



HOMELAND SECURITY

Collaboration
Innovation and
Standardization

2003 ANSI
Annual Conference



1st Responder CBRNE Protective Equipment Standards Development Program

presented by

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OLES Mission

- Performance Standards
- Compliance Testing Programs
- Technical Reports
- User Guides



NIJ Body Armor Standard

NIJ Standard 0101.04
“Ballistic Resistance of
Personal Body Armor”

NIJ Standard 0115.00
“Stab Resistance of
Personal Body Armor”



NIJ Body Armor Standard



NIJ Body Armor Standard

2700+





A handful of OLES programs
are specifically “Homeland
Security” programs ...

... but all OLES
programs have potential
to enhance Homeland Security.

Lines between
Law Enforcement/Public Safety Technologies
and
Homeland Security Technologies
are largely imaginary

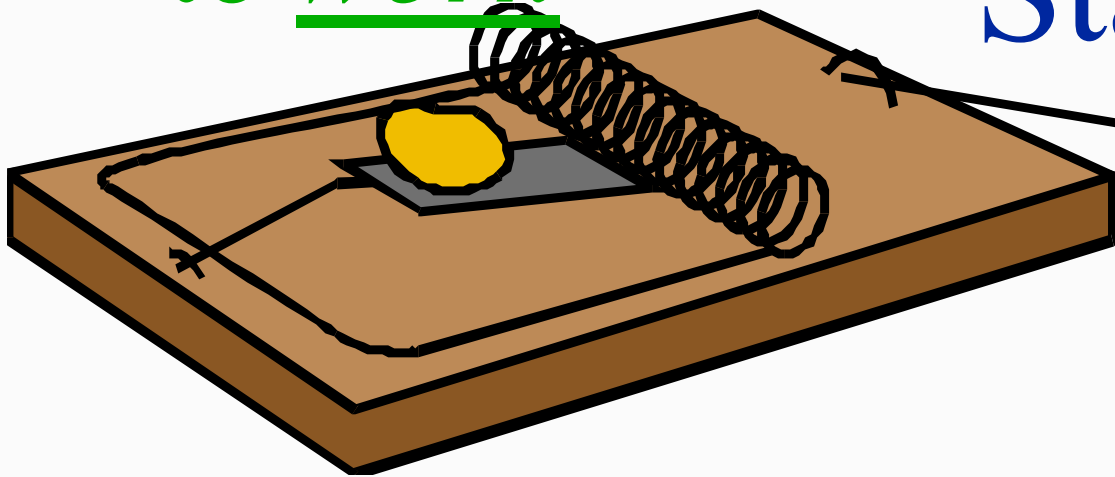


Performance Standards

How well
it has
to work

Design Standards

How it
has to be
built



CBRNE Standards Development Program

- Program has been in place since 1999
- \$24 million invested in program to date
- Standards have been developed with testing currently on going
- Additional standards very close to implementation
- Program recognized and collaborating with IAB, EPA, OSHA, DoD, DHS and others



1st Responder Standards Threat Areas

- **C**hemical (Warfare Agents & TICs)
- **B**iological Warfare Agents
- **R**adiological Agents (RDD)
- **N**uclear (IND, Weapon)
- Conventional **E**xplosives/Incendiaries



1st Responder CBRNE Protective Equipment Program Areas

- CBRN Respiratory Protection Equipment Standards
- CBRNE Protective Clothing Standards
- 1st Responder CBRNE Detection Equipment Standards
- 1st Responder CBRN Decontamination Standards
- 1st Responder CBRNE Communication Equipment Interfaces
- 1st Responder CBRNE Operational Equipment Standards
- 1st Responder CBRNE Equipment Compendia





The Interagency Board for Equipment Standardization and Interoperability (IAB)

Standardized Equipment List (SEL)

Items essential for responding to **CBRNE** incidents



“Most commodity SubGroups have realized that equipment that falls in the individual equipment categories will not provide suitable levels of field performance.”

