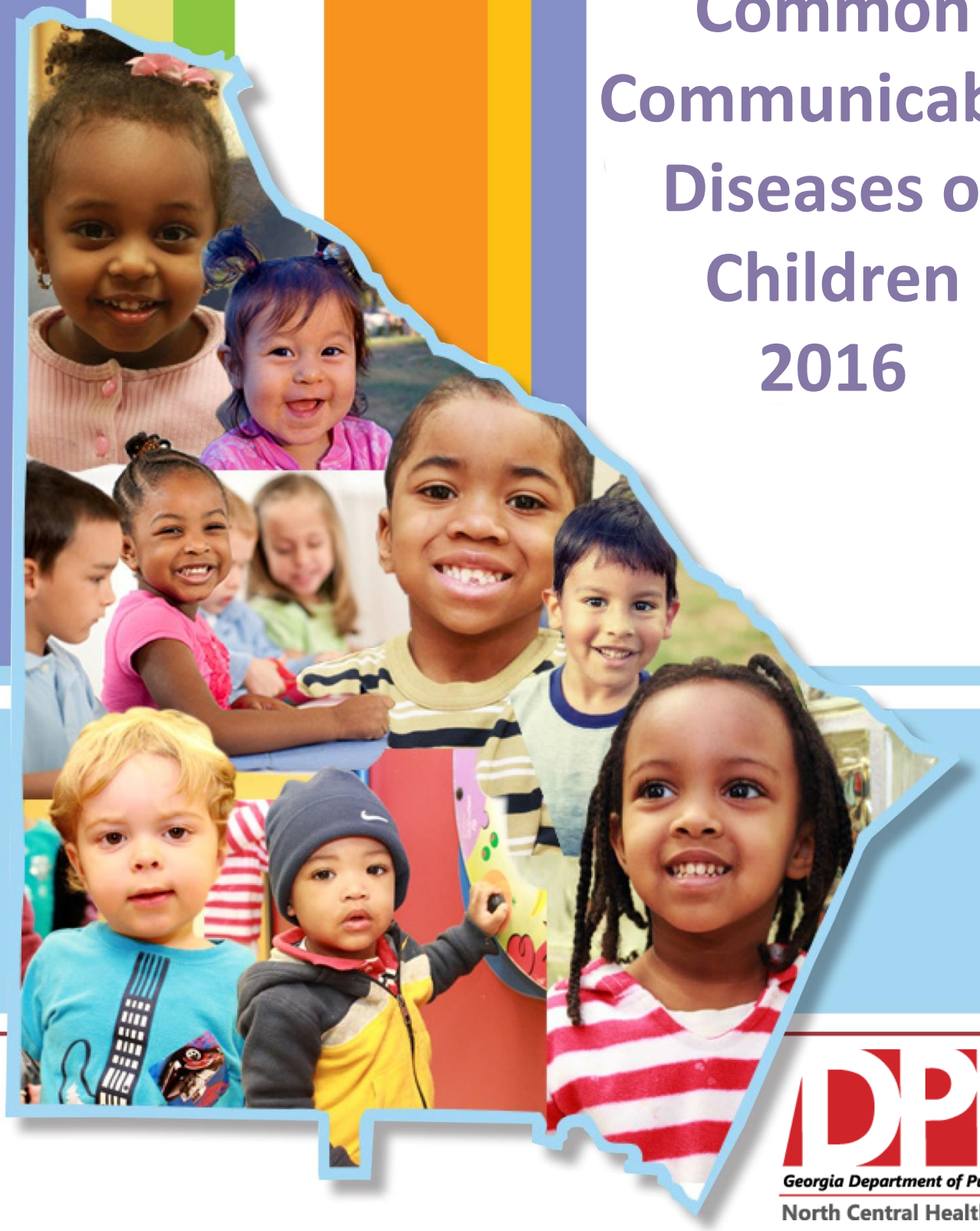
Common Communicable Diseases of Children 2016



Georgia Department of Public Health
North Central Health District

Adapted from the Dekalb Board of Health.

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North Central Health District (NCHD) Contact Information

Disease Reporting/Epidemiology Program

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(866) PUB-HLTH (Ask for Medical Epidemiology), After Hours

Email: nchd.epi@dph.ga.gov

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Immunizations.....(478) 751-4151

General Information .....(478) 751-6303

Tuberculosis Program……..……(478) 751-6128

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Main: (478) 946-2226

General Information on Illness

Signs and Symptoms of Communicable Illness
Any of the signs or symptoms below may indicate the beginning of an acute illness. Isolate the child and arrange to send him/her home, if possible.

- Flushed face, not related to exercise or other physical activity.
- Runny nose, excessive sneezing or coughing, sore throat, earache, swollen glands.
- Watery or glassy appearance of eyes.
- Unexpected sweating, pallor, blueness of lips or fingernails.
- Rash, "bumps" or other skin changes, including discharge such as pus.
- Body temperature above 100°F orally on repeated checks.
- Abdominal pain, nausea, vomiting and diarrhea.
- Pain on urination.
- Swelling of any part of the body.
- Stiff neck.
- Sudden onset of severe headache.

Many illnesses are most communicable during the one or two days before and the first few days after symptoms appear. For more information, consult with the Office of Epidemiology at (478) 751-6303.

General Illness Prevention Measures
Most communicable diseases can be prevented through basic infection control measures such as regular hand washing, practicing respiratory etiquette (covering coughs and sneezes), and proper disinfection of high touch/high traffic surfaces.

The Teacher Should:

Observe children daily for signs of illness. Remove a sick child from the classroom as promptly as possible and arrange to have him/her sent home.

The Parent Should:

Observe their sick child at home until he or she is well. Encourage good hand-washing and respiratory etiquette.

For some illnesses, obtain permission from the child's physician or the District Epidemiologist to readmit him/her to child care or school. Please see information on individual diseases for details.

School Personnel Should:

Practice good hand washing and respiratory etiquette. If sick, remain at home until well.

Acute Viral Rhinitis
The Common Cold

Signs and Symptoms
Runny nose, sneezing, cough, lethargy, muscle aches, irritability, irritation of the nose and throat, watery eyes and chills. These signs and symptoms are also often early signs of other illnesses. Fever is uncommon in children over 3 years of age and rare in adults.

Cause
Rhinoviruses are the most common cause of colds. Other viral causes include adenoviruses, coronaviruses, parainfluenza viruses, influenza and respiratory syncytial virus (RSV).

Transmission
Direct contact with or inhalation of respiratory droplets. Spread can also occur through contact with items freshly contaminated with the nasal or throat secretions of an infected individual, e.g., hands, clothing, toys, utensils, etc.

Incubation Period
Varies, depending on the viral agent. The average incubation period is usually 2 to 3 days, but can range from 12 hours to 10 days.[1,2]

Period of Communicability
Varies by agent, but viral shedding from the nose and throat is greatest 24 hours prior to onset of symptoms and for 5 to 10 days after the symptoms have begun.[2]

Diagnosis and Treatment
Only symptomatic treatment is given.

