INFECTIOUS/COMMUNICABLE

DISEASE PLAN FOR

STUDENTS AND STAFF

MONROE COUNTY INTERMEDIATE SCHOOL DISTRICT

Readiness and Emergency Management for Schools Grant

SEPTEMBER 2011

Adopted by the REMS Executive Committee – September 14, 2011

ACKNOWLEDGEMENTS

Monroe County Intermediate School District and the nine local school districts of Monroe County would like to thank Bay-Arenac ISD for sharing their Infectious Disease Plan with us. Their work saved us many hours of work that we would have had to do in order to create a document that would be useful to school districts. Our understanding is that Bay Arenac ISD used the following resources to create their document and we have adopted those same documents:

- "Infectious Disease Plan," School District of Lee County, Ft. Myers, FL.
- "Cleaning Guidelines," Washington State Department of Health
- "Communicable Disease Reference Chart," Genesee County Health Division
- Sample communications, Butte County Office of Education, Oroville, CA

This Infectious Disease Plan is intended to be used as a model for local school districts to adapt to their local needs.

Funding for the development of the Monroe County ISD Infectious Disease Plan for students and staff was from the U.S. Department of Education Readiness and Emergency Management for Schools Grant 2009.

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Introduction

A communicable disease is an infectious disease, caused by organisms like bacteria, viruses, and parasites; and is transmissible by direct contact with an infected individual, an individual's discharges of body fluids, through an intermediate host, vector (such as a mosquito, bird or animal), or by ingesting contaminated food or water. All school employees should be aware of communicable diseases that affect their school setting and be familiar with how to minimize the spread of those diseases.

Exposure to a variety of infectious diseases in a school population is inevitable. This guide provides information to school personnel regarding appropriate actions to identify infectious diseases, to access appropriate health care for students and staff, and to control the spread of disease. Additionally, this plan outlines steps that can be taken to help interrupt the spread of communicable diseases, such as influenza and other vaccine preventable diseases. This includes, but is not limited to, Methicillin-Resistant Staphylococcus Aureus (MRSA), Noroviruses, as well as other communicable diseases.

At-Risk Populations

In any school population, there are certain individuals who may have a higher risk of complications if exposed to specific diseases. Students and staff with anemia; immunodeficiencies; who are pregnant; and/or who have chronic disease, nutritional deficiencies, or debilitating illness should be informed of the possible risks of acquiring an infection. The responsibility of the school is not to determine the extent of that risk, but to inform these individuals and to encourage consultation with their licensed health care provider. The licensed health care provider will assess the risk and make appropriate recommendations for further action or treatment.

The contents of this plan were developed with a grant from the Department of Education. However, the contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.

Common Indicators of Infectious Diseases in Children

Since classroom teachers spend several continuous hours a day with their students, they are often in an excellent position to detect early physical and behavioral changes in students at school. Teachers may observe differences in the usual pattern for a particular student, and deviation from a developmental "norm" for students of a given age. The physical and behavioral "indicators" listed below are nonspecific and do not in themselves suggest the presence of an infection.

Appetite

Often, a student who is ill or becoming ill with an infection will exhibit changes in eating habits. He/she may "pick at" solid foods, eat lightly, want only certain foods, and/or prefer liquids.

Behavior

Irritability may be associated with illnesses, often because of the accompanying fatigue, fever, and discomfort. Play activities may diminish and the student may become lethargic (drowsy or indifferent).

Fever

Parent/guardian and school staff may exhibit a great deal of anxiety about fever, and yet fever does not automatically require therapy. It rarely causes harmful effects in itself, according to several scientific studies. Repeated low-grade fever may occur as the result of physiological changes in the body and may not cause any discomfort to the student. Students with fever over 100.4°F (38°C) may need to be sent home from school, especially if other symptoms are apparent. The student's parent/guardian should be notified.

Symptomatic treatment of any illness in the school setting should be avoided unless the parent/guardian has complied with school policy on the administration of oral medications for symptomatic treatment of illness or injury. Aspirin should not be administered for viral illnesses because of the possible association with Reye syndrome.

Skin Color

A pasty, pale appearance may signal an illness, especially if it is a change from a student's normal skin color. A new yellow tinge to the eyes or skin, or a flushed appearance with rosy cheeks and glassy or red eyes, may also indicate an illness.

Rash

The diagnosis of rashes can be very difficult and even a licensed health care provider may require lab tests to confirm whether a certain disease is present. If a referral to a licensed health care provider is made, advise the student's parent/guardian to inform their licensed health care provider's office staff of the presence of a rash illness so that appropriate medical isolation can be arranged during the visit. Itchiness of the rash is not a signal of infectiousness or non-infectiousness, however, itching should also be evaluated. A rash can be a symptom of a serious or non-serious condition.

Change in Bowel Habit

Diarrhea may accompany a number of infectious diseases. Conversely, sluggishness of the bowels and constipation may occur, sometimes with abdominal cramps. Cramps can be due to the inactivity of the ill student and the dehydration that often occurs during infections.

Nasal Discharge and Obstruction

Clear nasal discharge may signal a cold or it may indicate an allergic reaction especially if accompanied by watery eyes. Yellow or green discharge may indicate an infection (usually viral) or obstruction by a foreign body. Breathing may be noisy. If breathing is labored, immediate medical referral is indicated.

Sore Throat

A sore throat can be a minor problem. However, it may also accompany potentially more significant infections such as streptococcal pharyngitis, infectious mononucleosis, or even serious generalized illnesses. Check for accompanying fever and notify the parent/guardian. Recommend medical evaluation if the sore throat is accompanied by fever, difficulty swallowing, and/or swollen lymph nodes (glands).

Cough

Coughs accompany some chronic conditions, allergic conditions, and many infectious diseases. Persistent coughs (lasting 3 weeks or more), especially with other symptoms such as fever, loss of appetite, and weight loss, need medical evaluation.

Earache and Discharge from Ear

A student may complain, pull at the ear, or put a hand to the ear if there is discomfort. When there is an earache, particularly when blood or pus is seen running from the ear, the student needs to be referred for medical care.

Pain (Back, Limbs, Neck, Stomach)

Leg and back pains are not uncommon during the course of infectious diseases. Stomach pains or cramps usually do not signal serious disease in children, although appendicitis must be considered when abdominal pain is severe or persistent. Gastrointestinal disturbances such as vomiting, diarrhea, and constipation may be accompanied by abdominal pain. The student who is absent frequently for abdominal pain should receive medical evaluation.

Note

Since this material has been developed for the purpose of assisting school nurses, principals, secretaries, and teachers in making decisions about the public health implications of certain disease situations, a statement here about the exclusion of an affected student from school or from certain school activities is necessary. Prompt identification is important to the control of infectious diseases. Therefore, throughout this guide, distinguishing characteristics of various infectious diseases are given, along with the school's responsibility for intervention.

It is clear that, in addition to deciding whether a student should attend school, the administrator or his/her designee must also evaluate whether the disease has implications for the student's participation in such activities as physical education, athletics, field trips, and lunchroom work. For example, the student who may possibly infect others with a disease that can be spread via droplets, fecal-oral contamination, or sores on the skin should not work in food services until approved to do so by the school nurse, licensed health care provider, or public health official. At the same time, good personal hygiene such as washing hands after using the bathroom and before handling food, must be emphasized. In addition to proper handwashing techniques, it is required that food handlers, where practical, wear single-service gloves.

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Modes of Transmission

Understanding the modes of transmission can help mitigate and prevent the spread of communicable diseases. Common modes of transmission are:

A. Contact

1. Person-to-person is the most common way for communicable diseases to spread. They spread through the direct transfer of bacteria, viruses or other microorganisms from one person to another. This can occur when an individual with the communicable disease or virus touches, coughs on, or kisses someone who is not infected. Some communicable diseases such as HIV, Hepatitis B and C are spread through the exchange of body fluids from sexual contact, blood transfusion, or injectable drug use.

2. Animal-to-person is being bitten or scratched by an infected animal. It can make you sick, and in extreme conditions could cause death. Handling animal waste can be hazardous.

3. Indirect contact involves microorganisms that can linger on inanimate objects such as a tabletop, doorknob or faucet handle. Touching a contaminated object and then touching your eyes, mouth or nose can transfer an infectious disease. Sharing of personal items such as combs, hats, razors, straws, utensils, etc. should be discouraged.

B. Droplet

Droplet transmission occurs when droplets containing microorganisms, aerosolized from an infected person primarily during coughing, sneezing or talking, are propelled a short distance (usually 3 feet or less) and deposited on the conjunctivae of the eye or mucous membranes of the nose or mouth.

C. Vector and Other Vehicles

(A vector is an insect or any living carrier that transmits an infectious agent.)

1. Bites and stings from infected mosquitoes, fleas, lice or ticks that are infectious, can transmit those infected microbes to humans.

2. Food contamination would include food and/or water contaminated with a microorganism that can cause infection and subsequent illness when ingested by an animal or a human.

Prevention/Mitigation

A. Hygiene:

Staff and students are expected to comply with the following personal hygiene practices as listed below:

1. Hand washing

To effectively remove germs from hands:
Wash for at least 20 seconds with warm water. Soap is required. Alcohol based hand sanitizers (at least 60% alcohol) and wipes are acceptable if soap and water is not available, but washing with soap and water is best.

According to the Centers for Disease Control and Prevention (CDC): "Though the scientific evidence is not as extensive as that on hand washing and alcohol-based sanitizers, other hand sanitizers that do not contain alcohol may be useful for killing flu germs on hands."

Hand washing is necessary:

- After recess, P.E. class, or returning from a field trip,
- After using the bathroom,
- After handling animals/reptiles,
- Before and after preparing food or eating,
- After touching or changing a wound covering of an infected wound, and
- After sneezing into hands *(see cough / sneeze below).*

Hand sanitizer and hand wipes are acceptable:

- After blowing nose,
- After coughing into hands as long as there is no visible nasal discharge or saliva,

- After touching something that might be contaminated, such as a keyboard, desktop, mouse, door knob, railing, etc.
  (Caution: store safely – alcohol-based sanitizer is flammable; and alcohol poisoning can result from ingestion)

2. Cough and sneeze etiquette

   Cover your nose and mouth when coughing or sneezing. Cough or sneeze into your elbow or a tissue, not into your hand. If you use a tissue, be sure to throw it away in a proper receptacle. If you have to use your hand, be sure to wash your hands afterwards.

3. Protecting self and others

   Isolate students and staff who appear to have flu-like illness, until they can be sent home.

   Students and staff with flu-like illness should stay home for at least 24 hours after they no longer have a fever, or signs of a fever, without the use of fever-reducing medicines. Students and staff with Norovirus should stay home for 48-72 hours after last episode of diarrhea or vomiting.

   Cover skin trauma, such as open wounds, lesions, abrasions or cuts with a clean dry bandage until healed. Covering infections will greatly reduce the risks of surfaces becoming contaminated with (MRSA) and other communicable diseases.

B. Immunization:

1. Ensure students' immunizations are up-to-date according to state guidelines

   See Appendix A - "Protect Pre-Teens and Teens from Serious Diseases", Michigan Department of Community Health

   Appendix C – "New Communicable Disease Rules" (2010-2011), Michigan Department of Community Health

   Appendix D– "Required Childhood Immunizations for Michigan School Settings," Michigan Department of Community Health

Appendix E – "Adult Immunizations: Are you Protected?", Michigan Department of Community Health

2. Vaccination is the most effective way to decrease the spread of common communicable diseases, decrease illness and death among high-risk groups, and protect the community. Students and **all staff** are encouraged to get vaccinated for vaccine preventable diseases such as influenza, hepatitis, pertussis and tetanus (T dap), chickenpox, meningitis, etc.

C. Cleaning:

1. Cleaning surfaces with soap and water removes dirt and most microorganisms. Using a disinfectant kills additional disease-causing germs. All common surfaces should be disinfected frequently.

2. Refer to building administration for district/classroom approved cleaning products and practices.

3. Use personal protective equipment (PPE), such as disposable gloves, when cleaning surfaces contaminated with body fluid.

See Appendix F – "Cleaning Guidelines", Washington State Department of Health
See Appendix G – "Guidelines for Disinfection of Norovirus", MDCH

D. Social Distancing:

1. Social distancing is a strategy used to limit the spread of infection.

2. Methods of social distancing include, but are not limited to the following:

Stay at home if you have signs and symptoms of an infection or fever. Social distancing is a good way to reduce the spread of communicable disease.

