UCR Environmental Health & SafetyHEARING<br/>PERSONAL<br/>PROTECTIVE<br/>EQUIPMENT<br/>(PPE)

Repeated exposures to loud noise can lead to permanent, incurable hearing loss. The best hearing personal protective equipment (PPE) is the one that is comfortable and convenient, and that you can wear every time you are exposed to hazardous noise. Below are some of the common devices used

## Expandable Foam Plugs

- Made of a formable material designed to expand and fit to the shape of the ear canal
- Roll the expandable plugs into a smooth tube thin enough so that about half the length will fit easily into your ear canal
- Some individuals with small ear canals, have difficulty rolling the plugs small enough to make them fit (manufacturers now offer a small size expandable plug)

## **Pre-Molded Reusable Plugs**

- Made from silicone, plastic or rubber as either "one-size-fits-all" or in several sizes
- A person may need a different size plug for each ear (sealing the ear canal without being uncomfortable takes trial and error of the various sizes)
- Are relatively inexpensive, reusable, washable, convenient to carry, and come in a variety of sizes (nearly everyone can find a plug that will be comfortable and effective, and you don't need to handle or roll the tips in dirty or dusty environments)
- Insert this type of plug by reaching over your head with one hand to pull up on your ear, then use your other hand to insert the plug with a gentle rocking motion until you have sealed the ear canal

## **Canal Caps**

- Earplug tips may be a formable or pre-molded material
- Some have headbands that can be worn over the head, behind the neck or under the chin
- Newer models have jointed bands increasing the ability to properly seal the earplug
- Are convenient employees can leave the band hanging around their necks when it's quiet, and quickly insert the plug tips when hazardous noise starts
- Tips that resemble stand-alone earplugs seem to block the most noise (not all canal caps have tips that adequately block all types of noise)

## **Earmuffs**

- Come in many models designed to fit most people
- They block out noise by completely covering the outer ear (can be "low profile" with small ear cups or large to hold extra materials for use in extreme noise)
- Some include electronic components to help users communicate or block impulsive noises
- Not recommended for workers who have heavy beards or sideburns or who wear glasses (the hair and the temples of the glasses break the seal that the earmuff cushions make around the ear earplugs are best)
- Can be hot and heavy in some environments

Visit <u>www.ehs.ucr.edu</u> for additional information or call 951-827-5528 if you have any questions.

