

Infections are common in children and often lead to illness. Excluding children from early childhood education and care services while they are sick helps to stop the spread of infection to other children.

Stopping the spread of childhood infections

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Many children first enter early childhood education and care services at a time when their immune systems are still developing. They may not have been exposed to the common germs that cause infections before and they may be too young to be vaccinated against some diseases.

The way that children interact means that diseases can quickly spread in a variety of ways. Children (particularly younger children) will have close physical contact with other children through play; they often put objects in their mouths; and they may not always cover their coughs and sneezes.

Simple steps can reduce the chance that childhood infections spread to other people in the family and in childhood education and care services, and to vulnerable people in the community.

Chickenpox (Varicella)

Chickenpox is usually a mild childhood illness that causes a rash of red, itchy spots that turn into fluid-filled blisters. They then crust over to form scabs, which eventually drop off. Most people recover without complications, but sometimes the infection can lead to serious complications, such as pneumonia and inflammation of the brain.

Early in the illness, the virus is spread by coughing. Later, it is spread by direct contact with the fluid in the blisters.

Children with chickenpox should avoid others by staying at home, cover their coughs and sneezes with a tissue, and wash their hands regularly. Children with chickenpox shouldn't share toys, utensils, food or drinking cups.

Chickenpox is now less common because children are vaccinated at 18 months of age.

Keep at home? **Yes. Children should be excluded until all blisters have dried—this is usually at least 5 days after the rash first appears.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/chickenpox.aspx

Conjunctivitis

Conjunctivitis is a common eye condition where the outer surface of the eye becomes inflamed. This is often caused by an infection (virus or bacteria) and is usually highly contagious.

Conjunctivitis is spread by direct contact with discharge from the eyes, nose or throat of someone with the infection, or by contact with contaminated fingers or objects.

Keep at home? **Yes. Children should be excluded until the discharge from their eyes has stopped.**

More information

See website: www.healthdirect.gov.au/conjunctivitis

Gastroenteritis

Gastroenteritis (or gastro for short) is a bowel infection that causes diarrhoea and sometimes vomiting. Diarrhoea is runny, watery bowel motions. Bouts of gastro can cause dehydration, which can be dangerous for very young babies and young children.

Gastro is spread by contact with the vomit or faeces of an infected person, either directly or by contact with objects, food or drink that have come in contact with vomit or diarrhoea.

Keep at home? **Yes. Children should be excluded until there has not been a loose bowel motion for 48 hours**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/viral-gastroenteritis.aspx

Glandular fever

Glandular fever (also known as infectious mononucleosis) is a common viral infection that can cause fever, a sore throat with exudate (deposits of fluid) around the tonsils and throat, and enlarged lymph nodes (or 'glands').

The symptoms usually develop four to six weeks after infection with the virus. In young children, glandular fever usually causes mild or no symptoms.

Glandular fever spreads through close, personal contact and is transmitted by saliva. Young children can become infected by saliva on toys, shared cups or the hands of carers.

Keep at home? **No. Children do not need to be excluded unless they are sick.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/mononucleosis.aspx

Hand, foot and mouth disease

Hand, foot and mouth disease is a common viral infection. It is not related to the disease in cattle with a similar name (foot-and-mouth disease).

Symptoms of hand, foot and mouth disease include tiny blisters on various parts of the body, including in the mouth, and on the fingers, palms of hands, buttocks, nappy area, soles of the feet, upper arms or upper legs. The blisters last a little longer than a week. Some children may also have a fever, sore throat, runny nose or cough. The most troublesome symptom is often the blisters in the mouth, which make it difficult for the child to eat or drink.

The virus is in the fluid of the blisters and can be spread by becoming airborne during coughing and talking. It's also found in the child's faeces.

Symptoms usually start three to five days after the child is exposed. Careful hand washing especially after wiping nose, using the toilet and changing nappies helps prevent spread.