Students who become ill while at school should be isolated from other students and staff and be sent home as quickly as possible.

Promote special separation in common areas. Sit or stand as far away as possible (at least 3 feet) from potentially communicable individuals.

E. Universal Precautions:

1. According to the concept of Universal Precautions, all human blood and certain body fluids should be treated as if they are infectious. These may include, but are not limited to, Human Immunodeficiency Virus (HIV), Hepatitis B Virus (HBV) or other blood borne pathogens, or infectious microorganisms.

2. Always use appropriate district equipment and disposable gloves when cleaning up body fluids, being careful not to splash fluids into face or onto other surfaces.

3. Clean up blood and other body fluids promptly using proper disinfection procedures and products.

4. Inspect the skin on all exposed parts, especially the hands to determine whether broken skin areas are present. Cover these areas with band-aids prior to putting on disposable gloves.

5. Clean up all body fluids with any appropriate solution.

6. 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.

7. Refer to district Exposure Control Plan for Bloodborne Pathogens

Control

A. Disclosure of Protected Health Information and HIPAA

Protected health information will only be available to designated employees who need to have access to those records in their employment capacity with the District and with other authorized entities. Employees will not disclose or use protected health information unless an appropriate written consent or authorization exists, an actual emergency exists, or unless otherwise authorized by law.

B. Communicable Disease Reporting and HIPAA*

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) was enacted and addressed the sharing of protected (confidential) medical information. This has raised questions among a number of physicians about HIPAA requirements and the reporting of protected health information related to communicable diseases and immunization to local health departments. The HIPAA legislation does address this question and states that reporting of communicable diseases to the local or state health department or immunizations to the Michigan Care Improvement Registry (MCIR) are exempt because they are mandated within the Michigan Public Health Code and the information is used for surveillance and prevention of communicable diseases being spread. This is addressed in section §164.512(b) of the HIPAA regulations.

The relevant sections of the Michigan Public Health Code and Administrative Rules are: Sec. 333.5111 (1) b – Requirements for reporting communicable and serious communicable diseases

> R 325.173 – Administrative rules detailing the reporting of communicable and serious communicable diseases.
>
> Sec. 33.9207 – Establishment of the Michigan Care Improvement Registry R.325.163 – Administrative rules requiring the reporting of immunizations administered to children to the Department.

Physicians who are concerned about reporting communicable diseases and immunizations as required under the Michigan Public Health Code can be reassured that this is permitted under HIPAA and that they are not required to obtain the

patient's written consent before sending this information to the local health department.

*This information taken from Michigan Department Community Health website.(http://www.michigan.gov/mdch/0,1607,7-132-2945_5104-12538--,00.html

C. Surveillance Procedure and Reporting

1. Surveillance

   The State of Michigan requires surveillance of communicable diseases under the Communicable Disease Rules, Act No. 368 of the Public Acts of 1978, Schools and Communicable Disease Reporting.

   Under this Act, physicians, clinical laboratories, ***primary and secondary schools***, childcare centers, and camps are required to report the ***occurrence or suspected occurrences*** of any disease, condition or infection as identified in the Michigan Communicable Disease Rules. In addition, all other health care providers are authorized to report to local health authorities. Together, they play a key role in state and local efforts to control communicable diseases.

2. Reporting

   Schools are required to report communicable diseases for a number of reasons. The most common are as follows:

   - To identify outbreaks and epidemics
   - To enable preventive treatment and/or education to be provided
   - To help target prevention programs, identify care needs, and use scarce prevention resources efficiently
   - To evaluate the success of long-term control efforts

- To facilitate epidemiological research to discover a preventable cause

- To assist with local, national, and international disease surveillance efforts
  Source: Michigan Department of Community Health

Use the Michigan School Building Weekly Report of Communicable Disease to Local Health Department form DCH-0453 (formerly "IP10") for all reportable diseases. **(Appendix K)**

D. Student Exclusion Guidelines (confirmed or suspected)

1. School attendance is important for students. The decision to exclude students will be based on symptoms presented by the students. The determination of a communicable disease should be made by medical professionals. Students should be allowed to return to school once the exclusion period is met, or a health care provider clears the student.

2. Generally, if any of the following conditions apply, exclusion from school should be considered:

   - If the student does not feel well enough to participate comfortably in usual activities.

   - If the student requires more care than school personnel are able to provide.

   - If the student has a high fever, behavior changes, persistent crying, difficulty breathing, lack of energy, uncontrolled coughing, diarrhea or other signs suggesting a severe illness. Student/staff should be fever free for 24 hours without fever reducing medication, before returning to school.

   - If the student is ill with a potentially contagious disease and exclusion is recommended by a health care provider, the state or local public health agency, or by the following guidelines.

See Appendix I – "Communicable Disease Reference Chart", Monroe County Health Department

School Closure (short and long-term dismissal)

A. Decision Protocol

1. The determination of a school dismissal or closure will be made in conjunction with local health department officials. When considering **school dismissals**, school and health officials should work closely to balance the risks of communicable diseases in their community with the disruption dismissals will cause in both education and the wider community and should clearly state the reason for school dismissal. **Reactive dismissals** might be appropriate when schools are not able to maintain normal functioning. **Preemptive dismissals** can be used proactively to decrease the spread of communicable disease.

   The length of time schools should be dismissed will vary depending on the reason for dismissal as well as the severity and extent of illness. The schools, in conjunction with the local health department, should reassess whether or not to resume classes based on the epidemiology of the disease and the benefits and consequences of keeping students home.

2. For guidance regarding school closure due to attendance follow State of Michigan Compiled Law guidelines (388.1701 Sec. 101(3)(b)

3. School closure may also occur by Health Department declaration as authorized under Michigan Public Health code.

B. Continuity of learning

1. When schools dismiss students, buildings should remain open to teachers and staff so they can continue to provide instruction through other means, unless a

public health emergency is declared and congregating is not allowed.

2. Schools should develop alternative instructional strategies. If school closures are for a short duration, teachers and students may be able to keep up with lessons with help of a buddy or team system. Additionally, depending upon the grade level and level of parent/guardian literacy, sites may develop take home/send home independent study packets.

3. If the closures and the impact of the communicable disease become more severe or for subjects that require teacher facilitated instruction, districts may want to collaborate in utilizing multiple distance learning strategies. Also, since it is difficult to identify strategies and plan for all variables in the event of a school closure, it's recommended that the district form a team to determine local resources available to enhance continuity of learning. Potential resources may include curriculum maps, public access TV, libraries and various mass communication vehicles.

Appendix

A. Protect Pre-Teens and Teens from Serious Disease, Michigan Department of Community Health
B. Information for Schools on Influenza and Vaccines, MDCH, 3/11
C. New Communicable Disease Rules, MDCH, 2010-11
D. Required Immunizations for Michigan Childcare/Preschool Attendance, Michigan Department of Community Health
E. Adult Immunizations: Are you Protected?, Michigan Department of Community Health
F. Cleaning Guidelines, Washington State Department of Health
G. Guidelines for Disinfection of Norovirus, Michigan Department of Community Health
H. Reportable Diseases in Michigan – 2011, MDCH
I. Communicable Disease Reference Chart
J. Viral Meningitis Questions
K. Michigan School Building Weekly Report of Communicable Diseases to Local Health Department, MDC
L. MRSA Facts for Schools, State of Connecticut, Department of Public Health
M. Protect Yourself from MRSA and Other Infections, MDCH
N. Sample Communications

References

- ***www.cdc.gov*** (Centers for Disease Control and Prevention)
- ***www.michigan.gov/cdinfo*** (Communicable Disease Information)
- ***www.mdch.train.org/panflu/education*** (Pan Flu Tool Kit)
- ***http://www.co.monroe.mi.us/government/departments_offices/public_health/index.html*** (Monroe County Health Department)
- ***www.webmd.com*** (WebMD – Better Information; Better Health)
- ***www.michigan.gov/mdch*** (Michigan Department of Community Health)

HEALTH DEPARTMENT CONTACTS

MONROE COUNTY HEALTH DEPARTMENT
2353 South Custer Rd
Monroe, MI 48161
Phone: 734-240-7800
Toll Free: 888-354-5500
Fax: 734-240-7815

Deb Zimmerman R.N.
Communicable Disease Coordinator
Monroe County Health Department
2353 S. Custer
Monroe, Michigan 48161
734-240-7832
debbie_zimmerman@monroemi.org

APPENDIX

Measles

- Causes a rash, cough, sore eyes, and high fever

Mumps

- Causes fever, headache, and swelling under the jaw

Rubella (German Measles)

- Causes fever, rash, and soreness or swelling in the joints
- If you are pregnant, you can pass rubella to your unborn baby

One vaccine (MMR) protects against these three diseases.

All school-age children and teens need two shots of vaccine.

Polio

- Causes flu-like symptoms and can lead to paralysis and death
- Older children and teens need three doses of polio vaccine

More Vaccines?

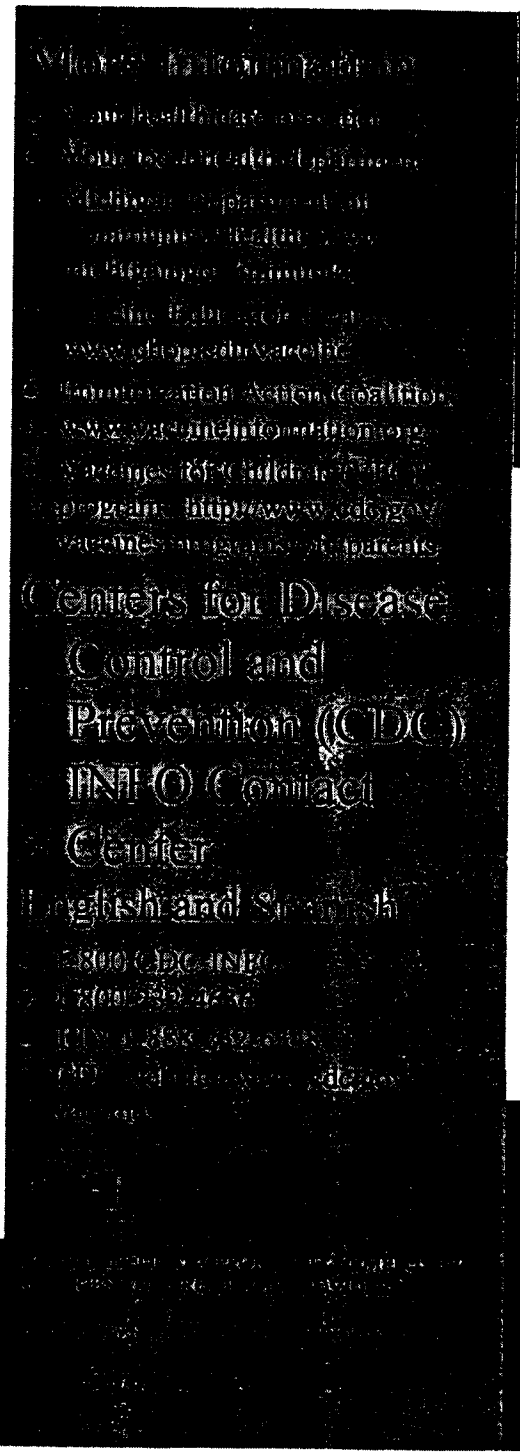
- Children who have health problems or are traveling outside the United States may need other vaccines
- Check with your child's health care provider to make sure your child isn't missing any doses of these childhood vaccines

Your Child's Vaccination Record

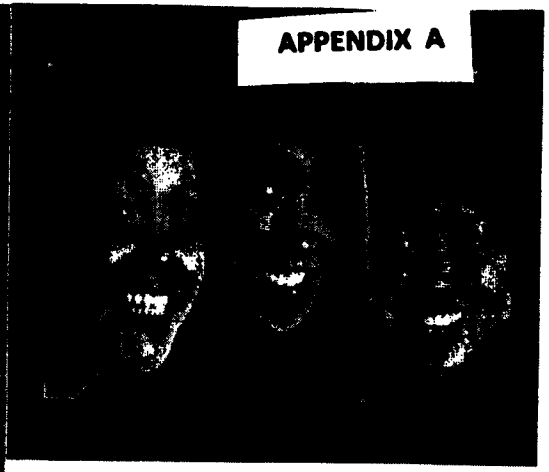
You should have a record of your child's vaccines. Keep it and carry it with you to every healthcare visit. A great way to keep track of anyone's vaccine record is by using the Michigan Care Improvement Registry (MCIR.) Ask if all your child's vaccines are in MCIR and make sure they have all needed vaccines.

