THE CIP REPORT

CENTER FOR INFRASTRUCTURE PROTECTION VOLUME 7 NUMBER 3

SEPTEMBER 2008
EMERGENCY MANAGEMENT

Featured in this month's issue of *The CIP Report* is information on emergency management. September is National Preparedness Month and the goal of this effort is to emphasize the importance of preparing for emergencies as well as to increase public awareness. We look at some of the different approaches to emergency needs, including preparedness, response, recovery, and mitigation.

GEORGE MASON UNIVERSITY
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First, we look at a study completed on the mass transit systems in the United States and their ability to handle an emergency evacuation. This study comes after the problems experienced during Hurricane Katrina in New Orleans. Next, we look at hospitals and how their emergency management was evaluated by a 2006 counterterrorism assessment. We also feature an article submitted by the program director of Rx Response. This program works to ensure that patients will receive medications in emergency situations and the article provides an overview of its efforts. We are also pleased to offer an article on the Institute for Biosecurity and Disaster Preparedness. The article discusses how the Institute was established to help prepare personnel as well as private and public entities for bioterrorism and pandemics.

This month's *Legal Insights* article discusses Good Samaritan laws as they apply to businesses and non-profit organizations. We also provide a brief legislative review of pending bills concerning emergency preparedness. Lastly, a reminder of next month's Supply Chain Security, Resilience & Sustainability Conference is included.

We hope you find this month's issue informative and useful. Thank you for your continued support and your feedback is welcome.

Mick Kicklighter
Director, CIP
George Mason University, School of Law

Transportation Research Board Releases Study on Mass Transit and Emergency Evacuations

In July, the Transportation Research Board released the results of a study requested by Congress and funded by the Federal Transit Administration which was intended to probe the capacity of mass transit systems in the United States to absorb an emergency evacuation. The results were cause for concern, with the majority of urban areas surveyed being found only "partially sufficient" in their evacuation planning processes. Even fewer areas had plans which adequately laid out the role of mass transit in such an emergency evacuation. The study has caused some policymakers to call for better plans or a rethinking of the planning process as a whole out of public safety concerns.

The study was commissioned after the failures of evacuation in New Orleans in the face of Hurricane Katrina. It centered on the 38 largest urban areas of the United States. Mass transit systems were defined broadly to include any infrastructure used in an evacuation, such as highways which carry buses. Since local governments take primary responsibility for evacuation, the study examined the emergency evacuation plans of these 38 urban areas for details about how an evacuation would proceed, the role of mass transit in an evacuation, and what specific plans had been made for the portion of the population which is mass transit-dependent.

Plans were examined to see if they broke the evacuation down into four stages: mitigation, preparedness, response, and recovery. Ideally, there would be a role for mass transit and the local agency responsible for mass transit at every stage. This ensures that the maximum population that can be evacuated will be evacuated, including individuals lacking a car or who are house-bound. Reviewers also checked to see if the agencies responsible for vulnerable populations were given a seat at the table, so that those who face the greatest harm were not left to fend for themselves. In addition, they evaluated the presence of communications between these different entities. One has only to search the news coverage of Hurricane Katrina to see what can happen if such things are left up to fate.

The final results were disheartening. Few evacuation plans were available and even fewer spelled out many details. Not only would it be difficult for a member of the covered population to discover what to do and where to go during an emergency, some plans made it difficult to imagine that even a responsible official would know enough to oversee an organized evacuation.

The report carried recommendations for improvement. The study's authors recommended that greater attention be paid to planning for multi-jurisdictional emergencies. They noted that no one "owns the problem" at the regional level, removing any impetus to plan for it. They also recommended that federal guidance be provided on the planning process, with states taking the lead to actually develop the plans. This is not dissimilar from the model provided by states when planning for energy emergencies.

As for mass transit, the authors recommended bringing mass transit agencies into the process early and giving them a voice and a role. A good plan contains an emergency command structure and that structure should contain the local mass transit agency. If responsible officials are wondering what their job is after disaster strikes, then it is too late. The authors also recommend utilizing the mass transit system to the best of its abilities. Depending on what kind of system an urban area possesses, mass transit may do more than just move citizens out of harm's way. At the same time, it is important to remember that the majority of the United States operates in a driving culture. Most people will attempt to evacuate by car and planners need to take that into account. A great deal of work has already been done by researchers, for example at the Hazard Reduction and Recovery Center at Texas A&M University to model variables like traffic flow, road usage, and average evacuation time. This is knowledge which can be used by planners to maximize the benefits they gain from all their transportation assets.

