

Standard precautions (SP) are intended to prevent transmission of infection, as well as decrease the risk of exposure for employees and students. SP incorporates the major features of universal precautions (designed to reduce the risk of transmission of blood borne pathogens) and body substance isolation (designed to reduce the risk of transmission of pathogens from moist body substances), regardless of the presumed infection status of the individual. It is not currently possible to identify all infected individuals, thus precautions must be used with every individual. SP pertain to:

- Blood (e.g. lacerations, nose bleeds, abrasions, menstrual flow),
- all body fluids, secretions, and excretions except sweat, regardless of whether they contain visible blood (e.g. urine, emesis, feces),
- non-intact skin (e.g. cuts, scrapes, dermatitis), and
- mucous membranes (e.g. oral/nasal secretions).

The single most important step in preventing exposure to and transmission of any infection is anticipating potential contact with infectious materials in routine as well as emergency situations. Based on the type of possible contact, employees and students should be prepared to use the appropriate precautions prior to contact. Diligent and proper hand washing, respiratory hygiene/cough etiquette, the use of barriers, appropriate disposal of waste products and needles, proper decontamination of spills, and appropriate disinfection and cleaning of all equipment or materials likely to have been contaminated with infectious material are essential techniques of infection control. All individuals should respond to situations practicing SP. Using common sense in the application of these measures will enhance protection of employees and students.

Hand Hygiene

Proper hand washing is crucial to preventing the spread of infection. All large or textured jewelry, on the hands or wrists should be removed prior to washing and kept off until completion of the procedure and the hands are rewashed. Use of running water, lathering with soap and using friction to clean all hand surfaces for at least 20 seconds is a key factor. Rinse well with warm running water and dry hands with paper towels. In the event handwashing facilities are not immediately available, waterless alcohol based hand sanitizers with at least 60% alcohol content are an acceptable method of hand hygiene. Hand and/or skin should be washed with soap and water as soon as possible. Occasionally there will be times when unforeseen skin contact will happen and gloves are not immediately available. In this event, hands and all other affected skin areas must be scrubbed with copious amounts of soap containing antiviral/antibacterial agents and running water for 10 minutes at once or as soon as possible after contact. If exposure involves mucous membranes, the affected areas should be flushed with water or eye irrigation solution for 15 minutes or until all traces of the body fluid has been removed. The affected and surrounding areas should be

inspected closely for residue. All body fluid exposures should be reported to the immediate supervisor. If there is an obvious or suspected break in the skin or if the exposure was to a mucous membrane, the individual exposed should be referred for a medical evaluation.

- Hands should be washed before physical contact with individuals and after contact is completed.
- Hands should be washed after contact with any used equipment.
- If hands (or other skin) come into contact with blood or other body fluids, hands should be washed immediately before touching anything else.
- Hands should be washed after the gloves are removed.

Respiratory Hygiene/ Cough Etiquette

The following measures to contain respiratory secretions are recommended for all individuals with signs and symptoms of a respiratory infection.

- Cover the nose/mouth when coughing or sneezing.
- Use tissues to contain respiratory secretions and dispose of them in the nearest waste receptacle after use.
- Perform hand hygiene (e.g., hand washing with soap and water or at least 60% alcohol-based hand rub) after having contact with respiratory secretions and contaminated objects/materials.

When space and chair availability permit, instruct coughing persons to sit at least three feet away from others in common areas and classrooms. Some facilities may find it logistically easier to institute this recommendation than others. If coughing cannot be adequately controlled, it is advised that the individual be sent home and seek medical treatment.

Educational reminders and alerts should be provided to students and staff when seeking medical evaluation from the school nurse to inform the nurse of symptoms of a respiratory illness when they are first seen by the nurse. Healthcare personnel in the district are advised to observe Droplet Precautions (i.e., wearing a surgical or procedure mask for close contact), in addition to SP, when examining a student/staff member with symptoms of a respiratory infection, particularly if fever is present. These precautions should be maintained until it is determined that the cause of symptoms is not an infectious agent that requires Droplet Precautions.

Personal Hygiene and Eating in the School Setting

In areas where a reasonable likelihood of occupational exposure exists, work practice controls should include restricting eating, drinking, applying cosmetics or lip balm, and when handling contact lenses. School employees should refrain from taking part in these activities in health rooms, first aid stations, or in any area where there are

contaminated items or risk of exposure to potential blood borne pathogens. Food and drink should not be kept in refrigerators, freezers, shelves and cabinets, or on countertops or bench tops where blood or other potentially infectious materials are present. Employees should wash their hands before and after work, as well as before and after meals, after bathroom use, or whenever necessary.

