

Biological Resiliency Programs

Christopher Russell

Program Manager

Research & Development Branch

Chemical and Biological Defense Division



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Report Documentation Page

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Wide Area Recovery and Resiliency Program (WARRP)

- **Collaborative program between DHS and Denver Urban Area Security Initiative (UASI)**
 - **Goal:** Develop solutions to reduce the time and resources required to recover wide urban areas, military installations, and other critical infrastructures following a catastrophic chemical, biological, or radiological (CBR) incident.
 - **Stakeholders:** Interagency partners, including federal /state / local / tribal governments, military, private industry and non-profit organizations
- **Building on Interagency Biological Restoration Demonstration (IBRD)**
 - Test and evaluate transportability of IBRD consequence management guidance, tools and solution sets against multiple threat agents within an all-hazards framework
 - Further explore interdependencies between Public Health, DoD and the socio-economic areas
- **Emphasis on Transition to Use**
 - Operationally relevant solutions, developed and demonstrated to meet end-user and owner requirements



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Programmatic Approach

Task	Effort	Capability Target & Objective
1	Front-End System Engineering Study and Gaps Analysis	Body of knowledge for national, state, and local restoration capabilities
2	Wide-Area Recovery Framework	Develop guidance to address civilian & military needs and capabilities for recovery & restoration actions
3	Science and Technology Development	Recovery process methods, procedures, and technology development
4	Workshops, Exercises, and Demonstrations	Coordinate civilian & military community interoperability, and practical application of technology and concepts of operation
5	Transition to Use	



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WARRP at a glance...



People...Products...Outcomes



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Key Stakeholders / Players



Activities & Products



Outcomes

Local / State	State of CO	Denver UASI
	Adams County	Emergency Mgmt
	Boulder County	Environmental Health
	Denver County	Fire
	Jefferson County	Public Health
	Tri-County	Public Safety
	South Metro	Transportation
Region	EPA Region 8	
	FEMA Region 8	
Federal	ASPR	DOE
	CDC	EPA
	DHS	FEMA
Military	Buckley AFB	
	Joint Staff	
	National Guard	
	NORTHCOM	
Private Sector	Brookfield Properties Corp.	
	Colorado 211	
	CO Chapter of ICC	
	CO Emergency Preparedness Partnership	
	COVOAD	
Program Support	<u>National Labs</u>	Cubic Applications
	Lawrence Livermore	ECBC
	Pacific Northwest	SPAWAR
	Sandia	

<p>System Study</p> <p>Strategic & Operational Gaps Public Health & Medical Gaps Economic Impact Assessment</p>
<p>Guidance & Frameworks</p> <p>Denver UASI Recovery Framework National Template CBR Technical Reports & Planning Annexes</p>
<p>Workshops</p> <p>Knowledge Enhancement Expert Elicitation</p>
<p>Work Groups</p> <p>Environmental Remediation Operations Public Health & Medical</p>
<p>Science & Technology</p> <p>Decision Support Decontamination Sampling</p>
<p>Exercises & Demonstrations</p> <p>Mile High Challenge S&T Demonstrations</p>

<p>Economic Resilience</p> <p>Innovative strategies to accelerate economic recovery</p>
<p>Proven Planning Templates</p> <p>Long-term recovery documents to enhance regional planning capabilities</p>
<p>Interagency Coordination</p> <p>Enhanced long-term formal coordination among all stakeholders</p>
<p>Public Health Understanding</p> <p>Improved understanding to address public health strategies and challenges</p>
<p>Science & Technology Solutions</p> <p>Operationally relevant solutions to support recovery activities</p>
<p>Process Development</p> <p>Objective regional processes for identifying & planning for CBR incidents</p>

WARRP – Products, Performers, Timelines

Product	Performer	Since Kick-off	2011			2012								
		Feb-Sep 2011	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
System Study	SNL	Workshops	Analysis & Gaps Consensus											
Regional Framework	PNNL	Denver All-Hazards UASI Recovery Framework with CBR Annexes												
National Guidance		National Urban Area Recovery Framework Guidance							Interagency Review Period		Adjudicate Comments	Final Document		
Science & Technology	ECBC, Cubic	Proposals	Development				Development & Demonstrations							
Transition	SPAWAR, Cubic	Transition Agreement Signings	Development					Transition						
			Remote Messaging Center Broom PATH/AWARE		Regional Recovery Knowledge Products Outdoor Reaerosolization Report Germ-Lysis, Fixatives Reports									
Workshops	PNNL, Cubic		Mile High Challenge	6-8 Knowledge Enhancement Workshops		Framework Workshop	4-6 Knowledge Enhancement Workshops			Capstone				
Work Groups	Cubic, Fed Leads	Environmental Remediation Operations Work Group (EROWG) Public Health & Medical Work Group (PHMWG)												



SPORE

- **Scientific Program on Reaerosolization and Exposure (SPORE)**
 - Correlate the relationship between environmental presence and exposure to *B. anthracis*
 - Explore nexus between operations and policy
 - Conduct a series of chamber and outdoor releases to provide empirical data to answer the critical science questions
- **Key Science Questions:**
 - What potential response and recovery actions are impacted/changed based on this new understanding of reaerosolization?
 - Is *B. thuringiensis* an appropriate and accurate simulant for *B. anthracis* reaerosolization?
 - How do environmental, human factors and other external forces impact reaerosolization?
 - How do bio-agent preparations and release mechanisms impact reaerosolization?
 - Can we improve what is known about various air sampling methods based upon reaerosolization?
 - What mechanisms govern outdoor to indoor transport (including vehicles)?
 - What models, plans and operations are necessary to quantify bio-agent reaerosolization (near and long term)?

