

ISRP 2002 abstract

Presenter/author	Title	Abstract
<p>Crutchfield, Clifton D. Kautz, Donald W. Peate, Wayne F.</p> <p><i>College of Public Health, University of Arizona, Tucson, USA</i></p>	<p>A Faster, More Rigorous Protocol for Fit Testing Respirators</p>	<p>OSHA's Respiratory Protection Standard requires that supplied air respirator facepieces be fit tested in the negative pressure mode. The methods and protocols currently used to meet this requirement can impose significant time and effort burdens on safety and health personnel. A condensed REDON fit test protocol was developed for the controlled negative pressure (CNP) fit test method and compared with the OSHA fit test protocol that is currently specified for the CNP method. The CNP REDON protocol consists of five total test exercises and incorporates the effects of three separate mask donnings. Based on over 500 fit tests of firefighter SCBA facepieces in the negative-pressure mode, the CNP REDON fit test protocol produced slightly more conservative test results than the CNP OSHA test protocol. No significant difference in protocol results was found. Fit tests conducted using the REDON protocol were generally accomplished 3-5 times faster than fit tests conducted using the OSHA protocol. A conclusion of the research is that the substantial time savings that can be realized through utilization of the REDON protocol could be applied to improving the respirator selection and training process.</p>