Child Care/School Attendance
If the child has a fever or complications, he/she should see a physician. A child with a fever should remain at home until the temperature has been normal for 24 hours without the use of fever-reducing medications.

Preventive Measures
Practice proper hygiene, including meticulous hand washing, covering the mouth and nose when coughing and sneezing, and proper disposal/decontamination of items used to collect nasal and throat secretions, e.g., tissues, handkerchiefs, towels, bulb syringes, etc.

Bacterial Gastroenteritis
Specifically infections of Campylobacter, pathogenic *E. coli*, Salmonella, Shigella and Yersinia

REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Sudden onset of diarrhea, abdominal pain, fever, vomiting, headache and/or malaise. Campylobacter, some serotypes of pathogenic *E. coli*, Shigella and Yersinia may produce bloody stool.[1]

Cause
Bacteria.

Transmission

Campylobacter	Associated with the consumption of under-cooked poultry, unpasteurized dairy products or exposure to infected pets (particularly puppies, kittens and birds).
Pathogenic *E. coli* (such as *E. coli* O157:H7)	Associated with the consumption of under-cooked ground beef, contaminated produce, contaminated water, unpasteurized dairy products and juices and contact with infected animals. Can also spread from person-to-person through contact with contaminated food, water or surfaces.
Salmonella	Associated with the ingestion of under-cooked chicken, eggs and egg products, contaminated water and produce, and contact with infected animals (including pet turtles, iguanas, lizards, snakes, birds and frogs). Can also spread from person-to-person through contact with contaminated food, water or surfaces.
Shigella	Spread from person-to-person through contact with contaminated food, water, or surfaces. No animal reservoir. Very contagious. Frequently the cause of diarrheal outbreaks in child care centers and elementary schools.
Yersinia	Usually associated with undercooked or raw pork. In Georgia, young children are often infected due to cross-contamination during the preparation of pork chitterlings.

Incubation Period

Campylobacter	1 to 7 days or longer.
Pathogenic *E. coli*	10 hours to 10 days. For *E. coli* O157:H7, 1 to 10 days with an average of 3 to 4 days.[1,2]
Salmonella	6 to 72 hours with an average of 12 to 36 hours.[1]
Shigella	1 to 7 days with an average of 1 to 3 days.[1]
Yersinia	1 to 14 days with an average of 4 to 6 days.[1]

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Bacterial Gastroenteritis

Period of Communicability

Campylobacter	Person-to-person spread is rare. However, it has been reported among young children in child care facilities. The bacteria can persist in the stool of infected individuals for 2 to 3 weeks.[1]
Pathogenic *E. coli*	Adults typically shed the bacteria in their stool for about 1 week; children for approximately 3 weeks. Prolonged shedding is uncommon.[2]
Salmonella	Transmission is possible for as long as bacteria remain in the stool. The bacteria can be shed for several days to several weeks. May be prolonged in infants.[1,2]
Shigella	Transmission is possible for as long as bacteria remain in the stool. Shedding of the bacteria in the stool usually resolves within 3 weeks, even without antibiotic therapy. Chronic shedding (>1 year) is uncommon.[1]
Yersinia	Person-to-person transmission is rare. Fecal shedding of the bacteria occurs for at least as long as the child is symptomatic, approximately 2 to 3 weeks. Untreated cases may shed the bacteria for 2 to 3 months.

Diagnosis and Treatment

Refer to physician for proper diagnosis and treatment.

Child Care/School Attendance

Campylobacter, Yersinia and some Salmonella	Exclude until diarrhea and fever free for 24 hours without the use of fever-reducing medication.
Pathogenic *E. coli* and Shigella	Age younger than 5 years: Exclude until 2 consecutive negative stool cultures (collected at least 24 hours apart). Age 5 years and older: Exclude until diarrhea and fever free for 24 hours without the use of fever-reducing medication.
Salmonella typhi and *paratyphii*	Age younger than 5 years: Exclude until 3 consecutive negative stool cultures (collected at least 24 hours apart and 48 hours after completion of antibiotics). Age 5 years and older: Exclude until diarrhea and fever free for 24 hours without the use of fever-reducing medication.

Preventive Measures

- Proper hand washing and personal hygiene. Remind children and staff to wash hands after using the restroom or changing diapers, and before preparing or eating meals/snacks.
- Serve only pasteurized juices and dairy products.
- Practice safe handling of raw meat, meat products and eggs.
- Cook all ground meat to an internal temperature of 160˚F and poultry to an internal temperature of 165˚F. Use a food thermometer.
- Properly dispose of diapers and baby wipes and thoroughly clean clothing, mats, towels, toys and other items contaminated with fecal material.

Bed Bugs

PLEASE NOTE: UNLIKE THE OTHER TOPICS DISCUSSED IN THIS MANUAL, BED BUGS CAN CAUSE AN INFESTATION BUT ARE NOT KNOWN TO TRANSMIT DISEASE.

Signs and Symptoms
Bites on face, neck, arms, hands, or other body parts that are exposed during sleep. May be red, slightly swollen, and itchy.

Bed bugs bite while a person is sleeping, so infestations usually occur in areas near where people sleep. They hide during the day in places such as seams of mattresses, box springs, bed frames, headboards, bedside tables, inside cracks and crevices, behind wallpaper, or any other clutter or objects near a bed. You may find the bugs hiding in these places or you may see evidence of their presence, such as shed exoskeletons after molting or small rusty–colored spots on the mattress and box spring. Unlike lice or scabies, bed bugs do not live on people.

Photo courtesy

Cause
Cimex lectularius (the bed bug) is a small, flat insect that feeds on the blood of people and animals while they sleep.

Transmission
Bed bugs do not live on a person and are not transmitted from person to person. They may "hitchhike" from an infested environment to another environment on backpacks, clothing, or suitcases. Exposure to an infested environment, even in a person with good personal hygiene, might result in bites.

Incubation Period
It may take as long as 14 days after being bitten for bite marks to appear.

Diagnosis and Treatment
Topical corticosteroids or oral antihistamines for itching. If scratching leads to skin irritation, a secondary infection is possible that may require antimicrobial treatment.

Child Care/School Attendance
Children with bed bug bites should not be excluded from school or child care. If the child's home has an infestation, ensure it is being treated by a professional exterminator. Consider storing the affected child's belongings, such as jackets and backpacks, in plastic containers to prevent transfer of bugs. Refer to the Georgia Bed Bug Handbook for additional information (http://dph.georgia.gov/sites/dph.georgia.gov/files/related_files/site_page/ADES_Bed_Bug_Handbook.pdf).

Preventive Measures
Regularly inspect for the signs of an infestation. If an infestation is suspected, have the area inspected by a professional exterminator. When traveling, vacuum suitcases and launder clothes to avoid introducing bugs in to new environment.

Conjunctivitis
"Pink Eye"

Signs and Symptoms
Pinkness or redness of the whites of the eye(s), swelling of the conjunctiva (the thin layer that lines the white part of the eye) and the inside of the eyelid. May exhibit a yellowish discharge with morning crusting, increased tearing and eye pain.

