

Infections and Contagious Illnesses

Fever

A fever is a temperature of 101° degrees or greater taken oral, rectal or axillary route. Fever{ XE "fever" } is often an indication of an impending illness. **Fever in children is not an emergency. Fever in children is not an emergency.** I know I repeated myself, because it is the most reason people call day or night. Relax and read on.

Most fever is *good fever* (<103°) and helps the body fight infection. *You don't have to treat it with fever lowering medicines.* I believe that your child should feel comfortable and you can use Tylenol™ if you wish.

Take your child's temperature if you suspect a fever because it confirms your suspicion and assists me in diagnosing and recommending treatment over the phone. Try to take your child's temperature before calling my office if you suspect a fever or have questions about an illness.

Call right away if:

1. You have an infant 6 weeks old or less.
- or 2. Temperature is 105° or greater 30 minutes to 1 hour after fever lowering medications were given.
- or 3. Your child appears very pale and is unaware of the surroundings.

*Remember, most illnesses may begin with some fever, so 24 to 48 hours of fever is common. **Don't be alarmed.** Children can tolerate fevers to 105° degrees for hours. If the fever persists past 1 to 2 days or the illness appears much worse — please, call the office.

Last reviewed 9/5/2005

Fever Treatment

Take off any unnecessary clothing. Give acetaminophen (Tylenol™),{ XE "Tylenol™" }

by mouth or if there has been vomiting Febernol™{ XE "Febernol™" } by suppository every 4 hours as necessary. Giving Tylenol™ more frequently or dividing the doses will not help and could be dangerous. Ibuprofen may be given at a dose of about 10 mg per 20 pounds up to a maximum of 400 mg. These anti-inflammatory medications are also good for many injuries.

For young children and adolescents whose fevers are not lowered and who are still quite uncomfortable, try a tepid water bath. As the water temperature cools, the body temperature should be lowered. This works well but is not long lasting in its effects. There is little benefit to bathing for mild temperature elevations. You can sponge bath by letting your child sit in a few inches of lukewarm water. Let your child play or relax while you run water over him or her. Check the temperature every thirty minutes or until you are able to lower it a couple of degrees or your child perks up and appears more comfortable. Give your child cool things to drink like soft drinks, water, juices, or popsicles.

Don't let your child get chilled. Don't use ice water or alcohol. A screaming, kicking, or shivering child won't cool off. Try to get your child to play or sleep. Children, even with mild illnesses, may be irritable, lack energy, sleepy, have a poor appetite, or appear dazed or glassy eyed. I only become alarmed if the child is not aware of the parent.

Coughs and Colds

Most colds go away by themselves, sometimes in just a few days.

Commonly, colds will last from 7 to 10 days. At the present time, there are no medications to cure a cold. Penicillin and other antibiotics have absolutely no effect on a common cold. If your doctor gave you an antibiotic for your cold, he or she probably suspected a secondary infection was also involved. Some doctors may succumb to parent's requests for treatment even though there is no recognized infection associated with a viral cold. If you believe your

child has a cold{ XE "cold" } and develops these symptoms, I encourage you to call our office for a brief exam.

1. Fever of 101° or more for 2 or 3 days.
- or 2. Persistent pain.
- or 3. Vomiting for more than 8 to 12 hours without successful fluid intake.
- or 4. Very pale and unresponsive to the surroundings.

If a baby's nose is full of mucus, the mucus can be removed with a bulb syringe. If the mucus is too thick to suction easily, salt water drops sprayed or dropped into the nostrils just prior to suctioning will help greatly. Do not use Q-tips™{ XE "Q-tip™" } to clean the nose or ears by probing inward beyond your vision. You may pack the mucus or wax so deeply that you will cause greater problems. A tickle in the throat can be helped by a mixture of lemon and honey for children over one year only. Honey{ XE "honey" } given to infants under one year has caused a life threatening illness called Botulism{ XE "botulism" }. Extra fluids seem to help all persons who have cold symptoms. Use fluids as your child tolerates them, but do not force fluids. Laxatives do not shorten a cold and are not recommended.

