



## **The Chemical Threat And the State of Chemical Preparedness**

### **Special Report & Survey Results**

## Special Report

# The Chemical Threat & the State of Chemical Preparedness

Prepared by Major General Stephen V. Reeves, USA (Ret.); Summarized by John F. Morton, DP40



**WHO:** DomPrep40 plus DomPrep Readers

**WHAT:** A short survey and report

**WHEN:** March 2010

**WHERE:** Online at DomesticPreparedness.com and SurveyMonkey.com

**WHY:** To provide policy makers a snapshot of strengths, gaps, and weaknesses

This DomPrep report and survey on U.S. chemical preparedness (and the steps needed to improve it) finds DomPrep members very much in synch with the views of the DomPrep40. Both groups are highly attuned to the chemical threat and

what it might mean for local emergency managers. Moreover, although local jurisdictions may consider a chemical warfare agent or TIC/TIM (toxic industrial chemical/toxic industrial material) event as high-consequence/low-probability, they do not necessarily have the time, talent, and financial resources needed to apply to increasing local preparedness for such events.

“Much more can be done in policy and process at the national level to help local emergency managers be better prepared,” says DomPrep40 member Major General Stephen V. Reeves, USA (Ret.), the Pentagon’s former Joint Program Executive Officer for Chemical and Biological Defense, who prepared

the survey. Citing the use of chemical detectors as an example, General Reeves comments that, “We can’t leave most local emergency managers on their own to determine what an acceptable standard is. This survey was an attempt to arrive at a consensus on the policy and process holes which – if filled – can help a local emergency manager make better decisions and be better prepared.”

*Key Findings:* DomPrep members validated the sharply defined consensus view of the DomPrep40. The chemical threat is *real*. Chemical preparedness is *inadequate*. What is most needed now are government standards for chemical detection equipment and an “approved products list” for DHS (Department of Homeland Security) grant funds.

*The chemical threat is real; [U.S.] chemical preparedness is inadequate – what is most needed now are government standards for chemical detection equipment and an “approved products list” for DHS (Department of Homeland Security) grant funds*

## The DomPrep40

The DomPrep40 is an interactive advisory board of insider practitioners and opinion leaders who have been asked to offer advice and recommendations on pertinent issues of the day. Focusing primarily on all-hazard preparedness as well as response and recovery operations, they will be challenged to provide quantifiable feedback that will be shared with the DomPrep audience.

## DomPrep40 Members

### John F. Morton

Strategic Advisor

### James Augustine

Chair, EMS and Emergency Department Physician

### William Austin

Chief, West Hartford Fire Department

### Ann Beauchesne

Vice President, National Security & Emergency Preparedness Department, U.S. Chamber of Commerce

### Joseph Becker

Senior Vice President, Disaster Services, American Red Cross

### Bruce Clements

Public Health Preparedness Director, Texas Department of State Health Services

### John Contestabile

Former Director, Engineering & Emergency Services, Maryland DoT

### Craig DeAtley

Director for Institute for Public Health Emergency Readiness

### Nancy Dragani

Former President, National Emergency Management Agency (NEMA), Executive Director, Ohio Emergency Management Agency

### Warren Edwards

Major General USA (Ret.), Director, Community & Regional Resilience Institute (CARRI)

### Katherine Fuchs

Deputy Chief FDNY Emergency Medical Services Command

### Ellen Gordon

Member, Homeland Security Advisory Council and Naval Postgraduate School Center for Homeland Defense Security

### Kay Goss

Former Associate Director, National Preparedness Training & Exercises, FEMA

### Steven Grainer

Chief, IMS Programs  
Virginia Department of Fire Programs

### Jack Herrmann

Senior Advisor, Public Health Preparedness, NACCHO

## DomPrep40 Members

### Cathlene Hockert

Continuity of Government Planning Director,  
State of Minnesota

### James Hull

Vice Admiral USCG (Ret.), former  
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### Harvey Johnson, Jr.

