

Bloodborne Pathogens



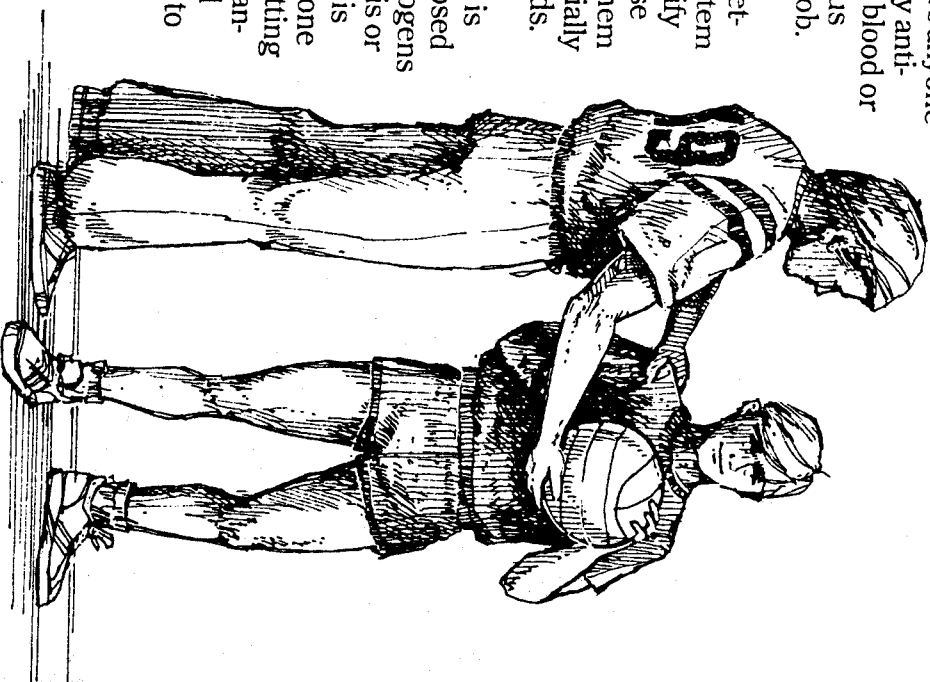
Introduction

As sure as the sun comes up every day, children end up with scraped knees, cuts and bruises. Students of all ages hurt themselves on the playground, in the classroom and on the playing field. As a professional in our educational system, you need to be aware of the potential danger of bloodborne pathogens.

The Occupational Safety and Health Administration (OSHA) has issued a standard that can protect you from bloodborne pathogens. OSHA has created a standard that provides you and your school system a method of working together to substantially reduce the risk of contracting a bloodborne disease on the job. The standard covers anyone who can reasonably anticipate contact with blood or potentially infectious body fluids on the job.

In an educational setting, the school system is required to identify the personnel whose job duties expose them to blood and potentially infectious body fluids.

Not every educator is occupationally exposed to bloodborne pathogens while performing his or her job. However, it is important for everyone in an educational setting to understand the dangers of infection and the safe procedures to minimize risk.



Bloodborne Diseases

Unfortunately, students are not immune to bloodborne diseases. You are in as much danger of infection from the students you work with as from any other group in society.

There are many diseases carried by blood. The two most common are the hepatitis B virus (HBV) and the human immunodeficiency virus (HIV).

