

Bloodborne Pathogens

This training module is designated to provide a basic understanding of bloodborne pathogens, common modes of their transmission, methods of prevention, and other pertinent information. This program is designated to meet the requirements of the Occupational Safety and Health Administration's (OSHA's) Bloodborne Pathogen Standard, 29 CFR 1910, 1030.

Hope Enterprises Exposure Control Plan follows this module, in the Hope Enterprises Agency Policy Manual, or upon request.



If you can reasonably anticipate facing contact with blood and/or other potentially infectious materials as part of your job duties, you can receive additional training from your instructor or supervisor including an opportunity for interactive questions and answers. Monitor staff training calendar for dates and times of training. You should also read this summary of OSHA's bloodborne pathogen standard before continuing with this module.

To receive credit for completing this module, please take the quiz at the end of the last section, print answer sheet and attach to completed Inservice Training Report and route to Staff Training Specialist.

Bloodborne Diseases

Bloodborne pathogens are microorganisms such as viruses or bacteria that are carried in blood and can cause disease in people. There are many different bloodborne pathogens including malaria, syphilis, and brucellosis, but Hepatitis B (HBV) and the Human Immunodeficiency Virus (HIV) are the two diseases specifically addressed by the OSHA Bloodborne Pathogen Standard.

While this module will focus primarily on HBV and HIV, it is important to know which bloodborne pathogens (from humans or animals) you may be exposed to at work.

Hepatitis B (HBV)

In the United States, approximately 300, 000 people are infected with HBV annually. Of these cases, a small percentage is fatal.

“Hepatitis” means “inflammation of the liver,” and, as its name implies, Hepatitis B is a virus that infects the liver. While there are several different types of Hepatitis, Hepatitis B is transmitted primarily through “blood to blood” contact. Hepatitis B initially causes inflammation of the liver, but it can lead to more serious conditions such as cirrhosis and liver cancer.

There is no “cure” or specific treatment for HBV, but many people who contract the disease will develop antibodies, which help them get over the infection and protect them from getting it again. It is important to note, however, that there are different

kinds of hepatitis, so infection with HBV will not stop someone from getting another type.



The Hepatitis B virus is very durable, and it can survive in dried blood for up to seven days. For this reason, this virus is the primary concern for employees such as housekeepers, custodians, laundry personnel, and other employees who may be exposed to blood or potentially infectious materials in a non first aid or medical care situation.

Symptoms:

The symptoms of HBV are very much like a mild “flu”. Initially there is a sense of fatigue, possible stomach pain, loss of appetite, and even nausea. As the disease continues to develop, jaundice (a distinct yellowing of the skin and eyes), and a darkened urine will often occur. However, people who are infected with HBV will often show no symptoms for some time. After exposure, it can take 1-9 months before symptoms become noticeable. Loss of appetite and stomach pain, for example, commonly appear within 1-3 months, but can occur as soon as 2 weeks or as long as 6-9 months after infection.

Human Immunodeficiency Virus (HIV)

AIDS, or acquired immune deficiency syndrome, is caused by a virus called the human immunodeficiency virus, or HIV. Once a person has been infected with HIV, it may be many years before AIDS actually develops. HIV attacks the body’s immune system, weakening it so that it cannot fight other deadly diseases. AIDS is a fatal disease, and while treatment for it is improving, there is no known cure.

Estimates on the number of people infected with HIV vary, but some estimates suggest that an average of 35,000 people are infected every year in the US (in 2000, 45,000 new infections were reported). It is believed that as of 2000, 920,000 persons were living with HIV/AIDS in the United States. These numbers could be higher, as many people who are infected with HIV may be completely unaware of it.

The HIV virus is very fragile and will not survive very long outside of the human body. It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials. It is estimated that the chances of contracting HIV in a workplace environment are only 0.4%. However, because it is such a devastating disease, all precautions must be taken to avoid exposure.

AIDS infection essentially occurs in three broad stages. The first stage happens when the person is actually infected with HIV. After the initial infection, a person may show few or no signs of illness for many years. Eventually, in the second stage, an individual may begin to suffer swollen lymph glands or other lesser diseases that begin to take advantage of the body’s weakened immune system. The second stage is believed to eventually lead to AIDS, the third and final stage, in all cases. In this stage, the body becomes completely unable to fight off life-threatening diseases and infections.

Symptoms:

Symptoms of HIV infection can vary, but often include weakness, fever, sore throat, nausea, headaches, diarrhea, a white coating on the tongue, weight loss, and swollen lymph glands.



If you believe you have been exposed to HBV or HIV, especially if you have experienced any of the signs or symptoms of these diseases, you should consult your physician or doctor as soon as possible.