Keep at home? **Yes. Children need to be excluded until all blisters have dried up.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/handfootmouth.aspx

Head lice

Head lice are insects that live in hair and suck blood from the scalp. They can cause itching of the scalp but they do not cause disease or illness.

Female head lice lay their eggs and glue them to the base of hair shafts, and the eggs hatch after seven to ten days. The immature lice grow into adults and start biting the scalp to feed on blood.

Check your child's head once a week for head lice. If you find any lice or eggs, begin treatment immediately. Check for effectiveness of the treatment every 2 days until no lice are found for ten consecutive days.

Keep at home? **No. Not excluded if effective treatment begins before the next day of attendance. The child does not need to be sent home immediately if head lice are detected.**

More information

See website: www.health.nsw.gov.au/environment/headlice/

Hepatitis A

Hepatitis A is caused by a virus and is highly infectious. The virus grows in the liver and passes into the faeces. It can cause abdominal pain, loss of appetite, nausea, fever and tiredness, sometimes followed by yellow skin and eyes (jaundice), dark urine and pale faeces.

Symptoms can last from one week to several months. Young children may not show any symptoms of the infection.

Hepatitis A is usually spread when virus from the faeces of an infected person is swallowed by another person. In children, the virus can be transferred onto hands and eventually mouth after handling soiled nappies, linen or towels of an infectious person.

Careful hand washing is important to prevent spread. Vaccination may prevent illness if given within two weeks of contact with the infectious person.

Keep at home? **Yes. Children should be excluded until your doctor provides a medical certificate of recovery and until at least 7 days after the onset of jaundice.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/hepatitis_a.aspx

Impetigo (school sores)

Impetigo is a skin infection caused by common skin bacteria, which commonly occurs in young children. Impetigo appears as flat, yellow, crusty or moist patches or blisters on the skin, usually in exposed areas such as the face, arms and legs.

The bacteria can spread by contact with the sores or infected fluid. Because the sores are usually itchy, children can scratch them and spread the infection, via their hands, to other parts of the body or to other people. The infection can also be spread by touching contaminated clothing or other items. The disease is very infectious, but it is not dangerous.

Keep at home? **Yes. Children should be excluded until appropriate antibiotic treatment has started. Any sores on exposed skin should be covered with a watertight dressing.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/impetigo.aspx

Influenza

Influenza ('the flu') is a viral infection that starts in the throat but can cause fever, cough, chills, headache, and muscle aches and pains. The infected person usually recovers in two to seven days.

Flu is very infectious as it can spread through the air by coughing and sneezing, as well as by hands, cups and other objects that have been in contact with an infected person's mouth or nose. Symptoms usually start one to three days after being exposed.

Annual flu shots offer the best protection against flu and they are free for young children aged from 6 months to under five years. Teaching children about covering their coughs and sneezes (including with their elbow if they don't have a tissue), and washing their hands regularly are important ways to prevent the spread of flu and many other diseases.

Keep at home? **Yes. Children should be excluded until they are well again.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/influenza_factsheet.aspx

Measles

Measles is now a rare infection in Australia, but is a highly infectious and serious viral disease. Symptoms include a fever, cough, and sore, red eyes (conjunctivitis). This is followed by a rash of large, flat, reddish blotches that often join up and completely cover the skin. The rash spreads over the entire body, and usually disappears within 6 days.

People with measles are usually infectious from just before the symptoms begin until four days after the rash appears. The time from exposure to becoming sick is usually about 10 days. The rash usually appears around 14 days after exposure.

Children are routinely vaccinated against measles at 12 and 18 months of age.

Keep at home? **Yes. Children should be excluded for at least four days after the rash appears.**

Non-immunised children who are contacts of a measles case are excluded for at least two weeks after they have been exposed to the case. The local public health unit will provide specific advice.

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/measles_factsheet.aspx

Meningococcal disease

Meningococcal infection is caused by a particular group of bacteria which can cause severe infections. Symptoms may include meningitis (infection of the outer lining of the brain and spinal cord), septicaemia (infection of the blood), joint infection, eye infection, pneumonia and rash.

