PREPAREDNESS, RESPONSE, AND RESILIENCE
TASK FORCE

Public Health and Emergency Management:
Challenges and Opportunities

Raphael Barishansky
Marko Bourne
Darrell Darnell
Robert Kadlec
Daniel Kaniewski
John Paczkowski
Peter Roman
Adam Thiel

THE GEORGE WASHINGTON UNIVERSITY
HOMELAND SECURITY POLICY INSTITUTE

June 7, 2012
Founded in 2003, the George Washington University Homeland Security Policy Institute (HSPI) is a nonpartisan “think and do” tank whose mission is to build bridges between theory and practice to advance homeland security through an interdisciplinary approach. By convening domestic and international policymakers and practitioners at all levels of government, the private and non-profit sectors, and academia, HSPI creates innovative strategies and solutions to current and future threats to the nation.

HSPI’s Preparedness, Response, and Resilience Task Force brings together experts from government, academia, and the private and non-profit sectors to consider contemporary policy issues facing the homeland security, first responder, and emergency management communities. To this end, the Task Force convenes sessions with policymakers and publishes policy papers and reports with actionable policy recommendations for the future. The Task Force is predicated on the idea that a more nuanced approach to these policy issues can contribute to a greater level of resiliency for all levels of government, the private sector, and the public writ large.

Recent considerations of the Task Force include a systems-based approach emphasizing risk management for resilience policy; methods for strengthening resilience through outcome-focused measurements of preparedness; and the future of resiliency as it relates to a diverse and changing operational environment.

While consensus positions were sought and often achieved, the Task Force Co-Chairs take full responsibility for the opinions and recommendations herein.

Comments should be directed to hspi@gwu.edu. For more information on HSPI and its programs, please visit http://homelandsecurity.gwu.edu.

ISBN: 978-0-9839904-3-7
PREPAREDNESS, RESPONSE, AND RESILIENCE
TASK FORCE

Co-Chairs

Michael Balboni*
Former Deputy Secretary for Public Safety, State of New York; Former New York State Senator

R. David Paulison**
Former Administrator, Federal Emergency Management Agency; Former Administrator, U.S. Fire Administration; Former Fire Chief, Miami-Dade County (Florida) Fire Rescue Department

Daniel Kaniewski
Deputy Director, Homeland Security Policy Institute; Assistant Vice President for Homeland Security, George Washington University; Former Special Assistant to the President for Homeland Security, The White House

Public Health and Emergency Management Subcommittee

Raphael Barishansky*
Chief of Public Health Emergency Preparedness, Prince George’s County (MD) Health Department

Darrell Darnell*
Senior Associate Vice President for Safety & Security, The George Washington University; Former Director of Resilience Policy, National Security Staff, The White House; Former Director, DC Homeland Security & Emergency Management Agency

Marko Bourne
Principal, Booz Allen Hamilton; Former Director of Policy and Program Analysis, Federal Emergency Management Agency

John Paczkowski*
Vice President, ICF International; Former Director, Emergency Management and Security at Port Authority of New York and New Jersey

Peter Roman
President, WIT Consulting, LLC

Dr. Robert P. Kadlec
Former Special Assistant to the President and Senior Director for Biodefense Policy; Former Staff Director, Senate Subcommittee on Bioterrorism and Public Health Preparedness

Adam Thiel**
Fire Chief, City of Alexandria, Virginia

Task Force Staff

Margaret Chasler and Adam Humayun
Research Assistants

*Denotes HSPI Senior Fellow
**Denotes HSPI Steering Committee Member
Introduction

The legacy missions of public health and emergency management must be synchronized for disaster preparedness and response efforts to be effective. To achieve this goal, stakeholders within these fields must work together to develop a comprehensive and integrated approach to managing manmade and natural disasters. Such an approach should institutionalize this partnership into guidance and policies at all levels of government and be implemented into practice for routine as well as catastrophic incidents.