Frequent colds do not have anything to do with tonsils and adenoids{ XE "adenoids" }. Tonsils{ XE "tonsils" } play an important role in the body's defenses against infections. Tonsils are naturally large during school-age years when they are exposed to many infections. Very few children need to have their tonsils or adenoids removed. Tonsils should only be removed when they interfere with normal breathing, sleep, or produce persistent snoring.

Croup

If your child awakens with a harsh “barking” cough{ XE "barking cough" }, you should moisten the surrounding air with a “cool mist” vaporizer{ XE "vaporizer" }. Air in the room should be as moist as possible. If you do not have a vaporizer or humidifier{ XE "humidifier" }, running the shower in the bathroom is a good way to produce steam quickly. You should stay with your toddler and let him or her breathe the steam but do not put them in the hot water. If there is no improvement and there is difficulty in breathing take your child to Children's emergency room for assessment and treatment. Notify me the day after this cough begins because I may be able to shorten the illness and reduce its severity by prescribing a special.

Head lice

Head lice{ XE "head lice" } are very common. School age children can get lice from school friends, neighbors or relatives. These are nuisance pests rather than serious health problems. They usually cause severe itching of the scalp and neck. They are transferred from person to person by direct contact or by sharing brushes or combs. They can only live for a few hours when removed from the human body. Over-the-counter preparations are effective. Nix Cream Rinse{ XE "Nix Cream Rinse" } and some other treatments are over-the-counter and recommended for killing eggs and adult lice. You may have difficulty differentiating the eggs (nits{ XE "nits" }) from dandruff. If the problem persists or you are not sure if your child has lice, call my office for an appointment.

Chicken pox

This is a viral infection that is quite contagious from one to two days before the rash erupts until all the rash has scabbed. The rash starts as a red blotch that becomes raised and quickly forms a clear blister at its center. The blister quickly ruptures and then scabs. The rash appears in groups called “crops{ XE "crops" }.” Fever is usually present in the earliest stages of the illness. Fever that occurs later in the illness may indicate the start of a secondary bacterial illness that needs my attention. Itching may be intense the first few days of blistering{ XE "chicken pox" } rash. Calamine™{ XE "Calamine™" } or Caladryl™ lotions may help reduce the itching. Baking soda baths are useful to reduce the itching too. I often recommend Benadryl™{ XE "Benadryl™" } or other over-the-counter antihistamine prescriptions to control the itching. The illness last 7 to 10 days. One infection usually establishes lifelong immunity, but repeat cases are possible.

Pink eye or

Redness{ XE "pink eye" }, irritation and pussy{ XE "conjunctivitis" } discharge can be caused by a virus, bacteria or allergy. I usually start treatment with an antibiotic drop

Conjunctivitis

assuming it is a bacterial infection.

If there is a clear discharge then it might just be an irritation or allergy that won't be a likely to be helped with antibiotics. You will need an appointment so that I can determine a likely cause of the eye inflammation. It may be necessary to refer to an eye specialist (ophthalmologist). Itchy, red eyes with hayfever symptoms may be relieved with non-prescription allergy eye drops like Visine™.

Bladder or urine infections

Urinary tract infections{ XE "urinary tract infections" } or bladder infections{ XE "bladder infections" } are common in childhood and adolescence. Symptoms in later childhood may be easy to spot but very confusing in the infant. Symptoms are : burning or pain while urinating, urgency or frequency in urinating, and back pain or fever, although back pain or fever are uncommon. These last symptoms may warn of kidney infections.

For infants, other symptoms may include : weight loss, vomiting, diarrhea, nausea, failure to gain weight or even jaundice. In early infancy, boys are three times more likely to have a urinary tract infection. This infection is carried to the bladder or kidneys from the blood. In childhood, bedwetting{ XE "bedwetting" } in a previously dry child, or abdominal pain may indicate a bladder infection. Treatment with any of several antibiotics works well. After treatment, I may suggest a follow-up test of the urine to insure no new infection has appeared.

