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Preventing infectious diseases in early childhood education and care services

NHMRC

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Acknowledgements

Staying Healthy Advisory Committee: Professor Chris Blyth (Chair), Dr Ruby Biezen, Professor Allen Cheng, Dr Celia Cooper, Professor Mark Ferson, A/Professor Amanda Gwee, Dr Briony Hazelton, Ms Miranda Ihanimo, Ms Rhonda Livingstone, Ms Samantha Page, Ms Leeanne Pena, Emeritus Professor Malcolm Sim AM, Dr Gabriela Willis

NHMRC Project Team: Ms Alice Downing, Ms Stephanie Goodrick, Ms Margie Morrison, Ms Sharon Hoffman, Ms Sara Lai, Mr Geraint Duggan

Writers and editors: Biotext Pty Ltd
Research: Health Technology Analysts Pty Ltd
Design: Leading Hand Design Pty Ltd

Contact us

For information about NHMRC publications or to submit a copyright request, contact:

E: communications@nhmrc.gov.au
P: (02) 6217 9000

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Introduction

This section introduces the *Staying healthy* guidelines and the roles and responsibilities of early childhood education and care services in preventing infection.

- The *Staying healthy* guidelines
- Early childhood education and care services

The *Staying healthy* guidelines

Purpose

Staying healthy: Preventing infectious diseases in early childhood education and care services is a best-practice resource that provides simple and effective ways for education and care services to help limit the spread of infectious diseases.

Infections are common in children and often lead to illness. At home, children are reasonably well protected from infectious diseases because they come into contact with fewer people than they would at education and care services. The adults they meet are usually immune to many childhood diseases because they had these infections as children or have been vaccinated against them.

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

The way children interact in education and care services means that diseases can quickly spread. Children (particularly younger children) have close physical contact with other children, educators and other staff through regular daily activities and play. They often put objects in their mouths, and even older children are only starting to learn about health and hygiene practices (for example, they may not always cover their mouth and nose when coughing or sneezing).

This means that actions to limit the spread of infections in education and care settings are an important part of protecting children and their families. They also help to prevent infections in educators and other staff, and are part of an employer's responsibility to employees (see Workplace health and safety). Further, these actions reduce the spread of disease in the wider community.

Following best-practice principles and maintaining high standards of hygiene reduces the spread of infectious diseases and promotes good health and safety practices. It is important for all staff in education and care services to lead by example to ensure that educators and other staff, children, visitors and families all remember to practice effective infection prevention and control.

Scope

The advice in the sixth edition of *Staying healthy* is drawn from established guidelines that are regularly updated using the principles of evidence-based medicine (including the Australian guidelines for the prevention and control of infection in healthcare). It also updates and builds on advice in previous editions of *Staying healthy*. It is designed to be used by anyone educating and caring for children – the term 'education and care service' includes long day care, family day care, preschool, kindergarten and care outside school hours.

The scope of *Staying healthy* is to provide advice on infectious diseases in children up to school age, and for children attending care services outside school hours, from a public health perspective. It is intended to help reduce the spread of infections that can affect children, educators and other staff, families and friends, and service visitors. This is particularly important if family members, children or other people in the wider contact circle have underlying health conditions.

It is not intended as a guide to managing individual children who are sick.

The key principles of infection prevention and control apply across age groups and the disability sector. However, it is recognised that the risks and issues depend on the age, abilities and

developmental capacity of the children. These variations in risks and issues are not considered in this edition of *Staying healthy*.

Education and care services vary widely, and there is more than one way to do a procedure or maintain a healthy environment. *Staying healthy* is a best-practice resource that explains the rationales behind procedures and why each step is important.

This enables education and care services – including approved providers, service leaders, educators and other staff – to interpret and adapt advice to make informed decisions that meet the regulatory requirements and quality standards that apply to their service environment and the children attending the service. They can identify the most effective strategies, policies and procedures to implement and to respond to issues as they arise.

This edition also includes scenarios based on real-life situations that illustrate the key messages and appropriate actions to take.

Alignment with the National Quality Framework

The National Quality Framework (NQF) was developed to support quality improvement in education and care services across Australia. The Australian Children's Education and Care Quality Authority (ACECQA) works collaboratively with the Australian, state and territory governments and guides the implementation of the framework in the education and care sector in Australia. ACECQA has policy guidelines for education and care services about dealing with infectious diseases.

Staying healthy is aligned with the NQF Education and Care Services National Law and Education and Care Services National Regulations, particularly Chapter 4 – Operational requirements, which outlines the requirements for children's health and safety (Part 4.2), physical environment (Part 4.3) and policies and procedures (Part 4.7, Division 2).

In addition to the National Law and Regulations, the NQF includes the National Quality Standard (NQS). Under these legislative and quality standards, providers, service leaders, educators and other staff must implement and promote effective hygiene practices to safeguard the health and wellbeing of children attending the services.

All quality areas from the NQS have been considered in this edition of *Staying healthy*:

- Quality Area 1 – 'Educational program and practice' includes a framework to guide learning and development outcomes
- Quality Area 2 – 'Children's health and safety' includes standards for hygiene and infection control in education and care services
- Quality Area 3 – 'Physical environment' includes standards to ensure that the physical environment in education and care services is safe and suitable
- Quality Area 4 – 'Staffing arrangements' includes professional standards for staff practices
- Quality Area 5 – 'Relationships with children' includes standards about positive educator and child interactions
- Quality Area 6 – 'Collaborative partnerships with families and communities' includes standards to help services develop productive relationships with families
- Quality Area 7 – 'Governance and leadership' includes the policies and procedures that education and care services must have in place.

The guidance provided in *Staying healthy* is also applicable to centre-based and in-home care services that may be out of the scope of the NQF.

What's changed since the fifth edition

The sixth edition of *Staying healthy* combines new evidence and perspectives from the past 10 years to inform the update of the guidelines.

The guidelines continue to meet the National Health and Medical Research Council (NHMRC) standard for guidelines. General service practices have not changed between the fifth and sixth editions, but guidance has been updated and expanded throughout to capture new evidence and ensure the guidance is comprehensive and clear. Improvements have been made to the structure and language to ensure users can easily find and understand the information. The structure has been updated to remove repetition and consolidate information. Parts of the guidelines have been renamed so service providers can easily find information.

Following the COVID-19 pandemic, information on the use of gloves, ventilation, hand hygiene and cleaning practices has been updated to ensure the content is clear and easy to implement in education and care services. The guidelines contain 5 recommendations on specific issues.

In the sixth edition, the scenarios used in the fifth edition have been updated to align with new advice. Some new scenarios have been added. These may help service providers implement the guidance.

In response to community comments and enquiries received by NHMRC on the fifth edition, fact sheets on symptoms and diseases have been added to the guidelines. Both fact sheet format and content have been updated to present clear information about symptoms and conditions for educators and other staff, parents and carers. This includes exclusion recommendations.

The new fact sheets for symptoms are:

- Diarrhoea or vomiting (gastroenteritis)
- Eye discharge
- Fever
- Rash
- Respiratory symptoms.

The new fact sheets for specific conditions are:

- Asthma
- COVID-19
- Human metapneumovirus
- Pneumonia
- Hepatitis E
- Typhoid and paratyphoid fever
- RSV (respiratory syncytial virus)
- Shingles
- Trachoma.

Summary of key recommendations

As well as the overall guidance in *Staying healthy*, the Staying Healthy Advisory Committee developed key practice recommendations through an evidence-to-decision (EtD) process. Full details on the EtD process, including the evidence that was considered to develop the recommendations, can be found in the Technical Report.

Each recommendation should be considered together with the accompanying information and advice – see links to the relevant part of the guidelines.

The key recommendations in the sixth edition of *Staying healthy* are:

- All educators and other staff and children should do hand hygiene regularly.
  (Part 2 – Preventing infection)
- Infection control practices should be used when children's nappies are changed.
  (Part 2 – Preventing infection)
- Routine environmental cleaning should be done daily and when surfaces are visibly dirty.
  (Part 3 – A healthy environment)
- Cleaning with specific products should be done after any spills of body fluids (urine, faeces, mucus, saliva, vomit, blood, breastmilk).
  (Part 3 – A healthy environment)
- Educators and other staff and children who show symptoms of infectious disease should be excluded from the service.
  (Part 4 – Managing infection)

Early childhood education and care services

Responsibilities of services in infection control

Every education and care service must ensure that risks associated with infection are prevented or minimised as far as is reasonably practical. This includes having strategies to:

- prevent or minimise exposure to infectious diseases
- safely store and minimise exposure to chemicals used to manage infection risks
- ensure that infection control practices are implemented and maintained.

Workplace health and safety

Workplace health and safety legislation in Australian states and territories places a duty of care on people conducting a business. This duty of care is to ensure the health and safety of workers and others as far as is reasonably practical, including where there is potential for the spread of infectious diseases. Education and care services should monitor, manage and minimise risks for managers, educators, other staff and students in their workplace.

All managers, educators, students, volunteers and other staff and contractors (including cooks, cleaners and administrative staff) should be aware of the service's policies on health and safety and their own duty to contribute to a safe work environment. This includes following appropriate infection control and immunisation policies as part of their employment and reporting their infectious status. If educators or other staff are feeling sick because of an infection or infectious disease, they should not be at work (see section 4.2 If a staff member is sick).

People at the service who are pregnant or are planning on becoming pregnant – including educators, other staff and visitors to the service such as family members – must be aware that some infections can affect pregnancy and their unborn child, and take appropriate action (see section 2.8 Protecting pregnant staff and visitors).

Volunteers and students on placements in education and care services should also be aware of and follow all policies and procedures, including the service's policies on immunisation, hand hygiene, nappy changes and infectious diseases.

Education and care services should regularly review and update their policies and procedures to reflect changes in staff and the circumstances of the service. Contact your work health and safety authority for more information on what is required in your jurisdiction:

Australian Capital Territory	WorkSafe ACT
New South Wales	SafeWork NSW
Northern Territory	NT WorkSafe
Queensland	Workplace Health and Safety Queensland
South Australia	SafeWork SA
Tasmania	WorkSafe Tasmania
Victoria	WorkSafe Victoria
Western Australia	WorkSafe Western Australia

Responsibilities of management and staff

Infection control is a shared responsibility. Management (including approved providers, service leaders and managers) and staff (including educators, other staff and volunteers) all have roles to play.

To reduce the risk and spread of infectious diseases, approved providers, service leaders and managers should:

- ensure that clear policies and procedures, informed by guidance from recognised authorities, are established and communicated to educators and other staff, including by
  - ensuring policies are easily accessible and understood
  - providing supporting documentation and resources
  - providing information in various formats in the language(s) used in the community; for example, by using photographs, infographics, audio and video recordings, posters, information sheets, checklists and templates
  - including health and safety policies and responsibilities in new employee induction processes
- regularly seek feedback from employees about health and safety policies and procedures to identify areas for improvement and opportunities to strengthen best practice (for example, by dedicating time for discussion during team meetings)
- regularly monitor the health and safety procedures used across the service, and audit compliance with them
- support educators and other staff to comply with policies and procedures, including by identifying reasons for noncompliance and supporting quality improvement actions
- provide educators and other staff with regular and ongoing learning opportunities (and dedicated time) to ensure their knowledge, understanding and application of best practice on health and safety is up to date and informed by recognised authorities (such as Australian, state or territory health departments)
- embed and discuss implementation of health and safety policy and procedures as part of regular performance reviews
- communicate with and seek input from families about the service's health policies and procedures
- share policies and health information with families in their own language(s) and in various formats; for example, by using photographs, infographics, audio and video recordings
- keep families informed of updates and changes to policies and procedures before they are implemented (in line with regulation 172 of the National Education and Care Services Regulations).

To reduce the risk and spread of infectious diseases, educators and other staff should:

- be familiar with, regularly refer to and comply with the *Staying healthy* guidelines
- follow immunisation guidance and requirements
- follow all service policies and procedures related to infection prevention and control
- stay home if sick
- actively participate in reviews of the service's health and safety policies and procedures and discuss with service leaders any concerns or opportunities for improvement that they identify in the service and its procedures
- actively participate in professional development and learning opportunities on health and infection control.

PART 1

UNDERSTANDING INFECTION

This section explains infections, their causes, and how you can break the chain of infection.

1.1 How infections occur

1.2 Breaking the chain of infection

1.1 How infections occur

An infection occurs when harmful germs (microorganisms) enter the body, multiply and cause disease.

The chain of infection refers to how germs spread (Figure 1.1). When an infection occurs, three things are involved:

- **the source** – the germs and where they live
- **spread** – how the germs get out of one person and move to a new person
- **the new host** – a susceptible person (someone who can be infected) with a way for the germs to get in.

All the steps in the chain need to occur for germs to spread from a source to a susceptible person. By breaking the chain at any stage, you can prevent the spread of infection.

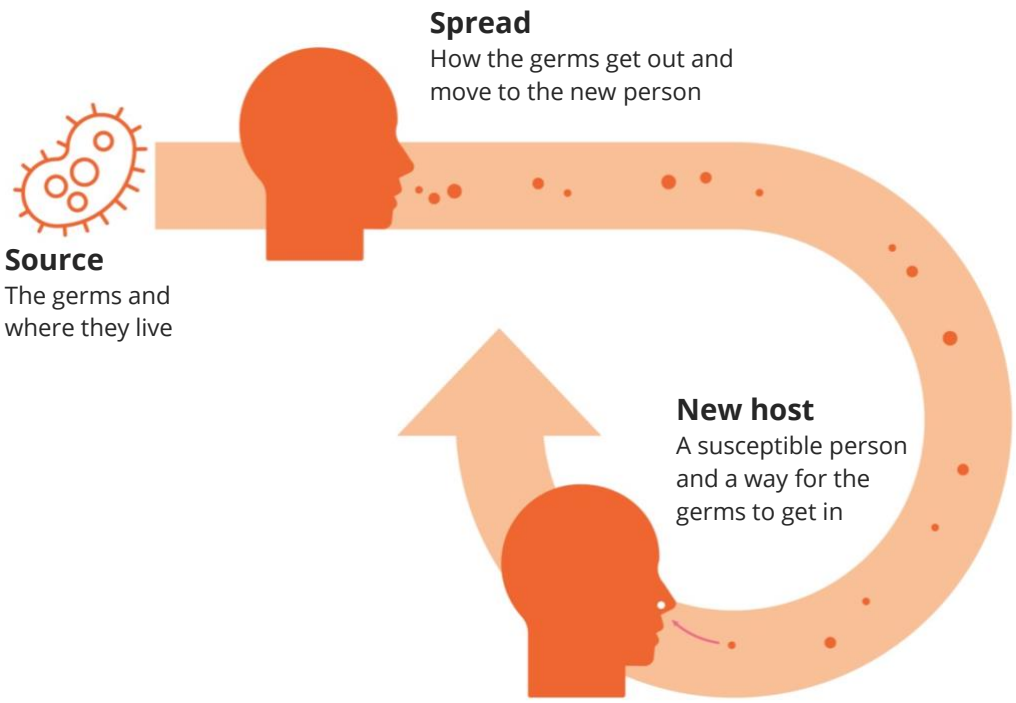

Figure 1.1 The chain of infection

Source

There are 3 major types of harmful germs responsible for human infections: bacteria, viruses and fungi. Parasites can also cause disease or other negative effects in humans.

- Bacteria are found almost everywhere, including in and on the human body. Most bacteria live in close contact with us and our environment without causing any harm. Some are even good for us – good bacteria live in our intestines and help us digest our food. But some bacteria can infect the body and cause disease. Bacterial diseases include streptococcal sore throat, impetigo (school sores), whooping cough (pertussis) and meningococcal infection.
- Viruses can only grow and reproduce inside other living cells. Viruses cause diseases such as the common cold, flu, COVID-19, gastroenteritis, chickenpox (varicella) and measles.
- Fungi generally do not cause disease in humans. However, some can cause skin and soft-tissue infections such as tinea corporis (ringworm), tinea pedis (athlete's foot) and candida (thrush). Some fungi may also cause serious infections in people with compromised immune systems.
- Parasites are organisms that live off or in another organism. Parasites can be harmful to humans and can cause diseases. Most parasites that cause disease in humans come from one of 3 categories.
  - Protozoa are single-celled organisms. Those that cause gastroenteritis usually live in water (for example, cryptosporidium and giardia).
  - Ectoparasites live on the surface of the human body (for example, infestations of scabies and head lice). These parasites can cause a local reaction that leads to itching.
  - Helminths are parasitic worms (for example, pinworm and roundworm). They can cause intestinal infections in humans.

Bacteria, viruses, fungi and parasites live in humans, animals, insects and the environment. These can all be sources of infection.

Generally, people are most infectious when they are sick and showing symptoms (for example, sneezing, coughing, vomiting or having diarrhoea). But not all people with infection show symptoms of illness. They may be infectious before they become sick, during their illness or after they have recovered.

An example is gastroenteritis. Children, educators and other staff who no longer have diarrhoea may still shed germs in their faeces for some time. Although this means they are still a potential source of infection, the spread of disease can be prevented if everyone in the education and care service follows good infection control practices.

Spread

Germs spread in several ways.

First, germs get out of their current host – for example, through saliva or cuts in the skin. They then travel to a new host. The ways that germs travel are known as their modes of transmission. Several modes of transmission are likely in education and care services.

- **Exposure to coughing or sneezing (droplet transmission)** – When an infected person sneezes or coughs, tiny droplets spray from their nose and mouth. These droplets can spread up to 2 metres before dropping to the ground. The droplets may land on the mouth or nose of another person if they are close to the source, or a person may touch a surface contaminated with the droplets, then touch their mouth, eyes or nose. Droplets help spread many viral diseases such as the common cold, as well as bacterial diseases such as whooping cough and meningococcal infection.
- **Breathing contaminated air (airborne transmission)** – Airborne (or aerosol) transmission is due to germs in very small particles that are so light they remain suspended in the air for a long time. These particles are created when an infected person breathes, talks, sings, coughs or sneezes. The particles can be carried in the air for long distances, so they can infect people who have not had close contact with the source. Examples of airborne germs include the measles virus, the chickenpox (varicella) virus and COVID-19.
- **Direct contact (contact transmission)** – Some germs or parasites can spread through touch. These include head lice (head-to-head contact) and bacterial and fungal infections of the skin (skin-to-skin contact). Germs and parasites can also spread through contact with body fluids, such as urine, faeces, mucus, saliva, vomit, blood and breastmilk. They can enter the body by contact with the eyes, nose, mouth or broken skin.
- **Indirect contact** – Surfaces such as benches, tables, door handles, toys and toilets can be contaminated when a person with an infectious disease touches them, or coughs or sneezes on them. If a person touches a contaminated surface and then touches their mouth, eyes or nose, they can become infected.
- **Animals** – Contact with animals can spread disease. Germs can be present on the skin, hair, feathers and scales of animals, and in their faeces, urine and saliva. These germs may not cause disease in the animal, but they may cause disease in humans. Some germs can multiply in insects such as mosquitoes, fleas and ticks and spread through the insect's bite. Insects that carry the germs are known as 'vectors'.
- **Food** – Food can be contaminated when a person with an infectious disease touches, coughs or sneezes on it. Food can also be contaminated at any point along the supply chain (farm, production, transport and preparation). If the food is not stored or heated or chilled properly, the germs can multiply in the food and spread to people who eat it, causing disease.

New host

When the germ has reached another person, it may enter the body through the mouth, nose, eyes or broken skin. Whether a person becomes sick after the germ has entered the body depends on both the type of germ and the person's immunity.

People with weakened immune systems may develop severe diseases from germs that may be harmless or cause only mild infections in people with normal immune systems.

Vaccination helps the immune system to fight certain diseases (see section 2.1 Immunisation). It can either prevent the disease from developing or reduce the severity of disease. Ensuring vaccinations are up to date gives the best protection against these diseases.

How infections spread in education and care services

The way that children interact with each other and with adults in education and care services means that diseases can quickly spread. Children, especially younger children, have close contact with other people through playing or care and comfort routines. They often put objects in their mouths, and they do not always cover their mouth and nose when coughing or sneezing. Because some harmful germs can survive on surfaces, children may touch a contaminated surface, then put their hands in their mouth and become infected.

1.2 Breaking the chain of infection

Infection control practices are actions that can break the chain of infection (Figure 1.2).

The most important actions to break the chain of infection and stop the spread of diseases are:

- **personal strategies** – actions you can take for yourself or in interactions with other people (see Part 2 Preventing infection)
  - immunisation
  - hand hygiene
  - respiratory hygiene
  - wearing gloves and masks
  - nappy changing and toileting
  - safely dealing with wounds and body fluids
  - taking care with animals
  - protecting pregnant staff and visitors
- **environmental strategies** – actions you can take to improve the environment (see Part 3 A healthy environment)
  - ventilation
  - cleaning
  - food safety
- **exclusion** – action to limit infection sources (see Part 4 Managing infection).

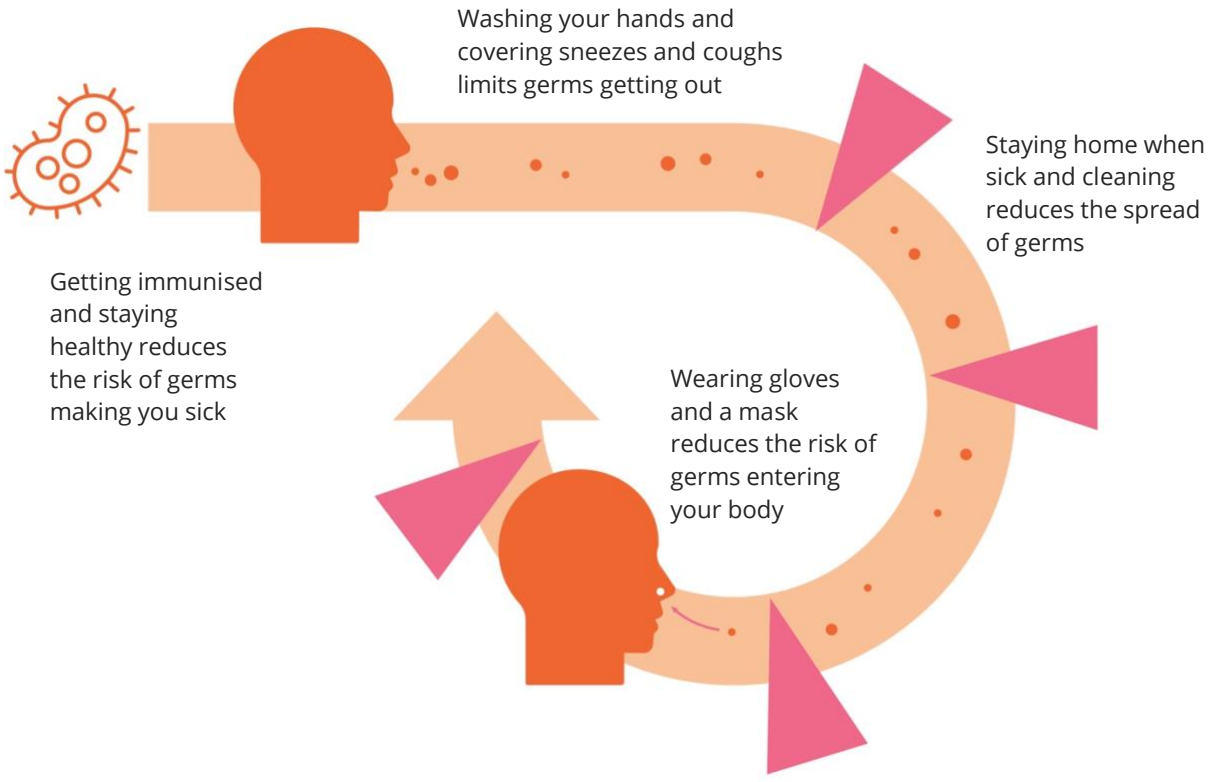

Figure 1.2 Examples of infection control practices to break the chain of infection

For many diseases, you may need to use several infection control practices to reduce the risk of spreading. For example, for respiratory viruses, practices include all the recommended personal strategies plus good ventilation and frequent cleaning of surfaces, toys, kitchens and bathrooms. Mask use may be mandated or recommended by public health authorities if there is an outbreak of certain diseases.

Always following all the recommended practices to break the chain of infection, and using extra protection when required, is the best way to prevent spread of infections in education and care services.

These are practices that everyone can follow to reduce the risk of infection for themselves and those around them, but children or infants may not be able to maintain hygiene standards on their own. Educators and other staff must help children with toileting, hand hygiene and respiratory hygiene.

Educators and other staff should also be aware of their own hygiene practices so they can model safe behaviours to children. Early childhood education and care settings provide great opportunities to teach or reinforce good hygiene habits in children and give them lifelong habits that will reduce the spread of infection in our communities.

PART 2

PREVENTING INFECTION

This section guides you through the actions you can take for yourself or in interactions with other people to prevent infections spreading. Good personal habits are key to reducing the spread of infection.

2.1 Immunisation

2.2 Hand hygiene

2.3 Respiratory hygiene

2.4 Wearing gloves and masks

2.5 Nappy changing and toileting

2.6 Safely dealing with wounds and body fluids

2.7 Contact with animals

2.8 Protecting pregnant staff and visitors

2.1 Immunisation

Immunisation is an effective way to prevent some infections. Immunisation uses a vaccine – often a dead or modified version of the germ – to trigger an immune response against a specific disease.[1] This means the person's immune system responds in a similar way to how it would if they had the disease, but with less-severe symptoms. If the person comes in contact with that germ in the future, their immune system can respond quickly to prevent the person becoming sick.

Immunisation can also protect people who are not immunised, such as children who are too young to be immunised, or people whose immune systems did not respond to the vaccine. This is because the more people who are immunised against a disease, the lower the chance that a person will ever meet someone who has the disease. The chance of an infection spreading in a community decreases as more people are immunised. Immune people are less likely to become infected, and this protects vulnerable people – this is known as 'herd immunity'.

In certain situations, including outbreaks of some diseases in education and care centres, a vaccine can be offered to people after they have been exposed to the disease to reduce the risk of them getting the disease. Your local public health unit can offer specific advice if this happens. However, this is only used in special circumstances – immunising people before they come into contact with a disease is far more effective.

A note about the terms

Both 'immunisation' and 'vaccination' are often used to mean the process of receiving a vaccine to create immunity.

The 2 terms have slightly different meanings:

- Immunisation is the process of inducing immunity to a specific germ by giving a vaccine or antiserum, or gaining antibodies by having the disease.
- Vaccination is the administration of a vaccine. If vaccination is successful, it results in immunity.

In this guide, we have used 'immunisation' to talk about the general process, and 'vaccination' to talk about specific vaccines and receiving a vaccine.

[1] Department of Health and Aged Care (2018). Fundamentals of immunisation, in the Australian Immunisation Handbook, Australian Government, Canberra.

Immunisation for children

The National Immunisation Program Schedule provides a list of the vaccines currently recommended for all children. Additional vaccines are recommended for Indigenous children in specific jurisdictions and for children with specific medical conditions.

The Australian Technical Advisory Group on Immunisation (ATAGI) recommends annual immunisation against influenza for all people aged over 6 months to prevent influenza infection and complications associated with influenza infection.[2] Immunisation against COVID-19 is recommended for all people aged over 5 years and for immunocompromised children aged over 6 months.[3]

The service should ask all parents and carers to provide a copy of their child's immunisation record when they enrol in the service. The Australian Immunisation Register maintains national records for all people vaccinated in Australia. The record is known as the 'Immunisation History Statement' and parents and carers can get a copy of the child's statement from the Australian Immunisation Register. Check the statement and talk to the parents or carers about ensuring the child has received all the vaccinations recommended for their age group.

It is a good idea to check the National Immunisation Program Schedule and your state or territory health department's website regularly (for example, once a year) for any changes to the immunisation schedule.

Children who are not fully immunised

Children may be defined as not fully immunised because they:

- have not received any vaccinations under the National Immunisation Program Schedule
- have not received all recommended doses of a vaccine appropriate to their age according to the National Immunisation Program Schedule
- have only been naturopathically or homeopathically vaccinated (this is sometimes called 'not medically vaccinated'). This is because naturopathic or homeopathic vaccinations are not effective.

Under the national No Jab No Play, No Jab No Pay legislation, for a family to receive family tax benefits or fee assistance, the children must be fully immunised or have a medical reason certified by an approved immunisation provider not to be immunised or not to have certain vaccines.

Additionally, in some jurisdictions, children must be fully immunised or have a medical reason not to be immunised to attend education and care services. Check the No Jab No Play, No Jab No Pay legislation for the rules in your state or territory.

If children who are not fully immunised are able to attend education or care services in your state or territory, they should still be excluded from the service during outbreaks of some infectious diseases (such as measles and whooping cough), following advice from your local public health unit. Discuss with the parent or carer that their child may need to be excluded during such events, even if their child is well, because they may be at risk of infection.

The service's immunisation policy should clearly describe rules around immunisation and exclusion (see Involving parents and carers in section 4.3).

[2] ATAGI (Australian Technical Advisory Group on Immunisation) (2022). Statement on the administration of seasonal influenza vaccines in 2022, Australian Government, Canberra.
[3] Department of Health and Aged Care (2023). COVID-19, in the Australian Immunisation Handbook, Australian Government, Canberra.

Encourage immunisation

Encourage parents and carers to immunise their children by:

- putting up wall charts about immunisation in rooms
- putting a message about immunisation at the bottom of receipts and newsletters.

When enrolling children, education and care services should ask for immunisation records and make a note of when the child will need updates to their vaccinations. At least annually, check for children who are behind in their vaccinations, discuss with their parents or carers and update their records. The child may need 'catch-up' vaccinations to get up to date – you can suggest parents and carers talk to their child's doctor about a catch-up schedule.

Refer parents and carers to their doctor, the Australian Immunisation Handbook and the No Jab No Play, No Jab No Pay legislation if they have any concerns.

Managing symptoms after vaccination

Vaccinations can cause several common side effects in the hours and days after vaccination, which you may see in children in your care. These are usually mild and do not last long. Treatment is not usually needed.

The Australian Immunisation Handbook provides an up-to-date comparison of the effects of diseases and the side effects of vaccines on the National Immunisation Program.

Managing injection site discomfort

Many vaccine injections can cause soreness, redness, itching, swelling or burning at the injection site for 1–2 days. Paracetamol can ease this discomfort. Sometimes a small, hard lump may persist for weeks or months. This should not cause concern and does not need treatment.