Events of the past decade—including 9/11, the anthrax attacks, Hurricane Katrina, and the 2009 H1N1 pandemic—have shown that public health and emergency management efforts are interconnected and often overlap in time of crisis. It is thus important to recognize that the success of these missions—whether considered individually or jointly—depends on the continued support of policymakers.

These concepts are not new, and much progress has been made over the past decade. Yet opportunities for improved collaboration remain. This report highlights remaining gaps and makes policy recommendations to enhance the nation’s resilience for manmade and natural disasters.

Public Health Preparedness

Public health preparedness is a dynamic field whose importance has become more broadly recognized over the last decade.\(^1\) Public health preparedness can be defined as “the capability of the public health and health care systems, communities and individuals, to prevent, protect against, quickly respond to, and recover from health emergencies.”\(^2\) Though often narrowly considered applicable only to “infectious disease outbreaks, bioterrorism, and emerging health threats,”\(^3\) public health preparedness should also address threats from manmade and natural disasters, consistent with an “all-hazards” approach to emergency

---


management. Public health professionals have a role to play in all of the threats and hazards recognized within the NPG Core Capabilities.4

What has been done?

Events of the past decade made it clear to policymakers that the nation was not prepared for large-scale public health emergencies.5 Federal, State, and local governments have since developed policies to create and to fund programs designed to address these new public health challenges.

Public Health

Hurricane Katrina revealed significant disconnects between public health and emergency management. The National Response Plan specified that HHS was to coordinate the health and medical response to disasters in its role as the leader for Emergency Support Function-8 (ESF-8), but HHS was ill-prepared for the mission.6 The disaster galvanized the agency, as well as Congress, to take action.

In 2006 Congress enacted the Pandemic and All-Hazards Preparedness Act (PAHPA) to address public health preparedness and disaster response issues raised following Hurricane Katrina. PAHPA placed the Assistant Secretary for Preparedness and Response at HHS in charge of Emergency Support Function-8 (ESF-8); established the Biomedical Advanced Research and Development Authority (BARDA) for the development and procurement of medical countermeasures; reauthorized public health and hospital preparedness grants; raised planning priority for at-risk individuals; and promoted development of situational awareness systems.

PAHPA also mandated the National Health Security Strategy (NHSS), the nation’s first such strategy, to “refocus the patchwork of disparate public health and medical preparedness, response, and recovery strategies in order to ensure that the nation is prepared for, protected

4 FEMA broadly defines health security as “a state in which the Nation and its people are prepared for, protected from, and resilient in the face of health threats or incidents with potentially negative health consequences.”


from, and resilient in the face of health threats or incidents with potentially negative health consequences.” The strategy, released in December 2009, identified ten strategic objectives and set the laudable goals of building community resilience and strengthening and sustaining health and emergency response systems. Most recently, in May 2012, HHS released the NHSS Implementation Plan.

In 2009 Congress enacted the American Recovery and Reinvestment Act (ARRA) which provided funding to revitalize and upgrade the nation’s public health system. ARRA provided $1 billion for public health programs around the country, with a particular focus on community-based prevention and wellness strategies. Some argue that healthy individuals and healthy communities will result in a healthier, more resilient nation, leaving fewer members of society vulnerable during an emergency. This example shows the broad benefit of promoting the relationship between public health writ large and public health preparedness.

In the current Congress, both the Senate and House of Representatives have passed their own versions of the reauthorization of PAHPA. Each bill would strengthen the role of the ASPR by further consolidating the authorities needed to effectively manage an ESF-8 response and reauthorizing key components to ensure that the effort to develop and procure medical countermeasures continues.

**Emergency Management**

The lack of effective emergency management doctrine and adequate coordinating mechanisms were among the significant failures experienced during Hurricane Katrina. The nation’s response playbook, the National Response Plan, proved to be inadequate. Delays

---


in the issuance of FEMA mission assignments induced ESF agencies (including HHS) to take unilateral action to get needed resources into the field. It was thus unsurprising that FEMA and HHS failed to effectively coordinate their efforts. In the wake of the disaster, the White House directed Federal departments and agencies to embrace emergency principles such as the National Incident Management System (NIMS) as well as to develop an integrated approach to planning.

