

SCHOOL DISTRICT OF LEE COUNTY INFECTIOUS DISEASE PLAN

I. Introduction

Infectious diseases are human illnesses caused by viruses, bacteria, parasites, fungi and other microbes. Spread may occur by direct contact with an infected person or animal, by ingesting contaminated food or water, by insects like mosquitoes or ticks (disease vectors), or by contact with contaminated surroundings like animal droppings or contaminated air.

II. Modes of Transmission

A. Contact

- **Person to person.** The most common way for infectious disease to spread is through the direct transfer of bacteria, viruses or other microorganisms from one person to another. This can occur when an individual with the bacterium or virus touches, coughs on or kisses someone who is not infected. These germs can also spread through the exchange of body fluids from sexual contact or a blood transfusion.
- **Animal to person.** Being bitten or scratched by an infected animal can make you sick, and in extreme conditions could cause death. Handling animal waste can be hazardous.
- **Indirect Contact.** Many microorganisms can linger on an inanimate object such as a tabletop, doorknob or faucet handle. When you touch a contaminated object you pick up the germ and then touch your eyes, mouth or nose.

B. Droplet

- Transmission which involves contact of the conjunctivae of the eye or mucous membranes of the nose or mouth of a susceptible person with large-particle droplets containing microorganisms generated from a person who has a disease or is a carrier of the microorganism. Transmission via large-particle droplet requires close contact between source and recipient persons.

C. Vector and other vehicles

- **Bites and stings.** Mosquitoes, fleas, lice or ticks carry microorganisms on their body or in their intestinal tract which can infect humans.
- **Food contamination.** Food and water infected with a microorganism can cause illness when ingested by an animal or a human.

- III. Basic Prevention and Infectious Disease Control**
- A. Routine hand hygiene.** Always wash hands before, during and after preparing food, before and after using the bathroom or changing diapers, and after handling animals or animal waste.
 - B. Get Immunized.** Immunization can drastically reduce the chance of contracting many diseases.
 - C. Routinely clean and disinfect surfaces.** Cleaning with soap and water removes dirt and most microorganisms. Using a disinfectant kills additional disease-causing germs. All common surfaces should be disinfected frequently.
 - D. Stay at home if you signs and symptoms of an infection.** Social distancing is a good way to reduce the spread of infectious disease. Students who become ill while at school should be sent home as quickly as possible.
 - E. Handle and prepare food properly.** Buy and refrigerate perishable foods quickly, Store food properly. Wash hands, kitchen surfaces and utensils while preparing food. Wash raw foods and vegetables.
 - F. Avoid exposure to all blood and other body fluids.**
- IV. School-Based Guidance and Responsibility**
- A. Surveillance of Absentees.** Absences of 15% over the normal rate should be reported immediately to the Coordinator of Health Services. This means that if normal daily student absences are 65 during September, and one day 74 students are absent, a report should be made.
 - B. Universal/Standard Precautions.** According to the concept of Universal Precautions, all human blood and certain body fluids should be treated as if they are known to contain HIV, HBV or other blood borne pathogen, or other infectious microorganisms.
 - Always use appropriate equipment and disposable gloves when cleaning up body fluid spills.
 - Clean up blood and other body fluids spills promptly.
 - Inspect the skin on all exposed parts, especially the hands to determine whether broken skin areas are present. Cover with band-aids prior to donning disposable gloves.
 - Clean up all spills with appropriate solution.
 - Always wash hands after contact with body fluids. This should be done immediately in order to avoid contaminating other surfaces or parts of the body.
 - C. Procedure for Needlestick or Other Bloodborne Pathogen Exposure.** In the event of a needlestick or other bloodborne pathogen exposure, **immediately** take the following steps. The person should be treated within one hour of exposure!
 - Call 851-6715 (or 936-1343 push O for operator and then extension 2494) to report the incident to the Internal Medicine Associates Infectious Disease Physicians Group.
 - You will be told to report to the office where you can be seen by an Infectious Disease Physician. You may be required to travel a short distance e.g. to Cape Coral or Bonita Springs.
 - Take prepared Incident Report and Workman's Comp paperwork.

