

MANAGING COMMUNICABLE DISEASES



IN CHILD CARE SETTINGS

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Ways to Keep Children and Adults Healthy

It is very common for children and adults to become ill in a child care setting. There are a number of steps child care providers and staff can take to prevent or reduce the incidents of illness among children and adults in the child care setting. You can also refer to the publication *Let's Keep It Healthy – Policies and Procedures for a Safe and Healthy Environment*.

Hand Washing

Hand washing is one of the most effective way to prevent the spread of illness. Hands should be washed *frequently* including after diapering, toileting, caring for an ill child, and coming into contact with bodily fluids (such as nose wiping), before feeding, eating and handling food, and at any time hands are soiled. **Note:** The use of disposable gloves during diapering does not eliminate the need for hand washing. The use of gloves is not required during diapering. However, if gloves are used, caregivers must still wash their hands after each diaper change.

Instructions for effective hand washing are:

1. Wet hands under warm, running water.
2. Apply liquid soap. Antibacterial soap is not recommended.
3. Vigorously rub hands together for at least 20 seconds to lather all surfaces of the hands. Pay special attention to cleaning under fingernails and thumbs.
4. Thoroughly rinse hands under warm, running water.
5. Dry hands using a single-use disposable towel or use an air dryer. Turn off the faucet with the disposable towel or wrists or backs of the hands.

A quick pass under the faucet to dampen hands is not an effective way to wash hands!

Note: Hand sanitizer cannot be used in place of hand washing; however, sanitizer containing at least 60% alcohol may be used to supplement hand washing.

Provide Tissues throughout the Home or Center

Use tissues to wipe young children's nasal drainage. Older children should be taught to use tissues on their own when needed. Tissues should only be used once and then discarded. The hands of caregivers and children should be washed each time a tissue is used.

Coughing and Sneezing

Teach children (and adults) to cough or sneeze into tissues or their sleeve and not onto others or other surfaces. If children and adults sneeze into their hands, their hands should be washed immediately.

Keep the Environment Clean

To keep children and adults healthy, it is important that the facility and equipment, including sleeping areas and equipment, toys, food service area and utensils, are kept clean and in good repair. To prevent the spread of germs, diaper changing surfaces and potty chairs must be cleaned and sanitized between uses. Refer to *Let's Keep it Healthy – Policies and Procedures for a Safe and Healthy Environment* for more information on maintaining a clean and healthy environment.

Maintain a Sanitary Setting

It is important to maintain a sanitary setting to prevent the spread of illnesses. Many items and surfaces in schools must be cleaned and sanitized frequently. To clean and sanitize means to wash vigorously with soap and water, rinse with clean water, and wipe or spray the surface with a sanitizing solution. The surface should air dry for the time listed on the product's instructions for use. For items that cannot be submerged into solution, spray or wipe with a sanitizing solution. Do not towel dry. Immediately wash, rinse, and sanitize items or surfaces that have been soiled with a discharge such as urine or nasal drainage. Examples of sanitizing solutions include:

- Commercial sanitizers used only in accordance with the manufacturer's instructions.

- A solution of water and non-scented chlorine bleach with a bleach concentration of 50–200 parts per million (one teaspoon to one tablespoon of bleach per gallon of water). Make this solution fresh daily.

Any cleaning, sanitizing or disinfecting product must always be safely stored out of reach of children. To avoid fumes that may exacerbate asthma, bleach sanitization should occur before or after school, using appropriate concentrations. All sanitizers must be used in a manner consistent with their labeling. If there are questions about the product, guidance is available from the National Antimicrobial Information Network at 1-800-621-8431 or npic@ace.orst.edu or from the National Pesticide Information Center at 1-800-858-7378.

Observation

Carefully observe children for a change in appearance or behavior that might indicate beginning illness. Observations should be communicated to the parent so that the parent is aware that the child may be getting sick or so that medical advice and diagnosis can be sought if necessary.

