Bloodborne Pathogens Definitions

(Exposure Control Plan)

- **Bloodborne Pathogens**: Infectious microorganisms carried in the blood of humans that can cause disease. These pathogens include Hepatitis B (HBV) and Human Immunodeficiency Virus (HIV).
- **Contaminated**: Any item or surface that has blood or other potentially infectious materials on them.
- **Decontamination**: Physically or chemically removing or destroying bloodborne pathogens on a surface or item, rendering them incapable of transmitting infectious particles, and making them safe for handling, use, or disposal.
- **Engineering Controls**: Controls that isolate or remove pathogens hazards from the workplace.
- **Exposure Incident**: When an employee has contact with blood or other infectious materials. This contact includes specific eye, mouth, or other mucous membranes, non-intact skin, or parenteral contact.
- **HBV**: Hepatitis B Virus
- **HIV**: Human Immunodeficiency Virus
- **Non-Intact Skin**: Skin that has cuts, abrasions, or other openings through which bloodborne pathogens could enter the bloodstream.
- **Occupational Exposure**: Reasonably expected employee contact with or other potentially infectious materials that may result from the performance of an employee's duties.
- **Parenteral**: Puncture wounds to the skin or mucous membranes caused by bites, cuts, abrasions or needle-sticks.
- **Personal Protective Equipment**: Special clothing or equipment worn by an employee for protection of hazards.
- **Sharps**: Any object that can penetrate the skin, including needles, broken glass, metal shards, wires, etc.
- **Source Individual**: An individual, living or dead, whose blood or other infectious materials may be a source of exposure to an employee.
- **Universal Precautions**: The treatment of all human blood and other body fluids as if they were known to be infectious for HIV, HBV, and other bloodborne pathogens.
- **Work Practice Controls**: Controls that reduce the likelihood of exposure by changing the way a task is performed.

HIV and HBV: Understanding the Risks

The Human Immunodeficiency Virus (HIV),
which causes AIDS, attacks the body's immune system, reducing its ability to fight disease.