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Best Practices in Hospital Antiterrorism

by Scot Phelps, JD, MPH*

As a professor of emergency management and a former paramedic, hospital-, and public health-emergency manager, I have long been interested in healthcare emergency management. However, I had no interest in terrorism until four years ago when I began an annual program taking graduate emergency management students to Israel in partnership with Israeli Military Industries Academy for Security and Anti-terror. Although our focus was emergency management planning, the Israeli strategies for antiterrorism in what we would view as "safe" settings of hospitals, schools, and other public places led me to implement not only training and regionally-based hospital assessments, but also the first graduate certificate in Emergency & Disaster Management with an endorsement in Critical Infrastructure Assessment at Southern Connecticut State University.

The Hudson Valley Regional Resource Center is a New York State Department of Health-funded resource center providing incident command, emergency management, decontamination, and counterterrorism education, evaluation, and exercises to the 39 hospitals in the seven counties of the Hudson Valley, fanning out in a "V" to the immediate north of New York City. Hospitals range from ten-bed critical access hospitals to tertiary medical centers with over 1,000 beds. As part of our services, we began offering formal counterterrorism assessment in 2006 utilizing a comprehensive, 52-page vulnerability analysis developed by the Federal Emergency Management Agency (FEMA) in their ***Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings***[1].

The FEMA Risk Management Series includes eight separate manuals aimed at antiterrorism:

- FEMA 426 - Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings
- FEMA 427 - Primer for Design of Commercial Buildings to Mitigate Terrorist Attacks
- FEMA 428 - Primer to Design Safe School Projects in Case of Terrorist Attacks
- FEMA 429 - Insurance, Finance, and Regulation Primer for Terrorism Risk Management in Buildings
- FEMA 430 - Site and Urban Design for Security: Guidance Against Potential Terrorist Attacks
- FEMA 452 - A How-To Guide to Mitigate Potential Terrorist Attacks Against Buildings
- FEMA 453 - Safe Rooms and Shelters: Protecting People Against Terrorist Attacks
- FEMA 459 - Incremental Protection for Existing Commercial Buildings from Terrorists Attack: Providing Protection to People and Buildings

As well as one training course and one risk assessment database:

- E155 and L156 - Building Design for Homeland Security (Suburban and Urban) and Building Design for Homeland Security for Continuity of Operations Train-the-Trainer (COOP): Instructor Guides, Presentations, and Student Manuals
- Risk Assessment Database v3.0 - Contains User Guide and Threat Matrix spreadsheet. This version can be used by a computer-conversant program manager or assessor.

To date, we have assessed almost two dozen hospitals with the results being completely confidential — results were released ONLY to hospital emergency managers and not back to region officials. These are 30 of the best practices we have found (and five of the worst):

(Continued on Page 4)

[1] Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings. Available at: http://www.fema.gov/library/viewRecord.do?id=1559. Accessed on August 9th, 2008.

Hospital Antiterrorism *(Cont. from 3)*

Security in General

- **Good security is good customer service.** All visitors are greeted at the border of the property at a checkpoint, their vehicle license plate is recorded and their ID scanned by handheld bar code reader. Vendors need a prior appointment. Visitors need to know the name of the patient they are visiting. Security officers provide visitors with a parking pass for their dashboard with directions on which spot to park in, closest to their relevant entrance. They also provide a linked, color-coded ID (coded to unit, floor, and day) to be worn above the waist with specific directions from that entrance to the unit where they are going. Staff are immediately rewarded for stop-and-help service, with monthly penetration drills.
- **A Professional, Career Security Department.** Security officers are the first point of contact with almost every patient, visitor, and staff member and need to be paid the same salary and benefits as local police in order to attract and retain professional career officers. Officers need to be trained and be permitted to use force (probably not guns, but pepper spray/batons) with legal backup.
- **Security draws bright line between protection and medical care.** The security department does not do psychiatric holds or restraints — this is considered medical care and must be done by a clinician. Security does provide physical security, patrol, customer service, and loss prevention.
- **No security at all.** One hospital in the region has no security department at all — it is every employee's responsibility to stop, question, and escort every visitor to their community hospital. This avoids the "security is not my job, it is the guy in the blue uniform's job" mentality seen in so many hospitals.

The Role of Security

- **Security officers have defined core patrol tasks to complete.** Security is not haphazard — there are regular core patrol tasks, checking doors, talking to the charge nurses and other staff. Core patrol tasks should be written and in checklist format.
- **Security officers actively check license plates for cars in emergency department parking.** One hospital checks every hour and compares against ED patients, looking for unauthorized vehicles.
- **Security officers have handheld magnetometers and policy for use with all officers trained.** Magnetometers provide for a more secure environment, but there need to be strong policies on weapons and the ability to enforce them.
- **Security Officers have individual "ID only" key and swipe all magnetic locked doors on rounds.** Access control should be a core strategy for hospitals, both on the perimeter and with multiple internal zones. Rounds can be easily tracked with the "ID only" key, although officers also need access keys as well, but shouldn't be unlocking doors unnecessarily.
- **Security office should be comfortable and be ergonomically designed to encourage alertness.** Many security offices now have multi-panel monitors and security officers on camera detail need to rotate hourly to limit fatigue.

