Blood Borne Pathogens (BBP)

Healthcare facilities are high-risk areas for exposure to bloodborne pathogens, so protect yourself and remind others to do the same. There are three bloodborne pathogens of special concern in the healthcare setting.

- Human immunodeficiency virus (HIV)
- Hepatitis B virus (HBV)
- Hepatitis C virus (HCV)

HIV
HIV attacks a person’s immune system and causes it to break down. A number of people infected remain healthy for many years. An infected person becomes seriously ill when the immune system loses its ability to fight infections. Some people infected with HIV go on to develop AIDS.

Hepatitis B Virus (HBV)
Most people infected by HBV recover and clear the infection. However, each year people die from chronic liver disease and liver cancer linked to hepatitis B. About 30% of people infected with hepatitis B have no signs or symptoms. Symptoms include:
- Jaundice (yellowing of the skin and eyes)
- Fatigue
- Abdominal pain
- Loss of appetite
- Nausea and vomiting
Fortunately, hepatitis B can be prevented by receiving the hepatitis B vaccine. The hepatitis B vaccine is given at no charge to any employee who works in an area at risk of contracting Hepatitis B on the job. It is a series of three injections in the deltoid muscle of the arm; it is safe and very effective at protecting you from getting Hepatitis B. Employees who do not elect to receive the Hepatitis B vaccine upon hire must sign a declination. If the employee decides at a later date they want the vaccine, they can contact Employee Health and receive the vaccine at that time.

Hepatitis C Virus (HCV)
The hepatitis C virus causes serious liver disease and has symptoms similar to hepatitis B. However, people who are chronically infected with hepatitis C may have no symptoms for up to 30 years. **Unlike HBV, HCV has no preventative vaccine.** Hepatitis C infections are on the rise and cause many more deaths than HBV.
How Bloodborne Diseases Spread
Bloodborne diseases/pathogens (BBP) are not as easy to contract as many other viruses. Unlike a cold or the flu, they are not spread through the air. You cannot get them from coughing, sneezing or casual contact. They are transmitted through contact with blood or Other Potentially Infectious Material (OPIM). Other OPIM includes:
- Semen and vaginal secretions
- Any fluid or tissue containing visible blood
- Cerebrospinal fluid (fluid that surrounds the brain and spine)
- Synovial fluid (fluid in the joints)
- Pleural fluid (fluid in the lungs)
- Peritoneal fluid (fluid in the abdomen)
- Pericardial fluid (fluid surrounding the heart)
- Amniotic fluid (fluid around the baby in the womb of pregnant women)
- Saliva in dental procedures
- Non-intact skin or organs from living or dead humans

How BBP are Transmitted
Through sex with an infected partner, when drug users share contaminated needles, tattoos, injuries involving needles, injuries involving other sharps such as scalpels, broken glass or anything that can pierce the skin. Aside from a puncture from a contaminated sharp, you can also be exposed to a BBP if blood or OPIM comes in contact with broken skin (open cuts, dermatitis, skin abrasions or acne) or mucous membranes of your eyes, nose or mouth. Dried HBV can survive on environmental surfaces at room temperature for up to one week.

Exposure Control Plan
Murray Medical’s Exposure Control Plan identifies which employees are covered by the OSHA Bloodborne Pathogens Standard. (You are covered by the standard if it is reasonably anticipated that you could be exposed to blood or OPIM as a result of performing your job). The Exposure Control Plan also describes the potential hazards of each job; details what measures will be taken to minimize your risk of exposure, explains what procedures to follow if there is an exposure incident and includes a method of identifying and evaluating safety devices such as safety sharps. The Exposure Control Plan can be found on the Murray Arc under organizational policies. It is policy # 906.1.
How to Reduce Your Risk of a BBP Exposure

There are several important ways you can protect yourself from exposure. These include:
- Standard precautions
- Engineering controls
- Safe work practices
- Personal protective equipment (PPE)
- Housekeeping
- Electing to receive the hepatitis B vaccine

**Standard Precautions**

Many people carry bloodborne disease and have no visible signs or symptoms. They may not even know they are infected. This means one cannot always tell who has a bloodborne disease so Standard Precautions should be used with every patient in all health care settings, regardless of suspected or confirmed presence of infectious diseases. Treat all blood and body fluids, except sweat, as though infected with bloodborne pathogens.

**Engineering Controls**

Engineering controls are provided by Murray Medical. They are designed to isolate or remove hazards from the workplace. Some examples include autoclaves, sharps disposal containers, sharps with engineered sharps injury protections and needleless systems.