Modes of Transmission

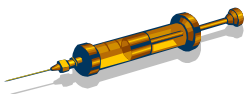
Bloodborne pathogens such as HBV and HIV can be transmitted through contact with infected human blood and other potentially infectious body fluids such as:

- Semen
- Vaginal secretions
- Cerebrospinal fluid
- Synovial fluid
- Pleural fluid
- Peritoneal fluid
- Amniotic fluid
- Saliva (in dental procedures), and
- Any body fluid that is visibly contaminated with blood

It is important to know the ways exposure and transmission are most likely to occur in your particular situation.

HBV and HIV are most commonly transmitted through:

- Sexual contact
- Sharing of hypodermic needles
- From mothers to their babies at/before birth
- Accidental puncture from contaminated needles, broken glass, or other sharps
- Contact between broken or damaged skin and infected body fluids
- Contact between mucous membranes and infected body fluids
- Accidental puncture from contaminated needles and other sharps result in transmission of bloodborne pathogens.



Unbroken skin forms an impervious barrier against bloodborne pathogens. However, infected blood can enter your system through:

- Open sores

- Cuts
- Abrasions
- Acne
- Any sort of damaged or broken skin such as sunburn or blisters

Bloodborne pathogens may also be transmitted through the mucous membrane of the:

- Eyes
- Nose
- Mouth



For example, a splash of contaminated blood to your eye, nose, or mouth could result in transmission.

PPE, Work Practices & Engineering Controls

It is extremely important to use personal protective equipment and work practice controls to protect yourself from bloodborne pathogens.

“Universal Precautions” is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are infectious, regardless of the perceived status of the source individual. In other words, whether or not you think the blood/body fluid is infected with bloodborne pathogens, you treat it as if it is. This approach is used in all situations where exposure to blood or potentially infectious materials is possible. This also means that the certain engineering and work practice controls shall always be utilized in situations where exposure may occur.

Personal Protective Equipment

Probably the first thing to do in any situation where you may be exposed to bloodborne pathogens is to ensure you are wearing the appropriate personal protective equipment (PPE). For example, you may have noticed that emergency medical personnel, doctors, nurses, dentists, dental assistants, and other health care professionals always wear latex or protective gloves. This is a simple precaution they take in order to prevent blood or potentially infectious body fluids from coming in contact with their skin. To protect yourself, it is essential to have a barrier between you and the potentially infectious material.

Rules to Follow:

- Always wear personal protective equipment in exposure situations.
- Remove PPE that is torn or punctured, or has lost its ability to function as barrier to bloodborne pathogens.
- Replace PPE that is torn or punctured.
- Remove PPE before leaving the work area.

If you work in an area with routine exposure to blood or potentially infectious materials, the necessary PPE should be readily accessible. Contaminated gloves, clothing, PPE, or other materials should be placed in appropriately labeled bags or containers until it is disposed of. It is important to know where these bags or containers are located in your area before beginning your work.



Gloves

Gloves should be made of latex, nitril, rubber, or other water impervious materials. If glove material is thin or flimsy, double gloving can provide an additional layer of protection. Also, if you know you have cuts or sores on your hands, you should cover these with a bandage or similar protection as an additional precaution before donning your gloves. You should always inspect your gloves for tears or punctures before putting them on. If a glove is damaged, do not use it! When taking contaminated gloves off, do so carefully. Make sure you do not touch the outside of the gloves with any bare skin, and be sure to dispose of them in proper container so that no one else will be exposed to them, either.

Always check your gloves for damage before using them.

Eye Protection

Anytime there is a risk of splashing or vaporization of contaminated fluids, eye protection should be used to protect your eyes. Again, bloodborne pathogens can be transmitted through the thin membranes of the eyes so it is important to protect them. Splashing could occur while cleaning up a spill, during laboratory procedures, or while providing first aid or medical assistance.

Face Shields/Masks

Face shields may be worn in addition to goggles/eye protection mask to provide additional face protection. A face shield will protect against splashes to the nose and mouth.



Aprons/Gowns

Aprons/gowns may be worn to protect your clothing and to keep blood or other contaminated fluids from soaking through to your skin.

Normal clothing that becomes contaminated with blood should be removed as soon as possible because fluids can seep through the cloth to encounter skin. Contaminated laundry should be handled as little as possible, and should be placed in an appropriately labeled bag or container until it is decontaminated, disposed of, or laundered.

Remember to use universal precautions and treat all blood or potentially infectious body fluids as if they are contaminated. Avoid contact whenever possible, and whenever it is not, wear personal protective equipment.

Hygiene Practices

Handwashing is one of the most important (and easiest) to prevent transmission of bloodborne pathogens. Hands or skin should be thoroughly washed as soon as possible following the exposure incident. Use soft, antibacterial soap, if possible. Avoid abrasive soaps, as these may open fragile scabs or other sores.

Hands should also be washed immediately (or as soon as feasible) after removal of gloves or other personal protective equipment.

Because handwashing is so important, you should familiarize yourself with the location of the handwashing facilities nearest to you.

