

# **The Role of Airflow Measurements in Setting Respirator Performance Criteria**

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Measurement of worker airflow rates has been the topic of much research in recent years. While general consensus is emerging on the measurements themselves, there is disagreement over how the data should be used. It must be recognized that physiological measurements are only one consideration in setting respirator performance requirements and certification test criteria. These requirements cannot be reasonably established without an understanding of numerous related sciences including chemistry, aerosol science, toxicology and occupational exposure limits. Applications and the manner in which respirators are used must also be considered. This paper will describe what is known about the performance of and protection provided by respirators that meet existing U.S. test criteria. These respirators have been shown to provide acceptable protection. Objective information and data do not suggest a need for significant change in respirator test criteria.