

Fact Sheets on Common Diseases in Child Care

Information on the most common infectious diseases found in child care centers is presented in the following pages. The information is written for the lay person in an easy to read and easy to understand style.

This information is intended to provide you with good basic information on the diseases you and your staff may encounter. You can also share this information with parents or guardians. You will find information given in the question and answer format. You will find basic information on each disease, symptoms, methods of diagnosis, prevention, treatment, exclusion of a child with the illness, and who to notify about the disease.

What the symbols mean:



The “check” gives a recommendation to you in preventing further spread of a disease.



The “pointing hand” tells you about exclusion from attendance and who to notify.



The “star” means the message is very important



The “telephone” means you should call your health department and licensing representative immediately.

Caution!

This guide is not a substitute for a public health nurse or a health care provider. Child care infection control recommendations are continually changing and expanding. The Texas Department of Health, the local health departments, and the Healthy Child Care North Texas Coalition do not take responsibility for how this guide is used. It should not be used instead of contacting a health care professional for questions relating to a child’s illness. Do not treat a child with the information in this guide. Consult a physician, nurse practitioner, or physician assistant first.

If you have questions:

Call your local health department or the regional office of the Texas Department of Health.

Campylobacteriosis

E.Coli 0157:H7

Fifth Disease

Giardiasis

Head Lice

Hepatitis A

Haemophilus Influenza Type B (HIB)

Impetigo

Measles (Rubeola)

Pinkeye

Pinworm Disease

Ringworm

Roseola

Rubella (German Measles)

Scabies

Strep Throat and Scarlet Fever

Campylobacteriosis

What is Campylobacteriosis?

Campylobacteriosis is an infection of the intestines caused by bacteria called *Campylobacte*.

What are the symptoms?

The symptoms may include mild to severe diarrhea (often bloody), stomach pain, fever, nausea, and vomiting. The symptoms usually start 2 to 5 days after contact with the bacteria. Infected persons usually pass the bacteria in their feces for periods ranging from a few days to as much as a week or more.

How is it spread?

Campylobacteriosis is spread by eating foods or drinking water contaminated with the bacteria (especially chicken and raw milk). It can also be gotten from infected pets (especially kittens and puppies), or even from other ill persons (especially infants who are infected with it).

How is Campylobacteriosis diagnosed?

Diagnosis is based on laboratory testing of a stool sample.

What is the treatment for Campylobacteriosis?

Most persons will get better on their own without treatment. Sometimes prescription medications are given for severe cases or to shorten the length of illness. This may be important for food handlers, care givers, and children in child care centers. Lots of fluids must be given to prevent serious side effects.

How is it prevented?

- ✓ Cook meat and poultry thoroughly. Cook all ground beef until the juices run clear. All poultry should be cooked to a minimum internal temperature of 165°F (73.9°C).
- ✓ Take special care when handling uncooked poultry.
- ✓ Scrub the cutting board thoroughly with hot, soapy water and sanitize with fresh bleach solution before cutting anything else on it.
- ✓ Do not allow children to drink or play in untreated water (streams, lakes, ponds, etc.).
- ✓ Do not allow children to drink unpasteurized milk, or eat any unpasteurized dairy products.
- ✓ Wash your hands after emptying your pet's litter box.
- ✓ Wash your hands carefully after changing diapers.
- ✓ Wash your hands before and after preparing and before eating or serving food.

- ✓ Keep children away from animal droppings.
- ✓ Good hand washing practices must be followed after using the toilet.

Does this affect attendance?

-  Anyone who cannot control their bowel movements should be kept at home until they have recovered.
-  Individuals should have solid stools before returning.
-  Follow your health care providers instructions.

Who needs to know?

-  Notify the local health department and your licensing representative.
-  Notify all child care staff and parents of other children (see letter).

E. Coli 0157:H7

What is E. Coli 0157:H7?

E. Coli stands for *Escherichia coli*. It is one of the many bacterium living in the intestines of animals and human. Most strains of E.Coli are harmless and necessary for our digestion. *E.Coli 0157: H7* is a strain that produces a toxin and can cause severe illness. It lives in the intestine of healthy cattle, but is considered pathogenic (disease causing) in humans.

What are the symptoms?

This organism can cause severe bloody diarrhea and stomach cramps. Symptoms begin 3 to 8 days after exposure to the bacteria. Hemolytic uremic syndrome (HUS), a form of kidney failure, is a severe complication that occurs, particularly in children under age 5 and the elderly. In this case, the red blood cells are destroyed and the stools are virtually all blood. Kidney failure and death can also occur.

How is it spread?

Eating beef (especially ground beef) that is undercooked and also from raw, unpasteurized milk. Transmission also occurs directly from person to person-in families and child care centers. Swimming in crowded lakes, unchlorinated swimming pools or drinking sewage contaminated water can also cause infection.