If you are working in an area where there is reasonable likelihood of exposure, you should never:

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



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

You should also try to minimize the amount of splashing, spraying, splattering, and generation of droplets when performing any procedures involving blood or potentially infectious materials, and you should NEVER pipette or suction these materials by mouth.

Decontamination and Sterilization

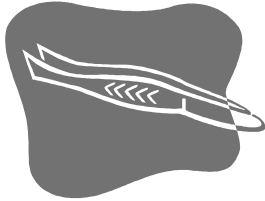
All surfaces, tools, equipment and other objects that come in contact with blood or potentially infectious materials must be decontaminated and sterilized as soon as possible. Equipment and tools must be cleaned and decontaminated before servicing or being put back to use.

Decontamination should be accomplished by using

- A solution of 5.25% sodium hypochlorite (household bleach/Clorox) or rubbing alcohol dilute between 1:10 and 1:100 with water. The standard recommendation is to use at least a quarter cup of bleach/alcohol per one gallon of water.

- Lysol or some other EPA-registered disinfectant. Check the label of all disinfectants to make sure they meet this requirement.

If you are cleaning up a spill of blood, you can carefully cover the spill with paper towels or rags, then gently pour the 10% solution of bleach/alcohol over the towels or rags and leave it for at least 10 minutes. This will help ensure that any bloodborne pathogens are killed before you actually begin cleaning or wiping the material up. By covering the spill with paper towels or rags, you decrease the chances of causing splash when you pour the bleach/alcohol on it.



If you are decontaminating equipment or other object (be it scalpels, microscope slides, broken glass, saw blades, tweezers, mechanical equipment upon which someone has been cut, first aid boxes, or whatever) you should leave the disinfectant in place for at least 10 minutes before continuing the cleaning process.

Of course, any materials you use to clean up a spill of blood or potentially infectious materials must be decontaminated immediately, as well. This would include mop sponges, re-usable gloves, buckets, pails, etc.

Sharps

Far too frequently, housekeepers, custodians, and others are punctured or cut by improperly disposed needles and broke glass. This, of course, exposes them to whatever infectious material may have been on the glass or needle. For this reason it is especially important to handle and dispose of all sharps carefully in order to protect yourself as well as others.

Needles must be disposed of in sharps container.

Improperly disposed needles can injure housekeepers, custodians, and other people.

Needles



- Needles should never be recapped.
- Needles should be moved only by using a mechanical device or tool such as forceps, pliers, or broom and dustpan.
- Never break or shear needles.
- Needles shall be disposed of in labeled sharps containers only.



- Sharps containers shall be closable, puncture-resistant, leak-proof sides and bottom, and must be labeled or color-coated.
- When sharps containers are being moved from the area of use, the containers should be closed immediately before removal or replacement to prevent spillage or protrusion of contents during handling or transport.
- A sharps injury log will be maintained to record all needlesticks.

Broken Glassware

- Broken glassware that has been visibly contaminated with blood must be sterilized with an approved disinfectant solution before it is disturbed or cleaned up.
 - Glassware that has been decontaminated may be disposed of in an appropriate sharps container: i.e. closable, puncture -resistant, leak proof on sides and bottom, with appropriate labels.
- Broken glassware will not be picked up directly with the hands. Sweep or brush the material into a dustpan.
 - Uncontaminated broken glassware may be disposed of in a closable puncture resistant container such as a cardboard box or coffee can.

By using Universal Precautions and following these simple engineering and work practice controls, you can protect yourself and prevent transmission of bloodborne pathogens.

Signs, Labels & Color Coding

Warning labels need to be affixed to containers of regulated waste, refrigerators, freezers containing blood, or other potentially infectious material; and other containers used to store, transport, or ship blood or other potentially infectious materials. These labels are fluorescent orange, red, or orange-red. Bags used to dispose of regulated waste must be red or orange-red, and they, too, must have the biohazard symbol readily visible upon them. Regulated waste should be double-bagged to guard against the possibility of leakage if the first bag is punctured.

Regulated waste refers to

- Any 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 of compressed
- Items that are caked with dried blood or other potentially infectious material and are not capable of releasing these materials during handling
- Contaminated sharps
- Pathological and microbiological wastes containing blood or other potentially infectious materials

All regulated waste must be disposed in properly labeled biohazard bags. These must be disposed at an approved facility.

Emergency Procedures

In an emergency situation involving blood or potentially infectious materials, you should always use Universal Precautions and try to minimize your exposure by wearing gloves, splash goggles, pocket mouth-to-mouth resuscitation masks, and other barrier devices.

If you are exposed, however, you should:

1. Wash the exposed area thoroughly with soap and running water. Use non-abrasive, antibacterial soap if possible.

If blood is splashed in the eye or mucous membrane, flush the affected area with running water for at least 15 minutes.