Access Control

- **All external entrances are manned or controlled by magnetic lock.** Magnetic locks are the single easiest way to dramatically improve physical security — at every exterior entrance, at each internal zone of the hosptal, and for access to each critical utility area. There should be no more than two entrances (Emergency Department and Main) and both should be controlled by security, not volunteers.
- **Internal zoned magnetic access.** Internal zones allow hospital staff to access their normal work areas but not the entire facility. All critical utility areas should have both magnetic locks and cameras.
- **Magnetic access card required to unlock all hospital computers.** Requiring an access card to access computer fulfills one of the three cornerstones of good

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Rx Response: Helping to Get Medicine to Patients in Times of Emergency

by Erin Mullen, Program Director

Introduction

In recent years, the threats of emerging infectious disease such as SARS and avian flu and other large-scale crises such as Hurricane Katrina have caused a great deal of public concern. Americans have wondered whether they will have access to the critical medicines they need and rely on during and in the aftermath of a crisis. In addition to the medicines necessary to treat the illnesses or injuries caused by an epidemic or disaster, would current medicines for the ongoing treatment of acute and chronic conditions continue to be available? If an epidemic, natural disaster, or terrorist event were to disrupt travel, communication, and business, would manufacturing facilities and the supply chain for these crucial medicines be preserved? Are the government, the pharmaceutical companies, and the critical players in the pharmaceutical supply chain talking to each other and planning ahead for the next crisis?

In an unprecedented collaboration, members of the U.S. private sector pharmaceutical supply system and the American Red Cross have formed Rx Response to ensure that these questions have answers. Rx Response is a program dedicated to sustaining the supply of critical medicines following a natural disaster, act of terror, or severe health emergency such as a pandemic. It represents a unique effort in today's business environment, with the parties responsible for an entire industry sector working actively to safeguard supply system resilience during times of crisis through information sharing and communication. This effort provides a collaborative setting for members of the private sector pharmaceutical supply system to communicate clearly and directly with key government agencies about disaster-related needs and concerns.

Existing public health emergency management programs, combined with the inherent resiliency of the normal day-to-day pharmaceutical supply system, are sufficient to address most regional or local isolated public health emergencies. The particular focus of the Rx Response program is to address pharmaceutical supply chain disruptions during severe, domestic public health emergencies.

Rx RESPONSE
Medicines to patients in times of emergency

Rx Response's partners include industry associations representing pharmaceutical manufacturers, distributors, retail pharmacies, hospitals, and the American Red Cross. In 2007, Rx Response members reached out to all levels of government, including the Departments of Health and Human Services (HHS) and Homeland Security (DHS) and state emergency management agencies. This outreach sought to address anticipated barriers to the normal flow of critical medicines and help support the continuing provision of medicines to patients in the event of a severe public health emergency.

Guiding Principles

The Rx Response program's core principles recognize that access to medicines during times of severe public health emergency require a broad effort and close communication among the many public and private sector stakeholders that will be called upon to respond. This includes government agencies as well as private relief groups such as the American Red Cross.

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Rx Response *(Cont. from 5)*

These principles include:

- Collaboration – Information sharing and problem-solving must be fostered between key private and public sector partners.
- Continuation of Normal Business Functions to the Maximum Extent Possible – To the greatest extent possible, the existing supply system must be preserved during disasters by working to maintain or restore normal business relationships.
- Utilization of Individual Partner Expertise – By assisting individual organizations and first-line responders to employ their respective individual emergency response plans, the respective strengths and skills of these organizations can fully be leveraged to address problems that single entities cannot solve alone.
- Simplicity – Plans, toolsets, and supporting processes should be kept as simple and understandable as possible.
- Focus – Efforts should center on the most important issues affecting the normal flow of pharmaceutical products.

