Childhood Illnesses

Contents

Common Cold

Description

The common cold is caused by many different viruses. Symptoms include runny, stuffed up nose, sneezing, coughing and a mild sore throat, with little or no fever. Children under 5 years of age may get several colds a year.

Colds are spread directly by contact with airborne droplets (coughing and sneezing), or indirectly by contaminated hands, tissues, eating utensils, toys or other articles freshly soiled by the nose and throat discharges of an infected person.

Incubation Period

About 1-3 days.

Infectious Period

From about one day before symptoms begins and during the first five days of illness.

Controlling the Spread of the Infection

Teach children to cover their mouth when sneezing or coughing and to wash their hands after blowing their noses.

Dispose of tissues soiled with nose and throat discharges

Wash hands after contact with soiled tissues or contact with nose and throat discharges.

Treatment

No specific treatment. Medicines containing paracetamol and decongestants may help to relieve symptoms in children older than 3 months.

Comments

Watch for new or more sever symptoms. They may indicate other more often serious infections.

Childhood Illnesses

Croup

Description
Croup is any kind of inflammation of the larynx or voice box that occurs in children. It is not a single disorder in itself. The characteristic features of croup are a harsh, barking cough and a noisy, harsh sound when breathing in, this noise is caused by air vibrating as it passes through the narrowed, inflamed larynx. Seek medical advice if the child develops these symptoms.

Several viruses may cause croup. These include parainfluenza, respiratory syncytial virus (RSV) and various influenza viruses.

Incubation Period
Difficult to define, but about 2-4 days.

Infectious Period
Shortly before the onset of symptoms and during the active stage of the disease.

Controlling the Spread of the Infection
Teach children to cover their mouth when sneezing or coughing and to wash their hands after blowing their noses.

Dispose of tissues soiled with nose and throat discharges.

Wash hands after contact with soiled tissues or contact with nose and throat discharges.

Treatment
A child with croup will need medical assessment. The doctor may recommend that a child with mild croup be treated at home. The child may benefit from a warm, humid atmosphere (a humidifier or steam). Increase their fluid intake and use paracetamol to lower a temperature and relieve a sore throat. It is likely that a child with severe croup will need to stay in hospital for a short time to receive specialised medical treatment.

Diarrhoea and Vomiting (gastroenteritis)

Description
Diarrhoea is an increase in the frequency, runniness or volume of the faeces. It may be caused by different organisms, for example viruses (such as Rotavirus), bacteria (such as Campylobacter, Salmonella and Shigella), and parasites (such as Giardia and Cryptosporidium). Diarrhoea is spread when hands, objects and surfaces become contaminated with organisms form faeces. Infected people do not always show symptoms.

Campylobacter and Salmonella infections can result form drinking contaminated water or unpasteurised (raw) milk or by eating contaminated food, especially undercooked poultry, fish or shellfish.

Childhood Illnesses

Sometimes, diarrhoea has a non-infectious cause, such as antibiotic treatment. The exact cause of the diarrhoea can only be diagnosed by laboratory tests of faecal specimens. Sometimes multiple specimens must be tested.

Other symptoms which may accompany diarrhoea include vomiting and stomach pains. Blood and mucus may be seen in the faeces, especially in bacterial infections. Diarrhoea can cause dehydration and serious illness requiring hospitalisation.

Incubation Period

Viral and bacterial infections, usually 1-3 days.
Parasitic infections, 5-15 days

Infectious Period

People are infectious for as long as the organisms are present in their faeces, whether or not they are ill.

Treatment

This section draws on information provided in the pamphlet, “Gastroenteritis: A guide for Parents and Caregivers” which was endorsed by the NHMRC 1996

Preventing dehydration in children with gastroenteritis
Children with diarrhoea need extra fluid to replace what they lose. However, many fluids have too much sugar and the wrong amount of salt. Giving a sick child the wrong kind of fluid can lead to more dehydration and illness.

Safe Drinks

The best fluids to give contain the special salts (electrolytes) and sugars. You can buy Gastrolyte from the chemist. Mix the sachet of powder with water, not other kinds of fluids (1 packet of Gastrolyte in 200 ml water).

If children refuse Gastrolyte they may be given diluted soft drinks or fruit juice.
Diluted cordial 10 ml + 150ml water.
Diluted soft drink (eg lemonade) 50ml + 150ml water
Diluted fruit juices 50ml + 150ml water.

Unsafe Drinks

Do not give undiluted fruit juice, fizzy drinks, cordial or lucozade to children with diarrhoea. They may increase diarrhoea and dehydration.

Breast Fed Babies

Breast feeding children mothers should continue to breast feed and off the breast more often. Offer water (boiled if the baby is under 6 months) between feeds.

Bottle / Formula Fed Babies

Continue normal strength formulae or milk if the child is hungry, and offer Gastrolyte or safe drinks as recommended above. Remember that withholding formulae for more than 24 hours may result in the baby losing weight.