Minimize the Spread of Disease

Other ways to minimize the spread of disease include the following:

- Staff who perform both food preparation as well as the diapering and toileting of children can be a contributing factor in the spread of diarrheal illness in child care settings. Avoid such combined duties when making staff assignments.
- Some microorganisms which cause disease multiply in warm, dark, damp, dirty environments. Keep surfaces clean, uncluttered and dry by cleaning, sanitizing and air drying. Use sunlight wherever and whenever possible to aid drying.
- Develop a plan for child care staff on how to handle illnesses and reduce their spread. Consider contacting your local health department for guidance. Prompt action by staff and providers may prevent a serious outbreak of communicable disease. Work restrictions for ill staff should be established and monitored.
- Assure that children are up-to-date on their vaccinations. Assure that staff have also received all recommended vaccines.

Exclusion Policy for Staff, Volunteers and Children

Exclusion Policy for Children

Communicate with parents the need to have a back-up plan for care when their child is ill. This may be a grandparent, friend or neighbor that can care for the child if the parent needs to work but cannot bring the child to the center or home.

Possible reasons to call a parent to pick up a child or to exclude a child from care:

1. Fever – A child has a temperature of 101 degrees F or greater AND behavioral changes or other signs or symptoms. The child should not return until 24 hours of no fever, without using fever reducing medications.
2. Diarrhea – If a child has two loose or watery stools, even if there are no signs of illness. The child should have no loose or watery stools for 24 hours prior to returning to care. Exception: This may occasionally be caused by antibiotics or new foods a child has eaten, but call the parent to find out if this is the likely cause.
3. Vomiting – If the child has vomited two or more times. Exception: Some babies may burp/spit up following a feeding – this is not vomiting. A healthcare provider may also rule out an infectious cause.
4. Rash – If the child develops a rash and has a fever or a change in behavior. Exclude until a physician has determined it is not a communicable disease. Note: Rapidly spreading bruising or small blood spots under the skin needs immediate medical attention.
5. Crying and Complaining – Any time a child is not his/herself, is lethargic, is complaining about discomfort or is cranky and crying more than usual for that child. The child should not return until he/she is acting normally.

Exclusion Policy for Employees and Volunteers

Employees and volunteers should be excluded when:

1. Diagnosed with a “Big Five” illness:
 - Typhoid fever (*Salmonella Typhi*).
 - Shigellosis (*Shigella* spp.).
 - *Escherichia coli* O157:H7 infection (*E. coli* O157:H7).
 - Hepatitis A (hepatitis A virus).
 - Norovirus infection.
2. Jaundice has occurred within the last seven days.
3. Experiencing noro-like symptoms (vomiting and/or diarrhea).

Note: It is also recommended the employees and volunteers stay home if ill with symptoms such as fever, cough and sore throat.

The employee or volunteer can return to work:

- When diagnosed with a “Big Five” illness: After health department approval and medical documentation states the excluded person is free of symptoms and free of the infectious agent.
- When excluded for jaundice: The excluded person has provided medical documentation stating that they are free of the Hepatitis A virus.
- When excluded for noro-like symptoms: 24-48 hours after the last symptom of illness. No handling of food or food ware for 72 hours after symptoms have resolved.

Fever and Measuring a Child’s Temperature

Fevers have many causes. Although fevers may occur during teething, it is important to rule out other, more serious causes of elevated temperature which may require specific treatment. It is generally recommended that a child who has been running a fever of 101 degrees F or greater should stay home until the temperature has stayed below 100.2 degrees F for 24 hours. However, a final decision regarding a child’s return to child care should be made based on the child’s overall condition in conjunction with his or her health care provider and, in an outbreak situation, with the local health department.

When a fever is suspected, a child’s temperature may be taken in a number of ways. One of the safest methods is to take it under the child’s arm. This can be done as follows:

1. Wipe one armpit dry.
2. Place the bulb end of the thermometer against the skin under the dry armpit. (Make sure clothing does not interfere.)
3. Hold the child’s elbow close to the child’s side and place the child’s hand on the opposite shoulder to keep the thermometer in place. If you hold the child in your arms or on your lap, you may feed or read to the child during the time you are taking the temperature.
4. Keep the child’s arm in this position and do not remove the thermometer for at least 5 minutes or until an electronic thermometer beeps.
5. Write down the reading. The normal body temperature under the arm is 97.6°F as temperatures taken under the arm can be 0.5 °F to 1.0 °F lower than a reading taken by mouth.

