OSHA: Respiratory Protection Overview



Key Takeaways:

– Understanding the purpose of using a respirator.
– Observing the factors that influence respirator effectiveness, the limitations and capabilities of respirators, and an employer’s responsibilities for respirator use in the workplace.
– Learning about how respirators are used in the workplace, including required medical evaluations, fit testing, inspection, seal checks, and maintenance and storage requirements.
– Recognizing when an employee should leave a respirator use area, the warning signs of an improperly functioning respirator, and the actions workers should take in an emergency situation.

Course Description

Annually, it is estimated that respiratory equipment prevents around 4,000 illnesses and 900 deaths.

Both on and off the job, the quality of the air we breathe has major implications for our respiratory health, which is why some regions in the United States alert local citizens when smog or air pollution reaches an unsafe level.

Specific industrial work environments endanger respiratory health; people who work in construction, manufacturing, agriculture, and other industries will be inevitably exposed to workplace respiratory hazards. These workers must be mindful of the air they are breathing because of tasks where irritating dust, chemical fumes, and other airborne contaminants are present in harmful concentrations, or where the percentage of oxygen is insufficient.

For this reason, OSHA requires employers to take the necessary precautions to control for respiratory hazards at worksites. The key rule is if an employer is incapable of eliminating respiratory hazards, the employer needs to provide employees with respirators to protect their health. Across jobs, there’s plenty to discuss about personal protective equipment and systems for safeguarding respiratory help.

The goal of OSHA’s respiratory protection standards is to prevent tragic workplace accidents and latent illnesses induced from exposure to respiratory hazards that workers may encounter on the job. There are numerous safety considerations around the vast category of airborne contaminants. In the case that you work in an environment that poses some respiratory risks, it’s likely that you’re aware of steps for minimizing your risk of exposure, and familiar with some respiratory devices. Although, due to unpredictability, there is a lot to learn about protection from

airborne contaminants, and it is important to know in what forms these hazards exist, where you're likely to find them, and how they physically behave. When you understand the properties of airborne contaminants, you are able to better apply appropriate measures to control them, avoid exposure, and treat symptoms.

The Respiratory Protection Standard (1910.134) is usually one of the top 10 most frequently cited standards following inspections of workplaces by OSHA.

approximately 5 million workers must wear respirators in 1.3 million workplaces within the United States. Respirators can protect workers against a variety of hazards, such as insufficient oxygen environments, harmful dusts, fogs, smokes, mists, gases, vapors, and sprays. Any of these hazards have the potential for causing cancer, lung impairment, diseases, or death. This is why fulfilling the OSHA Respiratory Protection Standard averts hundreds of deaths and thousands of illnesses every year.

There are two basic ways in which respirators protect a user. Firstly, they can remove contaminants from the air. Examples of this type of respirator include particulate respirators, which filter out airborne particles, and air-purifying respirators with cartridges/canisters which filter out chemicals and gases. Conversely, the other respirator type protects by supplying clean respirable air from another source. Examples of respirators within this category include airline respirators, which use compressed air from a remote source, and self-contained breathing apparatus (SCBA), which include their own air supply.