

INFECTION PREVENTION AND CONTROL IN SCHOOL SETTINGS

This circular will remain in effect unless rescinded or superseded by a subsequent version

Schools can minimize the risk of disease transmission through student and staff awareness and simple infection control practices at the school and classroom level.

MODES OF TRANSMISSION

Diseases have different modes of transmission. Diseases can be spread through direct contact, indirect contact, droplet, or airborne transmission. The following guidelines minimize the risks for all modes of transmission.

The single most important step in preventing exposure to and transmission of any infection is anticipating contact with infectious materials in routine as well as emergency situations. Based on the type of possible contact, the responder should be prepared to use the appropriate precautions and techniques prior to providing care. Diligent and proper hand washing, the use of barriers, appropriate disposal of waste products and needles, and proper decontamination measures will enhance protection of students and staff.

UNIVERSAL (STANDARD) PRECAUTIONS

The Centers for Disease Control (CDC) have long recommended "universal blood and body-fluid precautions" to prevent transmission of hepatitis B, human immunodeficiency virus (HIV), and other infections, as well as to decrease the risk for exposure to responders and students. As it is not possible to identify all infected individuals, these precautions must be used with every student. Universal precautions pertain to all blood and body fluids. For bloodborne infections, these precautions do not apply to other body fluids and material, such as saliva, sputum, feces, tears, nasal secretions, vomitus, and urine, unless blood is visible in the materials. However, these other fluids and body wastes can be sources of other infections and should be handled as if they are infectious, utilizing the same precautions. This is the basis of standard precautions to be used with all body fluids, blood, and other potentially infectious material.

TRANSMISSION BASED PRECAUTIONS

The CDC has recommended "transmission-based precautions" as the second tier of basic infection control, to be used in addition to standard precautions for individuals who may be infected or colonized with certain infectious agents for which additional precautions are needed to prevent infection transmission.

Contact Precautions

Use contact precautions for those with known or suspected infections that represent an increased risk for contact transmission. Proper personal protective equipment (PPE)

includes the use of gloves and gown for all interactions that may involve contact with the student or the student's environment.

Droplet Precautions

Use droplet precautions for students known or suspected to be infected with pathogens transmitted by respiratory droplets generated by coughing, sneezing, or talking. Proper personal protective equipment (PPE) includes the use of masks, both for the patient and school nurse, during all interactions.

Airborne Precautions

Use airborne precautions for those individuals known or suspected to be infected with pathogens transmitted by the airborne route (e.g., COVID-19, tuberculosis, measles, chickenpox, disseminated herpes zoster). Proper PPE includes a fit-tested, NIOSH-approved N95 or higher level of respiratory protection for healthcare personnel and a mask on the patient.

RESPIRATORY HYGIENE

In addition to spread by bodily fluids, infections can be spread by respiratory droplets that are generated when people sneeze, cough, laugh, or exhale. *Respiratory hygiene* is a term adopted by the CDC and Massachusetts Department of Public Health (MDPH) to describe measures that can be taken to decrease the risk for spreading respiratory illnesses by droplet and airborne transmission. A universal "respiratory hygiene/cough etiquette" policy includes:

- Covering the mouth and nose with a tissue when coughing or sneezing

- Disposing of used tissues in a wastebasket
- Practicing hand hygiene (washing) often
- Coughing or sneezing into elbow

HAND WASHING

Proper hand washing is crucial to preventing the spread of infection. Use of running water, lathering with soap, and using friction to clean all surfaces of the hands are key. Rinse well with running water and dry hands with paper towels. If soap and water are unavailable, hand sanitizer may be used.

- Hands should be washed before physical contact with students and after the contact is completed.
- Hands should be washed after contact with any used equipment. If hands (or other skin) become soiled with blood or body fluids, they should be washed immediately before touching anything else.
- Hands should be washed whether gloves are worn or not and after gloves are removed.
- Textured jewelry on the hands or wrists (such as rings and stones) should be removed prior to washing and kept off until completion of the care procedure and hands are rewashed.

BARRIER PROTECTION

Barriers include disposable gloves, protective eyewear, and gown. The use of a barrier is intended to reduce the risk for contact with blood and body fluids for the caregiver, as well as to control the spread of infectious agents from student to student. It is essential that appropriate barriers be used when contact with potentially infectious material is possible. Gloves should be worn when direct care of the student may involve contact with blood and body fluids, as well for contact with urine, feces, and respiratory secretions. Gloves should be disposed of after each use and not reused.