Triggers

While public health emergencies will be determined on a case-by-case basis, there are a number of existing mechanisms that will be used to help guide Rx Response program activation decision-making. These include:

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Natural Disaster Response	
Rx Response is…	Rx Response is not…
• A multi-party, private-sector driven, closed-system (non-public) coalition to share information and address pharmaceutical supply system risks in a disaster, as appropriate - A means to monitor the disaster situation and identify risks to the pharmaceutical supply system - A forum to facilitate problem solving of supply system issues • A means to support firstline emergency response parties • Applicable to medicines only	• A public call-in center • A source of medical advice or prescriptions • A coordinating capability among various parties to order medicines or provide for their distribution and dispensing • A decision-making body for individual sectors

Pandemic Response	
Rx Response is…	Rx Response is not…
• A collective forum to work with government agencies to address barriers to critical product delivery • A voice to the DHS Critical Infrastructure Program • A purveyor of organized intelligence • A means by which to share pharmaceutical supply best practices, as appropriate	• A government clearinghouse on vaccine and anti-viral availability • A one-stop shop for pandemic information

Institute for Biosecurity and Disaster Preparedness

by Rachel Schwartz, PhD, Assistant Professor

The Institute for Biosecurity at Saint Louis University's School of Public Health was first established as the Center for the Study of Bioterrorism and Emerging Infections nearly two years before 9/11 and the anthrax attacks, by a small group of faculty led by Greg Evans, PhD. This group believed that the United States was unprepared to face acts of bioterrorism, terrorism, and pandemics caused by new and emerging infections and took upon themselves the mission of providing educational material to reach broad audiences including first responders, medical and public health personnel, communities, families, and individuals from multiple cultural backgrounds.

With funding from the Centers for Disease Control and Prevention (CDC), the Institute launched several projects using the cutting edge technology which continues to remain its hallmark today. The first of these projects was the production and dissemination of interactive CD-ROMs, which were distributed free of charge to public health departments, hospitals, emergency medical service personnel, physicians, and nurses to provide the maximum benefit to the maximum number of people by educating and assisting in implementation of preparedness processes.

Faculty have worked on projects and published articles in the fields of SARS, bioterrorism, chemical terrorism, Avian Influenza, Pandemic and Disaster preparedness in vulnerable populations, correctional and health facilities, and in the general population. The Institute has developed bioterrorism-related exercises and developed preparedness plans for private and public entities, as well as helped set standards for infection prevention across the country. Current projects include researching and implementing resilience-building interventions for vulnerable populations suffering from traumatic events both natural and manmade; researching nurses' participation in bioterrorism-related educational activities and exercises; identifying and implementing preparedness programs for vulnerable populations and others.

Online Degree Programs

Director of the Institute, Dr. Greg Evans, notes that while there is currently a great need for people trained in biosecurity and disaster preparedness, "many people currently working in the field . . . have minimal relevant education . . . ." The online master's degree program offered through the School of Public Health seeks to address this problem by providing the necessary education to prepare leaders to deal with the consequences of a broad array of manmade and natural disasters. This Master of Science degree program in Biosecurity and Disaster Preparedness is the first entirely distance-learning program of its kind to focus on infectious biological agents and general disaster preparedness. It is designed to meet the growing need of public health professionals, physicians, physician assistants, nurses, veterinarians, emergency management professionals, law enforcement, corporate security, and first responders seeking the skill set needed for biosecurity professionals. Subjects covered include disaster planning, communicable diseases and infection control, terrorism and bioterrorism, legal, ethical, cultural and behavioral implications of disasters, epidemiological methods, disease surveillance, and others. Current enrollment includes students from around the world; among them are deployed military, first responders, law enforcement, fire, homeland security, and members of public health organizations like the CDC.

Director, Dr. Greg Evans

Courses are taught in a highly interactive fashion, making use of multiple media and faculty experts both from the Institute and organizations like the CDC and FBI as well as noted academicians and medical and military professionals.

The Institute also offers the option of a certificate program, a Master of Public Health, and will inaugurate its first PhD class in the fall of 2009. ❖

Legal Insights

Immunity for Emergency Responders — Business and Non-Profit Organizations

by Timothy P. Clancy, JD, Principal Research Associate for Law

Major disasters raise concerns about liability for emergency responders. This is especially true in the health sector where medical personnel could be called to meet the threat of a pandemic outbreak or bioterrorist attack.

Most federal and state emergency plans envision the need for a cadre of volunteer public health workers to provide surge capacity. If a catastrophic disaster with mass casualties brought on by pandemic flu were to occur, regional health care services could be quickly overwhelmed. In such an event, HHS recognizes that fewer workers, equipment, and supplies would be available than normal. Medical professionals, often volunteers, would need to come from other states and regions to fill the need. At the same time, most experts believe the ability of those available public health workers to meet established standards of care given would be compromised due to the extreme working conditions.

Unfortunately, concerns over legal liability inhibit many out-of-state public health workers from volunteering quickly and decisively in the event of a public health emergency.[1] Some immunity protection does exist in many states for public health volunteers and other professionals volunteering in the case of a major disaster or public emergency. Known popularly as "Good Samaritan Laws", these state laws are mostly an uneven mix of statutes and their protections are limited to mostly government employees and in certain cases individual volunteers.[2] Such laws traditionally do not protect compensated workers or volunteering organizations, businesses, or non-profit groups.