Note: Mercury-containing thermometers should never be used and should be disposed of in an approved manner.

An alternative method for taking a child’s temperature is to use a tympanic (ear) or a forehead thermometer. The directions that come with these types of thermometers should be carefully read and followed.

Steps to Minimize Further Spread of Disease to Children and Adults

If a communicable disease is suspected or is diagnosed in a child care setting, these recommendations for handling communicable diseases should be promptly followed:

1. Notify the local health department of any communicable disease.
2. Communicate with parents on when to exclude a child suspected of having a communicable disease. Under some special circumstances, and in coordination with the health department, children ill with a specific disease may be able to remain in the group care setting.
3. Report to all other parents and staff the illness to which children have been exposed and symptoms to watch.
4. When a diagnosed communicable disease is present in a child care setting or is a known problem in the community, perform a health screening of children on arrival so sick children can be quickly identified and care arrangements made.
5. Review the children's immunization records for completeness. If a child is not fully immunized against the diagnosed communicable disease, exclusion from child care during an outbreak may be recommended.
6. Sanitation procedures must be strictly followed and extra precautions taken regarding food handling, dish washing, highchair cleaning, and hand washing by staff and children; as well as general cleanliness of toys in the environment.
7. Re-admission should be upon the advice of the child's doctor and the local health department.

Reporting

Michigan Law requires schools and childcare centers to report specific diseases according to Act No. 368 of the Public Acts of 1978, which states that physicians, laboratories, primary and secondary schools, child daycares, and camps are required to report the occurrence or suspected occurrence of any disease, condition, or infections as identified in the Michigan Department of Health and Human Services (MDHHS) CD rules to your local health department within 24 hours. It is important for schools to report to their LHD for a number of reasons, including:

- To identify disease trends, outbreaks, and epidemics
- To enable preventative treatment and/or education
- To target prevention programs, identify care needs, and allocate resources efficiently
- To inform epidemiological practice and research
- To evaluate the success of long-term control efforts
- To assist with local, state, national, and international disease surveillance efforts

Individual Case Reporting

The diseases highlighted in bold in the "Disease Specific Chart" below represent a subset of the diseases required to be reported on an individual case basis to your LHD. A complete list of diseases that are required to be reported in Michigan, as well as a list of local health department contact numbers, can be found by going to https://www.michigan.gov/documents/mdch/Reportable_Diseases_Michigan_by_Pathogen_478489_7.pdf. Because of the risk of rabies, animal bites should always be reported to your LHD and/or animal control within 24 hours.

The individual case report should include the following information:

- Name of the disease
- Student demographic information including: first and last names, date of birth, grade, classroom, street address along with zip code, parent's name, and phone number(s)
- The date the student was first absent
- Who the disease was identified by (e.g., healthcare provider, parent/guardian, etc.)

Family Educational Rights and Privacy Act (FERPA) allows for the disclosure of personally identifiable information in connection with a health or safety emergency to public health authorities without individual or parent authorization if knowledge of the information is necessary to protect the health or safety of the student or other individuals under § 99.31(a)(10) and § 99.36 of the FERPA regulations.

Aggregate Reporting

Weekly aggregate counts of flu-like illness (also referred to as influenza-like illness) are to be reported to your LHD. Influenza-like illness refers to any child with fever and a cough and/or sore throat without a known cause other than influenza. Vomiting and diarrhea alone are NOT indications of influenza or flu-like illness. Some LHDs may also require

weekly aggregate counts of gastrointestinal illness, which is defined as any child with diarrhea and/or vomiting for at least 24 hours. Other diseases such as strep throat, pink eye, and head lice may also need to be reported on a weekly basis. Schools should consult their local health department for reporting requirements and how to submit communicable disease reports.

Requesting Information from Parents

To assist with illness reporting, schools can provide suggestions to parents/guardians about what they should report regarding their child's illness. For example, "Michigan law requires that schools report the possible occurrence of communicable disease to the local health department. To assist in this reporting, please include the illness (if known) and who diagnosed it OR a detailed description of symptoms such as vomiting, diarrhea, fever, rash, or sore throat when reporting your child's absence." Information about illness reporting can be provided in packets to parents/guardians at the beginning of the school year and a reminder can be left on the absentee line voice message.