Managing fever after vaccination

If a child develops a fever after a vaccination, give them extra fluids to drink and do not overdress them if they are hot. It is not generally necessary to give children paracetamol or ibuprofen at the time of vaccination, but it may be needed if a child has a fever and discomfort afterwards. Check that the parent or carer has given permission for their child to be given medication. Follow the instructions on the label carefully.[4]

If a child is sick after vaccination, monitor them carefully (see section 4.1 If a child is sick). They may be sick because of another condition.

[4] MedicineWise (2022). Treating my child's pain or fever – paracetamol or ibuprofen? National Prescribing Service, Canberra.

Immunisation for adults

It is vital that educators and other staff are up to date with their vaccinations

Immunisation protects not only staff, but also the children they work with, who may be highly vulnerable to vaccine-preventable disease.[5] Regularly check the National Immunisation Program Schedule and your state or territory health department's website for any changes to the vaccinations available for adults.

All educators and other staff should be vaccinated according to the recommendations in the Australian Immunisation Handbook. This includes additional vaccines recommended for people at occupational risk, including those working in children's education and care.

This is based on the Australian Guidelines for the Prevention and Control of Infection in Healthcare, which recommend:

'that all healthcare workers to be vaccinated in accordance with the recommendations for healthcare workers in the Australian Immunisation Handbook. Note: The advice reflects recommended practice supported by strong evidence. Healthcare facilities must also consider relevant state, territory and/or Commonwealth legislation regarding mandatory vaccination programs for healthcare workers'.

Service requirements

Approved providers and service leaders have a duty of care to ensure the workplace health and safety of educators, other staff and others in the workplace such as children, parents and carers, as far as is reasonably practical. This includes managing their risk of exposure to diseases that can be prevented by immunisation and other infection control practices. Immunisation of educators and other staff is an effective way to manage the risk of exposure because many diseases are infectious before the onset of symptoms.

Employers should:

- develop a staff immunisation policy, in consultation with staff, that states the immunisation requirements for educators and other staff
- require all new and current staff to provide a copy of their Immunisation History Statement, which is available from the Australian Immunisation Register, and update as required
- provide staff with information about vaccine-preventable diseases – for example, through in-service training and written material, such as fact sheets
- refer staff to the Australian Immunisation Handbook for further information, or to their general practitioner to discuss any concerns they have about vaccination
- take all reasonable steps to encourage staff who are not vaccinated according to the National Immunisation Program to be vaccinated. Advice given to educators and other staff, and any refusal to comply with vaccination requests, should be documented.

[5] Department of Health and Aged Care (2022). About immunisation, Australian Government, Canberra.

If any educators and other staff are not vaccinated according to the National Immunisation Program, they increase the risk that children – especially infants – may be infected with a vaccine-preventable disease.

If educators or other staff refuse reasonable requests for vaccination, there may be consequences for their employment. All staff should be advised of potential consequences. These include:

- being restricted to only working with children over 12 months old
- having to take antibiotics during outbreaks of specific bacterial diseases that are vaccine preventable, even if the educator is not sick – this would be at the direction of your local public health unit
- being excluded from work during outbreaks of vaccine-preventable diseases.

Recommended vaccinations for staff

Some occupations are associated with an increased risk of some vaccine-preventable diseases. The Australian Immunisation Handbook recommends that all people who work in children's education and care are vaccinated against:

- whooping cough (pertussis) – Whooping cough vaccination using a dTpa vaccine is especially important for educators and other staff who care for children who are too young to receive all their recommended whooping cough vaccines. Even if the adult was vaccinated in childhood, booster vaccination is necessary because immunity to whooping cough decreases over time.
- measles, mumps and rubella – Measles–mumps–rubella (MMR) vaccination is important for educators and other staff born during or since 1966 who do not have vaccination records of 2 doses of the MMR vaccine, or do not have evidence of immunity to measles, mumps and rubella (a blood test can check immunity).
- chickenpox (varicella) – Chickenpox vaccination is important for educators and other staff who have not previously had chickenpox (a blood test may be required to confirm previous infection).
- hepatitis A – Hepatitis A vaccination is important because children can be infectious even if they are not showing symptoms.
- COVID-19 – All staff should be up to date with COVID-19 vaccinations and boosters. The Australian Immunisation Handbook provides COVID-19 vaccination recommendations for all age groups.
- flu (influenza) – Annual flu vaccinations are important because young children are at higher risk of serious complications from flu. Some staff may be eligible for a free flu vaccine because of pregnancy, older age or underlying conditions. They should check their state or territory health department website for further information.

Additional vaccinations are recommended for educators and other staff who work with specific groups, or who live in particular locations:

- hepatitis B – Educators and other staff who care for children with developmental disabilities should have hepatitis B vaccinations. Vaccination of the children should also be encouraged.
- Japanese encephalitis – Educators and other staff who work in areas of Japanese encephalitis transmission should be vaccinated against it. Ask your local public health unit for current recommendations.

Educators and other staff who are pregnant or immunocompromised (that is, who have a weakened immune system either from a disease or treatment) should seek advice from their doctor about vaccinations. Some vaccinations are recommended in immunocompromised people and to protect both mother and baby in pregnancy, while others are not recommended.

Scenario 2.1

There were several cases of COVID-19 in the education and care service. Alex, an educator, became sick several days after the first case was diagnosed. She had to take time off work to recover. Alex checked the state health department website to find the most up-to-date recommendations for people who are sick with COVID-19. There were no exclusion recommendations, so Alex referred to her service policy, which stated she could return to work when her symptoms had resolved.

Points to consider for Alex:

- COVID-19 is a vaccine-preventable disease – if Alex had been up to date with her vaccinations when she began working at the service, her chances of getting sick from COVID-19 would have been much smaller. Not catching COVID-19 would have saved her time and money, because she would not have had to take time off.

Points to consider for the service:

- All education and care service employers should have accurate records of their staff members' immunisations and when any boosters are due, and should review these records regularly to keep them up to date.
- Every education and care service should have a clear policy about immunisations for staff and make sure that all staff are aware of this policy.
- When an outbreak occurs, service management can remind educators and other staff and parents and carers of the service's policy on COVID-19 infections and where to find further information.

2.2 Hand hygiene

Hand hygiene is a general term that refers to any action that cleans hands, such as washing hands with soap and water then drying hands, or using hand sanitiser.

Many harmful germs can spread easily to other people or onto surfaces via contaminated hands. Hands are an important step in several chains of infection including direct contact, indirect contact, animals and food (Figure 2.1). Effective hand hygiene can break all these chains of infection.

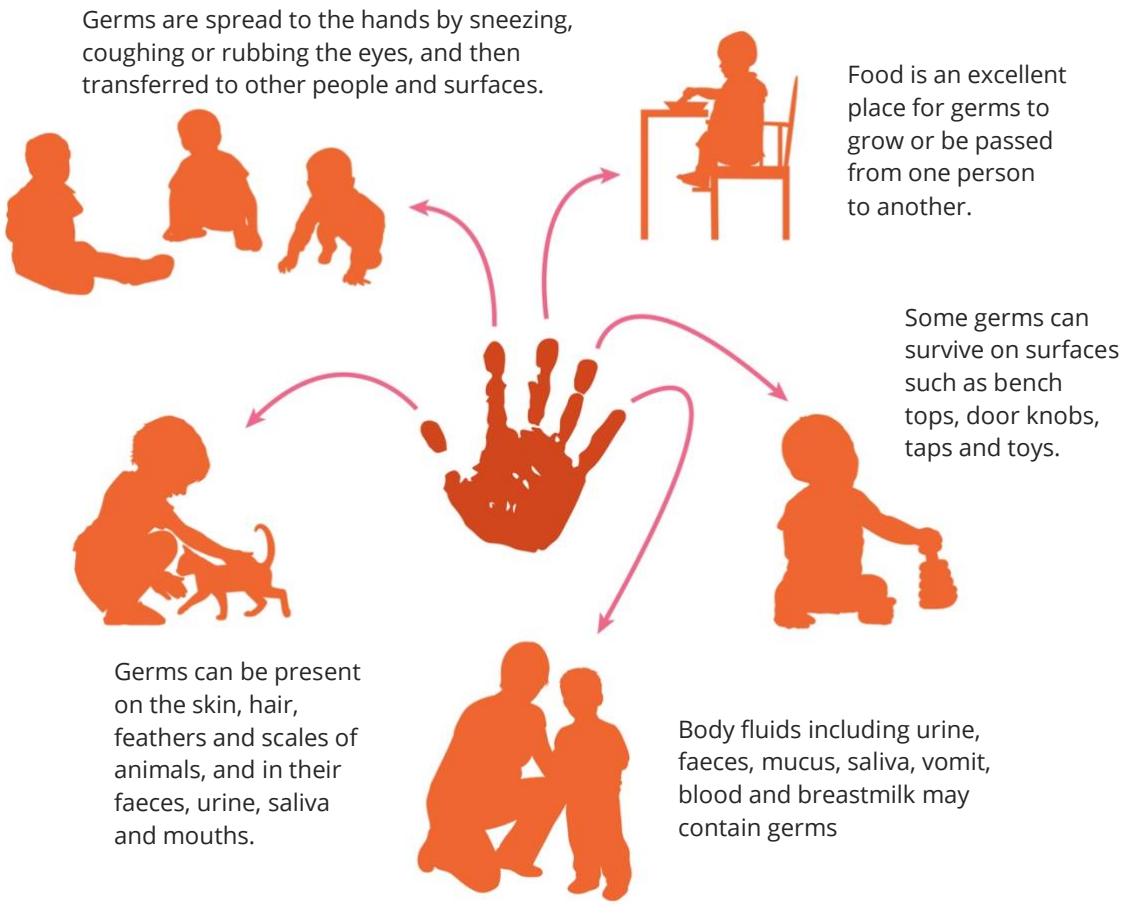

Figure 2.1 The role of hands in the spread of infection

Effective hand hygiene is important for everyone in the education and care service to help prevent disease.[6,7] Hand hygiene for children also helps them to develop good hygiene habits. For younger children, you may need to wash or sanitise their hands or help them wash or sanitise their own hands.

[6] Staniford LJ & Schmidtke KA (2020). A systematic review of hand hygiene and environmental disinfection interventions in settings with children, *BMC Public Health* 20:195.
[7] Luby SP, Agboatwalla M, Feikin DR, Painter J, Billheimer W, Altak A & Hoekstra RM (2005). Effect of handwashing on child health: a randomised controlled trial, *Lancet* 366(9481):225–223.

Hand hygiene has no negative effects on overall health. Regular hand hygiene does not weaken immune systems or interfere with normal development of a child's immune system.[8,9]

When to do hand hygiene

All educators and other staff and children should do hand hygiene regularly.

Think about the chain of infection when you think about hand hygiene. Perform hand hygiene before touching anything that should stay clean (such as before eating or preparing food) and after touching anything that might contaminate hands (such as after using the toilet or wiping a child's nose).

Examples of when educators and other staff and children should perform hand hygiene are shown in Table 2.1.

Table 2.1 When to do hand hygiene

Who	Before	After
Educators and other staff	• Starting work, so harmful germs are not introduced into the service • Eating or handling food • Giving medication • Putting on gloves • Applying sunscreen or other lotions to children • Going home, so harmful germs are not taken home with you	• Eating or handling food • Using the toilet • Helping children use the toilet • Taking off gloves • Changing a nappy (see section 2.5 Nappy changing and toileting) • Cleaning the nappy change area • Wiping a child's nose or your own nose • Cleaning up body fluids such as faeces, urine, vomit or blood • Handling garbage • Coming in from outside play • Applying sunscreen or other lotions to children • Touching animals
Children	• Starting the day at the service; parents and carers can help with this • Eating or handling food • Going home, so harmful germs are not taken home with them	• Eating or handling food • Using the toilet • Touching mucus (snot) • Coming in from outside play • Touching animals

[8] Rook GAW & Bloomfield SF (2021). Microbial exposures that establish immunoregulation are compatible with targeted hygiene, *Journal of Allergy and Clinical Immunology* 148(1):33–39.
[9] Bloomfield SF, Rook GA, Scott EA, Shanahan F, Stanwell-Smith R & Turner P (2016). Time to abandon the hygiene hypothesis: new perspectives on allergic disease, the human microbiome, infectious disease prevention and the role of targeted hygiene, *Perspectives in Public Health* 136(4):213–224.

How to do hand hygiene

Hand hygiene can be done using soap and water, or hand sanitiser.

With soap and water

Washing hands with soap and water is the best option if you have visible dirt, grease or food on your hands.

Washing your hands with soap and running water loosens, dilutes and flushes off dirt and germs. Soap alone cannot remove dirt or kill germs – it is the combination of running water, rubbing your hands and the detergent in the soap that helps loosen the dirt, remove the germs and rinse them off your skin.

Warm water is recommended because soap lathers (soaps up) better with warm water. However, soap and cold water can be used if warm water is not available.

You do not need to use antibacterial soap[10] – any soap is effective for hand hygiene if used properly.

There are 5 steps to washing hands:

1. Wet hands with running warm water.
2. Apply soap to hands.
3. Lather soap and rub hands thoroughly, including the wrists, the palms, between the fingers, around the thumbs and under the nails. If you wear rings or other jewellery on your hands, move the jewellery around your finger while you rub to ensure that the area underneath the jewellery is clean. Rub hands together for at least 20 seconds (for about as long as it takes to sing 'Happy birthday' twice).
4. Rinse hands thoroughly under running water.
5. Dry hands thoroughly (see Hand drying).

A diagram of washing hands with soap and water is available from the World Health Organization.

Hand drying

Effective hand drying after washing your hands with soap and water is just as important as thorough hand washing. Damp hands pick up and transfer more bacteria than dry hands.[11] Drying your hands thoroughly also helps remove any germs that may not have been rinsed off. Make sure you dry under any rings or other jewellery, because they can be sources of future contamination if they remain moist.

Using disposable paper towel is preferable for hand drying in education and care services. Cloth towels, if used, should be used by one person (that is, not shared) and hung up to dry between uses. Cloth towels should be laundered regularly to reduce the risk of spreading harmful germs.

[10] Hand Hygiene Australia (2022). FDA ruling on over-the-counter antibacterial soaps, HHA, Melbourne.
[11] Huang C, Ma W & Stack S (2012). The hygienic efficacy of different hand-drying methods: a review of the evidence, *Mayo Clinic Proceedings* 87(8):791–798.

Warm air dryers can also be useful, but they take longer to dry hands than using paper towel, can only serve one person at a time, and are often not used for long enough to ensure dry hands.

With hand sanitiser

Hand sanitisers (also known as alcohol-based hand rubs, antiseptic hand rubs or waterless hand cleaners) can reduce the number of harmful germs on your hands and should contain 60–80% alcohol.

Hand sanitisers are recommended when your hands are not visibly dirty.[12] Hand sanitisers are also useful when soap and water are not available, such as when in the playground or on excursion. However, even if your hands are visibly dirty, using hand sanitiser is better than not cleaning your hands at all.

There are 3 steps to using hand sanitiser:

1. Apply the amount of hand sanitiser recommended by the manufacturer to palms of dry hands.
2. Rub hands together, making sure you cover in between fingers, around thumbs and under nails.
3. Rub until hands are dry (alcohol-based sanitisers are self-drying, so you do not need a paper towel or hand towel). This should take about 20 seconds.

A diagram of cleaning hands with hand sanitiser is available from the World Health Organization.

It is a good idea to place hand sanitiser at the entrance to the education and care service. This can help remind parents, carers and children (as well as educators and other staff) to have clean hands when they enter the service.

Hand sanitisers are safe to use as directed, but children may be at risk if they eat or drink the cleaner, inhale it or splash it into their eyes or mouth. Hand sanitisers should be kept well out of reach of children and only used with adult supervision.

Hand care

Skin that is intact (that is, has no cuts, scratches, abrasions, cracks or dryness) provides a barrier against germs. Frequent hand hygiene can cause some people's skin to become damaged (known as dermatitis) and allow harmful germs to enter the body.

The most common form of dermatitis is irritant contact dermatitis. Symptoms include dryness, irritation, itching, cracking and bleeding. Symptoms can range from mild to severe. Irritant contact dermatitis is mainly due to frequent and repeated use of hand hygiene products – especially soaps, other detergents and paper towels – which dry out the skin.

Allergic contact dermatitis is rare and is caused by an allergy to one or more ingredients in a hand hygiene product.

[12] Hand Hygiene Australia (2022). Alcohol-based handrubs, HHA, Melbourne.

Hand hygiene products containing ingredients that soothe, moisturise or soften the skin (emollients) are readily available and can reduce irritant contact dermatitis.[13] Hand sanitisers contain moisturisers, so can be gentler on the skin. Regularly moisturising hands can also help reduce dryness and irritation.

To avoid causing or increasing dermatitis:

DO

- use warm (not hot) water for hand washing
- wet hands before applying soap
- use moisturiser if you are prone to dry skin

DO NOT

- use products containing fragrances and preservatives
- wash hands with soap and water immediately before or after using hand sanitiser
- put on gloves while hands are still wet from hand washing or using hand sanitiser
- use rough paper towels to dry your hands.

When buying hand sanitisers, soaps and moisturising lotions for the service, make sure they are chemically compatible. This will minimise skin reactions and ensure that the hand hygiene products work effectively together. It is a good idea to buy hand hygiene and hand care products from a range made by a single manufacturer, because this may help to ensure that the products are compatible. If you have a materials supplier, speak to them for advice on chemically compatible products.

Educators and other staff with significant skin problems may be at higher risk of infection. If an educator or other staff member has significant skin problems, they should see their doctor.

[13] Hand Hygiene Australia (2022). Hand care issues, HHA, Melbourne.

2.3 Respiratory hygiene

Respiratory hygiene is about limiting airborne germs and the transmission of respiratory diseases.

Coughing and sneezing

Many harmful germs can be spread through the air (see Spread in section 1.1). By covering your mouth and nose when you cough or sneeze, you reduce how far the germs travel and stop them from reaching other people and contaminating surfaces.

In the past, people were encouraged to cover their coughs and sneezes with their hands. But if you do not clean your hands immediately, germs stay on your hands and can be transferred to any surfaces you touch.

The correct way is to cough or sneeze into your inner elbow or use a tissue to cover your nose and mouth. Put all used tissues in the rubbish bin straight away and clean your hands with either soap and water or hand sanitiser.

Mucus

If someone is sick, their mucus (snot) can contain harmful germs, even if they do not have a runny nose.

Hand hygiene after every time you wipe a child's nose will reduce the spread of colds and other diseases.

It is not necessary to wear gloves when wiping a child's nose. If you do wear gloves, you must remove your gloves and wash your hands or use hand sanitiser afterwards.

Dispose of used tissues and gloves immediately.

2.4 Wearing gloves and masks

Physical barriers, such as gloves and masks, can help prevent the transmission of germs.

Gloves

Gloves provide a protective barrier against germs. Using gloves correctly reduces the spread of harmful germs, but does not eliminate it completely.

If gloves are not used correctly, they can spread germs and put others at risk. When a person wears gloves, they may come into contact with germs which can then be transferred to other objects or their face.

Types of gloves

Disposable (that is, single-use only) gloves are made of nitrile, natural rubber latex or vinyl.

- Nitrile gloves are recommended for education and care services. They must be used by educators and other staff who have latex allergies, or with children who have latex allergies.
- Latex gloves are not recommended because they cause skin dermatitis, asthma and other allergies in children, educators and other staff. If no other gloves are available and latex gloves are used, powder-free gloves should be used, because powdered gloves may further contribute to latex allergies in children, educators and other staff.[14]
- Vinyl gloves are not recommended.[15]

Utility (reusable) gloves are made of heavy-duty rubber and should be worn during general cleaning activities.

When to wear gloves

Gloves prevent contamination of the hands and exposure to damaging substances.

Wear disposable gloves if you are likely to come in contact with body fluids – for example, when changing wet or dirty nappies or cleaning up vomit or blood. However, it is not necessary to wear gloves when wiping noses.

Wear utility gloves when using damaging chemicals or cleaning.

Table 2.2 shows when you should wear disposable gloves and when you should wear utility gloves.

[14] National Health and Medical Research Council (2023). *Australian guidelines for the prevention and control of infection in healthcare*, NHMRC, Canberra.
[15] Rego A & Roley L (1999). In-use barrier integrity of gloves: latex and nitrile superior to vinyl, *American Journal of Infection Control* 27(5):405–410.

Table 2.2 When to wear and how to maintain gloves

Type of gloves	When to wear them	How to maintain them	Examples
Disposable gloves	• When there is a chance you may come in contact with body fluids, including faeces, urine, vomit or blood	• No maintenance – use them once and throw them away; do not reuse	• Changing nappies • Managing cuts and abrasions • Cleaning spills of body fluids
Utility (reusable) gloves	• When cleaning the education and care service • When preparing bleach solutions	• Clean according to the manufacturer's instructions • Hang up to dry after use, preferably outside • Store dry between uses • Replace when showing signs of wear	• General cleaning duties

Hand hygiene before and after wearing gloves

Wearing gloves does not replace the need to clean your hands, and you should do hand hygiene before putting gloves on and after taking them off.

Do hand hygiene before putting on gloves so that you remove as many harmful germs as possible from your hands. Otherwise, when you reach into the box of gloves, you can contaminate the other gloves in the box.

When you have finished a procedure that requires you to wear gloves, remove the gloves and clean your hands thoroughly. This is important because:

- any germs on your hands may have multiplied significantly while you were wearing the gloves
- there may be tiny tears or holes in the gloves that can allow germs to contaminate your skin
- you may contaminate your hands with the dirty gloves when taking them off.

Using disposable gloves

Never reuse or wash disposable gloves. They must be thrown away as soon as you have finished the activity that requires gloves.

Always clean your hands before and after wearing disposable gloves. Wear gloves on both hands.

If you have cuts or sores, cover these with a waterproof dressing before putting on disposable gloves.

Remember that the outside of the glove is dirty and the inside of the glove is clean. Avoid touching the inside of a glove with the outside of another glove and avoid touching bare skin or clean surfaces while wearing or removing contaminated gloves.

How to remove disposable gloves

1. Pinch the outside of one glove near the wrist and peel the glove off so it ends up inside out.
2. Keep hold of the peeled-off glove in your gloved hand while you take off the other glove. Put 1 or 2 fingers of your ungloved hand inside the wrist of the other glove. Peel off the second glove from the inside, and over the first glove, so you end up with the 2 gloves inside out, one inside the other.
3. Put the gloves in a plastic-lined, hands-free lidded rubbish bin and clean your hands. If such a bin is not available, put the gloves in a bucket or container lined with a plastic bag, then tie up the bag and take it to the outside garbage bin.

Illustrations of how to remove disposable gloves safely are available from the Australian Commission on Safety and Quality in Healthcare.

Masks

Masks reduce transmission of respiratory viruses, especially in crowded, poorly ventilated spaces. However, masks can be uncomfortable to wear for a long time. There is also a concern that mask use prevents children from learning to identify human facial expressions.

For these reasons, masks are not generally recommended for use in education and care services. However, masks may be mandated or recommended by public health authorities if there is an outbreak of certain diseases (see section 4.5 Disease outbreaks). Keep up to date with any requirements in your state or territory.

There are 2 types of masks:

- Surgical masks prevent transmission of larger droplets and reduce contact of potentially contaminated hands with the mouth and nose. In general, education and care services should use surgical masks (if masks are required). These masks are not air filters and do not stop transmission of small particles – when you breathe while wearing a surgical mask, air leaks around the sides. For this reason, surgical masks are useful to prevent the spread of germs spread by droplets (for example, flu, common cold) but not germs spread through contaminated air.
- P2/N95 respirators (often referred to as masks) provide a stronger seal around the mouth and nose and are made of less-porous material. They filter out the very small particles that carry germs spread by contaminated air (for example, measles, chickenpox and COVID-19). Respirators are not usually required in education and care services, but educators and other staff may be directed to use them in an outbreak of one of these diseases.

Other protective equipment

Face shields and protective eyewear (including goggles and safety glasses) are usually not required in education and care services.

Some education and care services may recommend protective equipment in some circumstances. For example, protective eyewear may be recommended if there is a risk that droplets or splashes of body fluids may go into the eyes of educators or other staff. This can occur when managing nosebleeds, dental injuries or bleeding wounds.

Public health units may also recommend the use of protective equipment in some circumstances (for example, during a disease outbreak).

2.5 Nappy changing and toileting

Faeces (and sometimes urine) contain billions of harmful germs such as bacteria and viruses. Hygienic nappy changing and toileting prevents these germs from spreading disease to staff and other children.

Children in education and care services may have disposable or cloth nappies. Either can be used safely, if you follow appropriate care and cleaning procedures. Both cloth and disposable nappies should be waterproof – either through the inclusion of a waterproof layer, or the use of a separate waterproof cover. Use flushable, disposable liners with cloth nappies.

Correct storage and disposal of nappies is also critical to preventing the spread of harmful germs.

Nappy changing

Infection control practices should be used when children's nappies are changed. Infection control practices include hand hygiene and proper cleaning and disinfection procedures (see the Glossary).

Change nappies when they have faeces in them, and at routine intervals throughout the day. This will minimise the amount of time that urine and faeces are in contact with the child's skin.

Wash your hands or use hand sanitiser:

- before preparing the nappy change area
- after changing the nappy
- after cleaning the nappy change area.

Nappy changing procedure

Preparation

1. Bring your supplies to the changing area. This includes a clean nappy, wipes, baby cream labelled with the child's name (if applicable), gloves, a plastic or waterproof bag for soiled clothing, and extra clothes.
2. Do hand hygiene. It is very important to wash your hands or use hand sanitiser when changing a nappy, even if you are going to use gloves. This is so that when you have finished changing the child, you can remove the dirty gloves and dress the child without needing to interrupt the nappy changing procedure to clean your hands before dressing the child.
3. Put on disposable gloves. This is recommended because educators and other staff are likely to come into contact with body fluids including urine and faeces during nappy changes. Follow your service's policies and procedures.

4. Place paper towel or plain paper on the change table, if desired, to reduce mess.
5. If the child can walk, walk with them to the changing area. If the child cannot walk, pick them up and carry them to the changing area. If there are faeces on the child's body or clothes, hold the child away from your body if you need to carry them.

Changing

6. Place the child on the change table and unfasten the nappy.
7. Clean the child's bottom with disposable nappy wipes. Always wipe front to back.
8. For disposable nappies, place dirty wipes in the nappy, remove the nappy from the child and put it in a plastic bag. Place the bag in the designated bin.
   For cloth nappies, put the disposable liner and wipes in the designated bin. Put the used nappy in a plastic bag and put it in the sealed container that you have for that child.
9. Remove the paper from the change table and put it in the designated bin.
10. Remove your gloves and dispose of them so you will not touch the clean child with dirty gloves. For details on how to remove gloves properly, see Using disposable gloves in section 2.4.
11. If a child requires nappy cream, clean your hands (if safe to do so, for example, using accessible hand sanitiser), put on new disposable gloves and apply the cream. Remove the gloves and dispose of them.
12. Place a clean nappy under the child and fasten the nappy.
13. Dress the child.
14. Wash your hands and the child's hands before placing the child back into a supervised area. (The standard recommendation is to clean hands after removing gloves. But when changing a nappy, it is more important to keep the child safe from falling and finish the nappy change before cleaning your hands.)

Cleaning

15. After every nappy change, clean the nappy change surface (see Nappy change area in section 3.2 for details on the best methods of cleaning for this area). If body fluids have got on the surface, clean then disinfect the surface.
16. Wear utility gloves for the cleaning. Do hand hygiene using soap and water or hand sanitiser. If your hands are visibly dirty or you have just removed gloves, wash your hands with soap and warm water.

Nappy change area

It is important to have a separate, dedicated nappy change area that is positioned away from the food preparation area and close to a warm water tap, sink and paper towels.

The supplies you need should be ready and within reach. The nappy change area should have baby wipes, clean nappies, disposable gloves, baby cream labelled with the child's name (if applicable), paper for the change table, and storage for used nappies and for soiled clothes.

Nappy change surface

The nappy change surface may be a change mat or a waterproof sheet over a mattress on a change table. Ensure that the nappy change surface is:

- waterproof
- in good condition
- smooth and easily cleaned (germs can survive in cracks, holes, creases, folds and seams)
- cleaned after every nappy change.

It is a good idea to change surfaces during the day to help prevent spread of germs. For example, you can have 2 change mats and swap them, or cover a change mat with a waterproof sheet and remove it halfway through the day.

If possible, do not share the same nappy change surface with children from another room. Having separate change mats for each room can help limit the spread of an infection and contain it to a single room. If this is not possible, take extra care to ensure that the change mat is thoroughly cleaned after each nappy change, especially if a child is known to have an infection (see Nappy change area in section 3.2).

Nappy change paper

It is a good idea to use disposable paper on the nappy change surface during nappy changes. Every time a child has their nappy changed, germs get onto the change surface. Placing paper on the surface before you place the child prevents many of these germs from reaching the surface itself.

Any type of new, clean, plain paper that can absorb leaks can be used for this (for example, paper towel or large sheets of paper). Remove the paper in the middle of the nappy change, before putting the child's clean nappy and clothes on, and put the paper and the germs in the bin.

If an education and care service does not wish to use paper on the change table, educators and other staff must take extra care when cleaning the change mat between nappy changes. Even when using paper, the nappy change surface must be cleaned after each nappy change.

Nappy storage and disposal

Always store and dispose of soiled nappies correctly to minimise the spread of harmful germs.[16]

Keep soiled nappies in a waterproof container that can contain smells. Do not keep containers for soiled nappies in areas used for preparing or eating food, or where children play.

For disposable nappies:

1. Remove the nappy.
2. Put the dirty nappy in a plastic bag and tie the bag.
3. Put the bag in a designated bin that is used only for used nappies. The bin should have a lid and be lined with a plastic bag.

For cloth nappies:

1. Put the flushable, disposable nappy liner in the toilet.
2. Remove the nappy.
3. Do not rinse the nappy; put it in a plastic bag and tie the bag.
4. Put the bag in a sealed container, which can be a lidded bucket or 'wet bag'. Have one container for each child who is using cloth nappies, marked with the child's name. Keep the container where it can be securely left for the child's parent or carer to collect it.

Waste management for disposable nappies:

- Have lined bins in the nappy changing areas.
- Do not overfill bins – when they are three-quarters full, tie the lining bag up and put it into the main waste bin.
- Have a schedule for emptying the bins during the day and at the end of the day.
- Clean all bins according to the specified cleaning schedule.
- Wear disposable gloves when collecting waste and emptying bins.
- When you are finished, remove gloves and do hand hygiene.