Such concerns make public-private partnerships in public health emergency response difficult. Several public health coalitions including academic, business, and non-profit groups have called for improving the liability protections for volunteer emergency responders including for-profit and non-profit organizations.

The North Carolina Institute for Public Health at the School of Public Health, University of North Carolina at Chapel Hill launched a two-year effort to improve public-private partnerships in emergency preparedness and response.[3] A key element was the creation of a Good Samaritan Entity Legal Protection Initiative to encourage states to amend relevant statutes or work around existing statutes to extend emergency response liability protection to businesses and non-profit groups in certain situations.

The initiative created a generic proposal and model law aimed at state legislatures. The Good Samaritan Entity Liability Protection proposal contains four key elements:

1. Extend liability protection to businesses and non-profit groups acting in *good faith* during an emergency.
2. Coverage triggered by a Governor's emergency declaration, not federal.
3. Applies to emergency activities conducted in coordination with a state agency only.
4. Liability protection covers pre-event planning and training activities prior to the declared emergency.

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[1] Responders' Responsibility: Liability and Immunity in Public Health Emergencies, Sharona Hoffman, *Georgetown Law Journal*, Summer 2008: Vol. 96, p. 1913, available at SSRN: http://ssrn.com/abstract=1017277.

[2] See Hoffman at 1917.

[3] North Carolina Public/Private Legal Preparedness Initiative, http://nciph.sph.unc.edu/law/index.htm.

Legislative Review

A Review of Pending Legislation Affecting Emergency Preparedness

With the August recess now over and an election looming, Washington has turned its mind away from legislating. However, here is a short summary of pending bills.

National Bombing Prevention Act of 2008 (H.R. 4749)

This bill would establish an Office of Bombing Prevention within the Office of Infrastructure Protection at the Department of Homeland Security. This new office would be the lead agency within the Department for programs designed to counter explosive attacks and would coordinate all other efforts towards that end. The bill has passed the House and is now under consideration by the Senate.

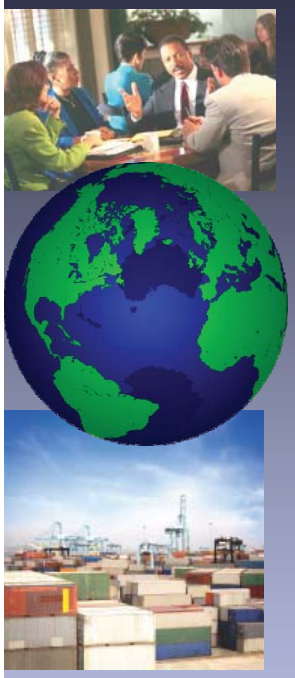
Pre-Disaster Mitigation Act of 2008 (H.R. 6109)

This bill reauthorizes the Pre-Disaster Mitigation Program offered by FEMA which provides funds to localities and communities to create hazard mitigation plans and implement mitigation projects. The bill also creates a floor for funding where no state may receive less than one percent of the total program's budget. The bill has passed the House and is now under consideration by the Senate.

Upcoming Conference Reminder

The CIP Program is co-hosting the Supply Chain Security, Resilience & Sustainability Conference on October 17, 2008 in Arlington, VA. Please see the invitation below for information on this upcoming conference.

For additional information, visit http://cipp.gmu.edu/research/SupplyChainConference.php.



Supply Chain Security, Resilience & Sustainability One-Day Conference

Friday, October 17, 2008

Globalization is forcing the convergence of multiple developments – Security, Resilience and Sustainability – which impact global operations and services for both public and private sectors. Come and hear the experts examine these developments and their likely effect on your enterprise.

George Mason University
Original Building
3401 Fairfax Drive
Arlington, VA 22201

Speakers Include:

- James J. Carafano, PhD, Assistant Director and Senior Research Fellow, The Heritage Foundation
- Randy Beardsworth, Principal, Olive, Edwards & Cooper, LLC
- Taylor Wilkerson, Research Fellow, LMI
- Joe McKinney, Vice President, Business Development, System Planning Group
- Celina Realuyo, Assistant Professor of Counterterrorism, NDU
- Karen Felstein, Booz Allen Hamilton
- Irv Varkonyi, President, SCOPE
- JR Helmig, Senior Analyst, SPADAC

Fee:

Non-Member of Host Organization(s)	$250
Member of Host Organization(s)	$200
Government Employee/Military	$100
Student	$50

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Hospital Antiterrorism *(Cont. from 4)*

access control — something you know, something you have, and something you are.