Immediate Reporting of Serious or Unusual Communicable Disease

In addition to reporting aggregate and individual cases, call your LHD **immediately** to report any of the following serious illnesses: measles, mumps, rubella, pertussis, *Haemophilus influenzae* Type B, meningitis, encephalitis, hepatitis, tuberculosis, or any other serious or unusual communicable disease.

Immediate Reporting of Outbreaks






All outbreaks of suspected or confirmed communicable diseases are **immediately** reportable to your local health department. An outbreak is defined as any increase in a certain type of illness.

An influenza-like illness outbreak is when a school building is experiencing influenza-like illnesses among students and staff that are above a level at which would be expected at that time of year. Schools are encouraged to work with their local health department to determine influenza activity in your area. Outbreaks of gastrointestinal illnesses are similarly defined as when the school building is experiencing gastrointestinal illnesses among students and staff that are above a level at which would be expected at that time of year. The sudden onset of vomiting and/or diarrhea in several students or staff may also suggest an outbreak is occurring. Your LHD can assist in determining if a gastrointestinal illness outbreak is occurring in the school. Even without closing a school, parents/guardians should be notified. Your local health department can assist with notification letters to parents.

Common Infectious Diseases

Children should not return to child care during the contagious period unless recommended by the health department or licensed health care provider.

Note: This chart is for information only. Diagnosis must always be made by the health department or licensed health care provider.

PRINCIPLE MODE OF SPREAD	DISEASE	SYMPTOMS	INCUBATION PERIOD	CONTAGIOUS PERIOD
AIRBORNE, DROPLET, AND DIRECT CONTACT Droplets from nose, throat and mouth spread disease virus and bacteria by sneezing, coughing and speaking.	CHICKENPOX [Varicella] 	Sudden onset of slight fever, mild respiratory symptoms, and skin rash of itchy, blister-like lesions. Lesions may cover the body but are usually more concentrated on the face, scalp, and trunk. Blistered (new) and broken and crusted (old) eruptions are on the skin at the same time.	10-21 days Average – 14-16 days	1 to 2 days before onset of rash until all lesions have crusted. Children who have been vaccinated or previously exposed may develop lesions that don't crust. Consider these cases contagious until lesions are fading or until no new lesions occur, whichever is later.
	CYTOMEGALOVIRUS [CMV]	None or mononucleosis ("mono")-like syndrome. Virtually all persons acquire CMV infection during their lifetime and it is usually without symptoms. Infection during pregnancy may result in fetal infection.	1 month	Virus may be shed for many months with a range of 6 months to 2 years. Children should not be excluded from child care due to shedding of CMV.
	FIFTH DISEASE [Erythema infectiosum] [Parvovirus B19]	Rash begins as a solid red area on cheeks ["slapped cheek" appearance], spreading to upper arms and legs, trunk, and hands and feet. Fever occurs in some patients.	4-20 days	Patients are most infectious before the onset of illness. They are not likely to be infectious after rash and other symptoms appear.