Childhood Illnesses

Re-introducing Food
Re-introduce food within 24 hours, even if the diarrhoea has not settled. Suitable foods to start off with include bread, plain biscuits, potatoes, rice, noodles, vegetables, plain meats, fish and eggs. Gradually re-introduce other foods, such as dairy foods and sweet foods such as jelly, honey and jam.

Ear Infections (otitis)

Description
Ear infections are common in childhood. They may be middle ear infections (otitis media) or outer ear infections (otitis externa).

Middle ear infections occur on the inside of the ear drum. Because this is a small area, infection leads to an increase in pressure on the eardrum and pain. A young child will not be able to tell you they have a sore ear. However, they may be pulling or rubbing their ear, have a fever or vomit. The child may be distressed, and crying that stops suddenly may mean that the ear drum has burst. Middle ear infections can be caused by bacteria or viruses and often occur a few days after a child gets a cold.

Outer ear infections occur on the outside of the ear drum or ear canal and are often associated with swimming.

Incubation Period
A few days.

Infectious Period
Middle ear infections are from colds and are not spread from one child to another. Organisms can only be passed form one child to another if and while there is infectious fluid draining out of the ear.

Control the Spread
Any discharge from an ear should be treated as infectious. Wash hands thoroughly.

Treatment
Middle ear infection: Antibiotics, taken by mouth. Use paracetamol to relieve pain.
Outer ear infection: Antibiotics, given as drops in the ear or places in the ear canal with wicks.

Comments
As ear infections are hard to detect in young children, suspect an ear infection with all fevers and vomiting. Watch the child for any signs of pulling of ears. Rarely, a middle ear infection may spread and the child may develop mastoiditis. The area behind the ear will be red and the ear lobe will stick out and down. A child with these symptoms should see a doctor as soon as possible.

Childhood Illnesses

Thrush (candida)

Description
Thrush, also known as monilia and candida albicans, is a fungus that infects the top layers of the skin or mucous membranes. The fungus that causes thrush is part of the normal human flora. Usually it lives harmoniously on and in the body. For various reasons, the fungus can multiply to such a degree in some people that it can cause symptoms that require medical treatment. Often this is when the person is feeling rundown or taking antibiotics.

Thrush is common in very young babies and infants. They are susceptible at this time because their immune systems are still immature. Thrush is often found inside the mouth as white spots or flakes that cannot be removed by cleaning the mouth. Another site of infection is the vulva and vagina. Frequently thrush is a secondary infection to nappy rash. Thrush is spread by direct contact with fungi living in the mouth, vagina and faeces and on the skin. A mother can infect her newborn baby during the birth.

Incubation Period
Variable, but 2-5 days in infants.

Infectious Period
As long as the white spots or flakes are present.

Controlling the Spread of the Infection
Make sure good hand washing and cleaning procedures are being practised.

Treatment
For moderate to sever infection of the mouth or the vulva/vagina the parent should take the child to a doctor. The doctor may prescribe anti-fungal medications. Wash the affected area with water, apply the prescribed cream, and expose the nappy area to air as much as possible.

Conjunctivitis

Description
Conjunctivitis is an irritation of the eye caused by bacteria, viruses, chemicals or allergies. Symptoms include a scratchy feeling in one or both eyes and redness on the whites of the eyes. A discharge may be present, causing the eyelids to stick together in the morning.

Sensitivity to light is another common symptom. Diagnosis of the source of infection or irritation can be made by examining a smear if the discharge from the eye under the microscope or by culturing the virus or bacteria. This is often not done and so usually the cause is unknown. Viral and bacterial conjunctivitis can be spread by direct contact with secretions form the eye. This type if infection may also be spread indirectly through towels, washcloths, handkerchiefs and other objects that have been contaminated with eye secretions.

Childhood Illnesses

Incubation Period
24-72 hours.

Infectious Period
During the entire course of an active bacterial or viral infection, or in the case of a bacterial infection three days after beginning antibiotic treatment. Conjunctivitis caused by chemicals or allergies is not infectious.

Responsibilities of Child Care Providers and Parents
Since bacterial and viral conjunctivitis look the same, the child should see a doctor for proper diagnosis and treatment.

Controlling the Spread of the Infection
Ensure hand washing is vigilant.

Treatment
Medication may be prescribed by a doctor. This is usually antibiotic eye drops.

Worms: Pinworms

Description
There are many worms that can infest children. Most however, need to live for a period in water, soil or animals before they become infectious to human. In Australia, with its temperate, dry climate and adequate town sewerage facilities, very few worms are transmitted. In child care centres, the most common worm is the pinworm (also called Enterobius vermicularis).

