

DTRA and Consequence Management

The Defense Threat Reduction Agency (DTRA) supports the Unified Combatant Commands and U.S. Northern Command with their consequence management responsibilities for chemical, biological, radiological, nuclear, and high explosive (CBRNE) incidents. During a threatened or actual terrorist incident, the agency provides scientific and technical analyses of an incident/accident through a computer-based reachback capability supplemented with subject matter experts.

The agency's Consequence Management Advisory Team (CMAT) is a deployable team that can support a number of mission areas. The CMAT is a task-organized team of two to 20 personnel who provide CBRNE advice and assistance. The team consists of CBRNE planners and modelers who are typically joint service personnel with training in CBRNE and consequence management skills. Their military backgrounds include nuclear weapons operations; nuclear weapons maintenance; explosive ordnance disposal operations; and nuclear, biological and chemical operations. DTRA's modelers are trained in CBRNE modeling tools, weather phenomenology and communications. They translate CBRNE technical information into operational terms for warfighters and decision-makers.

Additional team members who may supplement the CMAT include public affairs and legal personnel. DTRA also maintains a long-standing memorandum of understanding with the Armed Forces Radiobiology Research Institute that adds expertise to the team in health physics, casualty treatment and the effects of ionizing radiation. The CMAT utilizes DTRA's CBRNE computer modeling programs to predict the CBRNE effects of an incident and is supported with reachback capability.

The DTRA Operations Center provides CBRNE technical reference material, CBRNE situational awareness, and agency command and control to support the Combatant Commands, Department of Defense (DoD), interagency organizations and deployed teams. The Operations Center serves as the focal point for DoD CBRNE reachback which is reinforced by its ability to reach subject matter experts while providing a robust computer and communications network.

DTRA's reachback capability and its computer modeling programs are used to predict hazards, assess casualties and enhance planning and support for consequence management and force protection. The reachback capability is available on a 24-hour basis through the DTRA Operations Center or the Center for Special Weapons Effects; Nuclear, Biological and Chemical Threats; Technology Transfer and Resources (CNTTR). The CNTTR provides access to resources, expertise, communications and computer models. It has collaboration tools that tie together SMEs and operators in the field, providing voice data and video teleconferencing. These capabilities facilitate resource coordination, expert advice and analytical support in the crucial early minutes and hours of an incident.

The agency's computer modeling programs include the Hazard Prediction and Assessment Capabilities (HPAC) and the Consequence Assessment Tool Set (CATS). DTRA trains the National Guard Civil Support Teams on the use of HPAC and CATS, which provide an additional modeling resource and consequence management capability for local responders. HPAC helps users accurately predict the effects of the hazardous materials and its impact on people. This integrated computer program uses

meteorological and geographic information to identify potentially hazardous areas, giving officials a better picture of the situation. CATS is an automated, integrated geographical information system of hazard prediction and natural disaster models, and databases. The program aids in predicting and analyzing people, property and facilities at high risk. The program also aids in estimating response resource requirements and creates customized maps, graphs and other information. It also estimates actual casualty, damage and loss information.

DTRA also co-sponsors and plans nuclear weapons accident and foreign consequence management exercises with the Combatant Commanders.

DTRA safeguards America and its allies from weapons of mass destruction (chemical, biological, radiological, nuclear, and high yield explosives) by providing capabilities to reduce, eliminate, and counter the threat, and mitigate its effects. This Department of Defense combat support agency is located at Fort Belvoir, Va., and operates field offices worldwide.

January 2008