



# Pilot Testing of Respiratory Protection OHN Survey

Deborah Taormina, RN, BSN, COHN-S, Barbara Burgel, RN, PhD, COHN-S, FAAN, Debra Novak, RN, DSN, Candace Burns, PhD, ARNP, Annette Byrd, RN, MPH, Holly Carpenter, RN, BSN, Ed Fries, MS, MaryAnn Gruden, CRNP, MSN, NP-C, COHN-S/CM, Ann Lachat, RN, BSN, FAAOHN, COHN-S/CM, Patty Quinlan, MPH, CIH



## Background

- The Institute of Medicine (IOM) Report: Occupational Health Nurses (OHNs) and Respiratory Protection: Improving Education and Training (2011)
- Seven recommendations to improve OHN Competency in Respiratory Protection, and educate all levels of nurses in respiratory protection
- In December 2011, the American Association of Occupational Health Nurses (AAOHN) Grant Committee's Respiratory Protection Working Group and NIOSH/NPPTL (National Personal Protective Technology Laboratory) partnered to form an Advisory Group with representation from the American Board for Occupational Health Nurses (ABOHN), the Association of Occupational Health Professionals in Healthcare (AOHP), the American Nurses Association (ANA), and the IOM Standing Committee on Personal Protective Equipment for Workplace Safety and Health
- Focus of the Advisory Group was on IOM Recommendation 1: Conduct a Survey of OHNs

## Methods

- Development of a web-based survey tool
- Pilot survey to OHN's of varying levels of education, experience and type of industry
- Obtain feedback on the time estimate for tool completion, any confusing questions, and any comments regarding survey ease of use

## Demographics

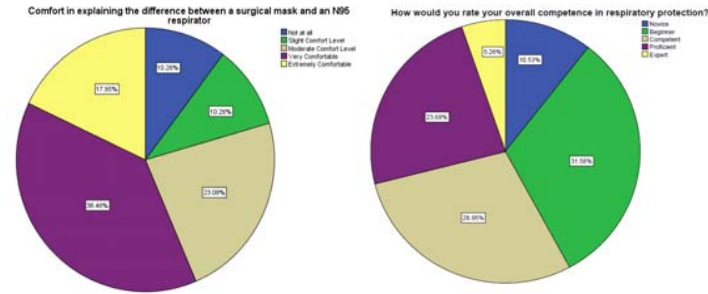
Selected Demographics (n=40)	
Nurse Practitioners	50%
AAOHN member	49%
AOHP member	17%
ANA member	15%
Certified Occupational Health Nurse Specialists	37%
Mean years of experience (Standard Deviation)	11.1 (10.3)
Hospital-Medical Center Industry	60%
NIOSH certified in spirometry in past 5 years	22%
OHN Responsible for Respiratory Surveillance Program at their facility	32%

## Pilot Survey Development

- Literature review lacking with regard to OHNs and respiratory protection and revolved mostly around agricultural workers and bioterrorism
- Pilot survey tool drafted and tested with a convenience sample of 40 OHNs
- Goals, as established by the advisory group, were to keep the web-based survey brief (20 items or less), completed within 10-15 minutes, and achieve at least a 30% member response rate from AAOHN, AOHP, ABOHN, and ANA (of those members who list occupational health as a specialty) with target date April 2012
- Pilot content looked at respondent education, years of OH experience, type of industry, participation in respiratory protection programs, experience with fit testing, how education was initially achieved and maintained in respiratory protection, how the respondent motivates a worker to use respiratory protection, and overall comfort and self-perceived level of competence in respiratory protection

## Findings

- A 12-item comfort scale (not at all comfortable=1 to extremely comfortable=5) based on respiratory protection program components had a Cronbach's alpha=.95
- Highest perceived comfort component was medical evaluation of employees re: respiratory fitness [m=3.37 (sd 1.53)]
- Lowest perceived comfort component was inspection, cleaning, and repair of respiratory equipment [m=2.16 (sd 1.24)]
- Overall mean comfort was significantly correlated with overall self-perceived competence in respiratory protection (Spearman's rho=0.860, p=0.000)
- Overall mean comfort in respiratory protection and years of experience were significantly correlated (Pearson's r =.514, p=0 .001)



Disclaimer: The findings and conclusions in this poster have not been formally disseminated by the National Institute for Occupational Safety and Health and should not be construed to represent any agency determination or policy.