

## Types of Respirators

### N95 Filtering Facepiece



Disposable half-mask respirator that covers nose and mouth. Filter out particulates such as dusts and mists. They do NOT protect against gases and vapors. Forms a complete seal with the face (Tight-fitting), air-purifying

### Elastomeric Half Facepiece



Reusable respirator covering nose and mouth. Replaceable filters, or cartridges or canisters are attached to facepiece. Remove particulates, or gases and vapors depending on the type of filters, or cartridges or canisters that are attached. Tight-fitting, air-purifying

### Elastomeric Full Facepiece



Reusable facepiece covers the face and eyes. Attached with replaceable filters, cartridges or canisters. Remove particulates, or gases and vapors depending on the type of filters, or cartridges or canisters that are connected. Tight-fitting, air-purifying

### Powered Air-Purifying Respirators (PAPR)



Uses battery powered blower to pull ambient air through attached filters, canisters or cartridges and then supplies purified air into the respirator. Loose-fitting PAPR does not require fit testing and can be used with facial hair, but requires training prior to use.

## Supplied-Airline Respirator (SAR)



Hood or facepiece connected to a separate clean air source supply from a high volume/high pressure cylinder or compressor through a long hose.  
Can be lightweight and typically used while working for long hours in environments not immediately dangerous to life and health (IDLH)  
Atmosphere-supplying respirator

## Self-Contained Breathing Apparatus (SCBA)



Tight-fitting elastomeric facepiece covering the whole face.  
Respirator is attached with its own breathing air supply from a compressed cylinder carried by the user.  
They are used for entry into or escape from environments that are immediately dangerous to life and health (IDLH).  
Atmosphere-supplying respirator

## Combination Respirators



A combination SAR with a backup SCBA provides users with the highest degree of protection possible.  
These units allow the wearer to escape dangerous atmospheres if the SAR fails during use.  
Atmosphere-supplying respirator

## References:

1. OSHA [1998] 29 CFR 1910.134 Respiratory Protection. Washington, DC: U.S. Department of Labor, Occupational Safety and Health Administration, [https://www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=standards&p\\_id=12716](https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=standards&p_id=12716)
2. NIOSH [2019]. A Guide to Atmosphere-Supplying Respirators. By Cichowicz, J., Cofey, C., and Fries, M. Pittsburgh, PA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. DHHS (NIOSH) Publication No. 2019-174, <https://doi.org/10.26616/NIOSH PUB2019174>
3. Respiratory Protection Program. Western Carolina University Safety and Risk Management. Revised April 2020.
4. Respiratory Protection Manual. The University of Texas Health Science Center at Houston. September 2022.