

## Ear Infections (Acute Otitis Media)

**What is otitis media?** Otitis media is an ear infection. Three out of four children experience otitis media by the time they are 3 years old. In fact, ear infections are the most common illnesses in babies and young children. In an ear infection, the eustachian tube (the part of the ear that connects the back of the ear drum to the back of the throat) is infected and swollen.

**How does otitis media happen?** Otitis media often happens as a result of another illness, such as a cold where mucous is pooling in the eustachian tube. The bacteria that live in the mouth will then climb up and infect that sitting mucous and cause the secondary infection. The eustachian tubes in children are smaller and flatter than they are in adults. This makes it harder for fluid to drain out of the ear and is one reason that children get more ear infections than adults.

Adenoids (small balls of cells) are located in the throat, near the exit of eustachian tube into the back of the throat. They can block the openings of the eustachian tubes, trapping air and fluid. Adenoids are larger in children than in adults, so they can more easily block the opening of the eustachian tube.

**What will a doctor do?** We will examine your child's ear and determine if your child has an ear infection. By looking at the ear drum, we cannot be determined if a bacteria or a virus is causing an ear infection. Statistically, it is more likely to be a bacteria causing the symptoms. There are two options for treating an ear infection:

1. **Oral antibiotics.** The assumption that ear infections are more commonly caused by bacteria has made a 7-10 day course of antibiotics the standard of care.
2. **Oral ibuprofen.** A recent study showed that ibuprofen given 3 times a day for 3 days is as effective at treating ear infections as antibiotics. For most ear infections, this is a reasonable alternative that we may suggest.

Medicines such as antihistamines and decongestants do not help in the prevention or treatment of ear infections. However, antihistamines, such as Benadryl, can frequently help a child sleep through the night while fighting an infection.

**What can I do in the middle of the night when my child suddenly wakes with ear pain?** We suggest that you give your child a dose of ibuprofen (motrin/advil) and put 5-6 drops of olive oil into the affected ear canal. Frequently, the combination of the two will give your child quick relief and allow everyone to get back to sleep. Then call us in the morning so that we can make arrangements for your child to be seen.

**What about children in daycare, pre-school, or school?** Ear infections are not contagious. However, the viruses that cause colds that set a child up for an ear infection are contagious. Therefore, your child should not return to activities until fever free for 24 hours and runny noses and coughs are under reasonable control.

**Can otitis media affect my child's hearing?** Yes. An ear infection can cause temporary hearing problems. Temporary speech and language problems can happen, too. If left untreated, these problems can become more serious. It is this reason that we like to see all children under 3 years old 1 month after an ear infection to ensure that the infection has resolved and that the residual mucous and fluid have resorbed.