



NIOSH APPROVED PARTICULATE FILTERING FACEPIECE RESPIRATOR TRAINING HANDOUT

Respiratory protection, when properly fitted and worn, can be an effective means to protect individuals from infectious diseases that are transmitted through airborne infectious particulates.

A risk assessment must be conducted by the PI/Supervisor and/or EHSO to determine if a respirator is required and what type of respirator is appropriate to the hazardous conditions present.

Contact [Kaka'ako EHSO](#) with any questions regarding respirators.

WHAT TYPES OF NIOSH APPROVED PARTICULATE FILTERING FACEPIECE RESPIRATORS ARE AVAILABLE?

The National Institute for Occupational Safety and Health, CDC (NIOSH) tests and rates respirators. There are seven classes of filters for NIOSH-approved filtering facepiece respirators available at this time, 95% being the minimal level of filtration that will be approved by NIOSH. The N, R and P designations refer to the filter's oil resistance as described in the table below.

- Only use NIOSH approved respirators.
- Particulate filtering facepiece respirators do not protect against vapors or gasses.

The table below provides a listing of NIOSH-approved particulate filtering facepiece respirators. Click on the Class to link to a CDC NIOSH webpage which provides a listing of NIOSH approved respirators.

Class	Description
N95	Filters at least 95% of airborne particles. Not resistant to oil.
N99	Filters at least 99% of airborne particles. Not resistant to oil.
N100	Filters at least 99.97% of airborne particles. Not resistant to oil.
R95	Filters at least 95% of airborne particles. Somewhat resistant to oil.
P95	Filters at least 95% of airborne particles. Strongly resistant to oil.
P99	Filters at least 99% of airborne particles. Strongly resistant to oil.
P100	Filters at least 99.97% of airborne particles. Strongly resistant to oil.

WHAT NEEDS TO BE DONE BEFORE YOU CAN WEAR A RESPIRATOR?*

Prior to using a respirator, you must have:

- Medical clearance confirming that an employee is physically able to wear a respirator during work
 Date: _____
 Medical Clearance is on file with: _____
- Fit testing to determine if the respirator fits properly on the employee's face. This must be done at least annually and anytime there is a change in the type or model/make of the respirator, when the risk to the employee changes, when the work environment changes, or when changes in the employee's physical conditions (weight loss or gain, facial scarring, etc.) could affect the fit of the respirator.
 Fit test date: _____
 Make and model of respirator fit tested: _____
 Fit Tester: _____ Fit test method: _____
 Comments: _____
- Initial training on the selection, use, storage, and limitations of the respirator used.
 Annual refresher training is required.



*If a respirator is not required by the employer, it is not necessary to protect the health of the employee, and you voluntarily choose to wear a disposable, filtering facepiece respirator such as a N95, you must read and understand OSHA 1910.134 Appendix D (attached). Date read: _____

Individuals with chronic respiratory, cardiac, or other medical conditions that make it harder to breathe should check with their healthcare provider before using an N95 respirator because the N95 respirator can require more effort to breathe. Some models have exhalation valves that can make breathing out easier and help reduce heat build-up.

N95 RESPIRATOR VS. FACEMASKS



Example of Facemask



Example of N95 Respirator

Facemasks are loose-fitting, disposable masks that cover the nose and mouth. These include products labeled as surgical, dental, medical procedure, isolation, and laser masks. Facemasks help stop droplets from being spread by the person wearing them. They also keep splashes or sprays from reaching the mouth and nose of the person wearing the facemask. They are not designed to protect you against breathing in very small particles. Facemasks should be used once and then thrown away in the trash. Wash your hands after handling the used mask.

While a facemask may be effective in blocking splashes and large-particle droplets, a facemask, by design, does not filter or block very small particles in the air that may be transmitted by coughs, sneezes or certain medical procedures. Facemasks also do not provide complete protection from germs and other contaminants because of the loose fit between the surface of the facemask and your face. Facemasks, though they may resemble a respirator, must not be confused with a N95 respirator; surgical masks are not certified as protective against airborne diseases.