- **When employee leaves, magnetic keys shut off, but access monitored for one month.** This is good counter-surveillance and better than taking the card away because it monitors for penetration. The card will be read and recorded if swiped, but no access granted.
- **All non-employees come through single entrance, passes color-coded by day and destination.** This is surprisingly simple. Each pass is a bright primary color.
- **Hospital perimeter is fenced.** This limits opportunity for theft and marks boundaries of property (Crime Prevention Through Environmental Design).
- **All emergency department doors lock.** This is surprisingly an issue at a lot of hospitals — urban, suburban, and rural.

Monitoring and Other Issues

- **All exterior cameras are pan-tilt-zoom (PTZ) cameras.** PTZ cameras allow security officers to provide more area coverage from a fixed point.
- **Panic phones in remote parking lots.** Makes employees feel safer.
- **Emergency department bollards protect against accidents.** Countersunk bollards protect against inadvertent and purposeful crashes into the emergency department, which almost every single hospital has a story about.
- **Hospital has no parking within 25 feet of hospital.** This limits (to some degree) the impact of a car bomb.
- **Hospital has panic buttons in key areas.** Employees in triage, registration, the finance office, and psychiatry need to be able to alert security without alerting the perpetrator.
- **Clear, bright, consistent signage.** Hospitals need to delineate public from private areas. Bright 12-inch "staff only" red-and-white stripes on doors clearly make the distinction.
- **Mailroom staff has had training in identification of suspicious packages and USPS poster is in place in mailroom.** This is a gap more often than not, even after Theodore Kaczynski sent multiple bombs to universities.

Construction and Physical Plant

- **All renovation and new construction built to earthquake-resistant standards.** Although many regional hospitals are not in a significant earthquake zone, building to seismic standards will provide some protection against explosive blasts as well.
- **Hospital can switch from #4 fuel oil to natural gas; can convert to #6 fuel oil.** Having a boiler that can convert to multiple oil types and gas ensures both long-term cost savings and increased resiliency.
- **Generator and/or water has pre-set external plug.** It is very difficult to get external power plugs set up after a failure.
- **Hospital has four water lines into building, all cross-connected.** Utility resiliency is key to effective functioning in crisis. Although generators are required, water and sewer systems are just as important.
- **Monthly emergency generator testing at full loads.** Testing at full loads and testing-till-failure helps ensure that emergency managers understand the real demands, rather than limited load/limited time testing.
- **Hospital is 100% sprinklered.** It is shocking that this is not required by law, considering the impact of a significant fire load in a non-clinical area.
- **Hospital maintains multiple cell vendors on different types of networks/supports cellular towers across campus/utilizes GETS and WPS on all critical phones.** Having multiple vendors ensures that calls are more likely to get through. Utilizing standard technology forces the cellular companies to shoulder the cost of upgrades, and having several cellular towers in the immediate area. The Government Emergency Telecommunications Service and Wireless Priority Service are low cost effective ways to increase communications resiliency in organizations.

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Rx Response *(Cont. from 6)*

- Health and well being of a significant number of persons is materially threatened or affected;
- Local, regional, national, or global healthcare infrastructure is significantly compromised;
- Ability to provide ample pharmaceuticals in sufficient quantities or in a timely fashion is challenged;
- Underlying circumstances or dynamics are not quickly or simply resolved (e.g., within several days or through normal business practices by individual companies) although they are limited in their duration; and/or
- Disaster declaration by a Governor or the President
- American Red Cross Level V+ Event
- DHS Severe Classification
- WHO Phase IV+ Event
- HHS Stage 2+ Event

Information Sharing

During a disaster, Rx Response participants will hold scheduled meetings to discuss the current situation and anticipated needs/issues. Key Federal or State officials may be asked to participate, as appropriate for the incident. However, another resource available to all Rx Response stakeholders is an online forum, RxResponse.org, which allows organizations and agencies to:

- Review pharmaceutical supply system situation reports focused on issues and barriers affecting the delivery of critical medicines;
- Contribute information focused on these barriers;
- Access member contact information; and
- Submit product requests to enable members to individually address essential medicine shortages.

