

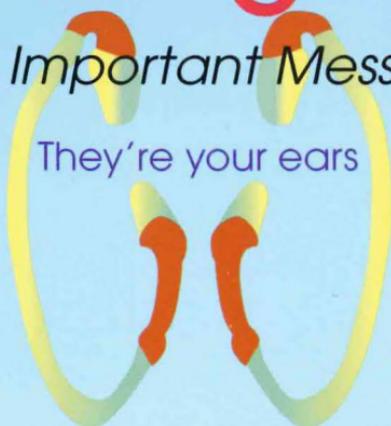


Preventing Occupational Hearing Loss



An Important Message

They're your ears



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health

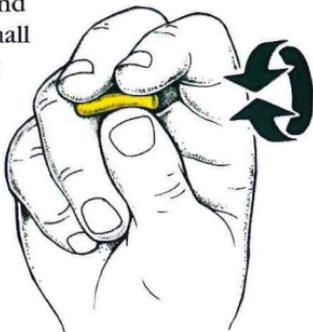


Fitting

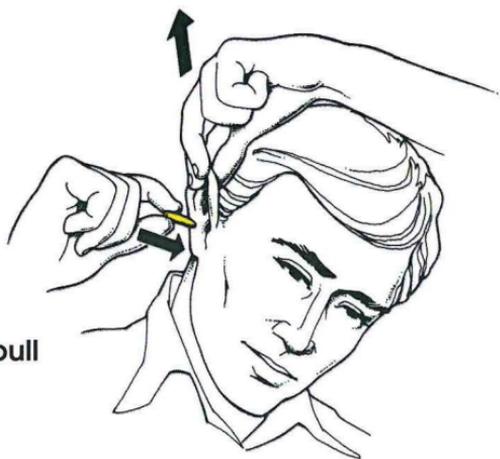
Formable Plugs



- 1 ROLL** the plug between your thumb and forefinger(s) to tightly compress it into a small round cylinder. Make sure you avoid getting creases in the plug when you roll it down.

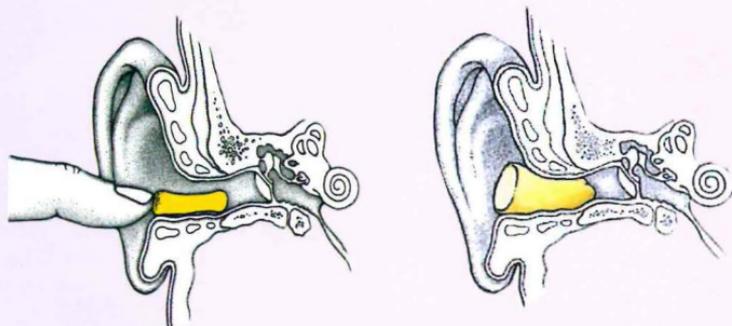


- 2** Once the plug is **TIGHTLY** compressed into a small cylinder, insert it into the ear canal. To make sure you can properly insert the plug, you must straighten out the ear canal by reaching over the top of your head and pulling up or back on the top of your ear.

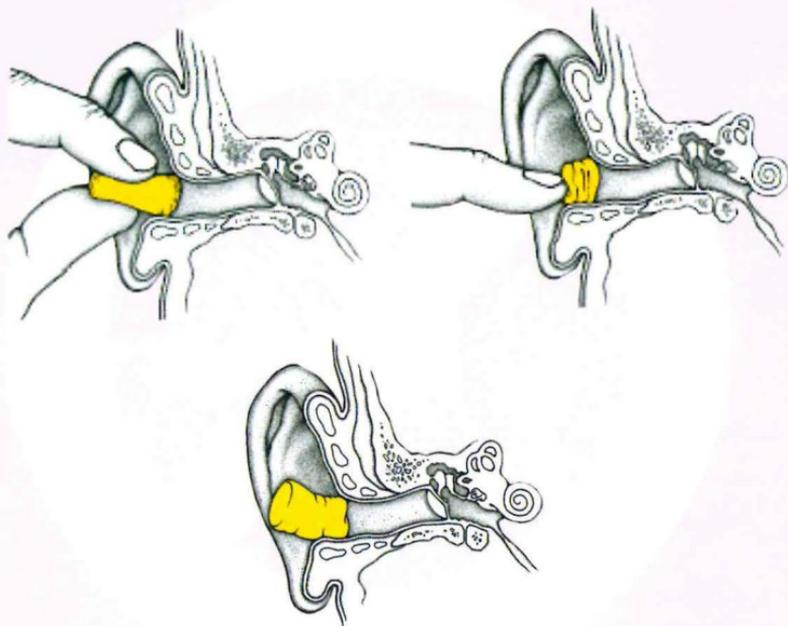


pinna pull

- 3** Once you've inserted the plug, hold it in place for just a few seconds as it expands and seats itself in the ear canal.



- 4** Remember that the plug must be rolled down tightly before you try to insert it into your ear canal. You can't try to push a formable plug into your ear if you have not rolled it down tight enough.



5 To be properly fit, a formable plug should be inserted so that most of the plug fits into the ear canal. While many formable plugs are "one size fits most," some do come in different sizes. If you can't get at least half of the plug into the ear canal, or if the plug can't expand enough to stay firmly seated, you need a different size.



correct



incorrect



Fitting

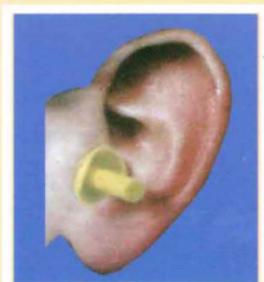
Premolded Plugs



- 1** *Fitting Premolded Plugs.* Premolded plugs are designed to be reused. Most can be easily cleaned with mild soap and water. Make sure they are completely dry before storing them in their case, or using them in your ear.
- 2** Just as with formable plugs, you need to use the “**pinna pull**” when inserting a premolded plug, i.e., reach up over your head and pull up or back on the top of your ear to straighten out the ear canal.



