

National Guard (NG) CBRN Response Enterprise (CRE) Overview





This brief provides an overview of the National Guard (NG) Chemical, Biological, Radiological, and Nuclear (CBRN) Response Enterprise (CRE) support concepts and capabilities.



- **Mission**
- **NG CRE History**
- **CRE Elements**
- Weapons of Mass Destruction Civil Support Team (WMD-CST)
- **CBRN Enhanced Response Force Package (CERFP)** ۲
- Homeland Response Force (HRF)
- **Summary**
- Questions





a Federal response to an incident in or outside their assigned State, Territo

or the District of Columbia

CONCEPT OF OPERATIONS (CONOPS)

10 October 2019

References



As of: 19 FEB 2020

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Mission and Force Structure



Mission: Develops strategic goals and objectives to standardize and institutionalize the NG CBRN Response Enterprise within DoD programs. Provides programmatic oversight for WMD-CSTs, CERFPs and HRFs. Maintains and sustains CBRN forces with equipment and capabilities incorporating leading edge technologies to support civil authorities, interagency and Federal partners in domestic incidents and specified threats.



 Strategic Concepts / Doctrine Branch Develop CBRN Response Enterprise CONPLANS and CONOPS Develop/formulate TE&Os for CBRN Response Enterprise forces Synchronize Plans, Policies, and Doctrine with DoD and Federal 	WMD-CST & HRF / CERFP Branches• Develop Policy & Guidance• Develop Material Acquisition strategies• Responsible for all PPBE activities• Institutionalize DOTMLPF-P Joint and Service equities.• Document TDA changes	 <u>SEAT</u> Plan, Coordinate & conduct CRE evaluations and assessments Capture best practices, develop trends analysis, and identify process improvements
Doctrine with DoD and Federal partners	Document TDA changesDevelop Material Acquisition strategies	

CBRN Response Enterprise (CRE)



State Response

Total State Response Force 10,530

Federal Response

Total Federal Response Force 8,200

		JTF-CS / DCRF			
		HRF	Defense CBRN Response Force	C2CRE A	C2CRE B
	CERFP CBRN Enhanced	Homeland Response Force ★ (10 Units) 574 / 5,740 PAX Capabilities - Command & Control - Search/Extraction - DECON - Emergency Med - Fatality Search Recovery Team (FSRT) - CBRN Assistance Support Element (CASE) - Joint Incident Site	FP 1 (2,100) FP 2 (3,100)	Command and Control CBRN Response	Command and Control CBRN Response
	Response Force Package ★(17 Units)		 Emergency Medical Role 2 & 3 Med w/ Surgical Capability Security Engineering Logistics Transportation Ground MEDEVAC & CASEVAC 	Element A	Element B ☆ 1,500 PAX
WMD-CST	208 / 3,536 PAX			Capabilities - C2 - CBRN Assessment - Search & Rescue - DECON - Role II Medical Logistics - Engineering	Capabilities - C2 - CBRN Assessment - Search & Rescue - DECON - Role II Medical - Logistics - Engineering
WMD – Civil Support Team ☆(57 Teams) 22 / 1,254 PAX <u>Capabilities</u> - Detection/ Identification - Rapid	<u>Capabilities</u> - Search/Extraction - DECON - Emergency Med - Fatality Search Recovery Team (FSRT) - Joint Incident Site				
Assessment of Hazmat	Communication Capability (JISCC)		- Aviation Lift - Aviation MEDEVAC & CASEVAC	Prepare to Deploy NLT N+96 Hours	Prepare to Deploy NLT N+96 Hours
Prepare to Deploy NLT N+3 Hours	Prepare to Deploy NLT N+6 Hours	Prepare to Deploy NLT N+6-12 Hours	Prepare to Deploy <u>FP 1</u> NLT N+24 Hours <u>FP 2</u> NLT N+48 Hours	+ Additional RFF Forces	+ Additional RFF Forces
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ated Forces

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Allocated Forces



WMD-CST





Support civil authorities at a domestic incident site during specified events, which include use or threatened use of a WMD; terrorist attack or threatened terrorist attack; intentional or unintentional release of nuclear, biological, radiological, or toxic or poisonous chemicals; natural or manmade disasters in the United States that result, or could result, in the catastrophic loss of life or property by <u>identifying</u> hazards, <u>assessing</u> current and projected consequences, <u>advising</u> on response measures, and <u>assisting</u> with appropriate requests for additional support.

