



Infectious Disease Epidemiology Program

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Disease	Causative Organism	Early Signs and Symptoms	Incubation Period	Mode of Transmission (refer to descriptions)	Period of Communicability	Exclusion Criteria	Preventive Measures	Report to LDH
Chickenpox (Varicella)	Varicella-Zoster Virus	Typically presents as a rash that turns into itchy, fluid-filled blisters which then turn into scabs. Scab formation typically takes 4-7 days. Other symptoms can include fever, fatigue, loss of appetite, and headache.	14-16 days (10-21 day range)	Airborne or direct contact with lesions	1-2 days before onset of rash until all lesions have crusted over	Exclude and isolate at home until all lesions have crusted over. If mild infection with no crusts, exclude until no new bumps for at least 24 hours. If 2 or more cases, unimmunized and improperly immunized close contacts should be excluded 21 days or until vaccination given.	Immunization available for ages 12 months and older. Notify potentially exposed family members, staff, and parents of unvaccinated children to watch for symptoms. Pregnant or immunocompromised individuals should follow up with their physician.	Yes
Cytomegalovirus (CMV)	Cytomegalovirus, also called human betaherpesvirus 5	Asymptomatic infections are the most common. If symptoms occur they are typically mild and include fever, sore throat, fatigue, and swollen glands. May cause severe symptoms in people with weakened immune systems, infants infected <i>in utero</i> and very low birth weight and premature infants.	Unknown. The incubation for person-to-person transmission is highly variable	Direct contact with saliva, blood, tears, urine, genital secretions, or breastmilk from infected individuals. Transmission also possible through transplanted organs, blood transfusions, and from mother to infant before, during, or after birth.	Unknown. Spread of CMV in households and child care centers is well documented.	Exclusion not required - reservoirs of infection are mostly asymptomatic shedders of virus	Handwashing and proper sanitation/disinfection	Outbreaks only
Common Cold (Upper Respiratory Tract Infection or URI)	Caused by a variety of viruses including rhinovirus, adenovirus, human metapneumovirus, human parainfluenza viruses, and seasonal human coronaviruses	Symptoms can include runny or stuffy nose, sneezing, watery eyes, sore throat. May be complicated by laryngitis, pharyngitis, and ear infection.	2-14 days	Droplet, direct, and indirect contact	A few days before symptom onset to up to 5 days after symptom resolution	Exclusion not required unless severe symptoms, such as fever, occur or the child is unable to handle nasal secretions	Handwashing, respiratory hygiene/cough etiquette, proper disposal of used facial tissues, and proper sanitation/disinfection	Outbreaks only
COVID-19	SARS-CoV-2 virus	Symptoms can include fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea.	2-14 days	Airborne, droplet, direct and indirect contact	Viral shedding is variable, but most people are infectious starting 2 days before symptom onset until 10 days after symptom onset. Can be longer for individuals with severe COVID-19 infection or those who are moderately or severely immunocompromised	Exclude for 5 days, with day 0 being the day of symptom onset or positive test result if asymptomatic. Individuals may return after day 5 if they are able to wear a mask through day 10. Individuals unable to mask should isolate at home for 10 days.	Exclusion of infected individuals. Immunization is available for anyone 6 months and older. Handwashing, respiratory hygiene/cough etiquette, proper disposal of used facial tissues, and proper sanitation/disinfection.	Outbreaks only
Diarrheal Disease	Caused by a variety of bacteria and viruses including Salmonella, Shigella, E. coli, Campylobacter, Cryptosporidium, Rotavirus, Norovirus	Varies according to causative agent, symptoms may include diarrhea, nausea, vomiting, stomach cramps, headache, general malaise, blood and/or mucus in stool, and fever.	Varies by causative agent: Salmonella 12-26 hrs (6-72 hr range) Shigella 1-3 days (1-10 day range) E. coli 3-5 days (1-8 day range) Campylobacter 2-5 days (can be longer) Cryptosporidiosis 7 days (1-12 day range) Rotavirus 48 hrs (24-72 hr range) Norovirus 12-48 hrs	Fecal-oral, foodborne, direct and indirect contact	Varies by causative agent, but highest risk of transmission is typically while child is symptomatic	Exclude until diarrhea has been resolved for 24 hours. Exclude if there is blood or mucus in stool or if stool is black. Exclude if child is showing signs of dehydration (dry mouth, no tears, low or no urine output in 8 hours).	Ensure proper cooking and storage of food. Exclusion of infected staff members who handle food. Education and prevention of fecal-oral transmission and strict handwashing and proper sanitation/disinfection.	Yes, except rotavirus and norovirus (for those two agents, report outbreaks only); Norovirus/rotavirus outbreak is the occurrence of 2 or more similar illnesses resulting from a common exposure that is either suspected or laboratory-confirmed to be caused by norovirus/rotavirus
Pinworm (Enterobiasis)	Small, thin, white roundworm (nematode) called a pinworm or "threadworm"	Itching around the anus which can lead to difficulty sleeping and restlessness. Symptoms are usually mild and some infected people have no symptoms.	1-2 months (from ingestion until migration to perianal region)	Fecal-oral, direct and indirect contact	A person remains infectious as long as female nematodes are discharging eggs on perianal skin. Eggs remain infectious in indoor environment usually for 2 to 3 weeks.	No exclusion necessary	Education and prevention of fecal-oral transmission and strict handwashing and proper sanitation/disinfection. Keep the child's fingernails short.	Outbreaks only
Giardia	<i>Giardia duodenalis</i> , formerly referred to as <i>Giardia intestinalis</i> or <i>Giardia lamblia</i>	Diarrhea, gas, foul-smelling and greasy stools that tend to float, stomach cramps or pain, upset stomach or nausea, vomiting, and dehydration. Some infected people have no symptoms.	1-3 weeks (2-25 day range)	Fecal-oral, foodborne, contaminated water	Highly variable - as long as the infected person excretes cysts - may be for months	Exclude until diarrhea has been resolved for 24 hours. Exclude if there is blood or mucus in stool or if stool is black. Exclude if child is showing signs of dehydration (dry mouth, no tears, low or no urine output in 8 hours).	Education and prevention of fecal-oral transmission and strict handwashing and proper sanitation/disinfection	Yes