Paying for Vaccines

Check to see if your health insurance will pay for these vaccines. If your child does not have health insurance, or does not have insurance that covers these vaccines, ask your health care provider or local health department about the Vaccines for Children (VFC) program. Eligible children, 18 years of age and younger, may receive publicly purchased vaccine through the VFC program.

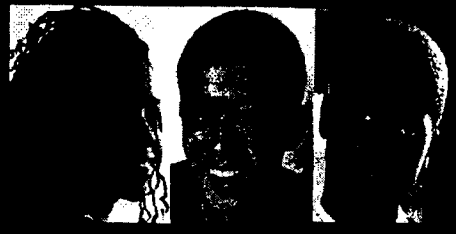


APPENDIX A



PROTECT PRE-TEENS AND TEENS FROM SERIOUS DISEASES

TEENS AND IMMUNIZATION



Every year pre-teens and teens miss important events in their lives – the first school dance or a big football game – because they are too sick to attend. Children can be protected from some serious diseases by getting immunizations (shots). Getting vaccines and staying protected from serious diseases is a lifelong job.

Meningitis

- An illness that affects the brain and spinal cord
- Spreading through sneezing, coughing, kissing, and sharing food or drinks with an infected person
- Places where teens are in close contact, such as classrooms or college dorms, make it easier to spread
- Children need one shot at the 11-12 year old check-up

Human Papillomavirus (HPV)

- HPV is a common virus
- Can cause genital warts and cervical cancer
- Three shots of HPV vaccine are recommended for girls 11 years of age and older

Tetanus

- Tetanus is usually found in soil and enters the body through a cut or wound.
- Causes painful tightening of the muscles and is life threatening

Diphtheria

- Spread by coughing or sneezing
- Can make you unable to breathe or move body parts

Pertussis

- Spread by coughing, sneezing or close contact with an infected person
- Causes coughing and choking making it hard to eat or breath
- If it is passed on to infants, it may be life-threatening

One vaccine (Tdap) protects against these three diseases.

Children should be immunized at the 11-12 year old check-up.

Influenza (Flu)

- Causes fever, headache, tiredness, cough, runny or stuffy nose, and sore muscles
- It's easy for flu to spread in places like classrooms or locations where school activities are held
- Flu spreads easily in college dorms, too
- All children 6 months through 18 years of age, as well as anyone else who wants to be protected, should receive flu vaccine every year

Some pre-teens and teens are missing doses of vaccines. All doses of vaccines are needed to protect against diseases.

Hepatitis A

- Can cause fever, tiredness, loss of appetite, nausea, and jaundice (yellowing of the skin and eyes)
- Anyone who wants to be protected from hepatitis A needs two shots of vaccine

Hepatitis B

- Can cause different kinds of liver disease including cancer
- Children need three shots of hepatitis B vaccine

Varicella (Chickenpox)

- Causes an itchy rash all over your body, fever and tiredness. It can lead to severe skin infections, scars and pneumonia
- All school-age children and teens, who have not had chickenpox, now need two shots of vaccine

the flu

Information for Schools on Influenza and Vaccines

What is influenza or "the flu"

The flu is an infection of the nose, throat and lungs caused by flu viruses. There are many different flu viruses and sometimes a new flu virus (like 2009 H1N1 flu) causes people to get sick. The flu is spread easily by coughing, sneezing or talking. Every year many people get the flu. Some people can get very sick and some may even die.

What are the symptoms of the flu

People with the flu develop a high fever, headache, dry cough, sore throat and achy muscles very quickly. Children may have stomach problems. Some people with the flu have NO symptoms at all and can still spread flu to others.

How students can protect themselves from the flu

Getting flu vaccine is the best way to protect children and adults from the flu. Flu vaccine is now recommended for:
–Everyone 6 months of age and older

What can be done to protect students

Get vaccinated and encourage others in contact with children to be vaccinated - parents, siblings, teachers, secretaries and other support staff. Getting vaccinated is especially important for those who take care of infants younger than 6 months of age. These babies are too young to be given vaccine.

Is flu vaccine recommended for children in school

Yes. CDC and MDCH recommend that children 6 months of age and older receive flu vaccine to help them stay healthy, although the vaccine is not required for school or daycare entry.

Michigan Department of Community Health
MDCH

March 2011

Do students and adults have to get the flu shot?

No. There are currently 2 types of vaccine - a shot and a nasal-spray. Some children may need 2 doses of vaccine. Health care providers can determine which type of vaccine can be given and how many doses are needed.

How often should students be vaccinated?

To be protected, children and adults need to be given flu vaccine every year - usually in the fall or winter months.

Are flu vaccines safe?

Yes, flu vaccines are safe and can be given with other vaccines. It is important to understand that the chance of being harmed from this disease is much greater than any chance of being harmed from vaccination.

Are there side effects from the flu vaccine?

Most adults and children have little or no problems after receiving flu vaccine. There may be soreness or redness where the shot was given. The nasal flu vaccine can sometimes cause a stuffy nose.

What if a student's family cannot afford vaccine?

Children 18 years of age and younger may be eligible for publicly purchased vaccines through the Vaccines for Children (VFC) program. To learn more about the VFC program contact your local health department or health care provider.

Where can I get more information?

Contact your health care provider or local health department
Centers for Disease Control & Prevention • cdc.gov/flu
Michigan Dept of Community Health • michigan.gov/flu
Childhood Influenza Coalition • preventchildhoodinfluenza.org
Families Fighting Flu • familiesfightingflu.org

May 2010

Michigan Department of Community Health
MDCH

APPENDIX C

New Communicable Disease Rules 2010-2011 School Reporting Year

BEGINNING JANUARY 1, 2010, (Effective for November 2010 report period) the following requirements will be in effect:

Required for all children entering kindergarten, all 6th grade students, and all children changing school districts:

- Two doses of varicella (Var) vaccine or history of chickenpox disease

Required for all children 11 - 18 years of age who are changing school districts or who are enrolled in 6th grade:

- One dose of meningococcal (MCV4 OR MPSV4) vaccine

- One dose of tetanus/diphtheria/acellular pertussis (Tdap) vaccine (if 5 years have passed since last dose of tetanus/diphtheria vaccine - DTaP, Td or DT)

NOTE TO SCHOOLS:

When adding November 2010 students to your MCIR/SIRS roster, these records will not be assessed by MCIR/SIRS for the NEW requirements until after May 1, 2010.

March 2011

STATE OF MICHIGAN
DEPARTMENT OF COMMUNITY HEALTH
LANSING

JENNIFER M. GRANHOLM
GOVERNOR

JANET OLSZEWSKI
DIRECTOR

MEMORANDUM

DATE: August 23, 2010

TO: Superintendents of Local and Intermediate School Districts
Principals of All Public, Private and Parochial Schools
Public School Academy Directors

SUBJECT: Immunization Requirements for Children entering Kindergarten, 6th Grade or Children entering a New School District in Grades 1-12 during the 2010 Calendar Year

Vaccine-preventable diseases continue to occur in Michigan, and may unfortunately result in disability or death. Immunization is a powerful cost-effective measure to protect children from disease. To prevent outbreaks from occurring in school settings and other places where children congregate, a high percentage of children must be immunized.

Since 1978, Michigan law requires that each student upon entry into kindergarten or into a new school district involving grades 1-12 possess a certificate of immunization at the time of registration or not later than the first day of school. *Public Act 89 of 2000* mandates that an immunization assessment be completed for each sixth grade student. The above laws (which amend the *Revised School Code*, the *Public Health Code*, and the *State School Aid Act)* were implemented to ensure that children are adequately immunized against vaccine-preventable diseases prior to achieving adolescence. Immunization prior to adolescence is important, as some of these diseases become an even greater threat to health upon reaching adolescence.

Prior to a child entering or attending school, parents or guardians are required to produce documentation confirming their child has received all required immunizations, or in the alternative their child received at least one dose of each of the required immunizations and is awaiting receipt of subsequent doses to be administered at appropriate intervals.

There are also three circumstances in which a required vaccine may be waived or delayed:

1. A valid medical contraindication exists precluding the child from receiving the vaccine. A medical waiver is required to be completed and signed by the child's physician and shall state the contraindication(s), the vaccine(s) involved, and the time period during which the child is precluded from receiving the vaccine(s).

2. The parents or guardians hold religious or philosophical beliefs which preclude receipt of a vaccination(s). A waiver must be signed by the parent or guardian with all

information completely supplied. An updated waiver must be presented every reporting year.

3. The child has received at least one dose of each immunizing agent and the next dose or doses are not yet due.

A child who fails to meet immunization requirements shall not be admitted to school. However, children excluded from school entry due to an incomplete immunization schedule may be granted an excused absence by the Michigan Department of Education (MDE) if permitted by the local school district board of education. It should be noted that children excused on "Pupil Membership Count Day" may still be counted for purposes of State School Aid if they physically return to school within 30 calendar days from the date of "Pupil Membership Count Day".

IP-100 reports of new enterers' and sixth grade student immunization records must be submitted by November 1, 2010, and February 1, 2011, as required by law. **The November 1 report should include all students who are newly entered and still enrolled in the school from January 1, 2010, through September 30, 2010. The February 1 report should include all students who are newly entered and still enrolled in the school from January 1, 2010, through December 31, 2010.**

The Michigan Care Improvement Registry/Schools Immunization Reporting System (MCIR/SIRS) is a web-based computer application designed to process childhood immunization records and to replace the handwritten IP-100 forms. This reporting system allows access to immunization records contained within the MCIR and provides for submission of on-line reports to the local health departments. This system also allows for timely and efficient reporting and should be used in circumstances in which there is access to the Internet. MCIR/SIRS provides assessment of immunization records according to the most current immunization requirements for children entering a new school district. **Please mail or fax copies of all waivers to your local health department with a copy of the waiver report from MCIR. To assist in completion of immunization reports, a summary of the immunization requirements for new school entries, along with supporting information, are available online at www.mcir.org under the School/Childcare link.** To obtain technical assistance or to enroll as a MCIR/SIRS user, please contact the MCIR Help Desk at 1-888-243-6652.

For those individuals who will be utilizing the revised handwritten IP-100/101 report form, copies are to be sent to your local health department. A copy of the revised form is to be retained for your own records. The revised IP-100/101 reporting forms should be properly updated to address those students with provisional status who receive additional immunizations or for new students who enroll during the year. Maintenance of the up-to-date information is critical in the event that an outbreak of disease were to occur or if an audit is conducted by your local health department or the Michigan Department of Community Health (MDCH). All necessary materials are provided for in this packet and additional forms may be obtained at www.mcir.org. **Please attach copies of all waivers to the revised IP-100/101 reporting form when providing to a local health department.**

Section 167 of the *State School Aid Act* (P.A. 94 of 1979) provides that by November 1, 2010, school districts shall have 90 percent of entering pupils with a completed, appropriately waived or provisional immunization record. Those school districts which are not in compliance will be subject to withholding of five percent of their state school aid funds. February 1, 2011, a minimum of 95 percent of entering pupils shall have a completed, waived or provisional immunization record to avoid implementation of the five percent withholding. Submission of immunization records prior to the November and February deadlines will allow your local health department to expedite review of submitted information and allow for data corrections.

Section 380.1177 of the Michigan Public Health Code requires the Michigan Department of Education, in cooperation with MDCH, to develop information for Michigan schools to address notification of families, with children enrolled in grades 6, 9, and 12, about the risk and prevention of the diseases meningococcal meningitis and human papillomavirus.* Local school notification includes information regarding the symptoms of the diseases, how they are spread, where to obtain additional information about risk factors, risk associated with vaccination against these diseases and where to obtain the vaccines. On-line access to these notification materials is available at www.michigan.gov/immunize or www.michigan.gov/mde.

Questions regarding immunization requirements or requests for additional copies of informational materials should be provided to your local health department. Staff at MDE is also available to discuss school immunization requirements and may be reached at 517-373-1122. We appreciate your continued support and cooperation in ensuring that Michigan's school-aged children are properly immunized.

