

INFECTIOUS DISEASE IN SCHOOLS

Infectious diseases are caused by organisms like bacteria, viruses, and parasites. Some infectious diseases can potentially be spread from one person to another. Illness caused by an infectious disease is a common occurrence in students. Infectious diseases can be spread in a variety of ways, referred to as transmission routes.

DROPLET TRANSMISSION / INFECTIOUS DISCHARGES

Diseases with respiratory tract symptoms (runny nose, cough, sore throat) are often spread by droplets containing viruses or bacteria or by surfaces contaminated with nose/throat discharges. Droplets are generated during coughing, sneezing, or talking. These “large” droplets travel less than three feet before falling to the ground and do not remain suspended in the air. Before falling to the ground, droplets may be deposited on the mucous membranes of the eye, nose, or mouth of another person within three feet, resulting in disease transmission. The droplets may also fall on frequently touched objects and are then transferred to the next person who touches the object. This type of transmission route is common in school settings.

AIRBORNE TRANSMISSION

This mode of transmission is rare and only a few diseases are spread by this route. Airborne transmission occurs when an infected person coughs, sneezes, or talks and generates very small respiratory particles (droplet nuclei) containing virus or bacteria. These small particles remain suspended in the air for long periods and can be widely dispersed by air currents. When another person inhales these small particles, they can potentially become ill.

FECAL→ORAL

Intestinal tract infections are often spread through oral ingestion of viruses, bacteria, or parasites found in the stool of an infected person or animal. This type of transmission happens when objects contaminated with microscopic amounts of human or animal feces are placed in the mouth. In school settings, the sites most frequently contaminated with feces are hands, classroom floors, faucet handles, toilet flush handles, toys and tabletops. Fecal→oral transmission can also occur when food or water is contaminated with microscopic amounts of human or animal feces and are then ingested.

SKIN CONTACT / DIRECT CONTACT

Some infections can be spread directly by skin-to-skin contact or indirectly by contact with contaminated surfaces like clothing.

BLOOD / BODY SECRETIONS CONTACT

Some infections are transmitted when a cut or mucous membranes (linings of various body parts and internal organs) comes in contact with an infected person's blood or other body secretions like saliva, urine, and seminal and cervical fluids. This type of transmission is very rare in school settings. Infected students can possibly transmit these infections through biting if there is visible blood mixed with their saliva (i.e. from bleeding gums).

SEXUALLY TRANSMITTED DISEASES

These diseases are most commonly transmitted by sexual contact, including genital-to-genital, oral-to-genital, or genital-to-anal contact. This type of transmission should not be occurring in schools.

PREVENTION: HANDWASHING

Handwashing is one of the best tools for controlling the spread of infections. All students and staff should perform effective handwashing, which will reduce the amount of illness in schools.

HANDWASHING TECHNIQUE

- Use SOAP and warm RUNNING WATER.
- Rub hands vigorously as you wash them.
- Wash ALL surfaces including the backs of hands, wrists, between fingers and under fingernails.
- Rinse hands well.
- Dry hands with a paper towel or air dryer.
- If using paper towels, turn off the water using a paper towel instead of bare hands.

State health regulations for schools require that soap and paper towels or air dryers are available for all bathroom facilities. Schools often have a problem keeping the restrooms stocked with soap and paper towels due to students playing with the items and clogging toilets or making messes. Please report the need for soap and paper towels to your custodian.

WHEN TO WASH YOUR HANDS

- After coughing, sneezing, wiping your nose, and cleaning up messes.
- After using the toilet.
- Before eating or drinking.
- After handling animals.
- Whenever hands are dirty.
- Food handlers should wash hands before handling food and when hands are soiled.
- Students who are unable to wash their own hands should have assistance from staff.

Sanitizing hand gels have increased in popularity. It is recommended that these products be used in addition to regular handwashing and not in place of handwashing unless facilities are not readily available.

PREVENTION: THE SCHOOL ENVIRONMENT - CLEANING AND SANITIZING

The facility operations/custodial services staff are usually responsible for most of the cleaning that occurs in schools. Individual classrooms can also take steps to clean and sanitize to help prevent transmission of infectious diseases. In classrooms with young children, toys should be cleaned and sanitized regularly, especially if the toys are soiled or placed in a child's mouth. Common areas, desks/tables, doorknobs and handles, and drinking fountains are examples of areas that should be kept clean and periodically sanitized. The custodial services have sanitizing solutions available, and should be consulted. Please do not bring in your own cleaning products.

AVOIDANCE

When possible, avoid direct skin contact with bodily fluids. Disposable non-latex gloves are available and their use is recommended when direct contact with bodily fluids is anticipated such as treating a bloody nose, handling clothes soiled by vomit or urine, or cleaning spills. The soiled gloves should then be disposed of properly and the hands washed. If unanticipated contact occurs, the hands and other affected skin areas should be washed immediately. Clothes or other cloth items soiled with bodily fluids will be placed in a leak-proof bag for washing or disposal.