

# Ear Infection (Otitis Media)

## What is an ear infection?

An ear infection is a bacterial infection of the middle ear (the space behind the eardrum). It usually is a complication of a cold, occurring after the cold blocks off the Eustachian tube (the passage connecting the middle ear to the back of the throat).

## What are symptoms of an acute ear infection?

The most common symptoms of an acute ear infection are ear pain and fever. If your child is too young to tell you what hurts, he or she may cry or pull on his or her ear. Your child may also be irritable, have trouble hearing, or not feel like eating or sleeping.

Most children will have at least one ear infection, and over one fourth of these children will have repeated ear infections. In 5% to 10% of children, the pressure in the middle ear causes the ear drum to rupture and drain a yellow or cloudy fluid. This small hole usually heals over the next week. Children are most likely to have ear infections between the ages of 6 months and 2 years, but they continue to be a common childhood illness until the age of 8 years. If the following treatment is carried out your child should be fine.

## Will ear infections hurt my child's hearing?

Middle ear infections and fluid in the ear are the most common causes of temporary hearing loss in children. But permanent damage to the ear or to the hearing is very rare. Studies have shown that the vast majority of kids "catch-up" on language skills with proper resolution of the ear fluid. It is important to talk with your Caring Family doctor if your child has persistent language problems.

## How can I take care of my child?

### • Treatment

It is wise to see your doctor. This can usually safely wait until daytime. The treatment, however, can start immediately, as the most important part is to reduce the pain. For this, acetaminophen (Tylenol) either as a liquid or tablet is usually the best. Ibuprofen (Motrin or Advil) is an alternative. You should not use aspirin in a child under the age of 16, but it can be very helpful for the older age groups.

### • Pain relief

Acetaminophen or ibuprofen can be used to help with the earache or fever over 102° F (39° C) for a few days until the antibiotic takes effect. These medications usually control the pain within 1 to 2 hours. Earaches tend to hurt more at bedtime.

To help ease the pain, you can put a nice bag or ice wrapped in a wet washcloth over the ear. This may decrease the swelling and pressure inside. Some physicians recommend a heating pad instead. Remove the cold or heat in 20 minutes to prevent frostbite or a burn.

### • Restrictions

Your child can go outside and does not need to cover the ears. Swimming is permitted as long as there is no perforation (tear) in the eardrum or drainage from the ear. Air travel or a trip to the mountains

is safe; just have your child swallow fluids, suck on a pacifier, or chew gum during descent. Your child can return to school or day care when he or she is feeling better and the fever is gone. Ear infections are not contagious.

## How can I help prevent ear infections?

If your child has recurrent ear infections, it's time to look at how you can prevent some of them. The following list includes ways you can help your child prevent ear infections. If some of the following items apply to your child, try to use them or talk to your health care provider about them.

### Children may be at higher risk for ear infections if they:

- Are around people who smoke.
- Have had previous ear infections.
- Have a family history of ear infections.
- Attend day care (because they are exposed to more germs and viruses).
- Were born prematurely or with a low birth weight.
- Have frequent colds or other infections.
- Bottle propping. If you bottle-feed, hold your baby at a 45° angle. Feeding in the horizontal position can cause formula and other fluids to flow back into the Eustachian tube. Allowing an infant to hold his own bottle also can cause milk to drain into the middle ear. Weaning your baby from a bottle between 9 and 12 months of age will help stop this problem.
- Use a pacifier.
- Are male (boys tend to get more ear infections than girls).
- Have nasal speech (caused by large adenoids that block the eustachian tube).
- Have allergies with nasal congestion.

## What if my child gets lots of ear infections?

If your child has very frequent ear infections, we may recommend preventive antibiotic treatment or ear tubes. Preventive antibiotics can be given in a low dose every day for several months, usually in the winter when respiratory illnesses are common. Ear tubes are put in the eardrum by a surgeon to help the middle ear fluid drain. Because of the way the eardrum heals, ear tubes will often come out on their own after several months to 2 years.

## How is an acute ear infection treated?

If your doctor thinks bacteria caused your child's ear infection, he or she may prescribe an antibiotic. It's very important to follow your doctor's directions for giving the medicine to your child and to use all of it. The pain and fever should go away within 2 to 3 days of starting an antibiotic.

If a virus caused your child's ear infection, antibiotics will not work. You'll have to wait until the virus goes away on its own.

To help your child feel better and reduce fever, your doctor may suggest using a pain reliever such as acetaminophen or ibuprofen. Don't give your child aspirin unless your doctor says it's OK. Aspirin can cause Reye's syndrome, a serious illness, and in some cases, death when it's used in children under 18 who have the flu. Your doctor might prescribe ear drops to reduce pain. A warm (not hot) heating pad held on your child's ear may also relieve his or her pain. (This is not recommended for young babies.)

## When should I call my child's health care provider?

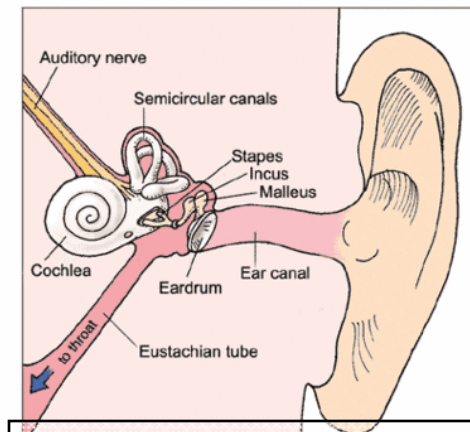
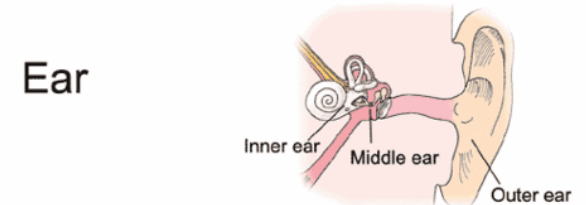
Call IMMEDIATELY if:

- Your child develops a stiff neck.
- Your child acts very sick.

Call during office hours if:

- The fever or pain is not gone after your child has taken the antibiotic for 48 hours.

You have other questions or concerns. The "tail" antibiotic treatment is usually given at a diminished dosage or less often. Although the current thinking is to give less antibiotic treatment, a daily sterilization of the middle ear contents has been proposed but found too expensive to study properly.



Caring Family, S.C. Todd S. Giese, M.D.,  
Racquel N. Ramirez, M.D., George B. Gancayco, M.D.,  
Kevin M. Cronin, M.D. 815 459-2200

[www.caringfamilysc.com](http://www.caringfamilysc.com)