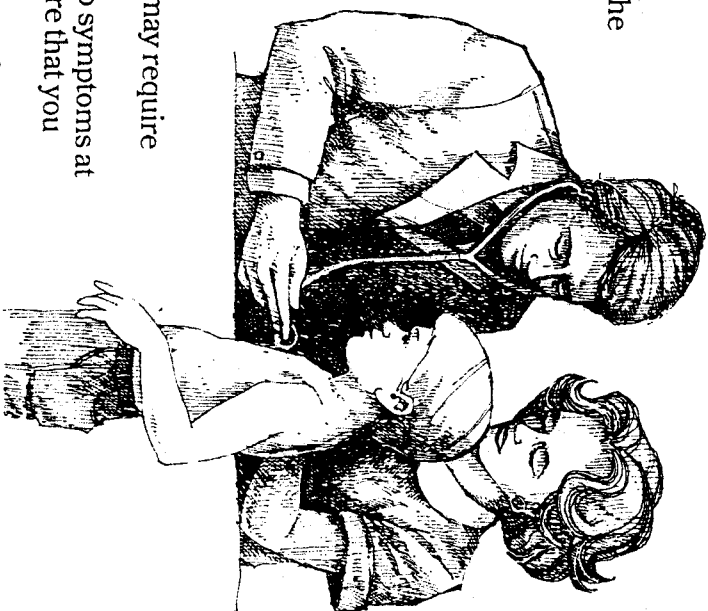
HBV

Hepatitis means "inflammation of the liver." Hepatitis B virus (HBV) is the major infectious bloodborne hazard you face on the job.

If you become infected with HBV:

- You may suffer from flu-like symptoms becoming so severe that you may require hospitalization.
- You may have no symptoms at all, being unaware that you are infected.
- Your blood, saliva and other body fluids may be infected.
- You may spread the virus to sexual partners, family members and even unborn infants.

Many people are unaware that they've been infected with HBV. However, HBV may severely damage your liver, leading to cirrhosis and almost certain death.



HIV

The human immunodeficiency virus attacks the body's immune system, causing the disease known as AIDS. Currently there is no vaccine to prevent infection. A person infected with HIV:

- May carry the virus without developing symptoms for several years
- May suffer from flu-like symptoms, fever, diarrhea and fatigue
- Will eventually develop AIDS
- May develop AIDS-related illnesses including neurological problems, cancer and other opportunistic infections.

HIV is transmitted primarily through sexual contact, but also may be transmitted through contact with blood and some body fluids. HIV is not transmitted by touching or working around people who carry the disease.

Workplace Transmission

As different as the outcomes of bloodborne diseases may be, the way they are transmitted in the workplace is essentially the same. HBV, HIV and other pathogens may be present in blood and other materials, such as:

- Semen and vaginal secretions
- Torn or loose skin
- Unfixed tissue or organs.

Bloodborne pathogens can cause infection by entering your body in a variety of ways, including:

- Open cuts
- Nicks
- Skin abrasions
- Dermatitis
- Acne
- The mucous membranes of your mouth, eyes or nose.

Special-education employees should take extra caution while working with severely disabled children. Some disabled children:

- May be more vulnerable to injury
- May have special medical needs
- Are more dependent on adults for personal care.

Accidental Injury

You can become infected by accidentally injuring yourself with a sharp object that is contaminated. Sharp objects may be:

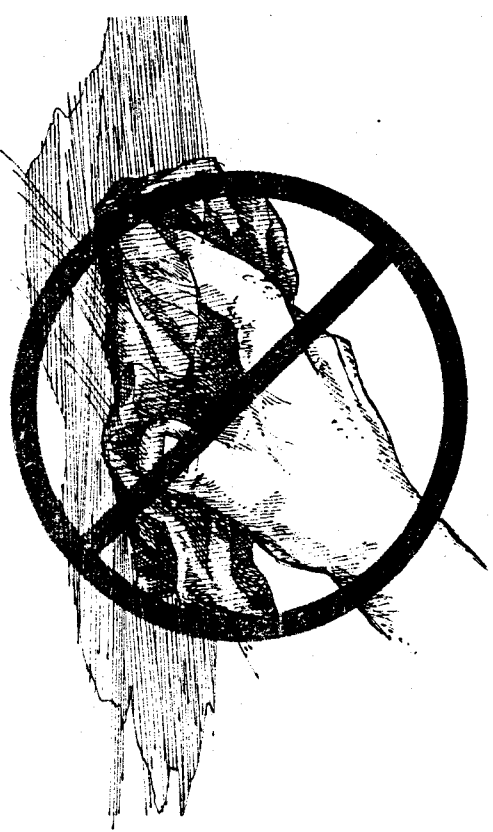
- Broken glass
- Sharp metal
- Needles
- Knives
- Exposed ends of orthodontic wires.