Cause
Bacteria, viruses, fungi and allergies. If bacterial, *Haemophilus influenzae, Streptococcus pneumoniae* and *Staphylococcus* are common causes of infection.[1,2]

Transmission
Contact with discharge from the eyes or upper respiratory secretions of an infected individual, or by contact with contaminated fingers, clothing, make-up, eye drops, etc.

Incubation Period
Varies depending on causative agent.


Photo courtesy of CDC

Period of Communicability
Varies depending on causative agent. Infected individuals should be considered contagious until symptoms resolve completely.[2]

Diagnosis and Treatment
Refer to physician. Bacterial and fungal infections will require treatment with an antimicrobial agent.

Child Care/School Attendance
Infected students should be allowed to return to school 24 hours after the appropriate antimicrobial treatment is initiated. Students who show symptoms of more serious illness, e.g., fever, should be excluded until symptoms have resolved. Students with behavioral or developmental problems that make proper hand hygiene and avoidance of close contact with students difficult or impossible should also be excluded until symptoms resolve.

Preventive Measures
Practice meticulous hand washing and regular disinfection of high touch/high traffic surfaces. Discourage students from sharing personal items, e.g., pillows, nap mats, towels, etc.

Cryptosporidiosis
"Crypto"

REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Frequent, watery, non-bloody diarrhea. Other symptoms may include stomach cramps, fatigue, poor appetite, vomiting and fever. Fatigue and fever are particularly common in children.[1] Symptoms such as diarrhea may come and go for up to 30 days.[4]

Cause
The parasitic protozoa *Cryptosporidium*, known as "Crypto."

Transmission
Ingestion of the Crypto parasite. Crypto may be found in soil, food, water and on surfaces that have been contaminated with the feces of infected humans or animals.[4] *Cryptosporidium* outbreaks have been associated with contamination of municipal water supplies and swimming pools. Person-to-person transmission also occurs and can cause outbreaks in child care centers.[1]

Incubation period
An average of 7 days with a range of 2 to 14 days.

Period of Communicability
Depending on species, *Cryptosporidium* can be shed in the stool of an infected individual from 7 days to 2 weeks.[1]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
The child should not be excluded from child care/school if under treatment unless the child is experiencing fever or diarrhea. Children with Crypto should be excluded from water play and swimming for 2 weeks after diarrhea has resolved.[4]

Preventive Measures
Practice thorough hand washing after toileting, changing diapers and before eating or preparing meals and snacks.

Fifth Disease

Erythema infectiosum, "Slapped Cheek Disease"

Signs and Symptoms
Characteristic red rash that appears on the cheeks, giving a "slapped face" appearance. The facial rash is often accompanied by a lace-like rash that appears on the trunk and extremities.[2] The rash may be preceded by a brief, non-specific illness characterized by fever, malaise, muscle ache and headache. The rash may be itchy and fluctuate in intensity in response to environmental factors such as temperature and exposure to sunlight.[1]

Cause
Parvovirus B19.

Transmission
Contact with respiratory secretions, exposure to blood and blood products, and from mother to fetus.[1]

Incubation Period
Usually 4 to 14 days, but can be as long as 21 days.[1]

Period of Communicability
Contagious before onset of rash. Not communicable after rash appears (except in those with aplastic anemia, who may be contagious for extended periods of time).[2]

Diagnosis and Treatment
Supportive.[1]

Child Care/School Attendance
Children with visible rash can attend school because they are no longer contagious. Only exclude if fever is present.

Preventive Measures
- Practice adequate hand washing and proper disposal of facial tissue.
- Pregnant women, immunocompromised individuals and those with sickle cell disease who have been exposed to Fifth Disease should contact their physician.

Giardiasis

REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Foul-smelling, greasy diarrhea that is often accompanied by gas, stomach cramps, fatigue and weight loss.

Cause
The parasite *Giardia lambia*.

Transmission
Ingestion of contaminated water or food. Person to person transmission occurs by hand-to-mouth transfer of cyst(s) from the feces of an infected individual, especially in institutions and day care centers.[5]

Incubation Period
One to 4 weeks, with an average of 7 to 10 days.[1,2]

Period of Communicability
Entire period of infection, often months.[2]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
Exclude child from child care/school until diarrhea is resolved. Children with Giardiasis should be excluded from water play and swimming activities for 2 weeks after diarrhea has resolved.[1]

Preventive Measures
- Practice meticulous hand washing, especially between diaper changes and before eating and preparing meals and snacks.
- After each use, clean and disinfect toys that children can put in their mouths.

Hand, Foot and Mouth Disease

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Illness begins with a fever, sore throat, poor appetite and malaise. One to 2 days later, painful sores develop in the mouth. The lesions begin as small red spots that blister and often become ulcers, usually located on the tongue, gums and inside the cheeks. A non-itchy rash may also develop. The rash has flat or raised red spots, sometimes with blisters. The rash may be found on the palms of the hands and soles of the feet. It may also appear on the buttocks and/or genitalia. A person may have only the rash or only the mouth sores.[6]

Photos courtesy of DermNet.com

Cause
Coxsackievirus or other enteroviruses.[2]

Transmission
Direct contact with nasal and throat secretions, blister fluid or feces of an infected person.[6]

Incubation Period
Three to 6 days.[1]

Period of Communicability
Infected persons are most contagious during the first week of illness and possibly longer as viral shedding can occur in the absence of clinical symptoms. The virus may persist in the stool of infected individuals for several weeks.[1,2,6]

Diagnosis and Treatment
No specific treatment is available. Only supportive therapy is given.

Child Care/School Attendance
If the child has a fever or complications resulting from illness, he/she should see a physician. A child with a fever should remain at home until the temperature has been normal for 24 hours.

Preventive Measures
- Practice meticulous hand washing, particularly after changing diapers and using the toilet.
- Properly dispose of tissues, diapers and baby wipes.
- Properly clean and disinfect items shared by children, e.g., towels, mats, toys, etc.

Hepatitis A

IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Hepatitis A infection in young children often causes only mild symptoms or no symptoms at all. In fact, only 30 percent of infected children under 6 years of age will show symptoms. Conversely, 70 percent of older children and adults infected with Hepatitis A have symptoms. Symptoms include: jaundice (yellowing of the skin and whites of the eyes), diarrhea, fever, malaise, appetite loss, nausea, vomiting, abdominal pain and dark or tea-colored urine.[1]

Cause
Hepatitis A virus (HAV).

Transmission
Ingestion of the virus from contact with the feces of an infected person, either through contaminated food or water or by hand-to-mouth transmission. The virus is shed in the stool of infected individuals, so hands may become contaminated after using the toilet or changing a diaper and subsequent contamination of food, water and surfaces is possible. HAV can cause outbreaks in child care centers, where infected but asymptomatic children can spread the virus to others.[1]

Incubation Period
Fifteen to 50 days with an average of 30 days.[2]

Period of Communicability
Communicable 1 to 2 weeks before the onset of symptoms and until a week after the onset of jaundice.

