



**Homeland
Security**

S&T Stakeholders Conference

Chemical Security Analysis Center

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PARTNERING FOR A SAFER NATION

CSAC Program Objective

Mission: To provide analysis and scientific assessment of the chemical threat against the American homeland and American public.

Objectives:

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

Payoffs:

- Centralized repository of chemical threat data
- Comprehensive S&T based assessments of chemical threat materials
- Centralized reachback capability for chemical threat information
- A prioritized assessment of chemical threats to provide guidance to Interagency activities



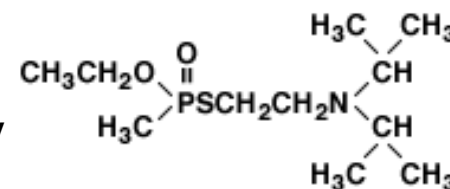
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The Chemical Threat Spectrum

Availability Increases ↑
↓ Toxicity Increases

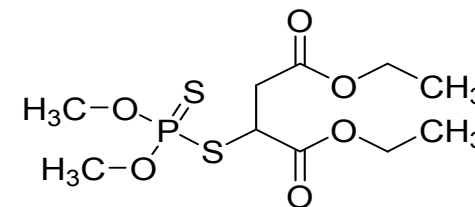
Chemical warfare agents (CWAs)

- Chemical warfare nerve agents
- Nearly impossible to obtain, must be synthesized by terrorists
- Nerve agents (G, V) - Have seen previous terrorist use
- Blister Agents (H, HN, HD)



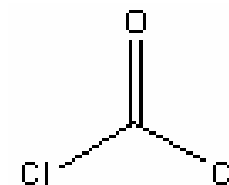
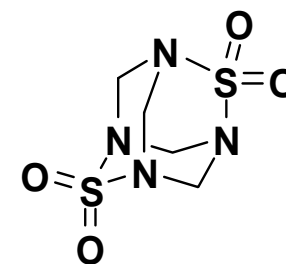
Organophosphorus and Chlorinated Pesticides