How is it diagnosed?

Diagnosis is based on laboratory testing of a stool sample

What is the treatment?

Controlling or replacing the infected child's fluids is the most important measure. Most cases do not require any other treatment and recover in 5 to 10 days. Severe diarrhea is life threatening and is treated with medication in the intensive care unit.

How is it prevented?

- ✓ Cook ground meat thoroughly until the juices run clear (well done) before eating
- ✓ Give or use only pasteurized milk and dairy products
- ✓ Eliminate cross contamination from raw foods to cooked ones by thoroughly washing all food preparation surfaces, dishes, and utensils with warm, soapy water then sanitizing with a fresh bleach solution and by washing hands thoroughly and often
- ✓ Wash fruits and vegetables before eating.
- ✓ Wash your hands thoroughly with soap and water before and after handling foods and after using the toilet or changing diapers.

Does this affect attendance?



Persons with diarrhea should be excluded from food handling and the care of children until the diarrhea ceases and 2 successful negative stool cultures are obtained.



Children with diarrhea should be isolated and sent home. The child should not return to child care until the diarrhea is gone or the child's health care provider has determined that the diarrhea is not contagious.

Who needs to know?



Notify the health department and your licensing representative.



Notify staff and other parents (see letter).

Fifth Disease

(Erythema Infectiosum, Slapped Cheek Disease)

What is Fifth Disease?

Fifth disease, also called erythema infectiosum or “**slapped cheek disease**”, is a viral infection caused by *human parvovirus (B19)*. Anyone can be infected, but the disease seems to occur more often in school age children. Outbreaks most often occur in winter and spring, but a person may become ill with fifth disease at any time of the year. Although severe complications resulting from this illness are rare, persons with immunodeficiency or chronic red blood cell disorders may get severe anemia if they catch fifth disease. If a pregnant woman becomes infected with parvovirus B 19, the fetus may suffer damage, including stillbirth.

What are the symptoms?

One to two weeks after exposure, some children will experience a low-grade fever and tiredness. By the third week, a red rash generally appears on the cheeks giving a slapped face appearance. The rash may then extend to the body and tends to fade and reappear. Sometimes, the rash is lacy in appearance and may be itchy. Some children may have vague signs of illness or no symptoms at all. In adults, joint pains or arthritis is likely to occur.

How is it spread?

Fifth disease is believed to be spread through direct person to person contact or by breathing in respiratory droplets from an infected person. The period of infectiousness is before the onset of the rash. Once the rash appears, a person is probably no longer contagious.

How is Fifth Disease diagnosed?

In most cases, the disease is diagnosed based on the appearance of typical symptoms. A specific blood test to confirm the diagnosis is available but is not necessary in healthy children. The blood test is used primarily for pregnant women exposed to fifth disease.

What is the treatment?

At this time, there is no specific treatment or vaccine for fifth disease.

How is it prevented?

Measures to effectively control fifth disease have not been developed yet.

- ✓ Children and adults should follow good hand washing practices
- ✓ Susceptible women who are pregnant should avoid exposure to persons infected with the disease. Pregnant women with sick children at home should be advised to wash hands frequently and avoid sharing eating utensils.
- ✓ Pregnant women and parents of children who have an impaired immune system, sickle cell anemia and other blood disorders may want to consult their physician.

Does this affect attendance?



The greatest risk of viral spread is before symptoms begin. Therefore, a child who has been diagnosed with fifth disease should not be excluded unless fever is present. The child may return to the child care facility after fever subsides.

Who needs to know?



Fifth disease does not have to be reported to the health department or your licensing representative



Staff and other parents should be notified (see letter).

Giardiasis

What is giardiasis?

Giardiasis is usually a mild intestinal illness caused by the protozoan parasite, *Giardia lamblia*. The parasite can be found in the feces (droppings) of infected animals (dogs, cats, beavers, rodents, etc.). Individuals who drink or swim in untreated surface water (ponds, lakes, or creeks) are at increased risk of getting giardiasis. Persons in institutional settings or child care facilities where children are not toilet trained are also at increased risk of getting giardiasis.

What are the symptoms?

The symptoms include frequent, loose, pale, greasy stools (often foul smelling), with gas, bloating, cramps, fatigue, and weight loss. Fever is usually not present, and many persons infected with *Giardia* may have no symptoms at all. The symptoms usually start 7 to 10 days after exposure to the parasite, but the onset can range from 5 to 25 days. The symptoms can last from 3 to 20 days or longer.

How is it spread?

The illness is spread by direct **fecal oral contact** with the feces (stool) of an infected person. The illness can also be spread by eating food or drinking water contaminated with the feces of persons or animals infected with the parasite, or by direct contact with the feces. The parasite is often transmitted between family members and small children. It is not spread by coughing or sneezing. A person with the disease is contagious for the entire period of infection.

