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)
• Homeland Response Force (HRF)
• Summary
• Questions
References

NATIONAL GUARD BUREAU

HOMELAND RESPONSE FORCE (HRF)

CHEMICAL, BIOLOGICAL, RADIOLOGICAL, NUCLEAR, AND HIGH-YIELD EXPLOSIVES ENHANCED RESPONSE FORCE PACKAGE (CERFP)

CONCEPT OF OPERATIONS (CONOPS)

10 October 2019
NG CRE History

### Historical Context

- **1995**: PDD-39
  - Delineated the Responsibilities for Federal Agencies
- **1997**: Quadrennial Defense Review
  - Identified CBRN Threat
- **1998**: PDD-62
  - Defined Responsibilities for all Federal Agencies
- **1997-1998**: PBD 712 SECDEF MEMO
  - Resourced and stationed first 10 CSTs

### WMD-CST

- **1999**: Title 10 USC SEC 12310
  - Established WMD-CST Program
- **2000, 01, 03, 05**: NDAA
  - Established a Total 55 WMD-CSTs
- **2007**: NDAA
  - Expanded mission to include natural or man-made disasters
- **2013**: NDAA
  - Officially Authorized a Total of 57 WMD-CSTs

### HRF and CERFP

- **2006**: CERFP DCR JROCM 162-06
  - Established 12 CERFPs
- **2006**: NDAA
  - Funded Additional 5 CERFPs (Total: 17)
- **2010**: QDR RMD 700 SECDEF MEMO
  - Restructured enterprise creating 10 HRFs
- **2012**: SECDEF MEMO
  - CBRN CM Response Enterprise: Full Operational Capability

As of: 19 FEB 2020
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.

Mission and Force Structure

Division Chief
(Mr. Heinrich Reyes)
GS-15

Deputy Division Chief
(COL Patrick Macklin)

Strategic Concepts & Doctrine Branch
(Mr. Frank Hudoba)

HRF / CERFP Branch
(MAJ Michael Williams)

WMD-CST Branch
(LTC Jennifer Cope)

SEAT Branch
(LTC William Bono)

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 partners

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
- Develop Material Acquisition strategies

SEAT
- Plan, Coordinate & conduct CRE evaluations and assessments
- Capture best practices, develop trends analysis, and identify process improvements
### CBRN Response Enterprise (CRE)

**State Response**
- Total State Response Force: 10,530

**Federal Response**
- Total Federal Response Force: 8,200

#### CERFP (CBRN Enhanced Response Force Package)
- CERFP
- CBRN Enhanced Response Force Package
  - 57 units
  - 574 / 5,740 PAX
- Capabilities
  - Command & Control
  - Search & Rescue
  - DECON
  - Emergency Medical
  - Fatality Search Recovery Team (FSRT)
  - CBRN Assistance Support Element (CASE)
  - Joint Incident Site Communication Capability (JISCC)

#### HRF (Homeland Response Force)
- Homeland Response Force
  - (10 units)
  - 574 / 5,740 PAX
- Capabilities
  - Command & Control
  - Search & Rescue
  - DECON
  - Emergency Medical
  - Fatality Search Recovery Team (FSRT)
  - CBRN Assistance Support Element (CASE)
  - Joint Incident Site Communication Capability (JISCC)

#### JTF-CS / DCRF (Defense CBRN Response Force)
- Defense CBRN Response Force
  - 5,200 PAX
    - FP 1: 2,100 PAX
    - FP 2: 3,100 PAX
- Capabilities
  - Command & Control
  - CBRN Assessment
  - Search & Rescue
  - DECON
  - Emergency Medical
  - Role 2 & 3 Medical w/ Surgical Capability
  - Security
  - Engineering
  - Logistics
  - Ground MEDEVAC & CASEVAC

#### WMD-CST (WMD – Civil Support Team)
- Capabilities
  - Detection / Identification
  - Rapid Assessment of Hazmat
- Prepare to Deploy NLT N+6 Hours

#### Total State Response Force: 10,530

#### Total Federal Response Force: 8,200

**National Guard / T10**

**Non-National Guard / T10**

**Prepared to Deploy**
- NLT N+96 Hours
- NLT N+6-12 Hours
- NLT N+24 Hours
- NLT N+48 Hours

**Prepared to Deploy + Additional RFF Forces**

**National Guard**

**Active Component**

**Reserve Component**

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**UNCLASSIFIED**
WMD-CST
WMD-CST Mission

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 identifying hazards, assessing current and projected consequences, advising on response measures, and assisting with appropriate requests for additional support.
WMD-CST KEY CHARACTERISTICS:
- Each team certified by the SECDEF
- 57 Teams (1 per State & territory/CA, NY, FL 2 ea)
- 22 Full-time, T32 AGR, Joint Manned Army/Air
- On alert 24/7/365
- Sophisticated technical reach-back system
- Interoperable with First Responders (80% COTS gear)
- All WMD-CST personnel are HAZMAT TECH certified
**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)