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Haemophilus influenzae type b (Hib)	Haemophilus influenzae type b	Invasive disease includes clinical syndromes of pneumonia, meningitis, and bacteremia or sepsis. Symptoms may include fever, cough, shortness of breath, headache, stick neck, tiredness, nausea, and confusion.	Unknown. It is thought to be as short as a few days.	Droplet	As long as the bacteria are present in the nose or throat. Non-communicable within 24-48 hours after starting an effective antimicrobial treatment.	Exclude during acute illness and until 24 hours after starting an effective antimicrobial treatment	Immunization available for ages 2 months and older. Chemoprophylaxis recommended for all household contacts if there are unimmunized or immunocompromised children under 4 years. Chemoprophylaxis recommended for all preschool and child care contacts if there are 2 or more cases within 60 days of each other	Yes
Hepatitis A	Hepatitis A virus (HAV)	Many infected persons, especially children, are asymptomatic or have mild symptoms without jaundice. Onset is usually abrupt with fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, diarrhea, clay-colored stool, joint pain, and jaundice.	25-30 days (15-50 day range)	Fecal-oral	From two weeks before symptom onset. Risk of transmission is minimal 1 week after onset of jaundice. HAV can live outside the body for months, depending on the environmental conditions.	Exclude cases for no longer than 7 days after onset of jaundice, or as decided by the physician	Immunization available for ages 12 months and older. Education and prevention of fecal-oral transmission and strict handwashing and proper sanitation/disinfection. Immunization not indicated for contacts in a usual school situation. In daycare centers, when HAV infection is identified in an employee or child, previously unimmunized employees in contact with the index case and unimmunized children in the same room as index case should receive HAV vaccine.	Yes
Hepatitis B	Hepatitis B virus (HBV)	Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stool, joint pain, and jaundice. Most children <5 years old do not have symptoms. Symptoms are present in 30-50% of people 5 years and older.	If symptoms occur, they begin an average of 90 days after exposure, and can occur anywhere from 60-150 days after exposure	Blood and body fluids, sexual transmission - vaginal and anal sex. Sharing needles, syringes, or other drug injection equipment. Vertical transmission from mother to child.	Blood can be infectious many weeks before the onset of symptoms and throughout the acute clinical phase of the illness. In case of chronic carriage, persons with chronic hepatitis B surface antigen are infectious lifelong	Exclude during acute illness. Exclude if child with known HBV has weeping sores that cannot be covered or has a bleeding problem. Exclude if child has biting or scratching behavior that may produce bleeding. Exclude if child has generalized dermatitis that may produce weepy wounds	Immunization available starting at birth. Blood/body fluid precautions by school personnel when attending injuries and/or blood spills. Education of children and school personnel on HBV. Immunization of contacts. Universal immunization of all infants required for all day care children	Yes
Hepatitis C	Hepatitis C virus (HCV)	Fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored stool, joint pain, and jaundice. Only 25% of people with HCV will become symptomatic.	If symptoms occur, they begin an average of 2-12 weeks after exposure, and can occur anywhere from 2-26 weeks after exposure	Blood and body fluids, sexual transmission - vaginal and anal sex. Sharing needles, syringes, or other drug injection equipment. Vertical transmission from mother to child.	Blood can be infectious before the onset of symptoms and while a person has active HCV infection	Exclude during acute illness. Exclude if child with known HCV has weeping sores that cannot be covered or has a bleeding problem. Exclude if child has biting or scratching behavior that may produce bleeding. Exclude if child has generalized dermatitis that may produce weepy wounds	Blood/body fluid precautions by school personnel when attending injuries and/or blood spills. Education of children and school personnel on HCV. Effective curative treatment with direct acting antivirals (DAAs) available	Yes
HIV	Human Immunodeficiency Virus	Initially - a self-limited, flu-like illness. Some people may not feel sick right away or at all. Later - depends on opportunistic infection - swollen lymph nodes, chronic diarrhea, weight loss, fever, chills, muscle aches, and fatigue.	Variable, 2 months to 10 years or longer	Blood and body fluids, sexual transmission - vaginal and anal sex. Sharing needles, syringes, or other drug injection equipment. Vertical transmission from mother to child.	Begins early after onset of HIV infection and extends throughout life	Blood and body fluid precautions. The child has weeping skin lesions that cannot be covered. The child has bleeding problems. Child should be regularly evaluated by physician and child care provider for appropriate placement	Use of standard precautions in school setting. Education of children and school personnel on HIV. If engaging in sexual activity, use a condom. Use new, clean syringes and injection equipment every time you inject. Develop policies for handling blood spills/injuries. Extra attention may be given to children with HIV as they can be at an increased risk of severe complications from certain types of infections	Yes