Key Accomplishments

Since program inception, Rx Response achievements include:

- A Defined Coalition – The program has developed and matured as key industry associations and organizations representing each step in the pharmaceutical supply system have joined. These organizations include manufacturers (PhRMA, BIO and GPhA), distributors (HDMA), and dispensers (NACDS, NCPA, and AHA), as well as ARC and DHS/HHS. Representatives from each of these organizations make up Rx Response's guiding partners.
- Outreach to State Emergency Management and Public Health – Rx Response performed intensive initial outreach with the states of New York and Florida to ensure that the program evolved into a model that meets the needs of and integrates with differing state emergency management agency models and response processes. Through continued outreach, Rx Response has developed relationships with response officials in a number of additional states and the program will continue outreach and awareness efforts to ensure all states are aware of the program.
- Recurring Outreach to DHS/HHS – Formal and recurring outreach with DHS and HHS has provided significant insight and awareness into the federal strategies for responding to natural disasters and pandemic events. Information sharing, awareness presentations, and general collaboration are ongoing.
- Documented Plans – Rx Response created two crisis management plans — a natural disaster/terrorism response plan, and a pandemic response plan.
- Information Sharing – In order to facilitate information sharing and communication between the public and private sector, Rx Response developed and implemented the Rx Response website (www.rxresponse.org), a portal that enables information sharing, contact management, and emergency notification.
- Permanent Staffing – Rx Response identified and retained a full-time program director, enabling a focused effort in maturing the program and staying engaged with all key public and private sector stakeholders.

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Rx Response *(Cont. from 12)*

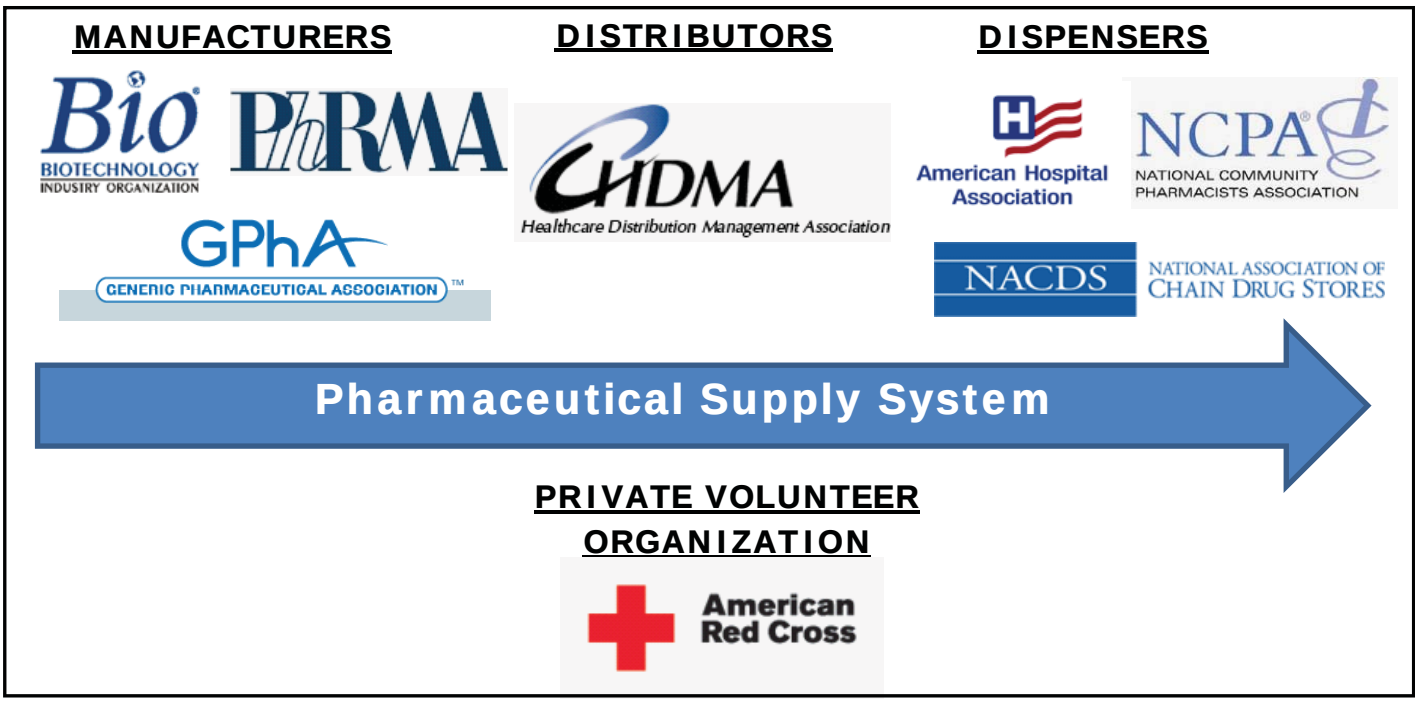
- Exercises – Rx Response has conducted multiple internal exercises to put into operation and validate the program's documented plans. Additionally, Rx Response has participated in Federal and State disaster response exercises, which continue to inform the Rx Response process.
- Alerts and Activations – In the year that Rx Response has been operational, the program has entered the "Alert" phase of active monitoring for three occasions: the 2007 California Wildfires, the 2008 Midwest Floods, and Hurricane Dolly. Though none of these incidents escalated to an extent that required activation of the Rx Response program, the Rx Response members tested communications protocols and authored situation reports, providing invaluable experience for the participants.