- If the person whose blood exposed the person is known, make a copy of any medications they are on and whether they are immunized for hepatitis B..
- Notify Insurance and Benefits (337-8321).
- Treatment options and appropriate follow-up will be discussed during the visit.
- **Alert: Remember that the exposed person should be seen within one hour of exposure if possible.**

C. Biomedical Waste.

- Red, puncture resistant, leak-proof containers should be used to discard all contaminated sharps such as syringes, lancets and other sharps. Filled containers should be closed, taped and transported to the Health Services office in the LCPEC building at 2855 Colonial Blvd. for disposal in the Biomedical Waste Container located there.
- Materials saturated with blood or potentially infectious body fluids to the point of dripping can be placed either in a red bag if available or into the sharps container. If the sharps container is used it must be closed, sealed and dated and delivered to the Health Services office within 48 hours. If a red bag is used, it should be sealed and delivered to the Health Services office as soon as possible.
- All other contaminated materials should be placed into garbage container lined with a plastic bag. Large quantities of unsaturated materials should be placed into a plastic lined garbage container, tied and placed into second plastic garbage bag. **Alert: Red bags should never be disposed of in regular trash containers. They should always be delivered to the Health Services office.**

D. Clinic Maintenance. Cots should be plastic covered. Disposable paper should be used on each cot and changed after student use. Cots and clinic chairs should be cleaned and sprayed with disinfectant at the end of each school day. If blankets or pillows are used, they should be laundered between student use.

E. Reporting Suspected Communicable Disease. When a student is reported to have a communicable disease such as bacterial meningitis, giardiasis, hepatitis etc.

- Collect demographic information such as student name, date of birth, address, phone number, parent's name and number where they can be reached.
- Collect information about the symptoms, last day in school, physician, hospital and who reported the possible disease.
- Call school nurse and/or Health Services coordinator at 337-8244.

F. Exclusion Guidelines. Students with certain infectious disease should be excluded from school. See **Health Services Guidelines.**

HEALTH SERVICES GUIDELINES

The following list gives guidelines and recommendations for exclusion from school due to illness. Children need not be excluded for a minor illness unless one or more of the following exists.

ILLNESS OR DISEASE	EXCLUSION IS NECESSARY
Chicken Pox (Varicella)	Yes. Child with uncomplicated chicken pox may return on the sixth day after onset of rash; may return sooner if all lesions are crusted.
Conjunctivitis (pink or red eyes with yellow or green drainage)	Yes. May return 24 hours after treatment started. If health care provider does not treat the child, a note from provider is needed.
Coxsackie Virus (Hand, Foot and Mouth Disease)	No. May attend if able to participate in school activities.
Diarrhea with other signs illness, e.g., vomiting or fever	Yes. May attend if cause of diarrhea is determined to not be illness related, e.g., from antibiotics or food sensitivity
Fifth's Disease	No. By the time the rash has appeared child is no longer contagious. Pregnant staff in direct contact with child May check with own health care provider for advice.
Head Lice	Yes. May return the morning after treatment is given and all lice and nits are removed from hair.
Hepatitis A	Yes. May return 1 week after onset of jaundice and when able to participate in school activities.
Herpes	Yes. Exclude if area is oozing and cannot be covered, e.g., mouth sores
Impetigo (MRSA, MSSA)	Yes. May return 24 hours after treatment starts
Rash with fever or behavior change	Yes. May return if health care provider has determined illness is not a communicable disease.
Ringworm	No. Needs medical treatment and areas covered.
Roseola	Yes. Needs medical advice. Child with rash and fever may not return to child care or school.
Scabies	Yes. May return after treatment has been completed.
Strep Throat	Yes. May return 24 hours after treatment and no fever
Vomiting	Yes. May return if cause of vomiting is not illness related
Mild Cold Symptoms, e.g., stuffy nose with clear drainage, sneezing, mild cough)	No. May attend if able to participate in school activities.
Upper Respiratory Complications -large amt. of yellow/green nasal discharge -extreme sleepiness/lethargy -stiff neck -ear pain -fever (above 100 ⁰ orally)	Yes. Medical care is highly recommended. Child may return when symptoms are improved or with direction from the health care provider
Vaccine Preventable Diseases -mumps, measles, pertussis (whooping cough)	Yes. May return if judged not to be infectious by a health care provider. Report cases to School Nurse Coordinator
Other Infectious Diseases -hepatitis, meningitis, mononucleosis, Tuberculosis	Yes. Report to School Nurse Coordinator