Diagnosis and Treatment
Refer to physician. HAV infection can be confirmed only through a blood test. No specific treatment is available.

Child Care/School Attendance
A child should be excluded for one week after the onset of jaundice. Teachers, caregivers and food handlers with acute HAV infection should also be excluded for 1 week after the onset of jaundice.

Preventive Measures
- Hepatitis A vaccine is routinely recommended for all children at 12 to 23 months of age with a second dose 6 to 18 months after the first.[19]
- Practice good personal hygiene and hand washing, particularly after each visit to the toilet and before preparing or eating food.
- Consult a physician or the Epidemiology Department about protection of household and other close contacts. Hepatitis A vaccine or immunoglobulin may be recommended, depending on each contact's age.

Herpes Simplex

Cold Sores, Fever Blisters

Signs and Symptoms
In early childhood, small, painful, fluid-filled blisters in the mouth and on the gums and lips. Once an individual is infected with herpes simplex virus (HSV-1), the virus remains in the body in an inactive form for life. Reactivation of the virus (i.e., return of lesions) can occur as a result of factors such as trauma, stress, being immunocompromised, food allergies and pregnancy.[1,2]

Photo courtesy of DermNet.com

Cause
Usually herpes simplex virus 1 (HSV-1). However, HSV-2, which usually causes genital herpes, can also cause mouth sores.

Transmission
Contact with the saliva of an HSV-1 carrier or direct contact with lesions caused by the virus.[2]

Photo courtesy of Heddie O. Sedano. DDS. Universitv of

Incubation Period
Two days to 2 weeks.[1]

Period of Communicability
While unhealed lesions are present and occasionally for weeks after symptoms disappear.

Diagnosis and Treatment
Refer to physician, especially for first infection. Prescription and over-the-counter medications are available that may shorten the duration of lesions and/or relieve discomfort.

Child Care/School Attendance
A child should be excluded if they have active lesions and do not have control of drooling or until fever-free for 24 hours without the use of fever-reducing medications.

Preventive Measures
- Practice good hand hygiene.
- Avoid kissing anyone with active lesions.
- Do not share food or drinks.
- Clean and disinfect toys regularly.

Impetigo

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Initial signs include red or pimple-like lesions surrounded by inflamed skin. These sores can be located anywhere on the body, but occur most commonly on the face, arms and legs. The sores fill with pus, then break open after a few days and form a thick crust. Impetigo is most common in children between the ages of 2 and 6.

Cause
Bacteria: *Staphylococcus* and *Streptococcus*.


Photo courtesy of DermNet.com

Transmission
By direct contact with the sores or nasal discharge of an infected person or by indirect contact with articles recently soiled by discharge from an infected person's lesions.[2] Infection usually occurs when bacteria enter through a break in the skin, such as a cut, scratch or insect bite.[8]

Incubation Period
Variable, from 1 to 10 days.[1]

Period of Communicability
As long as the skin lesions are draining.[2]

Diagnosis and Treatment
Refer to physician. Child should be treated with an appropriate oral or topical antibiotic as prescribed by a physician.

Child Care/School Attendance
Exclude the child from child care and/or school until lesions are under treatment with an appropriate antibiotic for at least 24 hours.[2]

Preventive Measures
- Promptly treat cuts or scratches using appropriate first aid.
- Prevent insect bites by using protective clothing and insect repellants according to the manufacturer's label.

Influenza
"The Flu"

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Sudden onset of high fever, chills, headache, muscle aches, fatigue, cough, sore throat and runny nose.[1,2] Nausea, vomiting and diarrhea can also occur, most commonly in children. Illness lasts from 2 to 7 days.[2] In the U.S., the influenza "season" runs from October to May, but influenza cases have been identified throughout the year.

Cause
Influenza A and B viruses.

Transmission
Transmitted from person to person by direct contact with droplets from nose, eyes or mouth, or by hands or other articles contaminated with nose and throat secretions. Outbreaks are common in institutional settings, such as schools, nursing homes and jails.

Incubation Period
One to 3 days.[1]

Period of Communicability
A person is contagious for 24 hours before the onset of influenza symptoms and for up to 5 days after becoming sick. Children may be contagious for longer than 7 days.

Diagnosis and Treatment
Refer to physician. Antiviral medication started within 48 hours of onset of influenza illness can both reduce symptoms and the amount of virus being shed in respiratory secretions.[1]

Child Care/School Attendance
A child with influenza should remain at home during the first days of illness, when symptoms are most severe and the infection is most contagious. The child can return to child care and/or school when symptoms have improved and he/she has been fever-free without the use of fever-reducing medications for at least 24 hours.

Preventive Measures
- Get a flu shot! Everyone 6 months and older should get a flu vaccine each year. Particular emphasis is placed on the vaccination of individuals who are household contacts and caregivers of children younger than 6 months of age.[8]
- Practice meticulous hand washing.
- Avoid touching eyes, nose and mouth, and discourage students from doing so.
- Cover coughs and sneezes with a tissue or cough and sneeze in to an elbow to avoid contaminating your hands. Wash your hands after coughing and sneezing.
- Regularly clean and disinfect frequently touched surfaces, including doorknobs, telephones and faucets.

Intestinal Parasites
Tapeworms and pinworms

Signs and Symptoms
Persons infected with tapeworms often have no symptoms or they may complain of nausea, abdominal pain and diarrhea. Tapeworm segments can be seen passing from the anus or in the feces. A child infected with pinworms may exhibit signs of restlessness and itching in the anal area.

Cause
Parasitic worms: *Taenia saginata* (beef tapeworm), *Taenia solium* (pork tapeworm), *Enterobius vermicularis* (pinworm)

Transmission

Beef tapeworm	Pork tapeworm	Pinworm
Ingestion of raw or under-cooked beef containing worm larvae.	Ingestion of raw or under-cooked pork containing worm larvae or from person to person through ingestion of tapeworm eggs. The eggs are shed in the stool and may contaminate food, surfaces or hands.	From person to person through ingestion of pinworm eggs. The eggs are deposited on the skin around the anus by the worm and may contaminate clothes, bedding or hands.

Incubation Period

Beef and pork tapeworms	Pinworm
Weeks to years.	Approximately 2 to 8 weeks.

Period of Communicability

Beef and pork tapeworms	Pinworm
As long as worm remains in the intestine, sometimes more than 30 years. Eggs can remain viable in the environment for months.[2]	As long as the female worm is releasing eggs. Pinworm eggs remain infective in an indoor environment for approximately 2 weeks.[2]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
The child should not be excluded from child care and/or school; however, treatment should be prescribed to reduce spread of infection.

Preventive Measures
- Practice thorough hand washing after using the restroom, after changing diapers and before meals.
- Cook meat thoroughly. Using a food thermometer, cook steaks, chops and roasts to 145˚ F and ground beef or pork to 160˚F.