Conclusion

Rx Response helps Federal and State authorities save time and resources with a single point of contact to communicate with key players in the pharmaceutical supply chain during severe public health emergencies. The program is designed to be flexible and allow response to any situation that arises in any area of the United States, including addressing simultaneous events. By enabling effective communication between the private sector and various levels of government, response efforts can be prioritized and efficiently executed. Working together, we can fulfill our mission: to support the continued provision of critical medicines to patients whose health is threatened by a severe public health emergency.

For additional information on Rx Response, please contact Erin Mullen at contactus@rxresponse.org or (202)-715-7200. ❖

Update: Since the submission of this article, Rx Response was activated for the first time in response to Hurricane Gustav and for the second time due to Hurricane Ike. For more information, please visit **http://www.rxresponse.org/web/guest/pressreleases**.



Hospital Antiterrorism *(Cont. from 11)*

The Five Worst Practices:

- Natural gas lines coming above ground and into buildings in unsecured, un-bollarded area.
- Doors held open in unguarded areas with low foot traffic.
- Physician buildings connected to hospital without any security posts, allowing direct access.
- Large propane tanks adjacent to parking areas, without fencing or bollards.
- Main hospital power line running overhead over driveway with pole exposed at street side, no bollards, at the bottom of a hill.

One of the biggest fears of hospital emergency managers is the planting of a primary terrorist device in the field followed by a secondary device going off 20-30 minutes later at the emergency department which would have the short-term impact of killing first responders, first receivers, and patients and the long-term impact of undermining the sense of safety which now surrounds hospitals. While there have been terrorist actions aimed at hospitals, particularly in Iraq, hospitals in the west had not considered themselves as targets. However, on July 26th in Ahmedabad, India the worst-case scenario happened- at least 51 killed and over 200 wounded when bombs exploded in a crowded market, followed by two car bombs exploding 20 minutes later outside two area hospitals.

Hospitals have significant existing vulnerabilities. Although it may not be possible for hospital administration to take the threat of terrorism seriously until there are a series of hospital-specific attacks, it is possible to get them to invest in changes in policy, training, and infrastructure to create a safer environment that is less vulnerable to crime. Good security has a direct impact on a hospital's ability to recruit and keep good nursing staff. With the ballpark costs of $25,000-50,000 to train a new nurse to competency, implementing a security development plan which retains three additional nurses a year and gives the hospital a competitive advantage against other local hospitals is a good investment in long-term hospital planning. ❖

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Mass Evacuations *(Cont. from 2)*

The message to be drawn here is that there is still much work to be done in this area. To their credit, many urban areas are already in the process of revising their evacuation plans. These plans will hopefully include a greater role for mass transit. The systems already exist, but they must be harnessed to do good, rather than harm, the next time a major disaster strikes. ❖

Legal Insights *(Cont. from 8)*

The proposal does not create blanket liability protection, limiting protection only to those entities acting in good faith and in coordination with a state government agency. The inclusion of protection for pre-event planning is critical — federal and state pandemic response plans anticipate a pre-positioned, pre-planned surge capacity of private sector and non-profit volunteer organizations. Removing a major disincentive for businesses and non-profit groups is needed if a true public-private partnership is to be created rather than an ad-hoc volunteer response once a disaster has been declared.

There could be an important side benefit to enacting volunteer entity liability protections — reduced state liability. Several "failure to prepare" lawsuits were filed in the aftermath of the Toronto SARS outbreak and Hurricane Katrina. In event of a lawsuit post-incident, existence of a robust emergency response plan including an active public-private partnership can demonstrate to a court that a state agency has acted prudently to prepare for a disaster. An effective public-private partnership requires pre-disaster coordination, education, training, and exercises — efforts that could be bolstered by a tailored emergency response immunity protection scheme for participating private organizations.

In conclusion, with any new proposed legal regime the devil can be in the details. Protection must be tailored to incentivize private participation in emergency response plans but still allow for recovery against intentional, wanton, or reckless behavior (good faith exception). Also, no immunity should exist for private entities that do not act in concert with a state agency and the relevant state emergency response statutes.

The good news is that several states have begun to amend their Emergency Good Samaritan or Volunteer statutes to create incentives. Working at the state level has advantages and disadvantages but since emergency response decisions are almost always the responsibility of state and local emergency managers, such a state-by-state reform effort is smart strategy. This type of legal reform can take several years but this reform could prove much more successful in the long run than creating a single, federal statute. ❖

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