2. Report the exposure to your supervisor as soon as possible.
3. Fill out an exposure report form.

EXPOSURE CONTROL PLAN BLOOD BORNE PATHOGENS & OTHER INFECTIOUS DISEASES

I. Accessibility/Updating

A copy of the Exposure Control Plan is available to employees and is located in the Agency Staff Manual.

This Exposure Control Plan will be reviewed annually and updated whenever necessary to reflect new or modified tasks and procedures that affect occupational exposure. The Occupational Health Exposure and Infection Control Coordinators will complete this by November 1 of each year. The Occupational Health Exposure Coordinator (OHE) is Mary Smith, who will contact The Workcenter® as a result of exposure incidents, order some supplies, and coordinate disposal of contaminated waste. The Infection Control Coordinator is Sue Livermore, RN, and who serves as a resource to answer questions and provide information as needed.

II. Exposure Determination

Occupational exposure- an exposure that might place staff at risk for Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), or Human Immunodeficiency Virus (HIV) infection is defined as a percutaneous injury (e.g., a needle stick or cut with a sharp object), or contact of mucous membrane or non-intact skin (e.g., exposed skin that is chapped, abraded or afflicted with dermatitis) with blood, tissue, or body fluids that are potentially infectious. 1

1. The job classifications in which all employees have potential occupational exposure to Bloodborne pathogens are as follows:

JOB TITLES	
Habilitation Manager Habilitation/Program Specialist	Program Supervisor Program Specialist Vocational Evaluator/PWAT

JOB TITLES	
Assistant Habilitation Manager Assistant Habilitation Manager/Program Specialist Health Services Coordinator Registered Nurse Licensed Practical Nurse Habilitation Staff Habilitation Staff - Third Shift	Production Manager Work Center Foreman Trainer Program Specialist Aide Range-of-Motion Direct Service Worker Line Supervisor Van Driver Van Assistant Maintenance Supervisor Custodian Occupational Health Exposure Coordinator
Program Supervisor Assistant Program Supervisor Home Educator Teacher (or Substitute) Instructional Aide (or Substitute) Van Driver (or Substitute) Van Assistant (or Substitute)	Program Supervisor Program Specialist Line Supervisor Van Driver Personal Care Aide Behavior Hab staff Asst. Behavior Hab Manager Behavior Hab Manager/ PS
Employment Specialist SS Benefit Specialist Work Supervisor Community Access Coach Supp. Program Act. Aide Incident Manager	

2. The job classifications in which some of the employees have some exposure to Bloodborne pathogens are as follows:

Administration Positions including receptionist and secretaries
Directors
Quality Assurance Coordinator
Clerical and accounting staff

3. Tasks and procedures in which exposure to Bloodborne pathogens can potentially occur. (Gloves must be worn and hands must be washed afterwards in all of these circumstances. A gown, mask and protective eyewear must be worn if there is any risk of splashing).

- ❖ Contact with blood and/or infectious material as a result of injury
- ❖ Contact with blood during blood glucose testing
- ❖ Contact with blood during individual's self-administration of insulin
- ❖ Nurses- contact with blood during administration of ordered IM injections
- ❖ Contact with blood as a result of use of Epi-pens
- ❖ Dressing changes
- ❖ Oral care including feeding/brushing teeth/flossing
- ❖ Menses care
- ❖ Fecal matter/urine

- ❖ Laundry
- ❖ Routine housekeeping, e.g., bathrooms
- ❖ Bathing

4. Schedule and Method for Implementation

On July 1, 1992, all methods of compliance were fully implemented, including Hepatitis B Vaccination and Post-exposure Evaluation and Follow-up, communication of hazards to employees and record keeping requirements. The method for implementation for these compliance requirements was by formal training sessions. This formal training followed the guidelines set forth in this Exposure Control Plan and in the Federal Register published December 6, 1991, in which the Bloodborne Disease Pathogens Standard appears. The specific practices used for the protection of Hope's employees or volunteers are outlined as follows:

III. Methods of Compliance

1. Universal/Standard Precautions

Universal/standard Precautions shall be implemented when dealing with blood or other potentially infectious materials. According to the concept of Universal Precautions, all human blood and certain body fluids are to be treated as if known to be infected with HIV, HBV, HCV or other Bloodborne pathogens. Although exposure to body fluids other than blood is unlikely except in health care settings, the following body fluids are to be treated as infectious.

- ❖ Blood
- ❖ semen
- ❖ vaginal secretions
- ❖ cerebrospinal fluid(fluid surrounding the brain and spinal cord)
- ❖ synovial fluid (joint fluid)
- ❖ pleural fluid (fluid around the lungs)
- ❖ pericardial fluid (fluid around the heart)
- ❖ peritoneal fluid (fluid surrounding the abdominal cavity))
- ❖ amniotic fluid (fluid surrounding a pregnant woman's fetus)
- ❖ saliva (dental practice only)
- ❖ blood- contaminated body fluids

2. Engineering and Work Practice Controls

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.

