

## ISRP 2002 abstract

Presenter/author	Title	Abstract
<b>Weber, Robert</b> <i>3M Company, St Paul, MN, USA</i>	<b>Environmental Issues and Possible Effects on Cartridges/Filters used for CBRN Agent</b>	<p>Today there is a heightened awareness and need for respirator systems to be used by individuals who are required to respond to terrorist incidents. Designing a respiratory protective standard to meet these complex chemical and aerosol filtration requirements is a demanding task. The respirator system is expected to filter out chemical warfare agents, such as sarin; biological agents like <i>Bacillus anthracis</i>; radiological particles; and toxic industrial aerosols and chemicals as diverse as ammonia, chlorine, and phosgene. In addition to designing performance testing to meet the filtration needs, the standard/guideline must take into account environmental factors that may affect filtration performance under real world conditions. Several studies have been conducted evaluating these factors. This paper will report on the effects of exposure to ionizing radiation, high concentrations of solvent vapors, temperature extremes, oil mist and diesel exhaust aerosols on filtration performance.</p>