

Respiratory Protection

Breathing new life into safety

Respirators are an essential form of personal protective equipment (PPE). In fact, according to OSHA, an estimated 5 million workers are required to wear respirators in 1.3 million workplaces throughout the United States. Respirators protect workers against environments with insufficient oxygen, harmful dusts, fog, smoke, mists, gases, fumes, vapors, and sprays. Exposure to these hazards may cause cancer, lung impairment, diseases, or death.

Respirators protect us in 3 basic ways; they remove contaminants by filtering particles, they purify the air, and they supply clean air from an outside source.

It's important to remember that respirators are only as good as the hazards they are protecting you against – always make sure you're wearing the right respirator for the right job. Contact Risk Management, Northwestern's Respiratory Protection Program Administrator, to confirm if you're wearing the correct respirator. Below are some of the most commonly used respirators at Northwestern:

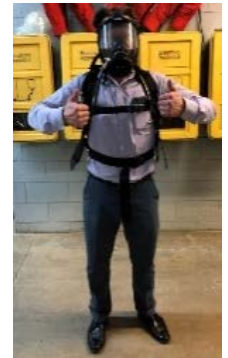


N95 Respirator – designed to filter airborne particles; the 'N95' designation means that at least 95% of airborne particles are blocked
Half-Mask – a tight-fitting, air-purifying respirator with replaceable filters or cartridges attached to a rubber or silicone facepiece; only covers a portion of the face around the mouth and nose
Full-Mask – also known as an air-purifying respirator, it works by filtering or cleaning harmful gases out of the air by using canisters or cartridges
Self-Contained Breathing Apparatus (SCBA) – a device worn by rescue workers, firefighters, and others to provide breathable air in a hazardous atmosphere

Respirators are a breath of fresh air

Now that we have an understanding of common respirators in the workplace and how they protect us, let's dive deep into what Northwestern is doing to ensure you're safe while wearing a respirator, and following OSHA's Respiratory Protection Standard:

- Details on our written Respiratory Protection Program are available on the [Risk Management website](#)
- Risk Management conducts air monitoring and reviews safety data sheets (SDS) to identify groups/individuals who are required to wear respirators
- Employees must undergo a medical evaluation to ensure users can safely wear a respirator
- Employees participate in annual training and fit testing to confirm users know how to properly wear a respirator, and understand the limitations of respirators
- Respirators are provided at no cost to employees



Chris Yohe, EHS Specialist, wearing an emergency SCBA

Preparation and training are essential

Learn more: Complete Respiratory Protection training at learn.northwestern.edu.

Tips for Success When Talking to Your Team

- **Preparation is Key:** Keep the topic relevant. Work with your team to review Northwestern's Respiratory Protection Program and make sure everyone knows what to do and who to notify in the event of a respiratory concern.
- **Stay Positive:** Keep the focus on what can be done to create a safe workplace, instead of focusing on what has gone wrong in the past.
- **Share a Story, Ask for a Story:** Storytelling is a powerful method to convey information. Stories from your employees make the topic even more relatable.

Safety at Home

While employees have resources at their workplace for respiratory protection, consumers and homeowners don't have such support. The information below can help you understand the limitations and cautions that need to be considered when completing DIY projects using materials such as paint thinners, drywall compound, and household pesticides:

- When shopping for a particulate respirator, be sure to purchase a NIOSH-approved device, which is always clearly marked on the respirator – there are counterfeit manufacturers out there, so double check your PPE's legitimacy to ensure ample protection.
- Always make sure you're wearing the right respirator for the right job – wear an N-95 while sanding drywall and wear a half-face respirator with a vapor cartridge when spraying aerosols, as pictured to the right
- If you have lung or heart disease, consider asking your doctor prior to wearing a respirator
- It's important to remember that PPE, such as respirators, should be used as a last resort after additional feasible control methods, such as substituting for a safer material or increasing ventilation, are implemented.



For Additional Information

Contact Gwen Butler, Director, Environmental Health & Safety, at 847.491.4936 with any questions.

Do you or your team have a safety story you'd like to share? Contact Risk Management at gwen.butler@northwestern.edu for details.