Indirect Transmission

Bloodborne diseases can also be transmitted indirectly. This happens when you touch an object or surface contaminated with blood or other infectious materials and transfer the infection to you:

- Mouth
- Eyes
- Nose
- Open skin.

Contaminated surfaces are a major cause of the spread of hepatitis. HBV can survive on environmental surfaces dried and at room temperatures for at least one week.



Exposure Control Plan

OSHA's Bloodborne Pathogens Standard requires your school system to create and make available to every employee an Exposure Control Plan. The ECP will:

- Identify the personnel covered by the standard
- Analyze the potential hazards of each job description
- Determine what measures will be taken to reduce the risk of exposure to bloodborne pathogens on the job.

The keys to preventing infection are:

- Understanding the dangers you face
- Knowing how to protect yourself.

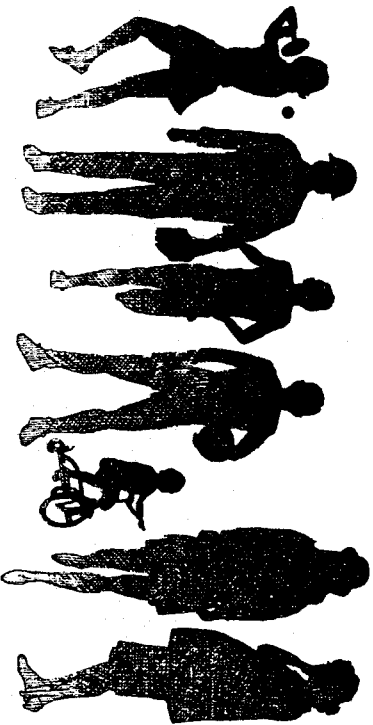


Universal Precautions

Most approaches to infection control are based on a concept called Universal Precautions. It requires that you consider every person, all blood and most body fluids to be a potential carrier of infectious disease.

There are many people who carry infectious disease having no visible symptoms and no knowledge of their condition. HIV and HBV infect people from:

- All age groups
- Every socioeconomic class
- Every state and territory
- Rural areas and inner cities.



Using Universal Precautions resolves this uncertainty by requiring you to treat all human blood and body fluids as if they were known to be infected with HIV, HBV or other bloodborne pathogens. You can't identify every person who may transmit infection. Yet you can't afford not to take every precaution, since it takes just one exposure to become infected.

Reducing Your Risk

Five major tactics reduce your risk of exposure to bloodborne pathogens on the job:

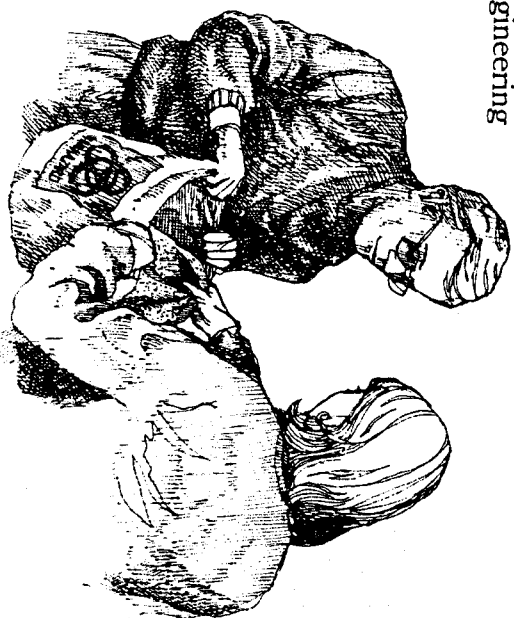
- Engineering controls
- Work practice controls
- Personal protective equipment
- Housekeeping
- Hepatitis B vaccine.

Alone, none of these approaches is 100 percent effective. They must be used together, like five barriers against infection.