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WMD-CST Organizational Structure



Survey and Detection



Mission: Utilizes specialized equipment to detect CBRN hazards. Collects hazardous samples for detailed analysis and confirmation using validated sampling protocols and chain of custody procedures.

- **HAZMAT** Technician Certified
- **Confined Space Certified**

All equipment meets NIOSH/ANSI/OSHA/NFPA Safety/Protection Standards







Capabilities:

- Conduct Sensitive Site Assessment/Exploitation
- Detect/characterize CBRN hazards including emerging threats/Non-Traditional Agents
- · Presumptive identification of hazards in hot-zone
- Collect samples for confirmatory analysis
- Documented Chain of Custody for all samples

Significant Detection Equipment:

- Radiological Detection / Identification
- High Purity Germanium (HPGe) / GM Tube / Sodium Iodide
- Alpha, Beta, Gamma, Neutron, X-Ray
- Biological Identification / Sampling
- Hand Held Assay and Reader
- Air Sampling (IBAC / SASS)
- Chemical Identification / Sampling
- AreaRae / Multi-Rae Multi Gas Detectors (VOC, TOX, O2)
- Joint Chemical Agent Detector (G Nerve, H Blister) Raman Spectroscopy (First Defender)
- Fourier Transform Infrared (Hazmat ID, TruDefender FTIR)
- Gas Chromatograph / Mass Spectrometer (Hapsite GCMS)
- Colorimetric (Draeger Tubes, M256, M8, M9, Agentase/CIDAS)

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Analytical Laboratory System



<u>Mission</u>: Utilize specialized laboratory instrumentation to identify potential chemical and biological threat agents at the field confirmatory level.

The WMD-CST Laboratory Program is accredited by the American Association for Laboratory Accreditation (A2LA) to conform to ISO 17025 Laboratory Standards





Primary Capabilities:

- Detection/Identification of BWAs
- Detection/Identification of nucleic acid biomarkers
- Detection/identification of unknown chemicals/CWAs/TICs/TIMs/FGAs/PBAs
- Biological Analysis/White Powder Analysis
- Radiological Data Analysis and Interpretation
- Basic Wet Chemistry Capability
- Reach back to State and Federal laboratories
- Secure and Nonsecure Interface to the Unified Command Suite for the transmission of digital sample information
- Environmental Confirmation of Sample

Significant Detection Equipment:

- Class 3 Glovebox for BSL-4 Agents
- Ion Mobility Spectrometer for identification of chemicals
- Hand-held Immunoassays for detection / identification of Biological Warfare Agents (BWA)
- Electrochemiluminescence Immunoassay (ECLIA) for antigen based detection of BWA s
- Polymerase Chain Reaction (PCR) for detection / identification of nucleic acid biomarkers
- Fourier Transform Infrared Spectroscopy (FTIR) for detection / identification of unknown chemicals
- Gas Chromatography Mass Spectroscopy (GC-MS) for detection of Chemical Warfare Agents (CWA) and Toxic Industrial Chemicals / Toxic Industrial Materials (TIC/TIMs)
- Raman Spectroscopy for detection of CWA and TIC/TIMs
- Polarized Light Microscopy for "white powder" analysis
- Fluorescent Light Microscopy for biological analysis

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Determine Contaminated Area





Mission: Utilizes specialized equipment to conduct a survey around the contaminated area in order to determine the presence and extent of contamination. Generate a plume model for vulnerability analyses and site characterization.