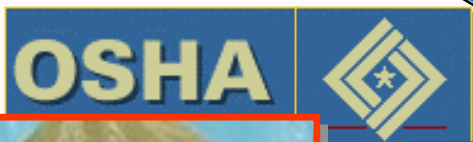
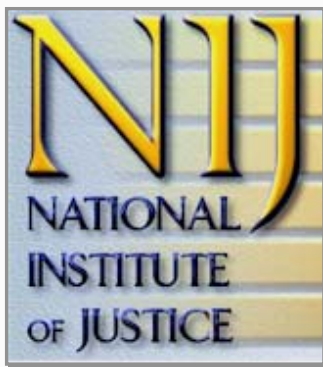
1999 IAB Annual Report

"It is critical that compatibility issues of equipment are addressed now, through nationally recognized standards, before the advent of multi-agency, multi-jurisdictional WMD incidents."

1999 IAB Annual Report



Team Formed to Tackle Top Priority



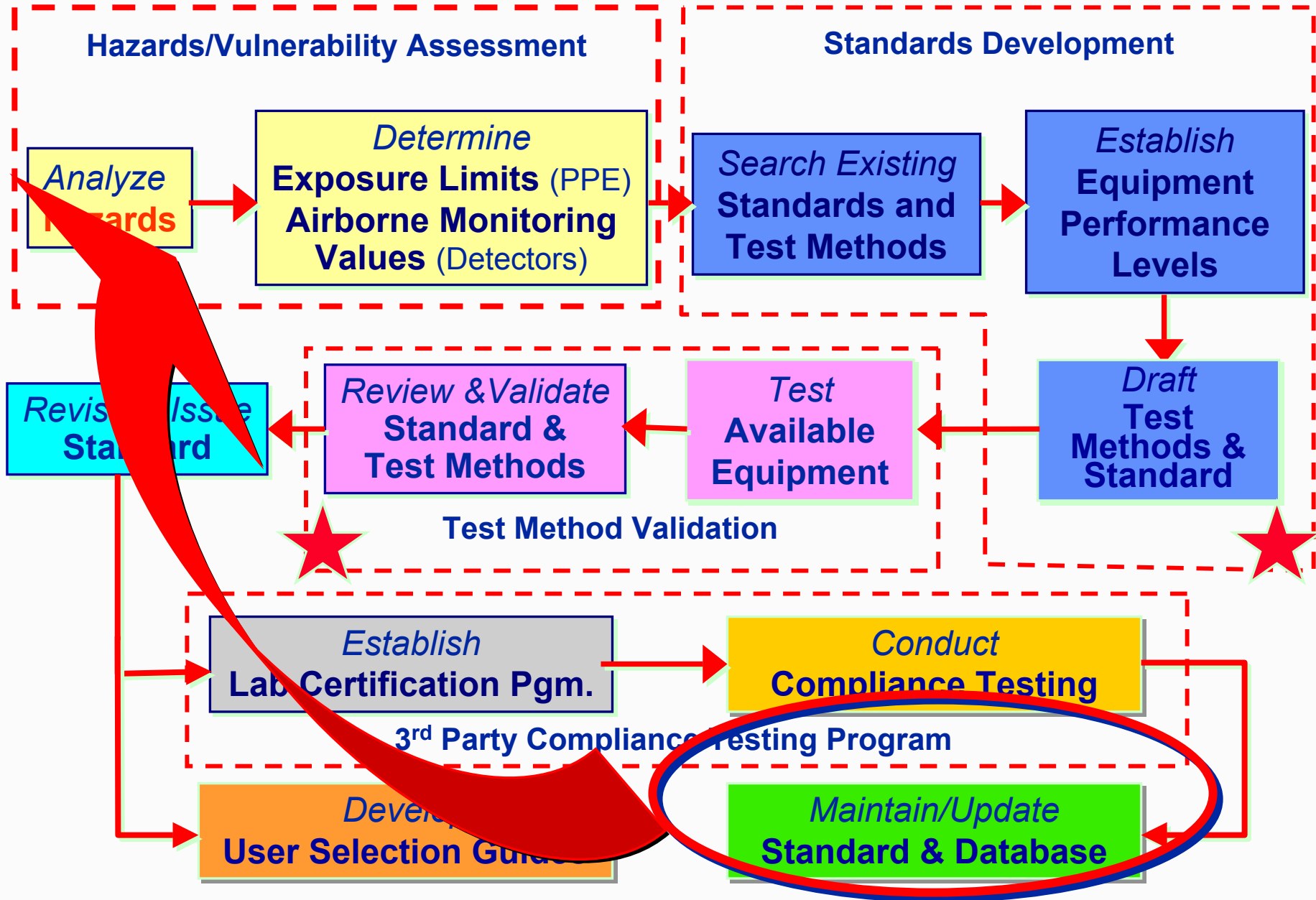
**STANDARDS FOR
CBRNE RESPIRATORY DEVICES**

