PLAIN LANGUAGE SUMMARY:
Acute Otitis Externa (Swimmer’s Ear)

BACKGROUND
This plain language summary serves as an overview in explaining Acute Otitis Externa (AOE), a condition commonly known as “swimmer’s ear.” Swimmer’s ear affects both males and females across a wide range of ages. It is very common in children. Most cases happen in summer months or in warmer regions due to increased water exposure. The information in this summary is based on the 2013 update of the Clinical Practice Guideline: Acute Otitis Externa. The guideline includes evidence-based research to support more efficient diagnosis and treatment of swimmer’s ear.

WHAT IS SWIMMER’S EAR?
Swimmer’s ear is an infection of the ear canal, which is a slender channel about one-inch long that leads from the outer ear to the eardrum. Symptoms of swimmer’s ear can include pain, redness, and swelling of the ear canal and an itchy feeling in the ear. Pain when tugging the earlobe, or when chewing food, is also a symptom. Some patients report temporary hearing loss or their ears feeling “full.” Patients may experience symptoms differently and at different levels of severity. It is important to note that swimmer’s ear is different from a middle ear infection, which is common in young children.

WHAT CAUSES SWIMMER’S EAR? ARE THERE RISK FACTORS?
Swimmer’s ear is an infection that occurs when water remains trapped in the ear canal. This moist environment is ideal for the growth of bacteria, and, in rare cases, fungus. Some patients get swimmer’s ear from swimming, although it can happen from bathing, showering, or even sweating. A lack of earwax due to aggressive cleaning with cotton swabs or small objects can cause swimmer’s ear. Earwax limits the growth of bacteria and is a natural barrier to moisture. Skin conditions such as eczema, and chemicals from hairspray or dyes, can also prompt swimmer’s ear.

Stress, sweating, wearing hearing aids, and allergies have been linked to the condition as well. People swimming in pools with poor water quality are more likely to get swimmer’s ear. Those living in warmer climates do are also more likely to get swimmer’s ear because they spend more time swimming or doing water sports. Some studies show that those with Type A blood may be at increased risk for swimmer’s ear.

WHAT CAN YOU DO?
Seeking medical care quickly after the onset of symptoms will help avoid misdiagnosis or delayed diagnosis and improve the success of treatment. Untreated swimmer’s ear can be very painful and can temporarily affect hearing. If left untreated, swimmer’s ear could spread beyond the ear canal, lead to a chronic infection, or even permanently damage the ear.

HOW IS SWIMMER’S EAR DIAGNOSED?
Swimmer’s ear is diagnosed by a physical examination and medical history by a healthcare provider. A doctor may examine the ears using a device called an otoscope (pronounced oh/ toe/ scope), which allows for a good view inside the ear canal. By using this device, a doctor can exclude any other causes of the patient’s symptoms, such as excessive ear wax or infection in the middle ear. A doctor may also clean the inside of the ear canal and take a sample of drainage from the ear, if present.
**WHAT TREATMENT IS AVAILABLE?**
Swimmer’s ear should be treated with prescription eardrops, which include antibiotics, steroids, or drugs that reduce inflammation. Sometimes the eardrops contain more than one medication. Swimmers ear can be very painful, so be sure to let your doctor know if you need additional medication taken orally to relieve pain.

The recovery time and severity of symptoms varies among individuals. Symptoms usually improve within 2 to 3 days and pain goes away within 4 to 7 days, but it may take up to 2 weeks for the ear to feel completely normal. Patients with ear tubes, a hole in the eardrum, diabetes, or a weak immune system may get modified treatments from their doctor.

Ear candles do not help swimmer’s ear and are not recommended for treatment. Studies show use of ear candles can cause more injury to the ears.

**HOW CAN YOU PREVENT SWIMMER’S EAR?**
**During treatment:** Patients with swimmer’s ear should stay away from water for 7-10 days during their treatment. Entering a swimming pool may be allowed in mild cases as long as the ears are not submerged under water.

**After treatment:** Swimmers may return to swimming 2-3 days after completing treatment if the pain has gone away and they use earplugs. Inserting earplugs can help reduce additional moisture in the ear. Patients who wear hearing aids or use earphones should limit their use until pain and any discharge have stopped.

Other prevention tips: Using eardrops prescribed by your doctor shortly before or after swimming, at bedtime, or in a combination of times is one way to prevent swimmer’s ear. Keeping the ear canal dry after water activities can also help defend against swimmer’s ear. One idea is to dry the ear by using a hair dryer on the lowest heat setting.

If your symptoms do not begin to improve after a few days with treatment you should inform you doctor to see if an office visit or change in medicine is necessary. A doctor can review past treatment and explore further options to treat the condition.

This plain language summary was developed from the 2014 AAO-HNSF Clinical Practice Guideline: Acute Otitis Externa. The multidisciplinary guideline development group represented the fields of otolaryngology–head and neck surgery, pediatrics, infectious disease, family medicine, dermatology, and consumer advocacy. Literature searches for the guideline were conducted up through October 2012. For more information on Acute Otitis Externa, visit [http://www.entnet.org/guidelines/guidelines.cfm](http://www.entnet.org/guidelines/guidelines.cfm)


**About the AAO-HNSF**
The American Academy of Otolaryngology—Head and Neck Surgery (www.entnet.org), one of the oldest medical associations in the nation, represents about 12,000 physicians and allied health professionals who specialize in the diagnosis and treatment of disorders of the ears, nose, throat, and related structures of the head and neck. The Academy serves its members by facilitating the advancement of the science and art of medicine related to otolaryngology and by representing the specialty in governmental and socioeconomic issues. The AAO-HNS Foundation works to advance the art, science, and ethical practice of otolaryngology-head and neck surgery through education, research, and lifelong learning. The organization's vision: "Empowering otolaryngologist-head and neck surgeons to deliver the best patient care."