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## Middle Ear Infections in Children

This message is about middle ear infections in children. It covers what causes them, what their symptoms are, and how they're treated.

A middle ear infection, also known as Otitis Media, is one of the most common ailments of childhood. In fact, most children have had one ear infection by the time they are three years old. Some have had many infections.

The middle ear is located behind the ear drum. It is a space that's normally filled with a small amount of air, allowing sound waves to move and vibrate the ear drum. A small passage called the Eustachian tube connects the middle ear with the back of the throat. When children catch a cold or have nasal congestion, the Eustachian tube may also become congested, fill with mucus, and become blocked. The child then loses the ability to open the tube periodically and equalize the pressure between the middle ear and the outside environment. The small amount of air in the middle ear can then be absorbed and replaced with fluid. This allows bacteria to grow in the middle ear and causes the infected area to become filled with pus.

Young children are much more likely to get ear infections than older children and adults, perhaps because they have smaller Eustachian tubes, which are more likely to become blocked. Some children seem particularly prone to this problem, even when they don't have a cold.

Symptoms of a bacterial ear infection may include earache, dizziness, ringing or fullness in the ears, hearing loss, fever, headache, or a runny nose. Infants with ear infections may tug at their ears or be fussy. Of course, ear tugging can also be common for children who do not have any infection, so you'll want to look for additional signs such as unusual irritability.

Although not all ear infections can be prevented, there are ways to reduce your child's chances of getting ear infections. Here are seven:

1. There is some evidence that breastfed babies usually get fewer ear infections. Breast milk is your baby's best source of nourishment. In addition to being the easiest form of milk for a baby to digest, it also provides antibodies that protect your baby from infection. You are encouraged to breastfeed your child for the first year of life. Your child may get sick less often.
2. Feed infants in an almost upright position to prevent milk from getting into the Eustachian tubes. However, don't allow babies to fall asleep with a bottle. It is all right for nursing infants to fall asleep at the breast.
3. Teach your children to blow their noses gently. This is actually something everyone

should do.

4. Don't expose your children to cigarette smoke, which is associated with more frequent ear infections.
5. If possible, keep your children away from other children who have colds. Children in day care facilities usually can't avoid catching more colds because of their increased contact with other children.
6. Discourage pacifier use.
7. Keep up with your child's scheduled vaccinations. Some vaccinations help in decreasing your child's chances of getting an ear infection.

To help relieve the pain of earaches, you can apply heat to the ear by using a warm washcloth or a heating pad set on low. However, never leave your child alone with a heating pad. To speed recovery, you should have your child rest and drink lots of liquids. Acetaminophen, such as Tylenol, may also help an earache, but never give aspirin to children or teens under the age of 20.

You should call your doctor or other health care professional anytime you suspect that your child has an ear infection. If the exam confirms an infection, you'll need to start antibiotics promptly. They are usually prescribed for five to ten days, and it's important to finish the full course of medication even if the child feels perfectly well after a day or two. Once the child starts on medication, the pain usually improves within 24 hours and is much better within two to three days.

In some children, it takes from six to eight weeks for the fluid in the middle ear to go away. This means that the child may not hear normally for that period of time. If the child is in school, the teacher should be told of this temporary problem.

Generally, children with ear infections can be permitted to bathe, go outside, travel by air, or go swimming. They can return to school or day care when they are feeling well and have no fever. In some cases, the doctor may want to recheck the ear in a few weeks to make sure that all is well.



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- Log on to our members-only Web site at [www.kaiserpermanente.org/california](http://www.kaiserpermanente.org/california), then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

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