Gloves should be worn:

- When changing a diaper or catheterizing a student
- When changing dressings or sanitary napkins
- When providing mouth, nose, or tracheal care
- If the caregiver has broken skin on the hands (even around the nails)
- When cleaning up spills of blood (e.g., nosebleeds), body fluids and wastes, and soiled supplies

Gowns or aprons may be worn to protect the caregiver's clothing if spattering of body fluids is possible. The apron or gown should be laundered or disposed of after each care session and should not be reused.

In addition, protective eye wear and masks should be worn if splashing of body fluids is likely to occur (such as mouth suctioning or care of a student who is coughing).

Chux or other waterproof barriers should be used to cover any work surface if drainage or splashing with blood or body fluids are possible. The barrier should be disposed of after each care session and should not be reused.

DISPOSAL OF WASTE

All used or contaminated supplies (including gloves and other barriers) except for syringes, needles, and other sharp implements should be placed in a plastic bag which is then sealed. This bag should be placed in a second plastic bag, which is also sealed. The double-bagged waste can then be thrown in the garbage, out of the reach of children or animals. Bodily wastes such as urine, vomitus, or feces should be disposed of in the toilet.

Needles, syringes, and other sharp objects should be immediately placed in FDA-cleared sharps disposal containers. To reduce the risk of an accidental needle stick or cut, needles should not be recapped, bent, or removed from the syringe before disposal. Once it is full, the container should be sealed and brought to Health Services central administration for disposal in a large biohazard container. Health Services will arrange for pickup by a biohazard waste disposal company for proper disposal at least annually.

CLEANUP PROCEDURES

Spills of blood and body fluids that are covered under standard precautions should be cleaned up immediately.

The CDC method of clean-up is as follows:

- Wear gloves.
- Mop up the spill with paper towels or other absorbent material.
- Using a solution of one-part household bleach (sodium hypochlorite) in ten parts of water; wash the area well.
- Dispose of gloves, soiled towels, and other waste in a sealed double plastic bag in the garbage as outlined above.

Routine environmental clean-up procedures for facilities (such as the health room and bathrooms) does not require any modification unless contamination with blood or body fluids should occur. If so, the area should be decontaminated using the procedure outlined above. Regular cleaning of surfaces which are not visibly contaminated with potentially infectious material, such as toilet seats and tabletops, can be done with the standard cleaning and removal of obvious soil.

LAUNDRY PROCEDURES

Whenever possible, disposable barriers should be used if contamination with body fluids or blood is possible. If sheets, towels, or clothing become soiled, they should be handled as little as possible. Wash with hot water and detergent for at least 25 minutes. Cool water washing is also acceptable if an appropriate detergent is used for the water temperature.

PREGNANT WOMEN

Pregnant women are at no higher risk for infection than other care-providers as long as appropriate precautions are observed. However, due to the possibility of in-utero transmission of viral infections such as cytomegalovirus (CMV) or HIV, as well as the potential for adverse outcomes with certain infections, pregnant women should be especially careful to observe standard precautions.

GENERAL INFECTION CONTROL PROCEDURES

The purpose of the procedures outlined herein is to establish basic guidelines to address the role of staff in all incidents requiring concern about infection control. Such incidents may include, but not be limited to, a bleeding nose, sneezing, coughing, uncontrollable urinating, and sudden bowel movement.

Head of school/principal shall:

- Ensure that all staff are familiar with this policy and that the provisions of this policy are implemented.

Classroom teacher shall:

- Encourage the use of class wide respiratory hygiene, especially during flu season and other respiratory illness upticks.
- Reassure and calm students involved in hygiene emergencies.
- Notify the school nurse of any infectious disease concerns.

- Notify custodians of infection control needs

School nurse shall:

- Review infection control procedures annually at the beginning of the school year with classroom staff.
- Assist the classroom staff in developing hygiene plans appropriate for the classroom as well as individual students.
- Notify Health Services of cases and possible clusters.

School custodian shall:

- Refer to and follow the steps identified in Superintendent Circular FMT-19 for cleaning related to possible infectious bodily fluids.

BITE EMERGENCY PROCEDURES

The purpose of the procedures outlined herein is to establish basic guidelines intended to assist students and staff who have encountered a human or animal bite that breaks the skin.