Vice Admiral USCG (Ret.), former Deputy  
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### Dennis Jones, RN, BSN

Executive Consultant, Collaborative Fusion Inc.

### Robert Kadlec

Former Special Assistant to the President for  
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### Neil Livingstone

Chairman & CEO, Executive Action

### James Loy

Admiral USCG (Ret.), former Deputy  
Secretary, DHS

### Adam McLaughlin

Preparedness Manager, Port Authority of  
NY & NJ (PATH)

### Vayl Oxford

Former Director, DHS Domestic Nuclear  
Detection Office (DNDO)

### Joseph Pennington

Senior Police Officer, Houston  
Police Department

### Stephen Reeves

Major General USA (Ret.), former  
Joint Program Executive Officer for  
Chemical & Biological Defense, DOD

### Richard Schoeberl

Former Executive Federal Bureau of Investigation  
& the National Counterterrorism Center

### Dennis Schrader

Former Deputy Administrator, National  
Preparedness Directorate (NPD), FEMA

### Robert Stephan

Former Assistant Secretary of Homeland  
Security for Infrastructure Protection

### Joseph Trindal

Former Director, National Capital Region,  
Federal Protective Service, ICE

### Theodore Tully

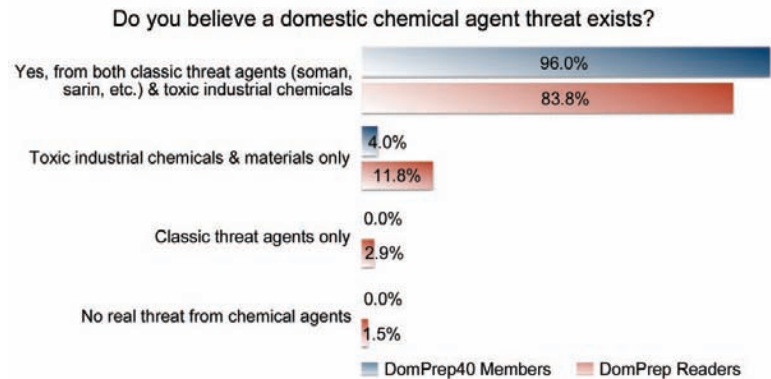
Director, Trauma & Emergency Services,  
Westchester Medical Center

### Craig Vanderwagen

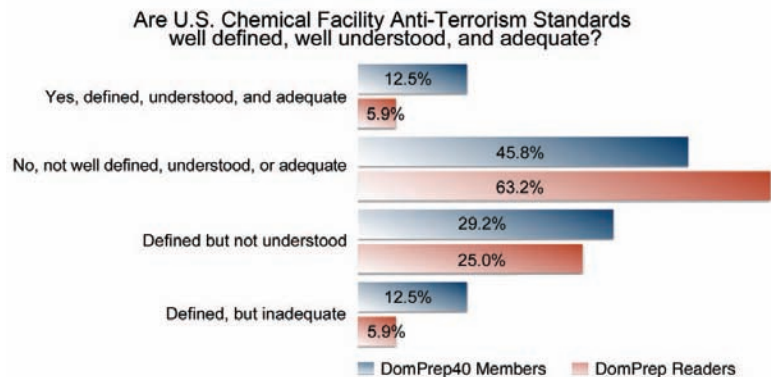
Former Assistant Secretary for Preparedness  
& Response, U.S. Department of Health &  
Human Services

## Following are the survey results

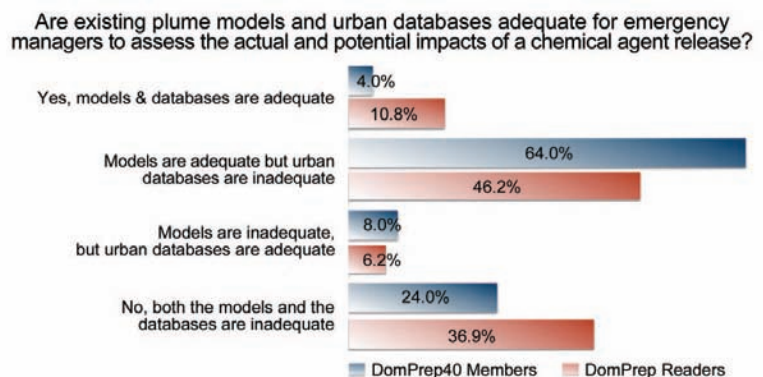
DomPrep members agreed very conclusively – at almost 84 percent – with the DomPrep40 opinion that a domestic chemical agent threat already exists.