Barriers/ Personal Protective Equipment

Using personal protective equipment (PPE) in schools adds another layer of insulation between being protected and being at risk for exposure to blood borne pathogens. The kind of PPE appropriate for the assignment can vary with the task performed and the exposure expected. Barriers and PPE anticipated to be used at school include disposable and utility gloves, surgical or procedure face masks, gowns, facemasks, eye goggles, absorbent materials, and resuscitation devices. Under the blood borne pathogen standard, the school district is required to provide, at no cost to the employee, personal protective equipment. The PPE must be accessible and provided in the correct size. If the employee notes an allergic sensitivity to latex or powder, hypoallergenic gloves or other similar alternative must be made available. The school district is also responsible for maintaining the personal protective equipment by means such as cleaning, laundering, repairing or replacing as needed for ensuring that the PPE is used properly. Suitable personal protective clothing is to be worn whenever the risk of occupational exposure to body fluids or other potentially infectious materials is anticipated. There are three levels of protection endorsed for school employees to reduce the occupational exposure to body fluids or other potentially infectious materials. These are intended to be the minimum requirements for infectious materials. Because the risk of exposure varies for each individual or task, each situation should be carefully individualized to determine the best level to be utilized. Employees should follow the “Pyramid of Protection” described below:

Level I: Disposable gloves should be worn whenever it can be reasonably expected that the exposure to blood or other potentially infectious materials, mucous membranes, non-intact skin, or contaminated surfaces is imminent. When putting on gloves, they should be visually inspected for absence of holes, tears, or defects. Single use gloves cannot be washed or decontaminated and should be replaced as soon as practical when they become contaminated or as soon as feasible if they are torn, punctured, or their ability to function as a barrier is compromised. Gloves should be removed without touching the outside and disposed of after each use. Hand hygiene should be performed immediately following glove removal and gloves should be discarded after use in an appropriate receptacle. Utility gloves should be worn when handling contaminated materials or cleaning contaminated surfaces or tools. Utility gloves can be decontaminated for reuse in the event the entirety of the glove is not compromised. They are to be discarded if they are cracked, peeled, torn, or punctured, they exhibit other signs of deterioration, or their ability as a barrier is compromised.

Assignments that may require Level I protection of single-use gloves:

- Minor wound care or dressing changes
- Blood glucose monitoring
- Injections
- Topical medications
- Catheterization
- Diapering/toileting
- Emesis cleanup
- Tooth brushing/oral care
- Changing ostomy bags
- Cleaning nose/mouth secretions
- Feeding (oral or gastrostomy)
- Suctioning
- Changing menstrual pads
- Oral temperatures

Assignments that may require Level I protection of utility gloves:

- Cleaning body fluid spills
- Emptying trash cans
- Handling sharps/containers
- Handling discarded contaminated materials/regulated waste
- Cleaning/sweeping up contaminated broken glass/sharps
- Handling contaminated laundry

Level II: Repellent gowns and gloves should be worn when there is an expectation of exposure to body fluids or other potentially infectious materials to clothing and skin from splashes, sprays, and splatters. Situations may vary and the clothing may change with the nature of the task. Assignments that may require Level II protection:

- Changing pads for uncooperative mentally impaired student
- Diapering/toileting with gross contamination
- Wound care for a combative child
- Sorting or bagging contaminated laundry
- Disposing of regulated waste with gross contamination
- Diapering, toileting, feeding, suctioning, and general, and cleaning of students with little or no impulse control

Level III: There should not be many situations where a level III protection would be warranted in the school setting. However, there may be incidents in which body fluids or potentially infectious materials could come in contact with the face, nose, or eyes. In these instances, maximum protection should be utilized by donning face/eye protection as well as fluid repellent gown and utility gloves. Assignments that may require Level III protection:

- Feeding a child with a history of spitting, or forceful vomiting, or coughing,
- Suctioning tracheotomy with history of forceful coughing or copious secretions, and
- Assisting with severe injury and wound with spurting blood.

