

Middle ear infection in children

This fact sheet helps you to know what's 'normal' and what you can expect to happen if your child develops an ear infection. It also tells you when you should become concerned and seek advice from a health professional.

Useful facts

What is middle ear infection?

Behind the ear drum is a small space that's usually filled with air: the middle ear. When germs (such as viruses or bacteria) enter, for example during a cold, an infection can develop. Middle ear infection is also known as "acute otitis media".

How dangerous is it?

In most children, it is a harmless infection that gets better by itself within 3-7 days without any complications.

How common is it?

Middle ear infection is very common, mostly affecting children. More than half of all children suffer at least one middle ear infection by the time they're 7. Symptoms usually last 3 days but can last up to 7. Most children and young people get better within 3 days without the need for antibiotics.

Who's affected?

Middle ear infections are more common in children who breathe in tobacco smoke, attend day care (nursery,) or who drink formula milk rather than breast milk.

What are the symptoms?

Older children usually complain of ear ache, while younger children often pull or rub their ears. It is common to get a fever, but not usually above 38°C. Other common symptoms in small children include being irritable, crying, disturbed sleep, cough, snuffly nose and poor feeding.

Does my child need antibiotics?

Most children with a mild middle ear infection will not benefit from antibiotics. Antibiotics may be prescribed if your child is very unwell (eg high fever and/or vomiting), if they are considered at risk of complications, if they develop a leaking ear, or, in children younger than 2 years, have infections in both ears. Your child may be prescribed 'back up' antibiotics, to be started only if they do not improve or become more unwell.

What can I expect to happen to my child?

Symptoms: Symptoms of middle ear infection tend to develop quickly and usually last 3 days, but can last 7 days. Most children and young people get better within 3 days without the need for antibiotics.

Fluid leaking from the ear: A hole may form in the ear drum and cause infected thick fluid (pus) to run out of the ear. This usually relieves the pain as it reduces the pressure on the ear drum.

What can I do to help my child now and in the future?

Giving painkillers: You can give either Paracetamol or Ibuprofen if your child is unwell or appears distressed. Do not give both at the same time unless advised by a health professional. You can try the alternative medicine if your child does not respond to the first one you start with. Always follow the manufacturer's instructions. Do not give Aspirin to children under the age of 16. Don't give antihistamines or decongestants.

Wipe away discharge: Wipe any discharge away but do not put anything in the ear, including cotton buds and fingers.

Keep your child cool: Avoid over or underdressing a feverish child. Keep your central heating down. Tepid sponging is not recommended.

Fluids: Offer your child regular fluids. If you're breastfeeding, offer as many feeds as your child will take. Avoid dummies and feeding while lying flat.

Body checks: Check your child at night regularly for signs of serious illness.

Use a warm or cold flannel: A warm or cold flannel applied to the ear can help.

When to seek help

Most ear infections are not serious and get better by themselves. Contact your child's surgery or ring 111 in England and Wales, the Phone First service in Northern Ireland or NHS24 in Scotland if your child has 1 or more of the following symptoms:

- **High fever:** A body temperature over 39°C in older children, particularly if aged between 3-6 months of age
- **Vomiting**
- **Not improving:** Your child becomes generally unwell or doesn't start to improve after 3 days.
- **Fluid:** Fluid leaks out of the ear.
- **Existing conditions:** If your child has a long term medical condition such as diabetes or a weakened immune system, for example due to chemotherapy.
- **Regular ear infections:** contact your GP if your child has regular infections or if any hearing loss does not improve after an infection.
- **Swelling:** You notice any swelling around the ear.
- **SEEK URGENT ADVICE if your child shows any of these symptoms: being more sleepy than usual, confusion, feeling dizzy, a stiff neck, a rash, slurred speech, seizures (fits), being sensitive to light or is aged 0-3months and has a temperature of 38°C or more.**

Coronavirus

COVID-19 infection is still common and widespread. Some of the symptoms of middle ear infection are similar, so you may also need to consider whether COVID-19 infection is a possibility.

Please follow the NHS advice in your area of the UK and if you are in a high risk group read the appropriate sections and make contact with the recommended agencies if you have symptoms or queries, please visit:

NHS England: <https://www.nhs.uk/conditions/coronavirus-covid-19/>

Norther Ireland NIDirect: <https://www.nidirect.gov.uk/campaigns/coronavirus-covid-19>

NHS Inform for Scotland: <https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/coronavirus-covid-19>

NHS Wales 111: [https://111.wales.nhs.uk/encyclopaedia/c/article/coronavirus\(covid19\)](https://111.wales.nhs.uk/encyclopaedia/c/article/coronavirus(covid19))

Where can I find out more?

A member of your pharmacy team can help you in assessing and treating your child's symptoms, otherwise visit the appropriate NHS website for your country:

England: <https://www.nhs.uk/conditions/ear-infections>

Scotland: <https://www.nhsinform.scot/illnesses-and-conditions/ears-nose-and-throat/middle-ear-infection-otitis-media>

Northern Ireland: <https://www.nidirect.gov.uk/conditions/middle-ear-infection-otitis-media>

Wales: <https://111.wales.nhs.uk/Earinfection/>