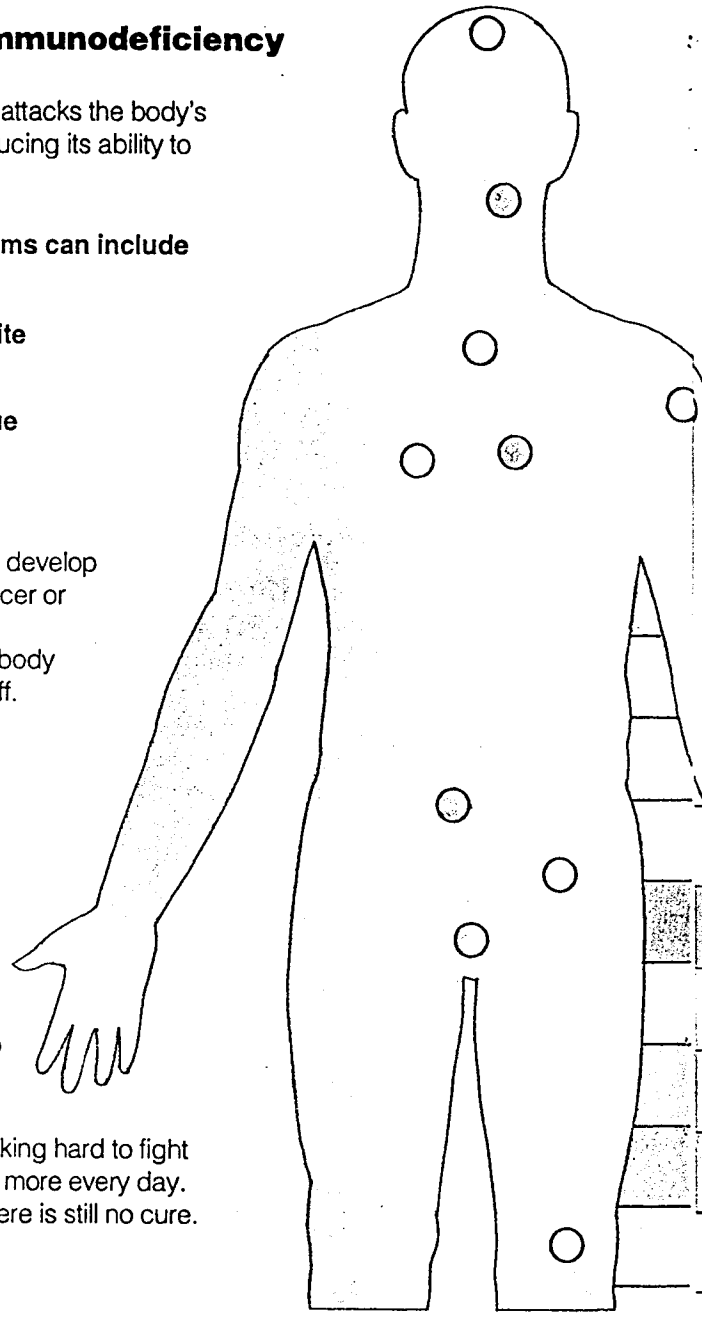
Early AIDS symptoms can include

- **Fever**
- **Loss of appetite**
- **Weight loss**
- **Chronic fatigue**
- **Skin rashes**

Later, the victim may develop unusual types of cancer or infections, including pneumonia, that the body can no longer fight off.

Some people who carry the HIV virus have no symptoms. Others don't develop AIDS for years after they're infected.

Researchers are working hard to fight AIDS, and they learn more every day. But, unfortunately, there is still no cure.



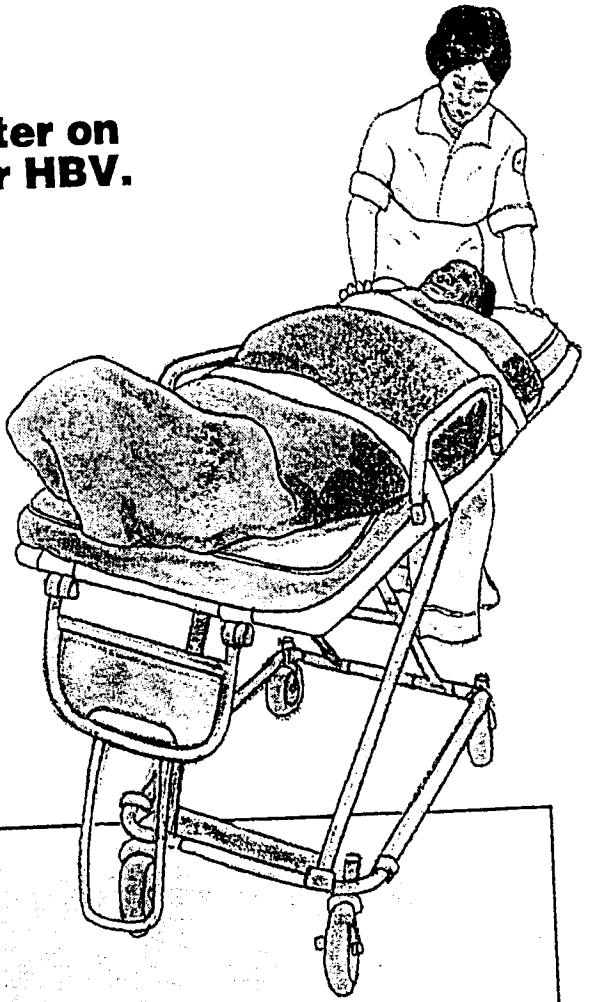
The Hepatitis B Virus (HBV)
infects the liver; it's more common than HIV and a greater risk on the job. Many HBV-infected people have no problems or symptoms. Some, however, develop serious or fatal problems such as cirrhosis, liver cancer, or chronic liver disease.

To Protect Yourself against HIV and HBV,
avoid direct exposure to infectious blood or body fluids—the prime transmitters of HBV and HIV.

Body fluids that can transmit infection are

- blood
- semen
- vaginal secretions
- cerebrospinal fluid
- synovial fluid
- pleural fluid
- pericardial fluid
- peritoneal fluid
- amniotic fluid
- saliva (in dental procedures)
- any unfixed human tissue or organ

Your risk of infection is very small— but very real



Most people you encounter on the job don't carry HIV or HBV.