Resuscitation masks (CPR): Pocket masks and mechanical emergency respiratory devices are used as barrier from saliva, vomitus, or other potentially infectious body fluids when giving CPR. They should be easily accessible for emergency situations. It is imperative that the pocket masks and other respiratory devices contain a one-way valve to prevent possible exposure to body fluids to either rescuer or victim. Non-disposable masks should be properly cleaned after an incident for reuse by:

- Putting on gloves,
- Soaking mask in mild soap and warm water, then scrubbing vigorously, rinsing and air drying, and
- Cleansing with an EPA registered disinfectant.

There are also single-use disposable CPR masks available. These devices have a one-way valve and are easy to access as they are packaged in a key chain case or nylon pouch. They are available through the school nurse and are provided to all employees who are CPR trained in the district.

Disposal of Waste

All used or potentially contaminated supplies (including gloves and other barriers) except syringes, needles and other sharp instruments, should be placed in a plastic bag which is sealed. The waste can then be thrown in the garbage. Needles, syringes and other sharp objects should be placed in an approved biohazard puncture resistant container, immediately after use and disposed of as regulated waste. Bodily waste, such as urine, vomitus or feces should be disposed of in the toilet. A band-aid, towel, sanitary napkin or other absorbed waste should be discarded into waste containers lined with plastic bags. Biohazard bags will be located in the nurse's office or through the custodial department. These should be used when blood or body fluids are liquid, semi-liquid, caked with dried blood or secretions, not absorbed into materials, or capable of releasing the substance if compressed and special disposal of such regulated waste is required. It is anticipated schools would encounter the need for this only in the case of a severe accident.

Housekeeping Guidelines

Everyone is responsible for a clean and sanitary school environment, since it protects all of the staff and the students. Keeping the work areas clean reduces the employee's risk of exposure to bloodborne pathogens. The custodial staff has the principal task of maintaining a sanitary climate and they have all necessary equipment needed for proper clean up and disinfection. The following are guidelines for handling body fluid spills (e.g. blood, urine secretions, vomit, saliva, feces, pus, semen, and vaginal secretions).

Cleaning body spills on washable surfaces:

- Wear disposable or utility gloves, and
- Clean and disinfect all hard, soiled, washable surfaces immediately, cleaning with soap and water and removing contaminants before applying disinfectant

(For small spills)

- Use paper towels or tissues to wipe up soiled areas
- After soil is removed, use clean paper towels, soap and water to clean area
- Dispose of paper towels in a plastic bag
- Disinfect area

(For large spills)

- Apply commercial sanitary absorbent agent on soiled area
- After soil is absorbed, sweep all material into a plastic bag, taking care not to create any dust emissions
- Disinfect area with clean mop
- Disinfect mop and bucket

Cleaning body spills on carpet/rugs:

- Use industrial equipment and follow manufacturer's directions for shampooing and disinfecting
- Apply commercial sanitary absorbent agent on soiled area
- After soil is absorbed but still wet, sweep the spill toward the center of the spill, picking up the contents in a dust pan and disposing of in a plastic bag
- Vacuum with either wet vacuum extractor or a vacuum cleaner with high efficiency filter
- Spray the area with a white vinegar solution (1-ounce vinegar to one quart cool water)
- Blot the area repeatedly with white paper towels
- Rinse the area with clean cool water

- Disinfect area with a compatible disinfectant
- Apply a bacteriostatic rug shampoo
- Disinfect vacuum cleaner, dust pan, and brush

Guidelines for cleaning and disinfecting equipment:

- Clean and decontaminate all equipment and environmental surfaces as soon as possible after contact with blood or other body fluids.
- Use a registered EPA approved germicide.
- Remove and replace protective coverings such as plastic wrap and aluminum foil when decontaminating.
- Inspect and decontaminate, on a regular basis, reusable receptacles such as bins, pail and cans that have the likelihood for becoming contaminated.
- Always use mechanical means such as tongs, or brush and dustpan to pick up contaminated sharp; never pick up with hands even if gloves are worn.
- Place contaminated sharps in infectious wastes in designated containers.
- Handle contaminated laundry as little as possible with minimal agitation.
- Contaminated linen should be bagged on site and transported in red biohazard bags that prevent leakage. Label red bag with “laundry” prior to transport.
- Use appropriate personal protective equipment when handling contaminated laundry.
- Discard all regulated waste according to federal, state, and local regulations.

Guidelines for cleaning and disinfecting medical devices:

- Wear disposable or utility gloves,
- Clean the device with soap and water to remove debris,
- Soak in appropriate chemical germicide for 15-20 minutes, and
- Rinse with water and allow to air dry thoroughly before reuse.