PANDEMIC INFLUENZA PLAN

I. Introduction

Pandemics of influenza are extreme infectious disease outbreaks. Although many infectious disease outbreaks (e.g. Severe Acute Respiratory Syndrome [SARS], Ebola, HIV, or West Nile Virus) can cause devastation, these infections are typically limited in their spread to either localized areas or regions, or to at-risk populations. Pandemic influenza, by contrast, is an explosive global event in which most, if not all, populations worldwide are at risk for infection and illness. In past pandemics, influenza viruses have spread worldwide within months and are expected to spread even more quickly today given modern travel patterns.

It is the sheer scope of influenza pandemics, with their potential to rapidly spread and overwhelm societies and cause illnesses and deaths among all age groups, which distinguishes pandemic influenza from other emerging infectious disease threats and makes pandemic influenza one of the most feared emerging infectious disease threats.

Although it is unpredictable when the next pandemic will occur and what strain may cause it, the continued and expanded spread of a highly pathogenic—and now endemic—avian H5N1 virus across much of eastern Asia, Russia, and eastern Europe represents a significant pandemic threat.¹

II. Influenza Transmission

Human influenza infection usually takes place within the respiratory tract. Preventing direct and indirect infection of the respiratory tract is of utmost importance for preventing person-to-person transmission of the disease.

A. Contact

- Direct-contact involves skin-to-skin contact and physical transfer of microorganisms to a susceptible host from an infected or colonized person, such as occurs when persons perform activities that require physical contact, e.g. playing sports or holding hands.
- Indirect-contact involves contact of a susceptible host with a contaminated intermediate object in the environment.

B. Droplet

Influenza is easily spread when droplets containing microorganisms are generated from a source person during sneezing, coughing or talking, make contact with the conjunctivae of the eye or mucous membranes of the nose or mouth of a susceptible person.

C. Airborne

Although there is no evidence that influenza can occur across long distances such as through ventilation systems, transmission can occur through inhalation of small-particle aerosols particularly in shared air spaces with poor air circulation.

III. Recommendations for Infection Control

A. Basic Infection Control for Preventing the Spread of Pandemic Influenza. The following apply to any setting where persons with pandemic influenza may congregate.

1. Limit contact between infected and uninfected persons.
 - Isolate infected persons (i.e. confine ill students, staff in designated area until they are able to leave school site.)
 - Promote spatial separation in common areas. Sit or stand as far away as possible – at least 3 feet- from potentially infectious persons.
2. Contain infectious respiratory secretions.
 - Instruct persons with “flu-like” symptoms to use respiratory hygiene/cough etiquette.
 - **Alert: Symptoms of influenza include fever, headache, muscle aches and pains, sore throat and cough. Children may also have earaches, nausea and vomiting.**

B. Management of Infectious Persons

Respiratory hygiene/cough etiquette has been promoted as a strategy to contain respiratory viruses at the source and to limit their spread.

Elements include:

- Education of staff, students and visitors on the importance of containing respiratory secretions to help prevent the transmission of influenza and other respiratory viruses.
- Posted signs in languages appropriate with instructions to staff, students and parents to immediately report symptoms of respiratory infection to Clinic Assistant and/or School Nurse.
- Hand hygiene after contact with respiratory secretions, and
- Spatial separation, ideally, at least 3 feet, of persons with respiratory infections in common areas when possible.

