Chemical and Biological Defense Science & Technology

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DTRA's Key Mission Areas

- Nunn-Lugar Global Cooperation Initiative
- Arms Control and Verification
- **Chemical & Biological Defense**
- Consequence Management
- Nuclear Deterrence and Defense
- Nuclear Detection and Forensics
- Reachback

Technical Landscape

Medical S&T

- Pretreatments
- Therapeutics
- Diagnostics
- Threat agent science



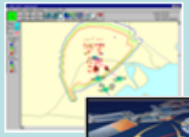

Physical S&T

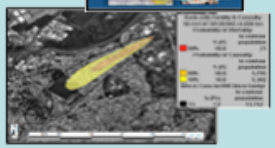
- Detection
- Protection (individual and collective)
- Hazard mitigation
- Integration and demonstration of advanced technologies




Information S&T

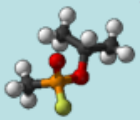
- Modeling and simulation
- Situational awareness
- Fate transport and dispersion
- Medical surveillance
- Data fusion
- Medical effects modeling
- Systems biology
- Bioinformatics

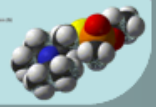




Basic / Supporting Research

- Physical chemistry
- Molecular design
- Phenomenology of biological agents
- In-silica modeling
- Mathematical recognition
- Bio-agent pathways
- Chem-agent mechanisms



Strategic S&T Themes

Provide an integrated capability to eliminate CB hazards as a threat to the Warfighter and the Nation

Seek the best science wherever it is

Deliver the best chem/bio technology for the warfighter and beyond

Optimize defense capabilities through partnership

Transition science to defeat asymmetric threats

Summary

- DTRA is engaged across the total spectrum of combating WMD
  - to include leading the development of next-generation CB defense technologies
- We work with phenomenal scientists and engineers in military laboratories, academic institutions and industry
  - to ensure that the best and most promising technologies are brought forward for further development by the JPEO into products that enable warfighter capabilities
- We'd like to hear from you about where you think technology might be able to enable future capabilities