[16] Health Protection Scotland (2018). Infection protection and control in childcare settings, NHS National Services Scotland, Glasgow.

Learning to use the toilet

Ask parents or carers to supply a clean change of clothing for all children, including those who are learning to use the toilet. If a child has got faeces on their clothes, dispose of faeces in the toilet and place the soiled clothes in a plastic bag. Keep these bags in a designated place until the parent or carer can take them home that day.

For children who are learning to use the toilet:[17]

- Help the child use the toilet (potty chairs are not recommended because they increase the risk of spreading infection).
- Encourage children, especially girls, to wipe front to back, to reduce the chance of introducing bowel bacteria to the urinary tract.
- After they have finished toileting, guide younger children to the handwash basin and help them wash their hands.
- Supervise older children while they wash their hands.
- Explain to the child that washing their hands and drying them properly will stop germs that might make them sick.
- Always do your own hand hygiene after helping children use the toilet.

[17] Australian Children's Education & Care Quality Authority (2016). Toileting and nappy changing principles and practices, ACECQA, Canberra.

2.6 Safely dealing with wounds and body fluids

Education and care services routinely deal with wounds and body fluids including urine, faeces, mucus, saliva, vomit, blood and breastmilk.

Follow your service's procedures to safely deal with body fluids, and to help prevent spills. You will also need to know how to safely deal with any spills (see How to clean spills of body fluids in section 3.2).

Wounds

Children must be supervised at all times to ensure they play safely. If a child is bleeding from an injury, nosebleed or bite from another child, you must:

- look after the child
- dress the wound (if needed) – this should be done by someone with approved first aid training
- check that no-one else has come in contact with the blood
- clean up the blood.

In an emergency, call 000 for an ambulance. If the situation is not urgent, follow the service's procedures about notifying the parent or carer.

Looking after the child

1. Avoid contact with the blood.
2. Comfort the child and move them to safety, away from other children.
3. Put on gloves, if available.
4. Apply pressure to the bleeding area with a bandage or paper towel.
5. Elevate the bleeding area, unless you suspect a broken bone.
6. When the wound is covered and no longer bleeding, remove your gloves, put them in a plastic bag or alternative, seal the bag and place it in the rubbish bin.
7. Wash your hands thoroughly with soap and running warm water.

If at all possible, do not touch the wound if you do not have gloves. If you do not have gloves, get someone wearing gloves to take over from you as soon as possible. Then wash your hands and go back to your other duties.

It is a good idea to wear a face shield or protective eyewear if there is a chance that blood could enter your eyes or mouth (for example, if the child has a mouth wound and is coughing).

Dressing the wound

1. Put on gloves, if there is time.
2. Dress the wound with a bandage or suitable substitute and seek assistance.
3. Remove your gloves, put them in a plastic bag, seal the bag and place it in the rubbish bin.
4. Wash your hands thoroughly with soap and running warm water.

Checking for contact with blood

Ask the adults and children near the spill if they have come into contact with the blood. For infants and non-verbal children, check if they have come into contact with the blood.

If they have, remove any blood from the person with soap and water and make sure they wash their hands thoroughly.

Body fluids

Strategies to prevent spills of body fluids include:

- regularly toileting children (changing their nappy or taking them to the toilet)
- excluding children with vomiting or diarrhoea
- encouraging children to blow their noses, especially any who have a runny nose, and disposing of tissues appropriately
- minimising the risk of injury by supervising and supporting children to play safely.

When a spill occurs, clean it up as soon as possible. If possible, place a safety sign around the spill to keep people away until it can be cleaned.

When cleaning up a spill of blood, faeces, urine, vomit or breastmilk, wear gloves and wipe up the spill with paper towels. Next, clean the surface with warm water and detergent, and dry with paper towels. Wipe the area with disinfectant and allow to dry.

Wash your hands thoroughly with soap and running warm water after you have cleaned any spills of body fluids.

Staff wound hygiene

Use waterproof dressings to cover open cuts or sores on the skin.

The skin is a natural barrier that stops germs entering the body. When the skin is damaged, germs can enter and lead to infections at the site of the cut or through the rest of the body. Placing a waterproof dressing (like an adhesive plastic strip) over the cut stops germs from entering the cut and helps the skin heal more quickly.

See also Hand care in section 2.2 for tips on how to prevent skin irritation.

2.7 Contact with animals

Animals can be a source of joy and stimulation for children. However, all animals carry germs that can cause infections if a person is bitten or scratched. Animal faeces also carry germs.

Contact with animals can spread disease. Germs are present on the skin, hair, feathers and scales of animals, and in their faeces, urine and saliva. These germs may not cause disease in the animal, but they may cause disease in humans. Some harmful germs can multiply in insects such as mosquitoes, fleas and ticks and spread through the insect's bite. Insects that carry germs are known as disease 'vectors'.

Animals

Some simple measures will minimise the health risk from contact with animals:

- Hygiene and child care
  - Make sure that adults and children wash their hands with soap and water (or use hand sanitiser if soap and water are not available) after touching animals or cleaning an animal's bedding, cage or tank.
  - Supervise children when they have contact with animals. Do not allow children to play with animals while they or the animals are eating. Do not let children put their faces close to animals.
- Animals and animal care
  - Choose appropriate animals. Avoid keeping ferrets, reptiles (including lizards, iguanas, snakes and turtles) and parrots. This is because these animals can carry germs that can be dangerous to humans (for example, reptiles often carry Salmonella).
  - Ensure that animals are free of fleas, mites, worms and skin diseases. Animals should be immunised as appropriate. Animals that are sick should be treated promptly by a veterinarian and kept away from children until the animal is well – an animal that is irritable because of pain or disease is more likely to bite or scratch.
  - Do not allow animals in sandpits, and do not allow them to urinate or defecate on soil, in pot plants or in vegetable gardens.
- Cleaning
  - Always wear gloves when handling animal faeces, emptying litter trays and cleaning cages.
  - Dispose of animal faeces and litter daily. Place faeces and litter in a plastic bag or alternative and put it out with the rubbish.
  - Pregnant women, in particular, must avoid contact with cat faeces to minimise their risk of toxoplasmosis (see Toxoplasmosis fact sheet).
  - If you have a birdcage, wet the floor of the cage before cleaning it to avoid inhalation of powdered, dry bird faeces.

Insects, spiders and ticks

Education and care services should try to prevent insects (especially flies and mosquitoes) and arachnids (spiders and ticks) from entering indoor areas. Screening windows and doors is a key way to prevent insects from entering. Barrier sprays can also be used. Remove or kill (with an appropriate spray or swatter) any insects or arachnids that come in.

If a child is bitten by an insect or arachnid while in care, monitor them for any reaction or illness and treat appropriately.

- If there is an allergic reaction or you know the child is allergic to the type of bite (for example, bees or ticks), contact the parent or carer and seek medical care if needed.
- If the child is bitten by an insect and there does not seem to be a reaction, let the parent or carer know about the bite at pick-up.
- If a child is bitten by a spider, contact the parent or carer and seek medical care if needed.
- For tick bites where the tick is still embedded in the child's skin, kill and remove the tick using an ether spray (see the healthdirect recommendations).

Fleas can infest animals and humans, and flea bites cause skin irritation and inflammation. Treat animals, their bedding (that is, where they usually rest) and their immediate environment with a flea treatment to kill adult and immature fleas. Always follow the manufacturer's instructions.

Bats

Australian bats may carry a lyssavirus that is very similar to the rabies virus. Treatment of bat bites or scratches can require several vaccine injections and injection of protective antiserum into the wound area.

Lyssavirus can be transmitted to humans through direct contact with bats. Do not approach or handle bats, including sick or injured animals, because there is a high likelihood of being scratched or bitten. Bats that are not in direct contact with people (for example, bats in trees) pose no risk of transmitting lyssavirus. Only trained and immunised wildlife handlers wearing suitable protective equipment should attempt to handle or move bats.

If you or a child is scratched or bitten by a bat, immediately clean the wound with soap and running water for 15 minutes and see a doctor or local hospital emergency department as soon as possible.

Fish and marine animals

Fish and fish tanks can carry harmful germs. If you need to reach into a fish tank, wear gloves or use a net. If you do use your bare hands and arms, wash your hands and arms thoroughly with soap and water afterwards. Never clean an aquarium in a kitchen sink or food preparation area. Use a laundry sink for cleaning and disposal of aquarium water.

Scratches from fish and marine animals, including coral, can cause unusual and serious infections. If an injury caused by a fish, or a wound contaminated by sea water, pond water or aquarium water, looks like it may have become infected, see a doctor promptly and explain how the injury occurred.

Scenario 2.2

You have invited a local reptile zoo to provide an interactive reptile show for the children at your service as part of an end-of-year celebration. The reptile show will include a group presentation to educate children and increase their awareness about reptiles, and a chance for children to touch some of the reptiles. The celebration will conclude with a barbecue lunch. The reptile zoo is bringing 2 staff members to conduct the presentation and interactive show.

On the morning of the celebration, Sasha's mum calls to advise that Sasha has a sore throat and a mild cough and will not be attending the service that day. Sasha's mum asks if Sasha can attend for the reptile show only and then go home.

Actions to take:

- Advise Sasha's mum that it is best for Sasha to stay home because she has symptoms of a respiratory disease.
- Refer to the Respiratory symptoms fact sheet and offer to email a copy to Sasha's mum.
- Make sure the reptile display is set up in a section of the service that is away from the food preparation area.
- Make sure that all children, educators and other staff, parents and carers do hand hygiene before and after touching animals. Have hand sanitiser available during the interactive session.
- Supervise children when they touch the reptiles. Separating the children into small groups may make this easier.
- Make sure all children and adults do hand hygiene at the end of the activity and before the barbecue lunch begins.

2.8 Protecting pregnant staff and visitors

Educators and other staff who are pregnant, as well as pregnant visitors to the service such as family members, should be aware of how some infections can affect an unborn child. If a staff member is pregnant, it is even more important than usual for the education and care service to make sure that all staff follow good infection control practices.[18]

The diseases listed in Table 2.3 can cause pregnancy risks and may occur in education and care services. Risks vary depending on the disease.

For most diseases, good hand and respiratory hygiene are the main ways to prevent infection, and wearing gloves and masks may be useful in some cases. Immunisation is also effective and recommended for protection against some diseases. For some diseases, pregnant staff or visitors may need to avoid exposure.

If any of these diseases occur in the education and care service, alert pregnant staff and visitors so they can take precautions.

Seek advice from local public health authorities if you are concerned about risks to pregnant staff and visitors from an infectious disease diagnosed in a child or staff member.

For more information about these diseases, see the relevant fact sheets. If a case of the disease occurs in the service, provide a printout of or a link to the fact sheet to all pregnant staff members and all families. Advise them to seek medical advice if they have concerns.

Table 2.3 Diseases that may occur in education and care services and that have an increased risk of harm for pregnant women and their unborn babies, and actions to take

Disease	Risk	Action to prevent infection
Chickenpox (varicella)	• Birth defects in the unborn child; this risk is highest in the first 3 months of the pregnancy • Increased risk of maternal complications • Severe infection in newborns can occur if exposure occurs in the weeks before delivery	• Vaccination before planning pregnancy • Immunity caused by previous infection (immunity can be confirmed by a blood test) • Pregnant staff or visitors who are exposed to varicella should seek medical advice within 96 hours to check whether post-exposure treatment is needed
COVID-19	• Premature birth; this is very rare and mainly in people who have not been vaccinated or previously infected • Increased risk of maternal complications	• Vaccination (this significantly reduces risk) • Good hand and respiratory hygiene • Wearing masks

(Continued)

[18] Radauceanu A & Bouslama M (2020). Risks for adverse pregnancy outcomes and infections in daycare workers: an overview of current epidemiological evidence and implications for primary prevention, *International Journal of Occupational and Environmental Health* 33(6):733–756.

Disease	Risk	Action to prevent infection
Cytomegalovirus (CMV)	• Birth defects in the unborn child; this risk is highest in the first half of the pregnancy	• Reduced exposure (e.g. a pregnant educator who usually works with infants might be reassigned to work with older children) • Pregnant educators should avoid or take particular care when changing nappies, as CMV can be spread through urine • Good hand and respiratory hygiene, especially after contact with body fluids including urine and saliva • Using gloves
Fifth disease (slapped cheek syndrome, erythema infectiosum, human parvovirus B19)	• Infection of the unborn child; usually mild but in rare cases can cause miscarriage • Risk to the child is highest in the first half of the pregnancy	• Good hand and respiratory hygiene
Flu (influenza)	• Miscarriage and premature birth; this is very rare and mainly in non-immunised people • Increased risk of maternal complications	• Vaccination (this significantly reduces risk) • Good hand and respiratory hygiene • Wearing masks
Hand, foot and mouth disease	• Miscarriage; this is extremely rare • Infection of the baby; usually mild but in rare cases can affect organ development	• Good hand and respiratory hygiene • Using gloves
Measles	• Premature birth; this is very rare and mainly in non-immunised people • Increased risk of maternal complications	• Vaccination before planning pregnancy • Immunity caused by previous infection (immunity can be confirmed by a blood test) • Pregnant staff or visitors who are exposed to measles should seek medical advice • Talk to your local public health unit for advice
Rubella (German measles)	• Birth defects in the unborn child • Risk is highest in the first 20 weeks of the pregnancy	• Vaccination before planning pregnancy • Immunity caused by previous infection • Immunity is routinely confirmed by a blood test early in each pregnancy • Pregnant staff or visitors who are exposed to rubella should seek medical advice • Talk to your local public health unit for advice
Toxoplasmosis	• Birth defects in the unborn child	• Immunity caused by previous infection (can be confirmed by a blood test) • Avoiding contact with soil (e.g. gardening) or cat faeces (e.g. cleaning litter boxes) • Good hand hygiene

(Continued)

Disease	Risk	Action to prevent infection
Whooping cough (pertussis)	• Transmission to newborns; severe disease and potential death of babies • Risk is highest late in the pregnancy	• Vaccination (recommended during the second or third trimester of every pregnancy to reduce the risk of pertussis in infants) • Pregnant staff or visitors who are exposed to whooping cough in their last trimester should seek medical advice • Talk to your local public health unit for advice

PART 3

A HEALTHY ENVIRONMENT

This section details the actions you can take to improve the environment at your education and care service and prevent the transmission of infection through the air, on surfaces and in food.

3.1 Ventilation

3.2 Cleaning

3.3 Food safety

3.1 Ventilation

The germs that cause some diseases spread through tiny particles that are so light they remain suspended in the air. Diseases such as measles, chickenpox and COVID-19 can be spread when people breathe in air contaminated with these particles. This is called airborne transmission.

Ventilating indoor spaces with fresh air reduces the risk of airborne transmission.[19] Frequently bringing in fresh, clean air dilutes the concentration of the tiny particles and they can no longer spread disease to other people.

There are 3 ways to improve ventilation:[20]

- natural – bringing in outside air by opening windows and doors
- mechanical – using air-conditioning and heating systems to bring outside air in (air-conditioning systems that recirculate air but do not bring in outside air are not mechanical ventilation)
- augmented – using air purifiers with HEPA (high-efficiency particulate air) filters to clean the air.

Use natural ventilation wherever possible. Mechanical methods may be useful when natural methods are not practical due to the weather or if the building design does not encourage airflow.

Some education and care services may have air purifiers, which can be helpful when natural methods are not practical. Air purifiers are effective at removing airborne germs but must be used correctly and maintained properly to stay effective.

Using outdoor areas as much as possible can also help minimise the spread of airborne infections.

Ventilation requirements for early childhood centres are outlined in the ACECQA Quality Area 3 – `Physical environment' and the National Construction Code. See Quality Area 3 for further advice on ventilation.

[19] Murdoch Children's Research Institute (2021). Research brief: COVID-19 in early childhood education and care and schools, MCRI, Melbourne.
[20] Education.vic.gov.au (2023). School operations: ventilation and air purification, Victorian Government, Melbourne.

3.2 Cleaning

Some harmful germs can survive for periods of time in the environment, usually on surfaces such as benchtops, door handles and toys. How long a germ can survive on a surface depends on the type of germ, the type of surface, temperature and humidity, and how often the surface is cleaned. Regular cleaning reduces the number of germs in the environment and breaks the chain of infection.

Routine cleaning should be done daily and when surfaces are visibly dirty.

Cleaning and disinfection should be done after any spills of body fluids (urine, faeces, vomit, blood, breastmilk).

If there is a disease outbreak, your local public health unit will advise on cleaning procedures. To break the chain of infection during a disease outbreak, education and care services may need to do a thorough cleaning process that goes beyond routine cleaning practices.

Cleaning equipment and products

You should have ready access to cleaning equipment and products, even if an external provider usually cleans your service.

Cleaning equipment

Appropriate cleaning equipment for education and care services includes:

- disposable cloths, or cloths that can be washed in a washing machine using hot water
- utility gloves
- buckets
- mops with detachable heads (so you can wash them in a washing machine using hot water)
- a vacuum cleaner (a vacuum fitted with HEPA filters is recommended, but if this is not available, try to finish vacuuming before children enter rooms to allow time for dust to settle)
- a dishwasher
- a washing machine that uses hot water
- a clothes line or dryer.

Keep cleaning equipment well maintained, clean, and stored in a way that allows it to dry between uses.

Consider colour-coding the cloths and sponges for each area so that it is easier to keep them separate. For example, bathroom is red, kitchen is green, general is blue and yellow is infectious.

Wear utility gloves when cleaning. Wash your hands after taking the gloves off. Utility gloves should be washed and dried between uses.

Cleaning products

Cleaning products suitable for use in education and care services include:

- detergent for general cleaning
- disinfectants (general-purpose disinfectant or bleach)
- dishwashing liquid
- dishwashing tablets, if a dishwasher is used
- washing powder or liquid, if laundry is done on the premises.

When choosing cleaning products, always consider the product's effectiveness against harmful germs. Appropriate cleaning products for education and care services are those that are specifically labelled and intended for cleaning. These cleaning products have consistent and standardised ingredients that are effective against germs.

Do not use domestic kitchen products such as vinegar or bicarbonate of soda as cleaning products – they are not as effective against germs.[21]

Always use the products at the right strength (that is, diluted correctly) to ensure they are effective. Follow the instructions on product labels and use the product correctly and for the correct purposes.[22]

Store all cleaning products appropriately, away from children.

Environmental sustainability

Education and care services can consider environmental sustainability in their service.[23] For the *Staying healthy* guidelines, this is most relevant in cleaning procedures.

Single-use products such as cleaning cloths are the safest to use to break the cycle of infection. But multiple-use products can also be effective, if they are washed and dried properly between uses.

Services can buy sustainable supplies, such as:

- forest-friendly or recycled paper products (for example, paper towels)
- eco-friendly cleaning and disinfecting products – but only if they are sold as effective cleaning products (for example, not vinegar or bicarbonate of soda)
- bulk supplies to minimise packaging waste.

[21] Rutala WA, Barbee SL, Aguiar NC, Sobsey MD & Weber DJ (2000). Antimicrobial activity of home disinfectants and natural products against potential human pathogens, *Infection Control & Hospital Epidemiology* 21(1):33–38.
[22] Department of Health and Aged Care (2023). Appropriate use of disinfectants: information for consumers, health professionals and healthcare facilities, Australian Government, Canberra.
[23] Australian Children's Education and Care Quality Authority (2016). Sustainability in children's education and care, ACECQA, Canberra.

When to clean

Clean up any spills of body fluids immediately.

Clean these types of areas frequently:

- Horizontal surfaces and frequently touched surfaces – Particles produced by coughing and sneezing contain germs and fall towards the ground, landing on horizontal surfaces. Hands also transfer germs onto surfaces that children and all staff frequently touch (for example, door handles, light switches, toys). Clean horizontal and frequently touched surfaces at least once a day. Clean them again if they become visibly dirty or contaminated with blood or other body fluids.
- Wet areas – The kitchen/food preparation area, toilets and nappy changing areas are wet areas. Many germs thrive in wet or damp conditions, so wet areas are likely to become contaminated with germs and be sources of germs that spread to other areas. For this reason, keeping kitchens and bathrooms clean and dry is a most important step to break the chain of infection. Clean these areas at least once a day. Clean them again if they become visibly dirty or contaminated with blood or other body fluids.

Table 3.1 shows how often to clean various surfaces and areas.[24] If a separate organisation provides or supervises cleaning services for your service, tell its cleaning staff about the requirements in Table 3.1.

Table 3.1 When to clean various surfaces and materials

Surface or area	Wash daily and when visibly dirty	Wash weekly and when visibly dirty	Wash regularly and when visibly dirty or obviously contaminated
Bathrooms – wash tap handles, toilets and doorknobs; check the bathroom during the day and clean if visibly dirty	✓		
Toys and objects children put in the mouth (for example, building blocks)	✓		
Surfaces that children touch frequently (for example, benchtops, taps, cots and tables)	✓		
Doorknobs	✓		
Floors		✓	

(Continued)

[24] Centers for Disease Control and Prevention (2022). When and how to clean and disinfect a facility, CDC, Atlanta, US.

Surface or area	Wash daily and when visibly dirty	Wash weekly and when visibly dirty	Wash regularly and when visibly dirty or obviously contaminated
Beds, stretchers, linen and mattress covers	✓ If children **do not** use the same items every day	✓ If children **do** use the same items every day	
Sofas, soft chairs, beanbags, cushions			✓
Low shelves			✓
Other surfaces not often touched by children			✓

How to do routine cleaning

Routine cleaning (also called environmental cleaning) is regular cleaning that reduces the number of harmful germs that survive on surfaces in the education and care service.[25] Spills of any body fluids need extra cleaning.

How to clean hard surfaces

'Hard' surfaces are surfaces that are waterproof or impermeable to liquid. They include tables, hard floors, taps and basins. A surface that is waterproof but feels soft (such as a vinyl sofa) is a 'hard' surface for cleaning purposes. Hard surfaces are recommended for education and care services to make cleaning easier.

Routine cleaning with detergent and water, followed by rinsing and drying, is the best way to remove harmful germs from hard surfaces.

- Detergents help loosen the germs so that clean water can rinse them away.
- Mechanical cleaning (scrubbing the surface) physically removes germs.
- Rinsing with clean water removes loosened germs and detergent residue from the surface.
- Drying the surface makes it harder for germs to survive or grow.

[25] Sehulster L, Chinn RY, Arduino MJ, Carpenter J, Donlan R, Ashford D, Besser R, Fields B, McNeil MM & Whitney C (2003). Guidelines for environmental infection control in health-care facilities: recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee, *Morbidity and mortality weekly report recommendations and reports* 52:1–42.

Basic steps for routine cleaning of hard surfaces

1. Put on utility gloves.
2. Mix detergent and warm water in a clean bucket or basin. Do not use handwashing basins for cleaning. Follow the manufacturer's instructions on how much detergent to use.
3. Wet a clean cloth or paper towel with the detergent mixture.
4. Vigorously rub the surface with the cloth or paper towel to physically remove germs. If repeat scrubbing is needed, first rinse the cloth in the detergent mixture, or get a new paper towel and wet it in the mixture.
5. Once the surface appears clean, empty the bucket, place any cloths to be washed in a plastic bag and discard any paper towels.
6. Rinse the bucket or basin and wash your hands.
7. Add clean water to the bucket or basin.
8. Wet a new clean cloth or paper towel with the clean water. Wipe the surface to remove detergent. Repeat if needed.
9. Dry the surface with a clean paper towel.

Some education and care services wipe tables and other areas associated with food with food-grade sanitiser after they are cleaned with detergent. While this is not required to stop the spread of infection, it is important to follow the policies and procedures for your service.

Make up fresh detergent and water every day in a clean, dry container. The mixture should be made up fresh daily to stop germs from growing in the container. Label the container with the time and date of mixing and the type of detergent. Empty out any mixture from the previous day and rinse the container before refilling. Do not top up the container with water during the day because this dilutes the mixture, making it less effective.

If you are using the mixture in a spray bottle, spray the surface heavily and rub it. Spraying a surface with a fine mist and then wiping it dry with a cloth or paper towel is not enough to dislodge germs.

Warm water is recommended when cleaning because this makes it easier to remove dirt from a surface. However, cold water and a little extra scrubbing can also clean effectively.

Start the cleaning process in the cleanest areas and finish in the dirtier areas. This helps to prevent cross-infection because it decreases the risk of contaminating a clean room with germs from a dirty room.

How to clean soft materials

'Soft' materials can absorb water and other liquids, and are usually made of cloth.

Common soft materials used in education and care services include sheets, towels and tea towels. Most of these should be washed every day (see also When to clean).

Wherever possible, other soft materials in the service should be removeable to allow laundering. For example, items such as sofas, soft chairs and beanbags should either be made of impermeable materials or have removable cloth covers that are laundered regularly.

Effective laundering involves:

- washing with detergent in a machine on a hot setting (≥60 °C)
- drying in sunlight **OR** drying in a tumble dryer on a hot setting (≥40 °C)
- drying items completely before storing them or using them again.

You do not need to wash contaminated cloth items separately as long as the water is at the correct temperature and the correct amount of detergent is used. This applies to cloth items used by a child who is sick or that are contaminated with body fluids. Examples include bed linen used by a child with a respiratory infection or gastroenteritis, or a towel with blood or vomit on it.

For more on cleaning specific soft items, see the relevant sections in Special considerations:

- Clothing
- Linen
- Carpets, mats and curtains
- Cushions
- Toys and books.

How to clean spills of body fluids

Accidental spills of body fluids – including blood, vomit, urine and faeces – are common in education and care services.

All body fluids should be treated as if they are infectious. Promptly removing the spilled substance and cleaning and disinfecting the area reduces the risk of spreading infection to other children and staff.[26]

Spill kit

Have a spill kit handy for educators and other staff to use. The spill kit can be a bucket filled with all the necessary equipment to clean up a spill, including:

- disposable gloves (such as you would use for nappy changing)
- utility gloves (heavy-duty gloves, used for cleaning)
- paper towel
- disposable cloths or sponges

[26] National Health and Medical Research Council (2019). Australian guidelines for the prevention and control of infection in healthcare, NHMRC, Canberra.

- a disposable scraper and pan
- detergent
- disinfectant.

You may also want to include a disposable apron in the kit to protect staff and their clothes. For large spills, have absorbing agents such as kitty litter or large disposable pads readily available.

Spill cleaning process

When a spill occurs, clean it up as soon as possible. Place a safety sign around the spill to keep people away until it can be cleaned.

1. Put on disposable gloves.
2. Wipe up the spill immediately with a damp cloth, tissue or paper towel. If the spill is larger, cover it with an absorbing agent such as kitty litter or large disposable pads. Use a disposable scraper and pan to scoop up the absorbent material and any unabsorbed body fluids.
3. Put the cloth, tissue, paper towel, absorbing agent and scraper into a plastic bag. Seal the bag and put it in the rubbish bin.
4. Remove disposable gloves and put them in the rubbish bin. This is because they may have become contaminated when you wiped up the spill.
5. Wash your hands with soap and water.
6. Put on clean utility gloves, wash the surface with detergent and warm water (see Basic steps) and dry with paper towels.
7. Wipe the area with disinfectant and allow to dry.
8. Remove utility gloves and wash your hands with soap and water.

The process is the same for spills on hard or soft surfaces.

Avoid direct contact with body fluids when you are cleaning the spill. Cover any cuts or abrasions on your hands with waterproof dressings, and wear gloves. You do not need to use protective equipment (for example, face shields or eyewear) when cleaning, but eyewear is recommended if body fluids may splash into your eyes.

Clean first, then disinfect

You must clean first, before using disinfectant. It is harder for the disinfectant to reach and kill germs if you have not wiped up the spill, removed any dried or caked-on material, and cleaned the surface well first.[27]

Some disinfectants combine the active ingredient with a detergent to allow for cleaning and disinfecting at the same time. These are common in hospitals but are not used in many education and care services. If they are used in your service, you can use them without cleaning the surface with detergent and warm water first.

[27] Holm SM, Leonard V, Durrani T & Miller MD (2019). Do we know how best to disinfect child care sites in the United States? A review of available disinfectant efficacy data and health risks of the major disinfectant classes, *American Journal of Infection Control* 47(1):82–91.

Disinfectants

Disinfectants are chemical substances used to destroy harmful germs. Each disinfectant has an active ingredient that attacks germs.

To kill germs, any disinfectant must be:

- effective against those specific germs
- used at the right concentration
- applied to a surface that has already been cleaned with detergent and water, and dried.

Education and care services can use either a commercially available general-purpose disinfectant or bleach to wipe the area after a spill of body fluid:

- General-purpose disinfectants can be a liquid disinfectant or a disinfectant wipe. Services should purchase disinfectants that are labelled 'hospital-grade' or similar, to ensure they are effective. If using liquid disinfectant, follow the manufacturers' instructions for dilution and use. In general, dilute just before use and do not store in spray bottles because disinfectants lose their effectiveness with time.
- Bleach is an effective disinfectant, particularly against bloodborne viruses. However, it can cause respiratory issues and may damage some surfaces, especially when concentrated. You do not need bleach for routine disinfection. Always prepare bleach solutions according to the manufacturer's instructions. You can also use the Chlorine dilutions calculator, which tells you how much bleach to dilute with water to get the desired concentration (parts per million).

Do **not** use domestic kitchen products, such as vinegar, as cleaning products or disinfectants.

Disinfectants may also be needed for more intense cleaning during disease outbreaks. If there are 2 or more cases of gastroenteritis in the education and care service, refer to your state or territory public health guidelines for the management of gastroenteritis outbreaks in education and care services or contact your local public health unit who will provide further advice.

Safe use of bleach

Always:

- Read and follow the safety and handling instructions on the label.
- Dilute bleach in a clean bucket or other container, according to the manufacturer's instructions.
- Wear gloves and eye protection when handling and preparing bleach.
- Check the use-by date before using bleach, because it can lose effectiveness during storage.
- Make up a new batch of bleach each time you disinfect – it loses its effectiveness quickly once it has been diluted.

Never use bleach in a spray bottle. Do not use hot water to dilute bleach, and do not mix bleach with any other chemicals. Bleach is corrosive, so do not use it on metals other than stainless steel.

Special considerations

Some areas and items in education and care services need special consideration to prevent the spread of infectious diseases.

Areas

Bathrooms and toilets

Clean bathrooms and toilets at least once a day, and more often if they are visibly dirty.