- a. Engineering Controls - Technical controls such as using Sharps containers for used needles.
- b. Work Practice Controls - Controls that reduce the likelihood of exposure by altering the manner in which a task is performed. Examples: Not allowing two-handed needle recapping; hand washing; not eating in areas where there may be infectious materials present.

Below are the engineering and work practice controls utilized at Hope:

- ◆ Hand washing and Washing of Skin and Eyes - All employees must wash their hands with an antibacterial soap immediately after removal of gloves or other personal protective equipment (PPE) such as gowns, protective eye wear, or masks. Hand sanitizer is used as well as hand-washing in specific cases (such as, if known antibiotic resistant organisms are present . See MDRO guideline in Medical and Nursing Guidelines Handbook). Additionally, employees shall immediately wash any skin/ mucous membranes that come into contact with blood or other potentially infectious materials. Eyes should be flushed with water for 15 minutes. In agency vehicles, antiseptic towelettes will be available in the First Aid kit.

- ◆ Sharps Containers and Needle Re-capping - Contaminated needles or other sharps will not be bent, sheared, removed, or recapped with the following exception:

All contaminated sharps, whether disposable or reusable, will be placed in an approved Sharps container as soon as possible after use. Sharps containers will be located in the medication room. Sharps containers must be kept in an upright position, must not be overfilled, must be closed before moving for storage, handling, transport or shipping, and must be leak proof on sides and bottom.

Sharps used in Hope facilities include the following:

- ❖ Injection needles with syringes
- ❖ Blood glucose lancets
- ❖ Blood glucose lancing devices
- ❖ Insulin Pens
- ❖ Epi-pens

Sharps disposal will be arranged through the OHE Coordinator.

- ◆ Eating and Drinking in the Work Place - No eating, drinking, smoking, or application of cosmetics is allowed in work areas where there is a potential for contamination with infectious materials.
- ◆ Storage of Food and Drink - No food or drink may be kept in refrigerators, freezers, shelves, cabinets, counter tops or bench tops where infectious materials may be present.
- ◆ Splashing and Spraying of Infectious Materials - All procedures in Hope's workplaces will be done in such a manner as to minimize the spraying or splashing of potentially infectious materials.
- ◆ Pipetting - Mouth pipetting/suctioning of blood or other potentially infectious materials is prohibited.
- ◆ Handling Specimens of Blood, Tissue and Other Potentially Infectious Material - The following rules will be observed when handling these types of materials:
 - The material will be placed in containers designed to prevent leakage
 - Universal/standard precautions will be observed at all times

- Material must be labeled, as directed on page 7 of the Exposure Control Plan, whenever the specimen is to be sent outside of the facility. (Specimens inside of the facility do not have to be labeled assuming the use of universal precautions);
- When the potential exists for the specimen to puncture primary container, the primary container is placed inside of a second container that is puncture resistant.
- ◆ Contaminated Equipment - All contaminated or potentially contaminated equipment will be decontaminated before servicing or shipping. If it is not feasible to decontaminate all or part of a particular piece of equipment, a label (see the labeling section on page 7 of the Exposure Control Plan) must be attached to the equipment stating which portions remain contaminated. Labels may be obtained from the OHE Coordinator.

3. Personal Protective Equipment (PPE)

Appropriate PPE will be provided to all employees. PPE will include exam gloves, gowns, masks, eye protection and CPR pocket masks. Replacement of PPE is available through the OHE Coordinator. The PPE is designed to prevent blood or other potentially infectious materials from passing through or reaching work clothes, street clothes, undergarments, skin, eyes, or mouth under normal circumstances.

- a. Use of Personal Protective Equipment (PPE) - It is the agency's responsibility to ensure that the employee knows when to use PPE. You will be required to use PPE when exposed to potentially infectious materials.
- b. Glove Allergies - The agency will provide hypoallergenic gloves, glove liners or powderless gloves for those who are allergic to the gloves normally used.
- c. Disposal of PPE - The agency will be responsible for disposal of PPE, as needed, at no cost to the employee.
- d. Repair and Replacement of PPE - The agency will also be responsible for the repair and replacement of PPE as needed, at no cost to the employee.
- e. Contaminated Protective Garments - All protective garments penetrated by blood or other potentially infectious materials must be removed as soon as possible and disposed of in an appropriate manner (See III 5. Waste).
- f. Removal of PPE - All PPE will be removed before leaving the work area, and must be placed in the designated container(s) for storage, washing, decontamination or disposal.
- g. Gloves - Gloves must be worn when it is likely that the employee may have hand contact with blood or other potentially infectious materials; mucous membranes; non-intact skin; during blood drawing procedures or other vascular access procedures; and when handling or touching potentially contaminated items or surfaces.
 - Disposable surgical and exam gloves must be replaced as soon as possible when contaminated, torn or punctured. These gloves will not be washed or decontaminated for re-use.