Measles
Rubeola

A SINGLE CASE OF MEASLES IS CONSIDERED A PUBLIC HEALTH EMERGENCY. IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Fever, cough, red and watery eyes and/or nasal congestion. A blotchy red rash appears on the 3rd to 7th day of illness, starting around the face and hairline. The fever often increases when the rash appears. The rash lasts from 4 to 7 days. Koplik spots (small lesions with bluish or white centers) may be visible inside the mouth.[2]

Cause
Measles virus.

Transmission
Airborne by droplet spread and by direct contact with nasal or throat secretions of infected individuals. May also be spread by contact with items freshly soiled with contaminated nose and throat secretions.[2] Measles is extremely contagious.


Photos courtesy of Logical Images, Inc.

Incubation Period
Seven to 21 days (average of 10 days) from exposure to onset of fever and 14 days from exposure until appearance of rash.[1,2]

Period of Communicability
From approximately 4 days before onset of rash to 4 days after rash appears.

Diagnosis and Treatment
Measles infection can be confirmed only through a blood test. Treatment is supportive.[1,2]

Child Care/School Attendance
Children should be excluded from child care/school from the onset of symptoms and for 4 days after the appearance of the rash.[1] Other children in the household may attend school if they are fully immunized against measles, but should be observed closely and excluded at the first sign of illness. Children who have not been vaccinated against measles should either be vaccinated within 72 hours of exposure or excluded from school for 3 weeks after the last case of measles.

Preventive Measures
- Measles, mumps and rubella (MMR) vaccine is routinely recommended for all children at 12 to 15 months of age, with a second dose at school entry (4 to 6 years of age).[2]
- Measles vaccine administered with 72 hours of exposure may provide protection in non-immune individuals (persons without a natural history of disease or record of complete immunization). Immunoglobulin (IG) can also be given to susceptible persons or for those who cannot receive the measles vaccine. IG must be given within 6 days of initial exposure.[2]

Meningitis, Bacterial

IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Sign and Symptoms
Sudden onset of fever, nausea, vomiting, headache and stiff neck. Can also include rash and progress to delirium and coma. Bacterial meningitis can be fatal if not treated quickly.[9]

Cause
Streptococcus pneumoniae (pneumococcal meningitis), *Neisseria meningitidis* (meningococcal meningitis) and *Haemophilus influenzae* type b (Hib meningitis) cause 90% of all bacterial meningitis cases in children.[2]

Transmission
By direct contact with droplets from the nose or throat of an infected person.

Incubation Period
Can range from 1 to 10 days, commonly 3 to 4 days.[1,2]

Period of Communicability
From up to 7 days before symptom onset to 24 hours after the start of appropriate antibiotic treatment.

Diagnosis and Treatment
Immediately refer to a physician.

Child Care/School Attendance
Documentation from a physician is recommended for readmission.

Preventive Measures
- Antibiotic prophylaxis is recommended for household and close contacts of meningococcal and Hib meningitis. A physician or the Board of Health should be contacted regarding the management of close contacts.
- Vaccines are available to protect against the three most common types of bacterial meningitis.
  - The Hib vaccine and the pneumococcal vaccine are recommended at 2, 4, 6 and 12 to 15 months of age.
  - The meningococcal vaccine is recommended for children 11 to 12 years of age, and a booster is routinely recommended for adolescents 16 to 18 years of age.
- Practice thorough hand washing.
- Cover coughs and sneezes with a tissue or cough and sneeze in to an elbow to avoid contaminating hands. Wash hands after coughing and sneezing.

Meningitis, Viral

REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Sudden onset of fever, nausea, vomiting, headache and stiff neck. Sometimes a rash is present. Viral meningitis is rarely life threatening, unlike bacterial meningitis.

Cause
Wide variety of viruses. In cases where the virus is known, it is most commonly an enterovirus or coxsackievirus.[1]

Transmission
Varies with the particular virus. May be transmitted through respiratory droplets, by ingesting feces in contaminated food or water or by hand-to-mouth transmission, or through the bite of an infected tick or mosquito.

Incubation Period
Varies with the particular virus.[2]

Period of Communicability
Varies. Usually no longer than 7 days.[2]

Diagnosis and Treatment
Refer to physician. The cause of meningitis (viral or bacterial) can be determined only through lab tests. Treatment is supportive.

Child Care/School Attendance
A child can return to child care or school when symptoms resolve. A letter from the child's physician is recommended for readmission.

Preventive Measures
- Practice thorough hand washing and disinfection of surfaces and toys.
- Prevent insect bites by using protective clothing and insect repellants (according to manufacturer's instructions).

Methicillin-resistant *Staphylococcus aureus* "MRSA"

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
A skin infection that may look like a pimple or a boil. The infection can be red, swollen and painful, may have pus or other discharge and is commonly misidentified as spider bites. MRSA can also cause more serious infections such as pneumonia, meningitis and sepsis. [10]

Photos courtesy of DeKalb County Board of Health

Cause
Staphylococcus aureus bacteria that is resistant to the antibiotic methicillin.

Transmission
By direct skin-to-skin contact or through hands contaminated with fluid from a draining lesion. The infection also can be spread when an infected person uses and then shares an item with an uninfected person without first sanitizing it, like a towel, soap, razor or athletic equipment. [10]

Incubation Period
Variable and indefinite, usually 4 to 10 days.[2]

Period of Communicability
As long as the lesion continues to drain.[2]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
A child with MRSA should not be excluded from child care/school as long any draining lesion can be covered and contained with a clean, dry dressing taped on all 4 sides. Children should be excluded from contact sports until the lesion dries up.[10]

Preventive Measures
- Practice good hygiene and hand washing.
- Discourage athletes from sharing towels, equipment and personal items.
- Cover all draining lesions with a clean, dry dressing.

Molluscum Contagiosum

Signs and Symptoms
Small, white, pink, or flesh-colored raised bumps or growths with a pit or dimple in the center. The bumps are usually smooth and firm and can be as small as the head of a pin or as large as a pencil eraser, about 2-5 mm in diameter. Lesions commonly occur on the trunk, face, and extremities but rarely are generalized. The growths are usually painless, but may become itchy, sore, red and/or swollen. [20]

Cause
Molluscipoxvirus[2]

Photos courtesy of emedicine.medscape .com (above) and healthline.com (below)

Transmission
Person to person by direct sexual and non-sexual contact with the infected skin. The virus can also be transmitted by touching a contaminated surface or object, such as a towel, toy or clothing.[20]

Incubation Period
Varies between 2 and 7 weeks but may be as long as 6 months.[1]

Period of Communicability
Unknown, probably as long as lesions persist.[2]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
No exclusions. Avoid close contact sports. Lesions not covered by clothing should be covered by a bandage. The bandage should be changed daily or when soiled.[1]

Preventive Measures
- Practice thorough hand washing.
- Avoid close contact sports and sharing bathtubs, bath towels and sponges with affected individuals.

Mononucleosis, Infectious
"Mono"

Signs and Symptoms
Fever, sore throat (often with a pus-like discharge), enlarged lymph nodes in the neck region and enlarged spleen. Illness is usually milder in children than in young adults, and can last from one to several weeks.[2]

Cause
Epstein-Barr virus is the most common cause.