How is it diagnosed?

Diagnosis is based on laboratory testing of a stool sample.

What is the treatment?

Antiparasitic/antibacterial medications can be prescribed to treat giardiasis. However, individuals may recover on their own without treatment.

How is it prevented?

- ✓ Caregivers, food handlers, and children should wash hands carefully after using the toilet, and especially before preparing or eating food.
- ✓ Caregivers should wash hands thoroughly after changing diapers and after cleaning a pet's litter box.
- ✓ Keep children away from animal droppings.
- ★ Do not allow to children to play in untreated surface water or in surfacing water from septic systems or sewers.

Does this affect attendance?



Yes. Children should be excluded until diarrhea stops.



Food handlers, caregivers, staff, and health care workers who have diarrhea should be excluded from work until diarrhea subsides. Strict personal hygiene must be stressed to everyone.

Who needs to know?



There is no need to report this disease to the local health department or to your licensing representative.



Parents of other children should be notified (see letter).

Head Lice (Pediculosis, Cooties)

What is Pediculosis?

Head lice, also known scientifically as *Pediculus capitis*, are parasitic insects that feed on human blood and cause severe itching of the head. Head lice are sometimes called “cooties.” Pediculosis is the general term used for infestation of the body or hair with adult lice, larvae, and nits (eggs). Head lice are relatively common and are NOT a major health concern.

What are the symptoms?

Usually, the first symptom of head lice is persistent itching or scratching at the back of the head or around the ears. Check the hair shafts for head lice or their nits (eggs).

How is it spread?

Anyone can get head lice by sharing the same bed or clothes (such as hats and scarves), combs, and/or brushes with an infected person. The lice survive only 1 or 2 days away from the scalp. Having head lice is not an indication of uncleanliness. Anyone can be affected.

How is Pediculosis diagnosed?

Although small, adult head lice may be seen with the naked eye. Because lice move rapidly and only a few may be present, using a hand lens or magnifying glass may allow them to be seen more easily. Head lice suck blood, and the rash caused by their feeding activities may be more noticeable than the insects themselves. Head lice attach their eggs at the base of a hair shaft. These eggs, or nits, appear as tiny white or dark ovals and are especially noticeable on the back of the neck and around the ears.

What is the treatment?

Medicated shampoo or cream rinses are used to kill lice and their nits. The medicated shampoo or cream treatment may need to be applied twice, with a 7 day interval between applications. This assures that all the nits that survived the first application are killed on the second application. Special finetoothed combs may be of some help in the removal of nits from hair.

How is it prevented?

- ✓ **Children should not share** clothing, hats, combs, hair brushes, or bed linens.
- ✓ **Wash clothes and sheets** used by the infested child in detergent and hot water (130°F for 20 minutes) or dry clean clothes (including hats and scarves) to kill lice and nits. Washing of clothes and linens should be done at the same time as the hair is treated for head lice. This will help stop any reinfestation. An alternative method is to seal clothing in a plastic bag for 2 weeks. This will kill all lice and their nits. Be sure to also treat any “dress up” clothes shared by the children.
- ✓ **Children’s clothing** and other personal items, as well as cots, cot covers, and pillows should be **kept separate** from those of other students on pegs or in separate storage areas.



Carpets, rugs, pillows, mattresses and upholstered furniture **should be vacuumed**. Dispose of the vacuum bag immediately. The lice die when they are away from the warmth of the human body for more than 48 hours.



Wash combs, brushes, and other hair care items with the same preparation used for treating head lice.



Do NOT treat the child care facility, home, or any vehicles **with an insecticide or any other pesticide**. Lice do not live in wall crevices or floor cracks like cockroaches or other household pests. Treatment of the facility with insecticide is wasteful, possibly harmful to the children and staff, and may be illegal.

Does this affect attendance?



Yes. The infested child should be excluded from the child care setting until after one treatment with an effective medicated shampoo or cream treatment.



To assure effective treatment, check previously treated children for any evidence of new infestation daily for 10 days after treatment.

Who needs to know?



Notify the child's parents so that family members can be inspected for lice. Anyone with lice should be treated with an effective medicated shampoo or cream treatment.



Notification of your licensing representative or the health department is not required.

Hepatitis A (infectious hepatitis)

What is hepatitis A?

Hepatitis A is a viral infection that causes infection of the liver.

What are the symptoms of hepatitis A?

Hepatitis A is usually a relatively mild ailment lasting one or two weeks. However, it can be a severe, disabling illness that lasts for several weeks or more. The symptoms include the sudden onset of fever, stomach pain, loss of appetite, headache, fatigue, and vomiting. The urine may turn a dark golden brown color. The stool may be pale colored. The skin and whites of the eyes may have a yellowish discoloration (jaundice).