- h. Eye Protection – Eye/face shields must be worn for all procedures likely to generate splash or spray of blood or other potentially infectious materials. It is policy that this type of eye protection be worn for the following procedures:
 - Sewage spill clean up
- i. Protective Clothing - Appropriate protective clothing must be worn when there is the potential for occupational exposure, i.e., blood splashes or other conditions where there is splashing, spraying or splattering. The clothing must not allow blood or other potentially infectious material to pass through it.

4. Housekeeping

Facilities will be kept in a clean and sanitary condition at all times. In addition, the following applies to the housekeeping of facilities.

- a. All equipment and environmental surfaces will be cleaned and decontaminated after contact with blood or other potentially infectious materials (1/4 cup of bleach per gallon of water)
- b. All contaminated work surfaces will be decontaminated after any spill of blood or other potentially infectious materials. Approved products for decontamination include, but are not limited to:
 - ¼ cup of bleach per gallon of water
 - ¼ cup of alcohol per gallon of water
 - HBV spray
- c. Certain protective barrier coverings are used to cover equipment or environmental surfaces and must be removed when contaminated
- d. Bins, pails and cans shall be decontaminated on a regular basis and whenever visibly contaminated with blood or other potentially infectious materials; and
- e. All contaminated glassware that is broken shall not be picked up by hand. Use tongs or a brush and dustpan.

5. Waste

Regulated infectious wastes are defined as items containing a moderate to a large amount of blood. Regulated infectious wastes are not items containing urine, feces, saliva or sanitary pads. Regulated infectious waste (other than sharps) will be placed in closable, leak proof containers, if it has not been rendered non-hazardous (i.e., treated in an autoclave, chemical vapor sterilizer, ethylene oxide, etc.) These containers will meet the following requirements:

- a. Constructed to contain all contents during handling, storage, transport, or shipping;
- b. Labeled or color-coded;
- c. Must be closed before removal;
- d. Must be placed in a secondary container if outside contamination of the first carton occurs; and

- e. Disposal of all regulated waste will be in accordance with applicable regulations of the United States and Territories, and political subdivisions of these such as counties, cities, townships, etc. For all Hope facilities, regulated infectious waste will be disposed of at The Williamsport Hospital and Medical Center. Any staff member who must dispose of any regulated infectious waste must contact the Occupational Health Exposure Coordinator for the proper procedures to dispose of any items.

6. Laundry

The following apply to contaminated or potentially contaminated laundry:

- a. Laundry should be handled as little as possible – not placed on floor but in container
- b. Employees in contact with this laundry must wear gloves when handling it
- c. Each individual's laundry will be washed separately from other's laundry.

7. Hepatitis B Vaccination

- a. It is agency policy to provide, at no cost, the Hepatitis B vaccine series to all employees. The Workcenter® is responsible for the maintenance of all records pertaining to immunization. Individuals living in residential facilities, who have potential exposure to blood, will be offered the same procedures as provided for employees except that the individual's own medical insurance will be billed for any procedure;
- b. Unless an employee has already received the vaccine or medical contraindications exist, he/she will be offered the vaccine within 10 days of their first day of employment;
- c. A copy of this Exposure Control Plan/Bloodborne Disease Pathogens Standard will be provided to the healthcare professional responsible for administering the vaccine to the employee;
- d. All employees who refuse the vaccine, for whatever reason, must sign a declination form. If the employee, at a later date, decides to have the vaccine, it will be provided at no cost; and
- e. If, in the future, the U.S. Public Health Service deems a booster necessary, it will be made available at no cost to the employee.

8. Post Exposure Evaluation and Follow-up: Method and Documentation

A confidential post-exposure medical evaluation will be made available to all employees at no cost to the employee. It is extremely important that the proper post-exposure protocol be followed after an exposure incident occurs. The following outlines the steps to be followed after an exposure incident occurs:

Step 1. Employee verbally reports an exposure incident (e.g., needle stick, human bite) to his supervisor and the OHE Coordinator followed by a written Employee Accident Report.

Step 2. Employee will arrange for an appointment with The Workcenter® at Divine Providence Hospital. The Workcenter will arrange for any medical follow-up

required. The Emergency Room will be utilized to provide post-exposure care, during hours that the Workcenter is closed.

- Step 3. The Workcenter staff will complete exposure incident documentation forms. They will maintain the proper protocol as required by OSHA, thus providing the employee with optimum protection.
- Step 4. The Workcenter is responsible for the maintenance of all records pertaining to exposure incidents. All findings and diagnoses shall remain confidential.
- Step 5. An Optional report will be filed in the HCSIS system, if an individual has bitten staff.