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Measles (Rubeola)	Measles virus, also called measles morbillivirus	High fever (up to 105F), cough, runny nose, and red, watery eyes precede onset of rash (prodromal period). Tiny white spots (Koplik spots) may also appear in the mouth at this time. Following the prodromal period, a maculopapular rash appears at hairline spreading downward over the body.	7-14 days prodromal symptoms, rash appears 3-5 days after first symptoms (7-21 day range)	Droplet and airborne	4 days before onset of rash through 4 days after onset of rash	Exclude and isolate at home until at least 4 days following the onset of rash. Exposed persons without evidence of immunity should be excluded for 21 days after last exposure, but may return if MMR given within 3 days of exposure.	Immunization available for ages 12 months and older. MMR vaccine may be given as post-exposure prophylaxis within 3 days following exposure in immunocompetent individuals > 6 months of age. Immunglobulin (IG) is recommended within 6 days following exposure and for those who cannot be vaccinated (immunocompromised individuals, pregnant individuals, and children < 6 months of age). All exposed individuals should be notified of the exposure.	Yes
Meningitis, Meningococcal meningitis	<i>Neisseria meningitidis</i>	Fever, sore throat, headache, nausea and vomiting, and stiff neck. In meningococemia cases onset often is abrupt with fever, chills, malaise, prostration and a rash that initially may be macular, maculopapular or petechial. In fulminant cases (Waterhouse-Friderichsen syndrome), purpura, disseminated intravascular coagulation, shock, coma, and death can ensue within several hours despite appropriate therapy.	Usually < 4 days (1-10 day range)	Droplet (requires close or lengthy contact)	As long as the bacteria are present in the nose or throat. Non-communicable after at least 24 hours on an effective antimicrobial treatment.	Exclude during acute illness and until 24 hours after starting an effective antimicrobial treatment	Immunization available, with routine vaccination typically beginning at age 11. Regardless of immunization status, household, daycare, and other close contacts should be given chemoprophylaxis as early as possible. School contacts and health care workers without direct exposure to oral secretions are not at high risk and do not need chemoprophylaxis.	Yes
Meningitis, Pneumococcal meningitis	<i>Streptococcus pneumoniae</i>	Clinical syndromes include pneumonia, meningitis, bacteremia or sepsis, or otitis media (ear infections). Early symptoms may include fever, cough, chest pain, headache, stiff neck, confusion, shortness of breath, or ear pain.	Varies by type of infection. Can be as short as 1-3 days.	Droplet	Unknown, but may be as long as bacteria present in upper respiratory tract secretions. Assumed non-communicable following 24 hours on an effective antimicrobial treatment.	Exclude during acute illness and until 24 hours after starting an effective antimicrobial treatment	Immunization available for ages 2 months and older. Chemoprophylaxis is not recommended for contacts of children with invasive pneumococcal disease, regardless of their immunization status	Yes
Meningitis, Viral (aseptic meningitis)	Can be caused by non-polio enteroviruses, mumps virus, herpesviruses, measles viruses, influenza virus, arboviruses, and lymphocytic choriomeningitis virus	Fever, headache, stiff neck, nausea, vomiting, lethargy, sensitivity to light	Varies by virus. Generally, within a week of exposure.	It is unlikely that others infected with the causative agent will also develop meningitis. Some viruses spread through close contact with an infected individual. Not all of the viruses can be spread person-to-person.	Varies by virus. Shedding of the virus in feces can continue for several weeks. Shedding from the respiratory tract usually lasts a week or less.	Exclude until child is cleared to return by a physician	Handwashing and proper sanitation/disinfection, stay up-to-date on all vaccinations, and avoid bites from mosquitoes or other insects and animals that can carry disease	Yes
Mumps (Epidemic parotitis)	Mumps virus, also called mumps orthorubulavirus	Swollen salivary glands under the ears on one or both sides (parotitis). Prodrome may include fever, headache, muscle aches, tiredness, and loss of appetite.	16-18 days (12-25 day range)	Droplet and direct contact	1-2 days before to 5 days after the onset of parotid swelling	Exclude for 5 days from onset of parotid gland swelling. Exclusion of unimmunized contacts for 26 days following the last onset may be warranted in high risk or outbreak settings. Excluded individuals may return following vaccination	Immunization available for ages 12 months and older. All exposed individuals should be notified of the exposure	Yes
Head Lice (Pediculosis)	A parasitic insect called a head louse, or <i>Pediculus humanus capitis</i>	Irritation and itching of the scalp (many children are asymptomatic). Lice are light grey insects which lay egg ("nits") on the hair, especially at the nape of neck and at the ears.	Nits hatch after 6-9 days, then mature into adults capable of laying eggs after about 1 week.	Most commonly spread by head-to-head direct contact. Less common by direct contact with personal objects (hats, combs, clothing, etc.).	Until live lice are no longer present	Exclusion is not necessary after initial treatment, even though nits may be present	Notify possibly exposed family members, staff, and parents of children to examine hair and treat if infested	Outbreaks only

