

UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

EAR WAX (CERUMEN)**Why do we have ear wax?**

Ear wax (or cerumen) is composed of secretions produced by glands in the outer third of the ear canal. These secretions mix with old skin, normal bacterial skin flora, and occasional hair to form cerumen, which protects the ear from infection, injury, and water damage. In addition to its lubricating and antibacterial properties, ear wax also traps dust and dirt, keeping them from reaching the eardrum. Ear wax can range in color from off-white to dark red to black, depending on its composition and dryness.

Under ideal circumstances, ear canals should never need cleaning. Normal jaw motions (like chewing and talking) and growing skin in the ear canal naturally transport ear wax to the opening of the ear, where it dries up and falls out or is washed off during bathing. This self-cleaning process works well most of the time.

Why does ear wax accumulate?

Excess wax accumulates in about 6% of the general population. The main causes are:

- Bad ear habits – Regular use of q-tips, earbuds, ear plugs, etc. tends to push wax deep into the ear canal.
- Overproduction of ear wax – This can happen when water gets trapped in the ear, when the ear is injured, or for no specific reason.
- Narrowing of the ear canal – Some people are born with narrow ear canals. Trauma or severe ear canal infections can also lead to narrow canals.
- Changes in the ear canal due to normal aging – Ear wax tends to get harder and thicker as people get older.
- Diseases that affect the ear canal – Excessive exfoliation of skin, changes in oil gland activity, abnormal soft tissue or bone growths, etc. can cause blockage of the ear canal.

What are the symptoms of excessive ear wax?

You may have no symptoms, or you could experience any of the following:

- Hearing loss
- Ear pain or fullness
- Ringing in the ear
- Itching in the ear
- Cough
- Dizziness

When is ear wax removal necessary?

If you are not experiencing symptoms, leave your ear wax alone! Ear wax is protective and only needs to be removed when it is causing problems.

How can I prevent ear wax accumulation?

- ❖ Avoid habits that predispose to ear wax blockage:
 - Don't use q-tips frequently. Regular use of q-tips ends up pushing ear wax deeper into the ear canal. If needed, q-tips may be used gently at the opening of the ear canal to absorb water or soft ear wax.
 - Avoid regular use of ear buds. Use buds that fit outside the ear canal, and do not push ear buds into the canal.
- ❖ If you require removal of ear wax in clinic more than once a year (and have otherwise normal ears), you can prevent ear wax accumulation by:
 - Placing a cotton ball dipped in mineral oil in the ear canal for 10 to 20 minutes once a week. Lay down with the affected ear facing up to help the oil soak into and soften the wax.
 - Visiting your medical professional every 6 to 12 months for routine ear cleaning.

How do I safely remove ear wax at home?

You may attempt to remove ear wax at home if symptoms are mild AND you have not had any ear drainage, prior ear drum perforation, or prior ear surgery.

- ❖ **Over-the-counter (OTC) ear wax softening drops** may be used:
 - These products usually contain hydrogen peroxide or mineral oil. Patients with dryness of the ear canal should avoid products containing hydrogen peroxide.
 - Some ear wax removal kits contain a soft bulb syringe for rinsing. Do not use the soft bulb syringe if you have diabetes or a health condition known to weaken the immune system.
 - Carbamide Peroxide 6.5% solution (Debrox, Murine, etc.) is a commonly used OTC ear wax softening product available in most pharmacies and Student Health. Place 5-10 drops into the ear canal once to twice daily. Avoid carbamide peroxide if you have dryness or excessive exfoliation of the ear canal; mineral oil is preferred in such cases.
- ❖ **General instructions for ear wax softeners** are as follows. Refer to the package insert for specific details.
 - Soften ear wax by using the drops in the kit or a cotton ball soaked with mineral oil. Wash your hands first. When applying drops, avoid contamination by not allowing the dropper tip to touch your ear, fingers, or other surfaces.
 - To apply drops, lie on your side or tilt your affected ear up. Pull up and back on the outer ear to straighten the ear canal. This will help the drops enter the canal.
 - Hold the dropper directly over the ear and place 5-10 drops into the canal.
 - The solution will foam on contact with the ear wax; you may hear a crackling sound.
 - Leave either the drops or the cotton ball in place for 10-15 minutes. Lay down with the affected ear facing up to help the softening liquid soak into the wax.
 - Use the drops or cotton ball regularly for up to 4-5 days. Stop use sooner if symptoms resolve or irritation develops.
 - If needed, you may gently flush out your ear with the bulb syringe. Never squirt water into the ear canal under high pressure. Pull down on your ear lobe after flushing; this will help break the surface tension of any water in the ear canal, allowing it to drain.
 - After 4-5 days, if you still have symptoms, contact your medical provider for an appointment.

When should I see my medical provider?

- ❖ Schedule an appointment in clinic for ear wax removal if:
 - You have significant symptoms from ear wax impaction.
 - You have mild symptoms that are not responding to home treatment.
- ❖ It is typically a good idea to use a softening agent regularly for a few days prior to your appointment to ensure successful removal of ear wax in clinic. Do not use softening drops if you have any ear drainage, prior ear drum perforation, or prior ear surgery.
- ❖ Common methods to remove earwax in clinic include ear irrigation and manual removal with a curette or other instrument.

What should I NOT do?

- Avoid inserting bobby pins, paper clips, or other objects into the ear. You are at risk of causing injury or infection.
- Do not force water into the ear canal under high pressure or use a water pic device in the ear due to the risk of injuring or perforating the ear drum.
- Do not candle the ear. Ear candling involves lighting one end of a hollow candle and putting the other end in the ear. It does not work well and can cause a serious burn.

Recommended websites: www.entnet.org, www.mayoclinic.org, www.uptodate.com/patients