Photos courtesy of DermNet.com

Transmission
Person to person via direct contact with the saliva of an infected person. The virus is occasionally transmitted by blood transfusion.[1]

Incubation Period
From 4 to 6 weeks.[2]

Period of Communicability
Exact length of communicability is unknown. It may be prolonged since the virus may persist in the throat and respiratory tract for many months after infection.[1]

Diagnosis and Treatment
Refer to physician.

Child Care/School Attendance
Child should be excluded from child care/school until he/she has been without fever for 24 hours without the use of fever-reducing medication. A physician statement is recommended for readmission to child care or school.

Preventive Measures
- Practice regular hand washing.
- Avoid direct contact with the saliva of an infected individual (such as through kissing or sharing drinking glasses and silverware).

Mumps

IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Swelling of one or more of the salivary glands, usually the parotid glands.[1] At onset of illness, a person may have a fever followed by swelling near the angle of the jaw and in front of the ear. However, more than one-third of infections do not cause swelling.[1]

Cause
Mumps virus.

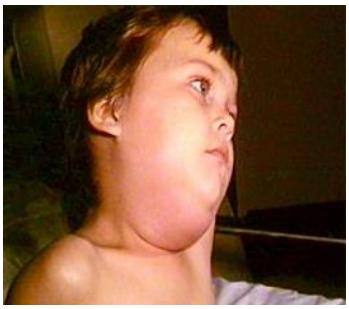

Photo courtesy of CDC Public Health Image Library

Transmission
Direct contact with respiratory secretions.[1]

Incubation Period
Usually 16 to 18 days after exposure, but cases may occur from 12 to 25 days after exposure.[1]

Period of Communicability
Most infectious from 1 to 2 days before to 5 days after onset of gland swelling.

Diagnosis and Treatment
Refer to physician. Mumps infection can be confirmed only through a blood test. Treatment is supportive.[1]

Child Care/School Attendance
A child should be excluded from child care/school for 5 days after the onset of the swelling. Susceptible students and teachers (those who have not been immunized for mumps) should receive the vaccine immediately. Those who are not vaccinated for mumps should be excluded: (1) until 26 days after the last case's onset of swollen salivary glands or (2) until adequately immunized.[19]

Preventive Measures
Measles, mumps and rubella (MMR) vaccine is routinely recommended for all children at 12 to 15 months of age, with a second dose at school entry (4 to 6 years of age).[2]

Pediculosis
Head lice and nits

Signs and Symptoms
Irritation and itching of the scalp.[1] Pinhead-size, transparent eggs attached firmly to individual strands of hair on the head. Lice are more common in straight hair.

Photos courtesy of DermNet.com

Cause
Lice are light gray insects that lay eggs (nits) in the hair, especially at the nape of the neck and above the ears.

Transmission
Direct contact with hair of person infested with lice or with their personal belongings. Lice move by crawling. They cannot hop or fly.[1]

Incubation Period
Eggs hatch 1 week after being laid and reach sexual maturity in about 14 days.[2]

Period of Communicability
While adult lice, larval nymphs or viable nits (located on the hair shaft within ½ inch of the scalp) are present in the hair.[2]

Diagnosis and Treatment
Refer to the Georgia Head Lice Manual (http://dph.georgia.gov/sites/dph.georgia.gov/files/related_files/document/HEAD%20LICE%20MANUAL%202014.pdf) or the child's physician.

Child Care/School Attendance
Exclude until treated.

Preventive Measures
- Teach children not to share combs, brushes, hats, picks, hair decorations or other personal head gear.
- Avoid head-to-head contact with an infested person.

Pertussis
Whooping Cough

IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Begins with mild upper respiratory symptoms (runny nose, sneezing), followed several days later by a dry cough. Coughing can become severe and occur in "spells," which are often followed by vomiting or a characteristic high-pitched "whoop" when inhaling. Pertussis in infants usually involves apnea (stopped breathing) instead of the whoop. Coughing can continue for 1 to 2 months. Fever is absent or minimal.[1]

Cause
Bordetella pertussis bacteria.

Transmission
Direct contact with respiratory droplets from someone with the disease.

Incubation Period
Usually 7 to 10 days, with a range of 6 to 20 days. [1]

Period of Communicability
Highly contagious during the first few weeks of illness (including the mild upper respiratory symptoms phase and the first 2 weeks of coughing). Communicability gradually decreases and is very low within 3 weeks of illness onset. [2]

Diagnosis and Treatment
Refer to physician. Treatment is by antibiotics.

Child Care/School Attendance
A child diagnosed with pertussis should remain at home until he or she has completed 5 days of appropriate antibiotic therapy. A note from a physician is recommended for readmission. A child who is not vaccinated for pertussis should be excluded for 21 days after onset of last case in facility or until adequately immunized.[1]

Preventive Measures
- Consult a physician or the NCHD District Epidemiologist about treatment of household contacts. Preventive antibiotics may be indicated for child care or school contacts.
- Pertussis vaccine is usually given along with diphtheria and tetanus in DTaP or Tdap vaccines. Children should receive 5 DTaP vaccines, given at 2, 4, 6 and 15 to 18 months of age, and at school entry (4 to 6 years of age). A dose of Tdap is recommended for pre-teens 11 to 12 years of age. Adults who have not received a dose of Tdap should get one to protect themselves and others.

Ringworm

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
Depend on the area of the body that is infected:

- **Tinea Capitis (Ringworm of the Scalp)** may present in any of the following ways:
  - Patchy areas of dandruff-like scaling along with possible hair loss.
  - Stubs of broken hairs forming a dotted pattern on the scalp.
  - Abundant pustules or raw areas with limited hair loss or scaling.
  - An inflamed, thickened, pus-filled area of the scalp (known as a kerion) often accompanied by fever and swollen lymph nodes.
- **Tinea Corporis (Ringworm of the Body)**
  A circular lesion which is typically red with a well-defined border that can be scaly, vesicular (fluid-filled) or pustular (pus-filled).[1]


Tinea Corporis


Tinea Capitis


Kerion

Photo courtesy of Logical Images, Inc.

Cause
A fungus.

Transmission
Direct skin-to-skin contact with affected areas of infected people or animals.
May also be transmitted indirectly by contact with contaminated items such as the backs of seats, hair combs, hair clippers, hair ornaments or brushes, as well as clothing and hats.[2]

Incubation Period
Ten to 14 days for Tinea Capitis and 4 to 10 days for Tinea Corporis.[2]

Period of Communicability
Duration of the infection.

Diagnosis and Treatment
Refer to physician. Usually requires 4 to 6 weeks of treatment.[1]

Child Care/School Attendance
The child may return to child care/school at the discretion of the treating physician. Lesions should be covered with a bandage and the child should be undergoing treatment as prescribed by the physician. The child should be excluded from swimming pools and contact sports until treatment is completed.

Preventive Measures

- Avoid direct contact with the source of the infection (hair, scalp or body lesion).
- Avoid sharing hair ornaments, combs, brushes and hats.
- Practice thorough hand washing following any contact with affected areas.
- Avoid direct contact with animals with ringworm infection. Ringworm can be spread from animals to people.

