

MEETING REPORT

COMMUNITY RESILIENCE ROUNDTABLE ON THE IMPLEMENTATION OF HOMELAND SECURITY PRESIDENTIAL DIRECTIVE 21 (HSPD-21)

Monica Schoch-Spana, Brooke Courtney, Crystal Franco, Ann Norwood, and Jennifer B. Nuzzo

ON APRIL 23, 2008, THE CENTER for Biosecurity of the University of Pittsburgh Medical Center (UPMC) convened an invitational meeting to discuss community resilience for catastrophic health events and to help inform implementation planning for Homeland Security Presidential Directive 21 (HSPD-21). Released in October of 2007, HSPD-21 identified community resilience as one of the “four most critical components of public health and medical preparedness” alongside biosurveillance, countermeasure distribution, and mass casualty care, and the directive also asserted “the important roles of individuals, families, and communities” in managing public health emergencies.¹

Meeting attendees (listed in the sidebar) included officials who authored HSPD-21 and those charged with its execution, grassroots leaders who have prioritized disaster management in their hometowns and among vulnerable populations, public health and emergency management practitioners, scholars of disasters and resilience, and staff to members of Congress with jurisdiction over homeland security and public health matters. Individual comments made during the event were not for attribution.

The day’s agenda was organized into 3 structured discussions: roundtable participants considered which definition(s) of community resilience best advanced the policy agenda, they reviewed prior public participation programs for disasters for relevant lessons, and they made recommendations for federal program and budget priorities in keeping with the value placed on resilience by the presidential directive. The organization of this report reflects the 3-part agenda. Opening each conversation was a presentation from the Center for Biosecurity and invited speakers, accompanied by the results of a brief survey circulated in ad-

vance of the meeting to spur discussion. Among the issues polled were attendees’ own concepts of community resilience, concrete techniques for building resilience, and the role of the federal government in helping state and local authorities promote resilient communities. A majority of participants ($n = 20$) completed the survey.

The following report is an overview of prepared remarks, pre-event survey findings, and the major themes that arose in the roundtable discussions. We first provide some brief background knowledge on HSPD-21.

BACKGROUND ON HSPD-21 AND ITS IMPLEMENTATION

Homeland Security Presidential Directive 21 addresses, at a strategic level, the need for public health and medical preparedness for major mass casualty events, including pandemics, cataclysmic natural disasters, and unconventional terrorist attacks.¹ HSPD-21 defines public health and medical preparedness as the “existence of plans, procedures, policies, training, and equipment necessary to maximize the ability to prevent, respond to, and recover from major events.”¹

Key principles of the HSPD-21 strategy are: preparedness for all potential catastrophic health events; coordination across different levels of government, jurisdictions, and disciplines; a regional approach to health preparedness; engagement of the private sector, academia, and nongovernment entities; and the important role of individuals, families, and communities.

Participants in the April 23, 2008, Community Resilience Roundtable

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Fran H. Norris, PhD, Research Professor, Department of Psychiatry, Dartmouth Medical School; Director, National Center for Disaster Mental Health

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HSPD-21 establishes a Public Health and Medical Preparedness Task Force comprised of secretaries from a number of federal agencies, including the Department of Health and Human Services (HHS) and the Department of Homeland Security (DHS). This task force is to submit, for the President's approval, an implementation plan for the strategy and to report annually on the status of the plan and recommend any changes.