Bacteria vs. virus

Many parents are naturally confused about bacterial and viral illnesses.

It is important to understand the difference between these two words because my treatment plan will be based on the type of infection I suspect.

Bacterial infections{ XE "bacterial infections" } cause illnesses like : strep throat, ear infections, skin infections such as impetigo, pneumonia or meningitis. Each infection can range from less serious to life threatening. Although some bacterial infections will go away on their own, with the use of drugs like antibiotics, recovery is quicker and complications are reduced. For this reason, I use various methods (lab tests, physical examination, and your child's history) to determine if your child could have a bacterial infection.

The use of antibiotics should not be taken lightly. Some children suffer reactions to antibiotics. While most side effects are annoying at worst, severe allergic reactions can be life threatening. Let me know if your child has allergies to any medications.

If I suggest and prescribe antibiotics it is critical that your child take them for the length of time I indicate.

Viral infections{ XE "viral infections" } are extremely common. Most of us will get several viral infections every year. The average child has 5 to 10 illnesses each year. Symptoms of viral illnesses can mimic bacterial illnesses. It can be difficult to separate and determine which infection your child has. Yet, viruses are less likely to cause serious complications.

Viruses are not affected by antibiotics. Certain medications can help some viral illnesses and several drugs are able to control and even kill some viruses. Even though most viral illnesses must run their course, I will probably be able to substantially reduce unpleasant symptoms and prevent complications from secondary bacterial infections.

If you suspect a bacterial infection, but your child is comfortable, I can examine your child during office hours. If there is a fever persisting more than 48 hours, difficulty breathing, pain, decrease in awareness of their surroundings, persist vomiting, or bloody diarrhea, you should call me or go to Children's emergency room.

Last reviewed 9/5/2005

Hand, foot, and mouth disease

This disease{ XE "hand, foot, and mouth disease" } occurs in the summer and fall months. It is not related to any serious cattle disease. Instead, it is a viral disease that spread through some child care facilities and among some families.

It is harmless for most young children. The virus causes small to large ulcers in the mouth. Pustules may appear on the palms of the hand or soles of the feet. The buttocks may also

develop a rash. Fever may occur but if it persists beyond two days, I recommend an office exam.

A possible complication is dehydration, because the oral ulcers can be severe and the discomfort will discourage fluid intake. This complication is unusual. Like most illnesses with rashes, your child is contagious for a couple of days before the rash appears until it fades.

Stomach flu or gastroenteritis

This viral infection should not be confused with “bacterial” food poisoning caused by improper food handling. “Stomach flu{ XE "stomach flu" }” is a viral illness{ XE "gastroenteritis" }

so there are no antibiotic cures for the vomiting and diarrhea symptoms. Tylenol™ helps the pain from the cramping.

The important concepts to remember are concerning fluid replacement. Understanding which type of fluids and solids you can use will help in the treatment.

The goal of treatment is to avoid dehydration. Fortunately, few children have this complication. (See the section on Vomiting and Diarrhea...)

Start with small amounts of clear fluids. Avoid dairy products because they are not easily digested and can aggravate diarrhea. Even dilute fruit juices can stimulate the diarrhea and should be avoided. If clear fluids are tolerated in larger amounts over an 8 to 12 hour period, consider solid foods. The BRAT diet{ XE "BRAT diet" } is an acronym for Bananas, Rice, Applesauce, and Toast. These are easily digested and help thicken the stools. Continue this diet until the stools approach normal for a couple of days.

Roseola (baby measles)

Roseola{ XE "roseola" } is one of the classic illnesses of early childhood. It is confused with the less common German measles and hard measles or rubeola. The rash of roseola{ XE "baby measles" } is preceded by several days of sustained high fever, up to 105°. Even though there is a high fever,

your child will appear well. A rash then appears after the fever disappears.

It may be slightly elevated, pink or light red. Mild cold symptoms may also develop. A very small number of children who are susceptible may have a convulsion with the fever. This is not epilepsy and will cause no long lasting effects.

