

ISRP 2000 abstract

Presenter/author	Title	Abstract
Gardner, Jan Reed, Sue	What are the Most Common Defects of Used Half Facepiece Respirators?	<p>A study was undertaken that assessed 485 used half facepiece, replaceable filter rubber, respirators against 71 visual defect classifications. Less than 15% of the examined respirators had no major defects. The most common defect was extremely dirty exhalation valve(s) due to poor maintenance and cleaning and not part degradation. The most common degradation defect was severely perished faceseal areas of the facepiece (8.8%). 6.2% of the respirators had deformed facepieces. Other common defects included: 5.9 % with severely perished head harnesses, 5.9% with at least one missing inhalation valve, 4.5% with modified head harnesses, 2.4% with split, torn or cracked facepieces, 2.3% with missing exhalation valves. An apparent design flaw resulted in 2.2% of inhalation valves being caught in the valve holder. 2.1% had very dirty filter seals. 2.1% had filter media loss on the interior of the respirator (35% did not have filters attached).</p> <p>The incidences of some defects were low, but the defects was of great concern. This includes damaged threads, improperly inserted valve holders and the use of wrong brand parts. 13 of the defect classifications were not found in the 485 respirators examined.</p> <p>The results of this study raise serious concerns about the understanding and implementation of respirator maintenance requirements in industry.</p>