

Metabolic Evaluation of N95 Respirator Use With Surgical Masks - FY12 (939ZUNG)

Objective

This project will investigate the recommendation by the IOM to examine the effects of the placement of a surgical mask over a N95 particulate filtering respirator using the Automated Breathing and Metabolic Simulator.



Applicable Standards

- Standard development for ISO and ANSI

Stakeholders

- CDC & IOM for guideline recommendations
- First responders
- Health care providers / first receivers / hospitals
- Department of Veterans Affairs
- Public, at large

Project Scope

- Select N95 respirators & surgical masks based on the US Strategic National Stockpile and market analyses
- Perform tests on each model and type (cup (n=18), horizontal flat-fold (n=6), and other flat-fold (n=6)), medium size (or M/L or universal), with and without exhalation valves, with and without surgical masks = 291 tests.
- Analyses included a subset of paired-valve FFR (18 FFR) that represented identical FFR models, with and without exhalation valves

Milestones FY 12

- Q1-3: Respond to journal reviewers comments
- Q4: Project ending

Outputs

- Manuscripts published or submitted (1) to peer review journals
- Presentations at conferences (1 abstract accepted to date)

Outcomes

- Data are used to consider revisions or support NIOSH / CDC guidance on respiratory protection for healthcare workers, and subsequent test protocols may be considered in the development of ISO and ANSI standards

Updated: 28 March 2012