All Survey members trained and certified to the HAZMAT Technician level (CFR 1910-120)

All equipment meets NIOSH/ ANSI/OSHA/NFPA Safety/Protection Standards

Primary Capabilities:

- · Conduct initial assessment of the affected area
- · Locates source of CBRN or other hazards
- Develop plume model
- Collects CBRN samples for confirmatory analysis
- Provides continual monitoring through the use of detection equipment

Other Relevant Capabilities:

- · Video and photographing items of interest
- Reporting casualty information



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Communications Support



Mission: Establish reach-back capabilities and provide incident-area interoperable communications during operations and provide a critical link to follow-on forces, supplies, and expertise for CBRN incidents and natural / man-made disasters.

All UCS Operators are trained and certified to meet DoD Directive 8570.01M Change 3 Information Assurance Standards



Capabilities:

- Establish interoperable communications (Secure/Unsecure)
- Provide reach-back access from incident site to other local, state or federal agencies and ALS to National Laboratories
- Provide Common Operating Picture (COP) support
- Establish unit-level voice and data networking support
- NG CIMS (real time sensor data/imagery from downrange)

Significant Support Equipment:

- Unified Command Suite (UCS):
 - Voice interoperability (radio, IP telephony)
 - HF/UHF/VHF/800MHz radio support
 - SATCOM
 - DSN and Commercial telephony
 - NIPR and SIPR data access
 - Onboard SCIF
 - Collaborative voice and video teleconferencing
- Advanced Echelon (ADVON) Vehicle:
 - Mobile and stationary voice/data/fax communications
 - Handheld and hands-free radio support
 - Satellite and VoIP telephony
 - Satellite and local radio
 - GPS navigation system
- Secure communications via COMSEC equipment, keying material management, link establishment and maintenance support of Classified documents
- IC communications augmentation support
- Coordination with civil and military agencies for follow-on support
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Homeland Response Force (HRF)



<u>MISSION:</u> When directed by the Secretary of Defense, coordinated by the Chief of the National Guard Bureau, and upon consent of the Governor(s) during major or catastrophic CBRN incidents, the HRF and CERFP alerts, recalls and deploys critical command and control and <u>life-</u> <u>saving</u> capabilities within six hours; on order, deploys and conducts command and control, <u>search and extraction, mass casualty</u> <u>decontamination</u>, and <u>medical stabilization</u> in order to save lives and mitigate human suffering; On order, redeploys.

KEY CHARACTERISTICS:

Designed to operate at the local, state, regional and national level

- HRF's are validated by the TAG of each State
- 80% Commercial off the shelf equipment
- HAZMAT Awareness or Operations level certified
- Total of 10 HRF's one per FEMA Region
- All members ICS 100b, 200b, 700a and 800b trained
- BDE C2 Bridges a gap between JFHQ and CBRN support units (CERFP and CST)
- CASE Force Protection for operations and general support
- Communications reach back and incident area interoperable systems
- Each component (capability) can be deployed on an individual basis or as needed basis
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HRF/CERFP Communications Support



- C2-level communications is supported by NG Joint Incident Site Communications Capability (JISCC) Block 3 system assets:
 - Access to commercial Internet, NIPRNET, and SIPRNET data services
 - Access to public/commercial and military telephony services
 - Reach-back access to NG support services
 - Voice/Radio interoperability with other incident-area military and civilian response partner agencies
 - Dedicated wired/wireless local area networks
 - Beyond line of sight High Frequency (HF) radio support
 - Other capabilities Video Teleconference, fax, integration with user expansion packages
- Additional Capabilities and Equipment include:
 - Unit-level tactical radio communications support (e.g., handheld devices, repeaters)
 - Laptop computer devices
 - Shared Situational Awareness (SSA)/
 Common Operating Picture (COP) support