Roseola
Exanthema Subitum, Sixth Disease

Photos courtesy of Logical Images, Inc.

Signs and Symptoms
Sudden onset of high fever (>103˚F) that persists for 3 to 7 days followed by a red rash over the body lasting 1 to 2 days. The illness usually occurs in children under 4 years of age. Seizures may occur due to high fever.[1]

Cause
Human herpesvirus (HHV)-6.

Transmission
Contact with saliva of an infected person.

Incubation Period
Average of 10 days with a range of 5 to 15 days.[2]

Period of Communicability
Unknown. May be contagious for life, even after symptoms are gone.[2]

Diagnosis and Treatment
Refer to physician. Treatment is supportive including acetaminophen or ibuprofen to reduce fever.

Child Care/School Attendance
The child should be excluded from child care /school until fever-free without the use of fever-reducing medications for 24 hours.

Preventive Measures
None.[2]

Rubella
German Measles

IMMEDIATELY REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms
In children and young adults, rubella is usually a mild viral illness characterized by fever and a rose-colored rash that lasts 2 to 3 days. The glands in the back of the neck and behind the ears are usually enlarged. Rubella during pregnancy can result in miscarriage or birth defects in the developing fetus, commonly known as congenital rubella syndrome.[1]


Photo courtesy of CDC Public Health Image Library

Cause
Rubella virus.

Transmission
Direct or droplet contact with nasal and throat secretions.[2]

Incubation Period
Usually from 14 to 18 days with a range of a range of 12 to 23 days.[1,2,12]

Period of Communicability
From 7 days before to 7 days after onset of rash. Children with congenital rubella syndrome should be considered contagious until at least 1 year of age unless cultures prove otherwise.

Diagnosis and Treatment
Refer to physician. Rubella infection can be confirmed only through a blood test. Treatment is supportive.

Child Care/School Attendance
The child should be excluded from child care/school for 7 days after the onset of the rash.

Preventive Measures
- Rubella vaccine is recommended at 12 to 15 months and again at 4 to 6 years of age.
- Children and non-pregnant adults who are not immune to rubella can benefit from the vaccine if it is given within 72 hours of exposure. It has not been demonstrated to prevent illness following exposure.[1]
- Pregnant women who have been exposed to rubella should seek advice from their physician immediately.

Scabies

Signs and Symptoms
An extremely itchy, red, pimple-like rash caused by the burrowing of adult female mites in the upper layers of the skin. The itching is more intense at night. The mites tend to burrow between the fingers and in skin folds of the wrists, elbows, knees and underarms, as well as at the waistline, stomach, thighs, navel, genitalia, buttocks and breasts. In infants and young children, the head, face, neck, palms and soles of the feet are often affected.[1]

Cause
The microscopic mite *Sarcoptes scabiei*.

Transmission
By direct, prolonged, skin-to-skin contact with a person infested with scabies. Usually, a quick handshake or a hug will not spread scabies. It is most commonly spread to sexual partners and household members. Though rare, transmission may also occur by sharing bedding with or wearing clothes just worn by an infested person.[2]

Photo courtesy of DermNet.com

Incubation Period
Two to 6 weeks before the onset of itching in people without previous exposure. People who have been previously infested develop symptoms 1 to 4 days after re-exposure.[1,2]

Period of Communicability
Until mites and eggs are destroyed by treatment, ordinarily after 1 or 2 courses of treatment.[2]

Diagnosis and Treatment
Refer to physician. Scabies can only be confirmed through a skin scraping and is treated with prescription medication. All household members and other close contacts should be treated at the same time as the affected person to prevent reinfestation.[1,13]

Child Care/School Attendance
A child should be excluded from child care/school until treatment is completed.[1]
Refer to the Georgia Scabies Handboook for additional information (http://dph.georgia.gov/sites/dph.georgia.gov/files/related_files/document/ADES_Georgia_Scabies_Handbook_v2011.pdf).

Preventive Measure
Early diagnosis and treatment of infested patients and their household and other close contacts will reduce the risk of transmission and recurrence.

Strep Throat and Scarlet Fever

REPORT UNUSUALLY HIGH NUMBERS OF CASES AND/OR CASES WITH A PROLONGED COURSE OF ILLNESS TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms

- **Strep Throat:** sudden onset of sore throat and fever. Child may also experience tender, enlarged glands on the sides of the neck.[2]
- **Scarlet Fever:** a fine red rash that turns white on pressure. The skin often feels like sandpaper. The rash most often appears on the neck, chest and beneath the arms. Pus-like patches may appear on the tonsils and the tonsils may appear red and swollen. The tongue is first coated white; the white coat then disappears to reveal a beefy red "strawberry tongue."[2]

Photos courtesy of DermNet.com

Cause

Group A streptococcus bacteria, specifically *Streptococcus pyogenes*.

Transmission

Direct contact with respiratory droplets of persons who are ill or carriers of Group A strep.[2]

Incubation Period

One to 5 days.[1,2]

Period of Communicability

From the first sign of illness until the child has been on antibiotic therapy for 24 hours.

Diagnosis and Treatment

Refer to physician. Treatment is by antibiotics.

Child Care/School Attendance

The child should be excluded from child care/school from onset of symptoms until he/she has been on antibiotic treatment and is fever-free for 24 hours.

Preventive Measures

- Monitor exposed children for evidence of disease. Promptly isolate an ill child during the period of communicability.
- Practice proper hand washing, disposal of tissues and disinfection of articles and surfaces contaminated with respiratory secretions.

Tuberculosis
"TB"

IMMEDIATELY REPORT ALL CASES TO THE NCHD TB PROGRAM AT 478-751-6128.

Signs and Symptoms
A child with TB may have no symptoms or only a low-grade fever. An adult may also not have symptoms or may have a low-grade fever, persistent cough or a recent history of unexplained weight loss, night sweats and appetite loss.[1]

Cause
Mycobacterium tuberculosis bacteria.

Transmission
Prolonged contact with a person with active tuberculosis (TB) disease. Most commonly, exposure occurs following inhalation of airborne respiratory droplets.[1]

Incubation Period
The time from exposure to development of a positive tuberculin skin test (TST) or positive interferon-gamma release assay (IGRA) result is 2 to 10 weeks. The risk of developing tuberculosis disease is highest during the 6 months after infection and remains high for 2 years; however, many years can elapse between initial tuberculosis infection and tuberculosis disease.[1] Some infected people never develop TB disease.

Period of Communicability
Until the bacteria are no longer present in the sputum. Drug therapy shortens this period.

Diagnosis and Treatment
Immediately refer to the NCHD TB program and the child's physician.

Child Care/School Attendance
A child with active tuberculosis disease should be excluded until he/she is on adequate anti-tuberculosis medication and is determined to be non-infectious.

Preventive Measures
- Prompt and adequate treatment of all persons with TB infection and disease.
- Investigation, testing and follow-up with all contacts of an infectious TB case.[2]

Varicella-Zoster Infections

Chickenpox

REPORT ALL CASES TO THE DISTRICT EPIDEMIOLOGIST.

