

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). Your child's ear is painful because trapped, infected fluid puts pressure on the eardrum, causing it to bulge. Other symptoms are irritability and poor sleep.

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 eardrum 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. Permanent damage to the ear or the hearing is very rare.

How can I take care of my child?

- **Antibiotics**

This medicine will kill the bacteria that are causing the ear infection.

Don't forget any of the doses. If your child goes to school or a baby sitter, arrange for someone to give the afternoon dose. If the medicine is a liquid, store the antibiotic in the refrigerator and use a measuring spoon to be sure that you give the right amount. Give the medicine until the bottle is empty or all the pills are gone. (Do not save the antibiotic for the next illness because it loses its strength). Even though your child will feel better in a few days, give the antibiotic until it is completely gone. Finishing the medicine will keep the ear infection from flaring up again.

- **Pain relief**

Acetaminophen or ibuprofen can be used to help with the earache or fever for a few days until the antibiotic takes effect. Sometimes your doctor will prescribe a numbing drop to help with pain also. Earaches tend to hurt more at bedtime.

- **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.

- **Ear Recheck**

Your physician may schedule a return appointment in 2 to 3 weeks for your child if there is any concern that the infection may still be present or an ear drum rupture has occurred. At that visit, the eardrum will be looked at to be certain that the infection is cleared up and more treatment isn't needed. Your physician may also want to test your child's hearing. Follow-up exams are very important, particularly if the infection has caused a hole in the eardrum.

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.

- **Protect your child from second-hand tobacco smoke.** Passive smoking increases the frequency and severity of infections. Be sure no one smokes in your home or a day care.
- **Reduce your child's exposure to cold during the first year of life.** Most ear infections start with a cold. Try to delay the use of large day care centers during the first year by using a sitter in your home or a small home-based day care.
- **Breast-feed your baby during the first 6 to 12 months of life.** Antibodies in breast milk reduce the rate of ear infections. If you're breast-feeding, continue. If you're not, consider it with your next child.
- **Avoid bottle propping.** If you bottle-feed, hold your baby at a 45° angle. Feeding 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.
- **Control allergies.** If your infant has continuous nasal secretions, consider an allergy as a contributing factor to the ear infections, especially if your child has other allergies such as eczema. A milk protein allergy can sometimes be a problem.
- **Check the adenoids.** If your toddler constantly snores or breaths through his mouth, he may have large adenoids. Large adenoids can contribute to ear infections. Talk to your physician about this.

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

Call IMMEDIATELY if:

- Your child develops a stiff neck
- Your child starts acting very sick

Call within 24 hours if:

- The fever or pain not gone after your child has taken the antibiotic for 48 hours
- You have other concerns or questions