Respiratory Protection
Use and Maintenance of Filtering Facepiece Respirators

A filtering facepiece is a NIOSH-certified, negative pressure, particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. They differ from other respirators because the filtering media itself is the mask. Negative pressure means that the flow of air through the filter is achieved via inhalation. This type of respirator is commonly used for protection against bioaerosols and dusts.

General Considerations
As with other types of respiratory protection devices, required use of this type of respirator is contingent upon medical qualification, fit-testing and training. Voluntary use of a filtering facepiece is not subject to medical qualification or fit-testing and training is abbreviated to require only that users receive and read the EHS Guidance Sheet, Respiratory Protection - Voluntary Use of Respiratory Protection Equipment (or 29 CFR 1910.134, Appendix D).

Types of Filtering Facepiece Respirators
There are several types of filtering facepiece respirators. The type of filtering facepiece respirator is distinguished with both a letter designation (N, R, P) indicating resistance to oil degradation and a filtering efficiency (95%, 99%, 100%). Selection of filter efficiency depends on how much filter leakage can be accepted. Higher filter efficiency means lower filter leakage.

The selection of N-, R-, and P-series filters depends on the presence or absence of oil particles, as follows:

- If no oil particles are present in the work environment, use a filter of any series (i.e., N-, R-, or P-series).
- If oil particles (e.g., lubricants, cutting fluids, glycerin, etc.) are present, use an R- or P-series filter.

Limitations Applicable to All Filtering Facepiece Respirators
Filtering facepiece respirators are not appropriate and cannot be used for gases and vapors, asbestos, arsenic, cadmium, lead, 4,4'-methylene dianiline (MDA) or sandblasting. N-series respirators may not be used in environments containing oil aerosols. R-series respirators may be use atmospheres containing oil, but may not be used for more than 8-hours or one shift. P-series filters used in environments where oil aerosols are present are time-limited in accordance with

the manufacturer's guidance and in consideration of hygiene, breathing resistance and filter condition.

Donning the Equipment

Employees are not permitted to wear tight-fitting respirators if they have any condition that prevents them from achieving a tight seal, including facial hair, facial scars or missing dentures. Glasses or goggles should be worn in a way that doesn't interfere with the seal.

- Inspect the respirator to verify that it is not damaged, deformed or soiled prior to use.
- The filter should be free of holes other than the punctures around staples. Enlarged holes resulting from ripped or torn filter material around staple punctures are considered damage. Do not use the respirator if damaged, deformed or soiled.
- When donning the respirator, determine whether the straps hold the respirator tightly against the face, and if the metal nose clip (if applicable on the chosen model) is in place and functions properly. If not, discard the respirator.
- Conduct seal checks in accordance with the manufacturer's procedures each time the respirator is donned.
- Employees should leave a contaminated area if the respirator needs to be changed.

Working While Wearing the Equipment

While using filtering facepiece respirators, if breathing becomes more difficult and the facepiece collapses slightly when inhaling, it is a sign that the respirator needs to be replaced. Leave the area and replace the respirator.

Additional Information Regarding Respirators Used for Infection Control Purposes

It is important that healthcare workers understand the significant functional difference between surgical masks and surgical N95 respirators. Surgical masks are not designed to prevent inhalation of airborne contaminants, and are not certified by NIOSH as respirators (although they are approved by FDA as a medical device). They are designed to trap large particulates (i.e., respiratory secretions) that are expelled by the wearer or as a physical barrier to protect against splashes of blood or bodily fluids.

A surgical N95 respirator is certified by NIOSH as a respirator and approved by FDA as a medical device. These types of devices are designed to filter particulates (airborne bacteria and viruses) from the air and protect the wearer from exposure.