Infants and young children with hepatitis A tend to have milder symptoms. They are less likely to develop jaundice than are older children and adults. The symptoms usually begin four weeks after being infected with the virus. However, the onset of symptoms can range from two to seven weeks.

How is it spread?

Most people get the disease by the fecal-oral route. This means that the disease is spread by putting something in the mouth that has been tainted with the feces (stool) of an infected person. Improper hand washing after diaper changing or using the toilet is the most common way to spread the virus. However, improper disposal of sewage, overcrowding, and unsanitary conditions also help the spread of the illness.

Poor hand washing practices among staff who change diapers and also prepare food helps to spread the illness. Children in diapers are likely to spread the disease because of contact with their own contaminated stools. Good hand washing practices for infants, children, and staff will limit the spread of the virus.

How is it diagnosed?

Diagnosis is based on laboratory testing of a blood sample.

What is the treatment?

There is no special treatment for persons with hepatitis A.

However, a shot called immune globulin (IG) can be given to household members, sexual partners, and other close contacts of persons who are contagious for hepatitis A. IG can be effective in either preventing or lessening the effects of hepatitis A.

To be effective, the IG shot must be given within 14 days of exposure to the virus. IG can also be given to control outbreaks of hepatitis A in child care centers. Once a person recovers from hepatitis A, he or she is protected for life.

How is it prevented?

- ✓ **Children and staff** should **carefully wash hands** after using the toilet, after changing diapers, and especially before preparing or eating food.
- ✓ Do not drink from untreated water supplies.
- ✓ Avoid drinks containing ice and ice made with water suspected of being contaminated.
- ✓ A hepatitis A vaccine is now available and has been shown to be safe and effective. However, it is not licensed for children less than 2 years of age. Protection of day care center employees by this vaccine is desirable if the center is playing a role in sustaining a community-wide outbreak. Consult with the local health department for further advice.

Does this effect attendance?

-  Exclude children from the child care center until 1 week after onset of symptoms.
-  Exclude food handlers and child care workers until 1 week after onset of symptoms or until released by a health care provider or upon approval of the local health department.

Who needs to know?

-  Notify the local health department and request advice.
-  Notify your licensing representative.
-  Notify parents (see letter).

Haemophilus Influenza Type B (HIB)

What is Haemophilus Influenza Type B (HIB)?

HIB is one of the most important causes of serious bacterial infection in young children. HIB may cause a variety of diseases. These may include meningitis (inflammation of the coverings of the spinal column and brain), blood stream infections, pneumonia, bone, or joint infections. HIB may also cause ear, sinus, and bronchial infections.

What are the symptoms?

Symptoms may include fever, lethargy and drowsiness, sudden vomiting, stiff neck and extreme irritability. Symptoms usually start 2 to 4 days after exposure to the bacteria.

How is it spread?

HIB is carried in the nose and throat of children and adults. They may be healthy or have only mild symptoms. It is then spread to the next person through contact with discharges or droplets from the nose or mouth.

The contagious period varies. Unless treated, the symptoms may last for as long as the bacteria are present in the nose and throat, even after symptoms have disappeared.

Seasonal peaks occur in early winter and late spring

How is HIB diagnosed?

 **See a doctor immediately if HIB is suspected.**

Diagnosis is done by laboratory testing of the secretions or droplets from the nose and throat. Sometimes, diagnosis will include a spinal tap for suspected meningitis.

What is the treatment?

-  See a doctor or transport the child to an emergency room **immediately** for treatment.
-  Antibiotics such as ampicillin or chloramphenicol are generally used to treat serious infections.
-  It is important to **get early treatment** to stop the infection from causing brain damage or death.
-  Rifampin may be used to treat people who may be carrying the germ. If more than one case occurs in a child care center, contact your local health department or a health care provider to discuss the need for Rifampin as a preventative measure for the other children.

How is it prevented?

 **HIB vaccine is required** for all children 2 months of age to 5 years of age entering a child care facility in Texas.

 **Be sure to have all children up to date on their immunizations** and HIB can be prevented from your child care facility.

HIB vaccine is available from your personal physician or through the local health department. If you do not know where your local health department is located, call 1-800-SHOTS-4-U to obtain that location in your community.

 Careful observation of exposed persons. Exposed children who develop illness with an elevated temperature should receive prompt medical attention.

Does this affect attendance?

 Yes. Readmittance can occur with a note from a physician or local health authority.

Who needs to know?

 Contact your local health department and your licensing representative.

 Notify parents of other children in the child care facility.

 Review all children's immunization records. If there are children who have not received the recommended vaccine, be sure to stress to the parents that the child's health care provider needs to be notified immediately.

 If a second case is found in your facility, contact your local health department and ask about prophylactic medication for the contacts.