- A number of very toxic compounds
- Easily obtained

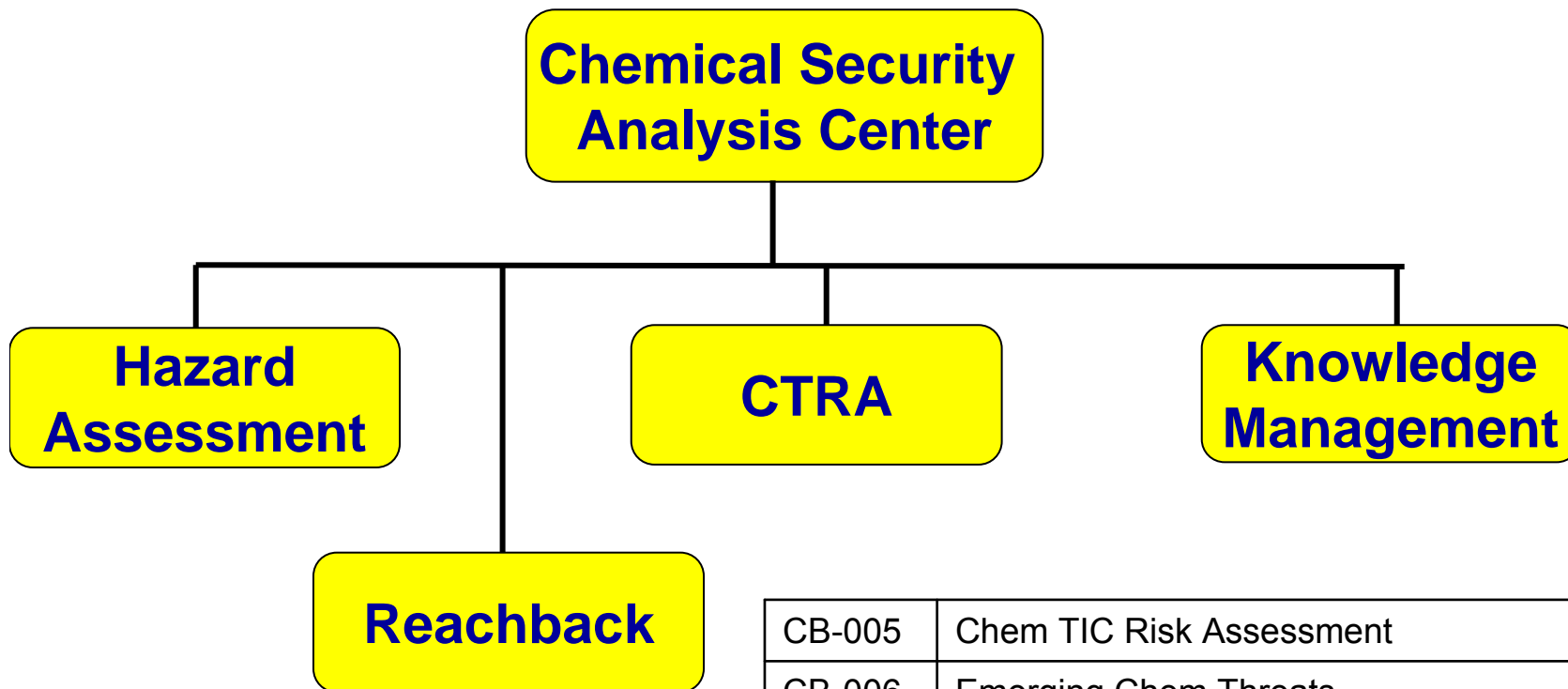


Toxic industrial chemicals (TICs)

- Large array of materials - Chlorine, Phosgene, Anhydrous Acids, Cyanides, Fluoroacetates ... etc.
- Reasonably accessible - Produced in millions of tons annually
- Releases have the capacity to cause a catastrophic number of casualties (Bhopal)



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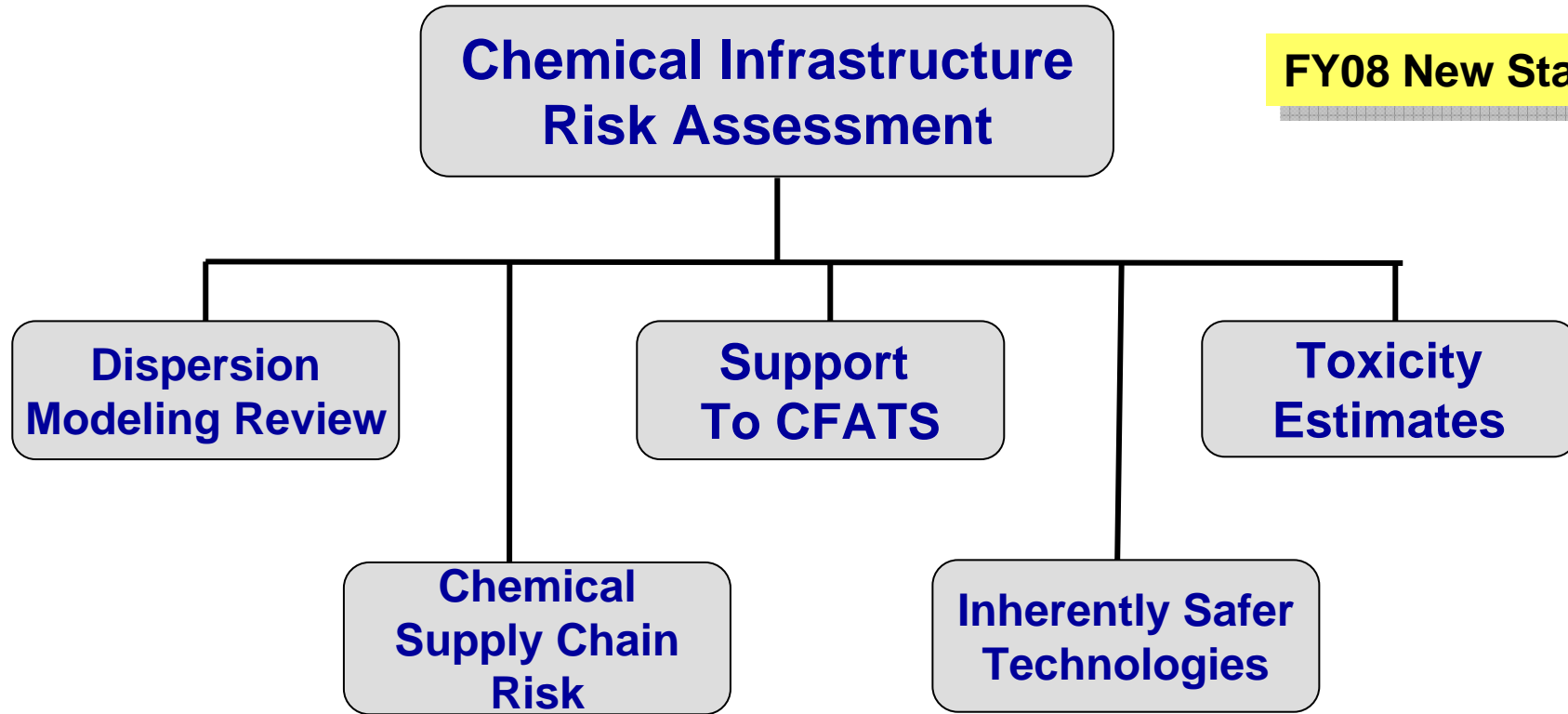


