Middle Ear Infection (Otitis Media) In Children

What is a middle ear infection?
An ear infection is an inflammation of the middle ear, usually caused by bacteria, that occurs when fluid builds up behind the eardrum. Anyone can get an ear infection, but children get them more often than adults. Three out of four children will have at least one ear infection by their third birthday. In fact, ear infections are the most common reason parents bring their child to a doctor. The scientific name for an ear infection is otitis media (OM). There are three main types of ear infections. Each has a different combination of symptoms.

- **Acute otitis media** (AOM) is the most common ear infection. Parts of the middle ear are infected and swollen and fluid is trapped behind the eardrum. This causes pain in the ear—commonly called an earache. Your child might also have a fever.

- **Otitis media with effusion** (OME) sometimes happens after an ear infection has run its course and fluid stays trapped behind the eardrum. A child with OME may have no symptoms, but a doctor will be able to see the fluid behind the eardrum with a special instrument.

- **Chronic otitis media with effusion** (COME) happens when fluid remains in the middle ear for a long time or returns over and over again, even though there is no infection. COME makes it harder for children to fight new infections and also can affect their hearing.

What causes an ear infection?
An ear infection usually is caused by bacteria and often begins after a child has a sore throat, cold, or other upper respiratory infection. If the upper respiratory infection is bacterial, these same bacteria may spread to the middle ear; if the upper respiratory infection is caused by a virus, such as a cold, bacteria may be drawn to the microbe friendly environment and move into the middle ear as a secondary infection. Because of the infection, fluid builds up behind the eardrum.

How can I tell if my child has an ear infection?
Most ear infections happen to children before they’ve learned how to talk. If your child isn’t old enough to say “My ear hurts,” here are a few things to look for:

- Tugging or pulling at the ear(s)
- Fussiness and crying
- Trouble sleeping
- Fever (especially in infants and younger children)
- Fluid draining from the ear
- Clumsiness or problems with balance
- Trouble hearing or responding to quiet sounds
How is an acute middle ear infection treated?
Many doctors will prescribe an antibiotic, such as amoxicillin, to be taken over seven to 10 days. Your doctor also may recommend over-the-counter pain relievers such as acetaminophen or ibuprofen, or eardrops, to help with fever and pain. (Because aspirin is considered a major preventable risk factor for Reye’s syndrome, a child who has a fever or other flu-like symptoms should not be given aspirin unless instructed to by your doctor.)

What are some risk factors for otitis media?
- Genetics
- Lack of breastfeeding as an infant
- Lack of immunizations
- Pacifiers
- Bottle feeding in bed or while laying down
- Multiple antibiotics
- Fall & winter months
- Male
- Smoke exposure
- Allergies
- Cow’s milk in diet
- Daycare

What can I do to help prevent otitis media?
- Smoke avoidance
- Daycare avoidance
- Update immunizations
- Frequent hand washing
- Plenty of fluids (avoid drinks with added sugar and soda)
- Daily Multivitamins
- Start Probiotics (Culturelle, Kefir, Activia, Align, Florastor)
- Avoid processed food and fast food (give them lots of fresh fruit and veggies)
- Cow’s milk avoidance (try almond, rice, coconut, or soy milk)
- Control allergies by cleaning the living environment of dust, dander, mold, and clutter
- Avoid pets or wash them with allergy control shampoo often
- Get a HEPA filter for the bedroom
- Change AC filter every month and get the AC ducts cleaned
- If old enough, chewing sugarless gum helps to open the Eustachian tubes
- No more pacifiers or bottles in bed

How long will it take my child to get better?
Your child should start feeling better within a few days after visiting the doctor. If it’s been several days and your child still seems sick, call your doctor. Your child might need a different antibiotic. Once the infection clears, fluid may still remain in the middle ear but usually disappears within three to six weeks.

What happens if my child keeps getting ear infections?
Some children may continue to have middle ear infections, sometimes as many as five or six a year. Your doctor may want to wait for several months to see if things get better on their own but, if the infections keep coming back and antibiotics aren’t helping, many doctors will recommend a surgical procedure that places a small ventilation tube in the eardrum to improve air flow and prevent fluid backup in the middle ear. The most commonly used tubes stay in place for six to nine months and require follow-up visits until they fall out. If placement of the tubes still doesn’t prevent infections, a doctor may consider removing the adenoids to prevent middle ear infections.