Impetigo

What is Impetigo?

Impetigo is a common, highly contagious infection of the skin. It is caused by streptococcal and staphylococcal bacteria. Most cases of impetigo appear in children. It occurs most often during hot, humid, summer weather when there are crowded or unsanitary conditions.

What are the symptoms?

Impetigo usually begins as a reddish spot or bump on the skin, which breaks. It releases a yellow cloudy fluid (pus), leaving a weeping sore. The fluid dries, leaving a yellow, golden or honey-colored crust. The sites usually involved are exposed areas such as the face, neck, and limbs, but sores may appear anywhere on the body.

How is it spread?

Impetigo frequently begins with a small scratch, scrape, or insect bite that becomes infected with bacteria. The infection can be spread from one part of the body to another. The infection can rapidly spread among persons in close, direct contact, such as children in a child care facility.

How is Impetigo diagnosed?

Diagnosis is based on laboratory culturing the yellow fluid or weeping sore to confirm the disease. The health care provider can also diagnose it by observation.

What is the treatment?

- ✓ The infected areas should be washed with mild soap and running water.
- ✓ Topical antibiotics, such as Neosporin™ or triple antibiotic ointment, can be used to treat insect bites on minor scrapes and abrasions before infection occurs.
- ✓ Antibiotics taken by mouth can be prescribed by the health care provider to treat impetigo once it has become established.
- ✓ If the sores are not widespread, the health care provider can also prescribe an ointment or cream.

How is it prevented?

- ✓ Promptly **clean and treat any small cuts or abrasions of the skin**. Keep the area clean and avoid touching or scratching the sores.
- ✓ When caring for infected persons, the caregiver should practice **good hand washing** to avoid transmitting the disease to others or to self.
- ✓ **Wash** the infected child's **clothes, linens, and towels** at least once each day and never share them with other children.

- ✓ Wear latex or vinyl gloves while applying any antibiotic ointment that a health care provider may recommend, and wash hands afterwards.
- ✓ Follow general recommendations for **cleaning** and **disinfecting** toys and dishware.
- ✓ Keep sores covered with adhesive bandage strips or other dressings.

Does this affect attendance?

- ☞ Yes. The child should be excluded from the child care facility until 24 hours after beginning treatment.

Who needs to know?

- ☞ No notice to the licensing representative or health department is required.
- ☞ Staff and parents of other children should be notified (see letter).

Measles (Rubeola)

What is Measles?

Measles is a highly contagious rash illness, that is caused by a virus. It is more common in children, but all ages of people can get measles if they are not protected.

What are the symptoms?

The symptoms usually start 10 days after exposure to the virus but can be from 7 - 18 days.

- The first symptoms are fever, runny nose, watery reddened eyes, and a cough.
- Two or three days after the fever starts white bumps or spots will develop on the gums inside the mouth.
- Three to four days after the fever a slightly elevated blotchy red rash starts on the face and then it appears on the rest of the body.

How is it spread?

Measles is spread by being exposed to someone who is in the infectious or contagious stage which is a 1-2 day before the first symptoms to 4 days after the rash appears.

It is spread through the air when someone coughs or sneezes or by direct contact with secretions from the nose or throat.

How is it diagnosed?

It usually is diagnosed on clinical observation of symptoms but it is best diagnosed by a special blood test done at two different stages of the illness.

What is the treatment?

None

How is it prevented?

- ✓ Measles is best prevented with measles vaccine. Two doses are required by Texas law. All children should receive the vaccine at 12 months of age and then again before the 12th birthday. Texas law requires it for all children in day care or school.
- ✓ Persons who have measles should avoid contact with other people
- ✓ Persons who are exposed and have never received the vaccine need to be vaccinated within 3 days of exposure.
- ★ All cases need to be reported to the local health department immediately.
- ✓ Check the immunization records for both children and staff to make sure all are up-to-date on their shots.

Does this affect attendance?



Yes, all children or people with measles should be excluded from attending day care until after the 4th day after the rash appears.

Who needs to know?



The child care staff needs to be notified so they can watch for additional cases.



Anyone who has no record of vaccination, anyone who is pregnant, immunocompromised or new born should contact their health care provider immediately.



Your health department and your licensing representative need to be notified immediately. ★

Pinkeye (conjunctivitis)

What is pinkeye?

One of the more common eye ailments among children is pinkeye. It is an inflammation of the mucous membrane that lines the eyelid. Allergens, viruses or bacteria can cause the condition. Pinkeye is also known as **conjunctivitis**.

What are the symptoms?