The emergency management community has made notable progress in the seven years since Katrina. President Obama’s issuance of Presidential Policy Directive-8 (PPD-8) in March 2011 provides the latest opportunity for further harmonization of efforts. PPD-8 called for a National Preparedness Goal (NPG) and a National Preparedness System. The National Preparedness Goal offers guidance for preparing for threats and hazards—including public health emergencies—that pose the greatest risk to the security of the United States. FEMA established the Core Capabilities of Prevention, Protection, Mitigation, Response, and Recovery within the NPG. As part of the National Preparedness System, FEMA developed National Planning Frameworks based upon these Core Capabilities that define key preparedness roles and responsibilities within whole-of-community partnerships.

Public health is addressed both by the NPG and the National Planning Frameworks, yet more could be done to fully integrate public health into these emergency management-focused documents. Increased emphasis on public health within the NPG and the Frameworks, along with improved coordination between them, would be a step in the right direction.

In March 2012 FEMA released the draft Frameworks for review. Each Framework recognizes the need for partnerships across every level of government and between the public, private and non-profit sectors. The Frameworks emphasize the importance of developing efforts and


relationships to address threats well in advance of a crisis. The Frameworks also identify other supporting elements of preparedness, including access points for collection of information, sufficient training for analysts, and adequate preparation by the first responder community.17

Government resources alone cannot meet all the needs of those affected by major disasters. The National Preparedness Frameworks therefore emphasize the need for a whole-of-community approach that engages the public in realizing each of the Core Capabilities.18 Cuts to funding and support for training, education, and exercises impair the ability of public health and emergency managers to pursue such an approach. Integration can be achieved only if public health and emergency managers, as well as other private-sector and non-profit entities, receive the support necessary to achieve true resilience as defined by the Core Capabilities.

The DHS Homeland Security Grant Program (HSGP) enables and in some cases encourages collaboration in training and exercises between the public health and emergency response communities. It also permits sharing of operational assets.19 For example, the Metropolitan Medical Response System (MMRS), though no longer funded as a separate program, serves as the locus for inter-jurisdictional public health and emergency management efforts. The FY2012 HSGP grant guidance specifies that MMRS activities are “allowable and encouraged activities and costs under the FY 2012 HSGP.”20 More generally, the Urban Areas Security Initiative (UASI) program enhances regional public health, especially when paired with the MMRS planning efforts. A local fire chief noted that using UASI to further develop MMRS capabilities delivers more than simply the grant funding. The UASI program fosters cooperative relationships between response communities by bringing together regional stakeholders for a common purpose.21

Alignment and integration of homeland security grant programs with large-scale public health preparedness programs would foster even more collaboration between public health preparedness and emergency management personnel in the field. Examples of such programs include the Hospital Preparedness Program Cooperative Agreement, which provides approximately $350 million annually to state and local jurisdictions, and the Public Health Emergency Preparedness Cooperative Agreement, which has provided nearly $7 billion to public health entities across the nation.

**Joint Efforts**

Recent joint DHS and HHS efforts at the federal level have further enhanced successful partnerships between emergency management and public health officials at the State and local levels. Examples include the Strategic National Stockpile program and the Cities Readiness Initiative (designed to “strengthen key partnerships with other responders with key roles in countermeasure dispensing, including law enforcement, fire, and emergency management”). In 2009, President Obama issued Executive Order 13527 (Medical Countermeasures Following a Biological Attack) to build upon these earlier successes. The EO directed the Secretaries of Homeland Security and Health and Human Services, in coordination with the Secretary of Defense, to develop a Concept of Operations and to establish requirements for a federal rapid response to dispense medical countermeasures to an affected population following a large-scale biological attack. This joint federal effort has led to successful partnerships on comprehensive medical countermeasures planning between emergency management and public health officials at the State and local levels.