HSPD-21 specifies that the federal government must formulate a "comprehensive plan for promoting community and public health medical preparedness to assist state and local authorities in building resilient communities."¹ The document defines "community resilience" as follows:

Where local civic leaders, citizens and families are educated regarding threats and are empowered to mitigate their own risk, where they are practiced in responding to events, where they have social networks to fall back upon, and where they have familiarity with local public health and medical systems, there will be community resilience that will significantly attenuate the requirement for additional assistance.¹

The directive dictates 2 actions specific to community resilience. The Secretary of HHS will lead and coordinate efforts across agencies to ensure that public health and medical training addresses ways to improve individual, family, and institutional public health and medical preparedness; enhance private citizen opportunities for contributions; and build resilient communities. The Secretary of HHS, in coordination with other agency secretaries, will submit to the President a plan "to promote comprehensive community medical preparedness."¹

In addition, HHS is tasked with establishing a federal advisory committee on disaster mental health. The purpose of this panel is to provide "recommendations for protecting, preserving and restoring individual and community mental health in catastrophic health event settings, including pre-event, intra-event and post-event education, messaging and interventions."¹

At the time of the roundtable, the draft task force implementation plan was in the interagency clearance process, and nominations to the disaster mental health advisory panel were being solicited.

WHAT DOES "COMMUNITY RESILIENCE" MEAN?

Talk Highlights

Fran Norris, director of the National Center for Disaster Mental Health, opened the first portion of the roundtable with the findings of an interdisciplinary review of the liter-

ature on community resilience and disasters.² According to the review, *resilience* is defined as a process of adapting to adversity through reliance on 4 key resources ("adaptive capacities") and their interactions: economic development, social capital, information and communication, and community competence. Adaptation to a major disturbance is measured in terms of population wellness—that is, high and nondisparate levels of mental and behavioral health, functioning, and quality of life.

Based on the survey of the literature and the proposed model, Norris and her colleagues identified 5 interventions that could help build disaster-resilient communities. First, develop economic resources, reduce resource inequities, and attend to areas of greatest social vulnerability. Second, engage local people meaningfully in every step of the mitigation process. Third, foster interorganizational relationships that rapidly mobilize services for disaster survivors. Fourth, boost and protect naturally occurring social supports. Lastly, plan for the unexpected by exercising flexibility and building trusted sources of information that function in the face of unknowns.

Following Norris's talk was a presentation by Ana-Marie Jones, executive director of CARD, or Collaborating Agencies Responding to Disaster (Alameda County, California). Complementing Norris's theoretical framework, Jones described how her group has equipped grassroots organizations and social service agencies with community development tools that have the dual benefits of honing survival skills for a disaster and ensuring continuity of operations so that vulnerable populations maintain access in an emergency. CARD, for example, has transformed the traditional Incident Command System into a leadership course that outfits nonprofits with improved organizational skills for managing resources and relating to other agencies on a day-to-day basis. Jones and her organization have shifted the conversation about disaster preparedness away from a fear-based framework in which government response is central, to the idea of community groups working together for economic prosperity and other positive goals of direct importance to them.

Survey Results

In the pre-meeting survey, roundtable attendees provided their own concepts of community resilience, registered the degree to which they agreed with the HSPD-21 definition, and identified key aspects missing from the HSPD-21 definition.

Four main themes emerged out of individuals' own definitions. First, a resilient community is *agile and rugged*—that is, able to bounce back promptly, minimize damage to life and economy, avoid cascading failures, and adapt to the unexpected. Second, it is *prepared for risks*. Doing more than just cope, it acts to prevent harm in the first place.

Third, a resilient community is *invested in its institutions*, fostering familiarity, understanding, and trust between officials and residents and combining self-sufficient residents with a robust infrastructure for public health and disaster response. Fourth, a resilient community is *inclusive and integrated*. It remembers the most vulnerable, and it calls on government, business, philanthropy, faith-based groups, and citizen groups to act for the greater good. It assures strong communication linkages across all sectors, before, during, and after a crisis, and it mobilizes centralized and decentralized resources effectively. An illustrative definition from the survey results follows:

Community resilience is the ability of a community to rebound from a disaster with a new focus on recovery and mitigation and a renewed sense of trust in government and other community leadership. Community resilience is achieved when a community has forged meaningful social networks with the goal of emergency preparedness among community members, leaders, government, and private industry.