	INFLUENZA [Viral influenza] 	Sudden onset of high fever, often with chills, headache, extreme tiredness, muscle aches, and dry cough. Subsequently, respiratory signs such as sore throat, runny or stuffy nose, and cough become more prominent. Red eyes, stomach ache, nausea, vomiting, and diarrhea have been reported infrequently. In some children, influenza can appear as an upper respiratory tract infection without fever or as a fever with few respiratory tract signs.	1-4 days	1 day before onset of symptoms to about 7 days from the first symptoms in children.
	MEASLES [Rubeola] 	Illness begins with a 2–4 day fever, runny nose, red eyes, and coughing. This is followed by a red, raised rash that begins at the hairline, then involves the face and upper neck and gradually proceeds downward and outward, reaching the hands and feet. The rash lasts about 5 days. Sensitivity to light is also common. Complications can include pneumonia and encephalitis.	7-21 days Average – 10-12 days	4 days before rash and for up to 4 days after.
	MENINGITIS [Meningococcal and Haemophilus] 	Illness has a sudden onset of high fever, headache, and stiff neck, but may also include vomiting, irritability and intolerance of light. In severe cases, delirium, stupor or coma can also occur. In meningococcal meningitis, purplish spots may be seen on the skin and mucous membranes.	1-10 days Average – 2-4 days	Until live bacteria is no longer present in nasal and mouth secretions. This usually occurs 24-48 hours after antimicrobial treatment.
	MENINGITIS (VIRAL) [Aspetic meningitis]	Symptoms include fever, headache, and stiff neck, but may also include vomiting, irritability and intolerance of light.	Varies	Varies with causative agent, but generally 2-14 days
	MUMPS [Infectious parotitis] 	The classic symptom of mumps is swelling of one or more salivary glands. The parotid salivary glands (which are located within the cheek, near the jaw line, below the ears) are most frequently affected. Nonspecific symptoms including muscle aches, anorexia, tiredness, headache, and low-grade fever may precede salivary gland swelling by several days. There is evidence that as many as 40–50 percent of mumps infections are associated with nonspecific or primarily respiratory symptoms, particularly among children younger than 5 years.	12–25 days Average – 14-18 days	7 days prior to onset up to 8 days later.
	RESPIRATORY SYNCYTIAL VIRUS [RSV]	Illness frequently begins with runny nose, cough, fever, and sometimes wheezing. Other symptoms depend on site of involvement: bronchitis, pneumonia, and/or ear infections. Infants and children with underlying cardiac, immunologic, and pulmonary disease have the most severe symptoms.	3-7 days	Young infants: 1 to 3 weeks or more. Older children and adults: 3 to 7 days.
ROSEOLA [Exanthm subitum] [Human herpesvirus]	Illness is marked by a sudden high fever (104°-105°F.) which falls with the appearance of a rash on about the third or fourth day of illness. Most cases are in children between 6 months and 3 years. The rash consists of small rose-pink spots which first appear on the chest and abdomen but may spread to the face, legs and arms. The rash is usually limited to only one or two days.	9 days	Greatest during the period of fever.	