9. Tables and Signs: Communication of Hazards

To communicate hazards to employees, the following labeling system shall be used:

- a. Warning labels shall be displayed and will be orange-red or florescent orange with lettering and symbols in contrasting color.



- b. These labels shall be placed on the following items:

- ◆ Containers of infectious waste (sharps containers)
- ◆ Refrigerators or freezers containing potentially infectious materials
- ◆ Any container used to store, transport or ship potentially infectious materials (i.e. urine, stool specimens)
- ◆ Contaminated equipment sent for repair/maintenance. The label shall state which portions of the equipment are contaminated.

- c. Situations where labels would not have to be used include:

- ◆ If red boxes or red containers are substituted for labels.
- ◆ Infectious waste that has been decontaminated.

10. Training and Information

All employees with occupational exposure will receive training at no cost to them, which will occur during working hours. The training will be provided as follows:

- ◆ At the time of initial assignment;
- ◆ On at least an annual basis (from the date of original training) and whenever new or modified tasks affect the employee's occupational exposure.

If employees have already had training on certain aspects of Bloodborne pathogens and other infectious diseases within the year, only training in areas not previously provided will be offered.

The content of training will be as follows:

- A copy of this Exposure Control Plan/Bloodborne Disease Pathogens Standard will be made available to all employees and its contents explained
- A general explanation of the epidemiology and symptoms of Bloodborne and other infectious diseases will be provided
- The modes of transmission of Bloodborne and other infectious disease will be outlined
- An explanation of the Exposure Control Plan and its location will be supplied
- How to identify tasks that may involve occupational exposure to blood or other potentially infectious materials will be detailed
- An explanation of the engineering controls, work practices, and personal protection equipment (PPE) used in our facilities, as well as the limitations of each will be provided
- Information on the type, use, location, removal, handling, decontamination and disposal of PPE will be supplied
- Information on how to select the proper PPE will be detailed
- Information on the hepatitis B vaccine and that it is available at no cost to the employee at risk will be furnished
- Who to contact and the appropriate action to be taken if an emergency involving exposure to blood or other potentially infectious material occurs will be detailed
- The procedure to follow if an exposure occurs, including reporting and information on post-exposure evaluation and follow-up will be provided
- Biohazards coding on Red Bag, Sharps containers, and labels will be reviewed
- The trainer will provide for a question and answer session

11. Training Records

The Staff Training Specialists and the Vice President of Programs and Services keeps an outline of training content. Training records will be kept for all training sessions and will include:

- a. Dates of training
- b. Name(s) and qualification(s) of trainer
- c. Names and job titles of all trainees.

Training records will be kept for three (3) years from the date of training.

12. Transfer of Records

If, in the future, the agency ceases to operate all or part of the program under which an employee is employed, all employee medical records and training records will be handled as follows:

- a. If another provider assumes responsibility for operating the program, the records will be transferred to that provider;
- b. If there is no successor, the agency will notify the Director of the National Institute of Occupational Safety and Health (NIOSH) at least three (3) months before record disposal. If notified to do so within that three- (3) month period, records will be transmitted to the Director.

13. Medical Records

- A. If the agency ceases to operate all or part of program under which an employee is employed, the Work Center will maintain medical records on all employees who have

had Hepatitis-B immunizations or occupational exposure (see page 8 Post Exposure Evaluation and Follow-up: Method and Documentation - steps 3 and 4).

- B. A Sharps Injury Log will be put in place to document all injuries. The log will include the type and brand of device involved in the incident, the location of the incident (i.e., department/work area), and a description of the incident. The OHE Coordinator will maintain the Sharps Injury Log.

This Exposure Control Plan reflects 2001 PA HB 454.

PENNSYLVANIA (2001 PA HB 454) (signed into law 12/01)

Provisions: Requires Department of Health to establish bloodborne pathogens standard for public employees that includes requirements for:

1. Inclusion of safer medical devices as engineering and work practice controls.
2. Employee training prior to implementation of safer medical devices.
3. Employer implementation and updates of a written exposure control plan, including development of a sharps injury log.
4. Employee involvement in safer medical device evaluation process.

Table: [Comparison of State-By-State Needle Safety Legislation](#) 3

Attachment A

EXPOSURE CONTROL PLAN

BLOODBORNE PATHOGENS TRAINING OUTLINE

TRAINING FOR:

OSHA Regulations on Occupational Exposure to Bloodborne Pathogens

TEACHING METHODS:

Lecture, Video (Preventing Disease Transmission: American Red Cross, Demonstrations, and Visuals)

INSTRUCTORS:

Kathryn Davis, Staff Training Specialist and Certified in HIV training from the American Red Cross, and Melody Wolf, Staff Training Specialist and Pennsylvania Licensed Practical Nurse, are certified to instruct the American Red Cross Course in Preventing Disease Transmission