The majority (85%, $n = 17$) agreed with the HSPD-21 definition of community resilience; nonetheless, every respondent ($N = 20$) offered some amendment to the directive. The aspect most commonly judged as lacking was the active engagement of local civic leaders, citizens, and families in health emergency planning, such that they feel co-ownership of the strategies adopted for protection. As one respondent put it:

I see “social networks” and “familiarity with PH and med systems,” but I don’t see explicit statements that people have come together, sat eyeball to eyeball with folks from other sectors of their communities, exchanged information and made decisions together. That seems important, too. A collaborative approach to shooting for win-win outcomes.

Also frequently noted as missing was recognition of the material need for vital, interconnected public health, public safety, and medical institutions. Respondents worried about at-risk populations who were not already embedded in protective social networks, and they thought it was reasonable to expect that outside help would reliably come when needed.

Discussion Themes

Is community resilience a useful term?

Attendees generally agreed on the usefulness of a concept of community resilience, offering a variety of reasons. The phrase denotes wellness, a positive state to which people can aspire, rather than shrinking from a stigmatized state,

suggestive of mental illness. The resilience ideal also helps shift the conversation away from fear and disasters and is in keeping with the finding that threat-based messaging does not work for long-term behavioral change.

Community and *resilience* are ideas with which ordinary people can identify, and resilience refers to a universal human trait, thus cutting across race, class, and other lines of difference. Disaster studies suggest that resilience is a basic tendency in people that should be augmented further. The policy priority of fostering more resilience and self-sufficiency *within* localities and regions also fits with the logistical reality that external support takes time to get to people in need.

Some participants expressed misgivings about the phrase, while recognizing its overall value. The increasingly frequent use of the term *community resilience* may be based more on its malleability—that is, the propensity to mean many things to many people—rather than any universal understanding. Both *community* and *resilience* are fuzzy terms that are hard to convey to policymakers looking for concrete steps to take or worrying about jurisdictional boundaries. Regions rather than cities, for instance, may be better units for resilience-building activities. *Community resilience* has limited value if defined only as the ability to “bounce back”: the thought of a community rebounding from disaster to an original state of poverty or a broken healthcare system is discouraging. The idea of some underlying human “hardiness,” a participant cautioned, could become an excuse for government not to aid people when mass tragedy strikes or not to promote and instill disaster resilience in advance.

How can vulnerable populations become more resilient?

The concept of vulnerability emerged in discussions about the meaning of disaster resilience, as did the policy challenge of protecting marginalized people from the disproportionate impact of extreme events. Participants agreed that government agencies alone cannot promote preparedness and response activities within at-risk populations, or serve as the only safety net for the most vulnerable groups during a disaster. Trusted intermediaries such as community-based groups and faith-based organizations, who interact with diverse populations on a daily basis, are critical partners in any locality’s preparedness and response system. Federal preparedness programs need to recognize and validate the importance of these grassroots actors as well as social service agencies that routinely work with marginalized populations. Existing initiatives sponsored by the Centers for Disease Control and Prevention (CDC) and the National Institutes of Health (NIH) around health disparities may provide a useful platform for reaching vulnerable populations for preparedness aims.

Several participants emphasized the importance of not

underestimating the resilience of at-risk populations or the perspective that they can bring to disaster and health emergency management. People in poor, deprived neighborhoods do not necessarily see themselves as vulnerable, having coped with a variety of “daily disasters” such as limited economic opportunities and high rates of crime and violence. Groups whom authorities may assume to be “high-needs” people could turn out to be the most resilient, depending on the circumstance. One practitioner recounted that among the residents displaced by a broken dam and living in a temporary shelter were recent immigrants who had previously lived in a refugee settlement. Their calm demeanor amidst grave uncertainty and their quick adaptation to unfamiliar surroundings inspired the other shelter inhabitants.

The desire to avoid the practice of labeling whole groups of people as “special needs” or as forever vulnerable was reinforced by the suggestion that any future community resilience program should adopt the functional needs approach when defining “at risk” populations in disasters.³ This framework attends to the needs of any people, regardless of diagnostic category, who have limitations in hearing, seeing, walking, learning, communicating, understanding, and/or other basic functions that could prevent them from successfully participating in emergency operations.