	RUBELLA [German Measles] 	The rubella rash is red and raised, begins on the face then progresses from head to foot, lasting about three days. Children usually develop few or no respiratory symptoms, but adults may experience low-grade fever, headache, fatigue, mild runny nose, and red eyes 1–5 days prior to rash onset. Swelling of the lymph nodes behind the ear and at the base of the skull is characteristic and precedes the rash by 5-10 days. Joint pains are frequent in older patients.	14-21 days Average – 16-18 days	7 days before to 7 days after rash onset.
	SCARLET FEVER [Scarlatina]	Caused by the streptococcal bacterium. Illness begins with fever and sore throat. Rash appears as a pink-red flush which looks like a sunburn with goose pimples that spreads to all parts of the body. Afterwards the skin may peel off like sunburn. Often tongue has a “strawberry” appearance.	1-7 days Average - 2-5 days	Variable. If not treated, can be contagious for weeks.
	STREP THROAT [Streptococcal sore throat]	Strep throat is similar to scarlet fever but without the rash. A sore throat and fever are the most pronounced symptoms.	1-7 days Average - 2-5 days	Variable. If not treated, can be contagious for weeks.
	STREPTOCOCCUS PNEUMONIAE 	Variable, depends on site of infection – ear infection, sinusitis, bloodstream infections, pneumonia, or meningitis	Varies. Maybe 1-3 days	Variable. Usually 24-48 hours after antimicrobial therapy.
	TUBERCULOSIS (TB)	Most children have no symptoms when first infected. When disease does occur, symptoms most often appear 1 to 6 months following infection. The symptoms for pulmonary TB include fever, growth delay or weight loss, cough, night sweats, and chills. TB disease outside the lungs may cause meningitis or disease of the lymph nodes, bones, joints, and skin.	2-10 weeks	Variable. After starting treatment with anti-TB drugs, a symptomatic patient may become non-infectious in as little as two weeks.
	WHOOPING COUGH (Pertussis) 	The initial signs are runny nose and sneezing progressing to cough and followed 1-2 weeks later by spasms of coughing characterized by a series of short convulsive-like coughs, followed by a high-pitched gasp of air called a whoop, commonly followed by vomiting. Fever is absent or minimal. Symptoms wane gradually over weeks to months. Disease in infants younger than 6 months of age can progress quickly, with gagging, gasping, or apnea as prominent early manifestations; absence of whoop; and prolonged convalescence. Sudden unexpected death can be caused by pertussis. Disease in older children and adults also can have atypical manifestations when the cough is not accompanied by spasms or whoop. The duration of classic pertussis is 6 to 10 weeks in children.	5-21 days Average – 7-10 days	Early, when patient has common cold-like symptoms to approximately three weeks after cough onset or until 5 days after appropriate antimicrobial therapy.
FECAL-ORAL Contamination of hands, food and drink or of objects placed in the mouth.	CAMPYLOBACTER	The disease is recognized by sudden onset of fever and abdominal pain and diarrhea which may be severe. There may also be vomiting or blood in the stools.	1-10 days Average – 2-5 days	Throughout the illness (1-2 weeks). If not treated, up to 7 weeks.
	E. COLI [Escherichia coli, Shiga Toxin]	Sudden onset of diarrhea that may become bloody on day 2-3 of illness. Severe abdominal cramps, nausea, vomiting; usually no fever. Some infections can lead to a life-threatening complication involving the kidneys called hemolytic-uremic syndrome (HUS). Highly infectious.	Variable; 2-10 days.	For duration of diarrhea thereafter until stool is culture-negative.
	GIARDIASIS [Protozoan diarrhea]	Chronic, intermittent diarrhea, bloating, foul-smelling stools and fatigue and weight loss. Sometimes observable symptoms are not present.	1-4 weeks	Entire period of infection, often months.
	SALMONELLOSIS [Acute gastroenteritis] [Food poisoning]	Sudden onset of fever, abdominal cramps, diarrhea, possible vomiting, and possible dehydration. There may be blood in the stools.	6 hours-7 days Average – 12-36 hours	Variable. Throughout course of illness. Infants can be carriers for extended periods of time.
	SHIGELLOSIS [Acute gastroenteritis] [Food poisoning]	Sudden onset of fever, diarrhea, abdominal pain. Loss of appetite and vomiting may also occur. There may be blood, mucus, or pus in the stools. Highly infectious.	Average – 1-3 days	From onset of illness until stool culture is negative.
	VIRAL GASTROENTERITIS [Norovirus and related caliciviruses (winter vomiting disease)]	Abrupt onset of illness characterized by any combination of the following symptoms: nausea, vomiting, diarrhea, abdominal pain and discomfort. Fever, if present, is usually low-grade. Occurs most often between November and April, but can occur at any time. Highly contagious illness. Transmission may also occur through ingestion of aerosolized vomit	12-72 hours Average 24-48 hours	From onset of illness until 3 days after symptoms subside. In rare circumstances the contagious period may last up to 2 weeks after recovery.
	ROTAVIRUS	Symptoms include fever, non-bloody diarrhea, nausea, vomiting.	1 – 3 days	From several days before diarrhea begins until more than a week after illness
	HEPATITIS A [Infectious hepatitis] [Epidemic jaundice] 	Sudden start with loss of appetite, nausea and abdominal pain or discomfort and fever. Within a few days, jaundice occurs with yellowing of eyes and skin and darkening of urine. Symptoms are generally much milder in young children or may be absent compared with adults.	15-50 days Average – 28-30 days	2 weeks before symptom onset to one week after jaundice development. Virus shedding may occasionally last up to several months.



