ANSI Homeland Security Standards Panel

### Workshop on CBRNE Standards

### Development Of CBRN Respiratory Protection Standards

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Jonathan Szalajda, NIOSH, National Personal Protective Technology Laboratory



Workplace Safety and Health



**NPPTL** Research to Practice through Partnerships

# <u>Chemical, Biological, Radiological and Nuclear</u> (CBRN) Respirator Standards Development

- Workshops/Committee Meetings
  - NIOSH-DOD-OSHA Chemical-Biological Respiratory Workshop & Report (March 1999)
  - Interagency Board Standards & PPE Committees
- Initial and Continuing Funding DHS
- Cooperation among NIST, RDECOM, OSHA, NIOSH, NFPA, and DHS
- Define Collaboration for CBRN Standards
  Development
- IAA's with NIST and RDECOM
- RDECOM Technical Support for Testing













## CBRN Standards Development process for respiratory protection

- Hazard analysis
- Protection determinations
- Human and environmental factors
- Standards concept paper
- Test requirements benchmarked
- STP writing, testing, and methodology validation
- Quality assurance provisions
- Vet the draft standard thru public meetings
- Final standard published in letters to manufacturers





# **NIOSH CBRN Respirator Standards**

#### http://www.cdc.gov/niosh/npptl/respstds.html

#### Approved Standards

- Self-Contained Breathing Apparatus (SCBA with CBRN Protection
- Air-Purifying Escape Respirator (APER) with CBRN Protection
- Air-Purifying Respirator (APR) with CBRN Protection
- Powered Air-Purifying Respirator (PAPR) with CBRN Protection

#### Standards in Rulemaking Process

- Closed Circuit Self-Contained Breathing Apparatus (CCSCBA) (including CBRN Protection)
- Supplied Air Respirators (including CBRN Protection)
- Combination Respirator Units with CBRN Protection





# **Systems Approach to PPE**

- NFPA 1994 Standard on Protective Ensembles for First Responders to CBRN Terrorism Incidents (Class 2, 3 & 4 CBRN Protective Ensemble Requirements)
- NFPA 1951 Standard on Protective Ensembles for Technical Rescue Operations (CBRN Technical Rescue Protective Ensemble Requirements)
- NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting (CBRN Structural and Proximity Protective Ensemble Requirements)

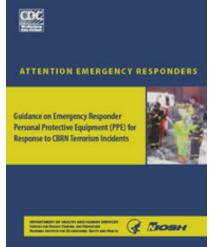
<u>All respirators specified by the ensemble manufacturer for use with</u> <u>these CBRN protective ensembles shall be certified by NIOSH as</u> <u>compliant to the CBRN SCBA, APR and PAPR federal standards</u>





## **PPE Guidance and Selection**

ATTENTION EMERGENCY RESPONDERS -Guidance on Emergency Responder Personal Protective Equipment (PPE) for Response to CBRN Terrorism Incidents DHHS (NIOSH) Publication No. 2008-132 http://www.cdc.gov/niosh/docs/2008-132/

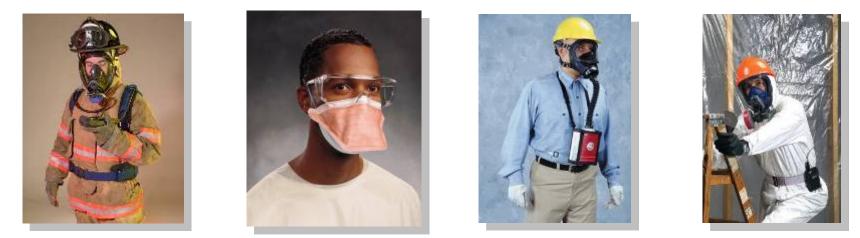


Recommendations for the Selection and Use of Respirators and Protective Clothing for Protection Against Biological Agents NIOSH Publication No. 2009-132 http://www.cdc.gov/niosh/docs/2009-132/





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