What is the relationship between community resilience and public health preparedness?

Roundtable participants expressed a range of views on how community resilience and public health preparedness relate to one another, conceptually and practically. Sparking this discussion was the tendency in the HSPD-21 document to use the terms interchangeably. For example, under the objective of community resilience, the directive requires the Secretary of HHS, in consultation with other agency executives, to submit to the President for approval “a plan to promote comprehensive community medical preparedness.”

Some meeting attendees argued that a robust system for handling the health consequences of a potential catastrophe is important, and the public has a key role in it, but this system may not be *the* essential foundation for a disaster-resilient community. As outlined in Norris’s talk, community resilience emerges from a strong, diversified economy with widely distributed opportunity, lively social networks for the exchange of information as well as emotional and material support, and a collective sense of self-efficacy. One participant drew a parallel to debates regarding the social determinants of health: a direct intervention around a particular disease may not be what strengthens a commu-

nity and makes it healthier over the long term, but creating jobs or building up social networks around a top community priority like crime prevention might be. Similarly, a direct intervention focused strictly on medical preparedness may not be the best protection for a population against the multiple effects of an extreme health event.

Others argued that improving the public health and medical preparedness and response capacity can be a practical exercise in building community resilience, depending on how it

is done. One attendee cited a cross-sector partnership involving nonprofits, government, and private industry in Atlanta, Georgia, that organized around a very specific public health preparedness goal: how to distribute large quantities of antibiotics after

an anthrax attack. The collective problem-solving abilities of this diverse group, along with its logistical capabilities, were then used to manage other, unanticipated crises, including a profound water shortage and the need for a temporary medical facility. Another attendee underscored that it was a moot question as to whether you did “community building” or “disaster stuff” first: “You’ve got to do it all at once.”

The implications for federal programming were that 2 kinds of investments could potentially enhance community resilience in the face of potential health catastrophes: (1) initiatives that further integrate the contributions of the public and community-based groups into the more formal public health and medical systems for preparedness and response; and (2) initiatives that support broad community development goals, where citizens work together to solve their priority problems and learn how to communicate and share resources. Public preparedness initiatives of the first sort can have sustainability problems, because extreme events drive public interest in them and their everyday value is not readily apparent. Thus, it makes equal sense to support “disaster resilience” programs that make communities stronger in general (ie, initiatives of the second sort). Critical to both efforts is providing the public with opportunities to use their own minds in generating solutions, not simply having them enact some preconceived plan by authorities.

ARE PRESENT EFFORTS AND INVESTMENTS SUFFICIENT TO BUILD COMMUNITY RESILIENCE?

Talk Highlights

Monica Schoch-Spanna, senior associate at the Center for Biosecurity, opened the second portion of the roundtable with a brief talk on the concept of the “civic preparedness

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continuum.” This idea originated in the deliberations of the Working Group on Community Engagement in Health Emergency Planning, a multidisciplinary panel convened to advise government leaders and response professionals on the feasibility and value of more active collaboration with citizens and civil society institutions in readiness, response, and recovery for extreme health events.⁴ By *civic preparedness*, the working group meant those personal and public measures that citizens adopt to remedy disasters and epidemics.

Genuine civic preparedness, said Schoch-Spana, spans the realm from individual protective behaviors, to the group actions of formal and informal volunteer networks, to the public deliberation of health emergency management policies and their implementation. The citizen role in health emergency management as largely conceived today, however, is shortsighted: government initiatives around public preparedness have stressed private citizens acting alone rather than civic groups like faith communities, neighborhoods associations, trade groups, and social clubs pulling together. In addition, volunteers’ physical contributions during the crisis period are valued, while the public’s mental and moral problem-solving abilities remain untapped in the planning periods long before and after an event.