Nappy change area

To keep the nappy change table clean:

- After each nappy change and at the end of each day, wash the nappy change surface well with detergent and warm water. Rub with paper towel or a cloth as you wash. To rinse, wet a new paper towel or clean cloth with clean water, and wipe the surface to remove detergent. Repeat if needed. Dry the surface with a clean paper towel or clean cloth.
- Put the paper towels in the bin, or put the cloths into a laundry hamper for washing. There will be many harmful germs on the cloths, and they cannot be used again until they have been washed.
- If body fluids get on the nappy change surface, use a disinfectant on the surface after cleaning it with detergent and warm water.
- Change surfaces during the day to help prevent germs. For example, you can have 2 change mats and swap them, or cover a change mat with a waterproof sheet and remove it halfway through the day. Clean the morning change mat or waterproof sheet with detergent and water and leave it to dry, preferably outside in the sun.
- Always wear utility gloves when cleaning the nappy change surface. Remove the gloves and wash your hands when you finish cleaning.

For more details on nappy changing procedures, see section 2.5 Nappy changing and toileting.

Outdoor areas

Outdoor areas should be cleaned according to the type of surface:

- Plastic and metal surfaces that are touched often should be cleaned with detergent and water when visibly dirty.
- Wooden surfaces such as play structures, tables and benches do not need to be cleaned.
- Footpaths and groundcovers do not need to be cleaned.

Spraying cleaning products or disinfectants in outdoor areas is not necessary or effective.[28]

Ensure there is no stagnant water in outdoor areas.

After playing outside, children should wash their hands with soap and water.

[28] Centers for Disease Control and Prevention (2022). When and how to clean and disinfect a facility, CDC, Atlanta, US.

Sandpits

Sandpits can be a source of fun and stimulation, but they are also a potential source of infection. Keep them clean and well maintained. Sand should be at least 50 cm deep.[29]

Cover sandpits with a tight-fitting animal- and vermin-proof cover when the education and care service is unattended. This prevents contamination from animal faeces and protects sandpits from accumulating sharp or dangerous objects, such as large sticks and broken glass.

Rake sand every day and expose it to the sun to help kill harmful germs. Raking helps with screening for foreign objects and contamination.

Remove any sand that is contaminated by:

- food
- human or animal faeces
- blood
- body fluids (for example, urine, vomit).

Use a shovel and dispose of the sand in a plastic bag. If the sand has been extensively contaminated, such as through a large spill of body fluids, replace all the sand.

Dig deeply through sandpits at least once a month to reduce moisture in the sand and allow exposure to sunlight.[30] Replenish the sand when the level drops 10 cm below the top edge of the sandpit.

Items

Carpets, mats and curtains

Carpets and mats should be vacuumed daily and steam cleaned at least every 6 months. Curtains should be washed every 6 months and when they are visibly dirty. Spot-clean carpets, mats and curtains if a small area is visibly dirty.

Clothing

Clothing can carry harmful germs, so regular laundering of staff clothing, aprons and children's dress-up clothes is recommended. All items should be laundered as soon as possible if there is a disease outbreak.

Cots

Follow this procedure to clean a child who has got body fluids on themselves and a cot.

1. Wash your hands and put on disposable gloves.
2. Clean the child.
3. Remove your gloves and place in the bin.
4. Dress the child and wash the child's hands and your hands.

[29] Kidsafe (2021). Sandpits, Child Accident Prevention Foundation of Australia, Canberra.
[30] MidCentral Public Health Service NZ (2010). Cleaning and disinfecting guidelines for early childhood education centres, New Zealand.

5. Put on utility gloves.
6. Clean the cot.
   - Remove most of the soiling or spill with absorbent paper towels.
   - Place the soiled linen in a plastic-lined, lidded laundry bin.
   - Remove any visible soiling of the cot or mattress by cleaning thoroughly with detergent and warm water.
7. Remove your gloves and clean your hands.
8. Once the mattress is dry, make up the cot with clean linen.

Crockery and cutlery

All crockery, cutlery and serving utensils should be washed after every use. No special treatment is needed for items that have been used by people who are sick, if the water is at the correct temperature.

If the service has a dishwasher, all items should be washed on a hot setting (≥60 °C) and dried before using again.

If the service does not have a dishwasher, all items should be washed in hot water with dishwashing liquid, and dried completely before storage or reuse. They can be dried on a drying rack or using a clean tea towel. Do not use soiled or wet tea towels. Used tea towels should be washed and dried every day.

Cushions

Make sure that all cushions, including large floor cushions, have removable cushion covers. Change and wash these regularly, as well as when they are soiled with body fluids or are visibly dirty (see Table 3.1).

Dummies

Never let children share dummies. When not in use, store dummies in individual plastic containers labelled with the child's name. Store dummies out of children's reach, and do not let a dummy touch another dummy or toy.

Linen

Wash linen (such as sheets and towels) in detergent and hot water. Do not carry used linen against your own clothing or coverall – take it to the laundry in a basket, plastic bag or alternative carrier.

Wear gloves when handling linen with faeces on it. If washed at the education and care service, linen with faeces on it should be:

- rinsed to remove most of the contamination
- washed in hot water with laundry detergent
- dried in the sun or on a hot cycle in the clothes dryer.

If linen with faeces on it is to be washed by a laundry service or at the child's home, place it in a plastic bag or waterproof bag for transport.

Play dough

Play dough has a high salt content, which discourages harmful germs from living and multiplying. The following steps reduce the risk of spreading infections when using play dough:

- Children and adults should wash their hands with soap and water or use hand sanitiser before and after using play dough.
- Make a new batch of play dough each week. Take out enough play dough for each day. Store the remaining play dough in an airtight container away from children.
- If a child puts play dough in their mouth, remove the dough and dispose of it in the bin.
- If play dough is contaminated (visible dirt, sticks, sand), dispose of it in the bin.

Toothbrushes

Never let children share toothbrushes. Each toothbrush should be labelled with the child's name. Toothbrushes should be replaced regularly.

Because bacteria can grow on wet toothbrushes, expose the bristles to the air and allow to dry after each use. Do not let toothbrushes touch or drip on one another.

Store toothbrushes away from nappy change or toilet areas. Store them out of the reach of children, but do not store them in individual containers, because this stops them from drying.[31]

Toys and books

Washing toys effectively is very important to reduce the spread of disease.[32] Toys must be washed at the end of every day, especially those in rooms with younger children. Wash toys in warm water and detergent, and rinse them well.[33] If they are made of suitable materials, you can clean toys in a dishwasher, but not at the same time as dishes. All toys, including cloth toys and books, can be dried by sunlight.

Only buy washable toys. Throw away nonwashable (soft) toys that are for general use. Individual soft toys may be assigned to a child and kept in the child's cot for their use only. Check individual soft toys for visible dirt. Clean by wiping with a moist cloth with detergent on it, and allowing to dry. Keep damp or wet toys out of use until they are dry.

Check books for visible dirt. Clean if there is visible dirt by wiping with a moist cloth with detergent on it, and allowing to dry. Keep damp or wet books out of use until they are dry.

Remove toys for washing during the day. Start a 'toys to wash' box out of reach of children and place toys in it during the day if you see a child sneeze on a toy or put a toy in their mouth, or if the toy has been used by a child who is sick. You can split toys into 2 lots and rotate them between washing one day and in use the next.

In the nappy change area, have a box of clean toys and a box of toys to be washed. Give a child a clean toy if they need one while being changed. Immediately after the nappy change, place the toy in the 'toys to wash' box.

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[31] Nelson-Filho P, Pereira MSS, de Rossi A, da Silva RAB, de Mesquia KSF, de Queiroz AM & da Silva LAB (2014). Children's toothbrush contamination in day-care centers: how to solve this problem? *Clinical Oral Investigations* 18:1969–1974.
[32] Ibfelt T, Engelund EH, Schultz AC & Andersen LP (2015). Effect of cleaning and disinfection of toys on infectious diseases and micro-organisms in daycare nurseries, *Journal of Hospital Infection* 89(2):109–115.
[33] Australian Commission on Safety and Quality in Health Care (2023). Safe management and use of shared toys and therapy equipment in healthcare settings, ACSQHC, Sydney.

3.3 Food safety

Some harmful germs grow readily in food – in the right conditions, the number of bacteria in food can double every 30 minutes. Germs that are common on our skin and in the environment can cause food poisoning if they grow to large numbers in food. Germs that do not grow in food can still be passed from person to person in food.

For these reasons, food safety is an important part of infection control in education and care services. The best ways to prevent diseases spreading through food are:

- hand hygiene, particularly after toileting, before preparing and handling food, and just before eating
- not sharing food, plates or utensils
- preparing and storing food properly (see the Food safety standards in the Australia New Zealand Food Standards Code)
- keeping food preparation areas clean – the kitchen should be clean, fly-proof and vermin-proof.

Education and care services must prepare and provide food in a way that is safe for the children in their care, to reduce the risk of spreading infectious diseases through food – see Food safety programs for food service to vulnerable persons: a guide to Standard 3.3.1.

Food safety is monitored by each state and territory. Check with your local authority for specific food safety requirements:

- **Australian Capital Territory** – ACT Health Protection Service
- **New South Wales** – NSW Food Authority
- **Northern Territory** – Northern Territory Department of Health
- **Queensland** – Queensland Health, Food Safety Policy and Regulation Unit
- **South Australia** – Department for Health and Wellbeing
- **Tasmania** – Tasmanian Department of Health
- **Victoria** – Victorian Department of Health
- **Western Australia** – Western Australian Department of Health

It is recommended that the person who prepares and serves food should, wherever possible, not be the person who changes nappies or helps children go to the toilet. If this is not possible, staff should take extra care with hand hygiene and put on an apron before preparing food.

This section highlights the basic principles of food preparation. For more detailed advice on food safety, please refer to your education and care service's food safety plan.

Basic food safety for meals and snacks

Before the meal or snack

- Always wash your hands with soap and warm water and dry them using a paper towel before handling food, even if you will be using gloves. Gloves are not a substitute for clean hands. There is no need to wear gloves when preparing food if your hands are clean and dry and your skin is not broken.
- Only prepare food if you are well (no symptoms of disease such as sore throat, runny nose, diarrhoea or vomiting) and have no sores on your skin.
- Clean the surfaces that will come in contact with the food with detergent and hot water and allow to dry. For specific cleaning procedures for food areas, see the Food safety standards in the Australia New Zealand Food Standards Code.
- Clean the utensils that are going to be used for the meal.
- Check that all children have washed their hands or used hand sanitiser before they eat or drink.

During the meal or snack

- Do not allow children to share individual eating or drinking utensils or take food from other children's plates or bowls.
- If children are taking food from a common bowl or plate, make sure they understand that they must use tongs, spoons or other appropriate utensils to take the food they want to eat, and they cannot put food back. Remind them that they cannot touch shared food because this can spread germs that might make them or other children sick.
- Teach children to turn away from food and cough or sneeze into their elbow when they need to, and then to wash and dry their hands.
- Use a separate bowl and spoon for each baby you feed.
- If you are interrupted to care for another child while preparing food or spoon-feeding a baby, wash and dry your hands again before you continue.

Preparing and storing food

Always wash and dry your hands before handling food. Education and care services must have a hand basin (separate from the kitchen sink), and soap and disposable towels in the kitchen so that educators and other staff who are preparing food can easily wash their hands. Check your state or territory's food safety legislation for any other requirements.

All staff working in the kitchen should have clean clothing. Staff should wear a clean apron or overalls when working in the kitchen.

Storing food at correct temperatures

The 'temperature danger zone' for food safety is between 5 °C and 60 °C. In temperatures inside this danger zone, bacteria grow easily.

Food that must be kept cold should be stored at or below 5 °C to prevent the growth of bacteria. Keep a non-mercury thermometer in your fridge so that you can check that the temperature is below 5 °C.

Frozen food should be kept at –18 °C or below,[34] which is the normal operating temperature of a domestic freezer or freezer compartment. At these temperatures, food should be frozen solid. Defrost frozen food in the fridge, not on the kitchen bench.

Food does not become unsafe immediately when it is in the danger zone (between 5 °C and 60 °C). It should be safe at these temperatures for up to 4 hours, because it takes more than 4 hours for bacteria to multiply to dangerous levels.[35] However, remember to add up the total time the food has been at that temperature (for example, if the food has been taken in and out of the fridge). Throw out all food that has been in the temperature danger zone for 4 hours or longer. Throw out any food if you are not sure how long it has been in the danger zone.

For pregnant or immunocompromised people, you need to be more careful, even with food stored in the fridge. Follow any special recommendations from their healthcare provider.

Warming and cooling food

Australia's food safety standards state that reheated food should reach 60 °C or above.[36] Heating to this temperature will destroy germs that may have grown in the food since it was cooked. As an extra precaution in education and care services, it is recommended that food to be served is reheated until it reaches 70 °C, and it should stay at this temperature for 2 minutes. This is because you may not know whether the prepared food has been within the temperature danger zone (5 °C to 60 °C).

Warm food or milk for bottles once only. Do not allow it to cool and then reheat it – this can allow harmful germs to grow.

Use a food thermometer to ensure that cooked or reheated food reaches the correct temperature.

Check that food has cooled before giving it to a child. Remove a small piece of food with a spoon to another plate and test the temperature of the food with your hand. Throw this piece of food away and wash the spoon.

Throw out all leftovers. Tell parents and carers what food their child left, but do not return the leftover food to the parents or carers.

Separating raw and cooked foods

Do not let raw meat come in contact with cooked food, because the raw meat may have germs in it.

To prevent cross-contamination between raw and cooked foods:

- keep raw and cooked foods separate, even in the fridge
- keep cooked food and ready-to-eat foods above raw food in the fridge
- use separate utensils and equipment (such as cutting boards and knives) for raw and cooked food.

[34] Food Safety Information Council (2023). Fridge and freezer food safety, FSIC, Canberra.
[35] Food Standards Australia New Zealand (2021). Food temperature and thermometers, FSANZ, Canberra.
[36] Food Standards Australia New Zealand (2023). Safe food Australia: a guide to the food safety standards, FSANZ, Canberra.

Preparing and storing bottles

The Infant Feeding Guidelines provide evidence-based advice for healthcare workers about breastfeeding and infant feeding. The information here has been adapted from these guidelines to be most relevant for educators and other staff working in early education and care services.

Bottles of breastmilk and formula must be carefully prepared, stored and warmed. The same guidelines apply when you are preparing to give a baby a bottle as when you are preparing food for older children.

Preparing bottles

When preparing formula, always do hand hygiene first, and ensure that work surfaces, bottles and other equipment are clean. Wash bottles thoroughly with hot soapy water, then rinse and sterilise them before use.

Follow your service's procedures carefully to sterilise bottles. Sterilisation methods include:

- boiling
- use of chemicals
- steaming.

Follow the formula manufacturer's instructions carefully to prepare a bottle of formula.

Storing bottles

Bottles of formula or breastmilk must be refrigerated at 5 °C or below, or frozen. Keep a non-mercury thermometer in your fridge so that you can check the temperature. All bottles need to be labelled with the child's name and the date the bottle was prepared or brought in by the parent or carer.

Formula

It is best to make up fresh formula for each feed and give it to the child as soon as it is ready. If this is not possible, the freshly made formula should be stored in the back of the refrigerator (where it is coldest).

Discard any made-up formula at the end of the day.

If a baby has drunk from a bottle but not finished it, do not store the remainder for later. Throw away any formula that is left over. Do not freeze or rewarm leftover made-up formula.

Breastmilk

Breastmilk can be stored in several ways:

- Refrigerated for 72 hours at 5 °C or lower (5 °C is the typical temperature of a standard fridge). Store breastmilk at the back of the refrigerator, not in the door.
- Frozen in a separate freezer section of a refrigerator for up to 3 months. If your freezer is a compartment inside the refrigerator, rather than a separate section with its own door, then only store the breastmilk for 2 weeks.
- Frozen in a deep freeze (–18 °C or lower) for 6 to 12 months.

When thawing frozen breastmilk, always use the oldest milk first. Frozen breastmilk can be thawed in the refrigerator and used within 24 hours. Alternatively, you can stand the bottle in a container of lukewarm water and use it straight away.

Never refreeze thawed breastmilk.

Warming bottles

Warm bottles **once only**. Do not allow a bottle to cool and then reheat it – this can allow harmful germs to grow.

Do not warm bottles of breastmilk or formula in the microwave.[37] Microwave ovens distribute heat unevenly. Water in the milk can turn to steam that collects at the top of the bottle, and there is a danger that the baby could be scalded.

To warm bottles:

- Stand the bottle in a container of warm water for no more than 15 minutes.[38]
- Before feeding the baby, check the temperature of the milk by letting a little drop onto the inside of your wrist – it should feel comfortably warm or even a little bit cool.

Discard any warmed milk that has not been used.

Children's cooking activities

Cooking is a safe and enjoyable activity for children in education and care services, provided you take a few simple precautions.

- Make sure children wash and dry their hands before and after the cooking activity.
- Always be aware of the dangers of heat.
- Tie up any long hair.

To reduce the chances of harmful germs spreading through food, children should only prepare food that will be cooked afterwards – any germs in the food will be destroyed when the food is cooked. Foods suitable for cooking activities include cooked biscuits, fresh pasta, soups and pizza.

Foods not suitable for cooking activities include biscuits or slices that do not need cooking and are therefore not exposed to high temperatures. Refrigeration does not kill germs.

However, if the food will not be cooked, the risk of spreading germs can be lowered if each child only prepares food that they will eat themselves.

Do not allow children to eat uncooked mixtures, such as uncooked biscuit dough or cake batter.

Children who have had diarrhoea or vomiting may return to the service if they have not had these symptoms for at least 24 hours, but should not participate in any cooking activities until they have not had these symptoms for at least 48 hours. If your service has recently had, or is currently experiencing, an outbreak of gastrointestinal disease, do not hold children's cooking activities. Check with your local public health unit before resuming cooking activities.

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[37] World Health Organization & Food and Agriculture Organization of the United Nations (2007). Safe preparation, storage and handling of powdered infant formula: guidelines, WHO, Geneva.
[38] National Health and Medical Research Council (2012). Infant feeding guidelines: information for health workers, NHMRC, Canberra.

Celebration cakes and blowing out candles

On their birthday, many children love to blow out the candles on a cake while their friends are singing 'Happy birthday'. Cakes and candles may also be brought into the education and care service for other special occasions.

It is unlikely that blowing out candles will spread disease, unless the child who is blowing is sick or has been sick recently. If you want to minimise the risk from this activity, other options for celebrations include:

- using a separate cupcake with a candle for the birthday child to blow out, and providing enough cupcakes for all the other children or a large cake that can be cut and shared
- 'clapping' (rather than blowing) out the candle.

PART 4

MANAGING INFECTION

This section describes the actions to take if you think a child or a staff member is sick or if a notifiable disease occurs in the education and care service. It includes considerations and procedures for excluding sick children, educators or other staff, and covers the role of public health units when disease outbreaks occur.

4.1 If a child is sick

4.2 If a staff member is sick

4.3 Excluding children and adults

4.4 Public health units

4.5 Disease outbreaks

4.6 Notifiable diseases

4.1 If a child is sick

This section has information on monitoring children who become sick while in the education and care service. This includes sickness from common infectious diseases and adverse effects after immunisation (see also section 2.1 Managing symptoms after vaccination). This section also describes how to keep health records.

See section 4.3 Excluding children and adults for information on how to identify the need for exclusion.

Watching for symptoms in children

Because you care for the children in your group every day, you are familiar with the way each of them looks and behaves when they are well.

Watch for symptoms of sickness in every child in your care, especially if you know a family member or carer is sick. If you notice symptoms, consider these questions:

- Does the child need medical attention immediately? If a child has any serious symptoms, call an ambulance (000) and the parent or carer. If a child has concerning symptoms that are severe or rapidly getting worse, or has several concerning symptoms, consider calling an ambulance.
- Does the child have symptoms that suggest they must go home or be separated from others immediately? See Concerning symptoms and What to do if a child seems sick for further guidance.
- Does the child have symptoms that require medical attention to make a more specific diagnosis? Discuss all symptoms with the parent or carer and give them details that will help them decide about care and whether the child needs to see a doctor. Take care to tell the parent or carer if the symptoms are severe or if they developed rapidly.

Identifying severe sickness

Educators and other staff should understand the symptoms that suggest that a child may be very sick and need urgent medical attention.[39] Remember that sickness in babies and infants can progress very quickly.

Serious symptoms

If a child has any of the following serious symptoms, call an ambulance (000) immediately:

- **Breathing difficulty** – the child may be breathing very quickly or noisily, or look pale or blue around the mouth. The child may be working hard at breathing, with the muscles between the ribs or at the base of the neck being drawn in with each breath.
- **Drowsiness or unresponsiveness** – the child is less alert, sleepier than normal or difficult to wake from sleep, or they are not responding as they usually do (for example, making less eye contact than usual, or less interested in their surroundings than usual).
- **Poor circulation** – the child looks very pale, and their hands and feet feel cold or look blue.

[39] Healthdirect (2021). Symptoms of serious illness in babies and children, Healthdirect, Canberra.

Concerning symptoms

Other symptoms may be concerning but do not necessarily mean that a child is severely sick. These symptoms may also occur in combination with the serious symptoms. The more of these concerning symptoms you see, the more likely it is that the child is severely ill.

If you see any of these symptoms, contact the child's parent or carer and monitor the child carefully. Consider calling an ambulance (000) if:

- any symptoms are severe
- symptoms rapidly get worse
- multiple symptoms develop.

Concerning symptoms include:

- **Lethargy and decreased activity** – the child wants to lie down or be held rather than participate in any activity, even activities that would normally interest them.
- **Fever** – fever by itself is not necessarily an indicator of severe sickness. However, a fever (temperature more than 38.0 °C) in a child is usually a sign of infection and may need to be investigated. Children less than 3 months of age with a fever of more than 38.0 °C should see a doctor. Ensure you measure temperature accurately (see Taking your child's temperature from Raisingchildren.net.au). See the Fever fact sheet for more information.
- **Poor feeding** – the child has reduced appetite and eats and drinks much less than usual.
- **Poor urine output** – the child is going to the toilet less often or not at all; for babies, there are fewer wet nappies than usual.
- **Pain** – a child may or may not tell you they are in pain. Facial expression is a good indicator of pain in small babies or children who do not talk. General irritability or reduced physical activity may also indicate pain in babies or infants.
- **A stiff neck, irritability (excessive or high-pitched crying) or sensitivity to light** – this may indicate meningitis.
- **New red or purple rash** – rashes may be caused by viral infections and other causes (for example, nappy rash). Rapidly developing rashes may be a symptom of more serious diseases. Monitor the child carefully if the rash develops rapidly or if it is combined with other concerning symptoms.

What to do if a child seems sick

If a child is not well enough to participate in activities, follow your service's policy for contacting parents, carers or emergency contacts. Tell them that the child is sick and must be taken home. A child who is feeling sick is better off at home with close supervision from a parent or carer.

Separate the sick child from the other children until they can be collected by the parent or carer. For example, they could lie on a floor cushion or mat in a corner of the room where you can still comfort and supervise them.

Monitor the child to make sure their condition does not get worse. If a child develops any serious symptoms, call an ambulance (000).

If the child has a fever, see the Fever fact sheet for more information.

Your education and care service may have a policy about giving children medication (such as paracetamol or ibuprofen) to relieve pain or fever. Check that the parent or carer has given permission before giving the child any medication.

When caring for a sick child, remember the main ways to break the chain of infection:

- Remind a child who is coughing or sneezing to cough or sneeze into their elbow. If the child covers their mouth with their hands, ask them to do hand hygiene.
- If you wipe a child's nose, dispose of the tissue in a plastic-lined rubbish bin then do hand hygiene.
- If you touch a child who might be sick, avoid touching other children until you have done hand hygiene.
- Consider wearing a mask when caring for the child.

When the parent or carer picks up the child, talk with them about the child's symptoms. Make sure you provide all the details that will help the parent or carer make decisions about care and whether the child needs to see a doctor. For example, describe the severity of the symptoms, how rapidly they developed and progressed, and how sick the child seemed. If appropriate, give them a fact sheet about the symptoms.

Recommend that the child sees a doctor if:

- any symptoms are severe
- symptoms rapidly get worse
- multiple symptoms develop.

After the child leaves, clean the areas where the child was, and the mattress or floor cushion where they were resting, before using them again. Some harmful germs can persist on surfaces and may cause infection even if an object looks clean or is wiped clean. See cleaning information in section 3.2 Cleaning.

Scenario 4.1

Tabitha is an 18-month-old who attends your education and care service.

About 2 hours after arriving, you notice Tabitha's face is flushed and warm to touch. She refuses her morning tea, does not want to play with the other children and seems quite miserable. Before lunch, she has diarrhoea, which escapes her nappy. She has 2 similar episodes in the next 2 hours.

You call Tabitha's parents to ask them to take her home, and reach Tabitha's dad. He says neither parent can get there for at least 2 hours.

What do you do?

Points to discuss with Tabitha's dad include:

- Tabitha is sick and needs to be with someone who can give her one-to-one care.
- If neither parent can pick Tabitha up, is someone else available, such as a grandparent or emergency contact?

While you are waiting for Tabitha's dad to collect her:

- Keep Tabitha away from the other children as much as possible. She can rest on a mattress in the room, but away from the others; this way, you can still supervise her. Remove the mattress linen and launder it when Tabitha leaves (see How to clean soft materials in section 3.2).
- Offer Tabitha small amounts of fluids regularly.
- Print the Diarrhoea or vomiting fact sheet for Tabitha's parents or send them the online link.
- Advise Tabitha's dad that Tabitha will need to be excluded for at least 24 hours after her diarrhoea has stopped.

Keeping records

Keep records of any sickness in children, educators or other staff at the education and care service. Templates to record sickness and medication use are available on the ACECQA website.

Record information with as much detail as you can, such as:

- symptoms you see
- the time you first noticed each of the symptoms
- action taken (for example, exclusion or review of nappy changing practices)
- which area of the education and care service the child or staff member was in for most of the day
- doctor's diagnosis, if there is one.

If the disease is one that the service must notify public health authorities about, record when and where the notification was sent, and which staff member made the notification (see section 4.6 Notifiable diseases).

Keeping health records helps to identify outbreaks by showing any increase in illness among staff and children. It also helps to prevent the spread of infection – records show when your approach to infection control is working. Further, parents or carers and the child's doctor may find written information on the child's sickness useful.

In some circumstances, the records may help identify the cause of an outbreak and how to control it.

4.2 If a staff member is sick

Educators and other staff should stay home whenever they have a disease that may be infectious, even if they do not feel very sick.

Educators and other staff should notify their supervisor or service manager as soon as possible if they feel sick and think they may have an infectious disease (see also Responsibilities of management and staff in the Introduction).

If symptoms of the infectious disease appear while they are still at home, they should call the service and stay home.

If symptoms of the infectious disease appear while they are at work, they should go home as soon as possible. If they need to wait to be collected, they should isolate themselves from children and other staff and continue to practice good hand hygiene and respiratory hygiene.

Contact their emergency contact person if the staff member is not well enough to drive home. Call an ambulance (000) for urgent medical attention if needed.

Provide the staff member with a copy of, or a link to, the relevant fact sheet.

Use appropriate cleaning procedures after the staff member has left the service (see section 3.2 Cleaning).

Staff members should not return to the service until symptoms have resolved. Follow the exclusion periods for symptoms (Table 4.1) and specific conditions (Table 4.2).

Scenario 4.2

Sam (one of the kitchen staff) becomes sick after preparing and serving morning tea in Tabitha's room. He has vomited once and had diarrhoea.

Points to consider:

- Sam is sick and must go home to rest.
- If he is not able to drive home, call his emergency contact to collect him.
- Because Sam prepares and serves food, he must be excluded for at least 48 hours after he stops vomiting or having diarrhoea.
- You ask Sam if he can drive himself home or if he would like you to call someone to take him home. Sam asks you to call his partner to drive him home. Sam's partner comes to pick him up and you remind him about the exclusion recommendations.

Clean and disinfect the kitchen where Sam worked. Food prepared by Sam for the rest of the day should be discarded, if possible.

Because you have 2 cases (that is, Tabitha and Sam) of diarrhoea and/or vomiting (possible gastroenteritis) at your service, you may be required to notify your local public health unit. This is a legal requirement in most states and territories (except South Australia). Please check your local public health information and notify if required.

- It is also a good idea to increase the use of strategies to break the chain of infection, including hand hygiene and cleaning.

4.3 Excluding children and adults

The aim of exclusion is to reduce the spread of infectious disease. The less contact there is between people who have an infectious disease and others, the less chance the disease has of spreading.

Excluding children, staff and parents who are at risk of transmitting infection to others limits the spread of infection in education and care services.

Identifying people who are at risk of transmitting infection to others will generally be based on symptoms. Although some infections can be spread before the person becomes sick, people are usually most infectious when they have symptoms. For this reason, it is best to exclude children, staff, and parents and carers from education and care services when they are sick.

By excluding anyone who is sick, you can protect many other people from becoming sick.

Educators and other staff and children who show symptoms of infectious disease should be excluded from the service.

The exclusion procedure

Education and care services should be mindful of the circumstances of each family. Services should work with families to make arrangements that consider the needs of the sick child and minimise the spread of disease, while limiting the impact on employment and other requirements, if possible. See Involving parents and carers for strategies to inform and collaborate with parents and carers on exclusion requirements.

The minimum exclusion periods recommended here aim to reduce the spread of infectious diseases between children, educators and other staff, and families visiting early education and care services. The exclusion periods are based on how long a person with a specific disease is likely to be infectious.

The need for exclusion and the length of time a person is excluded depend on:

- the type of infection
- if symptoms are present and how severe they are
- how easily the infection or disease can spread
- how long the person is likely to be infectious
- how severe the infection or disease can be.

As soon as you have identified that a person may have an infectious disease, the person should leave the education and care service and not return until they are well (see Returning to the service).

- Children – keep the child separated from other children until their parent or carer can pick them up (see What to do if a child seems sick).
- Educators and other staff – they should leave as soon as they start to feel sick.
- Parents, carers and other people who make short visits to the service – ask them not to attend the service if they are sick. If it cannot be avoided (for example, if no-one else is available to pick up a child), minimise risk by meeting the parent outside or restricting their movement in the service.

Provide the parent, carer or staff member with the relevant fact sheets for the symptom or disease.

