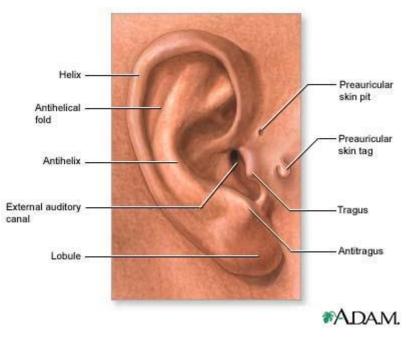
#### Introduction

*Cerumen* is a natural, sticky, waxy substance secreted by cerumen glands in the outer portion of the ear canal. Cerumen waterproofs the ear canal protecting the delicate canal skin from dirt and infection ... sort of like flypaper. Cerumen combines with keratin from dead skin cells, sweat and skin oil (sebum) to form *earwax*.

There are two basic types of earwax ... wet and dry. Your type of earwax is inherited. The wet wax is common in western Europe and contains about 50% fat. Dry wax is common in Asia and contains about 20% wax.



#### How does earwax get out?

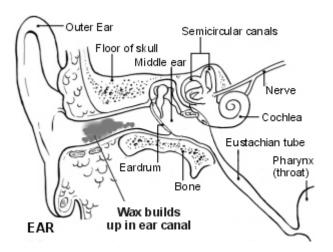
Your jaw joint forms one third of the ear canal. As you chew or talk, the joint moves the skin of the canal, slowly pushing the wax out and taking trapped debris with it. This wax falls out at random. So it is natural and expected to have flakes of ear wax drop out of your ear canal.

### Why does wax build up?

Earwax is necessary and good. It can build up though blocking the ear canal and causing hearing loss, infection or pain. There are a number of reasons that earwax may build up. First, some people just make too much. Why? We don't know. Second, some people have narrow or crooked ear canals and the wax can't get out.

The third and most common reason is the use of Q-tips. Cotton tipped swabs were neither designed nor intended for ear canal use. You will not find any reference on a Q-tip box that you should stick one in your ear. Instead of removing the wax, the swab can push it further into the canal, packing it tight like a canon or muzzle loading rifle. This tight wax dries out and cannot migrate out the ear canal.

In addition, swabs can scratch the delicate skin in the canal leading to infection. This is a common cause of *"swimmer's ear"* in patients who do not swim.



#### What are the symptoms that I have an earwax problem?

Earwax is only a problem if it causes you hearing loss, earache or ringing in your ears (tinnitus). The classic presentation of impacted earwax is sudden hearing loss after bathing, showering, swimming or diving.

*Why?* Well wax slowly builds up in the canal but as long as you have a tiny air hole leading to the eardrum, you will hear normally. If water enters the canal, it can shift the wax, closing the air hole and suddenly you can't hear.

# How can I Prevent earwax buildup?

- Do not use cotton swabs!
- "You shouldn't stick anything in your ear smaller than your elbow!"
- Q-tips will pack the wax in ... or worse ... can perforate your ear drum! The same goes for bobbie pins.
- It may help to wear ear plugs if you work in a particularly dusty environment though the plugs themselves can push wax further in.
- If you ears repeatedly block up with wax, it may be worth putting a couple of drops of olive oil into each ear once or twice a week.
- Remember that earwax isn't bad ... a blockage of earwax is. If you don't have a problem with your wax don't worry about it.

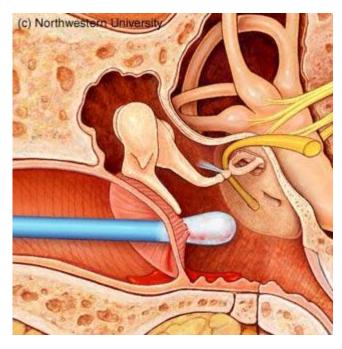
### What can I do to get the wax out?

Softening and lubricating the wax with drops helps. Sometimes this is all that you need. This may need to be followed by irrigation.

### What is in earwax softening drops?

There are three basic types of earwax drops:

• Debrox and Murine contain water, oil and a solution of hydrogen peroxide and other ingredients. The hydrogen peroxide does *not* dissolve earwax. It has a mechanical effect on the wax to help bubble it out.



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- Oil based solutions use olive oil (sweet oil), glycerin, mineral oil, propyline glycol and others. Warming these solutions can sometimes make them work better. Oil based solutions only lubricate, making the wax less sticky and easier to get out. They do not soften wax.
- Enzyme based preparations such as Cerumenex. We do not advise these as they can irritate the ear canal and create more problems.
- You can make your own earwax drops by combining watervinegar-hydrogen peroxide in a 1:1:2 ratio.



### You should not use any of these preparations in your ear if you know that you have a ruptured eardrum.

#### To instill earwax drops:

- Lie on your side with one ear facing up.
- Fill the canal with fluid.
- Wait 5 minutes, sit up and use a tissue to catch any liquid that drains out.
- Repeat on the other side.
- Do this several times per day.
- Sometimes softening the wax is all that is necessary for it to come out.

#### How can I irrigate my ears at home?

To irrigate your own ears try the following:

- Take a plastic bowl with you into the shower. (Don't use glass because you might break it.)
- Turn the shower on to a nice comfortable warm temperature.
- Fill the plastic bowl with the warm water.
- Fill a soft rubber bulb ear syringe (sold for this purpose) with water from the bowl.
- Lean to one side and flush the water into the ear. Repeat several times.
- Lean to the other side and repeat.

#### You might try a home earwax loop

<u>Ear-Wiz</u>® provides a **Safety Stop** that guards against ear drum contact and a **Spring-Flex** wax removing loop. This device is available over the counter without a prescription and is safer than bobbie pins or cotton swabs.

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### When should I go to the doctor?

You should see the doctor if:

- You have trouble hearing and you are not sure if you have wax or not.
- You have ear pain.
- You have a hole in your eardrum.
- You have chronic ear infections.
- You have ear tubes.
- You have ever had ear surgery.

#### What will the Doctor do?

First the doctor will diagnose the earwax impaction. Next, there are several ways for her to get the wax out.

- In our office we commonly use a syringe and warm water to flush the earwax out. We have the advantage that we can see what we are doing and look in the ear to see if it worked. Most people tolerate this procedure fine but some find it painful.
- The doctor may also combine this method with a small ear wax loop (a metal ring on the end of a probe) to grab the wax and pull it out. Sometimes this is a little painful and might cause bleeding. This happens if the wax is particularly hard or stuck to the skin of the canal.
- Using the earwax softening drops for several days before you see the doctor makes the job easier.
- For difficult cases, we have a dental care water jet.

Some people require regular cleaning of their ears every six to twelve months.

### What about earwax candling?

Though very popular on the Internet and with alternative health providers, we do not recommend this method. Candling involves lying on your side with one ear up and placing a lit candle over the ear canal. In theory, the burning wick produces a vacuum at the other end of the candle drawing wax out of the canal. It doesn't work and can cause burns.