Symptoms of pinworm infection include itchy bottom, irritability and behavioural changes. Sometimes a thin, adult pinworm, about 1 cm long, is found on freshly passed faeces. Pinworms are spread when the person scratches or touches the anal area (where the pinworm lays its eggs) and then puts their hands to their mouth. Occasionally eggs on infected clothing may be breathed in and then enter the gut (where the adult pinworm lives). Pinworms do not infect dogs and cats so domestic pets are not a source of infection.

Incubation Period
Approximately one month after eggs enter the gut, the female pinworm emerges to deposits her eggs.

Infectious Period
Pinworms can spread as long as worms live in the gut. Infection will continue until the person is treated. Immunity does not occur. Both adults and children are susceptible.

Childhood Illnesses

Controlling the Spread of the Infection

Encourage parents to seek medical treatment for infected children. The child will be free of pinworm infection within a day if the child receives treatment and clothes and bed linen are washed in hot water.

Do not exclude a child with pinworm from the entire.

Make sure that good hand washing and cleaning procedures are being followed.

Treatment

Treatment of pinworm is simple, safe and effective. The family doctor may wish to confirm the infection with a simple laboratory test. In most cases, through, the doctor will prescribe treatment on symptoms alone. A single-dose therapy is given to the child and each family member. This is repeated after two weeks. Treatment of other children at the centre is not necessary.

Head Lice (pediculosis capitis)

Description

The head louse starts as a small egg about the size of a grain of salt which the female louse glues to the base of the hair shaft. Most often these eggs (nits) are found in the hair behind the ears, at the back of the neck, or around the crown and under the fringe. The eggs hatch in 7-10 days. They mature into an adult louse, which is a wingless insect 2-3mm long with a flat body and six legs. The adult louse is capable of laying eggs after 10 days. Lice are very quick moving and very difficult to see in the hair.

Head lice generally cause itching behind the ears and at the back of the neck, they are spread by direct contact with the scalp of an infested person, or by contact with personal items(such as combs, brushes, hats, scarves, jackets, sweaters, sheets, pillows and pillowcases, blankets, upholstered furniture etc).

Lice are very host-specific. Those which live on animals will not live on humans and vice versa.

Incubation Period

The eggs usually hatch in 7-10 day s. Once hatched; the lice are capable of laying eggs in 10 days.

Infectious Period

As long as the eggs or lice are alive. Lice do not survive more than 2 days away from the human host but their eggs may survive longer.

Responsibilities of Child Care Providers and Parents

Be aware that children are more likely to have close contact with each other. This will provide the opportunity for head lice to be transferred from head to head. Sharing of combs, brushes and head gear has been blamed for the transfer of lice, but this is probably far less significant than direct contact.

Childhood Illnesses

Examine the heads of children who scratch their heads a lot. Look for eggs (nits) or lice near the scalp. Lice are less than 3mm long, translucent or tan in colour, and move. The eggs are greyish-white specks glued to the hair (within 6mm of the scalp). Eggs that are more than 12mm out from the base of the scalp are dead or are only empty egg casings. If live eggs are present, so are lice. Proper treatment will be necessary.

Controlling the Spread of the Infection

Head lice move away quickly as the hair is parted. Eggs will be easier to see as they will be firmly attached to the hair. A good light and a magnifying lens will help you find and identify lice. Discarded skins and black sandy excrement may be seen on pillows and collars. Educate the children, child car workers and parents about head lice and why personal items (like hats) should not be shared. The local health authority will help with this.

Dry clean clothing and bedding or launder them in hot water for a minimum of 20 minutes. This should be done both at the centre and at home.

Ironing clothes and drying clothes in hot clothes dryer are also effective ways of killing lice.

Place all items that cannot be washed or dry cleaned in a plastic bag for 3-4 days.

Vacuum or gently iron carpet and furniture. Do not spray them with insecticide.

Wash and clean combs and brushes with detergent and hot water.

Treatment

The best treatment for head louse infestation is not clear. The options include

- Insecticides (pediculicides),
- Physical removal of lice and eggs, and
- Herbal preparation

There is good evidence that pediculicides work, but on a small percentage of lice are resistant to the effect of the chemical. There are no published scientific works about treatment of infestation by herbal preparations or physical removal by combing alone. This means there is no evidence for, or against these approaches. Treatment with an insecticide is recommended and should be aided by physical removal of the eggs. Removal is reported to be the easiest by using ‘wet combing’ that is applying conditioner to wet hair and using a fine-tooth comb to remove eggs and lice. As removal of all eggs is difficult and re-infestation is common, wet combing needs to be done frequently such as every 2-3 days during the outbreak.

There are two types of pediculicides commonly recommended for treating head lice, Maldison (malathion) and permethrin / synthesised pyrethrins. There is no evidence that one is better than another. Neither of these should be used by pregnant women, children under 12 months of age or people with sensitive skin without first consulting a doctor. Because lice have been to shown to develop resistance to some of these preparations, if the infestation is not eradicated after treatment a change to the other preparation may be useful.

