

Quick Reference Card

Fit Testing



Before an employee uses any respirator with a negative or positive pressure tight-fitting facepiece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.

1. **A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.**



2. **An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.**



3. **Employees using tight-fitting facepiece**

respirators must pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT):

- prior to initial use,
 - whenever a different respirator facepiece (size, style, model or make) is used, and
 - at least annually thereafter
4. **Must conduct an additional fit test whenever the employee reports, or the employer or PLHCP makes visual observations of, changes in the employee's physical condition (e.g., facial scarring, dental changes, cosmetic surgery, or obvious change in body weight) that could affect respirator fit**
 - The fit test must be administered using an OSHA-accepted QLFT or QNFT protocol contained in Appendix A **QLFT Protocols:** Isoamyl acetate
 - Saccharin
 - Bitrex
 - Irritant smoke
 - **QNFT Protocols:** Generated Aerosol (corn oil, salt, DEHP)
 - Condensation Nuclei Counter (PortaCount)
 - Controlled Negative Pressure (Dynatech FitTester 3000)
 - Controlled Negative Pressure (CNP) REDON
 5. **A quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio:**

$$\frac{\text{Concentration of a substance in ambient air}}{\text{Concentration inside the respirator when worn}}$$
 6. **QLFT may only be used to fit test negative pressure APRs that must achieve a fit factor of 100 or less**
 7. **If the fit factor is determined to be equal to or greater than 100 for tight-fitting half facepieces or equal to or greater than 500 for tight-fitting full facepieces, the QNFT has been passed with that respirator**

