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Ear infection (middle ear)

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On this page

[Diagnosis ↓](#)[Treatment ↓](#)[Preparing for your appointment ↓](#)

Diagnosis

A healthcare professional can often diagnose an ear infection based on symptoms and an exam. The exam likely includes looking inside the child's ears with a lighted instrument known as an otoscope. If the eardrum is red and bulging, there's likely an infection.

Other tests might be needed if there's doubt about a diagnosis, if the condition hasn't gotten better with treatment or if there are other issues.

What a diagnosis means

- **Acute otitis media.** The diagnosis of ear infection often means acute otitis media. This involves having fluid in the middle ear or symptoms of an

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- **Otitis media with effusion.** This means there's fluid in the middle ear, but no symptoms of infection.
- **Chronic suppurative otitis media.** This is caused by a long-term ear infection that caused a tear in the eardrum. This condition often involves pus coming from the ear.

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Treatment

Many children's ear infections clear up without antibiotics. Treatment depends on the person's age and how bad the symptoms are.

Watchful waiting

Symptoms of ear infections usually get better in a couple of days. Most ear infections clear up in a week or two without treatment. The American Academy of Pediatrics and the American Academy of Family Physicians recommend a wait-and-see approach as one choice for:

- Children 6 to 23 months with mild pain in one ear for less than 48 hours and a temperature less than 102.2 F (39 C).
- Children 24 months and older with mild pain in one or both ears for less than 48 hours and a temperature less than 102.2 F (39 C).

Managing pain

Easing pain from an ear infection might involve:

- **Pain medicine that you can get without a prescription.** These include

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Use caution when giving aspirin to children or teenagers. Though aspirin is approved for use in children older than age 3, children and teenagers recovering from chickenpox or flu-like symptoms should never take aspirin. This is because aspirin has been linked to Reye's syndrome, a rare but potentially life-threatening condition, in such children.

- **Numbing drops.** These can be used with caution for short-term pain relief if the eardrum doesn't have a hole or tear in it.

Antibiotic medicines

Antibiotics might be helpful for some children and for adults with ear infections. But using antibiotics too often can cause the medicine to not work as well against the bacteria. Talk to your child's healthcare professional about the pros and cons of using antibiotics.

Usually after a watch-and-wait time, a healthcare professional might suggest using an antibiotic for an ear infection for:

- Children 6 months and older with moderate to severe ear pain in one or both ears for at least 48 hours or a temperature of 102.2 F (39 C) or higher.
- Children 6 to 23 months with mild middle ear pain in one or both ears for less than 48 hours and a temperature less than 102.2 F (39 C).
- Children 24 months and older with mild middle ear pain in one or both ears for less than 48 hours and a temperature less than 102.2 F (39 C).

Children younger than 6 months who have acute otitis media are more likely to be treated with antibiotics without the watch-and-wait time.

It's important to take the antibiotic as directed even after symptoms improve. Not taking all the medicine can cause the infection to return. Talk to a healthcare professional or pharmacist about what to do after missing a dose.

Ear tubes

Ear tubes drain fluid from the middle ear. Ear tubes might help children who have

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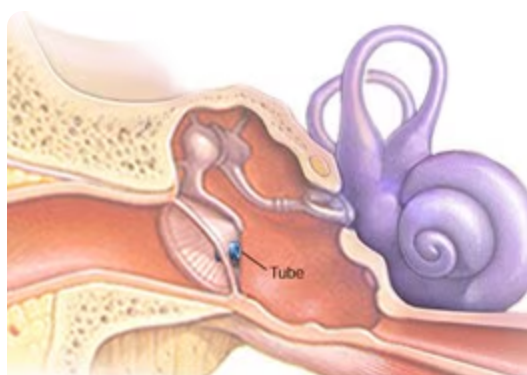
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The tubes are placed during an outpatient surgery called a myringotomy. A surgeon makes a tiny hole in the eardrum to suction fluids out of the middle ear. The surgeon then puts the ear tube in the opening to help air get to the middle ear and to prevent the buildup of more fluids.

Young children will likely be given medicine to put them to sleep for the surgery, also known as general anesthesia.

Some tubes stay in place for 6 months to 2 years. They fall out on their own. Other tubes are meant to stay in longer. They might need to be removed with another surgery.

The hole in the eardrum usually closes again after the tube falls out.



Tympanostomy tubes

Ear tubes, also called tympanostomy tubes, ventilation tubes or pressure equalization tubes, are tiny. They're usually made of plastic or metal. They're placed into the eardrum during surgery. An ear tube makes an airway that keeps fluid from building up behind the eardrum.

Treatment for chronic suppurative otitis media

Chronic infection that causes a tear in the eardrum, called chronic suppurative otitis media, is hard to treat. Antibiotics drops put into the ear might treat the condition. You might get directions on how to suction fluids out through the ear canal before putting in the drops.

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to schedule follow-up appointments. Follow-up might include regular hearing and language tests.

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You'll likely see your family healthcare professional. You may be referred to a specialist in ear, nose and throat (ENT) conditions.

You or your child can answer the questions a healthcare professional is likely to ask. These might include:

- What are the symptoms?
- When did the symptoms begin?
- Is there ear pain? Would you say the pain is mild, moderate or severe?
- Have you seen your infant or toddler pulling on ears, having trouble sleeping or being more irritable than usual?
- Has your child had a fever?
- Has there been fluid coming from the ear? Is the fluid clear, cloudy or bloody?
- Does your child seem to have trouble hearing?
- Has your child recently had a cold, flu or other symptoms that affect breathing?
- Does your child have allergies?
- Has your child had an ear infection before? When?
- Is your child allergic to any medicines, such as amoxicillin?

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