
N95 Respirator Fit Testing Frequently Asked Questions (FAQs) 3.25.2021 1530

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Q: What is a fit test?

A: A fit test is a test protocol conducted to verify that a respirator is both comfortable and correctly fits the user. Fit testing uses a test agent, either qualitatively detected by the wearer's sense of taste/smell or quantitatively measured by an instrument, to verify the respirator's fit.

Q: Why do I need to be fit tested?

A: Fit testing each model of respirator a team member will wear before use is important to ensure the expected level of protection is provided by minimizing the contaminant leakage into the facepiece. The benefits of fit testing include better protection for team members and verification that the team member is wearing a correctly fitting model and size of respirator. Higher than expected exposures to a contaminant may occur if users have poor face seals with the respirator, which can result in excessive leakage.

Q: What are the two types of fit testing methods? Is one better than the other?

A: Fit test methods are classified as either qualitative or quantitative. A qualitative fit test is a pass/fail test to assess the adequacy of respirator fit and relies on the individual's sensory detection of a test agent. A quantitative fit test numerically measures the effectiveness of the respirator to seal with the wearer's face, without relying on the wearer's voluntary or involuntary response to a test agent.

Both qualitative and quantitative fit tests are approved methods. One type of fit testing may be chosen over the other depending on respirator supply, availability of equipment or fit test kits, and scheduling.

Q: Can I wear any N95 once I am fit tested with one? What if it is a similar model and the same size?

A: No. A fit test only qualifies the user to don (put on) the specific brand/make/model of respirator with which an acceptable fit testing result was achieved. Users should only wear the specific brand, model, and size respirators that he or she wore during successful fit tests.

[Note: respirator sizing is variable and not standardized across models or brands. For example, a medium in one model may not offer the same fit as a different manufacturer's medium model.]

Q: What is the difference between a fit test and a user seal check?

A: A fit test helps to verify that the selected respirator can achieve an acceptable fit on a particular wearer's face. A user seal check is performed by the wearer every time the respirator is donned, to help the wearer confirm that the respirator is donned correctly and has sealed to the face.

Q: What do I need to bring to a fit test appointment?

A: Bring any PPE that you will wear during use of your respirator (e.g. goggles, face shield, etc.) and wear these items during your fit test. This ensures that the respirator—with which you pass fit testing—will fit during typical work activities. You may also bring an ID and appointment confirmation just in case.

Q: How long does a fit test take?

A: The fit testing process can take anywhere from 10 to 20 minutes.

Q: Why is there a 5-minute waiting period before the fit test?

A: There are two portions to a fit test:

- (1) Comfort Assessment: The fit test subject dons a respirator for a duration of five minutes to assess comfort and fit during which time the fit tester will describe the test procedures, the test subject's responsibilities, and the aspects of respirator fit on which to focus. This 5-minute period is vital for team members to be able to identify any issues with the selected respirator that they would notice during normal wear. Please see attached list for comfort and fit points to review at this stage.
- (2) Fit Testing Exercises: The fit tester walks the team member through fit testing exercises with either the qualitative or quantitative method.

Q: Will I have to be fit tested again?

A: Fit testing is generally required on an annual basis. Because of the limited availability of N95s due to the COVID-19 pandemic, Spectrum Health has had to get creative in sourcing respirators to protect team members. Unfortunately, this means that team members may need to be fit tested on multiple occasions as previous N95 models become unavailable.

Fortunately, Spectrum Health now anticipates a steady supply of N95s. This supply will be shifting from industrial N95s (Models 8210 and 9205) to medical-grade N95s (Models 1860 and 1870) over the coming months. That means that team members may need to be fit tested again when medical-grade N95s become widely available within Spectrum Health. Once supplies reach an equilibrium, fit testing will revert to an annual requirement.

Q: What if I have facial hair? Do I have to shave?

