

NEVADA COUNTY SUPERINTENDENT OF SCHOOLS OFFICE BLOODBORNE PATHOGENS AWARENESS

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).

Hepatitis B Virus (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.

Human Immunodeficiency Virus (HIV):

The Human Immunodeficiency Virus (HIV) 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 days.
- * 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 your:

- * 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.

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.

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.

Hand washing

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.

- * Hand washing 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 nonabrasive 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 hand washing 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 generations of droplets when attending to an injured student or co-worker.
- * 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 benchtops where blood or other potentially infectious materials are present.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

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 alternative 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.

Here are some general rules:

- * All equipment and environmental working surfaces must be cleaned and decontaminated with an appropriate disinfectant or a 10 percent 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.