



# Using Filtering Facepiece Respirators (2020) (commonly known as N95 masks or disposable dust masks)

Air purifying respirators (APR) can be an effective method of protection against specific hazards when properly selected and worn. It is critical to assess all potential hazards in order to understand the limitations of the APR and to be clear on the reason for wearing it. Is it protection against hazardous materials or for comfort?

Filtering Facepiece Respirators (FFP), or disposable dust masks, are designed to filter *only* particulates (liquid or solid airborne contaminants, including dusts, fumes, mists, fibers, fog, pollen, smoke, spores and bioaerosols). **FFP respirators will NOT protect against gases or chemical vapors.** Some manufacturers have incorporated carbon or charcoal layers in the FFP masks; this is only for comfort against nuisance odor. These added layers are not adequate for toxic levels of gases or chemical vapors and they cannot be used for those purposes.

FFP respirators are sometimes purchased to protect against hazards without realizing that they require fit testing as part of an overall Respirator Program. You and/or your employer AND a medical practitioner need to ensure that they are appropriate for the hazard and for your personal medical history.

FFP respirators purchased for comfort are often mistakenly worn for more hazardous tasks, mainly because users have not been informed of the limitations of this type of respirator. Employers are responsible for the proper selection and use of all personal protective equipment, even disposable FFPs.

A disposable FFP respirator is not appropriate if vapor- and/or gas contaminants are present in addition to particulates; for example, working with certain molds that produce microbial volatile organic compounds (MVOCs). Respirators for this type of work must have replaceable cartridges/canisters AND a HEPA (P100) filter incorporated into the cartridge or a dust/mist pre-filter. These respirators are typically half-face or full-face reusable masks.

## If you or your employer and your medical practitioners approve of the use of FFPs for your task, you should know:

- ✓ If the FFP is *required* by occupational exposure limits to protect you from hazardous exposures, you need to be medically evaluated, properly fitted, and trained. See the [Health & Safety Network wiki](#) for information on the AIC Respirator Fit Test program and U.S. Occupational Safety and Health Administration (OSHA) respirator fit test requirements.
- ✓ If the FFP respirator is worn only for *comfort* (i.e., when your exposures are well below the maximum allowable occupational exposure limits established by the OSHA, or in Canada, by the applicable jurisdiction) you still need to wear it safely and keep it clean.
- ✓ FFP respirators do not provide oxygen and must not be used in environments that are Immediately Dangerous to Life or Health (IDLH).
- ✓ No tight-fitting respirator will protect you if there is not a seal. FFP respirators cannot be worn over beards and most styles of facial hair, including stubble and sideburns.
- ✓ Read all instructions provided by the manufacturer on use, maintenance, and warnings as to the FFP limitations. The packaging will tell you for what the respirator can be used.
- ✓ **Do not buy or use an FFP respirator unless the NIOSH label is on the box, package or FFP itself (e.g., NIOSH TC number on the strap).** The packaging and respirator must state that the FFP is certified by the National Institute for Occupational Safety and Health (NIOSH) of the U.S. Department of Health and Human Services. Surgical masks are not respirators; they are approved by the FDA (not by NIOSH).
- ✓ Dispose of your mask when it becomes damaged, dirty or is difficult to breathe through. Do not reuse.
- ✓ Particulate filters are rated for both how well they holdup in oil-mist atmospheres and how efficiently they will capture 0.3 micron size particles, resulting in 9 types of filters:

Three categories of resistance to degradation by oil:	Three levels of filter efficiency:
N (Not resistant to oil)	95% (called "95")
R (Resistant to oil)	99% (called "99")
P (Oil proof)	99.97% (called "100")

- ✓ The most commonly used types are either **N95** (the least efficient) and **P100/HEPA** (the most efficient with almost 100% particle capture). N95 might be appropriate for common cleaning tasks, possibly mold or insect frass unless you are highly allergic. N or P100 might be worn for protection against allergens or heavy dusting.

**If you have any questions about the use of filtering facepiece respirators, or if your job tasks change, contact your supervisor or a safety specialist to be sure the respirator is providing you with the fit and protection that is right for you and the job.**

Have questions about health and safety in your workplace? Write to:  
**health-safety@culturalheritage.org**

### For more information visit:

[http://www.conservation-wiki.com/wiki/Health\\_&\\_Safety](http://www.conservation-wiki.com/wiki/Health_&_Safety)

For material related to masks for use for COVID-19, see [AIC's COVID Pandemic Resources](#)