CB-005	Chem TIC Risk Assessment
CB-006	Emerging Chem Threats
CB-008	Chem Consequence Assessment
CB-009	Chemical Defense Capability Assessment
CB-012	Chem BioVulnerability Assessment for CI
Chem2	Accurate Computer Modeling of Large Scale Toxic Chemical Releases



Chemical Infrastructure Risk Assessment

FY08 New Start

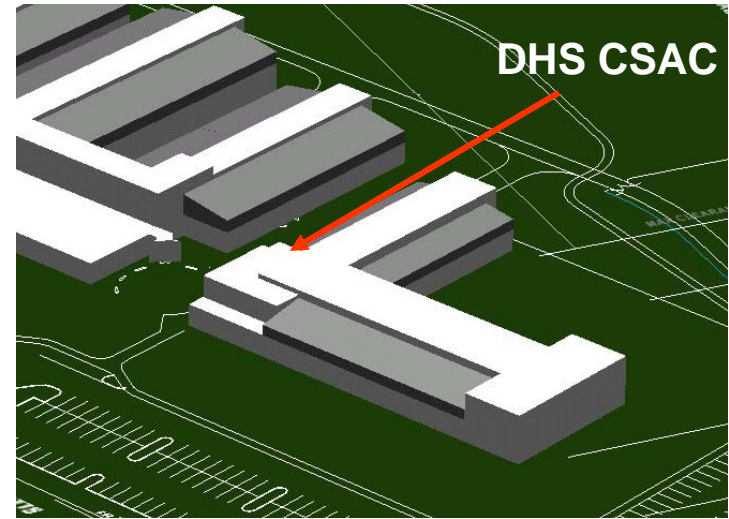


Chem2	Accurate Computer Modeling of Large Scale Toxic Chemical Releases
Chem4	Reversible Safing of Transported Hazardous Chemicals
Chem3	Continued Analysis of CFATS Appendix A Chemicals
CB-013	Infrastructure Modeling and Chemical Facility Risk Assessment



Summary

- CSAC continues to grow
 - 15 permanent staff
 - Six key performers
- CSAC continues to fill need for S&T based studies and analyses, for both DHS and the interagencies
- CSAC is committed to scientifically defensible, credible studies and analyses related to the chemical hazard



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