

What is cerumen?

"Earwax," medically known as cerumen (sa-roo-men), is the name given to the sticky liquid produced by skin glands located in the outer third of the ear canal. The function of this substance, which is produced by all of us, is to serve as a water repellent and keep the ear canal (as well as the ear drum) free of any foreign materials. Because cerumen is sticky, anything that flies, crawls or is blown into the ear canal, such as dirt, small insects, bacteria, etc., is quickly trapped and immobilized. The wax then accumulates, dries out and comes out of the ear, carrying the dirt and dust with it. Earwax moves outward naturally during chewing and the normal growth of the ear canal's lining.

Unless there is a blockage, it is best to leave earwax alone. If you push the earwax back into the ear, as usually happens when you try to remove the wax from the inside of the ear canal, it becomes more difficult for the wax to come out naturally.



What is the cause of excessive cerumen?

Earwax can build up because of over-production or difficulty in the normal clearing of the wax. Some children have problems with earwax throughout their lives while others suddenly develop "problem wax," without any obvious explanation. The buildup may occur in only one ear or both.

Why is too much cerumen bad?

Other than making it difficult for your pediatrician to view your child's eardrum, an abnormal buildup of earwax can cause a number of medical problems. Wax can plug up the ear preventing sound waves from reaching the ear drum. This can cause partial or complete hearing loss, depending on the amount of blockage. Some children tend to form very hard wax, which can cause pain by putting pressure on sensitive ear canal walls. Finally, since the ear canal shares some of the same nerves with the throat, earwax can provoke a "tickle in the throat" which can then lead to cough.

How is cerumen removed?

It is important for parents to realize that wax in children's ears is not bad. In fact, having too much wax is probably better than having none at all. The goal is to keep it from totally blocking the ear canal all together.

Most pediatricians will attempt to remove wax by irrigation (squirting warm water into the ear canal to wash out the wax) or by scooping the wax out with a curette (a very small, plastic ring at the end of a plastic handle). Should the doctor be unable to dislodge the obstructing wax, an ear, nose and throat (ENT) physician will most likely be consulted. These specialists typically remove wax by suction and/or curette technique using a microscope to get the best possible view of the ear canals.

What can be done to decrease the problem?

DO NOT USE Q-TIPS. Using cotton swabs to clean out your child's ear is potentially risky for a number of reasons. First, if your child has a lot of earwax, placing the swab into the canal will only "pack it down," further into the ear canal. Furthermore, the child can suddenly move causing damage to either the ear drum or the ear canal. In addition, children are great imitators and a youngster who gets his/her ears cleaned out with a cotton swab may one day take matters into his/her own hands and attempt to use a cotton swab on his/her ears or a sibling's ears.

Should your child chronically produce excessive wax, there are a number of over-the-counter drops that will help keep the ear canals clear.

- **3% Hydrogen Peroxide**
- **Debrox or Murine:** These over-the-counter drops are basically oil & peroxide combinations
- **Baby oil or mineral oil**

To install these solutions, tip your child's head so the ear points toward the ceiling. Using an eye dropper or medicine syringe, fill the ear canal with 2-5 mL of the liquid. Keep his/her head tipped for 1 minute (or as long as you can), then cover the ear with a towel and have your child straighten up his/her head, so the liquid drips out. Repeat this process in the opposite ear as necessary once or twice a week. Hydrogen Peroxide is a thinner solution and can be used to irrigate the ear canal if your child is not cooperative enough to hold his/her head still, tipped to one side. The peroxide will bubble out the earwax once it has become soft enough.

Caution: Never put these solutions in your child's ear if there is any chance the eardrum has a hole in it or if your child has ventilation tubes (a.k.a. T-tubes, PE-tubes, ear tubes). Contact your ENT for advice if these are present.