Engineering Controls

Your school system will provide physical or mechanical systems that eliminate hazards at their source. Their effectiveness usually depends on you. Make sure you know what engineering controls are available at your school and use them.

For example, appropriate containers must be used for disposing of regulated waste and towels soaked with blood or body fluids.



Work Practice Controls

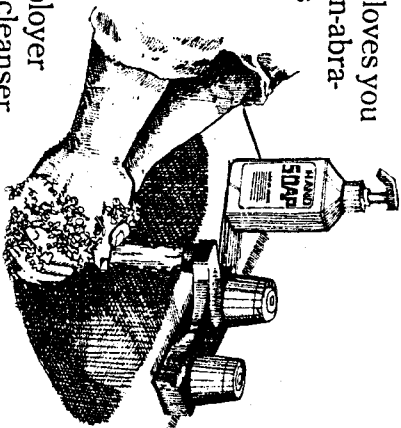
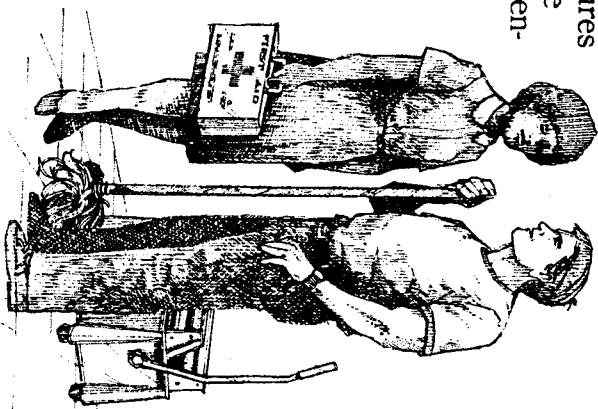
Work practices are specific procedures you must follow on the job to reduce your exposure to blood or other potentially infectious materials. The school system will identify specific personnel to deal with bloodborne hazards on a regular basis. These employees may include:

- A person trained in bloodborne pathogens safety to administer first-aid treatment to students.
- A custodian or trained person responsible for cleaning up all body fluid spills.

Handwashing

One of the most effective work practice controls is also one of the most basic — wash your hands. If infectious material gets on your hands, the sooner you wash it off, the less chance you have of becoming infected.

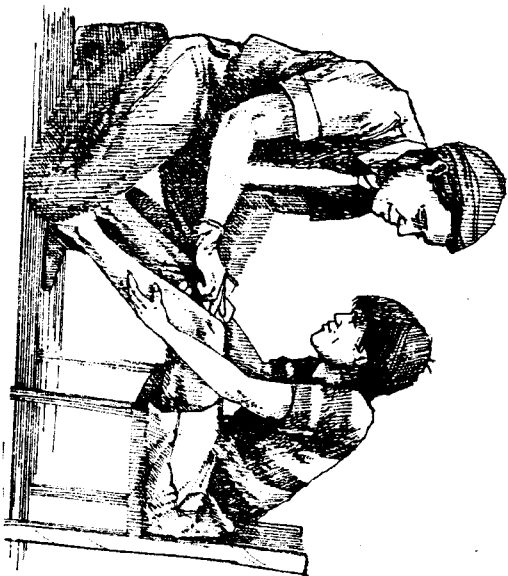
- Handwashing keeps you from transferring contamination from your hands to other areas of your body or other surfaces you may contact later.
- Every time you remove your gloves you must wash your hands with non-abrasive soap and running water as soon as you possibly can.
- If skin or mucous membranes come in direct contact with blood, wash or flush the area with water as soon as possible.
- Where handwashing facilities are not available, such as a school bus, your employer will provide an antiseptic hand cleanser or antiseptic towelettes. Use these as a temporary measure only. You must still wash your hands with soap and running water as soon as you can.



Personal Hygiene

Here are some controls based on personal hygiene that you must also follow.