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CBRN Assistance Support Element (CASE)



- Primary Capabilities
 - Maintain integrity of DECON corridor
 - Assist in casualty, and fatalities movements
 - Provide controls at Hot Zone entry and exit points
 - Maintain force protections for uninterrupted CERFP/CBRN TF footprint operations
 - General support assists with riot control

All CASE members trained and certified to the HAZMAT Operations Level (CFR 1910-120 / NFPA 472)









CBRN Enhanced Response Force Package (CERFP) and CBRN Task Force

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KEY CHARACTERISTICS:

- Designed to operate at the local, state, regional and national level
- CERFPs are validated by the TAG of each State
- 80% Commercial Off The Shelf (COTS) equipment
- HAZMAT Awareness and Operations level certified
- Total of 17 CERFP at least one per FEMA Region
- All members ICS 100b, 200b, 700a and 800b trained
- FSRT coordinates the removal of contaminated remains only within the CERFP area of operations
- Communications reach back and incident area interoperable systems
- Each component (capability) can be deployed on an individual basis or as needed basis

CERFP/CBRN Task Force C2



- Primary Capabilities
 - Conduct planning and coordination
 - Develop Incident Action Plans (IAP)
 - Oversee IAP Execution
 - Conduct Sustainment Operations
 - Conduct Deployment Operations
 - Conduct Redeployment Operations

All C2 members trained and certified to the HAZMAT Awareness Level (CFR 1910-120/NFPA 472)





Search and Extraction



Collective Capabilities (NFPA 1670)

- S&E element trained and equipped to provide the following operational capabilities:

- Rope Rescue at the Operations Level
- Structural Collapse Search and Rescue at the Operations Level
- Confined Space Search and Rescue at the Operations Level
- Individual Qualifications (NFPA 1006 (2013))
 - All Members
 - Level I Rope Rescuer
 - Level I Confined Space Rescuer
 - Level I Structural Collapse Rescuer
 - Team Leaders and above (minimum of 5 members per S&E element)
 - Level II Rope Rescuer
 - Level II Confined Space Rescuer
 - Level II Structural Collapse Rescuer

Primary Capabilities

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- Conduct search operations
- Conduct rope rescue operations
- Conduct lifting/loading operations
- Conduct confined space operations
- Conduct S&E tasks below IDLH levels in NFPA Class 2 PPE w/ PAPR

All S&E members trained and certified to the HAZMAT Operations level (CFR 1910-120/NFPA 472)

All equipment meets NIOSH/ANSI/OSHA/NFPA Safety/Protection Standards





- Primary Capabilities
 - Establish DECON site
 - Conduct ambulatory/non-ambulatory clothing removal, decontamination, monitoring, and redress operations
 - Establish equipment and personnel property decontamination stations
 - Establish and maintain a hazardous waste site.
 - Conduct technical decontamination



Decontamination





All DECON members trained and certified to the HAZMAT Operations Level (CFR 1910-120 / NFPA 472)



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- Qualifications
 - Possess civilian licensure and military privileging as physicians, physician assistants, registered nurses, pharmacists, NREMT's
 - Specialized Medical Trauma Training in Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives

- Primary Capabilities
 - Perform mass casualty triage
 - Provide life-saving medical stabilization
 - Coordinate transportation to higher levels of care

All Medical members trained and certified to the either the *HAZMAT Awareness or HAZMAT Operations Level (CFR 1910-120)





Medical

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Fatality Search and Recovery Team

- Primary Capabilities
 - Collect, catalog, and hold human remains until appropriate medical examiner /Coroner takes custody
 - Management of contaminated remains waste
- Secondary Capability
 - Conduct search and recovery operations for human remains in a contaminated area



- Clear medical element lanes
- Clear DECON lanes
- Perform Hot Zone Operations







All FSRT members trained and certified to the HAZMAT Operations Level (CFR 1910-120)

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CERFP GSA & Army Vehicles





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