



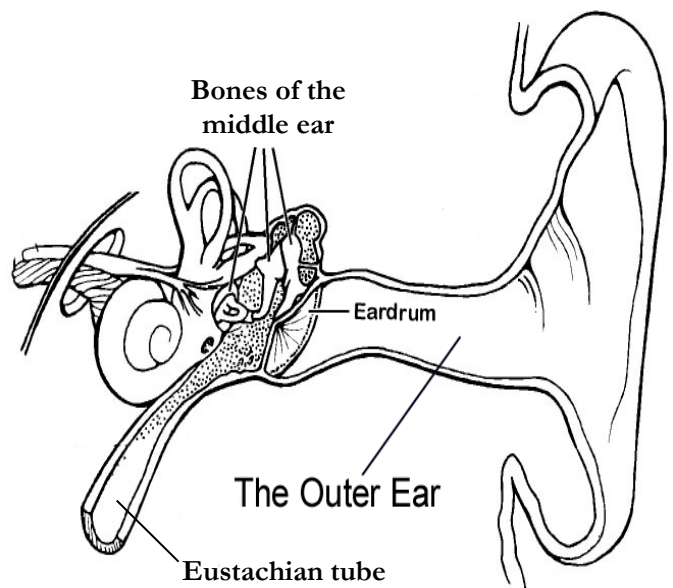
Ear Infection: Otitis Media

Otitis media (oh TIE tis ME dee uh) means the middle ear is infected or inflamed. It is the most common reason for young children to visit their primary care provider. Ear infections are usually seen in children younger than three years of age, but anyone of any age can get an ear infection. There are 2 main types of otitis media: acute otitis media with effusion, and chronic otitis media with effusion. Effusion (ef FYOO zhun) means fluid in the middle ear space. **Acute** otitis media is an infection of the middle ear that starts suddenly with fever, pain and irritability. **Chronic** otitis media with effusion is not an infection, but is inflammation where there is fluid in the middle ear space for 3 months or more.

Acute otitis media with effusion is caused by germs or viruses in the middle ear space. As they grow, they cause pus to form behind the eardrum which causes pressure, pain, and sometimes fever. This infection is usually very painful.

Chronic otitis media is less painful than acute otitis media with effusion. This is inflammation that occurs when the eustachian (yoo STAY shun) tube, the tube leading from the middle ear to the throat, is not ventilating the ear correctly. Fluid cannot drain, so it builds up behind the eardrum. This type of otitis media should not be treated with antibiotics, which are medicines that treat infection but will not resolve the fluid in the middle ear.

While there is fluid in the middle ear, there can be temporary hearing loss. Very rarely, an untreated acute otitis media can lead to permanent hearing loss. If your child shows signs of ear infection, he or she should be seen by a doctor as soon as possible.



Picture 1 The outer and middle ear.

Signs and symptoms of acute otitis media (many other conditions can also cause these symptoms)

When otitis media comes on suddenly, you may notice:

- Pulling or rubbing the ears or rolling the head from side to side
- Fussiness
- Crying that does not stop when the child is comforted, especially at night
- Waking up at night crying
- **Fever over 101°F axillary (under the arm)**
- Loss of appetite (refusing to eat)
- Infants will not suck because it causes pain
- Vomiting
- Diarrhea

Signs and symptoms of chronic otitis media with effusion

If your child is old enough to tell you, he may complain of:

- A feeling of fullness in the ears
- A popping feeling when swallowing
- Dizziness
- A feeling of motion in the ears
- Ringing in the ears
- Your child may turn up the volume on the TV or radio or sit very close to it.
- Teachers may be concerned about your child's hearing or inattention in the classroom.



Picture 2 Hold your baby upright during feeding time.

Medicines

In many cases, acute otitis media will resolve without antibiotics, so they are not always needed for treatment. For these children Tylenol® or Motrin® may be given for the fever, pain, and irritability.

For some children with severe acute otitis media, antibiotics will be prescribed. If your doctor orders antibiotics, make sure you give **all the medicine**, even if your child feels better.

How to help prevent ear infections

While most children get ear infections, there are a few things parents can do to try to prevent them:

- Breast feeding infants until at least age 6 months may help to lessen the number of ear infections.
- Keep your child away from cigarette smoke. Do not smoke or allow smoking in your home or car.
- Always hold your baby with his head up during feeding time (Picture 2). Babies should not be fed by propping the bottle or while lying flat. The formula can get into the middle ear and cause an infection.
- **Do not leave a bottle in the crib** for the baby to drink at bedtime.
- Make sure your child's immunizations are up to date.
- If your child is diagnosed with acute otitis media, avoid giving him a pacifier.
- Dress your child properly in cold and rainy weather.

Follow-up appointments

After your child has taken the prescribed medicine, the doctor will want to check the ears again. Make an appointment with your child's doctor in 2 weeks for him to be checked again.

Some children may need to have a hearing test as part of their follow-up exam. Your doctor may do this in the office or he may have an audiologist do the test.

If your child continues to have lots of ear infections, you might be referred to an ENT (ears, nose, and throat) doctor to discuss surgery.

If you need a doctor for your child, call the Nationwide Children's Hospital Referral and Information Line at (614) 722-KIDS.