Survey Results

The premeeting survey invited roundtable participants to rate 5 different public involvement techniques in terms of their potential to build community resilience to catastrophic health events: (1) mass marketing efforts to promote personal and household readiness (eg, family plans, emergency stockpiles); (2) mass education campaigns to brief the public on the content of local health emergency plans and policies; (3) organized opportunities for community members and nonprofits to volunteer as part of the preparedness and response team; (4) relationship building with leaders who represent trade groups, neighborhood associations, faith communities, fraternal organizations, ethnic centers, and social service nonprofits; and (5) an organized forum (eg, town hall-type meetings, advisory group) to solicit community and stakeholder input into emergency plans and policies.

Respondents unanimously ($N = 20$) agreed—a majority of them “strongly”—that building relationships with grassroots leaders and organized volunteer activities are the most promising techniques for building resilience to catastrophic health events. Rated next in potential was an organized forum to solicit stakeholder input to plans ($n = 17$

agreed; 31.6% strongly). A sizeable minority judged mass marketing of individual readiness (25%, or $n = 5$) and mass education on formal emergency plan content (35%, or $n = 7$) as ineffective at building resilience. Respondents also were asked to note the degree to which the 5 techniques are being used in the U.S. According to respondents, those public involvement practices with the most potential to build community resilience—relationship building with grassroots leaders, organized volunteer activities, and structured fora for stakeholder input—are the least in evidence.

Discussion Themes

What lessons do existing public participation disaster programs provide?

Meeting attendees briefly reviewed a number of federally supported initiatives to involve members of the public in the management of disasters and public health emergencies: Citizen Corps Councils (CCCs), Medical Reserve Corps (MRC), Project Impact (PI), and the Metropolitan Medical Response System (MMRS). Participants considered whether these programs were well positioned to meet the goal of resilient communities, how they might be improved, and what lessons these efforts offered for future federal programming. Emerging from this discussion were the following recommendations:

Adequately fund the program; go beyond rhetorical support: Participants underscored the importance of providing adequate federal seed money to implement the vision of multi-sector partnerships and community engagement. Project Impact and Citizen Corps Councils both shared these 2 resilience-building objectives, but they have had divergent success due, in part, to an order of magnitude difference in funding. When Project Impact was operational in the years 1997-2001, 250 communities in every state and some U.S. territories received a total of \$77 million, ranging from \$60,000 to \$1,000,000 over 3 years or less.⁵ In contrast, the Citizen Corps program supports approximately 2,300 local councils with an annual budget of \$15 million. The CCCs are at very different levels of development and sophistication, many lacking the required tools and technical assistance necessary to push them to the next level. Apart from local support, federal officers, too, must have adequate resources to oversee the program.

Secure a local full-time program coordinator: An-

other key element in successful Project Impact communities was a full-time coordinator who could actively facilitate cross-sector partnerships and champion program goals among diverse audiences. Some communities have contin-

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ued to benefit from PI relationships carefully nurtured over time. For example, the city of Berkeley, California, recently drew on the enduring social networks of the local PI coordinator to help mobilize a response to the influx of people, some with medical needs, from the Gulf Coast following Hurricane Katrina. Through preexisting ties with the local Rotary club and with faith organizations, the former PI coordinator helped connect the local Red Cross chapter with area physicians and also put together a Katrina resource center—all this, despite the fact that PI is a defunct federal program.

Demonstrate the day-to-day value of preparedness programming: Volunteers' interest in preparedness programs tends to wax and wane in relation to the latest crisis. One principle for sustainability, then, is to demonstrate the program's everyday value, not just that in an emergency. MRC, for instance, has tried consciously to relate its purpose to the ongoing strengthening of the public health infrastructure and not simply to the peopling of the local plan to distribute the Strategic National Stockpile or some other strictly preparedness activity. For example, some MRC units play a role in annual flu vaccine campaigns.

Document and circulate best practices: The federal government has the important role of disseminating best practices and promoting peer-to-peer mentoring across the country so that different jurisdictions can learn from one another.

Encourage and protect volunteers: Any program with a volunteer component requires a focus on knowledge, skills, and abilities as well as legal protections so that volunteers are comfortable and functional in their role.