Immunizations can help prevent this illness; the vaccine for this disease is part of the U.S. recommended immunization schedule for children.

Other serious diseases such as polio, typhoid, syphilis, hepatitis B, and gonorrhea are not included on this chart because their occurrence is less common than diseases listed here. **Should one of these illnesses be suspected in a child, it must be reported immediately to the local health authority and to the licensing consultant.**

Common Nuisance Diseases

PRINCIPLE MODE OF SPREAD	DISEASE	SYMPTOMS	INCUBATION PERIOD	CONTAGIOUS PERIOD
INFESTATIONS Contact with others, including their belongings	HEAD LICE [PEDICULOSIS]	Gradual onset of itching and burning. Scalp becomes dry and pink with patches that tend to spread, become rough and flake-off. Hair may become matted, as nits (white eggs) stick to hair shafts. Close examination show nits on hair near the scalp or crawling lice. Guidelines for head lice treatment, recommended policies, sample letters, and education can be found in the Michigan Head Lice Manual at www.michigan.gov/cdinfo .	6-14 days	Until eggs and lice in hair and on clothing and bedding have been destroyed.
	RINGWORM [Tinea capitis; tinea corporis]	Ringworm of the scalp begins as a small pimple which grows and spreads, leaving scaly patches of temporary baldness. Ringworm of the body appears as flat, spreading, ring-shaped lesions. The outside is usually red while the skin on the inside tends to appear lighter.	4-14 days	As long as lesions are present and spores persist on contaminated materials.
	PINWORM [Enterobiasis]	A mild illness with itching in anal area, disturbed sleep, irritability and local irritation due to scratching.	Unknown	As long as the female worm survives in the intestine.
	SCABIES [Itch Mite]	A skin infection caused by microscopic mites, characterized by pimples and tiny burrows that appear as slightly discolored lines. Intense itching is frequent, and often most severe at night. Areas commonly affected are skin folds, such as between fingers, inside elbows, inner thighs, waistlines, genital areas, and between buttocks. Since all close, skin-to-skin contacts of a confirmed scabies case should be treated, it is best practice to confirm a scabies infestation by asking a health care provider to obtain a "skin scraping" of an affected area and to visualize mites or eggs through a microscope. Guidelines for scabies treatment, recommended policies, sample letters, and education can be found in the Michigan Scabies Prevention and Control manual at www.michigan.gov/cdinfo .	2-6 weeks for first infestation. 1-4 days for those infected before.	Until mites are destroyed by treatment. Cases should be re-evaluated every week for 4 weeks for symptom resolution. Consideration for repeating treatment should occur if symptoms do not resolve.
DIRECT CONTACT Direct skin contact with wounds or discharges from an infected person.	IMPETIGO [Impetigo contagiosa]	An inflammatory skin disease marked by isolated pus-filled spots which become crusted and break, releasing a straw-colored fluid. Occurs principally around the mouth and nostrils.	1-10 days	As long as pus-filled lesions continue to drain.
	HERPES [Herpes simplex; cold sore; fever blister]	An infectious disease characterized by thin-walled blisters which tend to recur in the same area of skin. Common sites include the lips, gums, cheeks, and eyelids.	2-12 days	Up to 7 weeks after first infection and whenever blisters are present in repeated episodes.
	PINKEYE [Epidemic form of acute conjunctivitis]	An irritation of the mucus membranes which line the eye accompanied by a discharge of tears, swelling of lids, extreme sensitivity to light, and a buildup of a sticky fluid which dries to a straw-colored crusty material and tends to accumulate at the corners of the eye.	27-72 hours	During the period of active infection. Some children recover in only a few days but many cases take 2 to 3 weeks.
	HAND, FOOT & MOUTH [Herpangina]	Sudden onset of fever and development of tiny blisters inside of the mouth and throat and on the extremities. Virus can be shed in respiratory secretions, feces and fluid from blisters.	2-14 days Average 3-5 days	Probably from 2 to 3 days before onset to several days after onset. Can be shed in feces for weeks.
	<i>Staphylococcus aureus</i> and Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	A bacterial infection that may sometimes be resistant to certain antibiotics. Commonly staph is a skin lesion or soft tissue infection that may look like a pimple or boil. A draining lesion or purulent wound discharge is a common source of spread. Staph is also commonly found on the skin or in the anterior nares, but not causing infection, known as a carrier state.	Varies and can be indefinite	As long as lesions continue to drain or indefinitely in the carrier state.

Vaccines to Protect Children and Adult Caregivers

Vaccines are medications given to both children and adults to protect them from serious diseases. The immune system is the body's defense against disease. Vaccines cause the immune system to make antibodies. Antibodies are special "smart cells" that find and fight off germs. Vaccines prevent infections that can cause serious illness and death.

To protect children, all states have laws requiring children in child care and schools to be vaccinated. In Michigan, child care and school immunization requirements outline the number of doses appropriate for the child's age. Michigan's school and child care requirements include the following vaccines:

- Hep B - Hepatitis B.
- DTaP - diphtheria, tetanus, pertussis.
- PCV7/PCV13 - pneumococcal conjugate.
- Hib - *Haemophilus influenzae* type B.
- Polio.
- MMR - measles, mumps, rubella.
- Var - varicella (chickenpox).