A respirator (e.g., a N95 filtering facepiece respirator) is designed to protect you from breathing in very small particles, which might contain viruses. These types of respirators fit tightly to the face so that most air is inhaled through the filter material. To work the best way, N95 respirators must be specially fitted for each person who wears one (this is called "fit-testing" and is usually done in a workplace where respirators are used). N95 respirators are commonly used in construction and other jobs that involve dust and small particles. Some healthcare workers, such as nurses and doctors, use these types of respirators when taking care of patients with diseases that can be spread through the air.

There are two basic types of N95 respirators, "molded" and the "folding" types.



Folding w/ exhalation valve



Folding w/o exhalation valve



Molded w/ exhalation valve



Molded w/o exhalation valve

RESPIRATOR EFFECTIVENESS

Respirators are only effective when the seal around your nose and mouth/chin is tight. If you have doubts or concerns about the fit, do not enter the containment areas and consult your supervisor or EHSO immediately.



A respirator cannot be worn by employees with facial hair that comes between the sealing surface of the mask and face. Bearded employees must consult EHSO for information about alternative respiratory protection.

DONNING A "MOLDED TYPE" N95 RESPIRATOR (follow manufacturer's recommendations)

WASH YOUR HANDS.

Inspect the respirator:

- Check the facepiece for cuts, tears, frays, dirt, etc.
- Check for damage or missing components
- Check the elasticity of the headbands

Don the respirator:

- Cup the respirator in your hand with the nosepiece at your fingertips
- Position the respirator under your chin with the nosepiece up
- Pull the top strap over your head so it rests high on the back of your head so it rests high on the back of your head
- Pull the bottom strap over your head and position it around your neck below your ears
- Using two hands mold the nosepiece to the shape of your nose.

DONNING A "FOLDING TYPE" N95 RESPIRATOR (follow manufacturer's recommendations)

WASH YOUR HANDS.

Inspect the respirator:

- Check the facepiece for cuts, tears, frays, dirt, etc.
- Check for damage or missing components
- Check the elasticity of the headbands

Don the respirator:

- Separate the edges of the respirator to fully open it
- Slightly bend the nose wire to form a gentle curve
- Hold the respirator upside down to expose the two headbands
- While holding the headbands with your index fingers and thumbs, cup the respirator under your chin
- Pull headbands up over your head
- Release the lower headband from your thumbs and position it at the base of your neck
- Position the remaining headband on the crown of your head
- Confirm the nosepiece across the bridge of your nose by firmly pressing down with your fingers
- Continue to adjust the respirator and secure the edges until you feel you have achieved a good fit

SELF FIT CHECK PROCEDURE (follow manufacturer's recommendations)

- Place your hands over the outside of the mask
- Forcefully inhale and exhale several times. The mask should collapse and expand
- If the respirator does not collapse and expand, or if air is leaking out between your face and the respirator, then this is not a good fit. You should adjust the respirator until the leakage is corrected and you are successfully able to fit check the respirator.

STORING THE RESPIRATOR

When not in use, respirators should be sealed in plastic bags and stored in a single layer with the face piece and exhalation valve (if applicable) in a non-distorted position. The bag must be labeled with the employee's name and a log shall be used to track the usage time.

If the respirator is used for protection against infectious agents, the respirator should not be reused. The respirator should be carefully removed, bagged, and placed into the trash or autoclaved. Wash your hands immediately after handling the respirator.



WHEN TO GET A NEW N95 RESPIRATOR

Respirators should be changed or discarded if:

- The employee experiences a significant increase in the amount of resistance to breathing
- The respirator collapses due to excess moisture
- The employee senses breakthrough
- The respirator is visibly soiled or distorted
- The respirator no longer seals to the user's face
- You have exceeded the manufacturer's service life or 8 hours

LIMITATIONS OF N95 RESPIRATORS

- If the respirator becomes wet, soiled, or exposed to oil aerosols, it must be discarded
- Does not protect against hazardous vapors or gases (vapors or gases will pass through the particulate filtering facepiece)
- Does not supply oxygen and therefore must not be worn in an atmosphere with less than 19.5% oxygen
- Cannot be used in concentrations of contaminants that are immediately dangerous to life and health (IDLH)
- Cannot be used with beards, facial hair, or other conditions that prevent a good seal between the face and the respirator