Identifying the need for exclusion

To determine when a person should be excluded, check whether the symptoms or diagnosed sickness have an exclusion period. Table 4.1 lists the recommended minimum exclusion periods for symptoms, and Table 4.2 lists periods for diagnosed conditions.

Sometimes people who have been in contact with a person infected with a specific condition may also need to be excluded (see Table 4.2).

The recommendation 'Not excluded' means that exclusion is not required. However, the person with symptoms or a condition can still be infectious. Encourage staff to help prevent the spread of disease by staying home whenever they are sick. Encourage parents and carers to keep a sick child at home, even if the child is not very sick or if the disease is not serious (for example, if they have a cold).

Table 4.1 and Table 4.2 are support tools; they do not replace clinical assessment, management or judgement. They should be used together with any medical management plans provided by a doctor (for example, for an immunocompromised child). Encourage parents and carers to seek medical advice for any concerning symptoms or if symptoms continue. See the fact sheets for more information about each of the symptoms and conditions.

Contact your local public health unit if you have any questions about the recommended exclusion periods.

Exclusion based on symptoms

In most cases, exclusion will be based on symptoms (Table 4.1). Symptoms are the most obvious triggers for action.

Using your best judgement, assess whether the person's symptoms indicate that they are probably infectious. Follow these principles:

- Assess whether the symptoms have a known cause that is not infectious. For example, if a child has chronic asthma, they may have a cough but not be infectious.
- Assess whether symptoms are new. Symptoms that have been present for a long time or that recur are likely to have a non-infectious cause.
- Assess symptoms together, rather than separately. For example, a child with a cough would not usually be excluded, but a child with a cough who also had a fever and runny nose should be excluded until the symptoms have resolved or until the sickness is diagnosed.
- Assess general wellness as well as specific symptoms. For example, a child with a cough who is unhappy and lacks energy is more likely to be sick than a child who has a cough but is happily playing (see Identifying severe sickness for lists of serious and concerning symptoms).

Follow these principles and the guidance in Table 4.1 to decide on exclusion periods for individual cases. Communicate clearly with parents and carers about exclusion periods and when the child can return to the service.

Whenever a medical professional has diagnosed a specific condition, use the exclusion periods in Table 4.2.

People in the service who have been in contact with a person with symptoms do not need to be excluded. Contacts should only be excluded for specific conditions once the sickness is diagnosed (Table 4.2).

Table 4.1 Recommended minimum exclusion periods based on symptoms

These recommendations are practical guidelines that try to balance the risk of infection with the risk of sending children or staff home unnecessarily. Minimising the spread of infection is important even with mild diseases, because these diseases can have serious effects on very young or immunocompromised people. When you are making decisions about exclusion, consider whether keeping the sick person at the service would put other people at risk.

Only use the recommendations in the table for children without serious symptoms. If a child has serious symptoms, call an ambulance (000) immediately.

Excluded in some cases **Excluded**

Symptom	Should the child or staff member go home as soon as the symptom appears	Exclusion of person who is sick
Diarrhoea or vomiting	Yes, go home as soon as possible for any diarrhoea or vomiting	• Exclude until there has not been any diarrhoea or vomiting for at least 24 hours • If the diarrhoea or vomiting are confirmed to be due to norovirus, exclude until there has not been any diarrhoea or vomiting for at least 48 hours • Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) • Check if your state or territory has different requirements for gastroenteritis Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis
Eye discharge (pus or severe wateriness)	Yes, go home as soon as possible	• Exclude until discharge from the eyes has stopped (unless a doctor has diagnosed a non-infectious cause for the eye discharge)
Fever (temperature more than 38.0 °C)	Yes, go home as soon as possible	• Exclude until the temperature remains normal, unless the fever has a known non-infectious cause • If the child has gone home from the service with a fever but their temperature is normal the next morning, they can return to the service • If the child wakes in the morning with a fever, they should stay home until their temperature remains normal • Normal temperature is between 36.5 °C and 38.0 °C • If a doctor later diagnoses the cause of the child's fever, follow the exclusion guidance for that disease
Rash	No, stay at the service unless: • it develops rapidly • it is combined with fever or other concerning symptoms	• Rash on its own may not be cause for concern, but rash can often be combined with other symptoms • In cases of rapidly developing rash or when rash is combined with other concerning symptoms, exclude until the concerning symptoms have gone

(Continued)

Excluded in some cases Excluded

Symptom	Should the child or staff member go home as soon as the symptom appears	Exclusion of person who is sick
Respiratory symptoms (cough, runny or blocked nose, sore throat)	Yes, if the symptoms: • are severe or • are getting worse (more frequent or more severe) or • are combined with concerning symptoms such as: – fever – rash – tiredness – pain – poor feeding	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms

Scenario 4.3

Kai, a child in the kinder room, has a runny nose and is not engaged with the morning lesson. He eats lunch and then says he is really tired and would like to have a nap. Kai does not normally have a nap during the day. When he lies down for a nap, he starts coughing.

Points to consider:

- Kai is not behaving like his usual self.
- Kai is eating and drinking normally.
- Kai has several respiratory symptoms including a runny nose and appears significantly more tired than usual.

You call Kai's parents and get through to his mum, who says she can come to collect him in 20 minutes.

Points to discuss with Kai's mum:

- his symptoms – runny nose, severe tiredness and cough
- exclusion recommendations based on his symptoms.

When Kai's mum arrives, you provide the Respiratory symptoms fact sheet and explain that he can return to the service after his concerning symptom (severe tiredness) has resolved.

Exclusion based on a diagnosed condition

If a medical practitioner has diagnosed a specific condition, use the exclusion periods for that condition (Table 4.2).

Some states and territories may have different requirements for certain conditions. Check with your local public health unit if your state or territory has different or additional requirements.

Contact your local public health unit for information and support if you have a disease outbreak, or a case of a notifiable or concerning disease.

Table 4.2 Recommended minimum exclusion periods for specific diagnosed conditions

Not excluded **Excluded in some cases** **Excluded**

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Asthma	Not excluded	Not excluded
Bronchiolitis	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Bronchitis	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Campylobacter infection	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Chickenpox (varicella)	Exclude until all blisters have dried – this is usually at least 5 days after the rash first appeared in non-immunised children, and less in immunised children	Not excluded Staff or children who are immunocompromised are at high risk of developing severe disease if exposed Talk to immunocompromised or pregnant staff about risk and recommend they seek medical advice For any immunocompromised children, talk to the parents about the child's potential risk of exposure and follow the child's agreed action plan (see Plans for immunocompromised children)
Cold sores (*herpes simplex*)	Not excluded if the person can maintain hygiene practices to minimise the risk of transmission If the person cannot maintain these practices (for example, because they are too young), exclude until the sores are dry Cover sores with a dressing, if possible	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Common cold	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Conjunctivitis	Exclude until discharge from the eyes has stopped Not excluded if a doctor has diagnosed non-infectious conjunctivitis	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
COVID-19	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded Refer to state or territory advice
Croup	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Cryptosporidiosis	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded
Cytomegalovirus (CMV) infection	Not excluded	Not excluded
Ear infection	Not excluded unless associated with other concerning symptoms	Not excluded
Fifth disease (slapped cheek syndrome, erythema infectiosum, human parvovirus B19)	Not excluded	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Flu (influenza)	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Fungal infections of the skin or scalp (ringworm, tinea, athlete's foot)	Exclude until the day after starting appropriate antifungal treatment	Not excluded
Giardia infection (giardiasis)	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded
Glandular fever (Epstein–Barr virus, infectious mononucleosis)	Not excluded	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Hand, foot and mouth disease	Exclude until all blisters have dried	Not excluded
Head lice	Not excluded, as long as effective treatment begins before the next attendance at the service The child does not need to be sent home immediately if head lice are detected	Not excluded
Hepatitis A	Exclude until at least 7 days after jaundice starts, or if there is no jaundice, until at least 2 weeks after onset of other symptoms Talk to your public health unit for advice	Not excluded Talk to your public health unit for advice
Hepatitis B	Not excluded	Not excluded
Hepatitis C	Not excluded	Not excluded
Hepatitis E	Exclude until at least 7 days after jaundice starts, or if there is no jaundice, until at least 2 weeks after onset of other symptoms	Not excluded Talk to your public health unit for advice
Hib (*Haemophilus influenzae* type b)	Exclude until the person has received antibiotic treatment for at least 4 days	Not excluded Talk to your public health unit for advice
HIV (human immunodeficiency virus)	Not excluded	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Human metapneumovirus	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Impetigo (school sores)	Exclude until antibiotic treatment has started Cover any sores on exposed skin with a watertight dressing	Not excluded
Measles	Exclude for at least 4 days after the rash appeared	Immunised contacts are not excluded For non-immunised contacts, talk to your public health unit for advice Talk to immunocompromised or pregnant staff about risk and recommend they seek medical advice Exclude all immunocompromised children until 14 days after the rash appears in the last case at the service
Meningitis (viral)	Exclude until person is well	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Meningococcal infection	Exclude until the person has completed antibiotic treatment	Not excluded Talk to your public health unit for advice about antibiotics and/or vaccination for people who were in the same room as the case
Molluscum contagiosum	Not excluded	Not excluded
Mosquito-borne diseases (Barmah Forest virus, Chikungunya virus, Dengue virus, Zika virus, Japanese encephalitis, malaria, Murray Valley encephalitis virus, Ross River virus, West Nile virus – including Kunjin virus)	Not excluded Talk to your public health unit for advice	Not excluded
Mumps	Exclude for at least 9 days or until swelling goes down (whichever is sooner)	Not excluded
Norovirus infection	Exclude until there has not been any diarrhoea or vomiting for at least 48 hours Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded
Pneumococcal disease	Exclude until person has received antibiotic treatment for at least 24 hours and feels well	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Pneumonia	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Roseola (exanthum subitum, sixth disease)	Not excluded	Not excluded
Rotavirus infection	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
RSV (respiratory syncytial virus)	If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), monitor them and exclude them if: • they have several respiratory symptoms at the same time or • they have developed new symptoms while at the service or • the respiratory symptoms are severe or • the respiratory symptoms are getting worse (more frequent or severe) or • they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding) A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they are feeling well, they can return to the service Talk to your local public health unit for advice if there are several children and staff with respiratory symptoms at the service. Check if your state or territory has different requirements for respiratory symptoms	Not excluded
Rubella (German measles)	Exclude until the person has fully recovered or for at least 4 days after the rash appears	Not excluded Talk to immunocompromised or pregnant staff about risk and recommend they seek medical advice
Salmonella infection (salmonellosis)	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Scabies and other mites causing skin disease	Exclude until the day after starting treatment	Not excluded
Shigella infection (shigellosis)	Exclude until there has not been any diarrhoea or vomiting for at least 24 hours Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours) Talk to your local public health unit for advice if there are several children and staff with diarrhoea or vomiting at the service. Check if your state or territory has different requirements for gastroenteritis	Not excluded
Shingles (zoster infection)	Exclude children until blisters have dried and crusted Adults who can cover the blisters are not excluded (they are excluded if blisters cannot be covered)	Talk to your public health unit for advice about pregnant women and anyone who is immunocompromised
Staph infection (*Staphylococcus aureus*)	Exclude until the person has received antibiotic treatment for at least 24 hours and feels well	Not excluded
Streptococcal sore throat	Exclude until the person has received antibiotic treatment for at least 24 hours and feels well	Not excluded
Thrush (candidiasis)	Not excluded	Not excluded
Toxoplasmosis	Not excluded	Not excluded
Trachoma (*Chlamydia trachomatis* eye infection)	Exclude until antibiotic treatment has started **and** Talk to your local public health unit for advice	Talk to your public health unit for advice

(Continued)

Not excluded | Excluded in some cases | Excluded

Condition	Exclusion of person who is sick	Exclusion of contacts (people who have been in contact with the person who is sick, but who have no symptoms; if they have symptoms, they should follow the same guidance as the person who is sick)
Tuberculosis (TB)	Talk to your local public health unit for advice about exclusion	Talk to your public health unit for advice about screening, antibiotics and TB clinics
Typhoid and paratyphoid fever	Exclude until cleared by the local public health unit	Not excluded Talk to your public health unit for advice
Warts	Not excluded	Not excluded
Whooping cough (pertussis)	Exclude until at least 5 days after starting appropriate antibiotic treatment, or for at least 21 days from the onset of coughing if the person does not receive antibiotics	Talk to your public health unit for advice about excluding non-immunised contacts Talk to immunocompromised or pregnant staff about risk and recommend they seek medical advice
Worms	Not excluded	Not excluded

Note that exclusion advice is consistent with the Communicable Diseases Network Australia Series of National Guidelines, if available.

Returning to the service

Following all the steps to break the chain of infection at all times should minimise the chance of disease spreading, as long as sick people stay at home until they are better.

The exclusion periods in Table 4.1 and Table 4.2 are the minimum exclusion periods. People may need to stay home for longer to be well enough to return to the education and care service. For some diseases, additional public health recommendations and exclusion periods may apply. Contact your local public health unit as indicated and follow their advice.

For most conditions, once symptoms have gone, the person can return to the service.

If there are mild ongoing symptoms (for example, occasional cough after other acute respiratory symptoms have gone) and the person otherwise feels well, the person can return to the service.

In some cases, the person may still be infectious once symptoms have gone (see Part 1 Understanding infection). For this reason, the person should pay close attention to hand and respiratory hygiene when they return to the service.

Use the information in the *Staying healthy* guidelines to decide on your service's response to a sickness (for example, the required exclusion time).

Tell the parent or carer when the child can return to the education and care service. If it is an educator or other staff member who is sick, tell them when they can return to work.

If a sick child has been diagnosed and treated by a doctor, your service can still make the decision about when the child can return, based on your own criteria and judgement. Services are not required to follow letters from doctors stating that the child can return to care. Services should also not require 'clearance' from a doctor to allow the child back to the service.

Your local public health unit can also help you if you are in doubt about exclusion.

Involving parents and carers

Clear policies can help avoid conflict.

When the child enrols, give parents and carers a copy of your service's policies on exclusion, hand and respiratory hygiene, immunisation and medication.

Encourage parents and carers to discuss these policies with you. The exclusion policy is the policy most likely to cause concern. Make sure parents understand why the service has an exclusion policy.

It is also important that parents and carers support the service's policies on hygiene and infection control. Ask parents to encourage their children to wash hands or use hand sanitiser when they arrive at your service, and when they leave.

Written policy

Parents and carers may find their child's exclusion difficult because of work, study or other family commitments. Some parents and carers may put pressure on educators or other staff to vary the exclusion rules, which may lead to stress and conflict.

The best way to avoid conflict is to have a written policy that clearly states the exclusion criteria. This includes:

- the minimum exclusion periods (Table 4.1 and Table 4.2)
- a statement that additional public health recommendations and exclusion periods may apply for some diseases and outbreaks
- discussion of the principles that will be used to exclude someone based on symptoms (see Exclusion based on symptoms)
- any other conditions or exclusion periods that your education and care service may have.

Give a copy of the policy to all parents and carers, educators and other staff when they first join your service, and regularly remind them about the policy. Provide further information about infectious diseases in education and care services and the need for exclusion – for example, Starting Blocks provides clear information for parents and carers about illness in early learning services.

Plans for immunocompromised children

If a child who is immunocompromised attends your service, talk to the parent or carer about their needs. The parents or carers and the child's doctor can develop a written medical management plan that includes specific decisions in advance about whether the child should stay at home during disease outbreaks. The doctor may decide to modify the general exclusion recommendations (Table 4.1 and Table 4.2) for an immunocompromised child.

Scenario 4.4

Akiko, a child in the toddlers' room, has a confirmed case of measles. A public health nurse has contacted the education and care service, asking for the vaccination status of all staff and children who have been in the same room as Akiko.

One educator (Parvati) is immunocompromised, and one child (Sebastian, 2 years old) who attended on the same day as Akiko has not been vaccinated.

The public health nurse advises Parvati to see her GP and receive immunoglobulin,[40] even if she is up to date with her vaccinations.

The nurse advises Sebastian's parent that Sebastian should be vaccinated. The nurse also advises that Sebastian must be excluded for 14 days from his last contact with Akiko if he is not vaccinated. All other children in the room are up to date with their vaccinations, so the public health nurse does not recommend any other action.

You contact Sebastian's mum to come and pick him up. She is very upset and wants to know why Sebastian must be excluded – he is well, and she cannot take time off from her full-time job to stay home with him.

How do you respond?

Points to discuss with Sebastian's mum include:

- You are following best-practice public health advice. Ask her to contact the public health nurse to discuss the requirements further.
- You are not singling out Sebastian. Measles can cause serious sickness in young children and Sebastian is at higher risk of being infected because he is not vaccinated.
- By excluding Sebastian, you are protecting him. There may be other children who have measles but have not yet developed symptoms, and you want to prevent him from being exposed and getting sick.
- You are also protecting the other children in the education and care service. Sebastian may develop symptoms and spread the infection to children too young to be vaccinated or whose immune systems did not respond well to the vaccine.

[40] Department of Health and Aged Care (2023). Post-exposure prophylaxis needed within 6 days (144 hours) of 1st exposure for people exposed to measles, in Immunisation Handbook, Australian Government, Canberra.

4.4 Public health units

Public health units are run by departments of health in each state and territory. Public health staff play a critical role in protecting people from infectious diseases and preventing harm from hazards involving chemicals, poisons or radiation. Public health units conduct disease surveillance and control initiatives, including responding to disease outbreaks. They also make sure that public health laws are followed.

Public health unit support for education and care services

Public health units are valuable resources for education and care services. They can provide support and information about diseases that may occur in your service.

Public health staff can provide general advice and support about infectious diseases, infection control practices and public health issues. Contact your local public health unit with any questions.

Most importantly, public health staff can provide valuable advice, support and resources that can help manage cases or outbreaks of infectious diseases. Some of the important diseases that public health units can provide advice on and help to control are hepatitis A, Hib *(Haemophilus influenzae* type b), measles, meningococcal disease, tuberculosis, typhoid and paratyphoid infection, whooping cough and outbreaks of gastroenteritis.

If there is a case of one of these diseases in your service, staff from public health units can help to explain to educators and other staff:

- symptoms to watch out for and what to do if children or staff develop those symptoms
- how to control further spread of the infection (for example, immunisation, exclusion, cleaning, and education such as written information for parents, carers and staff).

Additionally, some of these diseases can cause concern among parents and carers and sometimes interest from the media. If this occurs, your local public health unit can provide information and support.

Contacting your public health unit

Public health units are based in each region – larger states and territories have several units and the Australian Capital Territory (ACT) and Tasmania each have one unit.

To contact a public health unit, you will need to identify the unit for your region. Visit your state or territory health website to find contact details for your local unit:

Australian Capital Territory	ACT Health Directorate – Health Protection Service
New South Wales	NSW Health – Public Health Units
Northern Territory	Northern Territory Department of Health – Centre for Disease Control
Queensland	Queensland Health – Public health units
South Australia	SA Health – Communicable Disease Control Branch
Tasmania	Tasmanian Department of Health – Public and Environmental Health Service
Victoria	Victorian Department of Health
Western Australia	Western Australian Department of Health – Public health units

4.5 Disease outbreaks

Disease outbreaks are when there is a sudden increase in the number of cases of a disease in a specific region or area. The definition of 'sudden increase' depends on the disease and how many cases normally occur in a population. For some rare diseases, a single case can be considered an outbreak.

An outbreak can occur within the education and care service, in the local area or more widely.

If a disease outbreak occurs within your service, you may need to:

- be more stringent about exclusion periods and criteria
- make your cleaning practices more intense or more frequent
- consider closing the service for a short time to break the cycle of disease.

Contact your local public health unit for guidance if you suspect an outbreak or are experiencing an outbreak. Some states and territories require notification if you suspect an outbreak of gastroenteritis (see section 4.6 Notifiable diseases).

If you are aware of outbreaks in your local area, contact your local public health unit for guidance. If an outbreak is occurring, your public health unit will often provide local information and fact sheets about specific diseases.

4.6 Notifiable diseases

Education and care services may need to act if you have a case of a notifiable disease or a disease that causes community concern.

A notifiable disease is any disease that is required by law to be reported to government agencies. The reporting allows the authorities to monitor the disease and prevent its spread.

Your local public health unit may contact you if a notifiable disease occurs in your service. They will tell you if there is action you should take to help prevent further cases.

Each state and territory has a list of diseases that your local public health unit must be told about if they occur. Most notifiable diseases are the same across the country (see the National Notifiable Diseases Surveillance System), but some are only notifiable in a few jurisdictions.

In most cases, it is doctors and laboratory staff who are responsible for the reporting. However, education and care services must report some diseases in some states. Check Table 4.3 to find out the reporting requirements for your state or territory.

Table 4.3 Notifiable disease reporting requirements for education and care services in each state and territory

State or territory	Action required
Australian Capital Territory	Notify the Disease Surveillance Unit if you have 2 or more cases of gastroenteritis among children or staff in 24 hours
New South Wales	Notify your local public health unit if a child or staff member at your service has one of the following diseases or has come into contact with a person who has one of the following diseases: • diphtheria • gastroenteritis (if 2 or more people are affected and you suspect an outbreak) • Hib (*Haemophilus influenzae* type b) • measles • meningococcal disease • mumps • poliomyelitis • rubella (German measles) • tetanus • whooping cough (pertussis)
Northern Territory	Notify your local Centre for Disease Control if a child or staff member at your service has one of the following diseases: • diarrhoea or vomiting (if 2 or more people are affected) • diphtheria • Hib (*Haemophilus influenzae* type b) • measles • meningococcal disease • mumps • rubella (German measles) • tuberculosis (TB) • typhoid and paratyphoid • whooping cough (pertussis)
Queensland	Notify your local public health unit if you have 2 or more cases of gastroenteritis among children or staff over a period of 1 to 3 days
South Australia	No reporting requirements
Tasmania	Notify your local public health unit if you suspect an outbreak of gastroenteritis
Victoria	Notify your local public health unit if you suspect an outbreak of gastroenteritis
Western Australia	Notify your local public health unit if you suspect an outbreak of gastroenteritis

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Asthma

Asthma is a condition that affects the lungs, causing the airways to become inflamed and narrow. Symptoms include wheezing, coughing, tightness in the chest and feeling out of breath.

People with asthma can experience asthma attacks, which are sometimes called flares. Asthma attacks can be serious and require hospital treatment.

Although asthma is not an infectious disease, it is included in these guidelines because asthma attacks can be triggered by a respiratory viral infection, such as a cold or flu. Infection control practices reduce the risk of viral infection, and thus reduce the risk of an asthma attack.

How it spreads

Asthma does not spread between people. It is not infectious.

Exclusion period

Not excluded – people with asthma can attend the service.

Actions for educators and other staff

Ensure that you have an up-to-date action plan for each child in your care who has asthma.

Reduce the risk of asthma being triggered by respiratory viruses by using appropriate cleaning practices and good hand hygiene, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If you think your child may have asthma, see a doctor for diagnosis and a treatment plan.

Give the service:

- a copy of the asthma action plan that your child's doctor has developed with you
- any medication your child needs.

More information about asthma

See healthdirect for more information on prevention, diagnosis and treatment of asthma (healthdirect.gov.au/asthma).

To find out if a child needs medical help, you can:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Bronchiolitis

Bronchiolitis is a potentially serious chest infection caused by a virus. The virus infects the small breathing tubes (bronchioles) of the lungs, which makes them inflamed. They then produce more mucus than normal, which causes breathing difficulties.

Respiratory syncytial virus (RSV) is usually responsible for bronchiolitis, although other viruses can also cause bronchiolitis. Infections often occur in infants less than 1 year old, usually in winter.

The symptoms of the infection begin like a common cold, with a runny nose, cough and fever. The coughing may become worse over the next day or 2, and rapid breathing and wheezing can make feeding young children difficult. Babies under 1 year old who have bronchiolitis will often wheeze when breathing out. Wheezing can last for a few days, but the cough can last for weeks.

How it spreads

Bronchiolitis spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Take your child to a doctor if they develop rapid breathing or wheezing.

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach them to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Avoid contact between your child and other children, or frail and elderly people, until the child is feeling well.

More information about bronchiolitis

See healthdirect for more information on prevention, diagnosis and treatment of bronchiolitis (healthdirect.gov.au/bronchiolitis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker))
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Bronchitis

Bronchitis is a chest infection, usually caused by a virus. The virus makes the lining of the windpipe and bronchi (the tubes leading from the windpipe to the lungs) inflamed and swollen, so it produces more mucus than normal. This causes a cough and sometimes a pain in the throat or upper chest when coughing. Bronchitis is usually mild in children.

A child with bronchitis may have the usual signs of a cold, including a runny nose, sore throat and mild fever. Next, they develop a cough. The cough is often dry at first and then becomes moist after a couple of days. They may have a slight wheeze and shortness of breath.

Children usually recover from bronchitis in 5 to 10 days. Some children keep having attacks of bronchitis and can develop ongoing symptoms (called chronic bronchitis). This can be due to allergies, people smoking around them or other problems in their lungs.

How it spreads

Bronchiolitis spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person kisses, breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

If a staff member is sick, they should stay home until they feel well.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

Avoid contact between your child and other children, or frail and elderly people, until the child is feeling well.

More information about bronchitis

See healthdirect for more information on prevention, diagnosis and treatment of bronchitis (healthdirect.gov.au/bronchitis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Campylobacter infection

Campylobacter infection is a type of gastroenteritis (or 'gastro') caused by *Campylobacter* bacteria. Symptoms usually start a few days after infection, and include stomach cramps, diarrhoea (sometimes with blood in it), fever, nausea and vomiting. It may cause dehydration, which can be very dangerous for young children.

How it spreads

You can get infected with the bacteria from an infected person, or by eating contaminated food, like undercooked chicken. You can also get it from touching infected animals or their faeces (poo).

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service).

Some states and territories may have different requirements for diarrhoea or vomiting. Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

To avoid getting *Campylobacter* infection, wash your hands after going to the toilet or changing a nappy; and before and after handling food.

Regularly rake sandpits and remove any animal faeces. If possible, cover the sandpit when it is not in use.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

Wash hands before and after cooking. Wash hands after using the toilet, changing nappies or cleaning up animal faeces. Teach your child to do the same.

More information about *Campylobacter* infection

See healthdirect for more information on prevention, diagnosis and treatment of *Campylobacter* infection (healthdirect.gov.au/campylobacter-infection).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Chickenpox (varicella)

Chickenpox is caused by the varicella-zoster virus. Symptoms start with a fever, headache or tiredness. This is followed by a characteristic spotty, itchy rash of small, fluid-filled blisters, which quickly spreads all over the body. Chickenpox is usually a mild disease in children, but complications occur in around 1% of cases.

How it spreads

Chickenpox is very infectious and can spread quickly in childcare environments. It spreads through the air (airborne droplets) or by touching blisters on someone who is infected with chickenpox.

Vaccination against chickenpox is part of the routine childhood vacinnation schedule in the Australian National Immunisation Program.

Exclusion period

Exclude until all blisters have dried – this is usually at least 5 days after the rash first appeared in unvaccinated children, and less in vaccinated children.

Contacts: any child who is immunocompromised is at high risk of developing severe disease if exposed. Talk to the parents about the child's potential risk and exposure and follow the child's agreed action plan.

Risks in pregnancy

If you are pregnant and get chickenpox, it can cause serious problems for your baby. The type of problems depends on how far along your pregnancy is. The risk is highest in the first 3 months of pregnancy.

If you have not had a chickenpox vaccination and are not sure if you have had chickenpox before, see a doctor within 4 days of hearing you have been exposed to check if you are immune. If you are not immune, you can get an antibody injection. Vaccination for chickenpox during pregnancy is not recommended. Read more about chickenpox and pregnancy at pregnancybirthbaby.org.au/chickenpox-and-pregnancy.

Actions for educators and other staff

Follow the exclusion periods in the *Staying healthy* guidelines. Let pregnant staff know if there is a chickenpox case in the service and recommend they seek medical advice. Encourage staff to be vaccinated.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child has chickenpox, keep them at home until all blisters have dried. Wash your hands often, and keep your child away from family and friends until they feel well again. The best way to protect yourself and other children against chickenpox is to get vaccinated.

More information about chickenpox (varicella)

See healthdirect for more information on prevention, diagnosis and treatment of chickenpox (healthdirect.gov.au/chickenpox).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Cold sores (herpes simplex)

Cold sores are caused by the herpes simplex virus and are very common. About 20% of children will have been infected by the age of 5 years, and about 80% of people will have been infected by the time they are adults. Once a person is infected, the virus can reactivate and cause new cold sores throughout life.

Cold sores usually start with a tingling or burning sensation on or around the lips, followed by the appearance of small, painful blisters. The blisters break, form a scab and then heal, usually without leaving a scar. Cold sores usually last 3 to 7 days. Cold sores can appear on the eye if the person touches an active cold sore and then touches their eye. Although this is rare, any child with a painful red eye should be seen by a doctor.

How it spreads

Cold sores spread by direct contact with sores, especially when there is fluid in the blister. They can also spread by sharing anything that is put in the mouth, including dummies, food and drink containers, and eating utensils. Even if a person does not have a visible cold sore, they may still be able to infect others.

Exclusion period

Do not exclude a person with cold sores if they can maintain hygiene practices to minimise the risk of transmission. If the person cannot maintain these practices (for example, because they are too young), exclude them until the sores are dry. Cover sores with a dressing, where possible.

Actions for educators and other staff

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Staff members with cold sores may need to be given duties that do not involve direct contact with children.

Actions for parents and carers

Cover the sores with a waterproof dressing (like a plastic adhesive strip), where possible.

If your child can wash their hands often and does not pick or scratch the sores, they can attend the service. If your child cannot do this, they should stay home until the sores are dry.

More information about cold sores

See healthdirect for more information on prevention, diagnosis and treatment of cold sores (healthdirect.gov.au/cold-sores).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Common cold

Colds are the most common cause of sickness in both children and adults. Symptoms include a runny or blocked nose, sneezing and coughing, watery eyes, headache, sore throat and a possible slight fever.

Children in education and care services can have as many as 8 to 12 colds a year. However, by the time they are 3 years old, children who attend a service have no more colds than those who are cared for only at home.

How it spreads

Colds spread by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Clean surfaces that your child has touched, sneezed on, or coughed on to reduce the risk of the infection spreading to others at home.

More information about the common cold

See healthdirect for more information on prevention, diagnosis and treatment of the common cold (healthdirect.gov.au/coughs-and-colds-in-children).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Conjunctivitis

Conjunctivitis is an eye condition where the clear membrane that covers the white part of the eye and lines the inner surface of the eyelids (the conjunctiva) becomes red and swollen. People can also be sensitive to bright lights. The most common causes are infection, allergy and irritation. Only infectious conjunctivitis can spread to others.