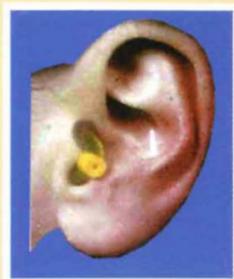
Acknowledgement: This graphic, and the graphics used to illustrate fitting formable plugs were provided, courtesy of Elliott Berger, Senior Scientist, Auditory Research E-A-R/Aero Company.



Too big



Good fit



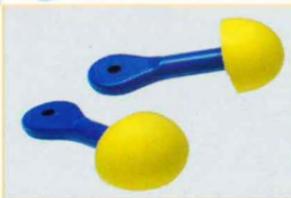
Too small

3 Premolded plugs may come in different sizes, or as “*one size fits most.*” Try out different sizes to see what fits you best. The earplug in the middle picture, above, shows a well fit premolded plug that completely seals the opening to the ear canal. The plug on the left is either too large or it has not been fully inserted, leaving gaps around the flange where noise can leak through. The plug on the right is too small, and also leaves gaps where sound can leak in. Remember, *size matters!* Not every earplug fits every ear. You may even need a different size earplug for each ear. When removing premolded plugs slowly twist the plug and pull the stem back and forth to break the seal. If you have an airtight seal, and pull the earplug out quickly, without first breaking the seal, you could harm your ear.

SAFER • HEALTHIER • PEOPLE™



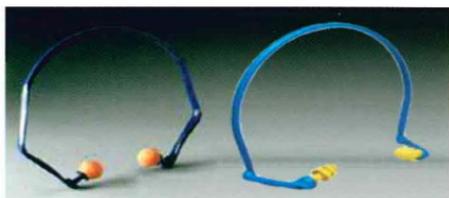
When your premolded plugs get hard or brittle, replace them with a fresh pair.



Fitting Canal Caps

4

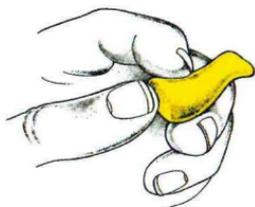
Canal caps are basically formable or premolded earplugs attached to a headband. Some headbands may be worn over the head, behind the neck or under the chin. Others are designed to be worn only behind the neck or under the chin. The main advantage of canal caps is that the headband allows them



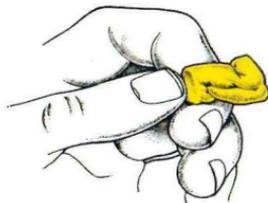
to be hung around the neck when not being used. This makes them convenient to use when noise is intermittent and you are taking your earplugs on and off many times during the day. Fitting and using canal caps is otherwise similar to fitting and using formable and premolded plugs.

Checking the Fit

- ✓ When an earplug is properly inserted, your voice will sound deeper, or louder.
- ✓ To check your fit, cup your hands over your ears and make a good seal. Count out loud while slowly cupping and uncupping your ears. If you have a good fit, your voice should sound about the same as you cup and uncup your ears. Try this with and without your earplugs to see the difference.
- ✓ With a premolded plug, you can perform the “tug test.” To do this, gently pull in and out on the stem of the earplug creating a slight piston action. As you do so, you should feel pressure changes in your ear canal to confirm you have a good fit. Do not pull hard enough to break the seal.
- ✓ If you are wearing a formable plug, when you remove it, check to make sure there is a slight bend. This shows that the earplug was inserted deeply enough to reach the bend in the ear canal. There should be no creases in the earplug.

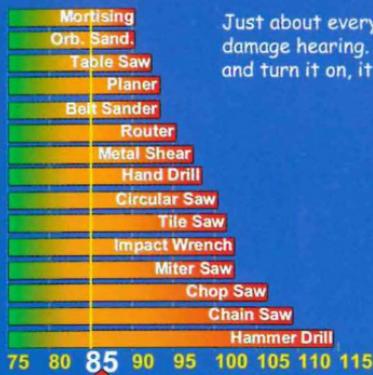


Good fit



Poor fit

Task/Tool



Just about every power tool can damage hearing. If you plug it in and turn it on, it's hazardous.

Sounds louder than 85 decibels can cause permanent hearing loss.

An average carpenter gradually loses much of his or her hearing.



If you work in noise and do not protect your ears, you should expect to develop a ringing in you ears known as TINNITUS

"I expected to lose my hearing.... But I thought it would be quiet." □



TIPS

Wearing your hearing protector intermittently can reduce its effectiveness by 50%.

Make sure you avoid getting creases in the formable plug when you roll it down.

Do not push a formable plug into your ear if you have not rolled it down tightly enough.

If you can't get at least half of the plug into the ear canal, or if the plug can't expand enough to stay firmly seated, you need a different size. Remember, **size matters!**

Make sure premolded plugs are completely dry before storing them in their case, or using them in your ear.

Some trial and error **will** be necessary to find the hearing protectors that are best for you.

When removing plugs with an airtight seal, first gently break the seal before pulling out your earplug.

They're yours ears. PROTECT THEM