PPE – Respiratory Stats & Facts

DID YOU KNOW?

You might need respiratory protection if inhalation hazards exist in your work environment. If you wear a respirator at UW, you must use it according to the UW Respiratory Protection Program designed to protect employees and students by establishing accepted practices for assessing respiratory hazards and selecting, using and caring for respirators.

Occupational respiratory disease surveillance is the ongoing, systematic collection, analysis, and dissemination of health and hazard data to monitor the extent and severity of occupationally-related lung disease and related workplace exposures for use in public health education and in disease prevention.

Since 2009, OSHA's Respiratory Protection Standard has consistently ranked fourth on the agency's annual Top 10 List of Most Frequently Cited Standards. Despite the wealth of OSHA guidance and compliance resources available to employers, not to mention an entire industry dedicated to respiratory PPE, air quality monitoring and engineering control technologies, it's clear that many employers continue to struggle with respiratory protection in the workplace.

Respiratory Protection: A Matter of Life & Death

NIOSH National Occupational Respiratory Mortality System (NORMS) data shows that between 2006 and 2016, 51,822 U.S. residents died from occupational-related respiratory illnesses. That's an average of more than 5,000 each year. In 2016 alone, occupational-related respiratory illnesses took the lives of 4,500 Americans. That's nearly equal to the total number of U.S. workers killed on-the-job during that same year (5,190). That makes occupational respiratory illness the single greatest cause of occupational fatalities.

These numbers can be a little confusing. To help clear things up, we first need to draw the distinction between on-the-job fatalities versus occupational-related fatalities. Respiratory exposure to harmful substances rarely results in immediate, on-the-job fatality. In fact, the BLS Census for Fatal Occupational Injuries (CFOI) 2011-2017 shows that in 2016, inhalation of harmful substances resulted in just 39 of the 5,190 on-the-job fatalities recorded that year. For comparison, the CFOI showed that the most common cause of on-the-job fatalities in 2016 was transportation-related incidents which resulted in 2,083 worker deaths. Sadly, it is almost always the case that occupational respiratory mortality is due to years of repeated exposures that eventually result in chronic, terminal respiratory illnesses like silicosis, mesothelioma, pneumoconiosis and other lung diseases. By the time workers are aware of their symptoms, it's often too late.

Thankfully, major revisions to OSHA's Respiratory Protection Standard introduced in

1998 have helped to gradually lower the rate of fatal occupational respiratory illness from greater than 24 per 100,000 workers pre-1998, to around 15 per 100,000 workers by 2016.