



A Good Fit

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You provide personal protective equipment to your employees. And you probably just assume that if you give it to them, it'll work fine. Take a minute to look at who works for you. Are all of your employees the same size? Are all of their faces equally wide? Equally long? Are their hands the same size?

OSHA requires you to provide appropriate *and effective* PPE. That means it has to protect against the hazard and it must fit the user. Equipment that doesn't fit well is like wearing shoes that don't fit. Sure, they may work in a pinch, but they're uncomfortable, don't work all that well, and given the choice, you're likely to go without.

If your shop uses tight-fitting respirators, you're required to prove that they fit. Respirator fit is critical: if it doesn't fit well, it won't seal. If it doesn't seal well, you'll breathe contaminated air. OSHA spells out exactly how to check the fit and how often (at least annually).

Fit testing may be quantitative (how much does the respirator leak) or qualitative (go/no go). We can usually use the less-expensive qualitative fit testing for collision repair shops. For that, the respirator user is exposed to a test agent that can be tasted or smelled at safe concentrations. If the user detects the substance, the respirator doesn't fit well enough. If users change styles of respirators, the fit test needs to be repeated.



You usually don't need to worry about the fit of ear muffs. As long as they can seal well around the ear, they'll do the job. But ear plugs are different. Because some people have small ear canals and some have large, one ear plug won't fit everyone. The angle of one's ear canal can also affect fit.

Providing your employees with several different styles of ear plugs is a starting point to making sure they use ones that fit. Follow that up by asking employees if the ear plugs are comfortable. Watch how they're used – is there someone who rarely uses the plugs available? It might be because they aren't comfortable. Do you see plugs propped in the ear, with 80% of the plug sticking out? They should be inserted deep into the ear. If they aren't, perhaps it's because of poor fit. Tell employees to check the fit, by cupping their hands over their ears. If the earplugs fit well, the noise levels should stay the same even with the cupped hands.

Quantitative fit testing has recently been developed for ear plugs. It's not yet in common use, but it shows great promise as a way to really demonstrate how effective ear plugs can be. It uses probed earplugs to measure sound levels outside and inside the ear. Where this might be of the greatest use: as a way to show employees when ear plugs are correctly inserted.

There aren't measures to check glove or safety glass fit. With these, fit problems are usually obvious. If gloves are too large, they'll still block the chemical, but they'll slow down the work. Safety glasses that don't fit may still prevent a flying chip from entering your eyes. But have you ever tried to work while constantly pushing your glasses back up on your nose? Not very efficient, was it?

We've talked to employees who reported eye injuries even though they were wearing safety glasses. Often, they were working under a car or doing some work that allowed particles to get past the side of the glasses. Goggles certainly could have prevented the injury. But wraparound safety glasses, chosen to fit tightly to the face, may also have prevented those. Until you hire people with the same size heads, then, you'll need to provide safety glasses to fit narrow faces, wide faces, long faces, and short ones.

People come in all shapes and sizes. Until you start hiring people of the same size and shape, the personal protective equipment you provide to them must also come in a range of shapes and sizes. There are enough options on the market to accommodate nearly everyone. It's your responsibility to ensure the options you choose accommodate your employees. And then to enforce their use.

If you have questions about personal protective equipment, fit testing, OSHA standards, or other safety issues, contact CHESS at 651-481-9787; toll free at 877-482-4377, or carkey@chess-safety.com.

This article is intended to provide general information (not advice) about current safety topics. To discuss your specific concerns and how CHESS may help, please contact CHESS at 651-481-9787 or chess@chess-safety.com

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