Sincerely,

Janet Olszewski
Director
Department of Community Health

Mike Flanagan
Superintendent of Public Instruction
Department of Education

JO/jap

Enclosures

cc: Local Health Departments

*http://www.legislature.mi.gov/documents/mcl/pdf/mcl-380-1177a.pdf

Required Childhood Immunizations for Michigan School Settings

Entry Requirements for All Public & Non-Public Schools		
Age → Vaccine**↓	4 years through 6 years	7 years through 18 years including all 6th grade students
Diphtheria, Tetanus, Pertussis	4 doses DTP or DTaP, one dose must be on or after 4 years of age	4 doses D and T **OR** 3 doses Td if #1 given on or after 7 years of age. 1 dose of Tdap for children 11 through 18 years **IF** 5 years since the last dose of tetanus/diphtheria containing vaccine.
Polio	4 doses, if dose 3 administered on or after 4 years of age, only 3 doses are required	3 doses
Measles,* Mumps,* Rubella*	2 doses on or after 12 months of age	
Hepatitis B*	3 doses	
Meningococcal	None	1 dose for children 11-18 years of age
Varicella* (Chickenpox)	2 doses of varicella vaccine at or after 12 months of age OR current lab immunity OR reliable history of disease	

* Current laboratory evidence of immunity is acccptable instead of immunization with antigen.
For more information, please refer to www.michigan.gov/immunize

****All doses of vaccines must be given with appropriate spacing between doses and at appropriate ages to be considered valid.**

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Rev. March 2011

Required Immunizations for Michigan Childcare/Preschool Attendance

Age → Vaccine**↓	Childcare/Preschool Entry Requirements						
	Birth through 1 month	2 months through 3 months	4 months through 5 months	6 months through 15 months	16 months through 18 months	19 months through 4 years	5 years
Diphtheria, Tetanus, Pertussis	None	1 dose DTaP	2 doses DTaP	3 doses DTaP	3 doses DTaP	4 doses DTaP	
Pneumococcal Conjugate (PCV7 and/or PCV13)	None	1 dose	2 doses	3 doses	4 doses **OR** age appropriate complete series	1 dose on or after 24 mo **OR** age appropriate complete series	None
H. influenzae type b	None	1 dose	2 doses		1 dose on or after 15 months of age **OR** age appropriate complete series		None
Polio	None	1 dose	2 doses		2 doses	3 doses	
Measles,* Mumps,* Rubella*	None	None	None	None	1 dose on or after 12 months of age		
Hepatitis B*	None†	1 dose	2 doses		2 doses	3 doses	
Varicella* (Chickenpox)	None	None	None	None	1 dose on or after 12 months of age **OR** current lab immunity **OR** reliable history of disease		

Michigan Department of Community Health
MDCH
Jennifer M. Granholm, Governor
Janet Olszewski, Director

* Current laboratory evidence is acceptable instead of immunization with that antigen.
† Hepatitis B may be administered as early as birth.
This table represents **the minimum required immunizations** for childcare centers.
****All doses of vaccines must be given with appropriate spacing between doses and at appropriate ages to be considered valid.**
Additional information is posted on www.michigan.gov/immunize

Rev. May 2010

Meningococcal (meningitis)

Adults who need meningococcal vaccine:

- College freshmen living in dormitories
- Persons with persistent complement component deficiencies
- Persons with a removed or damaged spleen (such as with sickle cell anemia)
- Military recruits
- Lab staff working with these organisms
- Some travelers

Adults who remain at an increased risk for meningococcal disease may need a second dose of this vaccine five years after their first dose (except for college freshman living in a dorm).

Appendix E

Human Papillomavirus (HPV)

There are two HPV vaccines: a quadrivalent vaccine (HPV4) to prevent cervical, vaginal and vulvar cancers (in females) and genital warts (in females and males), and a bivalent vaccine (HPV2) to prevent cervical cancers in females.

All women through 26 years of age should receive a HPV4 or HPV2 vaccine series.

All males through 26 years of age may receive a HPV4 vaccine series to reduce their risk of getting genital warts.

Your Shot Record

- You should be given a record of the vaccines that you have received. Keep it, and carry it with you every time you visit your doctor or nurse.
- The Michigan Care Improvement Registry (MCIR) can keep your record. Ask your doctor or nurse to if the vaccines you received are in MCIR. Your doctor can look in MCIR to see what vaccines you need.
- Make sure you and your loved ones get all needed vaccines.

Are you traveling out of the country?

You may need other vaccines. Check with your doctor, your local health department, or the Centers for Disease Control and Prevention (CDC) website at [illegible]

Paying for Vaccines

Adults who are uninsured or have health insurance that does not cover the cost of vaccines should check with their Local Health Department (LHD) about getting vaccines for free or little cost. Adults who have health insurance that covers vaccines (including Medicare or Medicaid) should speak with their doctor or LHD about where to get vaccines.

Where to go for more information

- Your health care provider
- Your local health department
- Michigan Department of Community Health: www.michigan.gov/immunize
- Vaccine Education Center: www.chop.edu/vaccine
- Immunization Action Coalition: www.vaccineinformation.org
- Centers for Disease Control and Prevention (CDC) INFO Contact Center:
  - English and Spanish
  - 800-CDC-INFO
  - 800-232-4636
  - TTY 1-888-232-6348
  - CDC website: www.cdc.gov/ vaccines

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MDCH is an Equal Opportunity Employer, Services and Programs Provider. 20,000 printed at $.12 cents each with a total cost of $2,383.63

(Rev. 4/10)

APPENDIX E

Adult Immunizations

Are You Protected?

Hepatitis B

Adults who need hepatitis B vaccine:

- Health care workers and others with on-the-job risk
- Developmentally disabled persons and staff working with them
- Persons who live with or care for a person with hepatitis B
- Men who have sex with men
- Persons with more than 1 sex partner in the last 6 months
- Persons with a sexually transmitted disease (STD)
- Dialysis patients
- Persons with acute or chronic liver diseases
- Persons with HIV
- Injection drug users
- Foreign born persons from places where hepatitis B is common
- Some travelers
- All persons who want to be safe from getting hepatitis B

Influenza (Flu)

All adults are recommended to get flu vaccine every year.

Flu vaccination is especially important for:

- Pregnant women
- Health care workers
- Persons with long-lasting health problems (such as diabetes, asthma, sickle cell, lung, heart, liver, or kidney diseases)
- Persons who live with or care for persons at high risk (listed above)

Some adults can receive the nasal spray flu vaccine.

For more information on influenza:
www.michigan.gov/flu
www.cdc.gov/flu

Measles, Mumps, Rubella (MMR)

All persons born in 1957 or later without proof that they have had measles, mumps, and rubella disease should receive a MMR vaccine.

Some adults may need two shots:

- Health care workers
- College students
- Some travelers

Pneumonia (Pneumococcal Disease)

All persons 65 years and older need this vaccine

Adults 19 through 64 years of age need this vaccine if they

- Have asthma
- Have long-lasting health problems (like diabetes, heart or kidney problems)
- Have a damaged or removed spleen (such as with sickle cell anemia)
- Have HIV
- Live in a long-term care facility
- Smoke cigarettes
- Have problems with alcohol

Only 1-2 doses of this vaccine are needed in a lifetime.

Hepatitis A

Adults who need hepatitis A vaccine:

- Persons who live with or care for a person with hepatitis A
- Persons in close contact with an adopted child from a place where hepatitis A is common
- Men who have sex with men
- Persons with blood clotting factor disorders
- Persons with acute or chronic liver disease
- Persons who use illegal drugs
- Some travelers
- All persons who want to be safe from getting hepatitis A

Tetanus-Diphtheria-Pertussis (Tdap)

Adults up to 65 years need one dose of Tdap if they:

- Are living with or caring for an infant under age 12 months
- Are a health care worker
- Have never had a dose of Tdap

Tetanus-Diphtheria (Td)

Adults who have had Tdap or are 65 and older need Td if:

- It has been 10 years or more since their last shot of Tdap/Td
- They have a wound and it has been 5 years since their last shot*

*If in doubt, ask a nurse or a doctor to look at the wound.

Varicella (chickenpox)

Adults can get chickenpox too! All adults born in the U.S. in 1980 or later who have not had chickenpox should receive varicella vaccine. If you received only one dose of varicella vaccine in your lifetime, you need a second shot.

Zoster (shingles)

Adults 60 years and older who wish to reduce their risk of getting shingles should get zoster vaccine.

Everyone needs shots to protect them from these diseases

Cleaning Guidelines:

Disinfectants need time to kill germs. Follow the time requirements on the product label.

◊ MRSA and influenza viruses, including the new H1N1 virus, are inactivated by many types of disinfectants (bleach, quaternary ammonium compounds (quats), alcohols, and stabilized hydrogen peroxides). Noroviruses are much harder to kill and these products are not generally effective against them ***(see cleaning vomit below for cleaning and disinfecting noroviruses)***. For more specific instructions on effective cleaning practices consult with your local health department.

◊ Choose a product that is effective against most bacteria and viruses, and lists schools as a recommended site. Read and follow the instructions on the label. Pay close attention to the hazard warnings and instructions for using personal protective items such as gloves and eye protection. Use disinfectants in well-ventilated areas. Spraying disinfectants into the air is not recommended or effective and may cause respiratory irritation.

Keep hard surfaces such as desks, tables, and countertops clean and disinfected at least once a day. *(Clean surface prior to disinfecting unless using a product that combines the two functions.)*

Keep surfaces touched by more than one person such as door handles, faucets, keyboards, and railings clean and disinfected at least once a day. *(Clean surface prior to disinfecting unless using a product that combines the two functions.)*

Use disposable sanitizer cloths to wipe electronic items that are touched often, such as phones, computers, remote controls, and hand-held games at least once a day. *(If there are visible contaminants, clean with one cloth and then use a second to disinfect.)*

If a child is visibly ill and coughing or sneezing on a surface, clean and disinfect the surface immediately.

When surfaces are not visibly dirty: Clean the surface with a commercial product that is both a detergent (cleans) and a disinfectant (kills germs). These products can be used when surfaces are not visibly dirty.

When surfaces are visibly dirty: Wash the surface with a general household cleaner (soap or detergent), rinse with water, and follow with a disinfectant. This method should be used for visibly dirty surfaces.

Using bleach as a disinfectant

◊ Use a chlorine bleach solution made by adding 1 tablespoon of bleach to a quart (4 cups) of water; use a cloth to apply to surfaces and let stand for 3-5 minutes before rinsing with clean water.

- ◊ Do not mix bleach or chlorine products with ammonia or quaternary ammonia cleaners or acids such as vinegar. Fumes produced can cause serious respiratory damage.

- ◊ Date bottles when opened and use within the manufacturers recommended shelf life.

- ◊ Prepare a fresh bleach solution daily.

Bathrooms

- ◊ Clean and disinfect bathroom surfaces at least once a day.

- ◊ Keep soap and paper towel dispensers full.

- ◊ Make sure that hand-operated, self-closing faucets deliver at least ten seconds of water at a time; and fifteen seconds minimum in food service areas.

Cleaning vomit (*Cleaning and disinfecting is required to kill any possible noroviruses.*)

- ◊ Clear all individuals from the area. Vomit should be immediately covered with a disposable cloth and the affected area drenched with a disinfectant to reduce potential airborne contamination.

- ◊ Use face masks with eye protection or a face shield, gloves, and aprons when cleaning up vomit. Paper towels or other towels used to clean-up vomit should be immediately placed in a sealed trash bag and disposed of properly.

- ◊ Discard any uncovered food in the vicinity.

- ◊ Clean contaminated surfaces with soap and water. Then disinfect using a ten percent bleach solution (1 part bleach to 9 parts water or 1½ cup bleach per gallon of water). Any food contact surfaces need a clear-water rinse and a final wipe down with a regular sanitizing bleach solution to remove residual high levels of bleach. This is an extremely concentrated bleach solution. Protect eyes, skin, and clothing. Keep the area well ventilated.

For further questions or guidance on environmental contamination call your local Health Department

Michigan Department Of Community Health
MDCH

Viral Gastroenteritis

NOROVIRUS

Michigan Department of Agriculture

Guidelines For Environmental Cleaning And Disinfection of Norovirus

Noroviruses are a group of viruses that cause acute gastroenteritis in humans. The symptoms of norovirus infection include nausea, vomiting, diarrhea, cramping, and low-grade fever. Noroviruses are transmitted through the fecal-oral route, either by consumption of fecally contaminated food or water, direct person-to-person spread, or environmental and fomite (inanimate object or substance that is capable of transmitting infectious organisms) contamination.