Signs and Symptoms

Sudden onset of fever that coincides with a rash on the surface of the skin.[1,2] The bumps are initially vesicular (filled with fluid) for 3 to 4 days and then form pus-filled lesions (pustules) that scab or crust over. As the illness progresses, the skin lesions often appear with several stages of maturity at the same time. The skin lesions tend to be more numerous on covered, rather than exposed, areas of the body.[2]

Vesicles
Photo courtesy of DermNet.com

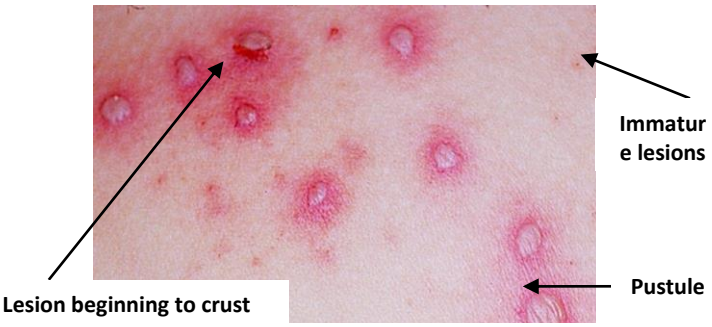

Photo courtesy of Dr. CW Leung of the Department of Pediatrics and Adolescent Medicine, Princess Margaret Hospital, Hong Kong

Cause

Varicella-Zoster virus.

Transmission

Person to person by contact with respiratory droplets (e.g., through coughing, sneezing or from a runny nose) or by direct contact with chickenpox lesions.

Incubation Period

Usually 14 to 16 days; occasionally as early as 10 days or as late as 21 days.[1]

Period of Communicability

Patients are most contagious from 1 day to 2 days before onset of rash until all lesions are crusted (usually about 5 days).[2]

Diagnosis and Treatment

Refer to physician for instructions. A child with chickenpox should not be given salicylates (aspirin or medications containing aspirin) because taking such medications increases the risk of Reye's Syndrome.

Child Care/School Attendance

The child should be excluded from child care/school until all lesions are crusted over or, in immunized people without crusts, until no new lesions appear within a 24-hour period. Other children in the family may attend child care/school, but should be excluded at the first sign of illness.[1]

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Varicella-Zoster Infections

Chickenpox

Preventive Measures

- The varicella vaccine is the best way to prevent chickenpox. Vaccination not only protects those who receive the vaccine, it also reduces the risk for exposure in individuals who are unable to be vaccinated because of illness or other conditions e.g., those who are immunocompromised. While no vaccine is 100 percent effective in preventing disease, the chickenpox vaccine is very effective: About 8 or 9 of every 10 people who are vaccinated are completely protected from chickenpox. In addition, the vaccine reduces the risk of severe disease in those who do become infected, producing a milder course of illness.[3]
- Two doses of varicella vaccine are recommended for children. The first dose should be given between 12 and 15 months of age. The second dose should be given between 4 and 6 years of age, before the child enters kindergarten or first grade.
- Children and other susceptible individuals who have not been immunized for chickenpox should receive the vaccine within 5 days of exposure. This might prevent or minimize the disease. For those who cannot receive the vaccine, VariZIG, IGIV or acyclovir can be considered.
- Pregnant women who have been exposed to varicella should seek advice from their physician.
- During an outbreak, exposed children and staff who are not immunized should be excluded from the setting from the start of the outbreak until 21 days after rash onset of the last identified case.

Varicella-Zoster Infections

Shingles, Herpes Zoster

Signs and Symptoms
A painful, blistering rash that usually appears in a well-defined band on one side of the body (typically on the torso) or on one side of the face (around the nose and eyes). Pain usually occurs before the rash and can continue even after the rash clears up.[14]


Photo courtesy of DermNet.com

Cause
Varicella zoster virus, the same virus that causes chickenpox. After causing chickenpox, the virus lies dormant in the nerves and shingles occurs when it is reactivated in a particular nerve.[1]

Transmission
Person to person, primarily by direct contact with blister fluid of an infected person. Shingles is not transmitted through contact with someone with either shingles or chicken pox. It is a reactivation of the virus with which the person was infected earlier. However, it is possible for a person with shingles to transmit chicken pox to someone who has not had it.[14]

Incubation Period
Indefinite, as shingles is the reactivation of the dormant Varicella zoster virus.

Period of Communicability
A person with shingles can spread the virus when the rash is in the blister phase. Once the rash has developed crusts, the person is no longer contagious.[14]

Diagnosis and Treatment
Refer to physician. Children with varicella should not receive salicylates (aspirin or medications that contain aspirin) because taking such medications increases the risk of Reye's syndrome.[1]

Child Care/School Attendance
The child should not be excluded from child care/school if the rash can be covered well. A child who is excluded from child care/school because the rash cannot be covered well may return after the lesions have crusted.[1]

Preventive Measures
Avoid contact with susceptible individuals, especially pregnant women and newborn babies, until the lesions have dried (usually within 7 days).[14]

Viral Gastroenteritis
Specifically Norovirus

NOROVIRUS IS A COMMON CAUSE OF OUTBREAKS IN CHILD CARE FACILITIES AND SCHOOLS. NOTIFY THE DISTRICT EPIDEMIOLOGIST IF YOU OBSERVE AN UNUSUALLY HIGH NUMBER OF CASES OF DIARRHEA AND/OR VOMITING IN YOUR FACILITY.

Signs and Symptoms
Nausea, vomiting and non-bloody diarrhea. May also cause low-grade fever, dehydration, abdominal pain, muscle ache and headache. Symptoms usually last 24 to 60 hours.

Cause
Viruses. Most commonly Norovirus.

Transmission
Norovirus is found in the stool and vomitus of an infected person. Transmission of the virus occurs through consuming contaminated food or liquids (including ice), touching contaminated surfaces and direct contact with a person exhibiting symptoms of norovirus infection.[11]

Incubation Period
Usually between 24 and 48 hours, but illness can occur within 12 hours or as long as 72 hours after exposure.

Period of Communicability
Up to 72 hours after the diarrhea and vomiting stop.

Diagnosis and Treatment
Norovirus infection can be confirmed only through a stool test. Treatment is supportive.

Child Care/School Attendance
Exclude from child care/school until at least 3 days after symptoms have resolved. Children with norovirus infection should be excluded from water play and swimming activities for 2 weeks after diarrhea has resolved.[1]

Preventive Measures
- Practice frequent hand washing, especially after toilet visits and changing diapers and before eating or preparing food.
- Thoroughly clean and disinfect contaminated surfaces immediately after an episode of illness, using a bleach-based household cleaner.
- Immediately remove and launder clothing or linens that may be contaminated with virus after an episode of illness. Wash and dry on the hottest setting possible.
- Flush or discard any vomitus and/or stool in the toilet and make sure that the surrounding area is kept clean.

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