Occupational Medicine
Environment, Health & Safety
FACILITIES PLANNING & MANAGEMENT
UNIVERSITY OF WISCONSIN–MADISON

Full Face/Half Face Respirator Use and Care Information

Purpose of a respirator is to protect your health but can only do so if used and cared for properly!

Full face or half face (half mask) respirators are reusable respirators that purify the air you breathe using filters or cartridges. This allows you to breathe clean air and prevent illness.

- To provide proper protection, respirators must be selected based on the potential hazard.
- There are filters/cartridges for particulates as well as many gases and vapors.
- Please contact your supervisor or EOH if you are unsure what filter or cartridge is appropriate for your hazard.
- The color of the filter/cartridge indicates the hazard it protects against.
    - A **pink or purple filter/cartridge** can be used to provide protection from particulates like welding fume, wood dust, animal allergens, biological aerosols and lead. The purple/pink color indicates it is a HEPA filters (eg. N, R or P100) will filter out 99.97% of the particles that are 0.3 microns in size
    - A **black label cartridge** is used for protection from organic vapors (OV) like isoflurane or solvents.
    - An **olive green color on the cartridge** usually indicates it protects against formaldehyde (FM), but it may be combined with protection against other hazardous substances so be sure to look for formaldehyde or FM on the label.
    - Many cartridges are “combination cartridges” and provide protection from multiple substances such as particulates and vapors

Respirator use is required due to one or more of the following:

- a supervisor expects staff to wear it,
- exposure levels to contaminants are above the allowable limits, or
- it is required by department work protocols

If respirator use is required, a written respiratory protection plan is necessary. Please contact your supervisor for a copy of your department’s written respirator plan that includes a hazard assessment and a cartridge change out schedule.

Do not use cartridge respirators when:

- There is not enough oxygen
- The air is very dangerous to your life or health
- For tasks other than assigned in written respirator program
- Facial hair is present where the respirator cannot seal against your face

If you are unsure whether a respirator is needed for the task, what respirator type or cartridge/filter to use, or have questions on proper use or cartridge change schedules, contact your supervisor or Environmental and Occupational Health with any questions (eoh@fpm.wisc.edu).

Seal Check

A **user seal check** allows you to test the seal of your respirator each day you wear it. Not every respirator can be checked using both a positive and negative pressure check. Refer to the manufacturer's instructions for conducting user seal checks for your respirator. Basic user seal check instructions are described below.

Positive pressure seal check –Once the respirator is properly put on (donned), put your hands over the exhalation valve. Exhale gently into the respirator. The check is considered satisfactory if a slight positive pressure is being built up inside the respirator without any evidence of outward air leakage at the seal.

Negative pressure seal check – Negative pressure seal checks are conducted by covering the filter or cartridge surface with your hands as much as possible and then inhale. The facepiece should collapse on your face and you should not feel air passing between your face and the facepiece.

Positive Pressure Check Negative Pressure Check

Respirators only work if they fit the wearer, are used only for task assigned, are maintained and worn properly.

- The annual respirator fit test will determine the proper model and size that fits your face.
- Only wear the manufacturer, style, and size respirator that you used during the fit test
- The respirator should be inspected for any defects before use.
- User seal check must be performed **EACH** time the respirator is put on to make sure it is adequately sealed.
- Respirators must be cleaned/sanitized after each use.
- The facepiece should be stored in a clean container (bag/box) between uses.
- Store the facepiece to prevent damage; never fold or bend it
- The filters/cartridges must be replaced regularly to be effective; they cannot be cleaned.
    - Change particulate filters when they become loaded. This may be indicated by increased breathing resistance or visual observation of dust on the filter.
    - Change chemical cartridges often based on a pre-determined change-out schedule in your department's respirator program. Some substances like formaldehyde require daily change out schedules per OSHA.
    - If an unusual taste in the mouth or an odor is detected, leave the hazardous area and change the cartridge immediately.

A helpful video on respirators can be found at:
http://www.youtube.com/watch?v=p1yYmABesZE&context=C3c287b7ADOEgsToPDskKsuctdHm850ogCNbIUXKjj