**Safe Work Practices**

Work practices are specific procedures you follow to reduce your exposure to blood or OPIM. Hand hygiene and sharps safety are some of the most important safe work practices to follow.

**Hand Hygiene**

The CDC’s Hand Hygiene Guidelines help protect you from exposure. Hand hygiene is the single most important practice to reduce the transmission of infectious diseases in healthcare settings. Hand hygiene includes both handwashing and use of alcohol based hand sanitizers. When your hands are visibly soiled, wash them with soap and water.

Proper Hand washing Technique:

1) Wet hands
2) Apply recommended amount of soap
3) Rub vigorously for at least 15 seconds over all surfaces of hands and fingers
4) Rinse thoroughly
5) Dry hands completely with a disposable towel
6) Use a dry towel to turn off faucet
Apply an approved hand lotion to your clean hands as often as needed to prevent skin breakdown. Keep nail tips shorter than one-quarter inch and never wear artificial nails.

**Sharps Safety**
According to the Occupational Safety and Health Administration (OSHA), more than half a million sharps related injuries occur each year. Studies show that sharps safety devices may significantly reduce your risk of injury during procedures such as joining IV lines, drawing blood, injecting medication and suturing during surgery. Contaminated sharps (needles, glass, etc) must be placed in a covered, puncture resistant, leak-proof container that is red or has a biohazard symbol. Your Exposure Control Plan details sharps safety rules you should follow.

- Use a safe needle device or needle-less system
- When using sharps, always follow effective, safe handling techniques
- Never break, bend or recap contaminated needles or sharps
- Follow safe disposal guidelines
- Be careful with all types of sharps
- Report all sharps injuries to Employee Health or the House Supervisor

**Other Safe Work Practices**
Do not eat, drink, smoke, apply cosmetics or lip balms or handle contact lenses where you are likely to be exposed to blood or OPIM. Never keep food and drink in places where blood or OPIM are present. Never mouth-pipette or mouth-suction blood or OPIM. Always minimize splashing, spraying and spattering when performing procedures involving blood or OPIM. Transport specimens of blood or OPIM in closed, leak-proof containers. Wear gloves and handle carefully. Before putting on gloves, make sure to cover or bandage any hand cuts since gloves can be torn or punctured. Do not let contaminated equipment touch your skin, mucous membranes, clothing other patients, visitors or items in the environment. Make sure reusable equipment is not used on another patient until it has been properly cleaned. Single-use items should be discarded appropriately.

**Personal Protective Equipment (PPE)**
Different tasks require different levels of personal protective equipment (PPE). You should wear only as much PPE as necessary. Your Exposure Control Plan outlines what PPE you need for each task. To follow Standard Precautions, you should wear PPE when you expect to touch blood, OPIM and contaminated surfaces. You must wear eye protection if fluids could splash or spray into your eyes. PPE may include:
Gloves  
Eye protection  
Gowns  
Mouthpieces  
Lab coats  
Resuscitation bags  
Face shields  
Pocket masks  
Masks  
Other ventilation devices

Murray Medical will provide you with the necessary PPE and train you how to use it.

**Housekeeping**

Good housekeeping protects you and your co-workers. Clean all blood and fluid spills according to Murray Medical policy. Keep work surfaces and protective coverings clean. Wear gloves to handle contaminated laundry and hold away from your clothing to prevent exposure to your clothing and skin. Place laundry in an appropriate container in the area where used. Deposit wet laundry in a leak resistant container. Do not reach into trash containers or push trash down with your hands or feet. Shake down waste in containers or remove trash bag and dispose. Dispose of blood and other regulated medical waste in appropriately labeled, closed, leak proof containers.

**Signage**

Fluorescent orange-red labels, red bags, red containers and warning signs are designed to warn you that the contents contain blood or OPIM. Use Standard Precautions whenever you handle these items.

**What to Do If Exposed to BBP**

1) Wash the exposed area with soap and water  
2) Do not use caustic agents such as bleach  
3) If contaminated material gets in your eyes or mucous membranes, flush them with large amounts of water for at least 15 minutes  
4) Report the exposure to Employee Health or House Supervisor and go immediately to the Emergency Department so that post-exposure evaluation, counseling and any necessary treatment can begin  
5) Act quickly! Some infections need treatment started right away

**Blood Borne Pathogen Exposure Follow Up**

A Blood Borne Pathogen Written Opinion will be performed within 15 days of an exposure. Surveillance will be offered for employee follow up at 6 weeks, 12 weeks and 6 months after the exposure. If employee declines surveillance, a declination for surveillance must be signed.