Pinkeye is usually seen as a redness that involves the white of the eye. The condition can cause the child's eye to itch and burn. Sometimes there is a discharge that may cause the eye-lashes to stick together, especially while the child sleeps. Infections caused by bacteria and viruses usually produce white or yellow pus. The discharge caused by an allergy is often clean and watery. The child may also be sensitive to light. Pinkeye in child care facilities is most often due to bacterial or viral infections. Red and sore eyes may also be part of viral respiratory infections, including measles.

How is it spread?

Some forms of pinkeye are contagious.

Conjunctivitis can be spread:

- by children coming into contact with the tears or discharges from the eyes of an infected child and then touching their own eye, and
- by droplets from coughing and sneezing.

How is pinkeye diagnosed?

The health care provider will usually diagnose the condition by observation.

What is the treatment?

- ✓ The child's health care provider may prescribe antibiotic ointment or eye drops. These will provide relief in 3 to 5 days.
- ✓ Parents or care-givers should not use over-the-counter eye drops to treat a child for pinkeye without consulting the child's health care provider first. The over-the-counter drops may mask the symptoms of an infection.
- ✓ Pinkeye usually disappears on its own after about a week. If the condition continues or gets worse, a health care provider will need to be consulted

How is it prevented?

- ✓ The child should be encouraged to **wash his or her face and hands frequently** to avoid spreading the infections to others.
- ✓ The child should be encouraged to **cover the mouth when coughing or sneezing**.



Pillows, washcloths, and towels should not be shared with other children without laundering.

Does this affect attendance?



Yes. Children with a white or yellow discharge should be excluded until they have been treated with an antibiotic for at least 24 hours.



Infected persons can return when the itching, pain, or tearing have stopped or when they have received 24 to 48 hours of antibiotic therapy or when released by the health care provider



Children with a clear, watery discharge generally do not need to be excluded unless there have been other children in the group with similar symptoms, but they should be monitored for signs of more serious illness, such as fever or rash.

Who needs to know?



Staff and parents of other children should be notified (see letter).



No report to the licensing representative or health department is necessary.

Pinworm Disease (enterobiasis)

What is pinworm disease?

Pinworm disease is a very common infection of the large intestine. A parasitic worm called *Enterobius vermicularis* causes it. The disease occurs most frequently in preschool-age and school-age children. Mothers and caregivers of infected children are also sometimes infected.

What are the symptoms?

Infection with pinworms usually causes itching around the anus, and irritability, often because of disrupted sleep. Some persons with pinworms may not have symptoms.

How is it spread?

Pinworms are spread when an uninfected person touches the anal area of an infected person (as during diaper changing) or sheets or other articles contaminated with pinworm eggs, then touches the mouth, transferring the eggs, and swallows the eggs. The eggs travel to the intestines where they hatch and mature. The mature worms then travel to the anus, where they deposit a new batch of eggs, usually at night. Contamination of the hands, clothing, and bedding can take place at this time.

How is Pinworm Disease diagnosed?

Diagnosis is made by health care provider applying a transparent tape to the anal region and examining the tape with a microscope for eggs. This is best done in the morning before bathing or defecation.

A parent might also see the pinworms by examining in child's anal area, at night in a darkened room with a flashlight and looking for the small worms.

What is the treatment?

- Medications prescribed by a health care provider are effective in pinworm infections.
- All members of the family may require treatment.
- Reinfection is common and several treatments may be necessary if exposure to the parasite continues.

How is it prevented?

- ✓ Eliminate the source of infection by **treating infected persons**.
- ✓ **Wash hands thoroughly** after diaper changing, before handling food, or before eating.
- ✓ Fingernails of children should be kept short.
- ✓ **Discourage nail biting**, and if possible, caution the child to **avoid scratching** the anal area.

- ✓ Encourage the child to practice **good hand washing**.
- ✓ The infested person should take early morning showers to help **wash away any eggs** deposited overnight around the anal area.
- ✓ **Change the underclothing, night clothes, and bed sheets** daily, preferably after bathing the child.
- ✓ Take special care to **avoid spreading eggs** when changing sheets.
- ✓ **Vacuum** the house or classroom **daily** for several days after starting treatment of cases. Use care in disposal of the vacuum bag.

Does this affect attendance?

 No.

Who needs to know?

 If you suspect that a child has pinworms, call the parents and ask them to have the child diagnosed.

 It is not necessary to report to the licensing representative or the health department.

Ringworm (tinea, dermatomycosis, dermatophytosis)

What is ringworm?

Ringworm is a term used to describe an infection of the skin caused by different types of microscopic fungi. These fungi commonly affect the scalp, skin, nails, and hair. Fungal growth on the skin can produce distinctive ring-like patches with raised borders thought by some to resemble worms. There are **no “worms”** in ringworm infection.

What are the symptoms?