Materials Needed:
Disposable gloves, masks, eye protection or face shields, and gown or protective clothing
Please don all materials before beginning cleaning procedure.
For questions about the above mentioned personal protective equipment, please see
http://www.cdc.gov/ncidod/dhqp/gl_isolation.html (Part II.E)

General Warning:
Chlorine bleach may damage fabrics and other surfaces. Please spot test area before applying to visible surface.

This document contains information for:

- Disinfection
- Specific Clean-up Procedures
- Food Service Establishments
- Healthcare/Hospital/Nursing Home Facilities
- Schools/Daycares

Disinfection

(For non-visibly soiled areas - please refer to specific procedures for large spills)

Examples of items to disinfect:
Doorknobs, faucets, sinks, toilets, commodes, bath rails, phones, counters, chairs (including backs), tables, hand rails, elevator buttons, light switches, keyboards, mattress covers, aprons, uniforms, linens, bedding and ice machines.

What works best: Chlorine bleach (sodium hypochlorite -NaOCl)

Chlorine bleach concentrations and mixing instructions:

- **200ppm** (parts per million) - 1:250 dilution
- **Use for stainless steel, food/mouth contact items, toys**
- 1 Tablespoon of bleach in 1-gallon water

1000ppm (parts per million) - 1:50 dilution
- **Use for non-porous surfaces, tile floors, counter-tops, sinks, toilets**
- 1/3-cup bleach in 1-gallon water

5000ppm (parts per million) - 1:10 dilution
- **Use for porous surfaces, wooden floors**
- 1 and ½ cup bleach in 1-gallon water

Stability of Chlorine Bleach
- Open bottles of concentrated chlorine bleach will lose effectiveness after 30 days. Change bottles of bleach every 30 days for accurate concentrations. For disinfecting, use an unopened bottle of chlorine bleach. Prepare a dilution of fresh bleach every day of use and discard unused portions.

Bleach dilutions clarified with household measurement terms

[illegible]	[illegible]	Chlorine (ppm)	Dilution approximate	[illegible]	[illegible]
5.25% - 6.15%	Concentrate	52,500 - 61,500	Concentrate	52,500 - 61,500	* Patient Care
5.25% - 6.15%	1:10	5,250 - 6,150	1.5 cups / 1 gallon	~6000	* Patient Care
5.25% - 6.15%	1:100	525-615	0.25 cup / 1 gallon	~600	* Patient Care
5.25%	1:200	263	1 tablespoon / 1 gallon	<200	Dietary
5.25% - 6.15%	1:1000	53-62	1 teaspoon / 1 gallon	~50	Dietary

The glossary in the CDC guidelines provides bleach dilutions using household measurement terms and equivalent parts per million (ppm) that can be used to translate recommendations for use in the patient care setting for environmental decontamination after cleaning, e.g., for *Clostridium difficile*. Premier's Safety Institute has expanded the information to include the use of chlorine bleach as a sanitizing agent in dietary settings consistent with EPA U.S Gov't regulations (21 CFR Part 178). **Please see references on page 10.**

Other effective disinfectants

- A phenolic environmental disinfectant (Lysol® or Pinesol®) may be effective, but may require a concentration of **2-4X** the manufacturer's recommendation. The use of this product at the higher concentration may pose a significant health risk to children, workers, pets or yourself. **Use** extreme caution when using these products. Please read the manufacturer's warning.

- Environmental Protection Agency (EPA) -registered disinfectants

  Note: Some of these products now include quaternary ammonia-based disinfectants but in combination with alcohols. These claims of effectiveness are based on in-vitro studies usually using feline calicivirus; field effectiveness in the context of outbreaks has not been evaluated.

EPA's Registered Antimicrobial Products Effective Against Norovirus:
http://www.epa.gov/oppad001/list_g_norovirus.pdf

NOT ALL DISINFECTANTS SHOWN ON EPA LIST ARE APPROVED FOR USE IN FOOD FACILITIES. ** **Please see Food Service Establishments Section beginning on page 5.**

Health Concerns with using Chlorine Bleach

Mixing hazards

- USE ONLY IN WELL-VENTILATED AREAS. Adverse effects of inappropriate mixtures of household cleaners usually are caused by prolonged exposure to an irritant gas in a poorly ventilated area. The most common inappropriate mixtures of cleaning agents are bleach with acids (like vinegar) or ammonia (Windex ®). Potential irritants released from such mixtures are chlorine gas, chloramines, and ammonia gas.

Health hazards

- Chlorine bleach is corrosive and irritating to all mucosal tissue, skin, eyes and upper and lower respiratory tract. Avoid spray bottle application with any disinfectant. However, "pour" or "pump" bottles that do not produce aerosols are highly recommended.

Personal protective equipment

- Disposable gloves, masks, eye protection or face shields, and gown or protective clothing
- Environmental cleaning using a more concentrated disinfectant will require a heavier duty glove than a simple non-sterile latex/vinyl glove.

Specific Clean-up Procedures

For cleaning large spills of vomitus or stool, a two-step process should be used. Put on personal protective equipment before cleanup as specified in the CDC document: http://www.cdc.gov/ncidod/dhqp/gl_isolation.html

1. Pre-cleaning of visible/organic debris with absorbent material (double layer and placed in a plastic bag to minimize exposure to aerosols) should precede the disinfection process.
2. Liberally disinfect area and objects surrounding the contamination with an appropriate environmental disinfectant (multiple applications may be required).

   *Ensure appropriate dilution and contact times for the appropriate environmental disinfectant.

Hard surfaces

- Disinfect with bleach, rinse with water if food preparation area.

Carpet / Upholstered Furniture

- Visible debris should be cleaned with absorbent material (double layer) and placed in a plastic bag to minimize exposure to aerosols - disinfecting with bleach may discolor carpet – steam clean (heat inactivation) 158°F for 5 minutes or 212°F for 1 minute for complete inactivation.

Linens / clothing / textiles

- If soiled, vomit or stool should be carefully removed to minimize aerosols. Keep contaminated and uncontaminated clothes separated. Minimize disruption of soiled linens and laundry. Aerosols created may pose a risk for transmission. Wash items in a pre-wash cycle, then use a regular wash cycle using detergent and dried separately from uncontaminated clothing at high temperature greater than 170°F. Ensure segregation of clean and soiled linens/clothing/textiles.

Surfaces Corrodible/damageable by bleach

- EPA-registered phenolic solutions (concentrated Lysol® or concentrated Pinesol®) mixed at **2-4X** the manufacturer's recommended concentration.

Food Service Establishments

Ill Employees

- Food handlers who are ill with gastrointestinal symptoms MUST NOT prepare or serve food for others under any circumstances **(2005 Food Code 2-201.12)**. Any employee with vomiting or diarrhea must be sent home immediately, unless their symptoms are the result of a non-infectious condition (e.g., pregnancy or Crohn's Disease).

- It is required that employees that have been ill with *suspected* Norovirus MUST not return to work for a period of 24 hours after symptoms have ended or provides medical documentation that the symptom is from a non-infectious condition, as mentioned above. However, It is **highly recommended that** employees that have been ill with suspected Norovirus should not return to work for a period of 48 to 72 hours after symptoms have ended

- Serving a Non-Highly Susceptible Population **(2005 Food Code 2-201.13 (A)(2)(a)**
  Food handlers who have been *diagnosed* as having Norovirus may return on a *restricted* basis (i.e. restricted from working with exposed food; clean equipment, utensils, and linens; and unwrapped single-service and single use articles) in the food establishment no sooner than 24 hours after symptoms resolve. They remain restricted until they do meet the following conditions:

  - Approval is obtained from the Regulatory Authority **(2005 Food Code 2-201-13 (D), AND**
  - They have been medically cleared **(2005 Food Code 2-201-13 (D)(1), OR**
  - More than 48 hours have passed since the employee's symptoms have resolved. **(2005 Food Code 2-201-13 (D)(2).**

- Serving a Highly Susceptible Population **(2005 Food Code 2-201.13 (A)(2)(b)**
  An employee who serves a highly susceptible population and who has been diagnosed with Norovirus is excluded from work until meeting the following requirements:

  - Approval is obtained from the Regulatory Authority **(2005 Food Code 2-201-13 (D), AND**
  - They have been medically cleared **(2005 Food Code 2-201-13 (D)(1), OR**

- More than 48 hours have passed since the employee's symptoms have resolved. (**2005 Food Code 2-201-13 (D)(2).**

- Diligent hand washing practices should be followed.

Hand washing

- After using the restroom, sneezing, coughing, before and after food preparation, all employees should wash hands with warm running water and soap, using friction for 20 seconds. Hands should be dried with a single-service paper towel or air dryer.
- It is recommended that persons involved in busing tables, handling of used utensils; cups or any dishes exercise regular thorough hand washing, particularly before eating or handling food or clean utensils.

Disinfection Precautions

- NOT ALL DISINFECTANTS SHOWN ON EPA LIST (page 3) ARE APPROVED FOR USE IN FOOD FACILITIES

- **Product label must contain language stating approval for use in (FDA or USDA) food facilities AND provide appropriate directions for use/application rates in these settings. Consult the manufacturer for further information on approval for use on food contact surfaces and/or in food service facilities.**

- Any pesticide product intended for sanitizing inanimate food contact surfaces must be approved by FDA under 21CFR178.1010. See link below for approved chemicals.
  http://www.access.gpo.gov/nara/cfr/waisidx_99/21cfr178_99.html

Healthcare/Hospital/Nursing Home Facilities

Occupational Health Policies

- Refer to Occupational Health for employee health policies for work restrictions and return to work policies http://www.cdc.gov/ncidod/dhqp/gl_hcpersonnel.html

EPA-Registered Hospital-Use disinfectant

- Ensure appropriate use EPA-registered Hospital-Use disinfectant – (see Disinfection section).

Medical Equipment Cleaning Precautions

- Medical equipment used for care of norovirus infected patients, should be either dedicated to that room for the duration of isolation or be thoroughly disinfected upon removal from the room. Please consult terminal cleaning recommendations for your facility. Selection of appropriate cleaning agent should be consistent with the equipment manufacturer's recommendation for compatibility.

Cleaning Procedures

- Routine environmental cleaning measures, at proper time intervals, and proper disinfection order, with the recommended concentration and contact time should be used.
- For cleaning procedures (i.e. changing water / wash cloths, sequence of cleaning) refer to HICPAC Environmental Infection Control for Healthcare Facilities, 2003 http://www.cdc.gov/ncidod/dhqp/gl_environinfection.html Pgs.71-88.

Laundry Concerns

- Do not shake soiled linens and laundry. Aerosols created may pose a risk for transmission. Soiled linens should be placed directly into a bag at the point of removal.
- Ensure proper separation of clean and soiled laundry.
- For additional laundry information go to http://www.cdc.gov/ncidod/hip/enviro/guide.htm pgs98-103.

Ice Machines

- Contaminated ice machines must be disinfected.
- For protocols see http://www.cdc.gov/ncidod/hip/enviro/guide.htm pgs 65-67.

Schools/Daycare

Hand washing

- All employees should wash hands with warm running water and soap, using friction for 20 seconds, paying special attention to under fingernails. Dry hands with a single-service paper towel or air dryer.
- Hands should be washed after using the restroom, sneezing, coughing, changing diapers, before any food preparation or service.

Toy cleaning

- Toys should be cleaned and disinfected daily.
- Any toy that enter a child's mouth (rubber or plastic blocks, balls, etc.) must be disinfected with 200ppm bleach, rinsed thoroughly and air dried or run through dishwasher with high temperature (170°F).
- Remove visible debris on softer toys that have been soiled by vomit – (see Disinfection section). Launder toy as directed or discard if necessary.

Keeping Diaper Changing Surfaces Clean

- Surfaces should have a plastic covered pad without cracks.
- Use disposable material to cover the pad on changing tables such as shelf paper, wax paper, scrap computer paper, cut up paper bags. Discard after each diaper change.
- Clean the surface after every diaper change by washing with detergent, water and friction, bleach dilution (see **Disinfection** section for appropriate concentration), and rinsing with clean water.
- Caregivers must wash their hands immediately.
- After changing a diaper, the diapered child's hands should be washed also.

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Michigan Department Of Community Health

MDCH

Michigan Department of AGRICULTURE

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REPORTABLE DISEASES IN MICHIGAN - 2011

A Guide for Physicians, Health Care Providers and Laboratories

Report the following conditions to the Michigan Disease Surveillance System (MDSS) or local health department (see reverse) within 24 hours (unless otherwise noted) if the agent is identified by clinical diagnosis, direct examination, culture, serology, molecular techniques or histopathology.

