N95 Fit Testing Requirements

The N95 respirator is the most common of the seven types of particulate filtering facepiece respirators. It filters at least 95% of airborne particles but is not resistant to oil. N95 respirators which are approved by the National Institute of Occupational Safety and Health (NIOSH) and also are cleared by the Food and Drug Administration (FDA) are referred to as “surgical N95 respirators.” Additional information about the respirator is available on the CDC NIOSH website listed below. During the COVID-19 emergency, the FDA issued emergency use authorizations for NIOSH-approved, non-FDA cleared respirators and for specific respirators manufactured outside the U.S. that are considered N95-equivalent.

An employer who requires employees to wear respirators is required by OSHA and Cal/OSHA to have a written respirator protection program, to provide staff training and to have staff fit tested. Initial fit testing remains a requirement under the current emergency.

The applicable Cal/OSHA regulations are Aerosol Transmissible Diseases (Section 5199) and Respiratory Protection (Section 5144). If an employer requires an employee to wear an N95 respirator, then the following steps must be followed to comply with Cal/OSHA regulations:

1. Employer provides a medical evaluation to the employee to determine the employee’s ability to use a respirator. The employer must identify a licensed health care professional to perform the evaluation using a questionnaire. The questionnaire must gather the information described in Appendix C of the Respiratory Protection regulation.
   a. The confidential medical evaluation must be conducted during normal working hours or at a time and place convenient to the employee.
   b. The employer or supervisor may not view an employee’s responses to the questionnaire. The employee must be provided with an opportunity to discuss the questionnaire and examination results with licensed health care professional.
   c. If an employee gives a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C, the employer must provide a follow-up medical examination. The follow-up examination shall include any medical tests, consultations, or diagnostic procedures that the licensed health care professional deems necessary to make a final determination.
   d. The employer shall provide to the licensed health care provider before the provider makes their recommendation:
      i. The employer’s written respiratory protection program and a copy of the Respiratory Protection regulation.
      ii. The type and weight of the respirator to be used by the employee.
      iii. The duration and frequency of respirator use.
      iv. The expected physical work effort.
v. Additional protective clothing and equipment to be worn.

vi. Temperature and humidity extremes that may be encountered.

e. The licensed health care provider transmits a written recommendation to the employer regarding an employee’s ability to use the respirator. The recommendation shall only provide the following information:

i. Any limitations on respirator use related to the employee’s medical condition or related to the workplace conditions.

ii. The need for follow-up medical evaluations, if any.

iii. A statement that the employee was provided with a copy of the licensed health care provider’s recommendation.

f. If the respirator the employee is to use is a negative pressure respirator and the licensed health care provider finds a medical condition that may place the employee’s health at increased risk if the respirator is used, the employer must provide a powered air-purifying respirator (PAPR) if the medical evaluation finds that the employee can use one. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the employer is no longer required to provide a PAPR.

2. Additional medical evaluations are required, at a minimum, when:

a. An employee reports medical signs or symptoms related to their ability to use a respirator.

b. The licensed health care provider, program administrator or supervisor recommends reevaluation.

c. Information from the respirator program, including observations made during fit testing and program evaluation, indicates a need.

d. Change occurs in workplace conditions that may substantially increase the physiological burden on an employee.

3. Employer must perform either quantitative or qualitative fit tests in accordance with Cal/OSHA regulations. The test must follow the protocols described in Appendix A of the Respiratory Protection regulation. The following steps must precede the fit test:

a. The employee to select an acceptable respirator that will fit them.

b. The employee is shown how to put on the respirator and to ensure it is an acceptable and comfortable fit.

c. The employee performs seal checks.

d. The employee performs a series of exercises while wearing the respirator. The exercises are described in Appendix A.
Fit test kits are available for sale, but a dental practice may want to consider hiring an industrial hygienist to conduct the test. Cal/OSHA requires employers to ensure that persons administering the qualitative fit test are able to prepare test solutions, calibrate equipment, perform tests properly, recognize invalid tests and ensure that test equipment is in proper working order. The requirements are similar if conducting a quantitative fit test.

When quantitative fit testing is performed, the employer shall not permit an employee to wear a filtering facepiece respirator or other half-facepiece respirator, unless a minimum fit factor of one hundred (100) is obtained. When fit testing single use respirators, a new respirator shall be used for each employee.

The employer must ensure that each employee who is assigned to use a filtering facepiece or other tight-fitting respirator passes a fit test:

1. At the time of initial fitting.
2. When a different size, make, model or style of respirator is used.
3. At least annually thereafter.

   Note that the annual fit test requirement is suspended for the duration of the COVID-19 emergency.

A dental practice may contact a local occupational medical clinic to conduct the medical evaluation and an industrial hygienist to perform the fit testing.

Resource

CDC NIOSH, Respirator Trusted-Source Information, Section 3: Ancillary Respirator Information, https://www.cdc.gov/niosh/npptl/topics/respirators/disp_part/respsource3healthcare.html#e, accessed April 15, 2020

---

\(^1\) NIOSH-Approved N95 Particulate Filtering Facepiece Respirators, cdc.gov/niosh/npptl/topics/respirators/disp_part/n95list1.html.