Infectious conjunctivitis can be caused by bacteria or viruses. Bacterial conjunctivitis may start in one eye, but almost always involves both eyes. There is likely to be a gritty feeling and thick white, yellow or green pus. Viral conjunctivitis may have a thinner, clear discharge. It may involve one or both eyes, making them red, itchy and watery.

How it spreads

Infectious conjunctivitis can easily spread from person to person. It spreads by direct contact with eye secretions, or by contact with towels, washcloths or tissues that have eye secretions on them.

Exclusion period

Exclude until discharge from the eyes has stopped (unless a doctor has diagnosed non-infectious conjunctivitis).

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Take your child to a doctor for diagnosis and treatment – viral and bacterial conjunctivitis can look the same but have different treatment options. Encourage your child to wash their hands regularly. Keep your child at home if the conjunctivitis is infectious (bacterial or viral).

More information about conjunctivitis

See healthdirect for more information on prevention, diagnosis and treatment of conjunctivitis (healthdirect.gov.au/conjunctivitis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

COVID-19

COVID-19 is a disease caused by infection with a coronavirus called SARS-CoV-2. Common symptoms include fever, cough, sore throat and shortness of breath. Other symptoms include fatigue, loss of taste or smell, and congestion or runny nose. COVID-19 is usually milder in children than in adults.

How it spreads

COVID-19 spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their mouth.

Vaccination and boosters against COVID-19 are available to everyone through the Australian National Immunisation Program.

Exclusion period

Refer to state or territory advice.

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Risks in pregnancy

If you are pregnant, there is a higher risk of complications for yourself and your baby if you catch COVID-19. There is a very rare risk of premature birth, mainly in unvaccinated women. Staying up to date with vaccinations, washing hands regularly and wearing masks can help reduce your risk of getting COVID-19. Read more at pregnancybirthbaby.org.au/coronavirus-covid-19-and-pregnancy.

Actions for educators and other staff

Encourage good respiratory and hand hygiene for all staff and children. Encourage COVID-19 vaccination for eligible people.

Check with your state or territory health department for local advice on managing COVID-19 infections.

Actions for parents and carers

If your child is eligible, the best way to protect them against COVID-19 is to get them vaccinated.

Most children who get COVID-19 have a mild infection that is like a common cold. Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach them to cough and sneeze into a tissue, then throw the tissue into a bin and wash their hands.

Check with your state or territory health department for local advice on what to do when your child has COVID-19.

More information about COVID-19

See healthdirect for more information on prevention, diagnosis and treatment of COVID-19 (healthdirect.gov.au/covid-19).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Croup

Croup is a viral infection that causes a harsh, barking cough and noisy breathing because the voicebox (larynx) and airways are inflamed and swollen. It often starts out like a common cold, with symptoms such as fever and runny nose, but then progresses to a cough that sounds like a seal or a barking dog. It usually affects children aged between 6 months and 3 years old, but can occur in other age groups. It is rare in adults because their airways are larger.

How it spreads

Croup spreads from person to person via droplets containing the virus that causes it. People can be infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them or near them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

Exclude based on symptoms; otherwise do not exclude. This means, if a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

A person can often have an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone. Try to keep them calm, as breathing is more difficult when they are upset.

Avoid contact between your child and other children, or elderly people, unti they feel well again.

Encourage your child to wash their hands regularly. Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about croup

See healthdirect for more information on prevention, diagnosis and treatment of croup (healthdirect.gov.au/croup).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Cryptosporidiosis

Cryptosporidiosis is a type of gastroenteritis (or 'gastro') caused by a parasite called *Cryptosporidium*. Symptoms include stomach pain, feeling sick, vomiting, and foul-smelling and watery diarrhoea. Symptoms can last for up to 2 weeks. It is more common in the warmer months and is sometimes associated with swimming pools that have been contaminated by a person with the infection.

How it spreads

Cryptosporidiosis spreads through infected faeces (poo) from people or animals. You can get it from drinking or swimming in contaminated water, eating food that infected people have touched, changing the nappy of an infected child and not washing your hands properly afterwards, or touching contaminated surfaces.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

Do not allow your child to swim in a public pool for 2 weeks after the diarrhoea has stopped.

Encourage your child to wash their hands regularly.

More information about cryptosporidiosis

See healthdirect for more information on prevention, diagnosis and treatment of cryptosporidiosis (healthdirect.gov.au/cryptosporidiosis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Cytomegalovirus (CMV) infection

Cytomegalovirus (CMV) is a common viral infection, particularly in young children. In Australia, about 50% of young adults have been infected. Once a person is infected, they can carry the virus for the rest of their lives, even if they do not have any symptoms. Sometimes the virus can be reactivated, usually when the person has another sickness or is stressed, and may then cause symptoms.

Healthy children and adults do not usually develop symptoms when they are infected, but some may show symptoms that are similar to glandular fever (for example, tiredness, sore throat, swollen glands and fever).

How it spreads

CMV infection spreads through contact with body fluids such as urine, saliva, blood or breastmilk. It can spread from person to person through close contact, such as sharing eating utensils, or through contact with contaminated objects such as toys or nappies. People can be infectious for months to years after their initial infection, because they can keep shedding the virus in their urine or saliva.

Exclusion period

Not excluded – people with CMV can attend the service.

Risks in pregnancy

CMV infection can be dangerous for unborn babies if the mother gets infected during pregnancy. In rare cases, it can cause hearing loss, intellectual disability or even stillbirth. This risk is higher during the first half of the pregnancy. CMV infection occurs in 1% or less of pregnancies and, of these cases, less than 10% of babies are likely to have severe illness.

Educators and other staff at education and care services are at a higher risk of catching CMV because they work with young children. Pregnant educators and other staff who usually work with children under 2 may wish to be reassigned to work with older children until they give birth. Pregnant educators should avoid or take particular care when changing nappies, as CMV can be spread through urine.

To avoid getting infected, wash your hands often, use gloves when changing nappies, and avoid sharing food, drinks or utensils with others.

Actions for educators and other staff

Ensure educators and other staff and children have good hand hygiene, especially after changing nappies or handling items contaminated with urine or saliva.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Inform staff who are pregnant or considering pregnancy about CMV and how to protect themselves against infection.

Actions for parents and carers

If your child has CMV, make sure family members wash their hands properly after handling any items with the child's saliva or urine on them.

More information about CMV infection

See healthdirect for more information on prevention, diagnosis and treatment of CMV (healthdirect.gov.au/cytomegalovirus-cmv). See WorkSafe Queensland for more information on CMV in early childhood education and care services.

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Diarrhoea or vomiting (gastroenteritis)

Gastroenteritis (or 'gastro') is a viral or bacterial infection that causes inflammation of the digestive system. It can cause diarrhoea, vomiting or stomach cramps. The symptoms can range from mild to severe and usually last for a few days. Gastroenteritis can cause dehydration because of the large amount of fluid lost through vomiting or diarrhoea.

Gastroenteritis can have various causes. If there is a specific diagnosis following gastro symptoms, follow the fact sheet for that disease:

- *Campylobacter* infection
- Cryptosporidiosis
- *Giardia* infection (giardiasis)
- Rotavirus infection
- *Salmonella* infection (salmonellosis)
- *Shigella* infection (shigellosis).

How it spreads

The disease spreads when germs enter the body. This can happen when people:

- inhale droplets produced when an infected person vomits
- touch contaminated surfaces and then touch their mouth, nose or eyes
- eat contaminated food.

Surfaces and food can become contaminated when:

- infected droplets are spread onto surfaces when an infected person vomits
- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- people do not wash their hands well after changing the nappy of an infected baby and their hands contaminate food or surfaces.

People are infectious for as long as the germs are present in their faeces (poo).

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

If the diarrhoea or vomiting are confirmed to be due to norovirus, exclude for at least 48 hours.

Staff with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours or stay away from the service).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until they feel well and there has been no diarrhoea for at least 24 hours, or for at least 48 hours if they have norovirus.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

If the local public health unit finds that the service has an outbreak of gastroenteritis, follow the directions for exclusion provided by the unit.

Encourage your child to wash their hands regularly.

More information about gastroenteritis

See healthdirect for more information on prevention, diagnosis and treatment of gastroenteritis (healthdirect.gov.au/gastroenteritis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Ear infection

Middle ear infections (also called otitis media) are common in young children. An ear infection can cause pain, fever and temporary hearing loss. It can be caused by bacteria or viruses, and often appears after a cold. Occasionally the eardrum may perforate and you may see fluid coming from the child's ear.

Outer ear infections (otitis externa) occur on the outside of the eardrum, involving the ear canal. They are often associated with swimming.

Rarely, a middle ear infection may spread to the mastoid bone behind the ear, causing mastoiditis. The area behind the ear will be red, and the ear lobe will stick out. A child with these symptoms should see a doctor as soon as possible – this is a serious infection.

Most children will have occasional ear infections that are not serious and resolve quickly. Children who have recurrent ear infections may develop 'glue ear' – when the middle ear is filled with a sticky fluid that looks similar to honey. This may last for many weeks or months and makes it harder for the child to hear.

How it spreads

Isolated ear infections rarely spread from person to person. However, middle ear infections can follow a viral respiratory tract infection (for example, the common cold), which is very infectious.

Exclusion period

Do not exclude unless the ear infection is associated with other concerning symptoms.

Actions for educators and other staff

Treat any discharge from an ear as infectious – wash your hands thoroughly if they come in contact with ear discharge.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home if they have a fever or other concerning symptoms.

If your child has frequent ear infections, talk to your doctor to rule out any underlying conditions that may be contributing to the infections.

More information about ear infection

See healthdirect for more information on prevention, diagnosis and treatment of ear infection (healthdirect.gov.au/ear-infection).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Eye discharge

Eye discharge refers to a sticky or runny fluid coming from the eyes that is not tears. It is normal to wake up with some discharge in the corner of the eye, and this is not a concern.

Sometimes eye discharge is a sign of other conditions, such as conjunctivitis (see Conjunctivitis fact sheet) or blocked tear ducts. Blocked tear ducts in babies often improve without treatment by the age of 1 year.

Conjunctivitis can be caused by a virus or bacteria (called infectious conjunctivitis), a reaction to something in the eye, or an allergy. Infectious conjunctivitis can cause:

- watery or white discharge (viral conjunctivitis)
- yellow or green sticky discharge that can make it hard to open the eye (bacterial conjunctivitis).

How it spreads

Eye discharge caused by bacteria or a virus can spread easily between people (see Conjunctivitis fact sheet). It spreads by direct contact with eye secretions, or by contact with towels, washcloths or tissues that have eye secretions on them.

Eye discharge caused by blocked tear ducts, allergic reactions or irritants in the eye is not infectious.

Exclusion period

Exclude until discharge from the eyes has stopped (unless a doctor has diagnosed a non-infectious cause for the eye discharge).

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Treat any discharge from an eye as infectious – wash your hands thoroughly if they come in contact with eye discharge.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Check the cause of your child's eye discharge with a health professional, so that you can start any required treatment quickly.

If your child has an infectious eye discharge, keep them at home until the discharge has stopped.

More information about eye discharge

See healthdirect for more information on prevention, diagnosis and treatment of eye discharge (healthdirect.gov.au/eye-discharge).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Fever

A fever is when a person's body temperature is over 38.0 °C. Normal temperature is between 36.5 °C and 38.0 °C.

Fever can cause sweating, shivering, muscle aches and a headache. Fever is a common symptom for children, and is usually caused by an infection.

Fever can be concerning for parents. However, it is usually more important to determine what is causing the fever rather than the temperature itself. Most fevers are **not** a sign of a serious disease.

How it spreads

Fever itself is not infectious and cannot be spread from person to person. However, the underlying infection that is causing the fever may be infectious. Viruses that cause fever spread from person to person via droplets containing the virus. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them or near them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

Exclude until the temperature remains normal, unless the fever has a known non-infectious cause.

If the child has gone home from the service with a fever but their temperature is normal the next morning, they can return to the service.

If the child wakes in the morning with a fever, they should stay home until their temperature remains normal.

If a doctor diagnoses the cause of the child's fever, follow the exclusion guidance for that disease.

Actions for educators and other staff

If you think a child has a fever, check their temperature. If their temperature is:

- between 37.5 °C and 37.9 °C – retest within 30 minutes
- 38.0 °C and over – notify a parent and ask them to pick up their child. Separate the child from the other children while waiting for their parent or carer to arrive.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their temperature remains normal.

If your child is under 3 months and has a fever above 38.0 °C, take them to the doctor, even if they have no other symptoms.

All children with a temperature over 38.0 °C **and** any of the following symptoms should see a doctor right away:

- a stiff neck or light is hurting their eyes
- lethargic and not interested in interacting or participating in their usual activities
- vomiting and refusing to drink
- a rash, especially if accompanied by other concerning symptoms
- going to the toilet to pass urine less often or not at all (fewer wet nappies than usual in babies)
- pain that does not get better with pain relief medication
- have had any fever for more than 3 days and there is no obvious cause
- seems to be getting more sick.

Call 000 and ask for an ambulance if your child has a fever and any of the following symptoms:

- not responding to your voice
- having problems with breathing
- is pale and their hands and feet are cold to touch
- having a fit (febrile seizure) for the first time.

More information about fever

See healthdirect for more information on prevention, diagnosis and treatment of fever (healthdirect.gov.au/fever-and-high-temperature-in-children).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Fifth disease

(slapped cheek syndrome, erythema infectiosum, human parvovirus B19)

Fifth disease is a common viral infection that usually causes a mild illness in children.

About 20% of infected children will have no symptoms. In others, symptoms include mild fever and muscle aches, followed 2 to 5 days later by a red rash on the face (hence the name 'slapped cheek syndrome') and a lacy red rash on the trunk and limbs. The rash can sometimes be itchy. It will usually disappear after 7 to 10 days, but can come and go for several weeks, often reappearing in response to heat.

Fifth disease is a type of parvovirus. Animals such as cats and dogs can have other types of parvovirus infections, but they cannot catch human parvovirus from people, and they cannot pass their parvovirus infections to people.

How it spreads

Fifth disease spreads through airborne droplets, contact with infected saliva or mucus, or transmission to the baby during pregnancy.

Exclusion period

Not excluded – people with fifth disease can attend the service.

Risks in pregnancy

If you catch fifth disease in the first 20 weeks of pregnancy, it can affect the baby. In less than 5% of cases, the baby develops a low red blood cell count (anaemia), resulting in miscarriage. Babies that survive if the mother is infected do not have birth defects.

Actions for educators and other staff

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone.

Encourage your child to wash their hands regularly.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Clean surfaces that your child has touched, sneezed on, or coughed on to reduce the risk of the infection spreading to others at home.

More information about fifth disease

See healthdirect for more information on prevention, diagnosis and treatment of fifth disease (healthdirect.gov.au/fifth-disease).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Flu (influenza)

Influenza, or the flu, is a viral infection that affects the respiratory system. Symptoms include fever, chills, headache, muscle aches and pains, a head cold and a mild sore throat. It can often cause a severe cough. The infected person usually recovers within a week. Children aged under 5 are at higher risk of developing serious complications from the flu, such as pneumonia.

How it spreads

Flu is highly infectious. Flu spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Annual flu vaccinations are available under the Australian National Immunisation Program and are free for eligible people most at risk, including children aged under 5 years.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Risks in pregnancy

If you are pregnant, you have a higher risk of developing serious complications from the flu. The flu can also be dangerous for the developing baby, as it increases the risk of low birthweight and complications. You can protect yourself by getting a flu vaccination, having good hand and respiratory hygiene, and wearing a mask if you wish.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Encourage annual flu vaccination for staff. Remind parents and carers about annual flu vaccinations.

If you have several cases of flu-like illness in your service, contact your public health unit for advice.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Encourage your child to wash their hands regularly.

Consider annual flu vaccinations for the whole family.

More information about the flu

See healthdirect for more information on prevention, diagnosis and treatment of the flu (healthdirect.gov.au/flu).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Fungal infections of the skin or scalp

(ringworm, tinea)

Tinea is a common fungal infection of the skin that is usually found in moist, warm parts of the body, such as between the toes, but can also infect skin on other parts of the body. The condition looks different depending on where it is. On the head or body, it causes a rash called ringworm. Ringworm is not caused by a worm.

How it spreads

The tinea fungus spreads by direct skin contact with an infected person or animal, or by touching contaminated clothing or soil.

Exclusion period

Exclude until the day after starting antifungal treatment.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Take your child to a doctor for diagnosis and treatment. Tinea is usually treated with antifungal cream or ointment, but sometimes oral medications are needed. Keep the affected area clean and dry. Keep your child at home until the day after treatment starts.

Do not share towels, clothing or shoes. Check other people in the family for signs of infection.

Wash your hands thoroughly after applying treatment or touching the affected area. Encourage your child to wash their hands regularly.

If pets have ringworm or mange, take them to a vet for treatment.

More information about fungal infections of the skin or scalp

See healthdirect for more information on prevention, diagnosis and treatment of tinea and other fungal skin diseases (healthdirect.gov.au/tinea and healthdirect.gov.au/fungal-skin-diseases).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Giardia infection (giardiasis)

Giardiasis is a form of gastroenteritis (or 'gastro') caused by a parasite called *Giardia lamblia* or *Giardia duodenalis*. This parasite can live in the bowels of people or animals. Untreated water that comes directly from lakes and rivers may also contain *Giardia*.

Symptoms include diarrhoea, foul-smelling faeces (poo), cramping, gas, fatigue, nausea, and sometimes vomiting and weight loss. Fever and bloody faeces are not usually symptoms of *Giardia* infections. Many infected people have no symptoms.

In education and care services, children and staff who have had *Giardia* may no longer have any symptoms but may still be infected with the parasite. This means their faeces can still infect others. A person with active diarrhoea is more likely to spread the disease than one who does not have diarrhoea but still has the parasite in their faeces.

How it spreads

Giardia infections spread when:

- infected people do not wash their hands well after going to the toilet, and then contaminate food or surfaces
- people's hands become contaminated while handling infected animals or changing the nappy of an infected child
- people drink contaminated water.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff members with these symptoms should not handle food until there has not been any diarrhoea or vomiting for 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro. If *Giardia* is found in your child's faeces, the doctor will recommend antibiotics.

Encourage your child to wash their hands regularly.

More information about *Giardia* infection

See healthdirect for more information on prevention, diagnosis and treatment of *Giardia* infection (healthdirect.gov.au/giardiasis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Glandular fever

(Epstein–Barr virus, infectious mononucleosis)

Glandular fever is caused by Epstein–Barr virus. Once a person catches Epstein–Barr virus, the virus remains in their body for life, although it usually does not cause further sickness. By adulthood, 90% to 95% of people have Epstein–Barr virus.

Most people will not have any symptoms, including children under 3 years old. Older children and young adults may develop symptoms including fever, tiredness, sore throat and swollen glands. Some people develop stomach pain and yellowing of the skin and eyes (jaundice), or a red, itchy rash. Symptoms can last for several weeks, and some people may feel tired for months after the infection.

How it spreads

Epstein–Barr virus spreads from person to person through contact with saliva, such as through kissing, sharing utensils and drinks, or coughing and sneezing. Young children may be infected by saliva on the hands of caregivers, or by sucking and sharing toys; however, the virus does not survive very well in the environment.

Exclusion period

Not excluded – people with glandular fever can attend the service.

Actions for educators and other staff

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child feels sick, keep them at home until their symptoms have gone.

Do not share utensils and drinks. Encourage your child to wash their hands regularly.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about glandular fever

See healthdirect for more information on prevention, diagnosis and treatment of glandular fever (healthdirect.gov.au/glandular-fever).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hand, foot and mouth disease

Hand, foot and mouth disease is a common viral infection caused by a group of viruses known as enteroviruses. 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. The worst symptom is often the blisters in the mouth, which make it difficult for the child to eat or drink. In adults, the disease is rare and may cause mild symptoms or no symptoms at all.

How it spreads

The virus can be found in saliva, mucus, faeces (poo) and blister fluid. It is usually spread from person to person through close contact, including:

- touching an infected person
- direct contact with blister fluid
- touching an object or surface that has been contaminated with the virus
- changing the nappy of an infected child.

Symptoms usually appear 3 to 5 days after infection. People are infectious for as long as the blisters contain fluid. Faeces can remain infectious for several weeks.

Exclusion period

Exclude until all blisters have dried.

Risks in pregnancy

In the vast majority of adults, infection is mild or asymptomatic. The risk associated with this disease during pregnancy is low; however, in extremely rare cases, it can cause miscarriage. If you are pregnant and become infected shortly before giving birth, the infection can pass to the baby. Most babies born with hand, foot and mouth disease have mild symptoms, but in very rare cases there are complications.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If you suspect a child has hand, foot and mouth disease, call the parent or carer and ask them to pick up their child.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their fever has stopped, they are eating and drinking normally and all blisters have dried.

Teach them to cough and sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about hand, foot and mouth disease

See healthdirect for more information on prevention, diagnosis and treatment of hand, foot and mouth disease (healthdirect.gov.au/hand-foot-and-mouth-disease).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Head lice

Head lice are tiny insects that live in hair and feed on blood. Young children are more likely to get head lice because they tend to have more head-to-head contact with other children, especially during playtime. They can cause itching of the scalp, but they do not cause disease. Lice can affect anyone, and are not a sign of dirty hair or poor hygiene.

Symptoms include itchiness on the scalp, seeing live lice or nits (lice eggs) in the hair, and sores or red bumps on the scalp or neck from scratching.

How it spreads

Head lice spread from one person to another by direct head-to-head contact, or by sharing a comb or hairbrush. Lice cannot jump or fly, and cannot live long away from the human head. They do not live or breed on animals, bedding, furniture, carpets, clothes or soft toys.

Exclusion period

Do not exclude as long as treatment begins before the next attendance at the service. The child does not need to be sent home immediately if head lice are found.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If one child in a class has head lice, it is likely that several others also have them. Do not isolate a child who has lice.

Reduce head-to-head contact between children if someone at your service has head lice. Avoid sharing of hats and other headwear.

Tell families if there is someone in your service with head lice. Support families by providing factual information, reducing parental anxiety and not singling out individual children with head lice.

Actions for parents and carers

If your child has head lice, keep them at home and treat them straight away. You may send your child back to the service as soon as your child has started treatment. Talk to your pharmacist about treatment options.

Check for head lice in other family members as well.

Check your child's head once a week for head lice. If you find any lice or eggs, begin treatment immediately. Check for lice every 2 days until no lice or eggs are found for 10 consecutive days.

More information about head lice

See healthdirect for more information on prevention, diagnosis and treatment of head lice (healthdirect.gov.au/head-lice).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hepatitis A

Hepatitis A is a liver disease caused by the hepatitis A virus, which is very infectious. Symptoms can include fever, tiredness, stomach pain, loss of appetite and nausea. This is sometimes followed by dark urine and yellowing of the skin and eyes (jaundice). Symptoms can last from 1 week to several months. Children under 3 years old rarely have any symptoms. Hepatitis A vaccine is recommended for people at higher risk of being infected.

How it spreads

Hepatitis A spreads when the virus enters the body by the mouth. This can happen when:

- people eat contaminated food or drink contaminated water
- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- a person changes the nappy of an infected child and does not wash their hands well.

The virus can survive on unwashed hands or room-temperature food for several hours. Heating or freezing contaminated food does not always kill the virus.

Exclusion period

Exclude until at least 7 days after jaundice starts, or if there is no jaundice, until 2 weeks after onset of other symptoms.

Actions for educators and other staff

Contact your local public health unit for advice if you have a case of hepatitis A in your service.

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand and toileting hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Encourage staff to be vaccinated against hepatitis A.

Actions for parents and carers

Take your child to a doctor to discuss caring for them and vaccination options for family members.

Make sure you and your child wash their hands regularly, especially after going to the toilet or changing nappies.

Keep the child at home for the exclusion period, or longer, until they are feeling better. You will need a medical certificate of recovery from a doctor before your child can return to the service.

More information about hepatitis A

See healthdirect for more information on prevention, diagnosis and treatment of hepatitis A (healthdirect.gov.au/hepatitis-a).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hepatitis B

Hepatitis B is a viral infection that affects the liver. About 50% of adults and 90% of children with the infection have no symptoms. If symptoms do occur, they may include fever, tiredness, stomach pain, nausea, dark urine and yellowing of the skin and eyes (jaundice).

In some cases, hepatitis B can lead to liver damage or liver cancer.

How it spreads

Hepatitis B spreads through contact with an infected person's blood or body fluids. The virus can survive outside the body for up to 7 days, so surfaces or objects contaminated with blood or saliva can also spread the virus.

Hepatitis B does **not** spread through food or water, or through ordinary social contact.

Vaccination against hepatitis B is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Not excluded – people with hepatitis B can attend the service.

Actions for educators and other staff

Routinely check the vaccination status of children and staff.

Follow standard procedures for handling blood and body fluids, as you may not know if someone has the virus.

Make sure your service has a protocol for managing exposure to blood, body fluids or needlestick injuries.

Cover open wounds with a waterproof dressing (like a plastic adhesive strip) to reduce exposure to blood.

Actions for parents and carers

If your child has been diagnosed with hepatitis B, follow your doctor's advice and keep your child at home until they are feeling better.

Cover any cuts or wounds with a waterproof dressing (like a plastic adhesive strip).

See your doctor if you or any family members have not been vaccinated.

More information about hepatitis B

See healthdirect for more information on prevention, diagnosis and treatment of hepatitis B (healthdirect.gov.au/hepatitis-b).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hepatitis C

Hepatitis C is a viral infection that affects the liver. The disease is slow acting and often has no symptoms, so around half of infected people do not know they are infected. If people do experience symptoms, they can include fever, tiredness, stomach pain, nausea, dark urine and yellowing of the skin and eyes (jaundice).

In the long term, hepatitis C can lead to liver damage and liver cancer. There is no vaccine, but treatment is available.

How it spreads

Hepatitis C spreads through direct contact with infected blood or body fluids.

Hepatitis C does **not** spread through food or water, or through ordinary social contact.

Exclusion period

Not excluded – people with hepatitis C can attend the service.

Actions for educators and other staff

Follow standard procedures for handling blood and body fluids, as you may not know if someone has the virus.

Make sure your service has a protocol for managing exposure to blood, body fluids or needlestick injuries.

Cover open wounds with a waterproof dressing (like a plastic adhesive strip) to reduce exposure to blood.

Actions for parents and carers

If your child has been diagnosed with hepatitis C, follow your doctor's advice. To prevent further liver infections, get your child vaccinated against hepatitis A and B (if they are not already vaccinated).

Cover any cuts or wounds with a waterproof dressing (like a plastic adhesive strip).

More information about hepatitis C

See healthdirect for more information on prevention, diagnosis and treatment of hepatitis C (healthdirect.gov.au/hepatitis-c).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hepatitis E

Hepatitis E is a liver disease caused by the hepatitis E virus. It is rare in Australia. Some infected people, especially children, will have no symptoms. If symptoms do occur, they can include fever, tiredness, stomach pain, loss of appetite and nausea. This is sometimes followed by dark urine and yellowing of the skin and eyes (jaundice).

How it spreads

Hepatitis E spreads when the virus enters the body by the mouth, for example when people eat contaminated food or drink contaminated water. Most Australians who get hepatitis E catch it overseas. Within Australia, people sometimes become infected after eating undercooked pork (pig) products, but this is very rare. Person-to-person transmission is not common.

Exclusion period

Exclude until at least 7 days after jaundice starts, or if there is no jaundice, until 2 weeks after onset of other symptoms.

Actions for educators and other staff

Contact your local public health unit for advice if you have a case of hepatitis E in your service.

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand and toileting hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Make sure you and your child wash their hands regularly, especially after going to the toilet or changing nappies.

Keep the child at home for the exclusion period, or longer, until they are feeling well. You will need a medical certificate of recovery from a doctor before your child can return to the care service.

More information about hepatitis E

See healthdirect for more information on prevention, diagnosis and treatment of hepatitis E (healthdirect.gov.au/hepatitis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Hib (*Haemophilus influenzae* type b)

Despite its name, the germ that causes this infection is not related to influenza ('the flu'). Until a vaccine was introduced in 1993, Hib was one of the most common causes of life-threatening bacterial infections in Australian children under 5 years old.

Hib can cause swelling in the throat, which interferes with breathing, causing noises when breathing. It may block breathing altogether. It can also cause pneumonia (infection in the lungs) and infect the membranes covering the brain (meningitis), the joints, or the tissue under the skin (usually on the face).

Symptoms of Hib meningitis are very similar to other types of meningitis. These include severe headache, stiff neck, fits, severe sleepiness, difficulty waking up and loss of consciousness.

How it spreads

Hib spreads from person to person via droplets in the air that contain the germ. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their mouth.

Vaccination against Hib is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude until the person has taken antibiotics for at least 4 days.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Contact your local public health unit for advice if you have a case of Hib in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of Hib in the service.

Check the immunisation records of all children who have come into contact with a child with Hib. Unvaccinated children who have had close contact with the infected child will need special antibiotics.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Ensure your baby is vaccinated against Hib by keeping their childhood immunisations up to date.

If your child has symptoms of Hib, contact your doctor immediately so they can give your child the correct treatment.

Keep your child at home until they feel well and have completed the course of antibiotics prescribed.

Teach them to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about Hib

See healthdirect for more information on prevention, diagnosis and treatment of Hib (healthdirect.gov.au/haemophilus-influenzae-type-b-hib).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

HIV (human immunodeficiency virus)

HIV is a virus that is carried in blood and body fluids and damages the immune system. Untreated infection with HIV can lead to AIDS (acquired immunodeficiency syndrome). When a person has AIDS, their immune system can no longer protect their body from other diseases such as infections and cancers. HIV is a lifelong infection.

Effective treatment is now available and people who take it have a near-normal life expectancy.

How it spreads

HIV only spreads through direct contact with infected blood and body fluids, usually through needle puncture, broken skin, or a break in the mucous membranes. In Australia, most HIV infections are caused by:

- unprotected sex with a person not on HIV treatment (people on effective HIV treatment cannot pass on HIV during sex)
- sharing drug-injecting equipment
- spread of the virus from mother to infant during pregnancy, birth or breastfeeding
- receiving blood or blood products before screening for HIV was introduced in 1985.