This is a contagious illness caused by a virus. The contagious period is just prior to and during the fever. It is treated the same as any febrile illness to provide symptomatic relief. Use aspirin-free fever relievers. Children with prolonged high fevers lasting more than two days should be examined. If fevers persist more than a few days, blood counts or similar laboratory examinations need to be performed. Occasionally some children will need to be hospitalized for observation to rule out serious infectious illnesses.

Ringworm

Ring worm{ XE "ring worm" } is a common skin infection caused by a fungus that invades the superficial layers of the skin. The name refers to the “ringed” appearance of the red rash. The rash begins as a round, small, red spot or pea sized bump. It’s center slowly pales, giving the appearance of a red ring. The ring grows, leaving a red, raised scaly rash which can be grouped or singular anywhere on the body.

Fortunately, it can be treated with readily available over-the-counter medications like Tinactin™,{ XE "Tinactin™" } Micatin™,{ XE "Micatin™" } Lotramin™{ XE "Lotramin™" } or Lamasil™. I prefer Lamasil™ but there are many different medications available. Treatment consists of spreading the cream or ointment sparingly over the rash twice a day. There should be dramatic improvement over a weeks time. If the rash does not improve or it worsens, I should see the rash in my office to determine if an infection or if some other condition exists.

Chronic fatigue in children.

A diagnosis of chronic fatigue{ XE "chronic fatigue" } has great appeal. It gives parents and children a socially accepted explanation for long-lasting complaints and some physicians a label for an otherwise baffling set of symptoms.

In part this is due to do with the nature of the Epstein-Barr virus{ XE "Epstein-Barr virus" }, the virus that causes mononucleosis. Most adults, and many infants and children have been infected with this virus at some point in their lives (90%). Assessing these patients is a difficult task. Most have normal physical examinations and laboratory tests, despite testing positive for the virus in the past. It is rapidly becoming apparent that most patients with "chronic fatigue syndrome" do not have an active case of the virus. We do know the Epstein-Barr virus can cause many illnesses ranging from mononucleosis to a prolonged and intermittent infection can even cause death, in severe cases.

To diagnose severe, chronic EBV infection, I consider: a severe illness lasting more than six months; evidence of involvement of the bones, eyes, lymph glands, liver or lungs. Special laboratory tests may be helpful in confirming the diagnosis. A chronic fatigue syndrome that meets my specific criteria is uncommon in children and adolescents.

Complaints of prolonged fatigue are common among teenagers. Small children rarely complain of "feeling tired," and even children with chronic disease rarely complain of fatigue. The concerned parent usually observes and reports that the child appears fatigued. Parents say things like, "He has no energy," or "All she does is lay around the house." They describe a child who prefers sedentary activities, looks tired or droopy, has no energy, seems bored, doesn't want to play with friends, and generally shrinks from social contacts. Many children experience periods of lassitude from time to time. But, children who go through protracted and severe periods of chronic fatigue and withdrawal from usual activities may be suffering from a serious depression.

They will need special medical or psychiatric treatment.

Adolescents complain about being fatigued quite frequently. In fact, fatigue is among adolescents most common problems in pediatric practice and one that arouses much concern in parents, particularly in spring, when adolescents suffer from a combination of fatigue and mild depression. Springtime is the season of the greatest school-related stress, before final exams, grades, college acceptance, prom time, and graduation. These symptoms should definitely be called "spring fever." All the uncertainties of adolescence including identity and sexual crisis, may create spring fever anytime of the year, with fatigue the major complaint. Many of the adolescence who come to my office with complaints of fatigue and no other problems have an emotionally based problem, usually a product of stress and anxiety.

This is a complex problem that may take time to work through. It should be discussed with both parents and child or adolescent.

Impetigo

Children's skin is more susceptible to infections from fungus and bacteria.

Impetigo{ XE "impetigo" } is caused by bacteria like streptococcus or staphylococcus commonly found on all children and adults. This skin infection looks like a yellow or honey colored crust. It may start as a small red bump, a pustule or tiny scab. In areas frequently scraped or rubbed, especially around the nose and buttocks. It often follows colds or hayfever when extra rubbing around the nose is natural.