Build future programming on existing infrastructure: Attendees generally agreed that any future federal programming around community resilience and medical and public health preparedness ought to build on what is already there, rather than start de novo. At the federal level, this includes current public involvement programs. At the local level, it is sensible to build community resilience programs on extant networks, such as parent-teacher associations and neighborhood watch groups, especially because preparedness goals are not top of mind for most people.

What role does government play in nurturing resilience?

Roundtable participants disagreed on the degree to which government agencies should lead in building community resilience to catastrophic health events. Some attendees took the position that resilience is not about government but about civil society itself: more people having a say in what they do, finding their own strength, and taking responsibility for being well. In fact, many people eschew things coming from government, including traditional preparedness activities, and thus any program emphasis should be on fostering resident-to-resident partnerships, rather than government-to-residents partnerships. Other partici-

pants took the position that government should play a facilitating but not a controlling role in building resilience. One member argued strongly that government has to be part of any effort to build community resilience to disasters, because the safety of the collective is the basis of the social contract between citizens and government.

HOW CAN GOVERNMENT FOSTER ADDITIONAL COMMUNITY RESILIENCE TO HEALTH DISASTERS?

Talk Highlights

To open the final portion of the roundtable, Schoch-Spanna presented the idea of a notional federal program entitled "Project CIVICS for Public Health: Community Inspired Victories Instead of Catastrophes." The Project CIVICS concept was intended to provoke discussion on how the federal government might operationalize the goal of community resilience for catastrophic health events.

The Project CIVICS mission would be to reduce the health effects of major epidemics and disasters by employing the American public's ability to solve problems at all stages of crisis planning, response, and recovery. The HHS Office of the Assistant Secretary for Preparedness and Response would house the hypothetical program and administer grants with the express purpose of building the public involvement component of local public health preparedness and response systems. The program would provide technical guidance, financial incentives, and peer-to-peer mentoring in best practices to promote the goal of authorities working in tandem with local opinion leaders and civic networks before, during, and after a health emergency.

Project CIVICS would help authorities, elected officials, heads of community-based organizations, and other local opinion leaders to together envision and build a comprehensive system to deliver the broad care required in a major public health emergency: tending to immediate injury and infection, averting the spread of contagion, preserving lifelines for the chronically ill, and securing survivors' mental health. Architectural principles for the program would include: active coordination with other federal grant programs; local grants with a high degree of flexibility; joint application from partnerships of community-based organizations, faith-based organizations, CCCs, health agencies, emergency management, and hospitals; and phased in programming that includes an evaluation tool to facilitate progress in the growing program.

Survey Results

Federal government

The pre-event survey asked respondents to identify potential roles for "the federal government in assisting 'State and

local authorities in building resilient communities in the face of potential catastrophic health events' (HSPD-21).” Among the possible objectives were 2 that received virtually unanimous support: “provide technical guidance to states and municipalities in how to build resilient communities; serve as a clearinghouse for information on best practices” (100%, $N = 20$) and “fund model programs (like Project Impact) that build community connections and organizational linkages among local and state government, community members and leaders, and private business and nongovernmental organizations” (95%, $n = 19$).

Respondents also added their own ideas about potential federal roles:

- create incentives for the adoption of best practices, encourage innovation, and foster peer-to-peer mentoring in best practices;
- establish a grants program specifically for community-based organizations to help them build capacity to become more resilient;
- ensure that states adopt community resilience as a priority objective when applying their federal preparedness dollars; and
- adequately fund the nation’s public health system to provide capacity for sustained public health and a surge capacity for public health emergencies.

Local health agencies

Survey participants ranked 5 possible spending priorities for a hypothetical health department that received \$250,000/year for 5 years to spend on community resilience for a catastrophic health event in a major metropolitan area (population 1.5 million). A dedicated, full-time project coordinator emerged as the most important investment, followed by minigrants to community-based organizations and faith-based organizations. Next, in order of decreasing importance, were training and leadership skills for community-based groups, public education and outreach activities, and communitywide exercises that involve community- and faith-based organizations.

