

# TRAINING IS THE KEY TO A GOOD FIT TEST PROGRAM

APPLICATION NOTE ITI-031

Many people who know about respirator fit testing assume that the objective of a fit test is facepiece sizing, i.e., finding out if a particular individual should use a small, medium or large respirator. While this view certainly identifies an important element of fit testing, it is not the only one, or even the most important.

The primary reason to fit test an individual is to verify that he or she has been trained to wear a respirator and has in fact learned how to don the facepiece correctly. Facepiece sizing is certainly important, but secondary. If a person does not know how to use the equipment, the protection level afforded will be compromised regardless of whether or not the facepiece is the right size.

A good respiratory protection program includes respirator-specific training for individuals who must wear a respirator. Some organizations hold day-long classes and others may spend a shorter time, but without exception, the employees are taught the why and wherefore of respirator usage, and are given a chance to work with the respirators.

A fit test should be thought of as a final examination. Students go through a training course that includes classroom instruction and hands-on practice, and then take an exam to determine if they really learned the material. At the same time, assuming they don the respirator correctly, they find out which size facepiece is right for them.

Some respiratory protection program administrators do not fully comprehend the training aspect of fit testing. Employees, especially new hires, are ushered into a fit test area where someone puts a respirator on their face for them and adjusts the straps. A fit test is performed and, if the result is favorable, the person is excused. The employee may have never seen a respirator before. Fit tests tend to be administered much like a hearing test where prior training of the testee is obviously not necessary: One thing is certain: You can't show up prepared for a fit test by just bringing your face like you can for a hearing test by just bringing your ears! What will happen when the time comes for that person to don a respirator? No one will be there to put the respirator on the employee and he or she won't know how to do it without help.

This example illustrates a situation where the primary purpose for the fit test has been disregarded either through naiveté or negligence. Emphasis on the secondary and much less important function of facepiece sizing has caused a potentially dangerous situation for this employee and for the organization. After multiplying the risk by the number of untrained employees wearing respirators it's easy to see the gravity of the situation and the uncomfortably high probability that someone will sooner or later be overexposed to hazardous materials.

There are cases where performing a fit test on a person who has not had any respirator training is acceptable: This occurs when the test is part of a pre-employment physical done solely to determine if the person is capable of obtaining an acceptable facepiece seal. Upon hiring, the individual is later provided with the appropriate training and subsequent thorough fit test.



Another critical element of a good fit testing program that is too frequently overlooked is the issue of training the people who conduct the fit test. An organization's fit testing program is only as good as its weakest component. The expertise of the test conductor can make the difference between a mediocre program and a great one.

One lamentable scenario sometimes occurs at organizations large enough to operate their own medical clinic. The industrial hygienist in charge of the respiratory protection program delivers a PORTACOUNT<sup>®</sup> respirator Fit Tester to the clinic tells the staff to include fit testing along with the usual pulmonary function, hearing and other tests and then disappears.

This often results in poorly conducted fit tests because the clinic staff usually has no background whatsoever in respiratory protection. To provide a proficient fit test the people conducting the test must be well aware of the issues and ramifications involved. They need to know why the test is necessary and why it's important. They need to know what to do, and just as importantly, what not to do. They need to know how to properly wear a respirator themselves so they will be able to quickly determine why a particular individual may be failing the fit test: is the mask the wrong size or is it not being worn properly?

A fully trained test conductor will greatly improve the efficiency and quality of your fit testing operations. Time will not be wasted trying to fit the wrong size respirator or by re-testing several different facepieces when the problem is really one of donning competence. The condemnable practice of re-testing a person with the same facepiece more than a few times until a marginal passing result is finally achieved will not occur. Scheduling headaches will be fewer and the process will flow more smoothly.

One simple way to dramatically improve a fit testing program is to have the person(s) who conduct the fit tests attend a one to three day seminar on the subject. There's a lot more to fit testing than just pressing the buttons on a respirator fit testing instrument.

If you feel that your organization's respiratory protection program could use improvement, help is available from a number of sources. Several organizations offering respiratory protection and fit test training are listed below.

## Organizations Offering Respiratory Protection and/or Fit Testing Seminars

<p><b>Bevis Respirator Consultants</b>  3010 Cowely Way #106  San Diego, CA 92117  (619)275-2442  <a href="http://www.bevis.org">www.bevis.org</a></p>	<p><b>Coastal Safety and Health Services, Inc.</b>  114 Pidgeon Hill Road, Suite 170  Potomac Falls, VA 20165  (800)368-0335</p>
<p><b>Emilcott Associates Inc.</b>  466 Southern Blvd.  Chatham, NJ  07928  (800)886-3645  <a href="http://www.emilcott.com">www.emilcott.com</a></p>	<p><b>Emilcott-dga Inc.</b>  285 N. State Street, Unit 201  Westerville, OH 43081-1448  (614)890-0800</p>
<p><b>University of Cincinnati</b>  Center for Occupational Health  P.O. Box 670458  Cincinnati, OH 45267-0458  (513)558-1234  <a href="http://www.DrMcKay.com">www.DrMcKay.com</a></p>	<p><b>Canadian Standards Association</b>  5060 Spectrum Way, Suite 100  Mississauga, Ontario, Canada  (416)747-4017  <a href="http://www.csa.ca">www.csa.ca</a></p>
<p><b>Southern Research Institute</b>  HLSCG  P.O. Box 1094  Jacksonville, AL 36265  (256)435-8468  <a href="http://www.sri.org/hls">www.sri.org/hls</a></p>	<p><b>Ce/Ci Training &amp; Services Inc.</b>  277 Labelle Blvd., Suite 205  Rosemere, Quebec, Canada  J7A 2H3  (450)433-2324</p>
<p><b>Georgia Tech Research Institute</b>  Environmental Science and  Technology Laboratory  Atlanta, GA 30332  (404)894-3806</p>	<p><b>Levitt Training &amp; Consulting</b>  2872 Bristol Circle  Oakville, Ontario, Canada  L6H 5T5  (800)268-6196 x3555  <a href="mailto:training@levitt-safety.com">training@levitt-safety.com</a>  <a href="http://www.levitt-tc.com">www.levitt-tc.com</a></p>
<p><b>DMR Environmental Health &amp; Safety LLC  Training &amp; Consulting</b>  Elk River, MN 55330  cell: (763)587-8844  office: (763)222-3679  <a href="mailto:marc_pehrson@DMREnvironmentalhealth.com">marc_pehrson@DMREnvironmentalhealth.com</a></p>	<p><b>Raeco LIC LLC</b>  135 Bernice Drive  Bensenville, IL 60106-3366  (815)464-6200  (800)852-9795  fax: (815)464-8720  <a href="http://www.raeco.com">www.raeco.com</a>  <a href="mailto:sales@raeco.com">sales@raeco.com</a></p>



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