NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.℠

Helping Hand™

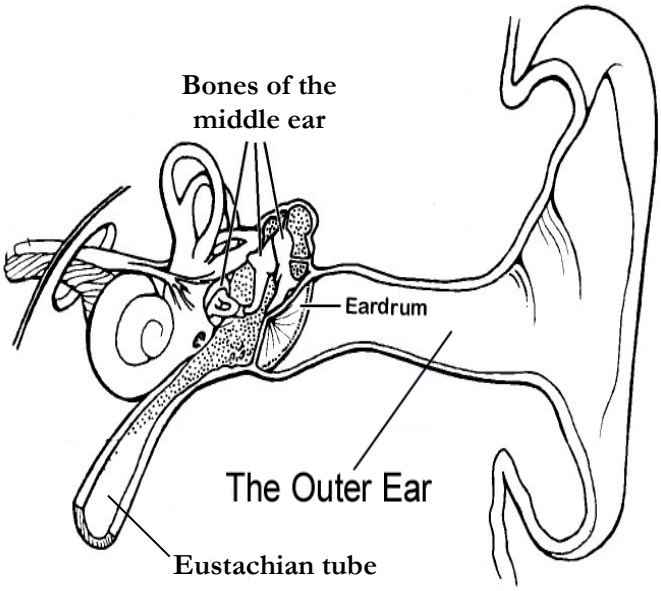
Ear Infection: Otitis Media

Otitis media (oh-TIE-tis ME-dee-uh) is an infection or inflammation of the middle ear. It is the most common reason for young children to visit their primary care provider. Ear infections usually happen in children less than three years of age, but anyone of any age can get an ear infection. In general, there are 2 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 has a sudden onset of fever, pain and irritability. *Chronic* otitis media with effusion means there is fluid in the middle ear space for 3 months or more.

Acute otitis media with effusion is caused by germs or viruses that grow and cause pus to form behind the eardrum. This infection is usually very painful. Acute otitis media without effusion is a very early infection before the middle ear fluid has formed. The eardrum is usually red and painful.

Chronic otitis media is less painful than acute otitis media, with or without effusion. This type of infection may occur 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 and it builds up behind the eardrum.

These types of ear infections can cause temporary or permanent hearing loss if not treated. 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

When it 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

Continued on page 2

Copyright 1980-2009, Nationwide Children's Hospital

Signs and Symptoms of Acute Otitis Media, continued

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

Picture 2 Hold your baby upright during feeding time.

Medicines

Some children with acute otitis media will be treated with antibiotics. If your doctor orders medicine, make sure you give **all the medicine**, even though your child feels better. Your child needs to take all the medicine to completely cure the ear infection. Often, ear infections will clear on their own without antibiotics. Tylenol® or Motrin® may be given for the fever, pain, and irritability.

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 young infants may help to decrease the number of ear infections.
- **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.

Continued on page 3

How to Help Prevent Ear Infections, continued

- If your child needs to blow his nose, have him blow *gently* with his mouth open to prevent forcing drainage into his middle ear.
- Dress your child properly in cold and rainy weather. (However, wearing a hat to protect the ears will not always prevent an ear infection.)
- Give your child healthy foods and liquids instead of junk food.
- Make sure his immunizations are up to date.
- Keep your child away from cigarette smoke. Do not smoke or allow smoking in your home or car.
- If your child is diagnosed with acute otitis media, avoid giving him a pacifier.

Follow-Up Appointments

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