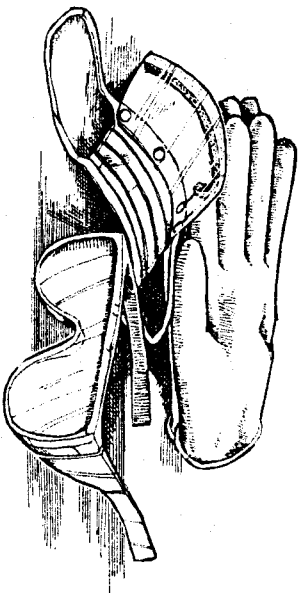
- Minimize splashing, spraying, spattering and generation of droplets when attending to an injured student or co-worker, especially where blood is involved.
- Do not eat, drink, smoke, apply cosmetics or lip balms or handle contact lenses where there is a reasonable likelihood of occupational exposure.
- Don't keep food and drink in refrigerators, freezers, shelves, cabinets or on countertops or benches where blood or other potentially infectious materials are present.



Personal Protective Equipment

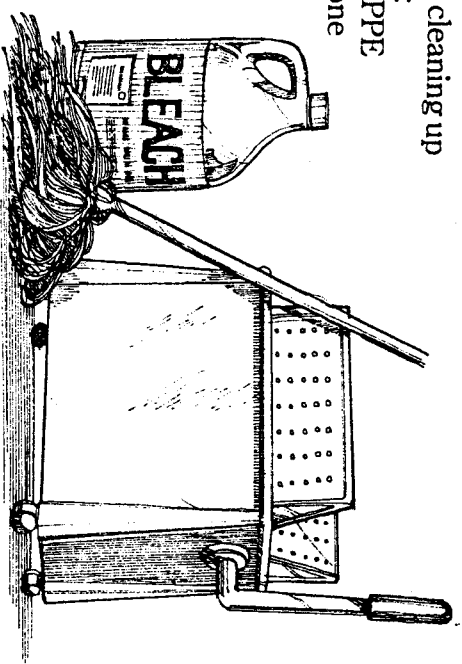
The type of protective equipment appropriate for your job, varies with the task and the degree of exposure you anticipate. Equipment that protects you from contact with blood or other potentially infectious materials may include:

- Gloves
- Gowns
- Aprons
- Lab coats
- Face shields
- Protective eye wear
- Masks
- Mouthpieces
- Resuscitation bags or other ventilation devices.



If you are faced with cleaning up blood or body fluids:

- Wear appropriate PPE
- Use a solution of one part bleach to ten parts water
- Disinfect mops and cleaning tools after the job is done.

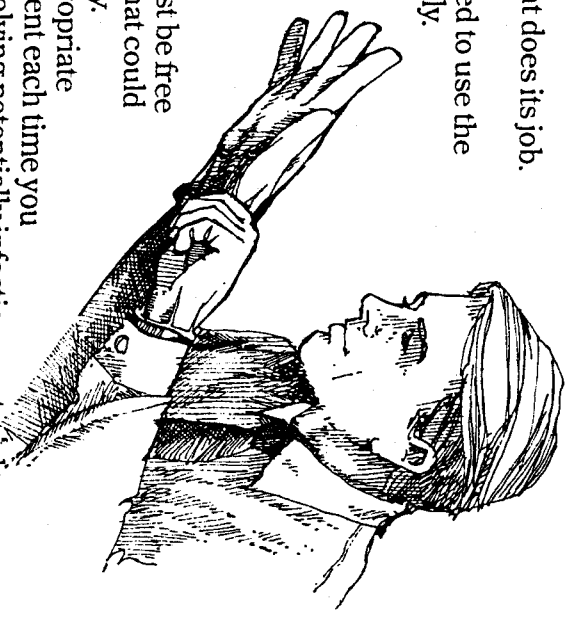


Your school system will issue personal protective equipment or make it readily accessible in your work area. In addition, your school system will maintain, replace or dispose of any protective equipment at no cost to you.

General Rules on PPE

You and your employer must work together to insure that your protective equipment does its job.

- You must be trained to use the equipment properly.
- The equipment must be appropriate for the task.
- The equipment must fit properly, especially gloves.
- All equipment must be free of physical flaws that could compromise safety.
- You must use appropriate protective equipment each time you perform a task involving potentially infectious materials.



