



# Ear Infection

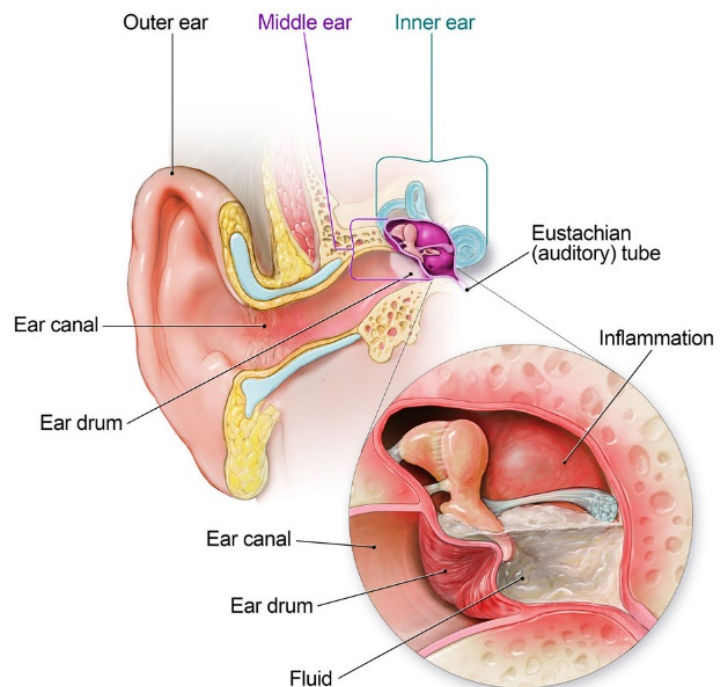
## What is an ear infection?

Ear infections can affect the ear canal or the middle ear.

**Acute otitis externa** (AOE) is the scientific name for an infection of the **ear canal**, which is also called swimmer's ear.

**Middle ear infections** are called *Otitis Media*, and there are two types of middle ear infections:

- **Otitis Media with Effusion** (OME) occurs when fluid builds up in the middle ear without pain, pus, fever, or other signs and symptoms of infection.
- **Acute Otitis Media** (AOM) occurs when fluid builds up in the middle ear. It is often caused by bacteria, but can also be caused by viruses.



## How are ear infections caused and how can they be prevented?

### Bacteria

AOM is often caused by bacteria, and *Streptococcus pneumoniae* is a common bacterial cause of AOM.

Ensure your child is up to date on vaccinations, including the pneumococcal vaccination which protects against *Streptococcus pneumoniae*. Breast feeding

exclusively until your baby is 6 months old and continuing to breastfeed for at least 12 months can protect your baby from infections, including AOM.

### **Cold and Flu Season**

AOM often occurs after a cold. Viruses cause OME (fluid in the middle ear), and then bacteria can grow in the fluid leading to AOM.

- Ensure your child is up to date on vaccinations and gets a flu vaccine every year.

### **Injury to the Ear**

Foreign objects, like cotton swabs and bobby pins, can cause cuts and bruises in the ear canal that can get infected, causing acute otitis external AOE.

- Avoid putting foreign objects in the ear.

### **Cigarette Smoke**

Exposure to cigarette smoke can lead to more colds and more AOM.

- Avoid smoking and exposure to secondhand smoke.

### **Family History**

The tendency to develop AOM can run in families.

- Family history is not preventable. Instead, focus on other prevention methods, like staying up to date on vaccinations, breast feeding, and avoiding smoke.

### **How are ear infections treated?**

- AOE is usually treated with antibiotic ear drops.
- OME usually goes away on its own and does not benefit from antibiotics but sometimes antibiotics are needed.

- **AOM** may not need antibiotics in many cases because the body's immune system can fight off the infection without help from antibiotics, but sometimes antibiotics are needed.

### **Watchful Waiting**

- Mild AOM often will get better on its own without antibiotic treatment, so your clinician may recommend **watchful waiting** before prescribing antibiotics to you or your loved one. This means that your provider may wait a few days before deciding whether to prescribe antibiotics, while treating the symptoms of AOM. Watchful waiting gives your or your child's own immune system time to fight off the infection first before starting antibiotics. If you or your child don't get better in 2-3 days or get worse, your clinician can recommend starting antibiotics.
- Another form of watchful waiting is **delayed prescribing**. This means that your clinician may give you an antibiotic prescription, but ask you to wait 2-3 days to see if you or your child are still sick with fever, ear pain, or other symptoms before filling the prescription.

### **What can I do to relieve my symptoms?**

There are ways to relieve symptoms associated with ear infections - like ear pain - whether or not antibiotics are needed.

- Consider using acetaminophen or ibuprofen to relieve pain or fever. Ask your clinician or pharmacist what medications are safe for you or your loved one to take.
- Antibiotics, such as amoxicillin, are used to treat severe ear infections or ear infections that last longer than 2-3 days.
- If your child has a fever of 102.2°F (39°C) or higher, discharge or fluid coming from the ear, symptoms are much worse, or symptoms last for more than two or three days for AOM, you should contact your clinician. If

your child has symptoms of OME for more than one month or hearing loss, contact your clinician.

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Adapted from CDC. *Ear Infections* Access at: <https://www.cdc.gov/antibiotic-use/community/for-patients/common-illnesses/ear-infection.html>

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