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Pertussis (Whooping Cough)	<i>Bordetella pertussis</i>	In the first 1-2 weeks: runny nose, low-grade fever, mild cough, apnea (in babies). Following this, coughing fits (paroxysms) with "whooping" sound upon inhalation, vomiting, and exhaustion during or after paroxysms. Cough can last up to 10 weeks.	7-10 days (5-21 day range)	Droplet (requires close or lengthy contact)	Up to 3 weeks following the onset of cough or until 5 days of an effective antimicrobial treatment have been completed	Exclude for 3 weeks following the onset of cough or until 5 days of an effective antimicrobial treatment have been completed	Immunization available. DTaP available for ages 2 months to 6 years. Tdap available for ages 7 and older. Booster doses of Tdap recommended for teens and adults every 10 years. Household, daycare, and other close contacts should be given post-exposure prophylaxis. In school settings, parents should be notified of the possible exposure and told to watch for symptoms for 21 days following the last exposure	Yes
Ringworm (Tinea or Dermatophytosis)	Approximately 40 different species of fungi can cause ringworm; the scientific names for the types of fungi that cause ringworm are <i>Trichophyton</i> , <i>Microsporum</i> , and <i>Epidermophyton</i>	A fungal infection that may affect the body, feet, and scalp. On the scalp- circular scaly patches with raised edges and short, broken off hairs. Discrete areas of hair loss studded by stubs of broken hairs. On the feet (athlete's foot) - occurs as fine vesiculopustular or scaly lesions between toes, particularly in the third and fourth interdigital spaces. May occur anywhere on the body as well. Pruritus (itching) is common.	4-21 days	Direct and indirect contact (especially with contaminated clothing or pets). More common in children 5-12 years of age.	As long as present on the person or on contaminated clothing	Anyone having ringworm should be placed under treatment by a health care provider. Return to school is dependent upon being under adequate treatment. No child should be readmitted to the classroom unless they have a note from a health care provider stating they are under medical care. Athletes with ringworm of the body in sports with person-to-person contact should not participate in sports for 72 hours after starting treatment unless area can be covered.	Proper treatment of cases to prevent spread to others. Family and close contacts should be monitored for symptoms and evaluated by a health care provider if symptoms develop	Outbreaks only
RSV	Respiratory syncytial virus	Runny nose, decrease in appetite, coughing, sneezing, fever, wheezing	4-6 days (2-8 day range)	Droplet, direct, and indirect contact	3-8 days and may become contagious 1-2 days before symptom onset	Do not exclude unless the child exhibits rapid or labored breathing or cyanotic (blue) episodes. If child meets this criteria, refer immediately to health professional.	Monoclonal antibodies available for eligible infants. Immunization available for certain pregnant individuals and eligible adults over 60 years old. Handwashing, respiratory hygiene/cough etiquette, proper disposal of used facial tissues, and proper sanitation/disinfection.	Outbreaks only
Rubella (German Measles)	Rubella virus	Usually mild with a generalized maculopapular rash typically starting on face then spreading to rest of body. The rash starts on the face and becomes generalized in 24 hours.	16-18 days (12-23 day range)	Droplet and direct contact	7 days before to 7 days after the onset of rash	Exclude children from school for 7 days after onset of rash. People without evidence of immunity should be excluded for 23 days following potential exposure to the last rash onset. They may return immediately upon receiving vaccination.	Immunization available for ages 12 months and older. Notify possibly exposed to watch for symptoms and exclude contacts without evidence of immunity. Pregnant individuals should follow up with their physician for a serologic screening	Yes
Scabies	Scabies mite, also known as human itch mite or <i>Sarcoptes scabiei</i>	Appears as small, scattered, red spots which are most frequently found in the web of the fingers and areas of the thighs and arms where the skin is thin. Burrows sometimes seen. Intense itching, most severe at night.	4-6 weeks in persons without previous exposure. People who previously were infested develop symptoms 1-4 days after repeated exposure to the mites.	Most commonly direct, prolonged skin-to-skin contact. May also be transmitted via indirect contact.	Until the mites and eggs are destroyed (usually after 1 or 2 days of proper treatment with scabicides)	Exclude infected children from school until the day after treatment is initiated	Good personal hygiene. Launder (hot water and hot drying cycle) bedding and clothing worn next to skin at least 4 days before start of treatment. Items that cannot be laundered should be kept in plastic bags for at least 4 days. Notify families to check for symptoms in exposed contacts. Prophylactic treatment of household contacts and those who have had skin-to-skin contact with infected person.	Outbreaks only