C. Infection Control Practices for District

1. In schools, infection control should focus on:
 - Keeping sick students, staff and workers away while they are infectious.
 - Promoting respiratory hygiene/cough etiquette and hand hygiene as for any respiratory infection. The benefit of wearing masks in the school setting has not been established.
2. School administrators should ensure that materials for respiratory hygiene/cough etiquette (i.e. tissues and receptacles for their disposal) and hand hygiene are available.
3. Non-latex, disposable gloves should be available for all school staff and employees.
 - A single pair of non-latex gloves should be worn for contact with blood and body fluids, including hand contact with respiratory secretions.
 - Gloves should fit comfortably on the wearer’s hands.
 - Wash hands after glove removal.
 - If gloves are in short supply (i.e. the demand during a pandemic could exceed the supply), reserve gloves for situations where

there is direct contact with blood, body fluids or respiratory fluids in large quantity and use other barriers such as paper towels or paper napkins when there is limited contact such as in cleaning up used tissues. Hand hygiene should be strictly reinforced in this situation.

- **Alert: All persons should take special care not to touch their eyes, nose or mouth with contaminated hands, gloved or ungloved.**
4. Hand hygiene has been frequently cited as the single most important practice to reduce the transmission of infectious agents in any setting.
 - If hands are visibly soiled or contaminated with respiratory secretions, wash hands with soap and water.
 - In the absence of visible soiling of hands, approved alcohol-based products for hand disinfection are preferred over soap and water because of their superior microbicidal activity and convenience.
 - Always wash hands between person contact and removing gloves.
 5. Cleaning and disinfection of student-occupied rooms should be done daily. EPA-registered disinfectant should be used on all frequently touched surfaces such as desks, telephones, lavatory surfaces, and doorknobs in addition to floors and other horizontal surfaces. Clinic areas should be given special attention.

D. Recommendations for Preventing the Spread of Pandemic Influenza in Schools.

The focus should be on keeping sick students, teachers and staff away while they are infectious and promoting respiratory/cough etiquette and hand hygiene.

1. Keep ill persons separate from non-ill persons.
 - Excuse students, teachers and staff from their duties if they develop symptoms.
 - Each school should develop a plan to allow for coverage when teachers and other staff must be home.
2. Identify illness early.
 - Training will be provided for students, teachers, parents and staff on influenza including: routes of transmission, signs and symptoms, treatment and infection control strategies.
3. Prevent exposure to student/staff and the spread of disease outside the school building.
 - Consider rescheduling extracurricular activities such as sports events, plays, dances, PTO meetings during pandemic.
 - Consider rescheduling field trips.
 - If absenteeism is high in certain classes, combine classes to limit exposure to/from substitute staff.
4. Encourage the use of infection control measures within the building.
 - Ensure that handwashing supplies are available and an alcohol-based hand gel, if possible.
 - Have issues and trash receptacles available in classrooms,

- Use an EPA-registered disinfectant to clean environmental surfaces.
 - Review cleaning procedures with housekeeping staff.
5. Communicate information.
- Absences of 15% over the normal rate should be reported immediately to the Coordinator of Health Services at 337 8244 or by e-mail (sharonaw@leeschools.net). This means that if normal daily student absences are 60 during September, and one day 69 students are absent, a report should be made.
 - Notify families of status and reinforce prevention strategies.
 - Post visual alerts on doors advising visitors to not enter a building if ill or report to the office if they exhibit symptoms of respiratory illness.

E. General Health Information.

- All personnel should be educated on issues relative to pandemic influenza.
- Symptomatic personnel should be sent home until they are physically able to return.
- Personnel who have recovered from pandemic influenza should develop protective antibody against future infection with the same virus. These persons should be well suited to care for others who are infected with influenza.

ALERT: As the scope of the pandemic escalates, State and local officials may choose to close all Lee County Schools either for short periods or for the duration of the pandemic. Plans for alternative learning approaches are being studied at this time.