Ringworm of the scalp commonly begins with small bumps on the head that grow in size and spread out in a circular pattern. The hairs at the site may become brittle and break off, leaving hairless, scaly patches. **Ringworm of the nails** is characterized by nails that become thicker, discolored, brittle, and broken. **Ringworm of the body** commonly appears as flat, scaly areas with reddish borders, spreading in a circular pattern.

How is it spread?

Ringworm is spread by direct skin-to-skin contact with people or pets that are infected. It can also be spread indirectly by sharing personal items, such as hairbrushes, combs, hair clippers, and hats contaminated with the fungi. Anyone can get ringworm, but children under 12 years seem to get it more often (especially ringworm of the scalp). The same fungi that infect humans can also infect animals such as dogs and cats, and infections may be acquired from pets as well as infected children.

How is ringworm diagnosed?

A health care provider can do some simple tests to determine whether a fungus causes a rash.

What is the treatment?

A health care provider can prescribe medications to treat the fungal infection.

How is it prevented?

- ✓ **Avoid sharing** combs, hairbrushes, hair clippers, clothing, towels, hats or caps.
- ✓ **Wash towels and clothing** with hot water and soap; use bleach in the rinse cycle.
- ✓ Young children who are infected should **minimize close contact** with other children until effectively treated.
- ✓ Caregivers should encourage **good hand washing** technique among **all children and adults**.
- ✓ Pets with skin rashes should be seen by a veterinarian for evaluation. If the pet's rash is caused by fungus, children should not be allowed to come into contact with the pet until the rash has been treated and heals and the pet has been bathed. Children should always wash hands after handling pets.

Does this affect attendance?



No exclusion is needed after effective treatment is started.

Who needs to know?



If you suspect that a child in the facility has ringworm, notify the parents and ask them to contact the child's physician for diagnosis.



Notify parents of other children (see letter).



No notice to the licensing representative or the health department is required.

Roseola (Exanthem subitem, human herpesvirus 6)

What is roseola?

Roseola is a common, generally mild, rash illness caused by a virus. It is most common in young children under four (4) years of age. The virus that causes roseola has recently been identified and named human herpesvirus 6.

What are the symptoms?

Sudden fever that can go up to 106°F and lasts for three to five days. During this time, the child may appear fussy or irritable. And there may be a sore throat with swollen glands in the neck. Generally, on the third or fourth day of fever, the temperature returns to normal (98.6°F) just as the roseola rash appear. The roseola rash appears as small, discrete (separate) rose-pink spots that last for one to two days. The rash begins on the trunk and neck, and may spread to the arms, legs, and face. It may fade within hours or last for 1 to 2 days.

How is it spread?

The mode of transmission is unknown. However, almost all children have been infected by four (4) years of age.

How is it diagnosed?

By examination by the child's health care provider.

What is the treatment?

There is no specific treatment for roseola. Generally, only supportive care is suggested. Acetaminophen (Tylenol™) may be given for fever.

Note: Unless instructed by the child's health care provider, avoid giving aspirin to a child who has a viral illness since the use of aspirin has been linked to Reye's syndrome.

Keep the child cool using a sponge or towel soaked in lukewarm water. Avoid using ice, cold water, alcohols rubs, fans, or cold baths.

Encourage the child to drink clear fluids like water, fruit juice, and weak tea. Fluids will help replace body water lost in the heat and sweat of fever episodes. The child should rest in bed until the fever goes away.

How is it prevented?

The best way to prevent the spread of roseola is to avoid exposing well children to an infected child during the febrile (fever) stage of the illness.

Does this affect attendance?



Yes. The infected child should be excluded from the child care center until the fever and rash have gone and the child is well.

Who needs to know?



Notify staff. There is no need to notify parents, your licensing representative or the health department.

Rubella (German Measles)

What is Rubella?

Rubella is a rash illness with mild fever caused by a virus. The illness is usually mild and most people get well with no problems. If it occurs during the first three months of pregnancy, up to 90% of the babies born will have serious birth defects. The number of children born with birth defects decreases if the mother contracts the disease after the 16th week of pregnancy.

What are the symptoms?

- Low fever (usually less than 101° F)
- Rash lasting three days or less
- Swollen glands, especially behind the ears and the back of the neck
- Headache
- A runny nose
- Body and joint aches
- Reddened eyes

As many as one-half of the cases will not have a rash. The rash starts on the face and moves from head to foot. The rash is itchy.

How is it spread?

Rubella is spread through the air by droplets from the nose or throat of someone who has the illness. This disease can be caught for one week before the rash. It can be given to others at least four days after the rash appears. The incubation period is 14 - 23 days.

How is it diagnosed?

The only way to determine if a rash with fever is Rubella (three day measles) is to do a blood test. This may require blood being drawn at two different times.

What is the treatment?

Most individuals require no special treatment. A health care provider should be contacted so that confirmation of the disease by a blood test can be done.

How is it prevented?