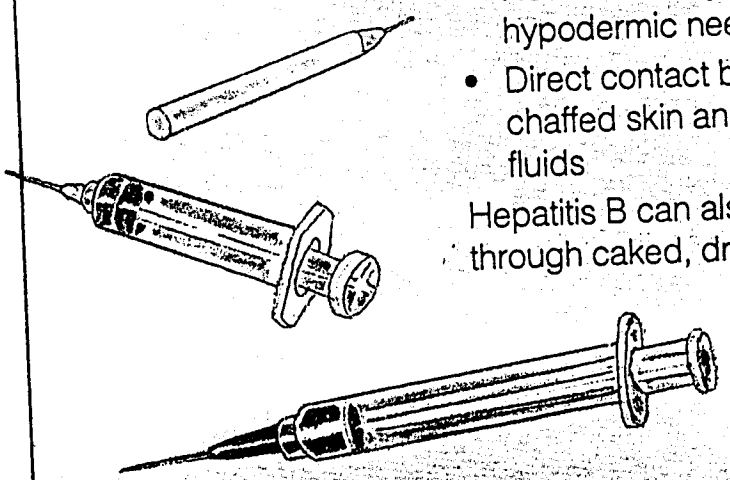
And most encounters with an HIV or HBV carrier pose no risk. AIDS and hepatitis B are **not** transmitted:

- By coughing or sneezing
- By touching an infected person
- By using the same equipment, materials, toilets, showers, or water fountains as an infected person.

The viruses can be transmitted through:

- Sexual contact
- Shared drug needles
- Needlestick injuries from infected hypodermic needles or sharps
- Direct contact between broken or chaffed skin and infected body fluids

Hepatitis B can also be transmitted through caked, dried blood and contaminated surfaces.



HEPATITIS B FACT SHEET

What is Hepatitis B?

Hepatitis B is an infection of the liver caused by the hepatitis B virus (HBV). HBV is one of several types of viruses (infections) that can cause hepatitis. There is a vaccine that will prevent HBV.

Hepatitis B virus infection may occur in two phases. The acute phase occurs just after a person becomes infected, and can last from a few weeks to several months. Some people recover after the acute phase, but others remain infected for the rest of their lives; they go into the chronic phase and become *chronic carriers.* The virus remains in their liver and blood.

Acute hepatitis B usually begins with symptoms such as loss of appetite, extreme tiredness, nausea, vomiting, and stomach pain. Dark urine and jaundice (yellow eyes and skin) are also common, and skin rashes and joint pain can occur. Over half the people who become infected with HBV never become sick, but some may later have long-term liver disease from their HBV infection.

About 300,000 children and adults in the U.S. become infected with the hepatitis B virus each year. More than 10,000 of them need to be hospitalized and 250 die. Most of these deaths are from liver failure.

HBV is passed from one person to another in blood or certain body secretions. This may occur during sexual relations or when sharing things like razors or needles used to inject drugs. A baby can get HBV at birth from its mother.

Those people infected with HBV who become *chronic carriers* can spread the infection to others throughout their lifetime. They can also develop long-term liver disease, such as cirrhosis (which destroys the liver) or liver cancer.

Anyone can get HBV infection. Because of the serious liver disease, cancer, and death resulting from HBV infection, all infants in the United States should be vaccinated against the virus. This will protect them when they become teenagers and adults, when they are most likely to catch hepatitis B.

Diagnosis and Treatment

Blood tests can tell if you are infected with the hepatitis B virus. These tests can also help your physician determine whether you are currently ill with hepatitis B or if you have had it for a long time and are possibly a *chronic carrier.*

Although there is no treatment for the disease, it is important to get sufficient bed rest and follow an adequate diet. Alcohol and medications (unless prescribed by your physician) should be restricted.

Hepatitis B Vaccine

Hepatitis B vaccine is given by injection. Three doses, given on three different dates, are needed for full protection. Exactly when these three doses are given can vary. Infants can get the vaccine at the same time as other baby shots, or during regular visits for well child care. Your doctor or nurse will tell you when the three shots should be given.

The hepatitis B vaccine prevents HBV infection in 85-95% of people who get all three shots. Studies have shown that in these people, protection lasts at least 10 years.

Who Should Get Hepatitis B Vaccine?

Hepatitis B vaccine is recommended for infants born to women who are infected with HBV and infants born to health women (non-carriers of HBV). In addition, adolescents and adults at high risk of getting HBV infection should be vaccinated. This includes:

- People who are exposed to blood or blood products in their work
- Clients and staff of institutions for the developmentally disabled, as well as clients and staff of group homes where any resident is a chronic carrier of HBV
- Hemodialysis patients
- Users of injectable drugs
- People with medical conditions (such as hemophilia) who receive blood products to help their blood clot