A: Facial hair between the skin and the face seal of the respirator interferes with the seal of tight-fitting respirators and causes opportunities for leakage. Because of a supply shortage of loose-fitting powered air-purifying respirators (PAPRs), we need more team members to utilize N95s if they are able. Team members should follow the facial hair requirements below based on COVID-19 surges and command center status changes:

COVID-19 Status	Facial Hair Requirement Changes
Green	Team members requiring respiratory protection are encouraged to shave their facial hair according to CDC-approved facial hair guidance to complete fit testing for an N95. Those who are not able to shave for fit testing will be assigned a PAPR while in supply.

Yellow	Team members in prolonged contact with or caring for COVID-19 patients or PUI must comply with the CDC-approved facial hair guidance and complete fit testing for an N95.
Red	All patient care team members must comply with the CDC-approved facial hair guidance and complete fit testing for an N95.

[Note: At any COVID-19 status, team members who wish to request a religious or medical/disability accommodation should do so by contacting Employee Health Services when you are required to be compliant.]

For more details and the most up to date information, check the [N95 Toolkit](#).

Q: How can I get the bitter taste out of my mouth after a qualitative fit test?

A: The taste of denatonium benzoate (Bitrex™) can be countered with chocolate. Eating chocolate should be done only after the entire fit test protocol is complete.

Q: Should fit testers disinfect the equipment between fit tests?

A: Yes, 3M, the manufacturer of the fit test equipment recommends the following:

- Between each fit test, disinfect the inside surface of hoods and the outer surfaces of nebulizer nozzles, using a disinfectant from the list of [products that meet EPA criteria for use against SARS-CoV-2](#), or one approved by a similar local authority outside the U.S.
- Alternatively, fit testers can disinfect using sodium hypochlorite solution (at a free chlorine concentration of 5,000 ppm) with 1-minute contact time, or 70% Isopropanol solution with 1-minute contact time.
- At the end of the fit test session, unused solution should be discarded and any remaining solution from the nebulizer should be cleaned out, per the fit test kit User Instructions

Q: During a qualitative fit test, will the nebulizer bulb pull infectious particles in and then re-aerosolize them during a fit test?

A: 3M, the manufacturer of the fit test nebulizer and hood, is not aware of any studies or evidence that shows that the use of a qualitative fit test nebulizer, which has been externally disinfected between each fit test, increases a team member's risk of exposure.

Spectrum Health exclusively utilizes N95 respirators without exhalation valves. This means that any exhaled air by a previous fit test subject would be filtered before reaching the nebulizer. The team member being fit tested is also wearing an N95 respirator, which would filter the air before it reaches the team member.

Q: Is fit testing safe during pregnancy?

A: Bitrex™ (denatonium benzoate) is nontoxic and completely digestible. It is used as a taste aversion agent to prevent children from ingesting certain household products and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers.

Q: If I work in surgery, why am I being fit tested for two separate respirators?

A: The limited stock of surgical N95s needs to be preserved by only using surgical respirators

when necessary. Team members need to be able to quickly grab a non-surgical N95 when needed in a non-surgical area and when the surgical respirators may not be available in that location

Q: Where can I find more resources about fit testing and respirators in general?

A: Below are some links to resources to help you navigate through respirator use and fit testing during the pandemic:

- [Health Care Professionals Resources](#), including the [N95 Toolkit](#)
CDC's Blog: [The Need for Fit Testing During Emerging Infectious Disease Outbreaks](#)

Items to Consider During the Comfort Assessment Portion of the Fit Test

MIOSHA Respiratory Protection lists the following two sections regarding the comfort assessment. The fit tester should walk the test subject through these points while assessing comfort for each respirator to be fit tested:

- Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose
 - (b) Room for eye protection
 - (c) Room to talk
 - (d) Position of mask on face and cheeks
- The following criteria shall be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed;
 - (b) Adequate strap tension, not overly tightened;
 - (c) Fit across nose bridge;
 - (d) Respirator of proper size to span distance from nose to chin;
 - (e) Tendency of respirator to slip;
 - (f) Self-observation in mirror to evaluate fit and respirator position.

Team members should also use this time frame to try on additional PPE that they would typically wear while wearing a respirator to ensure the fit is not affected.