

# SMART WORK PRACTICES For Preventing Bloodborne Pathogen Disease

Germs normally spread from person to person through a common series of events. To understand the spread of a disease, we need to review the Chain of Infection. This is a visual representation of the events that must happen for an infection-causing microbe to move to a new host (and cause an infection). Infection occurs when the chain remains unbroken.

The chain of infection is made up of six different links:

- 1. Infectious agent is the pathogen that causes a disease.
- 2. **Reservoir** refers to the environment where the pathogen lives, e.g., people, animals, insects, medical equipment, water, and soil.
- 3. **Portal of exit** is the way the pathogen leaves the host, e.g., sneezing, coughing, and bleeding is how an agent can be passed on through direct or indirect contact.
- 4. **Means of transmission is** the way the infectious agent can be passed on: through direct or indirect contact, ingestion, or inhalation.
- 5. **Portal of entry** is the way the infectious agent can enter a new host. For example, broken skin, the respiratory tract, mucous membrane and catheters and tubes.
- 6. **Susceptible host** is any person who is at risk of becoming infected by a disease. A person with a strong immune system may have all other risks of infection and never become infected. A vulnerable host has a much higher risk of contracting a disease, for example, the very young and very old. Others with reduced or compromised immune systems have higher risks of infection. e.g., those with poor nutrition, stress or a disease that affects the immune system.

Each link has a unique role in **the chain**, and each one can be interrupted or broken through various means.

## **Exposure Risks**

Some Department of Education employees may have exposure to blood and body fluids through the performance of their duties. Exposure may occur through:

- Providing medical and direct student care.
- Providing First Aid and Cardio-pulmonary resuscitation (CPR).
- Providing direct bathroom care of students.

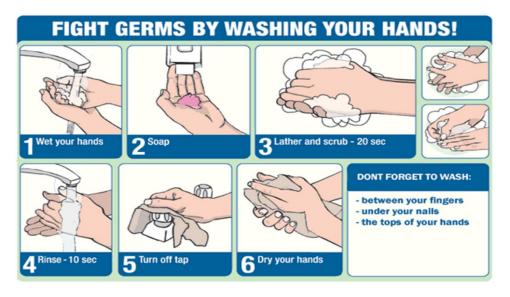


- Cleaning up blood and decontaminating surfaces such as adaptive equipment and changing tables.
- Handling contaminated sharp objects.
- Receiving needle sticks with contaminated needles or syringes.
- Sustaining physical injuries such as student bites.
- Having uncovered open wounds. This includes cuts, nicks, burns, abrasions, and acne sores. Openings in the skin are potential viral entry points.

## **Handwashing**

Every day on our way to work or at work, people touch multiple objects that are laden with germs such as money, public transportation, surfaces, doors, doorknobs, elevator buttons, pens, pencils, and books that are touched by thousands of people. This is the most common way for germs to be transferred from person to person.

Hand washing has been proven to be the single most effective way to reduce the spread of infectious disease. Handwashing keeps you from transferring contamination from your hands to other areas of your body, or to other surfaces you may touch.



## **Personal Protective Equipment (PPE)**

Personal protective equipment minimizes occupational exposure. It is often called the "last line of defense". When selected and worn properly, it prevents blood and body fluids from reaching an employee's clothes, skin, mouth, eyes, or other mucus membranes.



The type of protective equipment appropriate for the job varies with the task and degree of exposure anticipated. For DOE employees, these include:

- a. Nurses and District 75 employee: disposable gloves, sleeves, aprons, and gowns
- b. Other school staff— disposable gloves.

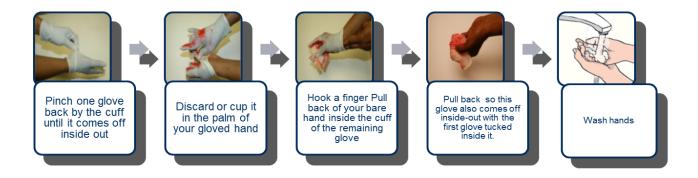
#### **Policy on PPE**

Personal Protective Equipment is provided to employees **free of charge** and is easily accessible. Ask your Site Employee Safety Administrator (SESA), principal, or administrator for disposable gloves.

- Cover Open Wounds Before you put on disposable gloves use a band aid to cover any
  cuts or abrasions on your hands, then select the correct type and size to ensure a good
  fit. If the gloves become punctured or torn, replace them with fresh gloves.
- Remove the gloves before leaving the work area to minimize contaminating other surfaces.
- Avoid touching surfaces with contaminated gloves to protect yourself, others, and environmental surfaces. These include light switches, door handles and cabinet knobs.
   These surfaces can become contaminated if touched with soiled gloves.
- If gloves become torn or heavily soiled and additional care tasks must be performed, change to fresh gloves before starting the next task.
- Change gloves before providing care to another student.
- Dispose of contaminated gloves in the nearest appropriate receptacle.
- Wash your hands with soap and water after removing gloves.
- Patient care gloves should never be washed and reused. Washing gloves does not
  necessarily make them safe for reuse; it may not be possible to eliminate all
  microorganisms and washing can make the gloves more prone to tearing or leaking.



## **Removing Contaminated Gloves**



#### **Personal Touch Contamination**

Employees must make every effort to eliminate personal touch contamination to protect themselves, students, and co-workers. Examples include adjusting your eyeglasses, rubbing your nose, or touching your face or body with gloves that have been in contact with another's body fluid. Avoid touching the outside of the gloves with bare skin.

## **Disinfecting Contaminated Surfaces**

- 1. Put on disposable gloves.
- 2. Wipe up the blood spill as much as possible with paper towels or an absorbent to avoid spreading and splashing.
- 3. Use an EPA approved disinfectant and follow the manufacturer's instructions on the label.
- 4. Alternatively, make a bleach solution\* of 1 part bleach and 9 parts water. Gently pour the solution on contaminated area; work from the edge to the center to avoid the contamination from spreading out.
- 5. Contact time should be between 10 15 minutes.
- 6. Wipe up remaining solution.
- 7. Disinfect all mops and cleaning tools using the solution.
- 8. Dispose of all contaminated materials appropriately; Medical waste containers are found in the Nurse's and Custodian's offices.
- 9. Wash your hands immediately with soap and water after clean-up is complete.



## **Disinfecting Solution**

1 part bleach + 9 parts water

## MAKE A FRESH SOLUTION ONLY AS NEEDED

#### **Medical Waste**

Medical waste containers such as red bags and puncture proof containers are used to remove the hazard from the workplace and must be labeled with the biohazard symbol. These are in the Custodian Engineer's office and in the Medica/Nurses' Room. Medical waste removals are coordinated by the School Custodian.



Red bags are used for materials that:

- 1. Will release liquid or semi-liquid bloody fluids if compressed, and
- 2. Items caked with dried blood or OPIM which will release when handled.
- 3. Bloody gloves



All contaminated sharp items must be placed in a leak-proof, puncture resistant sharps container.