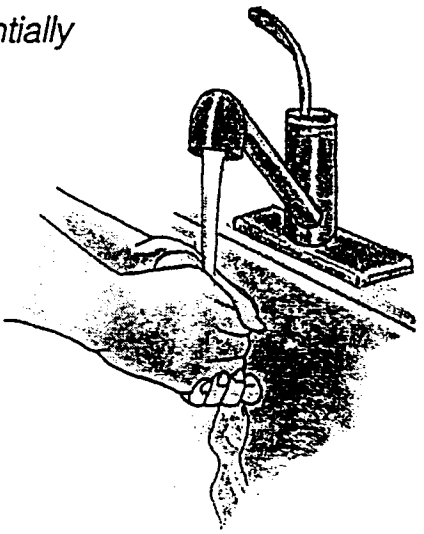
If you are an individual who is at risk for hepatitis B infection, discuss the need for hepatitis B vaccine with your physician. The vaccine is given intramuscularly in the arm (three doses) according to the following schedule:

- First dose: Elected date
- Second dose: 1 month later
- Third dose: 6 months after first dose

Universal Precautions

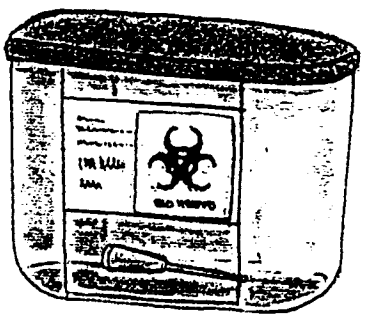
are your best protection against the risks you do face.

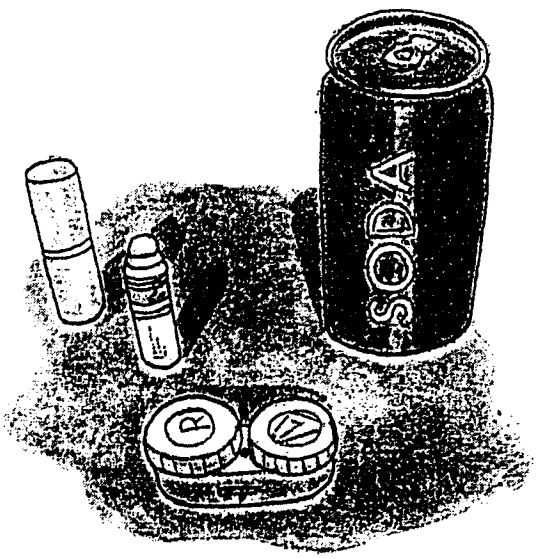
That means you treat all blood and other potentially infectious body fluids as if they are infected.



DO

- Wash hands and exposed skin with soap and water *immediately* after exposure to infectious materials or after taking off gloves or other personal protective equipment.
  - —Use antiseptic cleansers or towelettes only if washing facilities aren't available.
  - —Wash with soap and water as soon as possible.
- Minimize splashing, spraying, or spattering of droplets of blood or other potentially infectious materials.
- Place contaminated sharps in assigned labeled, puncture-resistant, leak-proof containers.





DON'T

- Don't shear or break contaminated needles or other sharps, and don't bend, recap, or remove unless specifically instructed.
- Don't keep food or drink in work areas with exposure potential.
- Don't eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in work areas with exposure potential.
- Don't pipette or suction potentially infectious materials with your mouth.

HCP & PPE *Quiz*

(Hazard Communication Program)
(Personal Protective Equipment)

SCORE_____

NAME_____ **DATE**_____

This quiz includes the following types of questions:
Fill-in the Blank please write in the best answer
Multiple Choice please circle the best answer
True and False please circle true or false

I. Hazard Communication Program (HCP)

1. What is the portion of the safety and health field devoted to preventing occupational employee illness and disease. _____ _____

2. The major objective of the HCP is:
   (a) to ensure that employees are protected from hazards of chemicals in the workplace
   (b) to make OSHA happy
   (c) to ensure that new chemicals are added to the MSDS book
   (d) to ensure that all chemical containers are labeled appropriately

3. Containers of chemicals entering the workplace must be labeled with:
   (a) chemical name
   (b) hazardous warning
   (c) name and address of manufacturer, or responsible party
   (d) all of the above

4. Before using a new chemical, employees must:
   (a) look up the chemical's abstract services registry number in the chemical inventory list
   (b) review the chemical's MSDS for applicable hazards
   (c) wear the appropriate PPE
   (d) both (b) and (c)

5. When a chemical is transferred from its original container, all secondary containers must be labeled with the chemical name, hazardous warning and name of manufacturer. (true) (false)

6. We can receive a chemical only if it has a batch trace-ability number. (true) (false)

II. Material Safety Data Sheets (MSDS)

Please refer to the attached MSDS to answer the following questions.