In infants and young children, symptoms can include fever, refusing feeds, fretfulness, vomiting, rash of reddish-purple spots or bruises, high-pitched or moaning cry, or pale or blotchy skin. The child may be difficult to wake.

Symptoms usually begin three to four days after exposure but the illness can then progress very quickly and become life-threatening.

Children are routinely vaccinated against four major strains (ACWY) of meningococcal bacteria at 12 months of age. Vaccines against the B strain of meningococcal disease are available but are not included in the National Immunisation Program schedule.

Keep at home? **Children suspected to have meningococcal disease should get urgent medical attention.**

The local public health unit will provide specific advice about cases and their close contacts.

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/meningococcal_disease.aspx

Molluscum contagiosum

Molluscum contagiosum is a common viral skin infection which causes a rash of pearly, skin-coloured lumps that can appear anywhere. In children, the lumps are mostly on the face, trunk, and upper arms and legs. The lumps are usually small, with a white centre and an indented surface.

The disease is not serious and usually disappears on its own but this may take several months.

The virus spreads by direct skin-to-skin contact, especially where there are minor breaks in the skin, and is most common in children. Symptoms usually take from two to seven weeks to appear.

Direct contact with the lumps should be avoided but they do not need to be covered up. Good hygiene including regular hand washing should be encouraged.

Keep at home? **No. Children do not need to be excluded.**

More information

See website: www.healthdirect.gov.au/molluscum-contagiosum

Mumps

Mumps is an infection caused by a virus that is now uncommon in Australia due to immunisation. About one-third of people with mumps will have only mild symptoms or no symptoms at all.

When symptoms do occur, they include swelling of glands around the jaw (the salivary glands), high fever and headache. Boys may have tender testicles, and girls may have pain in the lower abdomen.

The virus spreads by direct contact with droplets from the sneeze or cough of an infected person. Susceptible people usually develop symptoms about two weeks after being exposed.

Children are routinely vaccinated against mumps at 12 and 18 months of age.

Keep at home? **Yes. Children should be excluded for nine days from the onset of swelling.**

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/mumps.aspx

Ringworm

Ringworm is the name for a tinea fungal infection when it occurs on the scalp or body. It is called 'athlete's foot' if it is between the toes or on the feet, and 'jock itch' if it is in the groin. Despite the name, no worms are involved.

Fungal infections on most areas of skin appear as a flat, spreading, ring-shaped scaly patch. The outer edge is usually reddish. The area often contains fluid, including pus, but may be dry and scaly, or moist and crusted.

The germ spreads by direct skin contact or by touching contaminated clothing or other articles, infected animals or contaminated soil. Children are infectious as long as the condition persists or until treatment has started. Good hand hygiene reduces the risk of spread.

Keep at home? Yes. Children should be excluded until the day after anti-fungal treatment has started.

More information

See website: www.healthdirect.gov.au/ringworm

Rubella (German measles)

Rubella is a viral illness that causes a mild fever, runny nose, swollen glands (lymph nodes) and a pink blotchy rash that lasts a short time. Some people have no symptoms.

Unfortunately, rubella can cause serious harm (birth defects) to unborn babies if pregnant women are infected, particularly during the early stages of pregnancy.

Rubella is now very rare because children are vaccinated at 12 and 18 months of age.

Keep at home? Yes. Children should be excluded until fully recovered or for at least 4 days after the rash appears.

More information

See factsheet: www.health.nsw.gov.au/Infectious/factsheets/Pages/rubella-german-measles.aspx

Scabies

Scabies are tiny mite creatures (bugs) that burrow under the skin causing intense itching and sometimes a rash. The rash is due to an allergic reaction to the mite. Scabies tends to be worse around wrists, armpits, buttocks, and the groin and between fingers and toes.

Scabies is highly contagious and is passed from person to person through close skin contact. Infestation may also occur by sharing clothing, towels, and bedding. Symptoms usually appear two to six weeks after exposure.