Transmission Route	Description	Precautions
Airborne	Droplet nuclei less than 5 micrometers in diameter originating from coughing, speaking, sneezing, singing, or evaporation from larger droplets. May remain suspended in air for long periods of time and cover large distances/move through ventilation systems.	Exclusion from facility as soon as possible.
Droplet	Droplet nuclei 5 micrometers or larger in diameter originating from coughing, speaking, sneezing, or singing. Generally fall within a 3 foot radius of the source and cannot remain suspended in air or cover large distances.	Education and/or demonstration of proper cough/sneeze etiquette into tissue or if no tissue is available the crux of the elbow. Follow precautions for Indirect and Direct Contact below.
Indirect Contact	Transferred indirectly from an infected/colonized person to another via an intermediary person or object. Likely objects include clothing, uniforms, pencils/pens, books, chairs, tables, sinks, door handles, and any other high-touch surfaces.	Avoid sharing any clothing, food, or schooling materials. Follow precautions for Direct Contact below.
Direct Contact	Transferred directly from an infected/colonized person to another person. Likely to occur in common areas like classrooms, restrooms, diaper-changing areas and cafeterias/dining rooms.	Education and/or demonstration of proper handwashing and disinfection/sanitation practices.
Foodborne	Transmitted via food and generally implicates sick food handlers, poor hand hygiene among food handlers, or improperly cooked/handled/stored food.	Education on safe food handling as well as proper temperatures to store food until serving.
Waterborne	Ingestion of contaminated water (from people, animals, or food) as well as drinking from an untreated source and playing or swimming in contaminated water.	Ensure water source is free of contaminants (human or animal feces). Education and/or demonstration of proper handwashing and disinfection/sanitation practices.
Fecal-Oral	Transmitted via ingestion of fecal matter from an infectious individual. Some diseases require ingestion of a very small amount (unable to see) to cause infection.	Education and/or demonstration of proper handwashing and disinfection/sanitation practices.
Blood and body fluid	Transmitted via any blood or bodily fluid (most commonly urine and saliva, but can include any bodily fluid besides breast milk); typically when it comes in contact with open wounds, mucus membranes, or through the use of injectable devices.	Education on proper wound treatment and bandaging. Sanitize and disinfect surfaces that come in contact with blood. Proper handwashing and disinfection/sanitation practices should prevent spread by urine or saliva.