If, when wearing equipment, it becomes penetrated by blood or other infectious materials, remove it as soon as possible.

Resuscitation Devices

The mechanical emergency respiratory devices and pocket masks are designed to isolate you from contact with a victim's saliva and body fluids.

Avoid using unprotected mouth-to-mouth resuscitation. Students or co-workers may have blood or other infectious materials in their mouth and may expel them during resuscitation.

Gloves

Gloves are the most widely used and basic form of personal protective equipment. You **must** wear gloves when it is reasonably anticipated that you may have hand contact with:

- Blood
- Any potentially infectious materials
- Mucous membranes or non-intact skin.

Gloves may be made of latex or vinyl when used for first-aid procedures. Heavy duty utility gloves should be used for housekeeping. If you are allergic to latex or vinyl gloves, there are hypo-allergenic gloves, glove liners, powderless gloves or another alternatives that your school system can make available.

Utility gloves may be decontaminated or reused if they are not cracked, peeling, torn or punctured. They must otherwise offer a barrier of protection.

Since gloves can be torn or punctured, cover any hand cuts with bandages before putting on gloves.

Replace disposable single-use gloves as soon as possible if they are:

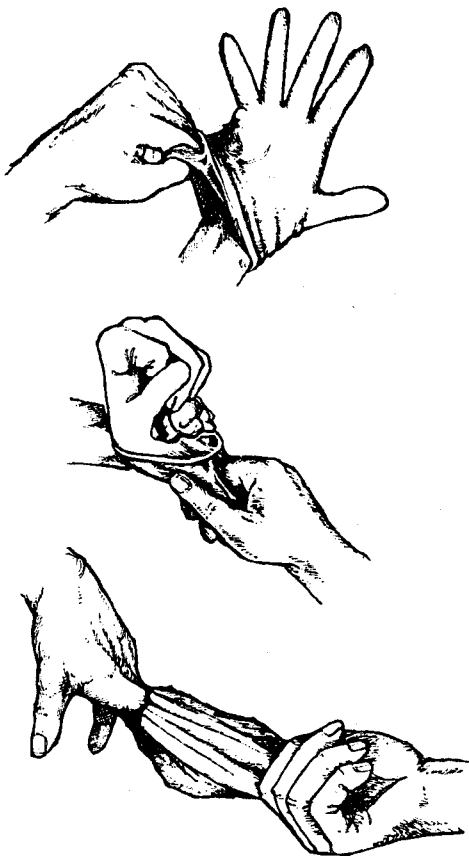
- Torn
- Punctured
- Contaminated
- No longer offer effective barrier protection.

Never wash or decontaminate this type of glove for reuse.

Glove Removal

Gloves should be removed when they become contaminated or damaged, or immediately after finishing the task. You must follow a safe procedure for glove removal, being careful that no pathogens from the soiled gloves contact your hands.

- With both hands gloved, peel one glove off from top to bottom and hold it in the gloved hand.
- With the exposed hand, peel the second glove from the inside, tucking the first glove inside the second.
- Dispose of the entire bundle promptly.
- Never touch the outside of the glove with bare skin.
- Every time you remove your gloves wash your hands with soap and running water as soon as you possibly can.



Good Housekeeping

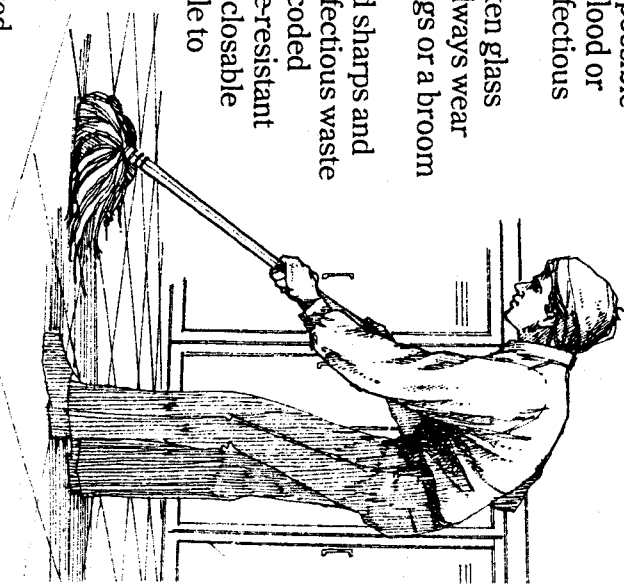
Good housekeeping protects you and the students. It should be everyone's responsibility.