An extremely low percentage of members – just under six percent – say that current Chemical Facility Anti-Terrorism Standards (CFATS) are well defined, well understood, and adequate. But well over 90 percent disagree with that hopeful assessment, so Yes, there is much more work that must be done in this area.



Members also support the DomPrep40 view that greater attention is needed, on primarily urban databases, on the potential impact of a chemical release.



The table below represents a combination of the DomPrep40 and DomPrep Readers responses to other questions asked in the survey. Several additional conclusions, based on the answers indicated in the table, become evident, including the following: (a) somewhere between two-thirds and three-quarters say that the United States currently lacks a reliable means of attribution; (b) over three-quarters say that DHS should change its policy on regulating chemicals of interest; (c) only about 12 percent are satisfied with the detection tactics, techniques, and procedures (TTPs) used by the Environmental Protection Agency (EPA) for chemical incident decontamination (again, there is much work to do); (d) with only one out of five believing there are adequate training programs that use live chemical agents, members are less confident than their DomPrep40 colleagues are about this key area; and (e) finally, there is agreement here – with members and the DomPrep40 both registering four out of five in their opinions – that the Chemical Safety Board should require industry to report all chemical incidents.

	Yes		No		Unsure	
	DomPrep40 Members	DomPrep Readers	DomPrep40 Members	DomPrep Readers	DomPrep40 Members	DomPrep Readers
Are adequate systems and processes in place addressing attribution as a means of identifying the nature and source of materials, the perpetrators, and the methods of chemical attacks?	4.0%	13.2%	72.0%	61.8%	24.0%	25.0%
The U.S. Department of Homeland Security (DHS) does not currently plan to regulate railroad facilities that are used to store, in rail cars, large quantities of chemicals or materials on the DHS "chemicals of interest" list. Should DHS change its current policy and undertake such regulation?	76.0%	79.1%	16.0%	13.4%	8.0%	7.5%
Has the Environmental Protection Agency developed adequate detection technologies, plans, and protocols - including the development of risk-based clean-up goals - to decontaminate following a chemical incident?	12.0%	11.9%	48.0%	55.2%	40.0%	32.8%
Should the Federal Government set standards and require independent testing and validation of commercial chemical-detection equipment?	76.0%	83.3%	12.0%	10.6%	12.0%	6.1%
Should the Department of Homeland Security establish an "approved products list" for the use of DHS grant funds?	60.0%	64.5%	28.0%	16.9%	12.0%	18.5%
Is there sufficient scientific research on low-level exposure to toxic chemicals and materials on civilian populations?	4.0%	9.1%	56.0%	72.7%	40.0%	18.2%
Are there adequate training facilities - using live chemical agents - for first responders and emergency managers?	24.0%	20.9%	68.0%	74.6%	8.0%	4.5%
Is the United States sufficiently engaged with Canada & Mexico to prevent chemical incidents in either of those countries from crossing U.S. borders?	0.0%	3.0%	72.0%	71.6%	28.0%	25.4%
Should the Chemical Safety Board require industry to report all chemical incidents?	80.0%	77.6%	20.0%	11.9%	0.0%	10.4%

In short, the chemical preparedness survey provides a compelling consistency across and between the DomPrep40 and DomPrep members. DHS therefore may want to take note: This quantitative sampling of opinion among homeland security professionals indicates that U.S. chemical preparedness must still be considered, at best, a work in progress. But the same survey also suggests several specific remedies in such areas as standards, regulations, training, and scientific research.

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