Bacteria are growing in and below the crusts. Treatment involves clearing and cleaning the infected areas. Betadine ointment or solution is the best over-the-counter bactericidal agent. Other choices include bacitracin, cortisporin and other over-the-counter creams and ointments. Oral antibiotics and prescription creams may be necessary for nonresponsive infections or infections covering many areas of the body at once.

These infections are very contagious. Your child may be required to stay home until the infection responds to treatment and clears up.

Influenza or (FLU)

Influenza{ XE "influenza" } or "true flu{ XE "respiratory flu" }" is a viral disease common in winter months. Adults use the term as a general description for many combinations of symptoms. I always ask parents to explain the symptoms. When "flu" appears, epidemic numbers of children and adults are affected. Type A virus is the most common strain, but during some years, Type B strain will occur. A second illness can occur in the same season,

giving the false impression of a relapse. When, in fact, the second illness is caused by a different strain of virus.

The virus takes about 2 to 3 days to develop before your children will show any symptoms. Older children can become ill quickly with fever, flushed face, chills, headache, muscle ache and fatigue. Temperature from 102° to 105° are common. Dry cough, runny nose and eyes appear early in the illness. You will notice sore throat and teary, burning, achy, light sensitive eyes. Up to 1/3 of children will have some diarrhea.

In younger children, the symptoms can be more severe, with a high degree of secondary infections like pneumonia, sinusitis or ear infections. Flu can mimic other illnesses like croup, bronchiolitis, pneumonia or bronchitis. Severe complications like Reye's syndrome{ XE "Reye's syndrome" } (a rare condition leading often to death or brain injury) can develop when aspirin are used instead of Tylenol™. I do not recommend the use of aspirin during influenza season when respiratory illnesses are more common.

“Flu” or influenza can be prevented by taking a series of two vaccines, starting in early fall. I recommend flu vaccine for any child with a chronic illness like severe asthma.

A drug called amantadine hydrochloride or Symmetrel™{ XE "Symmetrel™" } can prevent influenza A and is also used to treat the illness. If you suspect your child has influenza, contact my office to schedule an appointment. If your child has influenza, early treatment can reduce symptoms in 12 to 24 hours. I have used Symmetrel™ safely for many years, with excellent results.

Jaundice with hepatitis

This disease strikes terror in families because parents fear the worst outcome or have many misconceptions.

Hepatitis{ XE "hepatitis" } is an inflammation of the liver.

Most cases are not recognized because it is generally mild and symptoms are not severe. Its symptoms are nonspecific like fever, headache, general achiness, loss of appetite, or an itchy rash. After a few days, you will notice more nausea and vomiting, stomach ache, and in some cases jaundice{ XE "jaundice" } (yellowness of the whites of the eyes and skin). Urine will be dark and stools will change to a tan or white color. The area of skin over the liver can be quite tender from the swelling of the liver.

Viruses cause inflammation of the liver including the virus of mononucleosis{ XE "mononucleosis" } (Epstein-Barr virus). Two common forms of hepatitis are infectious or “A” type and Serum or “B” type. Incubation period can vary from 1 month for infectious hepatitis to 6 months for serum hepatitis. Infectious hepatitis is spread from one person to another from intimate contact or from infected water or food. Serum hepatitis is spread by contact with contaminated blood which can occur when infected needles are used or shared or sexual contact.

There is no cure for the viral infection once it develops in the body.

Treatment focuses on meeting the nutritional needs of the infected child. Foods should be lower in fats and contain only mild to moderate amounts of proteins. Carbohydrates are easier to digest than fats or proteins, but all food types can be eaten.

If a member of the family is known to have infectious hepatitis, all family members may receive immune globulin{ XE "immune globulin" } to prevent or to minimize the severity of hepatitis. Once the disease is diagnosed, immune globulin will not stop the infected person's disease. Some children and adults can have damage to the liver or chronic hepatitis. It is important to prevent cases of hepatitis, whenever possible. Fortunately, there will be complete recovery from infectious hepatitis in more than 90% of children.

