

Physiological Evaluation of Tight- and Loose-Fitting PAPRs - FY13 (927ZJRP)

Objective

The primary objective of this study is to evaluate the metabolic and respiratory responses of wearers of tight- and loose-fitting PAPRs at three exercise intensities on a treadmill. Findings will be provided to the PSD Branch in support of module development.



Applicable standards

- 42 CFR Part 84

Key Partners

- PSD Branch

Stakeholders

- Manufacturers
- Wearers



Project Scope

Men and women healthcare workers will wear different manufacturer's powered air-purifying respirators while inhaled gas concentrations, pressures, and temperatures are monitored continuously at rest and during low- and moderate-intensity activity. ABMS testing of PAPRs will also be conducted.

Milestones FY13

- Completed HSRB approval 2Q FY12
- Complete subject testing 4Q FY13

Outputs

- Presentation at ACSM conference May 2014
- Standards committee/stakeholder presentations (0 to date)
- Published manuscript in peer-reviewed journal (0 to date)

Outcomes

- Results incorporated into updates to PAPR module proposed for Title 42 CFR Part 84

Updated: 28 March 2013