- ✓ Rubella vaccine prevents this disease.
- ✓ Children should receive their first shot for Rubella after their first birthday. The shot given for this is MIVIR which includes measles, mumps and rubella.
- ✓ The second MMR. shot, given before entering school, includes Rubella.
- ✓ This shot is recommended for all children.
- ✓ Women of childbearing age should get the shot if they have not had the disease or the shot.

Does this affect attendance?



Yes. People may return 7 days after the rash started. If there is an outbreak, children and pregnant women, not protected, may not attend for at least three weeks after the last person has a rash.

Who needs to know?



Call the local health department or the Texas Department of Health to report a case within 24 hours.



Call 1-800-252-8239 or 1-800-705-8868



Also notify your licensing representative immediately.



Notify all child care staff and parents of children in the child care facility.
(See the sample letter.)

Scabies (acariasis, the itch)

What is scabies?

Scabies is a parasitic disease of the skin caused by a mite (a very small spider-like insect) called *Sarcoptes scab*, which burrows under the skin.

What are the symptoms?

The most common symptom is a rash that itches intensely, especially at night. The rash is usually found between the fingers, on the wrists, elbows, armpits, nipples, waistline, genitals (sex organs) and lower buttocks. In infants, the rash may appear on the face and palms of the hands, soles of the feet, and the scalp.

How is it spread?

Scabies is usually spread from person to person by close physical contact. Clothes, towels, and bed linens can spread the scabies mite if the items were recently in contact with a person who had scabies. The mites will die within 48 hours if they are away from the human body.

How is scabies diagnosed?

A health care provider can diagnose scabies by using a microscope to look for the mite in skin scrapings or by direct observation of the skin.

What is the treatment?

Creams or lotions that kill the mite can be applied to the skin. Follow the health care provider's instructions for treatment. Itching may continue for up to 2 weeks after treatment; it does not mean that the treatment did not work. Occasionally a second treatment is necessary one week after the first.



The entire family should be treated, as well as caretakers of the infested child.



Follow directions carefully and do not apply the medication more often than prescribed. Remove the cream or ointment by washing as recommended. Failure to follow closely the health care provider's instruction can result in severe injury to the child.

How is it prevented?



Avoid close personal contact with the infested child and his belongings, especially clothing and bedding.



There is no need for treatment of carpets or fumigation of the house, other than vacuuming and general cleanliness.



Routine laundering of bedding, clothing, and towels in hot water is advised for items used by the infected person within the past 48 hours.

Does this affect attendance?



Yes. Mite-infested persons are contagious and should be excluded from the child care facility until they receive treatment. Once treatment has started, however, they can return to the childcare facility on the following day.

Who needs to know?



Notify staff and other families regarding exposure (see letter).



It is not necessary to notify your licensing representative or the health department.

Streptococcal Throat and Scarlet Fever

What is Strep throat/scarlet fever?

The same bacteria cause strep throat, scarlet fever, impetigo, and rheumatic fever. When it infects the throat it is called **strep throat**. The organism can produce a toxin causing a skin rash. When this occurs it is called **scarlet fever**. Infections of the skin are impetigo (see the fact sheet on Impetigo). Rheumatic fever and kidney disease occur as later effects of these two illnesses.

What are the symptoms of strep throat/scarlet fever?

Strep throat –

- fever
- red painful throat
- swollen tonsils
- ear infections can be caused by this bacteria

Scarlet Fever –

- all of the symptoms of Strep throat
- fine reddish rash which appears on the neck, chest, under the arms, elbows, groin and inner surfaces of the thighs
- severe cases have “strawberry (red) tongue, vomiting and high fever
- the skin may peel off the hands and feet when getting well.

Uncommon serious problems –

- kidney disease
- rheumatic fever causing heart disease
- necrotizing fasciitis

How is it spread?

- By close contact to someone with the bacteria
- Sometimes by indirect contact with objects used by infected people
- This organism can cause illness through improperly cooked foods

How is it diagnosed?

Diagnosis is made by a culture for the organism.

What is the treatment?

Antibiotics can treat strep throat and Scarlet fever. If not treated or if all medication is not taken these infections can cause rheumatic fever or kidney disease. It is very important to see your health care provider and take **all** of the medication prescribed.

How is it prevented?



Avoid contact until at least 24 hours after antibiotics are started.



Cover mouth when coughing or sneezing



Do not drink or eat foods made with raw (unpasteurized) milk.

 Do not allow people with respiratory illnesses or skin sores to handle food.

 See **Impetigo** for further information.

Does this effect attendance?

 Yes. If untreated, people can transmit the bacteria for several weeks. Children should not attend until 24 hours after they have begun antibiotics or until there is no fever.

Who needs to know?

 Notify child care user families. (See sample letter.)

 There is no need to notify the health department or your licensing representative.