ii)(A)

The name and social security number of the employee;

1910.1030(h)(1)(ii)(B)

A copy of the employee's hepatitis B vaccination status including the dates of all the hepatitis B vaccinations and any medical records relative to the employee's ability to receive vaccination as required by paragraph (f)(2);

1910.1030(h)(1)(ii)(C)

A copy of all results of examinations, medical testing, and follow-up procedures as required by paragraph (f)(3);
The employer's copy of the healthcare professional's written opinion as required by paragraph (f)(5); and

A copy of the information provided to the healthcare professional as required by paragraphs (f)(4)(ii)(B)(C) and (D).

Confidentiality. The employer shall ensure that employee medical records required by paragraph (h)(1) are:

Kept confidential; and

Not disclosed or reported without the employee's express written consent to any person within or outside the workplace except as required by this section or as may be required by law.

The employer shall maintain the records required by paragraph (h) for at least the duration of employment plus 30 years in accordance with 29 CFR 1910.1020.

Training Records.

Training records shall include the following information:

The dates of the training sessions;

The contents or a summary of the training sessions;

The names and qualifications of persons conducting the training; and

The names and job titles of all persons attending the training sessions.

Training records shall be maintained for 3 years from the date on which the training occurred.
Availability.

1910.1030(h)(3)(i)

The employer shall ensure that all records required to be maintained by this section shall be made available upon request to the Assistant Secretary and the Director for examination and copying.

1910.1030(h)(3)(ii)

Employee training records required by this paragraph shall be provided upon request for examination and copying to employees, to employee representatives, to the Director, and to the Assistant Secretary.

1910.1030(h)(3)(iii)

Employee medical records required by this paragraph shall be provided upon request for examination and copying to the subject employee, to anyone having written consent of the subject employee, to the Director, and to the Assistant Secretary in accordance with 29 CFR 1910.1020.

1910.1030(h)(4)

Transfer of Records.

1910.1030(h)(4)(i)

The employer shall comply with the requirements involving transfer of records set forth in 29 CFR 1910.1020(h).

1910.1030(h)(4)(ii)

If the employer ceases to do business and there is no successor employer to receive and retain the records for the prescribed period, the employer shall notify the Director, at least three months prior to their disposal and transmit them to the Director, if required by the Director to do so, within that three month period.

1910.1030(h)(5)

Sharps injury log.

1910.1030(h)(5)(i)

The employer shall establish and maintain a sharps injury log for the recording of percutaneous injuries from contaminated sharps. The information in the sharps injury log shall be recorded and maintained in such manner as to protect the confidentiality of the injured employee. The sharps injury log shall contain, at a minimum:

1910.1030(h)(5)(i)(A)

The type and brand of device involved in the incident,

1910.1030(h)(5)(i)(B)

The department or work area where the exposure incident occurred, and

1910.1030(h)(5)(i)(C)

An explanation of how the incident occurred.
The requirement to establish and maintain a sharps injury log shall apply to any employer who is required to maintain a log of occupational injuries and illnesses under 29 CFR 1904.

The sharps injury log shall be maintained for the period required by 29 CFR 1904.6.

Dates --

Effective Date. The standard shall become effective on March 6, 1992.

The Exposure Control Plan required by paragraph (c) of this section shall be completed on or before May 5, 1992.

Paragraph (g)(2) Information and Training and (h) Recordkeeping shall take effect on or before June 4, 1992.


Hepatitis B Vaccine Declination (Mandatory) - 1910.1030 App A

I understand that due to my occupational exposure to blood or other potentially infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.