

RESPIRATOR FIT TESTING www.OSHA.gov

This [video](#) is about the respirator fit testing requirements for any worker who is required to use a tight-fitting respirator. The federal Occupational Safety and Health Administration - also called "OSHA" - and State OSHA Agencies require employers to fit test workers who must wear these respirators on the job.

This video provides a brief overview and general information about fit testing requirements under the Federal OSHA or State OSHA Respiratory Protection Standards. This video can be a part of the OSHA-required respiratory protection training, which includes many topics, like how to put on and take off a respirator and how to use, clean, and maintain your respirator. Your employer must also provide you with worksite-specific training.

While this video discusses some of your employer's responsibilities under OSHA's respiratory protection fit testing requirements, it is important to remember that using a respirator that fits you properly protects your health and safety.

A respirator can't protect you if it doesn't fit your face. It's that simple. Certain respirators, known as tight-fitting respirators, must form a tight seal with your face or neck to work properly. If your respirator doesn't fit your face properly, contaminated air can leak into your respirator facepiece, and you could breathe in hazardous substances. So before you wear a tight-fitting respirator at work, your employer must be sure that your respirator fits you. Your employer does this by performing a fit test on you while you wear the same make, model, and size of respirator that you will be using on the job. That way, you know that your respirator fits you properly and can protect you, as long as you use it correctly.

In addition, before you use a respirator or are fit-tested, your employer must ensure that you are medically able to wear it.

So what is a fit test? A "fit test" tests the seal between the respirator's facepiece and your face. It takes about fifteen to twenty minutes to complete and is performed at least annually. After passing a fit test with a respirator, you must use the exact same make, model, style, and size respirator on the job.

A fit test should not be confused with a user seal check. A user seal check is a quick check performed by the wearer each time the respirator is put on. It determines if the respirator is properly seated to the face or needs to be readjusted.

There are two types of fit tests: qualitative and quantitative.

Qualitative fit testing is a pass/fail test method that uses your sense of taste or smell, or your reaction to an irritant in order to detect leakage into the respirator facepiece. Qualitative fit testing does not measure the actual amount of leakage. Whether the respirator passes or fails the test is based simply on you detecting leakage of the test substance into your facepiece. There are four qualitative fit test methods accepted by OSHA:

- Isoamyl acetate, which smells like bananas;
- Saccharin, which leaves a sweet taste in your mouth;
- Bitrex, which leaves a bitter taste in your mouth; and
- Irritant smoke, which can cause coughing.

Qualitative fit testing is normally used for half-mask respirators - those that just cover your mouth and nose. Half-mask respirators can be filtering facepiece respirators - often called "N95s" - as well as elastomeric respirators.

Quantitative fit testing uses a machine to measure the actual amount of leakage into the facepiece and does not rely upon your sense of taste, smell, or irritation in order to detect leakage. The respirators used during this type of fit testing will have a probe attached to the facepiece that will be connected to the machine by a hose. There are three quantitative fit test methods accepted by OSHA:

- Generated aerosol;
- Ambient aerosol; and
- Controlled Negative Pressure.

Quantitative fit testing can be used for any type of tight-fitting respirator.

Many workers need to wear prescription glasses or personal protective equipment, such as safety goggles or earmuffs, while performing a job. If you fall into this category, then you must wear these items during the fit test to be sure they don't interfere with the respirator's fit.

You must be fit tested before you use a respirator in the workplace, and you must be retested at least every 12 months to make sure that the respirator you use still fits you. You must be fit tested with the specific make, model, style, and size of respirator that you will be using.

Not everyone can get a good fit with one specific respirator. If the respirator fails the fit test, then another make, model, style, or size must be tried until one is found that fits you properly. Therefore, your employer needs to provide you with a reasonable selection of sizes and models to choose from. When you've completed the fit testing process, it's very important that you know which make, model, style, and size respirator fits your face properly, and when and where you'll need to wear it for protection.

Also, the fit of your respirator must be retested whenever you have a change in your physical condition that could affect the fit of your respirator. Such changes could include:

- large weight gain or loss;
- major dental work (such as new dentures);
- facial surgery that may have changed the shape of your face; or
- significant scarring in the area of the seal.

Any of these changes could affect the ability of your respirator to properly seal to your face, which could allow contaminated air to leak into your respirator facepiece.

If you find that the fit of your respirator becomes unacceptable, you must be allowed to select a different type of respirator and be retested. The selection may include a new make, model, style, or size of respirator.

Facial hair, like a beard or mustache, can affect your respirator's ability to protect you. Anything that comes between your face and the respirator's seal or gets into the respirator's valves can allow contaminated air to leak into the respirator facepiece and you will not be protected. For example, if you have long hair, make sure it doesn't get between the respirator seal and your face because this can allow contaminated air to leak into the respirator.

Fit testing can be done by your employer or an outside party, including a union, an apprenticeship program, a contractor's association, or a past employer. Your current employer is permitted to accept fit testing you have received from an outside party (such as a former employer) within the last 12 months, as long as you use the same respirator make, model, style, and size at your new worksite. This is known as "fit testing portability."

While recent fit testing can follow you from job to job, it is still your current employer's responsibility to ensure that the fit testing and recordkeeping requirements of OSHA's respiratory protection standard have been met before you use a respirator for protection against hazardous exposures at work.

Sometimes workers own their own respirators and bring them to a job where respiratory protection is required. If your employer allows you to use your own personal respirator for protection, then your employer still has to comply with all of the requirements of the OSHA standard. For example, your employer must still ensure that:

- your respirator is appropriate for the hazards you face;
- your respirator is properly cleaned, maintained, and stored; and
- the proper schedule for replacing cartridges and filters is followed.

Keep in mind, however, that while your employer may allow you to use your own respirator, your employer cannot require you to use your own respirator.

This video has provided you with a brief overview of OSHA's fit testing requirements. There are many other things that you must know and do before you can safely use a respirator in a hazardous work environment. While this video may be a part of your respiratory protection training, your employer must also provide you with additional training on respirators, including worksite-specific training.

Remember, if you don't know if a respirator is needed for the task you will be doing, or if you are unsure about how to properly use a respirator or which filter or cartridge to use, talk to your supervisor before entering the hazardous area.

For more information about respirator use in your workplace, refer to these OSHA and NIOSH websites. You will find OSHA's respiratory protection standard, additional respirator training videos, and other guidance material to help you work safely.