1. The HMIS rating for flammability is? _____

2. The emergency phone number between 8:00 a.m. and 5:00 p.m. is? (___) _____

3. The chemical/hazardous ingredients are found in which section? _____

4. Under the "health hazard data" section, we find this product can:
   (a) be an eye irritant
   (b) cause skin irritation
   (c) produce headaches if overexposure occurs
   (d) both (a) and (b)

5. The color "blue" on the NFPA warning label represents which category?
   (a) fire hazard
   (b) health hazard
   (c) reactivity
   (d) specific hazard

6. Choose the best first aid procedure for this product if ingested:
   (a) there is no procedure
   (b) induce vomiting and get medical attention
   (c) do not induce vomiting, give victim water to drink and get medical attention
   (d) give conscious victim plenty of water to drink

III. Personal Protective Equipment (PPE)

1. PPE should be worn while working with:
   (a) chemicals and metals
   (b) extreme heat or cold
   (c) sharp objects
   (d) all of the above

2. Safety glasses should be put on:
   (a) soon after your shift begins
   (b) before your shift begins
   (c) before you enter the work area
   (d) when the boss yells at you

3. If PPE is not cleaned properly, or becomes worn out, it may:
   (a) have reduced effectiveness
   (b) not be used properly
   (c) not always be worn
   (d) all of the above

4. What is noise:
   (a) modern music
   (b) unwanted sound
   (c) three politicians in a room
   (d) always deafening

5. It is OK to wear contact lenses with no additional eye protection when eye hazards are present. (true) (false)

6. The two major types of noise in the workplace are continuous and impulse. (true) (false)

7. You don't need to wear hearing protection because it's better to "get used to" the noise. (true) (false)

8. The three major hazards to the eye are physical, chemical and radiant energy. (true) (false)

Bloodborne Pathogens *QUIZ*

(Exposure Control Plan) **SCORE**_____

NAME_____ **DATE**_____

This quiz includes the following types of questions:
Fill-in the Blank please write in the best answer
Multiple Choice please circle the best answer
True and False please circle true or false

I. First Aid Responders

1. List two first aid responders. _____

   _____

2. The first aid responders are responsible for performing first aid as a secondary job function. (true) (false)

II. HIV/HBV

1. The most common way to spread bloodborne pathogens is:
   (a) touching someone who is infected
   (b) sharing a bathroom with an infected person
   (c) sexual transmission and IV drug use
   (d) working with an infected co-worker

2. Bloodborne pathogens are disease-causing viruses and bacteria that are present in human blood and other body fluids. (true) (false)

3. It is easier to be infected with HIV than HBV. (true) (false)

III. Occupational Exposure

1. Universal precautions are:
   (a) never talking to strangers
   (b) not carrying too much cash
   (c) always wearing PPE when there is a chance of being exposed to someone's blood or body fluids
   (d) all of the above

2. An exposure incident is:

(a) going outside in extremely cold weather without a coat
(b) getting too close to a person that is bleeding
(c) a specific eye, mouth, nose, or non-intact skin contact with potentially infectious materials
(d) throwing away your own used bandage in the biohazard bucket

3. All Class A employees who have occupational exposure to blood (first aid responders responsible for administering first aid and cleaning up) have the right to receive/refuse the HBV vaccine, free of charge. If the vaccine is refused, the employee:
   (a) must sign a statement indicating their decision
   (b) increase their chance of becoming infected with bloodborne pathogens
   (c) may still receive the vaccine in the future, free of charge, if they change their mind
   (d) all of the above

4. During post exposure follow-up procedures, the employer must:
   (a) keep records and reports confidential
   (b) provide appropriate testing and consultation with a health care professional
   (c) provide written results of the medical evaluation with 15 days after the evaluation
   (d) all of the above

5. Single-use latex gloves provide complete protection for your hands. (true) (false)

6. The biohazard bucket is located in the warehouse room. (true) (false)

12-99

FIRST AID RESPONDERS

The following employees have agreed to be responsible to perform first aid, as a secondary job function:

Denise Batley	**Hans Kott**
Brad Dearth	**Regina Nutter**
Ken Fleeman	**Russ Pratt**
Amanda Frayser	**Venicia Reynolds**

The first aid responders are trained and certified in standard first-aid and CPR by the American Red Cross Association. Copies of their certification cards are maintained in the safety training records.