

## **Progress Toward a “B95” Respirator for Healthcare Personnel**

Ron Shaffer, Ziqing Zhuang, Mike Bergman, Ed Fisher, Andy Palmiero, Ray Roberge, Jon Williams, Jung-Hyun Kim, and Eddie Sinkule

National Institute for Occupational Safety and Health (NIOSH), National Personal Protective Technology Laboratory (NPPTL), Pittsburgh, PA

Lew Radonovich, Megan Gosch, Aaron Egan

Department of Veterans Affairs (VA), National Center for Occupational Health and Infection Control (COHIC), Gainesville, FL

### **Abstract**

Like other occupational/public health interventions, respiratory protection relies upon user compliance to be effective. Unfortunately, compliance among healthcare personnel (HCP) is less than ideal and can be attributed in part to problems posed by the respirators currently available to them, including discomfort, poor communication, interference with occupational tasks, and time constraints to use properly. In 2008, VA/COHIC, in collaboration with NPPTL, formed the Project BREATHE (**B**etter **R**espirator **E**quipment using **A**dvanced **T**echnologies for **H**ealthcare **E**mployees) Working Group (WG), composed of a variety of federal stakeholders, to discuss strategies for improving respirator compliance. The WG developed 28 desirable features and performance characteristics of a respirator targeted at healthcare, which can be grouped into four key themes: (1) respirators should perform their intended function safely and effectively, (2) respirators should support, not interfere, with occupational activities, (3) respirators should be comfortable and tolerable for the duration of wear, and (4) respiratory protective programs should comply with federal/state standards (e.g., NIOSH, OSHA, FDA) and guidelines and local policies. As a necessary next step, the WG identified the need for a new class of respirators (tentatively called a “B95” respirator), which would better address the unique needs of HCP and outlined a national strategy to develop clinically-validated respirator test methods, promote “B95” respirator standards, and advance novel design features, which together will lead to commercialized “B95” respirators. The purpose of this presentation is to discuss recent progress on the “B95” respirator concept and to obtain feedback on draft “B95” requirements, test methods, and pass/fail criteria.