Cleaning Schedule

A written schedule should be adopted for cleaning and decontamination of areas that may be susceptible to contamination with blood borne pathogens. These rooms may include, but are not limited to, health room, bathrooms, and self-contained special education classrooms.

Care of Students / Staff

- When possible, students/staff should be encouraged to take care of their own injuries. Students/staff should be encouraged to apply pressure with their own hand, tissue, or bandage over a bloody nose or wound.
- If needed, ask the school nurse, paraeducator, athletic trainers and/or designated first responders.
- If you must assist, provide a barrier between your skin and the blood/body fluid of others. This can be done with gloves. A thick layer of paper towels or cloth can be used as a barrier if gloves are not readily available.

Exposure Incident

An exposure incident is when a person's mucous membrane, non-intact skin or parenteral contact comes in contact with another person's blood or other potentially infected material. An exposure incident requires immediate washing/flushing, reporting and follow-up.

- Always wash the exposed area immediately with soap and water.
- If a mucous membrane splash (eye or mouth) or exposure of non-intact skin occurs, irrigate or wash the area thoroughly.
- If a cut or needle stick injury occurs, wash the area thoroughly with soap and water.

The exposure should be reported immediately to a staff member if the person exposed is a student or visitor. First aid should be sought immediately and the parent or guardian (if a minor student) is notified, and the person exposed should contact a physician immediately for further health care instructions. When a school employee incurs an exposure incident, it should be reported as soon as possible to the employee's supervisor and first aid care sought. All employees who incur an exposure incident will be offered post-exposure evaluation and follow-up in accordance with the OSHA standard. The following steps will be taken once an employee has reported an exposure incident:

1. Detailed information concerning the exposure incident will be given by the exposed employee to the District's occupational health carrier (Wheaton Occupational Medicine, 226 Bluebell Rd, Cedar Falls, IA 50613).
2. The exposed employee must sign a consent form for permission to release and exchange information with the exposed employee's medical provider.
3. If at all possible, the identification of the source individual and, if possible, the status of the source individual should be obtained, unless the employer can establish that identification is not feasible or prohibited by state or local law. The blood of the source individual will be tested (after consent is obtained) for HIV/HBV/HCV infectivity. It must be noted that the results of the source individual's tests cannot be relied on solely. It is prudent to remember that HIV antibodies may not be detectable for a window of 6-12 weeks.

4. Direct the exposed employee to the District's occupational health provider at the time of the exposure incident for evaluation and to determine the need for HIV PEP. (Wheaton Occupational Medicine, 222 Bluebell Rd., Cedar Falls, IA 50613 if exposure occurs between 7:00 am and 5:00 pm, Monday-Friday. If the exposure occurs before 7:00 am or after 5:00 pm or on weekends/holidays, the employee should report to Sartori Emergency Department.) Follow-up for HBV and HCV infections also should be conducted. The Human Resource office must provide the healthcare professional with a description of the employee's job duties as they relate to the incident, and a report of the specific exposure, including date/time of exposure, route of exposure, and relevant employee medical records, including Hepatitis B vaccination status.
5. If a severe exposure occurs involving:
 - (1) a known infected individual; or
 - (2) copious amounts of blood or other infected materials; or
 - (3) if the exposed person is pregnant or suspected to be resistant to antiretroviral drugs, the CDC has new recommendations for post exposure prophylaxis.

Infected individuals should be placed on the HIV medications within one to two hours of exposure and remain on them until HIV testing is negative.

6. The results of the source individual's testing shall be made available to the exposed employee, provided the source individual has given consent and release for testing. The employee shall be informed of applicable laws and regulations concerning disclosure of the identity and infectious status of the source individual.
7. The exposed employee will be given appropriate counseling concerning precautions to take during the period after the exposure incident. The employee will also be given information on what potential illnesses to be alert for and instructions to report any related experiences to the appropriate personnel.
8. The District Human Resource Director shall obtain and provide the employee with a copy of the healthcare professional's written opinion within 15 days of the completion of the evaluation. The healthcare professional will be instructed to limit their opinions to:
 - a. whether the hepatitis B vaccine is indicated and if the employee has received the vaccine, or for evaluation following the incident;
 - b. whether the employee has been informed of the results of the evaluation; and
 - c. whether the employee has been told about any medical conditions resulting from exposure to blood or other potentially infectious materials. All other findings or diagnoses will remain confidential and will not be included in the written report.

