

HOW TO USE AN OTOSCOPE

When checking the ear of a child older than 12 months or an adult, hold the otoscope in one hand (same hand as the ear you are viewing) and use your free hand to pull the outer ear gently up and back. This straightens the ear canal and improves visualization. In babies younger than 12 months, gently pull the outer ear down and back.

Now, slowly insert the pointed end of the viewing piece (**speculum that has a diameter slightly smaller than the opening and that has been cleaned with an alcohol wipe**) into the ear canal while looking into the otoscope. The sides of the ear canal can be quite sensitive, so try not to put pressure on the ear canal. It may help to steady your hand on the person's face so your hand moves along with their head in case they move quickly.

Do not move the otoscope forward without looking into it. Make sure you can see the path through the ear canal. You do not need to insert the viewing piece very far (only a centimeter or two) into the ear-the light extends well beyond the viewing tip.

Angle the tip of the viewing piece slightly toward the person's nose to follow the normal angle of the canal. While looking through the otoscope, move it gently at different angles so that you can see the canal walls and eardrum. Stop at any sign of increased pain.

Ear canal

Normal:	<ul style="list-style-type: none">• Ear canals vary in size, shape, and color.• The ear canal is skin-colored and contains small hairs and usually some yellowish brown or reddish brown earwax.
Abnormal:	<ul style="list-style-type: none">• Wiggling or pulling on the outer ear causes pain.• The ear canal is red, tender, swollen, or filled with pus.

Eardrum

Normal:	<ul style="list-style-type: none">• The eardrum is pearly white or light gray, and you can see through it.• You can see the tiny bones of the middle ear pushing on the eardrum.• You see a cone of light, known as the "light reflex," reflecting off the surface of the eardrum. This cone of light is at the 5 o'clock position in the right ear and at the 7 o'clock position in the left ear.
Abnormal:	<ul style="list-style-type: none">• The light reflex on the eardrum is dull or absent• The eardrum is red and bulging.• You can often see amber liquid or bubbles behind the eardrum.• You can see a hole in the eardrum (perforation).• You can see whitish scars on the surface of the eardrum.• If your child has had a tube placed in an ear, you may also see the tiny plastic tube, which is usually blue or green.• The eardrum is blocked by earwax or an object, such as a bean or a bead.

Note: If you see an inflamed canal, pus, a dull or red eardrum, fluid behind the eardrum, a hole in the eardrum, or a foreign object in the ear, call your doctor.

Otoscope with speculum attached



Image of a Normal Ear Drum



Image of an Ear Drum with Otitis Media



Images from <http://www.doomandbloom.net/2012/02/ear-infections-how-to-use-an-otoscope.html>

Directions for use of Otoscope from <http://www.webmd.com/a-to-z-guides/home-ear-examination>