**Acquired Immunodeficiency Syndrome (AIDS)
Anaplasma phagocytophilum (Anaplasmosis)
Arboviral encephalitides, neuro- and non-neuroinvasive
California serogroup, Eastern Equine, Powassan
St. Louis, Western Equine, West Nile
Babesia microti (Babesiosis)
Bacillus anthracis (Anthrax)
Blastomyces dermatitidis (Blastomycosis)
Bordetella pertussis (Pertussis)
Borrelia burgdorferi (Lyme Disease)
Brucella species
Burkholderia mallei (Glanders)
Burkholderia pseudomallei (Melioidosis)
Campylobacter species
Chlamydia trachomatis (Trachoma, Genital infections, LGV)
Chlamydophila psittaci (Psittacosis)
Clostridium botulinum (Botulism)
Clostridium tetani (Tetanus)
Coccidioides immitis (Coccidioidomycosis)
Corynebacterium diphtheriae (Diphtheria)
Coxiella burnetii (Q Fever)
Cryptosporidium species
Cyclospora species
Dengue virus
Ehrlichia species
Encephalitis, viral or unspecified
Entamoeba histolytica (Amebiasis)
† Escherichia coli, O157:H7 and all other shiga toxin positive serotypes
Francisella tularensis (Tularemia)
Giardia species
*Guillain-Barre Syndrome
Haemophilus ducreyi (Chancroid)
Haemophilus influenzae, sterile sites - submit isolates for serotyping for patients <15 years of age
Hantavirus
Hemolytic Uremic Syndrome (HUS)
Hepatitis, viral
Hepatitis A virus, (Anti-HAV IgM)
Hepatitis B virus, (HBsAg)
Hepatitis C virus, (Anti-HCV, RNA, RIBA, genotype)
Hepatitis D virus
Hepatitis E virus
Histoplasma capsulatum (Histoplasmosis)
**HIV, (Confirmed positive HIV diagnostic serology and detection tests; CD4 counts/percents and all viral loads on people already known to be infected)
Influenza virus (Weekly aggregate counts)
Pediatric mortality, report individual cases
Novel Influenza viruses, report individual cases
*Kawasaki Disease
Legionella species
Leptospira species
Listeria monocytogenes
Measles virus (Measles/Rubeola)
Meningitis, bacterial and viral
Mumps virus
‡ Mycobacterium tuberculosis complex (Tuberculosis)
Neisseria gonorrhoeae (Gonorrhea)
Neisseria meningitidis, sterile sites (Meningococcal Disease)
Orthopox viruses (including: Smallpox, Monkeypox)
Plasmodium species (Malaria)
Poliovirus
Prion disease (Includes CJD)
Rabies virus
*Rheumatic fever
Rickettsia species (Spotted Fever and Typhus Group)
Rubella virus
Salmonella species
Salmonella typhi (Typhoid Fever)
Severe Acute Respiratory Syndrome (SARS)
Shigella species
Staphylococcus aureus, (MRSA), outbreaks only
Staphylococcus aureus, vancomycin intermediate/ resistant (VISA/VRSA)
Streptococcus pneumoniae, sterile sites, susceptible and resistant
Streptococcus pyogenes, group A, sterile sites
*Toxic Shock Syndrome
Treponema pallidum (Syphilis)
Trichinella spiralis (Trichinellosis)
Varicella (Chickenpox)
Vibrio species (Cholera)
Vibrio cholera, V. vulnificus, or V. parahaemolyticus
Viral Hemorrhagic Fever
Yellow fever virus
Yersinia enterocolitica (Yersiniosis)
Yersinia pestis (Plague)

Note: Also report the unusual occurrence, outbreak or epidemic of any disease or condition

LEGEND

Blue Bold Text = An isolate, diagnostic specimen, or serum sample, where appropriate, must be submitted to MDCH or other laboratory designated by MDCH.
† An isolate, if available, or the non-culture positive broth and/or stool specimen must be submitted to MDCH laboratory
‡ All preliminary tuberculosis test results are to be reported to appropriate local health department and isolates submitted to MDCH laboratory.
* Reporting within 3 days is required.
** Reporting within 7 days is required.

This reporting is expressly allowed under HIPAA and Michigan Public Act 368 Communicable Disease Rules: R 325.171-3, 333.5111

MONROE COUNTY HEALTH DEPARTMENT
COMMUNICABLE DISEASE REFERENCE CHART FOR SCHOOLS

APPENDIX I

The following are general recommendations for uncomplicated cases. Principals may use their judgement, based on these recommendations to exclude children. Contacts without symptoms need not be excluded. These diseases are primarily transmitted by direct contact with the individual. Books, papers, and other school equipment do not ordinarily act as vehicles for transmission of diseases.

DISEASE	INCUBATION	PERIOD OF COMMUNICABILITY	MODE OF TRANSMISSION	EARLY SIGNS	RESTRICTIONS
ATHLETES FOOT	Unknown	As long as a lesion is present.	Contact with secretions from feet or surface contaminated by such secretions.	Itching, scaling, cracking and/or blisters between the toes.	Exclude only from showers and swimming pools.
CHICKENPOX (Varicella)	2 to 3 weeks	One to two days before rash, to 6 days after eruption first appears or until all lesions have crusted.	Contact with secretions of nose and throat; discharges from skin lesion; scabs not infectious.	Mild fever at time of eruption, which looks like water blisters.	Exclude until lesions are dry and crusted, at least one week after eruption first appears.
COLD SORES (Herpes Simplex I)	2 to 12 days	May be as long as 7 weeks after recovery from stomatitis.	Contact with saliva carriers.	Eruption which looks like blisters on lips or mouth.	No exclusion; discourage kissing and use of shared eating and drinking utensils.
COMMON COLD	Between 12 hours and 5 days	24 hours before onset to 5 days after.	Contact with hands or articles soiled by discharges from nose/throat.	Cough, sneezing, tearing, "runny nose".	No exclusion; proper disposal of soiled articles; frequent handwashing.
EYE INFECTIONS (Conjunctivitis & Pink Eye)	Variable dependent upon infecting agent	During course of active infection.	Contact with discharge from eyes and nose.	Red eyes and lids and drainage from eyes.	Exclude until drainage from eyes has cleared, or treatment is started and physician approves return.
FIFTH DISEASE (Erythema Infectiosum)	Variable – 4 to 20 days to development of rash.	Probably 2 days before rash and 4-5 days later.	Droplets.	Slapped face appearance and reddening of skin, which fades and reoccurs for period of 1-3 weeks.	No exclusion necessary. Potential risk to fetus of pregnant females.
FLU-LIKE ILLNESS	1-4 days	From one day before symptoms begin to five days after illness onset	Various modes of transmission	Fever, sore throat, cough , aching muscles	Exclude until fever free. Good cough etiquette and proper hand hygiene should be exercised.
GERMAN MEASLES	14 to 21 days	One week before to 4 days after onset of rash.	Contact with secretions of nose and throat.	Mild symptoms of head cold for 1 or 2 days followed by eruptions on face and body, swollen glands behind ear.	Exclude until 7th day after onset of rash.

MCHD - COMMUNICABLE DISEASE REFERENCE CHART FOR SCHOOLS

DISEASE	INCUBATION	PERIOD OF COMMUNICABILITY	MODE OF TRANSMISSION	EARLY SIGNS	RESTRICTIONS
HAND, FOOT AND MOUTH DISEASE	3 to 5 days	During acute stage of illness or longer, since viruses persist in stool for several weeks.	Direct contact with nose and throat discharges and feces of infected person, and by aerosol droplet spread.	Sudden onset of fever, sore throat, lesions (blisters) on inside of cheeks, gums, side of tongue; may last 7-10 days. Also occur on palms, fingers, soles of feet, or buttocks.	Exclude during acute state of illness or as directed by physician.
HEPATITIS A	15-50 days Average 28-30 days	2-4 weeks before onset of symptoms to one week after onset of jaundice.	Oral contamination by feces from infected person.	Abrupt onset with fever, tiredness, loss of appetite, nausea and jaundice.	Exclude until physician's approval to return.
HEPATITIS B	45-180 days Average 60-90 days	Blood may remain communicable for prolonged period of time.	Contact with body secretions such as blood, saliva, semen, and vaginal fluids.	Loss of appetite abdominal discomfort, nausea, vomiting, and jaundice.	Exclude until physician's approval of return.
IMPETIGO	Variable – commonly 4-10 days	While sores are draining.	Contact with discharge from lesions.	Open sores on skin (typically face) with draining pus	Exclude until after 24 hours on medication or antibiotic ointment. Sores should be covered with a bandage.
INFLUENZA	1-3 days	1-2 days before onset to 4-5 days thereafter.	Contact with excretions from nose and throat (i.e. coughing, sneezing).	Fever, chills, headache, muscle aches, fatigue, cough, runny nose.	Exclude until symptoms subside. Proper disposal of soiled articles, frequent handwashing.
MRSA (Methicillin-Resistant Staphylococcus Aureus)	**SEE**	**APPENDIX L**	**"MRSA**	**FACTS FOR**	**SCHOOLS"**
MEASLES (Hard Measles or Rubeola)	7-18 days, 10 days average	Usually about 4 days before rash onset, until 4 days after rash appears.	Contact with nose and throat excretions (i.e. coughing, sneezing).	Moderate fever, puffy watering eyes sensitive to light. Lining of cheeks studded w/bluish white spots, 1-2 days later rash appears.	Exclude until minimum of 4 days after appearance of rash.
Meningitis – Bacterial (caused by	2 to 10 days, commonly 3 - 4 days	Until bacteria no longer present in discharges from nose or mouth. (Usually	Direct contact, including respiratory secretions.	Sudden onset of fever, intense headache, nausea, vomiting, stiff neck.	Exclude until 24 hours of antibiotic therapy given. Close contacts

neisseria meningitidis) Vacc. is avail.		disappear 24 hours after antibiotic treatment began).			(household, socially close) may need antibiotics.
Meningitis – viral (aseptic meningitis cause vary with specific infectious agent)	***** See Attached – Is viral meningitis a serious disease?*****				

MCHD - COMMUNICABLE DISEASE REFERENCE CHART FOR SCHOOLS

DISEASE	INCUBATION	PERIOD OF COMMUNICABILITY	MODE OF TRANSMISSION	EARLY SIGNS	RESTRICTIONS
INFECTIOUS MONONU-CLEOSIS	4-6 weeks	Prolonged; virus may persist in saliva for one year after infection.	Saliva (eating with same utensils, drinking with common cup or bottle).	Fever, sore throat and enlargement of glands in neck.	Exclude until physician's approval to return.
MUMPS	14-21 days, average 18 days	6 days before swelling appears, up to 9 days after.	Contact with excretions from nose and throat.	Swelling of salivary glands in neck below and in front of ears.	Exclude for 9 days from onset of parotid gland swelling and with physician's approval.
PEDICULOSIS (Head Lice)	Several days or weeks. Eggs hatch in 1 week; maturity reached in 2 weeks.	Until lice and eggs (nits) are destroyed. Nits on hair shaft more than ½" from scalp are no longer alive.	Direct contact with infected person through shared clothing, combs, hair ornaments, and bedding. (Lice do not jump).	Severe itching of the scalp.	Exclusion not necessary. Advise immediate home treatment
RINGWORM OF SKIN & SCALP	10-14 days	As long as lesions are present.	Direct contact with infected skin or contaminated articles. Personal contact.	Circular patches of dry skin on any part of body; patchy baldness on scalp.	As directed by physician or other evidence student is being treated.
ROSEOLA	7-18 days; 10 days average	Beginning of cold symptoms until 4 days after appearance of rash		Sudden high fever, rash of small separated rose-pink spots	Exclude until recovered.
ROTOVIRUS	24-72 hours	During Acute stage and while virus shedding continues symptoms average 4-6 days.	Fecal-oral and possible respiratory spread. May be present in contaminated water.	Vomiting, fever, watery diarrhea. Occasionally severe dehydration in young children.	Utilize enteric precautions, frequent hand washing by caretakers. No Exclusion Restriction.
SCABIES	Several days or weeks. Eggs hatch in 1 week.	Until mites and eggs are destroyed.	Direct contact with infected person and shared clothing.	Extreme itching of skin where mites have burrowed under skin.	Exclude until completion of treatment.
STREP RASH (Scarletina, Scarlet Fever)	short, usually 1-3 days, rarely longer	1-2 days if treated; 10-21 days if untreated. **Antibiotic treatment important to prevent complications.*	Contact with discharge from upper respiratory tract of contacts and carriers.	Sudden onset, usually with fever, sore throat, vomiting, headaches, fine rash.	Exclude until physician's approval to return.