HBV Vaccinations

The following is a list of job classifications grouped according to level of occupational exposure potential. All employees in category (1) will be given the opportunity to receive the HBV vaccinations.

- (1) Employees with exposure potential:
 - Administrators

- Nurses
- Secretaries (who are trained to administer first aid and/or medication certified)
- Playground associates, paraeducators regularly assigned to assist students with disabilities, and those associates trained to administer first aid and/or parenteral medication)
- Teachers in physical education and teachers in laboratory settings (family & consumer science, industrial technology, art and science) and teachers regularly assigned to playground and/or bus duties
- Coaches and athletic trainers
- Custodians
- Bus drivers
- Emergency-response team members (CPR/AED/First Aid certified in each building)

(2) All other staff approved volunteers have the option to receive post-exposure vaccination.

School staff members may decline the vaccination. However, if they do, they must sign a declination form. The employee may request and obtain the vaccination later and at no cost if the individual is employed in a category (1) position. If the school employee has previously received the vaccination series, a copy of the information should be submitted by the employee to the Human Resource Department for placement in the employee's confidential medical records.

Employee Training and Information

Training for all employees should be:

- (1) conducted prior to initial assignment to a task where exposure may occur,
- (2) provided at no cost to the school personnel,
- (3) transacted during working hours, and
- (4) conducted at least once a year thereafter.

Additional training may be needed when tasks are modified or new tasks that involve occupational exposure to blood borne pathogens affect the employee's exposure. The person conducting the training must have knowledge of the subject matter, the information provided must be appropriate in content and vocabulary to the educational level, literacy, and language of the audience addressed.

An acceptable training will contain the following elements:

- A copy of or information on how to obtain the OSHA standard for blood borne pathogens regulations.
- Information on the epidemiology and symptoms of blood borne diseases; modes of transmission of blood borne pathogens.

- Modes of transmission of bloodborne pathogens.
- An explanation of the exposure control plan, including points of the plan, lines of responsibility, how the plan will be implemented, etc, and where it is located.
- Information on how to recognize tasks that might result in occupational exposure.
- A list of control measures and work practices which will be used in the school to control exposure to blood or other potentially infectious materials.
- Information concerning personal protective equipment available at the school, including the types, selections, proper use, location, removal, handling, decontamination, and disposal.
- Information on hepatitis B vaccination, such as safety, benefits, efficacy, methods of administration, and availability.
- Post-exposure evaluation and follow-up, including information on whom to contact and what to do in an emergency.
- Information on warning labels, signs and color-coding.
- Question and answer session on any aspect of the training.

This information and training may be conducted using a variety of learning modes, videotapes, written material, and lecture material. In most cases the school nurse will be responsible for the training.

Record Keeping

The bloodborne pathogen standard requires that two types of records be kept for school employees who sustain an occupational exposure incident to blood or other potentially infectious materials: medical and training.

The medical record is confidential and separate from other personnel records. It is retained by the Human Resource office and includes the employee's name, social security number, hepatitis B vaccination status, including dates of vaccination, and any medical records relative to the employee's ability to receive the vaccination. If an occupational exposure incident occurs, results of examinations, medical testing, and post-exposure evaluation and follow-up procedures as well as the health care professional's opinion and a copy of the information provided to the medical professional should be included. The medical records must be kept confidential and maintained for at least the duration of the employee's tenure in the District, plus 30 years.

The training records are also to be retained and kept for three years from the date on which the training occurred and must be available to OSHA upon request. They should include:

- (1) the dates of the training sessions and the content,
- (2) the name and qualifications of the person presenting the training, and
- (3) the names and job titles of all those attending the training.

Upon request, both the medical and training records must be made available to the Assistant Secretary of Labor for OSHA. The training records must also be made available to the school employee upon request. The medical records can be accessed by anyone if the employee gives written consent.

References

Centers for Disease Control and Prevention. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *MMWR Morb. Mortal. Wkly Rep* 1998; 47 (RR-19):1-39.

Centers for Disease Control and Prevention. Recommendations for preventing transmission of infection with human T-lymphotropic virus type III/lymphadenopathy-associated virus in the workplace. *MMWR Morb. Mortal. Wkly Rep* 1985;34:681-5; 691-5.

Champion, C. Occupational Exposure to Blood Borne Pathogens; Implementing OSHA Standards in a School Setting. NASN (2005).

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