Organizational changes at both FEMA and HHS demonstrate signs of progress at the federal level toward truly joint public health and emergency preparedness efforts. The position of


Assistant Secretary for Preparedness and Response (ASPR) at HHS was created by PAHPA. Personnel changes likewise indicate growing recognition of the need for collaboration between the public health and emergency management disciplines: a veteran Emergency Medical Services (EMS) chief now serves as Deputy Administrator of FEMA, while an emergency management expert serves as Principal Deputy Assistant Secretary for ASPR. These appointments provide an excellent opportunity to strengthen the partnership between the public health and emergency management enterprises.

FEMA Deputy Administrator Richard Serino suggests that while a cross-disciplinary alliance is forming, a need for more interaction and more integration across public health and emergency management boundaries remains.26

In 2009, then-Boston EMS Chief Serino created the city’s Medical Intelligence Center (MIC). Serino felt public health intelligence was just as important as counterterrorism intelligence gathered by the fusion center, the Boston Regional Intelligence Center. The center gathers information reported by public health organizations and emergency managers. This partnership enables public health officials to gather and maintain public safety and homeland security information and to communicate with appropriate partners when necessary.27 Serino believes that these types of initiatives establish effective cooperation, and that they should be institutionalized.28

In one local community, the 2009 H1N1 pandemic offered an opportunity for collaboration that continues to this day. Said a local fire chief, “Our Office of Emergency Management (OEM) worked with our public health agency to build a National Incident Management System (NIMS) organization that included representatives from all our public and private sector partners; that was a crucial next step in a partnership that now has our public health emergency planner actually sitting with OEM staff at least one day a week to collaborate on mutual issues and maintain critical relationships.”29

---


Individuals and Communities

Another concern for the public health community and the nation is the health and well-being of individuals and communities. ASPR’s Strategic Plan for 2011-2015 identifies a need to strengthen and promote the resilience of communities by “fostering a nation able to withstand and recover from public health emergencies.”\textsuperscript{30} Some non-profit organizations attempt to further this objective. One example is Collaborating Agencies Responding to Disaster (CARD), whose mission is to support traditional disaster relief agencies and prepare local community groups to participate in coordinated response and recovery efforts in Alameda County, California. This organization was created after the 1989 Loma Prieta earthquake, when members of the community realized that government resources were insufficient to adequately address all preparedness and planning needs. Community-based initiatives such as CARD enable the public health and emergency management communities to focus limited resources on other vital areas, such as biosurveillance and early detection.\textsuperscript{31}

Opportunities for Improvement

Despite efforts to improve public health and emergency management integration, the need for further collaboration remains. For example, while the 2009 H1N1 incident demonstrated some success such as the rapid deployment of personal protective equipment from the Strategic National Stockpile, it also highlighted shortcomings. After President Obama declared H1N1 a national emergency, the push to have vaccines ready did not prevent shortages in numerous localities. Panic and mistrust among the public caused complications that compounded shortages.\textsuperscript{32} Within the public health community, a lack of communication, insufficient situational awareness and disease detection, and staff shortages further weakened the response to H1N1.\textsuperscript{33} These issues brought gaps in the public health system to the attention of policymakers and the public.

\begin{flushright}
\end{flushright}

\begin{flushright}
\textsuperscript{31} “Collaborating Agencies Responding to Disasters,” \texttt{http://cardcanhelp.org/who-we-are/what-is-card/}.
\end{flushright}

\begin{flushright}
\end{flushright}

\begin{flushright}
\end{flushright}
Experts attest to both the reality and the inadequacy of progress thus far. Dr. Robert Kadlec, Former Special Assistant to the President and Senior Director for Biodefense Policy and former Staff Director of the Senate Subcommittee on Bioterrorism and Public Health Preparedness, testified before Congress that biological and pandemic threats are very real, and that the nation is not prepared to deal with a large-scale event. Kadlec emphasized that progress has been real, if fitful. At the same time, he noted that little headway has made on preparedness requirements such as rapid detection and diagnosis of biological agents of concern, development and procurement of medical countermeasures, rapid dispensation of countermeasures, and decontamination efforts. Kadlec recognized growing appreciation for an increased federal role in a public health emergency, while calling for improved leadership and guidance to better prepare state and local governments for crises. In comparison to other federal activities, funding for biodefense is low, amounting to some $7 billion annually. In comparison, the U.S. Government spends close to $15 billion annually on nuclear defense and $17 billion on cyber defense.\(^3\) While funding for biodefense is significant in absolute terms, it may be insufficient to tackle the wide range of complex issues that a public health emergency would create.

