



# **Interactions with the DHS S&T Laboratories**

**Joint CBRN Conference**

**March 13, 2012**

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**Department of Homeland Security**

**Science and Technology**



# Science and Technology (S&T) Laboratories

## National Biodefense Analysis and Countermeasures Center (NBACC)

- Ft Detrick, MD
- Bioterrorism Threats

## Plum Island Animal Disease Center (PIADC)

- Off Long Island
- Animal Diseases



## Transportation Security Laboratory (TSL)

- Atlantic City, NJ
- Improvised Explosive Threats



## Chemical Security Analysis Center (CSAC)

- Aberdeen, MD
- Chemical Threats



## National Urban Security Technology Laboratory (NUSTL)

- NY, NY
- Nuclear Detection,  
First Responders



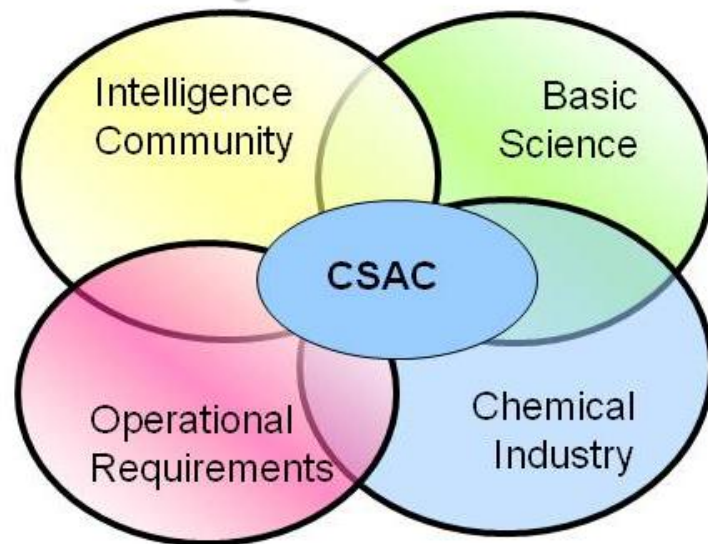


# Chemical Security Analysis Center

Mission: To identify and characterize the chemical threat against the American homeland and American public.

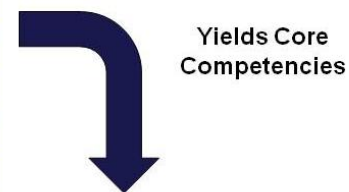
## Objectives:

- Chemical hazard awareness, assessment and analysis
- Science-based assessment of risk
- Integration and analysis of chemical threat information and data
- Reachback capability to provide expert analysis support
- Fusion of information from different communities

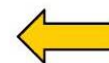


Critical Skills

Analytical Chemistry	Computational Toxicology
Organic Chemistry	AT&D Modeling
Agent Operations	Process Design
Physical Protection	Risk Analysis
Threat Agent Chemistry	Program Management
Toxicology	Chemical Engineering
Energetic Materials	



Over 90 Reports  
8 Journal Articles  
300 Reachback Inquiries



- Knowledge Management
- Design and Execution of Laboratory and Field Tests
- Assessing Hazard and Risk of Toxic Chemicals
- Safer Design Strategies for Chemical Engineering Processes
- 24/7 S&T Based Reachback

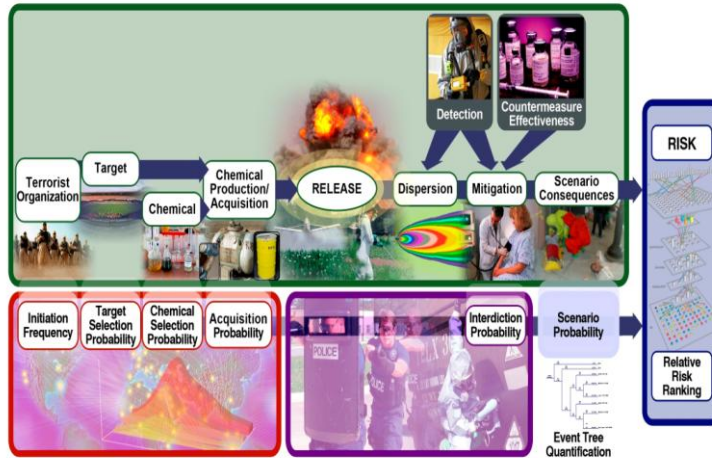




# How has CSAC been an HSE Force Multiplier?



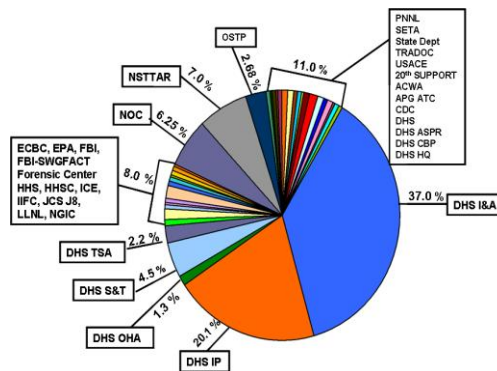
### Jack Rabbit Field Tests



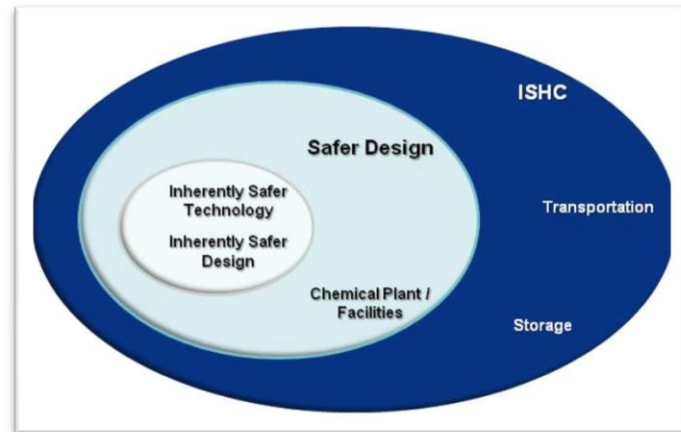
### Chemical Terrorism Risk Assessment



### Knowledge Management



### S&T Based Reachback



### Chemical Infrastructure (CFATS)



Homeland  
Security