HIV does **not** spread through:

- social contact in schools, at home, or in the workplace
- air or water
- swimming pools or toilets
- sharing of plates, cups or cutlery
- kissing, coughing, sneezing or spitting
- mosquitoes or other biting insects.

Exclusion period

Not excluded – people with HIV can attend the service.

If the person is severely immunocompromised, they will be vulnerable to other people's infections.

Actions for educators and other staff

Maintain confidentiality if a child or staff member has HIV.

Use standard precautions for handling blood and other body fluids at all times – you may not know if people are carrying the virus.

Cover open wounds with a waterproof dressing (like a plastic adhesive strip).

Actions for parents and carers

Talk to your doctor about treatment and precautions for your child to attend a care service.

Children with HIV are more likely to get severe infections than other children, so vaccination is especially important. Ask your doctor about which vaccines your child should get.

You may choose to tell educators or other staff if your child has HIV, but you do not have to.

Keep children with HIV at home when there are outbreaks of infectious diseases at the service.

Cover open wounds with a waterproof dressing (like a plastic adhesive strip).

More information about HIV

See healthdirect for more information on prevention, diagnosis and treatment of HIV (healthdirect.gov.au/hiv-infection-and-aids).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Human metapneumovirus

Human metapneumovirus (HMPV) is a respiratory virus that causes a mild infection similar to a common cold or respiratory syncytial virus infection. Symptoms include cough, fever, runny or blocked nose, headache and tiredness. Complications such as bronchiolitis or pneumonia can occur in young children.

How it spreads

HMPV spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach them to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about human metapneumovirus

See NSW Health for more information on prevention, diagnosis and treatment of respiratory viruses, including HMPV (health.nsw.gov.au/Infectious/factsheets/Pages/respiratory-viruses.aspx).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Impetigo (school sores)

Impetigo is a skin infection that is common in school-aged children. Impetigo appears as flat, yellow, crusty or moist patches or blisters on the skin, usually on the face, arms and legs. The sores can measure 5 millimetres or more. Impetigo spreads easily.

Impetigo is caused by 2 bacteria: *Staphylococcus* and *Streptococcus*. These germs often live harmlessly on and in the body, such as on the skin and in the nose. Cuts, abrasions, or dry and cracked skin can allow the germs to get into deeper layers of the skin and cause infections. However, healthy, intact skin can sometimes develop sores.

How it spreads

The sores are filled with the germs, which spread when others touch the sores or infected fluid. Because the sores can be itchy or painful, people can scratch or touch them, spreading the infection via their hands to other parts of their body or to other people. The infection also spreads by touching contaminated clothing or other items.

Exclusion period

Exclude until antibiotic treatment has started.

Cover any sores on exposed skin with a waterproof dressing (like a plastic adhesive strip).

Actions for educators and other staff

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until they have had antibiotics for at least 24 hours. If antibiotics are not used, keep the child at home until the sores are dry.

Cover any sores on exposed skin with a waterproof dressing (like a plastic adhesive strip).

Make sure your child washes their hands thoroughly and often, especially if they touch the sores.

More information about impetigo

See healthdirect for more information on prevention, diagnosis and treatment of impetigo (healthdirect.gov.au/impetigo).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Measles

Measles is a highly infectious and potentially serious disease caused by a virus. The first symptoms include a fever, cough, and sore, red eyes (conjunctivitis). This is followed by a rash of large, lumpy, reddish to purplish blotches that often join up and completely cover the skin. The rash spreads over the entire body but usually disappears within 6 days.

Measles often causes very serious complications, including lung infections (pneumonia) and swelling of the brain. Children with measles can be very sick, and adults with measles are usually hospitalised.

The number of cases of measles in Australia has fallen dramatically over the past 15 years because of vaccination programs and other public health measures. However, overseas travellers still bring measles into Australia, so people in Australia can still catch the virus.

How it spreads

Measles spreads from person to person via close contact or droplets in the air that contain the measles virus. The virus is very infectious. People get infected by:

- breathing in infected droplets. The virus can stay in the air even after an infected person has left the room.
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their mouth.

Vaccination against measles is included in the measles–mumps–rubella (MMR) vaccine, which is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude for 4 days after the rash appeared.

Contacts: Vaccinated and immune contacts are not excluded. For unvaccinated contacts, talk to your public health unit for advice. Exclude all immunocompromised children until 14 days after the rash appears in the last case.

Risks in pregnancy

In very rare cases, measles can cause premature birth. This is mainly seen in unvaccinated people. Getting vaccinated before getting pregnant significantly reduces the risk.

Actions for educators and other staff

Contact your local public health unit for advice if you have a case of measles in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of measles in the service.

Review vaccination records: Ensure children have received 1 or 2 doses of measles–mumps–rubella (MMR) vaccine, depending on their age. The public health unit will tell you if any unvaccinated children need to be excluded.

Let pregnant staff know there is a measles case in the service and recommend they seek medical advice.

Ensure that:

- all staff have received 2 doses of MMR if they were born during or after 1966
- staff and children have good hand and respiratory hygiene
- staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Make sure your child is fully immunised against measles by keeping their childhood vaccinations up to date.

Keep your child at home for the exclusion period, or longer, until they are feeling better.

Tell any friends, family or social contacts that your child has measles. These people may need to seek medical advice if they:

- are pregnant or considering starting a family
- are not vaccinated
- have a medical condition that lowers their immunity, such as cancer or HIV
- are taking certain medications.

More information about measles

See healthdirect for more information on prevention, diagnosis and treatment of measles (healthdirect.gov.au/measles).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Meningitis (viral)

Meningitis is an infection of the membranes that cover the spinal cord and brain. Many different viruses can cause meningitis, including the ones that cause gastroenteritis, measles, mumps, chickenpox and herpes.

Symptoms include headache, fever, vomiting, neck stiffness, joint pain, drowsiness or confusion, and discomfort when looking at bright lights. Although symptoms may be severe, people usually recover completely.

How it spreads

How people get meningitis depends on the virus that causes it. Some viruses spread via droplets in the air that contain the virus. Others spread by touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – or by contact with infected faeces (poo).

Exclusion period

Exclude until the person is well.

Actions for educators and other staff

Tell a parent or carer immediately if their child has symptoms of meningitis.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child has symptoms of meningitis, contact your doctor immediately. If your doctor is not available, go to your nearest emergency department or call triple zero (000) and ask for an ambulance.

Do not send your child back to the education and care service until they feel well again.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about meningitis

See healthdirect for more information on prevention, diagnosis and treatment of meningitis (healthdirect.gov.au/meningitis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Meningococcal infection

Meningococcal infection is a severe but uncommon infection caused by a germ called *Neisseria meningitidis*, also known as meningococcus. There are several types of meningococcal bacteria that cause disease in humans. Most cases of meningococcal disease worldwide are caused by types A, B, C, W and Y. Vaccination against these types is available under the Australian National Immunisation Program to give extra protection to people who are most at risk of meningococcal disease.

Meningococcal infection can cause meningitis (infection of the membranes that cover the brain and spinal cord). The germ can also infect the blood, joints, eyes, lungs and skin. Symptoms in infants and young children include fever, refusing feeds, fretfulness, vomiting, a rash of reddish-purple spots or bruises, a high-pitched or moaning cry, and pale or blotchy skin. The child may be difficult to wake up.

Meningococcal blood infections (septicaemia) can cause shock and death within hours of symptoms starting. In Australia, 5–10% of people infected with meningococcus die, even if they are treated promptly. Meningococcal disease can affect anyone; however, those at higher risk include infants, small children, adolescents and young adults.

How it spreads

The meningococcal germ is found in the nose and throat of up to 1 in 10 people, where the germs are almost always harmless. In a few people, for reasons that are not clear, the germ spreads into the bloodstream and can cause very serious disease.

A person can be infected if they:

- are in close contact with an infected person for a long time
- breathe in droplets when an infected person breathes, coughs or sneezes on them.

The germs do not spread by contact with saliva from the front of the mouth. For example, sharing drinks or eating utensils does not spread meningococcus, even if a person is carrying it in the back of their throat.

Vaccination against meningococcal infection is available through the Australian National Immunisation Program and is free for eligible people most at risk.

Exclusion period

Exclude until the person has completed antibiotic treatment.

Actions for educators and other staff

Contact your local public health unit for advice if you have a case of meningococcal disease in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of meningococcal disease in the service.

Contact your local public health unit for advice about antibiotics and/or vaccination for people who were in the same room as the person with meningococcal disease.

Seek urgent medical attention for any person with any of the signs of meningococcal infection, such as rapid onset of illness, or a rash of reddish-purple spots or bruises.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child is at risk, make sure your child is vaccinated against meningococcal infection.

Contact your doctor immediately if your child shows any of the signs of meningococcal infection, such as rapid onset of illness, or a rash of reddish-purple spots or bruises.

Keep your child at home for the required period, or longer, until they feel well.

Your doctor can tell you if very close contacts (such as family members) of someone with meningococcal disease need to take antibiotics to kill any germs they may be carrying. Usually, all very close contacts are treated because there is no easy and quick way of finding out who is the carrier.

More information about meningococcal infection

See healthdirect for more information on prevention, diagnosis and treatment of meningococcal infection (healthdirect.gov.au/meningococcal-disease).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Molluscum contagiosum

Molluscum contagiosum is a common skin infection caused by the molluscipox virus. The virus causes a rash of pearly, skin-coloured lumps that can appear anywhere on the body. The most common places to find them are under the arms, at the back of the knees, on the inside of the elbows, and at the tops of the thighs. The lumps are usually small, with a white centre and an indented surface.

The disease is not serious and usually disappears without treatment, but this may take several months, or even longer in people whose immune defences are not working well. The infection is most common in children but has no long-term effects.

How it spreads

The virus spreads by direct skin-to-skin contact with an infected person, especially when there are small breaks in the skin. It can also spread in bath or pool water, on towels, face washers or clothing.

Exclusion period

Not excluded – people with molluscum contagiosum can attend the service.

Actions for educators and other staff

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Do not share towels and face washers.

Actions for parents and carers

Make sure your child washes their hands thoroughly and often.

Do not share towels, face washers or clothing. Wash and dry children's bath toys after use.

Dry the affected area last after showering your child and wash your hands thoroughly after touching the spots.

Treatment is not generally needed, but see a doctor if your child develops many spots or the spots become infected.

More information about molluscum contagiosum

See healthdirect for more information on prevention, diagnosis and treatment of molluscum contagiosum (healthdirect.gov.au/molluscum-contagiosum).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Mosquito-borne diseases

Diseases that spread through mosquito bites are called mosquito-borne diseases. Mosquitoes can pick up germs from biting infected animals or infected humans, but in Australia most mosquitoes do not carry disease-causing germs.

The mosquito-borne diseases reported most often in Australia are Ross River virus infection, Barmah Forest virus infection, dengue fever (in northern Queensland and the Torres Strait) and malaria (usually in people who have travelled overseas). Other mosquito-borne diseases such as Japanese encephalitis, Murray Valley encephalitis, Kunjin (West Nile) virus and Chikungunya virus are very rare.

Mosquito-borne diseases cause various symptoms, which often include fever, headache, muscle and joint pain, and rash. Some can have rare but serious complications. For details on individual diseases, see healthdirect (healthdirect.gov.au/mosquito-borne-diseases).

How it spreads

Mosquito-borne diseases are not spread directly from person to person. The mosquito picks up the virus from an infected person or animal and then spreads it when it feeds on another person or animal.

Exclusion period

Not excluded – people with mosquito-borne viruses can attend the service.

Actions for educators and other staff

Contact your public health unit for advice if you have a mosquito-borne disease in your service.

If in a mosquito-prone area, check with parents if they would like staff to apply insect repellents on their child. Insect repellents containing picaridin, diethyl toluamide (DEET), or oil of lemon eucalyptus (also known as PMD; p-menthane-3,8 diol) are recommended. When using insect repellents on infants and young children, always read the label and follow the manufacturer's instructions carefully.

Ensure insect screens are in good condition, with no holes. If you have rainwater tanks, put a screen with holes of less than 1 millimetre over inlets and overflow outlets.

To stop mosquitoes breeding:

- remove any standing water or water-holding containers, or empty and wipe out the container
- empty outside pot plant trays at least once a week, or put sand in the trays to take up the water.

Actions for parents and carers

Keep your child indoors when mosquito bites are most likely to happen. Some mosquitoes will bite during the day, but many are most active for 2 to 3 hours around sunset and sunrise.

When using insect repellents on infants and young children, always read the label and follow the manufacturer's instructions carefully. Insect repellents containing picaridin, diethyl toluamide (DEET), or oil of lemon eucalyptus (also known as PMD; p-menthane-3,8 diol) are recommended.

Make sure insect screens are in good condition, with no holes.

In highly mosquito-prone areas or when mosquitoes are most active, dress your child in long-sleeved, loose, light-coloured clothing that covers as much of the body as possible. Mosquitoes can bite through tight clothing.

Remove any objects that can hold water, such as old tyres or troughs – mosquitoes breed in still water.

Empty pot plant trays at least once a week or put sand in the trays to take up the water.

Keep fish, such as small native fish, in fishponds or unused swimming pools to eat the baby mosquitoes before they turn into adults.

Empty paddling pools each day as soon as children have finished playing in them.

Empty birdbaths and pets' water bowls at least once a week.

If you have rainwater tanks, put a screen with holes of less than 1 millimetre over inlets and overflow outlets.

More information about mosquito-borne diseases

See healthdirect for more information on prevention, diagnosis and treatment of mosquito-borne diseases (healthdirect.gov.au/mosquito-borne-diseases).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Mumps

Mumps is an infection caused by a virus that is now uncommon in Australia because we have a vaccine for it. About one-third of people with mumps only have mild symptoms or no symptoms at all. When symptoms do occur, they include swelling of the glands that produce saliva, high fever and headache. Men and adolescent boys may have tender testicles. Very rarely, women and adolescent girls may have abdominal pain because of inflammation of the ovaries.

Serious complications can sometimes occur, including swelling of the spinal cord and brain, and hearing loss. Very rarely, a person can become infertile. In extremely rare cases, a person may die.

How it spreads

The mumps virus spreads from person to person via droplets in the air that contain the virus. People get infected by breathing in droplets when an infected person breathes, coughs or sneezes on them.

Vaccination against mumps is included in the measles–mumps–rubella (MMR) vaccine, which is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude for 9 days or until swelling goes down (whichever is sooner).

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Contact your local public health unit for advice if you have a case of mumps in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of mumps in the service.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Make sure your child is vaccinated against mumps by keeping their childhood vaccinations up to date.

Keep your child at home until they feel well **and** the swelling has gone down, or it is 9 days after the swelling started.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about mumps

See healthdirect for more information on prevention, diagnosis and treatment of mumps (healthdirect.gov.au/mumps).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Norovirus infection

Norovirus is a common viral cause of gastroenteritis (or 'gastro'). Vomiting is usually the main initial symptom, and there can be a lot of vomit. Other symptoms include diarrhoea, nausea, stomach cramps, fever, headache and muscle aches. Norovirus gastroenteritis can cause dehydration because of the large amount of fluid lost through vomiting and diarrhoea.

Outbreaks are common because norovirus spreads very easily and it only takes a small number of virus particles to make someone sick. The disease is more common from late winter to early summer.

People who have had norovirus before can be reinfected as new strains of the virus spread around the world every few years.

How it spreads

The virus is present in large amounts in the faeces (poo) and vomit of an infected person.

The disease spreads when norovirus enters the body. This can happen when:

- people inhale droplets produced when an infected person vomits
- people touch contaminated surfaces (including clothes) and then touch their mouth, nose or eyes
- people eat contaminated food.

Surfaces and food can become contaminated when:

- infected droplets are spread onto surfaces when an infected person vomits
- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- people do not wash their hands well after changing the nappy of an infected baby and their hands contaminate food or surfaces.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for 48 hours.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene. Hand washing is more effective against norovirus than hand sanitiser.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines. Use disinfectants that are effective against norovirus.

The virus is relatively resistant to disinfectants, so thoroughly clean and disinfect any surfaces contaminated by vomit or diarrhoea, as well as bathrooms and high-touch surfaces. This reduces the risk of large outbreaks.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 48 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

More information about norovirus infection

See healthdirect for more information on prevention, diagnosis and treatment of norovirus (healthdirect.gov.au/norovirus-infection).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Pneumococcal disease

Pneumococcal disease is caused by a bacteria called *Streptococcus pneumoniae*. The germ can cause a range of diseases, from mild ear or throat infections to severe lung infections (pneumonia) and meningitis (infection of the membranes covering the brain and spinal cord). In Australia, pneumococcal disease is more common in winter and spring. It is a leading cause of death in children under 5 years of age, especially in First Nations children. Seniors are also at risk of pneumococcal pneumonia.

How it spreads

Pneumococcal disease spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Vaccination against pneumococcal disease is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude until the person has received antibiotics for at least 24 hours and feels well.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Protect your child against pneumococcal disease by being up to date with their childhood vaccinations.

If your child has symptoms of the disease, see your doctor.

Keep your child at home until they feel well, and for at least 24 hours after they have started taking antibiotics.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about pneumococcal disease

See healthdirect for more information on prevention, diagnosis and treatment of pneumococcal disease (healthdirect.gov.au/pneumococcal-disease).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Pneumonia

Pneumonia is a lung infection that can be serious in young children. It can be caused by bacteria, viruses or fungi. People can develop pneumonia after they have common infections such as a cold, the flu or respiratory syncytial virus.

People with pneumonia may have symptoms of a cold that get worse over time, rather than better. Symptoms of pneumonia include a moist cough, fever, tiredness and difficulty breathing.

How it spreads

The germs that cause pneumonia are generally common and spread from person to person, but only cause disease in a small proportion of people. Pneumonia is a significant disease in pregnancy and immunocompromised people.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Take your child to see a doctor if you think they may have pneumonia. If your child's pneumonia is caused by bacteria, they will need antibiotics. Follow your doctor's treatment plan and keep your child at home until their symptoms have gone.

If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Keep your child up to date with their recommended vaccinations. Vaccination can prevent some diseases that lead to pneumonia.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about pneumonia

See healthdirect for more information on prevention, diagnosis and treatment of pneumonia (healthdirect.gov.au/pneumonia).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Rash

Rashes are common in children. Many rashes do not need urgent attention, especially if the child is happy and the rash does not appear to bother them.

Urgent medical attention is needed if a child has a rash of flat spots that do not whiten if you press on them. The spots can be very small or quite large, and are coloured red or purple. These rashes are caused by burst blood vessels under the skin. They may indicate a serious infection such as meningococcal disease.

Some rashes are a sign of a severe allergic reaction (anaphylaxis). The parents or carers of children with severe, life-threatening allergies should give the service a copy of the child's anaphylaxis action plan. Staff should follow this plan if the child has an anaphylactic reaction.

How it spreads

Spread depends on the cause of the rash. Most rashes are not infectious.

Exclusion period

Exclude if rash develops rapidly or it is combined with fever or other concerning symptoms. Otherwise do not exclude.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child has a rash and is sick, take them to the doctor to find out what is causing the rash.

Keep your child at home until they feel well, especially if the rash is infectious.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often if they have an infectious rash.

More information about rash

See Pregnancy, Birth and Baby for more information on prevention, diagnosis and treatment of serious rashes in children (pregnancybirthbaby.org.au/serious-childhood-rashes).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Respiratory symptoms

Respiratory symptoms include cough, sneezing, runny or blocked nose, and sore throat. Children in education and care services can have as many as 8 to 12 colds a year.

Cough is a common sign of illness in children. The most common cause of cough is an infection of the respiratory tract, like a cold.

A runny or blocked nose is a common symptom and can be caused by many different conditions or diseases. Some causes are infectious, such as a cold, the flu (influenza), COVID-19, respiratory syncytial virus, or other viral infections. Some causes are not infectious, such as allergies (hayfever) or having something stuck in the nose.

A sore throat often results from an infection with a virus. Viral sore throats are not usually serious and disappear in a few days. Bacterial sore throats can be caused by a streptococcal infection (strep throat).

How it spreads

Short-term cough can be caused by viruses that spread when infected people cough or sneeze on or near others. Long-term cough (lasting more than 3 weeks) may have other causes. For information on other things that can cause coughs, see healthdirect (healthdirect.gov.au/coughs-and-colds-in-children).

Viruses that cause a runny or blocked nose and sore throat spread by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach your child to cough into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

Clean surfaces that your child has touched, sneezed on or coughed on to reduce the risk of spreading the infection to others at home.

See your doctor if your child's runny or blocked nose gets worse over time, or lasts for more than a week.

More information about respiratory symptoms

See healthdirect for more information on prevention, diagnosis and treatment of cough and colds in children (healthdirect.gov.au/coughs-and-colds-in-children).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Roseola (exanthum subitum, sixth disease)

Roseola is caused by a virus. It is a mild disease and is common in children aged 6 months to 3 years. It usually begins with a high fever that starts suddenly. The fever lasts 3 to 5 days and then a rash appears, usually as the child's temperature returns to normal. The rash is usually fine, raised, red spots and can last from several hours to several days. The rash first appears on the trunk of the body and spreads to the arms and legs. The rash turns white (blanches) when pressed.

How it spreads

Roseola spreads to others before symptoms appear in the infected child. Once your child has a fever and/or rash, they are no longer infectious.

Roseola spreads from person to person via droplets in the air that contain the virus. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them or near them
- direct contact with infected saliva (such as through sharing a cup or eating utensils)
- touching a surface contaminated with droplets – for example, hands, tissues or toys – and then touching their eyes, nose or mouth.

Exclusion period

Not excluded – people with roseola can attend the service.

Actions for educators and other staff

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their fever has gone and they feel well.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about roseola

See healthdirect for more information on prevention, diagnosis and treatment of roseola (healthdirect.gov.au/roseola-infantum).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Rotavirus

Rotavirus is a common cause of gastroenteritis (or 'gastro') in children. Symptoms include vomiting, fever and watery diarrhoea. It usually starts suddenly. Rotavirus mainly affects infants and young children up to 3 years of age. In cooler parts of Australia, rotavirus peaks in mid to late winter. In the northern tropical and arid parts of Australia, disease peaks are less predictable.

Rotavirus gastroenteritis can cause dehydration because of the fluid lost through vomiting and diarrhoea.

How it spreads

The virus is present in large amounts in the faeces (poo) of an infected person.

The disease spreads when rotavirus enters the body. This can happen when:

- people inhale droplets produced when an infected person vomits
- people touch contaminated surfaces (including clothes) and then touch their mouth, nose or eyes
- people eat contaminated food.

Surfaces and food can become contaminated when:

- infected droplets are spread onto surfaces when an infected person vomits
- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- people do not wash their hands well after changing the nappy of an infected baby and their hands contaminate food or surfaces.

Vaccination against rotavirus is part of the routine childhood vaccination schedule in the Australian National Immunisation Program. Rotavirus vaccine does not completely prevent infection, but it prevents severe disease that might otherwise require hospitalisation.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines. Use disinfectants that are effective against rotavirus.

The virus is relatively resistant to disinfectants, so thoroughly clean and disinfect any surfaces contaminated by vomit or diarrhoea, as well as bathrooms and high-touch surfaces. This reduces the risk of large outbreaks.

Review vaccination records of all staff and children.

Actions for parents and carers

Make sure your child is immunised against rotavirus by keeping their childhood vaccinations up to date.

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

Encourage your child to wash their hands regularly.

More information about rotavirus

See healthdirect for more information on prevention, diagnosis and treatment of rotavirus (healthdirect.gov.au/rotavirus).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

RSV (respiratory syncytial virus)

RSV is a common virus affecting the lungs and breathing passages. RSV in children usually causes mild to moderate cold-like symptoms lasting from 8 to 15 days. Symptoms include fever, runny nose, coughing and wheezing.

In young children and babies under 12 months old, RSV can cause a chest infection called bronchiolitis. Signs of bronchiolitis include wheezing and difficulty breathing. This may get worse over the first 3 to 4 days before starting to improve. Some children and adults (particularly the elderly) need hospital treatment for their RSV lung infection.

How it spreads

RSV is very infectious. RSV spreads by droplets in the air that contain the virus or direct contact with mucus or saliva. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their eyes, nose or mouth.

The virus can live on surfaces for several hours, and on unwashed hands for up to an hour.

Infected people usually develop symptoms 5 days after exposure to the virus. This can range from 2 to 8 days. People with RSV can usually pass the virus to others for 8 days from the start of their symptoms.

Exclusion period

If a person has respiratory symptoms (cough, sneezing, runny or blocked nose, sore throat), exclude them only if:

- the respiratory symptoms are severe, **or**
- the respiratory symptoms are getting worse (more frequent or severe), **or**
- they also have concerning symptoms (fever, rash, tiredness, pain, poor feeding).

Otherwise do not exclude.

A person often has an ongoing cough after they have recovered from a respiratory infection. If their other symptoms have gone and they feel well, they can return to the service.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good respiratory and hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

If you have several cases of flu-like illness in your service, contact your public health unit for advice.

Actions for parents and carers

Keep your child at home until their symptoms have gone and they feel well. If your child still has a cough, but their other symptoms have gone and they feel well, they can return to the service.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Clean surfaces that your child has touched, sneezed on or coughed on to reduce the risk of the infection spreading to others at home.

More information about RSV

See healthdirect for more information on prevention, diagnosis and treatment of RSV (healthdirect.gov.au/respiratory-syncytial-virus-rsv).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Rubella

Rubella is caused by a virus and is usually a mild illness. Rubella is now rare in Australia because we have a vaccine.

Symptoms begin like a cold, with a slight fever, sore throat and enlarged glands in the neck. A rash appears 2 to 3 days later, beginning on the face and spreading to the trunk. The spots are pale pink at first and join to form patches. The rash disappears after a few days.

How it spreads

Rubella spreads from person to person via droplets in the air that contain the virus. People can be infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them or near them
- direct contact with infected saliva – for example, sharing a cup or eating utensils with an infected person
- touching a surface contaminated with droplets – for example, hands, tissues or toys – and then touching their eyes, nose or mouth.

Vaccination against rubella is included in the measles–mumps–rubella (MMR) vaccine, which is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude until the person has fully recovered or for at least 4 days after the rash appears.

Risks in pregnancy

If a woman catches rubella during pregnancy, the virus can pass to her baby through the bloodstream. If this happens, there is a risk of miscarriage or serious birth defects, especially if infection occurs in the first 16 weeks of pregnancy.

If you are pregnant and have been exposed to rubella, see your doctor to get a blood test to check if you are immune. You can protect yourself by getting vaccinated **before** becoming pregnant. For more information, see pregnancybirthbaby.org.au/rubella-and-pregnancy.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Contact your local public health unit for advice if you have a case of rubella in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of rubella in the service.

All staff should be immunised. However, vaccination during pregnancy is not recommended.

If pregnant staff members are concerned, refer them to their doctor.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Make sure your child is immunised against rubella by keeping their childhood vaccinations up to date.

If your child has rubella, keep them at home for at least 4 days after the rash appears, and until they feel well again.

Tell any pregnant friends or family who may have been exposed to see their doctor.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about rubella

See healthdirect for more information on prevention, diagnosis and treatment of rubella (healthdirect.gov.au/rubella-german-measles).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Salmonella infection (salmonellosis)

Salmonella is a bacteria that causes gastroenteritis (or 'gastro') and occasionally bloodstream infection. Symptoms include diarrhoea (sometimes with blood or mucus in the faeces), fever, stomach pain, nausea and vomiting. The severity of the symptoms depends on the number of germs swallowed, the person's age and their general health.

Specific types of *Salmonella* cause typhoid and paratyphoid fever (see separate fact sheet). These can be more severe abdominal and bloodstream infections, but are generally only reported in returned travellers from countries where typhoid is common.

How it spreads

A person gets the disease by swallowing the germs. This can happen by:

- eating undercooked meat, especially chicken
- eating cooked food that has been contaminated with germs from raw food
- handling infected animals and not washing your hands afterwards.

Infection can also spread from person to person when:

- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- people do not wash their hands well after changing the nappy of an infected baby and their hands contaminate food or surfaces.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service for at least 48 hours).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Ensure staff and children have good hand hygiene, especially after handling any animals.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

Encourage your child to wash their hands regularly, especially after touching animals.

More information about *Salmonella* infection

See healthdirect for more information on prevention, diagnosis and treatment of *Salmonella* infection (healthdirect.gov.au/salmonella).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Scabies and other mites causing skin disease

Scabies is an infestation of the skin by tiny, insect-like creatures called mites. Scabies affects people of all ages, sexes, races and standards of personal hygiene. Having scabies does not mean that people are unclean. Scabies is specific to humans. Animals can get mite infections that look the same, but they do not cause disease in humans.

The tiny mites burrow under the skin, and itchy red bumps or blisters appear, especially on skin folds around the fingers, toes, wrists, elbows, armpits, waistline, thighs, genitals, stomach and bottom. Children under 2 years are likely to be infected on the head, neck, palms and soles of the feet, but they can have mites all over their body.

People with scabies usually have itchy skin. Scratching can break the skin, allowing germs to enter and cause other dangerous infections on top of the scabies (for example, acute rheumatic fever).

How it spreads

Scabies usually spreads by prolonged skin-to-skin contact with an infected person – a quick handshake or hug will usually not spread the disease. Mites can sometimes spread on clothes or bedding that has been freshly contaminated by an infected person, but the mites can only live away from the body for 2 to 3 days.

Exclusion period

Exclude until the day after starting treatment.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines. Bed linen that has been used by children with untreated mites should be washed in hot water and detergent. Put items that cannot be washed or dry-cleaned (such as toys, cushions and pillows) out in the sun for 2 or 3 hours to kill the mites. Alternatively, items can be disinfected by storing them in a closed plastic bag for at least 72 hours.

Actions for parents and carers

Keep your child at home until the day after they have started treatment.

Treat all people in the household and anyone else who has skin-to-skin contact with your child, even if they have no itching or other symptoms.

Make sure your child washes their hands thoroughly and often.

Wash bedding or clothes used by people with the mites in hot water and detergent. These things are contaminated if the person used them in the 48 hours before treatment starts. Put items that cannot be washed or dry-cleaned (such as toys, cushions and pillows) out in the sun for 2 or 3 hours to kill the mites.

More information about scabies

See healthdirect for more information on prevention, diagnosis and treatment of scabies (healthdirect.gov.au/scabies).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Shigella infection (shigellosis)

Shigella is a germ that can cause a severe bowel infection. It is a type of gastroenteritis (or 'gastro'). Symptoms include diarrhoea (sometimes containing blood or mucus), fever, vomiting and stomach cramps. Some infected people have no symptoms. Even very small numbers of the germs can cause an infection, so strict control measures are needed to stop it spreading.