The public health community has voiced concerns about its ability to manage significant incidents. The economic crisis has led many state and local governments to cut public health funding, in some cases resulting in the elimination of staff positions and of programs. Compounding this challenge is the decline in federal grant funding. Some public health officials state that disaster preparedness, while important, cannot take a higher priority because their agencies are underfunded and understaffed.\(^3\) What this means, according to some experts, is that we are better prepared than ten years ago, but are still less prepared than we should be. For example, the recent report Ready or Not?: Protecting the Public’s Health from Disease, Disasters, and Bioterrorism, by Trust for America’s Health finds that while the nation has been working to close preparedness gaps for the past decade, much remains to be done.\(^3\) The complexity of public health emergencies, as well as the broader public health and medical consequences of disasters, will force more resource sharing across


\(^3\) For an overview of efforts to close preparedness gaps by strengthening public health functions within national preparedness and resilience efforts, see Ready or Not?: Protecting the Public’s Health from Disease, Disasters, and Bioterrorism, (Report, Trust for America’s Health, 2011), http://healthyamericans.org/report/92/.
jurisdictions and across disciplines. The decrease in aggregate resources available for public health preparedness efforts will only increase the importance of cross-disciplinary and cross-jurisdictional collaboration.

**Public Health and Emergency Management Synchronization**

It is our view that further strengthening collaboration between the emergency management and public health communities should be a top priority. Federal doctrine guiding the public health and emergency management communities must be synchronized. Current guidance is disjointed: the emergency management community follows preparedness policy articulated in Presidential Policy Directive-8 (PPD-8)\(^{37}\) (including the National Preparedness Goal and the planning Frameworks) and response policy in Homeland Security Presidential Directive-5 (HSPD-5). Meanwhile, the public health community’s guiding preparedness doctrine is the National Health Security Strategy and HSPD-21,\(^{38}\) as well as the Centers for Disease Control and Prevention’s Public Health Preparedness capabilities\(^{39}\) and the ASPR Healthcare Preparedness Capabilities.\(^{40}\) The ongoing implementation of PPD-8 offers opportunities to further strengthen collaboration.

One major barrier to better integration between the public health and emergency management disciplines is a lack of funding to support joint implementation. A recommendation from the White House’s after action review from Hurricane Katrina stated: “Grant funds from HHS and DHS should be synchronized to maximize the benefit to local and State health departments.”\(^ {41}\) In a time of fiscal austerity, more funding may be an

---


impossibility. Creating grant programs that incentivize collaboration using existing funds should therefore be considered. The public health preparedness mission and its requisite capabilities should be incorporated into emergency management doctrine, policy, and grant guidance; doing so will lead to improved coordination and ultimately a more comprehensive preparedness effort. At the state level, funding and investment justifications will benefit from a consolidated preparedness strategy that prioritizes spending and encourages consolidation and regionalization of efforts. Experience has shown that success can be achieved when significant funding is made available along with specific goals for achievements linked to outlays.

Another challenge to successful cooperation between the public health and emergency management enterprises is the potential magnitude of public health emergencies. Threats, hazards, and incidents do not neatly align with jurisdictional or bureaucratic boundaries. Often multi-jurisdictional, these challenges must be handled by multiple agencies at the federal, State, and local levels and by both the public and private sectors. State and local governments will be better prepared if they are able to share information, establish relationships and partnerships, and share resources before an incident occurs. As described above, the unity of effort required of the two communities will prove difficult to achieve absent funding for joint training, exercises, and planning before crises.

