

FREQUENTLY ASKED QUESTIONS REGARDING N95 RESPIRATORS

Q. What is an N95 respirator?

- A. The N95 respirator is an air-purifying respirator (APR) certified by the National Institute for Occupational Safety and Health (NIOSH), otherwise known as a filtering facepiece respirator.

Q. What does an N95 respirator protect against?

- A. The N95 is designed to protect against particulate matter such as dust, fumes, mists, aerosols, and smoke. It is also effective against biological particles such as pollen, mold spores, bacteria, viruses, animal dander and allergens. It is effective against aerosolized droplets, in particular, smaller droplets which evaporate to form droplet nuclei.

Q. What does an N95 respirator NOT protect against?

- A. The N95 is not effective against gases and vapors. Examples of gases include methane and carbon monoxide. Vapors may include chemicals such as organic solvents and formaldehyde.

Q. What does the N in N95 stand for?

- A. Particulate respirators and cartridges are classified by NIOSH into three classifications, N, R, and P.
- N class respirators/cartridges are not resistant to oil mists.
 - R class respirators/cartridges are resistant to oil mists (<8 hours).
 - P class respirators/cartridges are oil proof (>8 hours).

Q. What does the 95 in N95 stand for?

- A. 95 refers to the efficiency of the filtration medium of the respirator or cartridge, i.e. it filters at least 95% of 0.3µm particles at 85 lpm. The percent efficiency is also equal to 100% minus leakage. Thus, an N95 has 5% leakage. Respirators/cartridges are available in other particle efficiencies such as 99 and 100.

Q. Can the N95 respirator filter small particles?

- A. Yes. The N95 respirator can filter particles less than 0.3µm as well as particles above 0.3µm. The N95 is least efficient against particles in the 0.3µm size range.

Q. What is the difference between an N95 respirator and a surgical mask?

- A. There are a number of differences:
- Surgical masks are primarily designed to prevent biological particles from being expelled by the wearer into the environment.
 - Surgical masks are also used to protect the wearer from droplet transmission. Droplet transmission occurs when larger particles (>5 µm) containing infectious agent are propelled through the air and deposited on conjunctivae, nasal mucosa, or mouth.
 - An N95 is designed to protect the wearer from inhalation hazards, i.e. particles less than 5 µm in size such as droplet nuclei.
 - A number of N95 respirators are also approved as surgical masks.

Q. When should I wear an N95 respirator?

- A. The N95 should be worn if there is a potential to be exposed to inhalation hazards or high concentrations of particulates (e.g., heavy dust).

Q. When should a health care provider wear an N95 respirator?

- A. Health care providers should wear an N95 respirator:
- when a patient presents with a cough and fever
 - when a patient is known to have a highly transmissible or infectious respiratory agent
 - if patient was recently in a foreign country
 - if the health care provider must perform an aerosol-generating procedure

Q. What are some laboratory and health-care procedures which may generate aerosols?

- A.** Examples of aerosol-generating procedures used by health care providers which could increase the dissemination of droplet nuclei include: endotracheal intubation, administration of aerosolized or nebulized medication, sputum induction, bronchoscopy, airway suctioning, tracheostomy care, chest physiotherapy, nasopharyngeal aspiration, positive pressure ventilation via face mask (e.g., BiPAP, CPAP), high-frequency oscillatory ventilation, resuscitation, postmortem excision of lung tissue.

Examples of aerosol-generating procedures used by laboratorians include vortexing, centrifugation, and the handling of specimens.

Q. Under what circumstances should I NOT wear an N95 respirator?

- A.** In the following situations, for the following reasons:

- N95 respirators do not provide oxygen; therefore, they should never be worn in an oxygen-deficient atmosphere such as a confined space.
- N95 respirators only protect against particulates; therefore, they should never be worn in an atmosphere containing toxic levels of gases or vapors.
- N95 respirators should never be worn in an atmosphere in which the hazards are not known, i.e. a fire, explosion, or spill of an unknown chemical.
- N95 respirators should not be used in certain industrial applications such as asbestos removal, sandblasting or painting.

Q. Who should NOT wear an N95 respirator?

- A.** The following persons:

- Children.
- Anyone restricted for medical reasons from wearing an N95.
- Patients and visitors.

Q. What are some limitations of the N95 respirator?

- A.** Some limitations include:

- Some infectious agents may be transmitted through the skin or eyes; therefore, other protective equipment may be necessary.
- Wearer must be clean-shaven so that the N95 seals tightly to the face. Beard, stubble, or long mustaches may cause leaks.
- Wearer must be trained initially and annually on the proper use and limitations, including practice donning and doffing the N95.

Q. How do I check the fit and seal of the N95 respirator?

- A.** Respirator fit is checked by performing a “fit test” before wearing an N95 and annually thereafter. A “fit test” is performed in conjunction with annual training. The “fit test” is specific to the make, model, and size of N95 respirator.

Additional Notes

If wearer’s face changes during the year (e.g., major weight loss or gain) another “fit test” should be performed. Wearer should follow the manufacturer’s donning instructions and perform a “user seal check” before entering the contaminated environment.

Q. How long can I wear the N95 respirator?

The N95 can be worn until damaged, breathing becomes difficult, or contaminated with blood or bodily fluids.

Q. What about storing the N95 respirator?

- A.** Store the N95 in a clean environment to protect it from damage, contamination, dust, sunlight, extreme temperatures, and damaging chemicals. The N95 respirator must also be stored to prevent deformation of the respirator.

Q. How do I dispose of the N95 respirator?

- A.** Respirators should be disposed of in accordance with policies and procedures determined by your work area.