Respondents also were asked to recommend other spending priorities for the health agency’s resilience-building program. Among the budget items recommended were: collaborative planning efforts that involved government, community-based organizations, faith-based organizations, and private industry; coordination with healthcare providers serving the working poor, low-income families, the homeless, and other marginalized groups; regional coalition-building efforts;

rapid translation capabilities for public messaging and education materials, coupled with a network of community-based organizations that serves as an information conduit between the health department and diverse communities; support for a local, neutral, nongovernmental entity able to provide culturally competent preparedness programming and support services to nonprofits, faith agencies, and other stakeholders; attention to groups with special needs including the elderly, children, and disabled people; and money set aside for research and evaluation of any program that is initiated.

Several respondents noted that genuine resilience would require dramatic investments in economic, social, safety, and other key issues, well beyond the sums discussed in the survey. Health agencies alone, with modest grant monies, could not be the driver of resilience to catastrophic health events.

Discussion Themes

What improvements to existing federal preparedness programs are a backdrop to community resilience?

Fixing the remaining deficiencies of federal preparedness grant programs is a prerequisite to enhancing community resilience to extreme health events, according to roundtable participants. Congress should restore the preparedness funding to state and local health departments (through the Public Health Emergency Preparedness [PHEP] cooperative agreements with CDC) that has been cut over the last 4 to 5 years. Administering the PHEP federal grants is incredibly time-consuming for overburdened health departments; HHS and CDC can improve this situation by providing sustainable funding, extending the grant cycle beyond 1 year, simplifying the grants reporting system, and creating flexibility in how money is spent. Tribes also could benefit from better funding mechanisms.

Specific program improvements to build community resilience to catastrophic health events included the following steps: First, remove the cap on the percentage of federal preparedness dollars that state and local agencies can spend on personnel. Building cross-sector partnerships—especially with private industry, community-based organizations, and faith-based groups—is a time-consuming effort that requires dedicated staff. Present preparedness grant formulas, however, provide incentives for jurisdictions to buy equipment rather than invest in people.

Second, develop a funding mechanism that makes it easier for local community- and faith-based organizations to collaborate with health and disaster agencies. Agencies

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could provide migrants to entice community-based organizations and faith-based groups to the emergency planning table as well as a “reserve” of dollars to reimburse the nonprofits when they volunteer services in a disaster. Alternately, the federal government could fund a community foundation or other intermediary to coordinate the contributions of community- and faith-based organizations and individual residents. Such a third party could help overcome issues such as lack of trust in government and concern over equity. Whatever funding mechanism is adopted, the involvement of community- and faith-based organizations should be genuine and not simply give a government initiative the appearance of grassroots participation.

Third, require that every federal preparedness grantee demonstrate that they have genuinely incorporated citizen input into health emergency plans. In fact, the Pandemic and All Hazards Preparedness Act of 2006 makes the PHEP awards to state and local health agencies contingent on an explicit mechanism, such as an advisory committee, “to obtain public comment and input” on preparedness and response plans as well as their implementation (Sec. 201).

What are key principles to guide future programming around community resilience?

In response to the idea of Project CIVICS, roundtable participants generated a set of principles to guide any future federal program with a specific mission to generate community resilience to catastrophic health events. Some suggestions reiterated points made during the review of present public involvement programs for disasters (see above) and are not reproduced here for brevity’s sake.

Program flexibility: In light of diverse local hazards, distinct community geographies and demographics, and a not-yet-fully-known set of pathways to resilience, many participants underscored that any federal grants program for “community resilience” should be flexible in its implementation. While the program may place a premium on cross-sector partnerships and public engagement, the local forms that these take and the configuration and boundaries of the applicant “community” may vary. Communities, for instance, could incorporate face-to-face interactions as well as virtual networks.