Childhood Illnesses

Measles

Description
Measles is a highly infectious and serious viral illness. It begins with fever, tiredness, a cough, a runny nose and inflamed eyes. These symptoms usually worsen over 3 days. The cough tends to be worse ay night. The child may avoid light because the eyes are inflamed. At this stage, there may be small white spots on a red base present in the mouth on the inside of the cheek. Between day 3 and 7, a rash begins at the hair lin. 24-48 hours, this has spread over the entire body. When the rash reaches the legs, the rash on the head and face begins to fade. The rash usually disappears after 6 days. Measles lasts about 10 days. The cough may be the last symptom to disappear. A child with measles usually feels very ill.

In a fairly high number of cases, the measles virus causes serious complications, such as pneumonia or inflammation of the brain. That is why there is much concern about the disease. Measles is not a simple childhood disease.

Incubation Period
8-14 days, usually 10 days.

Infectious Period
About 4 -5 days before the rash begins until the fourth day after the rash appears.

Responsibilities of Child Care Providers and Parents
All children with a fever and a rash should see a doctor.

Keep the child away form other children for at least 4 days after the rash appears.

Before taking a child to a doctor you must ring and inform the health staff that they are bringing a child with suspected measles. Measles can spread very easily to others in a doctor's waiting room.

Controlling the Spread of the Infection
Varicella zoster immunoglobulin (VZIG) may be given to some contacts who are at high risk of complications because of other medical problems. This is not recommended for normal healthy children.

Follow good personal cleanliness practices. Cover the nose and mouth when coughing or sneezing. Dispose of soiled tissues after wiping a runny nose. Wash hands carefully. Do not share eating utensils, food or drinking cups. If there is an outbreak, disinfect mouthed toys after washing them.

Treatment
There is no specific treatment, but calamine lotion or Phenergan may soothe the itch. Use a medicine containing paracetamol to lower the child's temperature or relieve discomfort. Never give aspirin to children who develop fever after exposure to chickenpox. Aspirin appears to increase the risk of Reye's syndrome, a rare but serious disorder characterised by sleepiness and vomiting. Reye's syndrome can lead to coma and death.

Childhood Illnesses

Chickenpox

Description
Chickenpox is a viral illness that comes on suddenly. Symptoms include fever, runny nose, cough, fatigue and a general rash. Each sore begins as a small bump which becomes blister-like for 3-4 days, then leaves a scab. Several crops of these blisters will come out over a period days, so at any one time, the child will have sores in various stages of development. The rash tends to be more noticeable on the trunk of the body than on exposed part of the body. It may appear inside the mouth, on the scalp and in the upper respiratory tract. Chickenpox is highly contagious. It is spread by coughing and contact with a moist rash. One infection gives long-lasting immunity. People rarely get chickenpox twice. Herpes zoster (shingles) is caused by the same virus. It is an eruption in someone who has previously had chickenpox. Direct contact with the moist shingles rash can cause chickenpox in a child who has not already had it.

Incubation Period
13-17 days.

Infectious Period
From two days before the rash appears (that is, during the coughing, runny nose stage) and until all blisters have formed scales or crusts.

Responsibilities of Child Care Providers and Parents
Remind parents that aspirin should not be given. (See below in treatment – Reye's syndrome)

Pregnant women should be advised to avoid contact with chickenpox. Although vaccination for chickenpox during pregnancy is not recommended, the inadvertent administration of the vaccine during early pregnancy is not cause for undue concern.

Advise the parent to keep the child away from other children.

Treatment
None.

Comments
Measles is best prevented through immunisation with the MMR vaccine. Children should be vaccinated twice against these diseases, at 12 months of age and at 4 years old. The vaccine gives lasting immunity.

Childhood Illnesses

Immunisation Schedule

Recommended Australian Childhood Immunisation Schedule

Age	Disease Immunised Against
Birth	Hepatitis B
2 Months	Hepatitis B Diphtheria Tetanus Pertussis/ Whooping Cough (DTPa/HepB), Haemophilis Influenzae type B (Hib), Polio, Pneumococcal
4 Months	DTPa/HepB, Hib, Polio, Pneumococcal
6 Months	DTPa/HepB, Hib, Polio, Pneumococcal
12 Months	Hib, Measles Mumps Rubella (MMR), Meningococcal C
18 Months	Chikenpox (varicella)
4 Years	DTPa, Polio, MMR
12 Years	Chickenpox (for those not vaccinated as children and who have not had the disease), Hepatitis B (for those not vaccinated as children)
15 Years	Adult Diphtheria/Tetanus/Pertussis (dTpa)

For more information about immunisation visit the Immunise Australia website at http://immunise.health.gov.au or call the Immunisation Infoline on 1800 671 811.