As these examples have shown, DHS, HHS, their counterparts at the State and local levels, and other stakeholders within the private and non-profit sectors should continue to recognize the need for cross-discipline collaboration to better synchronize their efforts.

What can be done?

In our report “Operationalizing Resilience: A Systems-based Approach Emphasizing Risk Management is Required,” we asserted that resilience will be best achieved by harmonizing and integrating the planning frameworks called for in PPD-8. We stated that this could be done by using a systems-based approach, collaboratively incentivizing the use of risk

management practices for preparedness and resilience that guides integrated federal, State,
and local government and private sector planning and decision-making, and enhancing risk
communication by engaging in candid conversations about risk with all affected
stakeholders. Since the release of PPD-8, FEMA has undertaken significant efforts to
implement the policy. However, in the context of public health, there are further
opportunities to enhance collaboration. We suggest that further integration between the
disciplines develop as PPD-8 is implemented. By fostering public health and emergency
management partnerships and collaboration at the federal, State, and local levels, the nation
will become more resilient against man-made and natural disasters.

**Recommendations**

1) **Federal Leadership and Guiding Doctrine**
   a. HHS should continue its leadership of the National Response Framework (NRF)
      Emergency Support Function-8 (ESF-8). This should include operational response
capabilities as well as disaster response training for ESF-8 stakeholders at all levels of
government and in the private sector.
   b. DHS should incorporate public health into all of the five PPD-8 planning frameworks
      (and not limit them to only the preparedness and response frameworks).
   c. DHS should recognize the National Health Security Strategy as an essential component of
      homeland security and emergency management doctrine.

2) **Grant Reconciliation**
   a. HHS and FEMA should align public health preparedness grant programs with the
      Homeland Security Grant Program.
   b. DHS should better integrate public health preparedness and healthcare preparedness
      capabilities into the Core Capabilities of the NPG.
   c. DHS and HHS should better synchronize their grants and develop incentives for
      resource-sharing partnerships, regionalization, and other cost reductions from the federal
      level to enhance State and local preparedness.

3) **Partnerships and Regionalization**
   a. DHS and HHS should leverage existing work on medical countermeasures plans by
      regionalizing other joint efforts.

---

b. State and local authorities should use UASI regions as cross-disciplinary coordination mechanisms, not simply as funding mechanisms.

4) **Risk Management**
   
a. Given decreasing funds, grants and capital investment decisions should be based on risk. This requires cross-disciplinary identification and definition of risk. This will best ensure the development and sustainment of public health and emergency management capabilities.

b. DHS and HHS should collect, identify, and aggregate risk data geographically, and target funding to improve capabilities. Data should drive investment decisions, future grant allocations, funding decisions, national level risk assessments, and national-level public health preparedness programs. Improved integration of data into funding decisions will increase the incentive for partnerships between agencies and for appropriate risk management. In turn, this will foster dialogue, establishment of common practices, and increased collaboration at the federal, State, local, UASI, and regional level.

5) **Individual and Community Resilience**
   
a. DHS and HHS should encourage programs and initiatives that create strong individual and community resilience such as the organization Collaborating Agencies Responding To Disaster (CARD).

**Conclusion**

Since 2001 both the public health and emergency management communities have worked to strengthen public health preparedness in order to further national resilience to public health threats. The National Preparedness Goal defines full integration of the many disciplines and focus areas that contribute to preparedness as a prerequisite to resilience. The resilience of communities and of the nation as a whole depends on the integration of public health and

---


emergency management efforts. While progress towards such integration has been made, national unity of effort is lacking and many barriers to success remain. The public health challenge will only grow as the population becomes more mobile and international borders become easier to cross. The threat of bioterrorism and the ever-present public health consequences of all-hazards disasters and emergencies will remain. It is therefore vital for the public health and emergency management communities to continue to strengthen their partnership in order to prepare for, respond to, and recover from all types of emergencies and incidents.