Similar to the Project Impact formula, the program should support self-defined communities working within a broad program mandate, with the freedom for interjurisdictional or regional efforts. Some communities may choose to invest in preparedness-specific activities, while others might support broader community development efforts that teach participants, for example, to generate their own solutions and build mutual-aid networks. Grant monies should be set aside for states (not just local-level grantees), so that a well-resourced entity can administer the

money and aid rural areas that could not otherwise do the activity on their own.

Genuine partnerships and engagement: A recurrent theme during the roundtable was the need for meaningful partnerships across all levels of government and sectors of society and the need for sustained community engagement. Standing up any new program for community resilience should involve key stakeholder groups, from the point of conception onward. Moreover, federal seed money may initiate the venture, but these funds should be leveraged with support from state and local governments, foundations, and private industry.

Applications that involve diverse agencies (eg, public health, emergency management, public safety) and a range of grassroots organizations will help assure that grant funds are applied to communitywide goals, and not exacerbate agency turf battles about who “controls” the money. Community-based organizations, faith-based organizations, and other trusted intermediaries will be critical to efforts to draw in marginalized populations skeptical of government. Any new community resilience program should provide minorities with leadership roles, giving them an opportunity to serve the larger community.

Evaluation/assessment: Participants agreed that any program or strategy to enhance community resilience should have an evaluation component at the outset, rather than tacked on after the fact. Demonstrating results and “return” on federal investments is a chronic problem for the emerging field of public health preparedness, so this should be remedied in advance. Program participants, administrators, and funders deserve feedback on the program’s value. State and local partners should be involved in the development of any assessment tool so that it is realistic. Information technology has the potential to support program measurement without putting undue burden on grantees. Metrics will be necessary to show value and measure progress. A suggested method for developing metrics is to implement a series of pilot projects so that potential measures are real, tested, and meaningful. Local universities and community colleges could play a key role in community resilience partnerships, conducting program evaluations, providing technological support, and offering expert disaster knowledge.

CONCLUSION

Roundtable participants considered HSPD-21’s emphasis on community resilience to be a commendable policy turn, in part because resilience is a positive state to which communities can aspire, rather than dwell on the doom and gloom of disaster. Proactive measures to build community resilience should, at a minimum, attend to the following issues: cross-sector partnerships; the critical role of community-based organizations and faith-based

organizations, especially as intermediaries with vulnerable populations; strong social networks and robust communication linkages; active engagement of the public in preparedness policy decisions; vital, interconnected public health, safety, and medical institutions; and a strong, diversified economic base with broadly distributed opportunity.

Federal programming to support community resilience in catastrophic health events can take 2 forms, and local grantees should be free to pursue either formula: (1) initiatives that integrate the contributions of the public, community-based organizations, faith-based organizations, and private industry into the larger public health and medical systems for preparedness and response; or (2) initiatives that support broad community development goals where residents and groups come together to solve problems on their own terms. Critical to both efforts is the creation of opportunities for members of the public to apply their mental and moral problem-solving skills and not simply enact plans prefabricated by authorities.

REFERENCES

1. Homeland Security Presidential Directive 21 [news release]. Washington, DC: The White House; October 18, 2007. <http://www.whitehouse.gov/news/releases/2007/10/20071018-10.html>. Accessed June 25, 2008.
2. Norris FH, Stevens SP, Pfefferbaum B, et al. Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *Am J Community Psychol* 2008;41(1-2):127-150.
3. Kailes JI, Enders A. Moving beyond “special needs”: a function-based framework for emergency management and planning. *Journal of Disability Policy Studies* 2007;17(4):230-237.
4. Schoch-Spana M, Franco C, Nuzzo JB, Usenza C; on behalf of the Working Group on Community Engagement in Health Emergency Planning. Community engagement: leadership tool for catastrophic health events. *Biosecur Bioterror* 2007; 5(1):8-25.
5. Multihazard Mitigation Council. *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities. Vol. 2: Study Documentation*. Washington, DC: National Institute of Building Sciences; 2005.