Lyme disease

Lyme Disease{ XE "Lyme disease" } is a bacterial infection transmitted by the bite of the small mouse or deer tick. Symptoms are fever, body ache, and rash. Later, symptoms like irregular heart beats, convulsions or arthritis may develop. This disease can cause serious problems, but it is rarely fatal. Any stage of the disease can be successfully treated with antibiotics.

The first stage of the disease begins from 3 to 30 days after the tick bite. The characteristic rash can be flat or raised and red. There is a ringed border with a pale center. The size may be $\frac{3}{4}$ inch to 26 inches across. Later other rashes may appear accompanied by fatigue, fever and headache.

Stage two develops after a brief period of well being. Then the headache, stiff neck, nausea, vomiting, fatigue, memory loss and loss of concentration may occur. Facial nerve paralysis, irregular heart beat can also develop in this stage. In stage three, the last stage, weeks, months or years may pass before arthritis appears.

There are no accurate tests to detect Lyme disease in stage one. The combination of flu symptoms, rash and tick bite are necessary for diagnosis. The later stages can be more accurately tested. Treatment with common antibiotics is generally successful.

To prevent Lyme Disease wear light colored clothing so the tick may be easily seen. Wear long pants tucked into your socks. Remove ticks promptly. Use tick repellents containing 30% DEET{ XE "DEET" } or 0.5% Pyrethrins{ XE "Pyrethrins" }. Tick collars for pets are recommended. This tick is not native to our area so unless you have traveled to an area where it is common, you should not be concerned about Lyme Disease.

Tuberculosis

Tuberculosis{ XE "Tuberculosis" } was once a common disease in the early and middle twentieth century. It has decreased in frequency, but has recently made a comeback, especially in the middle adult years. In Fresno county the disease has made a rebound too, because of the influx of immigrants from Mexico and Central and South America.

Tuberculosis is spread by inhaling infected droplets. The infected person coughs and sneezes, spreading the infection. Adults who have the disease need to cough large amounts of the infected droplets to spread the disease to a child.

Children 3 to 15 years are likely to develop primary tuberculosis, if infected. This form of Tuberculosis is usually asymptomatic. There is no fever, cough, fatigue, or other symptoms. It is picked-up or diagnosed by the simple skin test that we do in the office. X-rays are often negative. Tests to cultures or examine the bacteria are difficult to obtain, because sputum is necessary to culture. Most small kids swallow their sputum so testing them is difficult.

Because tuberculosis requires large amounts of infected particles to be coughed up and spread, it is very unusual to contract TB from a casual exposure. It is also unusual for a child to spread it to another child. The classic exposure is from an older adult with long established disease to another person after prolonged exposure.

Treatment is by drug therapy. Up to a year of drug therapy is necessary to eliminate the infection.

Skin infections

Shortly after birth normal infants are exposed to a whole range of different bacteria, viruses, and fungi. As we grow, infants and children establish colonies of many different organisms that do not harm the body.

Even though we might take exceptional good care of our children's skin, permanent colonies of microorganisms develop. Only when the normal checks and balances of the body are effected, will you notice the presence of an infection.

The skin might not be the only location for the spread of viruses, bacteria, or fungi. Some infections invade deeply advancing into the blood system, spreading throughout the body or adjacent organs.

The skin is naturally dry. The first locations for infectious overgrowth will be in areas where moisture is increased. The groin, underarms, around the neck, and feet are frequent sites for infections to grow or spread.

There are many common types of bacterial infections found. Here is a brief list of the those I see: impetigo, folliculitis, furuncles, carbuncles (boils), paronychia, and cellulitis.

Infections are first noted on the outermost areas of the skin. Impetigo is one of the most common skin infections in children. It can start as a simple small red bump or flat area. It progresses to form a small white head or larger collection of pus. Drainage can occur on its

own with crusting. This crusting is generally honey-colored. Bacteria grow in the collection of crusts and continue to reinfect the skin.