General Exclusion Criteria

Exclude if the child has •a severely ill appearance •a fever •diarrhea •vomiting 2 or more times in the previous 24 hours •abdominal pain that continues for more than 2 hours or intermittent abdominal pain associated with fever or other signs or symptoms •mouth sores with drooling that the child cannot control unless the child's health care provider states the child is noninfectious •rash with fever or behavioral changes, until a primary care provider has determined the illness is not a communicable disease •skin sores that are weeping fluid and are on an exposed body surface that cannot be covered with a waterproof dressing.

Outbreaks

An outbreak is a sudden rise in the number of cases of a disease. Outbreaks of a known condition or unusual symptoms of an undiagnosed illness among children or staff members should be reported to your regional epidemiologist.

ACIP Child and Adolescent Immunization Schedule

<https://www.cdc.gov/vaccines/schedules/hcp/imz/child-adolescent.html>

Hand Hygiene in School and Early Care and Education

<https://www.cdc.gov/handwashing/handwashing-school.html>

Food Safety

<https://www.cdc.gov/foodsafety/>

All Louisiana Reportable Conditions

https://ldh.la.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/Surveillance/sanitarycode_06_21_Revision_final_1.pdf

Louisiana Infectious Disease Epidemiology Section

<https://ldh.la.gov/page/299>