I. Introduction

1. Welcome
2. Purpose of Training
 - A. Educate staff on Bloodborne Pathogens/B-Vaccination
 - B. Demonstrate Personal Protective Equipment/Disposal

- C. Reporting procedure related to exposure
- D. Question and answer

II. Basic Education (Video list above) - 20 minutes

- 1. Universal Precautions
- 2. Hepatitis B
- 3. HIV virus
- 4. Other Bloodborne Pathogens
- 5. Verbal review
- 6. Question and answer session

III. Universal Precautions (Video covers)

- 1. Restate two key points
 - A. To minimize and eliminate contact with blood or other potentially infectious material
 - B. To treat all blood and other possibly infectious material appropriately regardless of the person's diagnosis, who they are, or where they are from
- 2. Connect Universal Precautions with Pathogens and its importance

IV. Work Practices and Personal Protective Equipment

- 1. Skin as barrier
- 2. Gloves
 - a. Latex
 - b. Utility
- 3. Mask
- 4. Gowns
- 5. Pocket Mask
- 6. For above applying, removal and disposal
- 7. Decontamination of exposure site
- 8. Disposal

V. B-Vaccination

- 1. Facts about the Vaccination
 - A. Yeast based
 - B. Intermuscular
 - C. Offered within 10 days of initial assignment
 - D. No cost to employee
 - E. Benefits of being vaccinated
 - F. Employees who are pregnant considering or have any health concerns; before receiving the vaccination, should seek medical advice from their doctor
- 2. Who will receive the vaccination?
 - A. If your job title or location is listed on the Exposure Control Plan or is approved by a Vice-President, you will be offered the vaccination
 - B. Not necessary that you take it
 - C. Can change mind at later date

- D. Everyone will be given a consent form to sign and return
- 3. The Occupational Health Exposure Coordinator, in conjunction with the Workcenter®, will schedule vaccinations
- 4. Tracking and booster shots will be based on the Workcenter's records and recommendations

VI. Waste/Disposal

- 1. What is and what is not regulated infectious waste?
- 2. Exceptions (sharps) placed in closeable, leak-proof containers
- 3. Labeling
- 4. Contact the Occupational Health Exposure Coordinator for disposal instructions (The Williamsport Hospital will be receiving regulated waste)

VII. Post Exposure Evaluation and Follow-Up

- 1. Person who is exposed responsibility
 - A. Verbal report
 - B. Written Employee Accident Report
- 2. Agency Responsibility
 - A. Completion of proper forms
 - B. Notification of proper agencies
 - C. Disposal
 - D. Follow-up of recommendations
 - E. Order personal protective equipment
 - 1. Gowns
 - 2. Mask
 - 3. Red bags
 - 4. Labels
 - 5. Gloves
 - 6. Anti-bacterial soap
 - 7. Decontamination materials
 - 8. Pocket mask

OSHA regulations will be placed in all Agency Staff Manuals, which are located at each physical site.

Attachment B

EXPOSURE CONTROL PLAN

BLOOD BORNE PATHOGENS & OTHER INFECTIOUS DISEASES

REGARDING HUMAN BITE EXPOSURE

A human bite is considered an exposure if an employee is bitten and blood is drawn. If there is blood from the bite, the exposure is to the source, not the one bitten unless the source had bloody gums. Please adhere to the following procedures if this should take place.

- 1. The employee must verbally report an exposure incident to his supervisor and the Occupational Health Exposure Coordinator (OHEC) followed by a written

Incident/Accident Report. Upon review of the incident, the OHEC will give the employee the phone number to the Workcenter, 320-7440. Our current contact there is Cindy Bower, Certified Occupational Nurse. She will schedule the employee to come in for testing. Because post-exposure procedures need to take place within 72 hours, please make sure Cindy is contacted if the OHEC is not available. The Workcenter is located at Divine Providence Hospital, 1100 Grampian Blvd, Williamsport, PA.

2. A Worker's Compensation (WC) claim will be completed on the exposed employee. Bills for tests and subsequent treatment will be covered through WC.
3. At the Workcenter, the employee will need to be tested for Hepatitis B Virus (HBV), Hepatitis C Virus (HCV), and Human Immunodeficiency Virus(HIV). If the employee never received the Hep B immunizations, he will be encouraged to start the series. A possible tetanus shot will be given if the person's last shot is out of date. If the test results are negative, there will be a six-month follow-up test for HBV, HCV & HIV.
4. The physician of the source individual should be contacted to see if recent testing has occurred. Where appropriate, the source individual will be encouraged to be tested for HBV, HCV & HIV. Normally, the source individual is not retested unless he is repeatedly biting. In that case, he would be tested once a year until the biting ceases. The cost for testing should be paid for by the source individual's MA card. If the individual's parents/guardians prefer to use their own doctor, arrangements will need to be made to send the results of the tests to Cindy Bower, RN, at the Workcenter.

Please review the procedures documented in the Exposure Control Plan.