Background information for human bites:

Biting is very common among young children but usually does not lead to any serious infectious disease concerns. If the skin is punctured or broken, bacteria may be introduced into the wound that can lead to blood-borne infection which needs to be treated by a healthcare professional. Blood-borne infection could be of concern if the biter breaks the skin and blood is drawn into the biter's mouth or if the biter has bleeding gums or mouth sores. Hepatitis B, Hepatitis C and HIV are some pathogens of concern although the risk of transmission of these viruses is very low in

school settings. For HIV, there have not been any reported cases of transmission in school settings.

The “biter” might be considered at higher risk than the “bitee” due to the exposure to the blood from the wound if the skin is broken. Each human bite represents a unique set of circumstances and requires an individualized response. In most biting episodes there are no communicable disease extenuating circumstances, and the episodes are treated with standard precautions. There is a heightened sense of urgency when one of the children has a communicable disease. The school nurse is responsible for guiding the response, working with the headmaster/principal, and ensuring that confidentiality is maintained.

Background information for animal bites:

Animal bites are common since children can behave unpredictably and animals have normal protective instincts. An animal bite that breaks or punctures the skin will require immediate medical attention due to the risk of bacterial and viral infection. The longer the animal's mouth germs stay in the wound, the greater the risk of potential infection that will require antibiotics.

Animals can also transmit rabies, a very serious viral infection that infects the nervous system. Although any mammal bite can transmit rabies, the bites of some wild animals (e.g., bats, raccoons, skunks, foxes, coyotes) and some stray and unvaccinated pet dogs and cats are of greatest concern. Wild animals should not be kept or allowed to visit schools. All

suspected animal bites should be promptly reported to public health authorities by Health Services.

In the event of an animal or human bite that *breaks the skin*:

Principal/head of school shall:

- Ensure that all staff are familiar with this policy and that the provisions of this policy are implemented.

Classroom teacher shall:

- Reassure and calm the students.
- Employ standard precautions in evaluating the bite.
- Notify the school nurse immediately.
- Have the student wash the area with soap and water immediately.
- Report action taken to the headmaster/principal.

For human bites, school nurse shall:

- Provide first aid to the child who was bitten by washing any broken skin and applying a cold compress to any bruise.
- Review known medical information of both the “biter” and the “bitee.” If there is a known communicable disease issue, the nurse must consult with Health Services administration for more specific guidance. Confidentiality must be respected throughout the consultation.
- Contact the student's parent/guardian to report the incident and recommend next steps.
- Refer both the “biter” and “bitee” to their primary care provider for further guidance. This may include any or all the following: risk counseling; hepatitis and HIV testing;

prophylaxis. The treatment approach is at the discretion of the primary care provider and the family.

- Notify Health Services prior to calling the families if there is a known communicable disease issue with one or both students.
- Be a liaison to the primary care provider as requested by the parent and within the boundaries of confidentiality.
- Document the incident in SNAP for students. If a staff member was involved, the staff member must file a Report of Injury Form [see Superintendent's Circular HRS-PP07, Worker's Compensation Procedures] within 7 days.

For animal bites, school nurse shall:

- Immediately provide first aid to the child who was bitten by washing any broken skin and applying a cold compress to any bruise.
- Notify Health Services prior to calling parent/guardian. An animal bite that breaks or punctures the skin needs immediate wound care to reduce the risk of infection. All animal bites should be reported within 24 hours.
- Contact the student's parent/guardian to report the incident and recommend next steps.
- Refer the student to their primary care provider for further guidance. The treatment approach is at the discretion of the primary care provider and the family.
- Be a liaison to the primary care provider as requested by the parent and within the boundaries of confidentiality.

EMPLOYEE NEEDLESTICK MANAGEMENT

When a needlestick occurs:

- Gently bleed the area, wash, and immediately flush with soap and water.
- The employee who has had the needle stick should call their primary care provider.
- If the risk assessment of the primary care provider and/or school nurse is that the needle stick represents an exposure to blood or body fluids, it is advisable that the employee seek management at an emergency department that can provide the latest in prophylactic management; the employee's primary care provider will be able to assist with this.
- Health Services should be notified for further guidance.
- The employee should complete an incident report and Worker's Compensation form after the situation has been stabilized.

LIST OF TERMS USED ABOVE

Blood-borne infection: infectious germs present in blood that can cause disease in humans.

Communicable disease: an illness caused by an infectious agent or its toxins that occurs through the direct or indirect transmission of the infectious agent or its products from an infected individual or via an animal to a susceptible animal or human host.

SUMMARY OF SIGNIFICANT DATES AND DEADLINES

Date	Activity
September 2024	All staff should have universal precaution review by school nurse

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