Scabies are easily treated with gentle scrubbing of the skin followed by drying and applying permethrin cream or lotion that you can buy from pharmacies. People who have had close contact with an infected child should be examined for infestation and be treated if necessary. Wash linen, towels and clothing worn in the past 2 days in hot water and detergent.

Keep at home? Yes. Children should be excluded until the day after appropriate treatment has started.

More information

See website: www.healthdirect.gov.au/scabies

Scarlet Fever

Scarlet fever is a type of bacterial throat infection that also causes a red (scarlet) rash. It usually affects school-aged children aged 5 to 15 years. Symptoms of scarlet fever usually appear between 1 and 3 days after infection and include a very red sore throat, swollen glands and fever. The rash usually starts about 12 to 24 hours after the other symptoms start.

Treatment with antibiotics means most people recover in about a week, but left untreated it can spread to other parts of the body and cause serious health problems.

To avoid giving it to other people, children should cover their nose and mouth when coughing or sneezing, and wash their hands regularly.

Keep at home? Yes. Children should be excluded until the day after appropriate antibiotics have been started and the child feels better.

More information

See website: www.healthdirect.gov.au/scarlet-fever

Slapped Cheek

Slapped cheek disease (also known as Fifth disease) is a fairly mild viral illness caused by a parvovirus (B19). It gets its name from its most obvious symptom – a red rash that makes children's cheeks look like they've been slapped. Other symptoms include a mild fever, an itchy lace-like rash, and possibly cough, sore throat or runny nose.

Parvovirus B19 can rarely cause problems for unborn babies during pregnancy. Most pregnant women have been exposed to the virus as a child and so are not susceptible, and even when infection occurs most pregnancies are unaffected.

Slapped cheek is spread through the air by coughing and sneezing, as well as by hands, cups and other objects that have been in contact with an infected person's mouth or nose. People usually stop being infectious once the rash appears.

To avoid giving it to other people, children should cover their nose and mouth when coughing or sneezing, wash their hands regularly, and avoid sharing drinks.

Keep at home? No. Children do not need to be excluded.

More information

See website: www.healthdirect.gov.au/scarlet-fever

Whooping Cough

Whooping cough (pertussis) is a highly infectious disease caused by infection of the throat with the pertussis bacteria. It affects infants, children and adults. The disease usually starts like a cold, with a runny nose, tiredness and sometimes a mild fever. A cough then develops, usually in short bouts followed by a deep gasp (or 'whoop'). Not every person makes the whooping sound—this is more common in non-immunised children. The cough can last up to 3 months.

Young infants may stop breathing and sometimes turn blue. Adolescents and adults may just have a persistent cough. One in four children will also develop pneumonia; some have fits (convulsions); and some may develop inflammation of the brain (encephalitis).

Whooping cough is particularly serious in children under 12 months of age, and hospitalisation is often necessary.

Whooping cough spreads by airborne droplets. It can also spread through contact with surfaces that have been contaminated by infectious airborne droplets (e.g. hands, tissues, toys, eating utensils). Symptoms usually start nine to 10 days after exposure.

Vaccination is the best way to protect against whooping cough. Children are immunised at 6 weeks, 4, 6 and 18 months and 4 years of age. Specific antibiotics are used to treat whooping cough and may be recommended for some people that have been in close contact to help prevent infection.

Keep at home? Yes. Children should be excluded for 21 days from the start of their symptoms, or until they have taken an appropriate antibiotic for at least 5 days.

More information

See website: www.health.nsw.gov.au/Infectious/factsheets/Pages/pertussis.aspx

Further information

For further information please call your local Public Health Unit on 1300 066 055 or visit the NSW Health website: www.health.nsw.gov.au

Other sources of information:

- HealthDirect website: <https://www.healthdirect.gov.au/>
- *Staying Healthy - Preventing infectious diseases in early childhood education and care services*. (5th Edition). National Health and Medical Research Council (NH&MRC): www.nhmrc.gov.au/about-us/publications/staying-healthy-preventing-infectious-diseases-early-childhood-education-and-care-services.