How it spreads

Shigella spreads from person to person when people swallow the germs. This can happen when:

- infected people do not wash their hands well after using the toilet and their hands contaminate food or surfaces
- people do not wash their hands well after changing the nappy of an infected baby and their hands contaminate food or surfaces.

Exclusion period

Exclude until there has not been any diarrhoea or vomiting for at least 24 hours.

Staff members with these symptoms should not handle food until they have not vomited or had diarrhoea for at least 48 hours (they can be assigned to other duties after at least 24 hours, or stay away from the service).

Some states and territories may have different requirements for gastroenteritis (diarrhoea or vomiting). Check if your state or territory has different requirements for gastroenteritis.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

If you have 2 or more cases of gastroenteritis in your service, contact your local public health unit for advice. This is legally required in most states and territories (except South Australia).

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until there has been no diarrhoea for at least 24 hours and they feel well.

Give your child plenty of fluids and talk to your pharmacist about rehydration solution options.

See a doctor immediately if your child cannot keep down any fluids. Babies under 6 months should always be seen by a doctor if they have gastro.

Encourage your child to wash their hands regularly.

More information about *Shigella* infection

See healthdirect for more information on prevention, diagnosis and treatment of shigella infection (healthdirect.gov.au/shigella-bowel-infection).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Shingles

Shingles (also called herpes zoster) is a painful, blistering rash. It is caused when the virus that causes chickenpox (varicella-zoster virus) reactivates in the body. Shingles only affects people who have previously had chickenpox. Shingles can affect people of any age, but is more common in those over 50. It rarely affects children under 3 years old. If someone gets shingles, prompt treatment with antivirals can reduce its severity and duration. Antivirals should be started as soon as possible after diagnosis.

How it spreads

Shingles itself does not spread between people. However, the varicella-zoster virus can spread from someone with shingles to others. This can cause chickenpox in people who are not immune.

The virus spreads through airborne droplets when an infected person coughs or talks. It can also spread if someone touches the fluid from the blisters and then touches their mouth, nose or eyes.

Vaccination against shingles is available through the Australian National Immunisation Program and is free for eligible people most at risk.

Exclusion period

Exclude children until blisters have dried and crusted.

Adults who can cover the blisters are not excluded (they are excluded if blisters cannot be covered).

Risks in pregnancy

If you are infected with the varicella-zoster virus in the first 3 months of pregnancy, it may affect your unborn child.

Seek medical advice within 48 hours if you are exposed to someone who has shingles and you are pregnant, have not had chickenpox before and have not been vaccinated. You may need a blood test to check if you have antibodies against the virus. If you do not, you will need an injection of antibodies (known as varicella-zoster immunoglobulin, or VZIG).

You can be vaccinated against chickenpox, but vaccination is not recommended during pregnancy. Pregnancy should also be avoided for 1 month after having a chickenpox vaccination.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Talk to your public health unit for advice about pregnant women and anyone who is immunocompromised.

Anyone who works with children and has not previously had chickenpox should be immunised against chickenpox, or be certain that they are immune by having a blood test. Immunisation against shingles is also available. It is not free for people aged under 65, but staff should see their doctor if they are interested in getting the shingles vaccine.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until their blisters have dried and crusted. See your doctor if you think your child may have shingles, particularly if the rash is near their eyes.

The childhood vaccination schedule includes vaccinations against chickenpox (varicella). This will protect children who have not yet been infected.

More information about shingles

See healthdirect for more information on prevention, diagnosis and treatment of shingles (healthdirect.gov.au/shingles).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Staph infection (*Staphylococcus aureus*)

The germ commonly known as staph (*Staphylococcus aureus*) is often found on the skin and in the nose and throat of healthy people. It generally causes no problems or disease, but sometimes it can cause infections. If the staph germs enter the body through damaged skin, they can cause skin infections such as impetigo (school sores), boils and abscesses. Sometimes they get into the blood and cause blood poisoning (septicaemia).

Staph can also cause food poisoning and lung infection (pneumonia).

Staph is sometimes mentioned in the media when it causes outbreaks of infections in hospitals or in the community. Outbreaks can sometimes be caused by a type of staph known as MRSA, which stands for methicillin-resistant *Staphylococcus aureus*. MRSA is not more infectious, but it can be more difficult to treat because it is resistant to some common antibiotics.

How it spreads

Staph skin infections spread from person to person by:

- directly touching infected areas of the skin, or by people touching their sores and then touching other people without washing their hands
- touching a surface contaminated with the germs – for example, clothing, tissues or toys.

People usually get staph food poisoning if infected people who have not washed their hands well touch food that other people eat.

Exclusion period

Exclude until the person has taken antibiotics for at least 24 hours and feels well.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Where possible, ensure that sores are covered with a waterproof dressing. Put all dressings in a lidded bin as soon as they are removed.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If a doctor has prescribed antibiotics, make sure your child takes the full course.

Keep your child at home until they have been on antibiotics for 24 hours and are well.

If your child has sores, cover them with a waterproof dressing (like a plastic adhesive strip) where possible. Keep your child at home until sores have dried completely.

Make sure your child washes their hands thoroughly and often, especially if they touch their sores.

More information about staph infection

See healthdirect for more information on prevention, diagnosis and treatment of staph infection (healthdirect.gov.au/staph-infections).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Strep throat

Strep throat is a throat infection caused by bacteria called *Streptococcus pyogenes* (Group A *Streptococcus*). The symptoms of strep throat can range from mild to severe. They include sore throat, painful swallowing, fever, swollen glands in the neck, and loss of appetite.

Serious but rare complications of strep throat include scarlet fever, rheumatic fever and kidney disease.

How it spreads

Strep throat spreads from person to person via infected droplets in the air. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them or near them
- direct contact with infected saliva – for example, sharing a cup or eating utensils with an infected person
- touching a surface contaminated with droplets – for example, hands, tissues or toys – and then touching their eyes, nose or mouth.

Exclusion period

Exclude until the person has taken antibiotics for at least 24 hours and feels well.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff with sore throats stay at home until they feel well.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If you think your child has strep throat, see your doctor. They may need to take a course of antibiotics.

Keep your child at home until they have been on antibiotics for at least 24 hours and feel well.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about strep throat

See healthdirect for more information on prevention, diagnosis and treatment of strep throat (healthdirect.gov.au/strep-throat).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Thrush (candidiasis)

Thrush is caused by a germ (yeast infection) called *Candida*. Most people have this germ on their skin, in their mouth and in their gut, where it does not cause any trouble. However, it can sometimes cause infections, especially in moist places such as babies' mouths, in skin folds or in the nappy area. It is often associated with nappy rash – if a nappy rash is not clearing after 3 days or not responding to the usual barrier cream, it may be thrush. Thrush often causes skin irritation or soreness, but is not usually dangerous.

Thrush can also infect the vagina, or the nipples of breastfeeding mothers.

Thrush may look like white spots or flakes. When the skin is involved it usually looks red with small spots or pimples (pustules) in the surrounding area.

How it spreads

Thrush spreads from person to person by direct contact with the germs living on the skin, in the mouth or vagina, or in faeces (poo). A baby may pick up *Candida* during birth.

Candida lives in the human digestive tract from early infancy. Most of the time it does not cause disease.

Exclusion period

Not excluded – people with thrush can attend the service.

Actions for educators and other staff

Do not allow children to share dummies, cups or eating utensils.

Regularly wash toys and other objects that children put in their mouths.

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Use the online symptom checker (see below) or see a pharmacist or doctor to decide if your child needs treatment.

Clean and sterilise your baby's bottle teats and dummies, and replace them regularly.

Do not share your baby's eating utensils, food or drinking cups.

Thoroughly wash toys that your baby or toddler puts in their mouth.

More information about thrush

See healthdirect for more information on prevention, diagnosis and treatment of thrush (healthdirect.gov.au/thrush-and-other-fungal-infections).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Toxoplasmosis

Toxoplasmosis is an infection caused by a parasite called *Toxoplasma gondii*. The parasite is found in all parts of the world.

Toxoplasmosis is rarely serious in healthy children or adults. Most people have no symptoms when infected with *Toxoplasma gondii*, but a minority will experience a flu-like illness, sometimes with swollen neck glands. It can, however, cause serious disease if a person's immune system is weakened by conditions such as cancer.

How it spreads

People may become infected through:

- eating raw or undercooked meat
- contact with environments contaminated by cat faeces (poo), such as cat litter boxes or soil
- eating raw food (vegetables or salad) or drinking water contaminated with cat faeces.

Exclusion period

Not excluded – people with toxoplasmosis can attend the service.

Risks in pregnancy

If you are infected with *Toxoplasma gondii* during pregnancy, it may pass to your baby through the bloodstream. It can cause birth defects in the unborn child, especially if infection occurs in the first half of pregnancy.

If you are pregnant and have been exposed to toxoplasmosis, see your doctor to check if you are immune, or if you need treatment.

If you are pregnant, **avoid**:

- cleaning cat litter trays
- eating raw or undercooked meat
- drinking untreated water
- contact with soil (for example, gardening; or wash hands thoroughly after gardening or spending time outdoors)
- eating raw fruit or vegetables without thoroughly washing and peeling beforehand.

For more information, see pregnancybirthbaby.org.au/toxoplasmosis.

Actions for educators and other staff

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Cover sandpits when they are not in use.

Actions for parents and carers

Make sure your child washes their hands thoroughly and often, especially after playing outdoors or after touching pet cats.

Wash your hands thoroughly before and after meals and after handling raw meat. Wash knives and other kitchen utensils thoroughly after they have been in contact with raw meat.

Cook meat well, and wash raw fruit and vegetables carefully before eating.

Dispose of cat droppings and dirty litter daily, because it can become infectious after 24 hours. Wash your hands thoroughly after disposing of litter. If you are pregnant, get someone else to clean out your cat's litter tray.

Cover your children's sandpit when they are not playing in it to stop animal droppings getting in.

More information about toxoplasmosis

See healthdirect for more information on prevention, diagnosis and treatment of toxoplasmosis (healthdirect.gov.au/toxoplasmosis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Trachoma

Trachoma is an eye infection caused by a bacteria called *Chlamydia trachomatis*. Symptoms include red, sticky, itchy or painful eyes. Children may not show symptoms of trachoma, but repeated infections can cause blindness in adulthood.

Trachoma can be treated with a single dose of an antibiotic. If left untreated, it can cause the eyelid to turn inward. The person's eyelashes then rub on the surface of the eye, damaging it. In Australia, trachoma is more common in remote areas with limited access to water and washing facilities, which makes good hygiene more difficult.

How it spreads

Trachoma spreads when people have contact with fluid from the eyes and nose of infected people. It can spread when people share face cloths or towels. Flies can also spread the bacteria between people.

Exclusion period

Exclude until antibiotic treatment has started, and talk to your local public health unit for advice.

Actions for educators and other staff

Contact your local public health unit for advice if you have a case of trachoma in your service.

Follow the exclusion period in the *Staying healthy* guidelines.

Ensure staff and children have good hand hygiene and do not share towels or face cloths.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

If your child has trachoma, your child and everyone in the household will need to get antibiotics from your doctor.

Keep your child at home until they have started treatment. You can help prevent repeated trachoma infections by teaching your child to wash their hands and face well, and making sure family members do not share face cloths or towels.

More information about trachoma

See healthdirect for more information on prevention, diagnosis and treatment of trachoma (healthdirect.gov.au/trachoma).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Tuberculosis (TB)

Tuberculosis (TB) is an infection that can affect almost any part of the body, but it mostly affects the lungs. It is not common in Australia but is very common in other areas of the world.

People with TB may have symptoms such as fever, tiredness, sweating (especially at night), weight loss and a persistent cough that does not go away with normal treatment. The cough may produce phlegm and sometimes blood. A chest X-ray can help diagnose TB.

TB infection and TB disease are different. People with TB disease are sick because the germs are active in their body. They usually have one or more symptoms of TB. These people can spread TB to others. People with TB infection (but not TB disease) have the germs that cause TB in their body, but they are not sick because the germs are not actively causing disease. These people cannot spread the infection to others. Most people with TB infection do not become sick. However, the TB germs can remain within their body for years and can become active.

How it spreads

TB spreads from person to person via infected droplets in the air. People get infected by breathing in droplets when a person with active TB disease breathes, coughs or sneezes on them. Remember, people who are infected with TB but who do not have TB disease cannot spread the infection.

Exclusion period

Talk to your local public health unit for advice about exclusion.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Talk to your public health unit for advice about screening, antibiotics or accessing TB clinics. In the Northern Territory, education and care services must notify their local public health unit about any cases of TB in the service.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Keep your child at home until the local public health unit says they can return to care.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

More information about TB

See healthdirect for more information on prevention, diagnosis and treatment of TB (healthdirect.gov.au/tuberculosis).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Typhoid and paratyphoid fever

Typhoid is a serious disease that needs immediate treatment. Symptoms usually develop 1 day to 2 weeks after exposure, and sometimes up to 2 months after. Symptoms include fever, headache, tiredness and stomach pain.

Typhoid is caused by infection with the bacteria *Salmonella* Typhi. Paratyphoid fever is a similar disease caused by a different but related bacteria, *Salmonella* Paratyphi. Paratyphoid infections are usually less severe than typhoid infections.

Typhoid and paratyphoid are not common in Australia, but people can catch them if they travel to places such as India, Africa, Asia, South and Central America and the Middle East.

How it spreads

The bacteria causing these diseases are found in the faeces (poo) and urine of infected people. These diseases usually spread when people drink water or eat food that is contaminated with the bacteria. It can also spread if people touch contaminated surfaces such as taps, toilets, cutlery, toys and nappies.

Some people have the bacteria in their faeces but do not have symptoms of the disease. They can spread the disease.

There is a vaccine against typhoid, but no vaccine available for paratyphoid fever.

Exclusion period

Exclude until cleared by the local public health unit.

Contacts: Talk to your local public health unit for advice.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Contact your local public health unit for advice if you have a case of typhoid or paratyphoid in your service. In the Northern Territory, education and care services must notify their local public health unit about any cases of typhoid or paratyphoid in the service.

Ensure staff and children wash their hands well after using the toilet.

Ensure staff are using appropriate cleaning practices, as described in the *Staying healthy* guideline.

Actions for parents and carers

See a doctor immediately if you think your child may have typhoid or paratyphoid.

Keep your child at home for the exclusion period or until they are feeling better. You will need a medical certificate of recovery before your child can return to the care service.

Make sure you and your child wash their hands regularly, especially after going to the toilet or changing nappies.

If you are planning to travel to a country where typhoid is common, children over the age of 2 and adults can be vaccinated before travel. See your doctor at least 6 weeks before you travel.

More information about typhoid and paratyphoid fever

See healthdirect for more information on prevention, diagnosis and treatment of typhoid and paratyphoid fever (healthdirect.gov.au/typhoid-and-paratyphoid).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Warts

Warts are skin growths that are usually harmless. They look like thickened skin that is clearly different from the skin around them. They are usually round or oval shaped. Warts are caused by a virus (called the human papillomavirus) that enters the skin through scratches or other skin damage.

There are several types of warts and they can appear in different places on the body. Mostly, there are only 1 or 2 warts, but sometimes there can be a lot in one area.

How it spreads

Warts can spread to other people, usually from skin-to-skin contact with another person. Picking or scratching warts can mean the warts are spread to other parts of the infected person's body.

Warts can also be spread by touching contaminated surfaces.

Exclusion period

Not excluded – people with warts can attend the service.

Actions for educators and other staff

Ensure staff and children have good hand hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Try to stop your child picking or scratching the warts.

Make sure your child washes their hands thoroughly and often, especially if they touch the warts.

More information about warts

See healthdirect for more information on prevention, diagnosis and treatment of warts (healthdirect.gov.au/wart-treatments).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Whooping cough (pertussis)

Whooping cough (pertussis) is a highly infectious disease caused by infection of the respiratory tract with a bacteria called *Bordetella pertussis*. It can affect babies, children and adults. Vaccination can prevent whooping cough.

The disease usually starts like a cold, with a runny nose, tiredness and sometimes a mild fever. Then a cough develops. Fits of coughing are often followed by vomiting. Often the person coughs in short bouts that may be followed by a deep gasp, or whoop. Not every person makes the whooping sound – this is more common in children who are not vaccinated. The cough can last up to 3 months.

Babies may stop breathing and sometimes turn blue during a coughing fit. About a quarter of children who catch the disease also develop a lung infection (pneumonia). Some children have fits (convulsions), and some develop swelling of the brain (encephalitis). Whooping cough is particularly serious in children under 12 months, and they often have to go to hospital if they catch it. Teenagers and adults may just have a persistent cough.

How it spreads

Whooping cough spreads from person to person via infected droplets in the air. People get infected by:

- breathing in droplets when an infected person breathes, coughs or sneezes on them
- touching a surface contaminated with droplets – for example, hands, tissues, toys or eating utensils – and then touching their face.

Vaccination against whooping cough is part of the routine childhood vaccination schedule in the Australian National Immunisation Program.

Exclusion period

Exclude until 5 days after starting antibiotic treatment, or for 21 days from the onset of coughing if they do not take antibiotics.

Contacts: Talk to your local public health unit for advice about excluding unvaccinated contacts.

Risks in pregnancy

If you catch whooping cough while you are pregnant, it can pass to the baby after birth and cause severe disease and even death. If you are 20 to 32 weeks pregnant, you can get a free vaccination under the Australian National Immunisation Program. For more, see pregnancybirthbaby.org.au/whooping-cough-and-pregnancy.

Actions for educators and other staff

Follow the exclusion period in the *Staying healthy* guidelines.

Contact your local public health unit for advice if you have a case of whooping cough in your service. In New South Wales and the Northern Territory, education and care services must notify their local public health unit about any cases of whooping cough in the service.

Review vaccination records of all staff and children and remind staff, parents and carers to keep vaccinations up to date.

Ensure staff and children have good hand and respiratory hygiene.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

Make sure your child is fully immunised against whooping cough by keeping their childhood vaccinations up to date.

If your child has whooping cough, see your doctor straight away so they can treat your child with antibiotics.

Keep your child at home and away from other children for the exclusion period. Tell your friends and contacts that your child has whooping cough.

Teach your child to cough or sneeze into a tissue, then throw the tissue into a bin and wash their hands. If there are no tissues nearby, teach them to cough or sneeze into their inner elbow instead of their hands.

Make sure your child washes their hands thoroughly and often.

More information about whooping cough

See healthdirect for more information on prevention, diagnosis and treatment of whooping cough (healthdirect.gov.au/whooping-cough).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Worms

Many types of worms can infect people. In Australia, threadworm (also called pinworm) is the most common worm in children, but worms can infect people of any age. Threadworms are small, white, thread-like worms that are 2 to 13 millimetres long. The worms only infect humans, so children cannot catch threadworms from pets.

Other types of worms include roundworms, hookworms and tapeworms. One type of tapeworm, called hydatids, can cause hydatid disease. In people, the baby hydatids live inside fluid-filled balls called cysts that can grow in many different parts of the body, but mostly in the liver and lungs. Hydatid disease is more common in rural communities where dogs and livestock interact.

How it spreads

Threadworms

People get threadworms by swallowing worm eggs. Worm eggs are picked up and transferred to the mouth when an infected person scratches their bottom and then touches their mouth, or when they do not wash their hands properly after going to the toilet. This keeps this infection going. The eggs can also be transferred to bedding, clothes and other surfaces, where other people can pick them up. Eggs can survive on surfaces for up to 2 weeks.

Hydatids

In Australia, people mostly get hydatids from infected dogs, but dingoes and foxes can also spread the infection. Animals such as sheep, goats, cattle and kangaroos spread the infection to dogs. People get infected by swallowing eggs passed in the faeces (poo) of an infected dog. This may happen when a person handles infected dogs, or things soiled with infected dog droppings, and then touches their mouth. They can also get infected if they swallow food or water contaminated with dog droppings.

Hydatid disease does not spread directly from person to person, and a person cannot get infected by eating the meat of infected sheep or cattle.

Exclusion period

Not excluded – people with worms can attend the service.

Actions for educators and other staff

Ensure staff and children have good hand hygiene, especially after touching animals and before preparing or eating food.

Ensure any dogs that visit the service are regularly treated for worms.

Ensure staff use appropriate cleaning practices, as described in the *Staying healthy* guidelines.

Actions for parents and carers

To minimise the chance of your child getting any kind of worms, make sure they wash their hands thoroughly and often. This is especially important after going to the toilet or touching animals, and before eating.

Threadworms

- You can get a threadworm treatment from your pharmacy. Treat all family members. Follow the directions on the label.
- Change bed linen and underwear daily for several days after treatment. Wash clothes and bed linen in hot water to kill threadworm eggs.
- Keep children's fingernails short.

Hydatids

Prevention is important as treatment can be complicated.

- Regularly treat your dog for worms.
- Do not let dogs lick people on the face.
- Dispose of dog droppings regularly, wearing gloves.
- Do not feed dogs raw offal meat (such as liver or kidneys) because this is how they can become infected.

More information about worms

See healthdirect for more information on prevention, diagnosis and treatment of worms (healthdirect.gov.au/worms-in-humans).

To find out if a child needs medical help:

- use the online symptom checker (healthdirect.gov.au/symptom-checker)
- speak to a registered nurse by calling the 24-hour health advice hotline on 1800 022 222.

Glossary

This section provides definitions of terms used in the *Staying healthy* guidelines.

airborne transmission	The spread of a disease through contaminated airborne particles. Airborne (or aerosol) transmission is due to germs in very small particles that are so light they remain suspended in the air for a long time.
air purifiers	Devices that remove contaminants from the air in a room to improve indoor air quality.
antibiotic	A substance that kills bacteria or slows their growth. Antibiotics may be prescribed to treat a bacterial infection; they are not effective against viruses.
antibodies	Proteins that protect the body against invading germs by helping the immune system to kill them. The body makes antibodies in response to an infection or a vaccine. Some antibodies can be injected to give immediate protection against diseases such as hepatitis A and B, measles, chickenpox and tetanus, but this protection is temporary.
bacteria	A type of germ that is not visible to the naked eye and consists of a single cell. Some bacteria can be beneficial to humans, some can cause disease and some can do both, depending on the circumstance.
body fluids	Fluids that come from inside the bodies of living people, including urine, faeces, mucus, saliva, vomit, blood and breastmilk.
chain of infection	The process by which an infection spreads. The chain includes the following stages: 1. Source (where the germs live) 2. Spread (how the germs move to a new person) 3. New host (a person susceptible to the germs).
complication	Another disease or condition that develops, either directly or indirectly, as a result of an infection. For example, pneumonia is a common complication of measles; damage to an unborn baby is a complication of cytomegalovirus infection during pregnancy.
concerning symptoms	Fever, rash, tiredness, pain, poor feeding, poor urine output. Concerning symptoms may indicate serious illness.
contact	A person who has had the opportunity to catch a disease from someone while that person was infectious. The exact definition of a contact varies depending on how the disease spreads. Contact tracing involves identifying and monitoring these individuals to prevent further spread of the disease.
cross-contamination	The transfer of harmful germs from one surface or food item to another, leading to the potential spread of disease. Prevent cross-contamination between raw and cooked foods by keeping them separate and using separate utensils and cutting boards.
dermatitis	Any condition of the skin that involves inflammation (redness and swelling). Eczema is a type of dermatitis.
diarrhoea	Frequent passing of loose, watery faeces.
disease	Any condition that affects the body's normal functions. Diseases can be infectious or non-infectious. *See* infectious disease

disease outbreak	When the number of cases of a particular disease in an area exceeds the usual or expected number. Outbreaks require immediate attention, investigation, and coordinated efforts to control the spread of the disease.
disease surveillance	The ongoing collection and analysis of data about diseases. Disease surveillance helps identify patterns, trends and outbreaks, allowing for effective public health responses and preventive measures.
disinfectant	A chemical agent that kills germs outside the body (for example, on surfaces).
droplet transmission	Spread of infections through contaminated droplets. Small droplets, often invisible to the naked eye, that are propelled from a person's mouth or nose when they cough, sneeze, talk or spit. These droplets can contain germs from the person's nose and throat; if another person breathes in the droplets, they can become infected. The droplets can also contaminate surfaces. Many diseases are spread in this way.
eczema	A type of disease that causes dry, itchy and sensitive skin.
education and care service	Any service that provides, or is intended to provide, education and care on a regular basis for children up to school age. This includes day care, long day care, family day care, preschool and outside-school-hours care. It does not include full-time schools, special classes or services (for example, sport classes, dance classes, disability services, medical services), or personal arrangements.
educator	A person at the education and care service who works directly with children. *See* staff
environmental cleaning	Removing dirt and germs from surfaces. The best way to do this is by rubbing or scrubbing the surface with warm water and detergent, followed by rinsing and drying.
exclusion	The temporary removal of a sick child or adult from an education and care service to prevent the spread of infectious diseases to others.
fungus	A group of germs that includes yeasts, moulds and mushrooms. Some fungi can cause disease.
gastroenteritis	An inflammation of the stomach and intestines, often resulting in symptoms such as vomiting and diarrhoea. Gastroenteritis is commonly caused by viral or bacterial infections and can be highly contagious.
germ	A microorganism (for example, bacteria, viruses, fungi, protozoa). Not all germs cause disease.
hand hygiene	Keeping your hands clean. This can be done using soap and water or hand sanitiser, and is one of the most effective ways to reduce the spread of germs.
hand sanitiser	A type of hand hygiene product that contains alcohol and can kill germs without using soap and water. Also known as alcohol-based hand rubs, antiseptic hand rubs or waterless hand cleaners.
hand washing	Cleaning hands using soap and water, rather than using a hand sanitiser product.
hard surfaces	In the context of education and care services, hard surfaces are waterproof or impermeable to liquid (for example, tables, hard floors, taps, basins and so on).
herd immunity	The way that immunised people can protect non-immunised people in a community. If a high proportion of the population is immune to a particular disease through past infection or vaccination, it is unlikely that the disease will be able to spread from person to person. *See* immune, immunisation

immune	A person becomes immune as a result of immunisation against, or previous infection with, a particular germ. Immunity means that the next time the person is exposed to the germ, their body can quickly recognise and destroy or weaken the germ before the person has any symptoms. A person is immune to a disease if they have antibodies to the germ in their blood; this can often be determined by a laboratory test.
immunisation	The process of making a person immune to a disease by giving them a vaccine or antiserum. *See* immune, vaccine
immunocompromised	Refers to individuals who have a weakened or compromised immune system, making them more susceptible to infections and less able to fight off germs effectively. Immunocompromised individuals include those with certain medical conditions, undergoing medical treatments (for example, chemotherapy) or taking immunosuppressive medications.
infection	The entry and multiplication of a germ in a human or animal. Infections may or may not cause disease – a person can be infected with a germ without it causing any damage to their body or any symptoms. *See* disease
infection control practices	Measures and protocols aimed at preventing the spread of infections. Within healthcare and educational settings, infection control practices include hand hygiene, respiratory hygiene (covering coughs and sneezes), proper cleaning and disinfection procedures, and the use of personal protective equipment when necessary.
infectious	(Of diseases), caused by a germ able to spread from one living thing to another. Also known as contagious.
infectious disease	Diseases caused by germs (bacteria, viruses, fungi) or parasites that can spread between living things or from the environment, including food and water. Also known as a communicable disease. *See* disease
laundering	The process of washing and drying clothes or other fabric items, such as sheets, towels and tea towels. Effective laundering involves washing with detergent in a machine on a hot setting (≥60 °C) and drying in sunlight or a tumble dryer on a hot setting (≥40 °C).
lethargy	A state of extreme tiredness or lack of energy where a child may appear drowsy, uninterested, or less active than usual.
medically vaccinated	When a person has received a vaccine that has been scientifically proven to be effective in preventing or reducing disease. *See* non-medically vaccinated, vaccine
meningitis	A serious disease that involves inflammation of the membrane that surrounds the brain and spinal cord.
non-infectious	Refers to conditions or symptoms that are not caused by an infectious germ but have other underlying causes, such as chronic diseases or allergies.
non-medically vaccinated	When a person has received a treatment that is said to act as a vaccine but has not been scientifically proven to be effective (for example, homeopathic or naturopathic vaccination). *See* medically vaccinated, vaccine

notifiable disease	A disease that health professionals or pathology laboratories must report by law to government authorities. By collecting information about diseases, the government can monitor where a disease occurs and how many people have it – this can help with planning prevention strategies and provide early warning of outbreaks.
outbreak	A sudden increase in the number of people who have a particular disease.
parent or carer	The person who has responsibility for the child – this could be a biological parent or legal guardian.
public health unit	Part of a state or territory health department that investigates and provides advice on infectious diseases, including outbreak management, immunisation and other public health matters. Your local public health unit may be in your local area or in your capital city.
respiratory hygiene	Practices that help prevent the spread of diseases through the air, such as covering the mouth and nose with a tissue or your elbow when coughing or sneezing.
respiratory symptoms	Cough, runny or blocked nose, sore throat.
routine cleaning	Regular cleaning that reduces the number of harmful germs that survive on surfaces in the education and care service.
soiled	Dirty or unclean.
staff	Any person employed, appointed or engaged to work at an education and care service, whether as a family day care coordinator, an educator or otherwise. The term 'staff' includes the cook, administrator, gardener, housekeeper or cleaner. *See* educator
temperature danger zone	The temperature range between 5 °C and 60 °C in which bacteria can grow rapidly in food. To prevent foodborne diseases, it is important to keep food either below 5 °C (for cold storage) or above 60 °C (for cooking and heating).
urine output	The amount of urine produced by an individual. Poor urine output refers to a person going to the toilet less often or not at all. It can indicate dehydration or other underlying health issues.
vaccine	A substance that contains live or dead germs, or parts or products of germs, that is given to a person to make their immune system respond. Once a person has received a vaccine, they are considered to be immunised. *See* immune, immunisation, medically vaccinated, non-medically vaccinated
vaccine-preventable diseases	Diseases for which effective vaccines exist. If a large portion of the population is vaccinated against these diseases, outbreaks can be prevented or controlled.
ventilation	The process of supplying a building or room continuously with fresh air, which helps prevent the spread of airborne diseases. This can be done through natural or mechanical means.
virus	A type of germ, much smaller than bacteria, which can only multiply inside living cells. Some viruses can cause disease.