The Michigan Department of Health and Human Services and Centers for Disease Control and Prevention recommend additional immunizations to protect children including annual seasonal influenza (flu), rotavirus (RV) and hepatitis A (hep A) vaccines. Child care centers must monitor children's immunization status by using the Michigan Care Improvement Registry (MCIR) program to remind parents when their children are due for an immunization.

Also, encourage staff to review their own immunization status to protect those they care for and their families. Adults who care for infants and young children should have vaccines to protect themselves and the children in their care. These vaccines include tetanus, diphtheria and pertussis (Tdap), and annual seasonal influenza (flu) vaccines. Persons without proof of age-appropriate vaccination or other proof of immunity to measles, mumps, rubella, and varicella disease should receive MMR (measles, mumps, rubella) and/or Varicella (chickenpox) vaccines. Vaccines will protect caregivers, their families and the children for which they care.

For more information on vaccines and school/child care immunization requirements, contact your local health department or visit www.michigan.gov/immunize.

Norovirus

Noroviruses are a group of viruses that cause gastroenteritis (GAS-tro-en-ter-i-tis). Norovirus is known incorrectly as the "stomach flu". Norovirus is NOT related to the flu (influenza), which is a respiratory illness caused by a different virus. Norovirus illness usually begins 24-48 hours after exposure, but can appear as early as 10 hours after exposure. Symptoms usually include nausea, vomiting, diarrhea, and stomach cramping, but a low-grade fever, chills, headache, muscle aches, and a general sense of tiredness may also be present. The illness is usually brief, with symptoms lasting 1-2 days. Noroviruses are very contagious and spread easily from person-to-person. The virus is found in the stool and vomit of infected people. People can become infected in several ways, including eating food or drinking liquids that are contaminated by infected food handlers, touching surfaces or objects contaminated with norovirus and then touching their mouth before handwashing, or having direct contact with another person who is infected and then touching their mouth before handwashing. Children and staff exhibiting symptoms of viral gastroenteritis should be excluded from school or other group activities until 2 days after their symptoms have stopped. Frequent handwashing with warm water and soap for at least 20 seconds is highly encouraged as alcohol-based hand sanitizers are NOT effective against the virus. It is important to note that most household cleaners are ineffective against norovirus; a diluted bleach solution is the most reliable means of disinfection. Norovirus can survive on surfaces for many days unless disinfected. Please see the References section below for the MDHHS Fact Sheet and Guidelines for Environmental Cleaning and Disinfection of Norovirus.

Influenza

Influenza (or "the flu") is a contagious respiratory illness caused by influenza viruses that infect the nose, throat, and lungs. It can cause mild to severe illness, and at times can lead to death. In fact, influenza causes more hospitalizations among young children than any other vaccine-preventable disease. People infected with influenza may experience fever or feeling feverish, chills, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, and/or fatigue; some children may experience vomiting and diarrhea. Most experts believe that flu viruses spread mainly by droplets produced when people with flu cough, sneeze or talk. These droplets can land in the mouths or noses of people who are nearby. Less often, a person might get infected with the flu by touching a surface contaminated with the influenza virus and then touching their own mouth, eyes or nose. Most healthy adults may be infectious to others beginning 1 day before

symptoms develop and up to 5 to 7 days after becoming sick. Some people, especially young children and people with weakened immune systems, might shed the virus for even longer. One of the best ways to protect against the flu and its potential severe complications is to get a seasonal influenza vaccine each year. Flu vaccination is recommended for all children aged 6 months and older. Making healthy choices at school and at home can also help prevent the flu.

Encourage children, parents, and staff to take the following everyday preventive actions:

- Stay home when you are sick and avoid close contact with people who are sick.
- Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue away after use and wash your hands. If a tissue is not available, cover your mouth and nose with your sleeve, not your hand.
- Wash your hands often with soap and water. If this is not available, use an alcohol-based hand rub.
- Avoid touching your eyes, nose, or mouth. Germs spread this way.
- Clean and disinfect frequently touched surfaces at home, work, or school, especially when someone is ill.



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