Technical Issues


- Insufficient knowledge about threats and acceptable exposure limits
- Existing military equipment not suited for First Responder mission
- Existing commercial equipment untested against WMD agents
- Urgency



CBRNE Equipment Standards

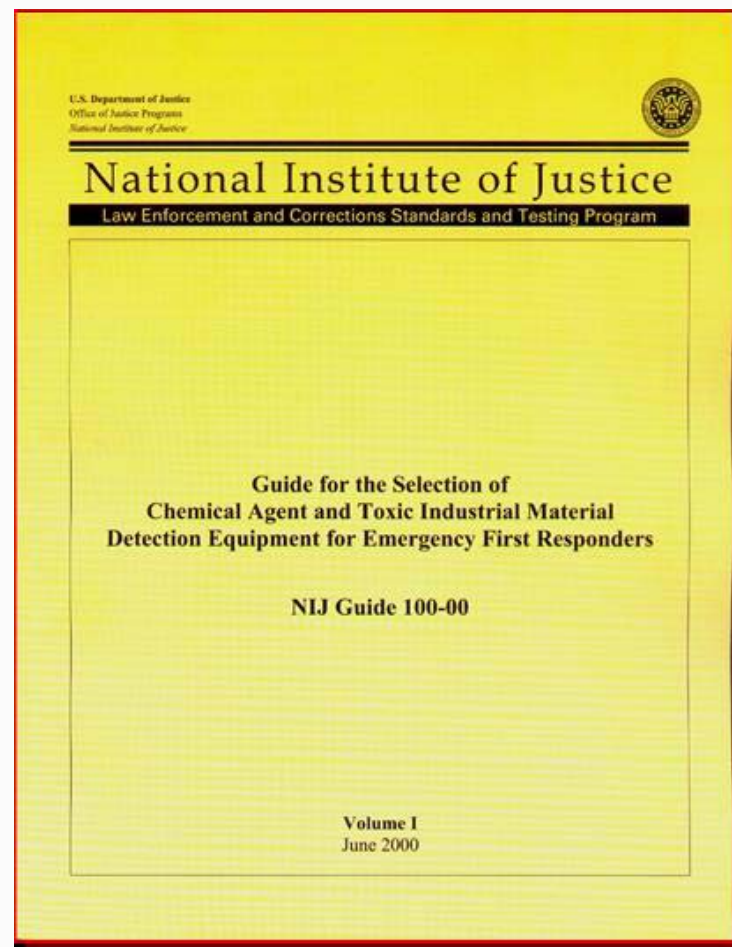


Achievements

- Identified types of threats and expected exposures
 - Developed computer-based modeling tool
- 
- Identified and analyzed related equipment standards
 - Completed CBRN Standards for SCBA and APR
 - Assisted NIOSH in establishing state-of-the-art testing lab
 - Certification testing ongoing

Achievements – Equipment Guides

- Chemical Agent Detection Equipment
- Biological Agent Detection Equipment
- Personal Protective Equipment Guide
- Chemical & Biological Decontamination Equipment
- Communications Equipment



The Bottom Line

- NIST/OLES CBRNE Program is well established, recognized and is producing results
- Coordinating and facilitating standards development efforts between NIST and DHS
- Greater safety for first responders
- More effective technologies
- Raise performance bar for industry