WHOOPING COUGH (Pertussis)	7 to 21 days	One week before to 3 weeks after onset of cough.	Contact with discharge from nose and throat (i.e. coughing/sneezing).	Series of violent coughs with whoop.	Exclude until 5 days minimum of a 14-day course of antibiotic has been completed.

Children with other dangerous communicable diseases such as tuberculosis, meningitis, etc., should be under the care of a physician. School attendance of cases and contacts would be by recommendation of attending physician or Health Department.

References: Control of Communicable Diseases in Man 18th Edition, 2004
2003 Red Book Report of the Committee on Infectious Diseases, 26th Edition

JML:psw:0699 / Revised DZ:dco07/08

Viral Meningitis Questions

Q: What is viral meningitis?

A: Meningitis is an inflammation of the membranes ("meninges") that cover the brain and spinal cord. Viral infections are the most common cause of meningitis; bacterial infections are the second most common cause. Other, rarer causes of meningitis include fungi, parasites, and non-infectious causes, including those that are related to drugs. (For more information, see What causes viral meningitis?.)

Meningitis caused by viral infections is sometimes called "aseptic meningitis."

Q: Is viral meningitis a serious disease?

A: Viral ("aseptic") meningitis is serious but rarely fatal in people with normal immune systems. Usually, the symptoms last from 7 to 10 days and the patient recovers completely. Bacterial meningitis, on the other hand, can be very serious and result in disability or death if not treated promptly. Often, the symptoms of viral meningitis and bacterial meningitis are the same. For this reason, if you think you or your child has meningitis, see your doctor as soon as possible.

Q: What causes viral meningitis?

A: Different viral infections can lead to viral meningitis. But most cases in the United States, particularly during the summer and fall months, are caused by enteroviruses (which include enteroviruses, coxsackieviruses, and echoviruses). Most people who are infected with enteroviruses either have no symptoms or only get a cold, rash, or mouth sores with low-grade fever. And, only a small number of people with enterovirus infections develop meningitis.

Other viral infections that can lead to meningitis include mumps, herpesvirus (such as Epstein-Barr virus, herpes simplex viruses, and varicella-zoster virus—the cause of chickenpox and shingles), measles, and influenza.

Arboviruses, which mosquitoes and other insects spread, can also cause infections that can lead to viral meningitis. And lymphocytic choriomeningitis virus, which is spread by rodents, is a rare cause of viral meningitis.

Q: What are the signs and symptoms of viral meningitis?

A: Symptoms can appear quickly or they can also take several days to appear, usually after a cold or runny nose, diarrhea, vomiting, or other signs of infection show up. Symptoms in adults may differ from those in children:

- **Common in infants**
  - Fever
  - Irritability
  - Poor eating
  - Hard to awaken
- **Common in older children and adults**
  - High fever

- Severe headache
- Stiff neck
- Sensitivity to bright light
- Sleepiness or trouble waking up
- Nausea, vomiting
- Lack of appetite

Q: How is viral meningitis diagnosed?

A: Viral meningitis is usually diagnosed by laboratory tests of a patient's spinal fluid (from a "spinal tap"). The test can reveal whether the patient is infected with a virus or a bacterium. The exact cause of viral meningitis can sometimes be found through tests that show which virus has infected a patient; however, identifying the exact virus causing meningitis may be difficult.

Because the symptoms of viral meningitis are similar to those of bacterial meningitis, which is usually more severe and can be fatal, it is important for people suspected of having meningitis to seek medical care and have their spinal fluid tested. A hospital stay may be necessary in more severe cases or for people with weak immune systems.

Q: How is viral meningitis treated?

A: There is no specific treatment for viral meningitis. Most patients completely recover on their own within 2 weeks. Antibiotics do not help viral infections, so they are not useful in the treatment of viral meningitis. Doctors often will recommend bed rest, plenty of fluids, and medicine to relieve fever and headache.

A hospital stay may be necessary in more severe cases or for people with weak immune systems.

Q: How is the virus spread?

A: Different viruses that cause viral meningitis are spread in different ways. Enteroviruses, the most common cause of viral meningitis, are most often spread through direct contact with an infected person's stool. The virus is spread through this route mainly among small children who are not yet toilet trained. It can also be spread this way to adults changing the diapers of an infected infant.

Enteroviruses and other viruses (such as mumps and varicella-zoster virus) can also be spread through direct or indirect contact with respiratory secretions (saliva, sputum, or nasal mucus) of an infected person. This usually happens through kissing or shaking hands with an infected person or by touching something they have handled and then rubbing your own nose or mouth. The viruses can also stay on surfaces for days and can be transferred from objects. Viruses also can spread directly when infected people cough or sneeze and send droplets containing the virus into the air we breathe.

The time from when a person is infected until they develop symtoms (incubation period) is usually between 3 and 7 days for enteroviruses. An infected person is usually contagious from the time they develop symptoms until the symptoms go away. Young children and people with low immune systems may spread the infection even after symptoms have resolved.

Q: Can I get viral meningitis if I'm around someone who has it?

A: If you are around someone with viral meningitis, you may be at risk of becoming infected with the virus that made them sick. But you have only a small chance of developing meningitis as a complication of the illness.

Q: How can I reduce my chances of becoming infected with viruses that can lead to viral meningitis?

A: Viral meningitis most commonly results from infection with enteroviruses. But there are other causes, such as measles, mumps, and chickenpox. Viral meningitis can also be caused by viruses that are spread by mosquitoes and other insects that bite people.

The specific measures for preventing or reducing your risk for viral meningitis depend on the cause.

- Following good hygiene practices can reduce the spread of viruses, such as enteroviruses, herpesviruses, and measles and mumps viruses. Preventing the spread of virus can be difficult, especially since sometimes people are infected with a virus (like an enterovirus) but do not appear sick. In such cases, infected people can still spread the virus to others. Thus, it is important to always practice good hygiene to help reduce your chances of becoming infected with a virus or of passing one on to someone else:
    - Wash your hands thoroughly and often (see CDC's Clean Hands Save Lives! web site). This is especially important after changing diapers, using the toilet, or coughing or blowing your nose in a tissue. For more information on hand washing, see the video Put Your Hands Together, listen to the podcast Put Your Hands Together.
    - Cleaning contaminated surfaces, such as handles and doorknobs or the TV remote control, with soap and water and then disinfecting them with a dilute solution of chlorine-containing bleach also may decrease the spread of viruses. This solution can be made by mixing ¼ cup of bleach with 1 gallon (16 cups) of water. (See more about cleaning and disinfecting in general in CDC's Prevention Resources).
    - Cover your cough. The viruses that cause viral meningitis can be spread by direct and indirect contact with respiratory secretions, so it is important to cover your cough with a tissue or, if you do not have a tissue, to cough into your upper arm. After using a tissue, place it in the trash and wash your hands.
    - Avoid kissing or sharing a drinking glass, eating utensil, lipstick, or other such items with sick people or with others when you are sick.
- Receiving vaccinations included in the childhood vaccination schedule can protect children against some diseases that can lead to viral meningitis. These include vaccines against measles and mumps (the MMR vaccine) and chickenpox (the varicella-zoster vaccine).
- Avoiding bites from mosquitoes and other insects that carry diseases that can infect humans may help reduce your risk for viral meningitis (see West Nile Virus, Fight the Bite!).

- If you have a rodent infestation in and around your home, follow the cleaning and control precautions listed on CDC's Web site about lymphocytic choriomeningitis.

From the Center for Disease Control and Prevention web site 8/2010

APPENDIX K

MICHIGAN DEPARTMENT OF COMMUNITY HEALTH

MICHIGAN SCHOOL BUILDING WEEKLY REPORT OF COMMUNICABLE DISEASE TO LOCAL HEALTH DEPARTMENT

According to Public Act 368, of 1978 as amended, the local health department shall be notified immediately of the occurrence of communicable disease (especially rash-like illnesses with fever). In addition to immediate notification by telephone, please include all occurrences on this form and mail to your local health department.

1 WEEK ENDING: | SCHOOL OR PRESCHOOL: | DISTRICT: | CURRENT SCHOOL ENROLLMENT:

INSTRUCTIONS

A: Record appropriate information in Sections 1, 2, 3, 4 & 5.
B: Simply fold, scotch tape, stamp and mail.
C: MAIL EACH FRIDAY to your local health department EVEN IF THERE ARE NO DISEASES TO REPORT.
D. Add additional sheets as necessary.

2 List all confirmed or suspected cases of communicable diseases, including: Measles, Rubella (German measles), Mumps, Hepatitis, Scarlet Fever, Strep Throat, Scabies, Pertussis (Whooping Cough), *Haemophilus influenzae* type b, Encephalitis, and Meningitis.

NOTE: STARTING IN 2005, INCLUDE CHICKENPOX (Varicella) CASES HERE.

DISEASE	DATE FIRST ABSENT	CHILD-S NAME LAST	CHILD-S NAME FIRST	AGE/ SEX	GRADE	ADDRESS/CITY/ZIP	PHONE NUMBER(S)	DIAGNOSED BY: (Dr., parent, teacher, etc)

3 Indicate here (by number only) suspected or confirmed cases of:

DISEASE	NUMBER OF CASES
Apparent Flu*	
Pediculosis (Head Lice)	

*Count as APPARENT FLU case any child with pneumonia or fever and any of the following symptoms: sore throat, cough, generalized aching in the back or limb muscles. Please report apparent influenza by total numbers only. Vomiting and diarrhea alone are not indications of influenza.

4 Place an X here if:

☐ NO DISEASES TO REPORT

☐ SCHOOL CLOSED DUE TO DISEASE

5

SUBMITTED BY:

TELEPHONE #:

DATE:

STATE OF CONNECTICUT

DEPARTMENT OF PUBLIC HEALTH

Methicillin-resistant *Staphylococcus aureus* Infections (MRSA): MRSA Facts for Schools

Staphylococcus aureus ("staph") infections have been around for a long time, causing mild to severe illness. MRSA is a kind of staph infection that may be more difficult to treat but is otherwise the same as a "staph infection". Mild infections may look like a pimple or boil and can be red, swollen, painful, or have pus or other drainage. More serious infections may cause pneumonia, bloodstream infections, or surgical wound infections.

Staph is passed from person to person through direct contact with skin or through contact with contaminated items. The bacteria may live in people's noses and on their skin and most of the time do not cause any problem. Staph can enter the body through breaks in the skin and sometimes cause infection. The main ways to prevent staph infection are to wash hands and care for wounds properly.

Practical Advice for Teachers

- Observe children for open wounds. If any are draining or contain pus, refer the child to the school nurse.
- Encourage hand washing before eating and after toileting.
- Coaches should ensure that athletes wash their hands, cover their wounds, and not share personal items and towels.

Practical Advice for Parents

- Clean wounds and cover them with a clean, dry bandage. Wounds that do not heal properly need medical attention. The only way to determine if an infection is caused by MRSA is through laboratory testing ordered by a physician or other health care provider.
- Teach children to wash their hands regularly, such as before eating and after toileting. See http://www.cdc.gov/germstopper/home_work_school.htm for additional information (including posters) on how to stop the spread of germs at home, work and school.
- Be sure your family members use antibiotics properly. Take all that are prescribed, even if the symptoms stop before the prescription is used up. Do not share prescriptions.
- Children who participate in sporting events should wash their hands after each practice and game. They should not share equipment, uniforms, towels, or other personal items (e.g., razors). Wash uniforms and towels with hot water and detergent after each use.

School/Nurse Responsibility

- Make referral to licensed health care provider. Skin infections may need to be incised and drained and/or antibiotic treatment based on a wound culture and sensitivity.
- Ensure contact precautions when doing wound care. Ensure standard precautions if the potential for splashing exists.

Control of Spread

- Students or staff members, who are colonized or infected with MRSA, do not need to be routinely excluded from the classroom.
- Exclusion from school should be reserved for those with wound drainage that cannot be covered and contained with a clean, dry dressing taped on all 4 sides.
- Typically, it is not necessary to inform the entire school community about a MRSA infection. When MRSA occurs within the school population, the school nurse and school physician

should determine, based on their medical judgment, whether some or all parents and staff should be notified.