As of: 19 FEB 2020
### Mission:
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

<table>
<thead>
<tr>
<th>Primary Capabilities:</th>
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<tbody>
<tr>
<td>- Detection/Identification of BWAs</td>
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<tr>
<td>- Detection/Identification of nucleic acid biomarkers</td>
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<tr>
<td>- Detection/identification of unknown chemicals/CWAs/TICs/TIMs/FGAs/PBAs</td>
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<tr>
<td>- Biological Analysis/White Powder Analysis</td>
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<tr>
<td>- Radiological Data Analysis and Interpretation</td>
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<td>- Basic Wet Chemistry Capability</td>
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<td>- Reach back to State and Federal laboratories</td>
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<td>- Secure and Nonsecure Interface to the Unified Command Suite for the transmission of digital sample information</td>
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<td>- Environmental Confirmation of Sample</td>
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### Significant Detection Equipment:

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

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

All equipment meets NIOSH/ANSI/OSHA/NFPA Safety/Protection Standards
**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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As of: 19 FEB 2020
Homeland Response Force (HRF)
**MISSION:** 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 life-saving capabilities within six hours; on order, deploys and conducts command and control, search and extraction, mass casualty decontamination, and medical stabilization 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

As of: 19 FEB 2020
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
CBRN Assistance Support Element (CASE)

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

• 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
**HRF GSA & Army Vehicles**

**HRF C2 (160 PAX)**
- 4 - F350s
- 4 - Buses 44 PAX
- 3 - Vans
- 1- 20 FT Cargo Truck
- 4 - Cargo Trailers

**CASE (200 PAX)**
- 4 - F350s
- 4 - Buses 44 PAX
- 1 - 20 FT Cargo Truck
- 4 - Cargo Trailers

**CBRN TF (208 PAX)**
- 2 – F450s (MED)
- 18 – F350s
- 20 – Trailers
- 1 – Stake Body Truck 750
- 1 – Van
- 2 – 44 PAX Bus
- 1 – ATV
- 1- DECON Trailer

**FSRT (11 PAX)**
- 4 – F350/450s
- 2 – Cargo Trailers
- 2– Flat Trailers
- 3 - ATVs

**Maintenance & Recovery**
- 1 X

**HEMTT (CL III B) Diesel**
- 1 X

**Mogas**
- 1 X

**MTV**
- 1 X

**CARGO (CL I & II) CASE**
- 1 X

**JISCC (12 PAX)**
- 2 – Trucks
- 2 – Trailers

**CARGO (CL I & II) C2 Section**
- 2 X

**PAX Movement Supported by Buses**
- 24 X

**TOTAL 51 GSA Leased Vehicles and 47 Army Vehicles**

As of: 19 FEB 2020
CBRN
Enhanced Response Force Package (CERFP) and CBRN Task Force
**MISSION:** 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 life-saving capabilities within six hours; on order, deploys and conducts command and control, search and extraction, mass casualty decontamination, and medical stabilization 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
- 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**
- 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

As of: 19 FEB 2020
Decontamination

• 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

Mobile Decontamination Trailer Lane
Non-Ambulatory Decontamination Lane
Ambulatory Decontamination Lane

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

As of: 19 FEB 2020
• 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)"
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

**Priority of Effort**
- 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)
CERFP GSA & Army Vehicles

**C2 (19 PAX)**
- 3x F350s
- 1x Cargo Trailer
- 1x C2 Trailer
- 1x Climate Cargo Trailer
- 1x Bus

**DECON (75 PAX)**
- 6x F350s
- 1x F450 or F750
- 5x Cargo Trailers
- 1x Climate Cargo Trailer
- 1x Decon Trailer
- 1x Bus

**S&E (50 PAX)**
- 5x F350s
- 4x Cargo Trailers
- 1x Climate Cargo Trailer
- 1x ATV

**MED (47 PAX)**
- 4x F350s
- 2x F450s
- 1x Van (15 PAX)
- 6x Cargo Trailers

**FSRT (11 PAX)**
- 4x F350/ F450
- 2x Climate Cargo Trailers
- 2x Flatbed Trailers
- 3x ATVs

**Notes:**
- Movement planning factor: 5 PAX per vehicle (F350 or F450)
- ANG pay for the Med Element 7 vehicles and FSRT 4 vehicles
- ARNG pay for the C2, DECON and S&E vehicles
- PAX Movement: Approx. 87 personnel are transported by bus
NG CRE Locations

New England HRF
VT, RI