Research Highlights



Building Community Resilience to Disasters

A Roadmap to Guide Local Planning

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Key findings:

- Key levers of community resilience, i.e., areas in which communities might need to build capacity, are wellness, access, education, engagement, self-sufficiency, partnership, quality, and efficiency.
- By conducting capacity-building activities in these areas, communities can improve their ability to withstand and recover from disasters.
- Communities can select capacity-building activities according to local needs.

ommunity resilience, or the sustained ability of a community to withstand and recover from adversity (e.g., economic stress, influenza pandemic, man-made or natural disaster) has become a key policy issue at the local, state, and federal levels. For example, the 2009 National Health Security Strategy identified community resilience as critical to national health security, i.e., to ensuring that the nation is prepared for, protected from, and able to respond to and recover from incidents with potentially negative health consequences. Given that resources are limited in the wake of an emergency, it is increasingly recognized that communities may need to be on their own after an emergency before help arrives. Thus, they need to build resilience before

an emergency. Resilience is also critical to a community's ability to reduce long recovery periods.

Although there is general consensus that community resilience is important to national health security (and security generally), there is less clarity about what communities can do to build resilience. In particular, a better understanding is needed of how existing programs and resources can be leveraged to build resilience. To assist communities in this process, RAND developed a roadmap to help communities build resilience. This roadmap includes a set of levers for building community resilience and a list of activities specific to national health security that local public health departments and their community partners can implement to bolster community resilience. The roadmap was developed through a literature review, stakeholder focus groups, and meetings with subject matter experts.

Definition of Community Resilience

To establish a foundation for identifying community resilience—building activities, RAND developed a comprehensive definition of community resilience in the context of health security that draws on both the literature review and discussions with focus group participants.

The definition emphasizes several key concepts, including engagement at the community level, partnership among organizations, sustained local leadership, culturally relevant education about risks, and individual-level and community-level preparedness and self-sufficiency.

This research highlight summarizes RAND Health research reported in the following publication:

Chandra A, Acosta J, Stern S, Uscher-Pines L, Williams MV, Yeung D, Garnett J, and Meredith LS, *Building Community Resilience to Disasters: A Way Forward to Enhance National Health Security*, Santa Monica, Calif.: RAND Corporation, TR-915-DHHS, 2010 (http://www.rand.org/pubs/technical_reports/TR915.html).

Community resilience entails the ongoing and developing capacity of the community to account for its vulnerabilities and develop capabilities that aid that community in (1) preventing, withstanding, and mitigating the stress of a health incident; (2) recovering in a way that restores the community to a state of self-sufficiency and at least the same level of health and social functioning after a health incident; and (3) using knowledge from a past response to strengthen the community's ability to withstand the next health incident.

A Roadmap for Building Community Resilience

RAND used the definition to develop a roadmap for building community resilience. RAND first identified eight *levers* of community resilience, i.e., areas in which communities might need to build capacity: wellness, access, education, engagement, self-sufficiency, partnership, quality, and efficiency. By conducting capacity-building *activities* in these areas, communities can improve their ability to withstand and recover from emergencies. For example, wellness and access contribute to the development of the social and economic well-being of a community and the physical and psychological health of the population. Specific to the disaster experience, education can be used to support effective risk communication, engagement and self-sufficiency are needed to build social connectedness, and partnership helps ensure that governmental and nongovernmental organizations are

integrated and involved in resilience-building and disaster planning before a disaster. **Quality** and **efficiency** are important to all areas of community resilience.

Activities for Building Community Resilience

RAND also identified a range of activities that can be implemented (or are already being implemented) by communities to build resilience according to specific local needs. The table shows examples of activities for each of the eight levers.

Using the Roadmap

The activities described in the report can be adapted to local needs. Community-planning teams should consider using the following approach:

- Review the levers for building resilience. Consider the ways in which the community is addressing each area and identify areas in need of additional effort.
- Review the activities that correspond to the lever(s) of interest. Select activities based on community needs and assets.
- Develop a local plan for the community. Consider whether the activities are feasible and whether the community can leverage existing resources to complete them.
 Further research and evaluation are needed to test indi-

vidual activities and assess their impact. Given the ongoing challenge of limited resources, understanding which activities should be given priority is a critical next step in helping communities move forward.

Example Activities for Building Community Resilience

Lever	Activities
Wellness	Ensure pre-health incident access to health services and post-health incident continuity of care.
Access	Provide "psychological first aid" or other early psychological or behavioral health interventions after disaster.
Education	Bolster coping skills and psychological wellness by developing public health campaigns focused on these messages.
Engagement	Build the capacity of social and volunteer organizations (i.e., nongovernmental organizations) to engage citizens in collective action to address an issue or problem (e.g., a community development or service project).
Self-Sufficiency	Develop programs that recognize the vital role citizens can and must play as "first responders" to help their own families and neighbors in the first hours and days of a major disaster.
Partnership	Engage established and local organizations (e.g., cultural, civic, and faith-based group; schools; and businesses) and social networks to develop and disseminate preparedness information and supplies.
Quality	Ensure that all disaster plans have identified common data elements (e.g., benchmarks for disaster operations) to facilitate seamless monitoring and evaluation of health, behavioral health, and social services pre-incident, during, and post-incident.
Efficiency	Develop policies for effective donation management and provide the public with clear guidance on donations.

Abstracts of all RAND Health publications and full text of many research documents can be found on the RAND Health website at www.rand.org/health. This research highlight was written by Kristin J. Leuschner. The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. RAND® is a registered trademark.



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