- Students with weakened immune systems may be at risk for more severe illness if they get infected with MRSA. These students should follow the same prevention measures as all others to prevent staph infections.
- Athletes with active skin and soft tissue infections should not participate in wrestling until wounds are completely healed. Consider using this rule for all contact sports.
- Individuals with open wounds should keep them covered with clean, dry bandages that are taped on all four sides.
- Gloves should be worn if you expect to have contact with non-intact skin or mucous membranes. Hands should be washed immediately after removing gloves.
- Good personal hygiene and hand washing with soap and water for at least 20 seconds should be encouraged.
- If soap and water are not available, use an alcohol-based hand sanitizer with at least 60% alcohol concentration.
- Potentially contaminated surfaces should be cleaned with an EPA-registered disinfectant labeled effective against MRSA and manufacturers directions should be followed. Household bleach diluted 1:100 (new solution every day) may be used.
- Clean and disinfect health room cots regularly (at least daily), and use pillow protectors.
- If soiled linens and clothing are washed on school premises, wash with laundry detergent in hot water (minimum 160°F), add one cup of bleach if water is not 160°F and dry in a hot dryer.

Further information about MRSA can be found at:

- Community onset MRSA: http://www.cdc.gov/ncidod/dhqp/ar_mrsa_ca_public.html
- Questions and Answers about MRSA for School Health Professionals: http://www.mass.gov/dph/cdc/antibiotic/mrsa_school_health.htm

The Tacoma-Pierce County Health Department has developed a MRSA Toolkit for Middle & High Schools that may be helpful in responding to questions about MRSA and schools:

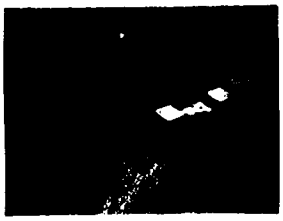
http://www.tpchd.org/page.php?id=364

This toolkit has been designed to help prevent and stop or reduce the spread of MRSA skin infections in middle and high schools. It contains educational materials targeted to the school health team, athletic directors/coaches, custodians, athletes/students and parents.

The Environmental Protection Agency (EPA) provides a list of EPA registered products effective against MRSA:

http://epa.gov/oppad001/chemregindex.htm

If you have additional questions about MRSA, please contact your physician, your local health department, or the State Department of Public Health (860-509-7994).



Personal Hygiene

- Wash hands before preparing food, before eating, before and after touching wounds or bandages, after using the bathroom, after coughing/sneezing/blowing your nose, or whenever hands are visibly soiled.
- Shower daily – always after working out – dry off with your own clean towel and put on clean clothes.
- Do not share personal items, like towels, bar soap, wash cloths, razors, clothing or jars of ointment – even among family members.
- Use clothing or a towel as a barrier between skin and shared surfaces, like exercise equipment.

Hand Hygiene

- Wash with soap and water and scrub for at least 15 seconds. Dry with a clean cloth or paper towel, or forced warm air.
- An alcohol-based hand sanitizer containing 61% or more alcohol, like Purell®, may also be used to clean hands when soap and water aren't available and hands aren't visibly dirty.

Respiratory Hygiene

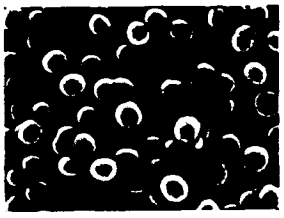
- Cover your mouth and nose with a tissue or your shirt sleeve when sneezing or coughing.

Wound Care

- Keep wounds clean, dry and covered with a fresh bandage.
- Avoid touching other people's wounds or soiled bandages.
- Throw away soiled bandages.
- Watch for signs of infection. If a cut or scrape becomes red, swollen, painful, warm to the touch, or starts draining pus, see a healthcare provider immediately.
- If wound drainage can't be fully contained under a bandage, avoid close contact with others (work, school, sports activities) to prevent the spread of MRSA.

Antibiotics

- Use antibiotics only as directed by a healthcare provider.
- Don't take antibiotics for viral infections, like colds and flu.
- Take antibiotics exactly as prescribed.
- Don't save antibiotics for later or share them with others.



Laundry

- Wash clothes, towels and sheets in water (at hottest suitable temperature) with laundry detergent. Add bleach, if desired (check label instructions). Dry in a dryer at hottest suitable temperature – do not "line dry."

Cleaning

- Clean and disinfect high-touch or soiled surfaces (for example, door knobs and phones frequently, and shared sports equipment between uses) according to item label cleaning instructions. Types of cleaning/disinfecting products include soap and water, diluted bleach, Lysol®, and Original Pine-Sol®. Follow label instructions for appropriate dilutions and contact times to be sure that surfaces are cleaned properly.

MDCH MARR

Protecting our antibiotic lifeline.

for more information visit these Web sites

www.michigan.gov/mdch • www.reducemisuse.org

Infectious Disease Communications

Keeping students and parents updated on the status of the infectious disease and school procedures is one of the best ways to reduce confusion, rumors and panic.

Sample Parent Letter #1

Preparedness & Prevention

Our local health department *(Insert local public health department)* is working diligently to advance public health preparedness. Toward this effort they have focused on *(Insert communicable disease).* We have tapped into several resources to provide information to use to move forward with preparedness plans *(Insert information specific to disease being addressed).*
Personal hygiene is still the best method to prevent illness. The following are tips to keep in mind:

- Wash your hands often with soap and water.
- Cover your nose and mouth with a tissue when coughing and sneezing.
- Dispose of dirty tissues promptly and carefully.
- Avoid sharing cups and glasses.
- Be a good example to others.
- Stay home when sick to prevent the spread of illness.

(Insert other tips specific to disease being addressed).

Being prepared is one of the best prevention techniques to protect your family. It is essential to prepare at home, in your community, at work and in our school.

(Insert closure)
(Insert signature)
(Insert school district and/or health department)

Sample Parent Letter #2

Preparedness & Prevention

There have been confirmed cases of *(insert disease and location)*. *(Insert local public health department)* is working diligently with state health officials to monitor and track the progression of the disease. There remains concern that the disease could spread into Michigan. If this were to happen further steps to minimize the spread of the disease will occur.

Now is the time to begin preparing for a public health emergency. Please go to *[insert website]* for more information about how to prepare your home.

Follow directions as given by local, state and national health officials. Go to reliable sources for information and instructions on *(Insert disease)*. The Michigan Department of Community Health and U.S. Department of Health & Human Services also offer reliable information on their websites at *(Insert addresses)*.

Personal hygiene is still the best method to prevent illness. Following are tips to keep in mind: *(Insert specific guidance)*

(Insert closure)
(Insert signature)
(Insert school district and/or health department)

Sample Parent/Staff Letter #3

Preparedness

Plan for Keeping Your Family Healthy

(Insert district name) encourages all parents and employees to take the following measures to cope with the possibility of *(Insert disease)* at home. Involve family, friends and neighbors in the following:

- ☐ Plan for ill individuals to remain at home
- ☐ Develop a support/communication system among friends and family
- ☐ Have a back-up plan for childcare
- ☐ Take precautions to prevent the spread of *(Insert disease)* (e.g. reduce social contact with others, including hand shaking, face-to-face meetings, frequent trips to shopping areas, etc.)
- ☐ Practice good hygiene among household members
- ☐ Visit *(Insert websites)*

By working together and following these simple guidelines, we can limit the spread of the disease.

Thank you for your help.

(Insert closure)
(Insert signature)
(Insert school district and/or health department)

Sample Staff Letter #4

Preparedness

Plan for Being Absent:

- Plan ahead for family and/or personal illnesses.
- If ill, stay home (Insert recommended duration)
- Be prepared to take care of yourself and/or family members without having to leave your home. Checklists will be provided and can also be found at (Insert location).
- Develop a buddy system at your school site. We know there will not be sufficient numbers of substitutes.
- Classroom teachers may work together by grade level, subject matter, etc., to develop emergency lesson plans. Adapt current lesson plans that will allow instruction to continue.
- Personnel from 2 or 3 schools may need to work together, by department, to cover for absent co-workers. Essential services must continue.

Thank you again for your support.

Sample Staff Letter #5

Prevention

Social Distancing

(Insert district name) encourages all school staff, when directed by the County Health Officer, to practice the following:

1. Minimize close contact with others.
2. Do not schedule any large group events such as indoor assemblies or rallies.
3. Eliminate handshaking.
4. Keep classroom keyboards, phones and other shared materials/equipment wiped down.
5. Limit face-to-face meetings; use email as an alternative.
6. Put distance between student desks.
7. Send ill children to the office to be sent home.
8. (Insert disease specific measures).

Thank you again for your support.

Sample Staff/Parents Letter #6

Prevention

Extra-Curricular School Activities

(Insert district name) is preparing for the possibility of a *(Insert disease)* outbreak:

Extra Curricular Activities: In order to minimize the spread of germs, all extracurricular activities are immediately suspended until further notice. This includes all activities, including those scheduled, before school, during lunch and after school.

By working together and preplanning for the event, we can minimize the impact on our school and community.

Thank you.

Sample Parent Letter #7

Response

Guidelines: as the disease progresses, continue to send reliable information from *[Insert local public health department]* to parents.

- ☐ Keep them updated on the health status of students and staff.
- ☐ Strongly encourage them to keep their children home if they suspect they are ill.
- ☐ Monitor student and staff illness.
- ☐ Contact *[Insert local public health department]* with any questions or needed information.
- ☐ Give parents and staff *[Insert local public health department]* website as a reliable source of information.

Sample Hotline Script #8

Keeping students and parents updated on the status of the disease and school procedures is one of the best ways to reduce confusion, rumors and panic. If your school has a hotline, it should be updated daily with information pertaining to the school's daily operation.

You have reached the *Insert school name* hotline. This message was updated on *[insert date and time]*.

[Insert county] Schools remain open despite the *(Insert disease)* outbreak in the County. Parents are asked to prepare for possible closures if it continues to spread.

School and county health officials are working together to monitor the situation. Please report all absences due to illness and be prepared to report the child's symptoms. Parents will be updated with any important information. Health officials say parents can help protect their children and prevent the spread of this communicable disease by taking the following precautions: *(Insert disease specific precautions)*

[Insert local public health department] officials point out that recommendations may change during the course of this outbreak. For school updates, parents should call the school district's hotline at *[insert number if available]* or the *[insert local health department]* hotline at *[insert hotline number]*.

Insert School or Health Department
Name or Logo Here

[DATE]
[ORGANIZATIONAL ADDRESS, CITY, STATE, ZIP]
[ORGANIZATIONAL PHONE NUMBER]

AMPLE LETTER # 9 (- Viral Meningitis)

Dear Parent/Guardian:

A suspected case of viral meningitis has been reported in one of your child's classmates. We are working closely with the [LHD OR SCHOOL NAME] in response to this situation.

Viral meningitis can be caused by several types of viruses and is the most common type of meningitis. The illness is rarely serious and it usually causes fewer long lasting problems than the bacterial form of meningitis. Symptoms may include sudden onset of fever, headache, stiff neck, vomiting, rash, or confusion. The disease is spread through contact with an infected person's oral or nasal secretions, meaning saliva or mucous. A fact sheet has been included to provide you with more information. [ATTACH FACT SHEET]

Only a health care provider can diagnose meningitis. ***Children or adults exhibiting symptoms of meningitis should be evaluated by a health care provider immediately.***

We are evaluating the situation to determine any risk to other students and you will be contacted if preventative measures are deemed necessary for your child. Generally, no treatment is necessary for contacts of individuals with viral meningitis. As always, students should continue to practice routine methods for preventing illness including the following:

- Ensuring that all students are up to date on their vaccinations including those that prevent diseases like Influenza, Measles, Mumps, Rubella, Chickenpox, *Haemophilus influenzae* type b (Hib), and Meningococcal disease, as appropriate.
- Eating balanced diet and getting plenty of sleep.
- Staying home from work, daycare or school while sick.
- Practicing good hand hygiene by thoroughly washing, including under the fingernails, for a minimum of 20 seconds using soap and warm running water after using the bathroom and before eating.
- Always sneezing or coughing into sleeves or tissues and immediately discarding used tissues in the trash.

If you have any questions please contact [NAME], with [ORGANIZATION NAME] at [PHONE NUMBER] or [EMAIL].

Sincerely,

[NAME, TITLE]