As the parent you can help to control the infection by removing the crusts with medicated ointments, cremes, or lotions. This will reduce the reinfection of the skin. Over-the-counter neosporin, bacitracin, or Betadine are just a few examples of possible medications.

Other forms of impetigo{ XE "impetigo" } appear as large pus-filled blisters. This is more common in the diaper area and between the thighs. This is called bullous impetigo and needs antibiotic treatment with oral medications.

Deeper infections can produce pain and fever. In most cases these infection called cellulitis{ XE "cellulitis" } start as a simple pimple but grow involving deeper zones of the skin, muscle, and bone. The skin might be red, tender, and swollen.

These are definitely more serious and require my care. Close doctor follow-up is necessary to avoid progression of the infection into the body organs or the blood system.

Some infections start at the hair follicle and cause redness, irritation, pain, and sometimes a discharge of watery, yellow, or bloody fluids. Soaking these with water might be your first option. It will help if you keep the area clean with soap and water and then dry well.

On occasion small areas of infection group and form an abscess which will require minor surgical drainage. I recall a recent patient account where a well-meaning parent tried to clean and drain an infection around a nail by lancing it with a needle. After repeated attempts at draining the area, the infection grew. It invaded the bone in the finger. The destruction of the bone infection eroded the end of the finger bone, leaving his finger tip shortened by about an inch. Don't try to drain an abscess at home with a needle. Very serious complications can result.

A form of skin infection called Methacillin Resistent Staph Aureus (MRSA) is now appearing that is resistant to common antibiotics. There are two forms. One is a community acquired form which is less serious and can be treated in the office. It can reoccur. The other form is acquired in the hospital with patients that often have chronic illnesses and their form requires care from an infectious disease specialist.

Last reviewed 9/5/2005

Pinworms

Pinworms{ XE "pinworms" } are the most common type of intestinal infection in children in America. The adult worm measures about ¼ of an inch in length.

You can barely see it without a magnifying glass. Pinworms cause no symptoms in the majority of children they infest. You cannot get an infection from pets only from another infected child or adult.

Symptoms caused by pinworms are usually confined to the areas surrounding the rectum, although in girls the worms can cause symptoms in the vagina. There may be itching and pain or restlessness at night. Many children grind their teeth.

You may be able to see the worms migrating at night near the rectum. Take a flashlight at night while your child is sleeping.

A chewable prescription medication kills the worms. If more than one person in the family is infected, I will treat the whole family at the same time.

Valley Fever

Coccidiomycosis{ XE "Coccidiomycosis" } is the correct name for a fungal infection found in areas such as the San Joaquin Valley. It is sometimes called San Joaquin Valley Fever{ XE "San Joaquin Valley Fever" }. The spores are inhaled and later develop in the tissues of the lung.

The infection is self-limited and harmless to most who are infected. Two thirds of those infected do not develop any symptoms of the disease. Others will show effects to the tissues of the lungs. A rare few develop an over-whelming infection and sometimes die. The disease tends to be milder in children. Some children will show infection of their bones or the tissue surrounding the brain. The period of incubation is about 10 to 16 days. The illness might develop slowly or quickly with signs of influenza-like illness with fever, chills and body ache.

There can be a persistent cough and painful sore throat. There might be headache, backache or chest pain.

There may be a fine red round rash or hives might appear within a day or so. The rash might last a few days only or appear as tender bumps. At the same time you might notice an arthritis or conjunctivitis.

Signs of pneumonia can appear. It is usually minor but can be quite severe.

The diagnosis of Valley Fever can be made by skin test but a negative test does not rule out Valley fever so I will order a complete cocci blood test. This will be more accurate and gives dependable results.

There is no treatment recommend for primary, uncomplicated Valley Fever. Rest is helpful, but not is not required. You can only contract the disease by breathing the infectious spores and will not be contagious to others will the disease is active. One infection should establish immunity for future infections. There is no effective vaccine for this disease.