Your facility's Exposure Control Plan will list specific methods and regular schedules for cleaning environmental surfaces possibly contaminated with infectious materials.

General Housekeeping Rules

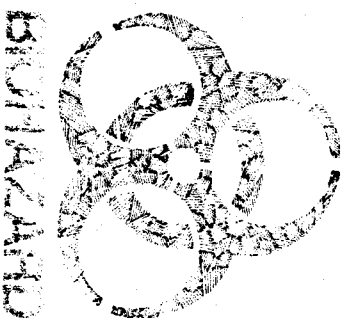
Here are some general rules:

- All equipment and environmental working surfaces must be cleaned and decontaminated with an appropriate disinfectant or a 10 percent bleach to water solution as soon as possible after contact with blood or other potentially infectious materials.
- Never pick up broken glass with bare hands. Always wear gloves, and use tongs or a broom and dustpan.
- Place contaminated sharps and other potentially infectious waste in labeled or color-coded leak-proof puncture-resistant containers that are closable and easily accessible to those who use them. Infectious waste containers should not be allowed to overfill.
- Handle contaminated laundry as little as possible and with minimal agitation. Place soiled laundry in labeled or color-coded leak-proof bags or containers without sorting or rinsing.
- Bins, pails, cans and similar receptacles that are reused and have a reasonable likelihood for becoming contaminated with blood or other infectious materials shall be inspected and decontaminated on a regularly scheduled basis.



Read the Label

Watch for fluorescent orange-red labels, red bags and containers with a biohazard symbol. This symbol will warn you when the contents of containers used for waste, storage or shipping contain blood or other potentially infectious materials.



HBV Vaccination

One of the best ways to protect yourself from hepatitis B infection is to roll up your sleeve for a vaccination. If you are exposed to blood or other infectious materials as part of your job, the school system will make the hepatitis B vaccination available at no cost.

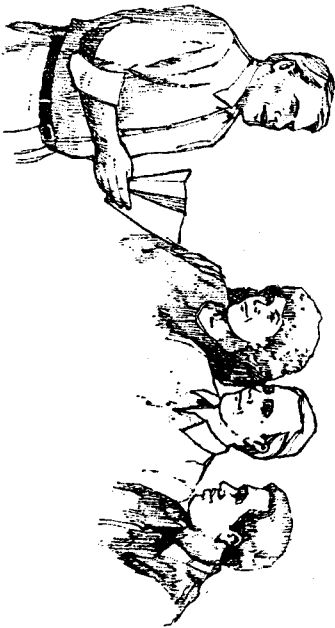
Administration of the vaccine should begin within 24 hours of exposure. It will be completed by three injections over a six-month period. Today's vaccines are safe and effective.

Playing It Safe

Even when you play it safe, accidents may sometimes happen. If you are exposed, immediately report the incident to your supervisor. If you consent, your employer will provide you with:

- A confidential medical evaluation
- Blood tests
- Post-exposure preventive treatment if available
- Follow-up counseling.

Before you assume a job with occupational exposure, your school system will provide you with a free training program during working hours and annually thereafter.



Summary

Protecting yourself from bloodborne diseases on the job requires knowing the facts and taking sensible precautions. As a professional educator, backed by OSHA's Bloodborne Pathogens Standard and your school's Exposure Control Plan, you can confidently protect yourself from bloodborne infection and safely give our children their most valuable asset, an education.