

Healthy, Resilient, and Sustainable Communities after Disasters: A Discussion Toolkit

A toolkit that can be used and adapted to conduct a single day-long meeting or series of activities aimed at helping a community engage in an initial conversation about potential actions that can be taken across sectors to infuse disaster recovery planning with strategies that optimize community health.

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Overview

Each year, dozens of events across the United States—from floods and forest fires to explosions and tornadoes—are declared disasters. Communities experiencing these events often receive an influx of public, private, and charitable support and resources intended to facilitate their return to normalcy. For many communities, these new resources represent an opportunity to go beyond restoring a less than optimal status quo, achieving crucial benefits for the community as a whole and the lives of its members.

Simply restoring a community to its previous state following a disaster reproduces or reinforces its vulnerabilities. A resilient community learns from its disaster experience and rebuilds with an eye toward reducing the risks of hazard exposure in the future (Lindell, 2013). In addition to reducing vulnerability, rebuilding can be focused on designing solutions that improve the living conditions and health of a community's citizens.

Long-term disaster recovery planning can serve as the impetus for sectors across the community to think holistically about how they can contribute to post-disaster rebuilding. This toolkit provides an approach for bringing together a variety of sectors in a community to discuss the opportunities and benefits of leveraging disaster recovery resources and coordinating disaster response efforts to improve community health, resilience, and sustainability. For recovery to be most effective, the needs and priorities of the community must shape the planning process. Likewise, if community members are to take ownership of the recovery process, their voices must be heard in the planning process as well.

During the community meeting that is the subject of this toolkit, a facilitator guides the participants through a number of activities that involve establishing a common foundational language, generating a shared vision, analyzing the current context, and developing concrete actions aimed at aligning planning efforts. This meeting is designed to accomplish several goals:

- Connect stakeholders from sectors responsible for both disaster recovery and community development and improvement.
- Generate a shared understanding that disaster recovery planning is an opportunity to coordinate efforts and leverage resources for improved community health, resilience, and sustainability.
- Foster a shared vision for a healthy, resilient, sustainable community.
- Identify opportunities to align planning activities and integrate strategies to ensure long-term health, resilience, and sustainability.

This toolkit is designed to ensure appropriate preparation for planning, hosting, and following up after such a community meeting. It contains step-by-step instructions and tips including a sample agenda, document templates (invitation, sign-in sheet, notes, evaluation form), messaging for different sectors, a supplies and set-up checklist, detailed guidance for the facilitator, and participant worksheets and handouts.

Finally, this community meeting is not intended to replace a comprehensive disaster recovery planning effort. Rather, this toolkit can be used in whole or in part to complement a broader community planning effort. It also can be used by nonprofit, academic, or other organizations as a reference in their publications or products. Its overall purpose is to raise awareness of expert recommendations and help communities consider how they might integrate health into their cross-sector recovery planning.

Origins of This Toolkit

With support from the Office of the Assistant Secretary for Preparedness and Response (U.S. Department of Health and Human Services), the Office of Lead Hazard Control and Healthy Homes (U.S. Department of Housing and Urban Development), the Veterans Health Administration (U.S. Department of Veterans Affairs), and the Robert Wood Johnson Foundation, the National Academies of Sciences, Engineering, and Medicine convened an expert committee to develop an approach to disaster recovery that can mitigate the impacts of disasters on health and promote healthy communities. The committee's report, *Healthy, Resilient, and Sustainable Communities after Disasters: Strategies, Opportunities, and Planning for Recovery*, provides a conceptual framework for the integration of health considerations into recovery planning, as well as operational guidance for multiple sectors involved in community planning and disaster recovery.

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Understanding Disaster Recovery Planning

What Is a Disaster?

A disaster occurs when the disruption caused by a hazard (whether a phenomenon, substance, human activity, or condition) exceeds a community's ability to cope using its own resources. The risk for disaster can be diminished by reducing the likelihood of exposure to the hazard, increasing the resilience of the community (its people, property, infrastructure, and systems), and improving disaster preparedness and response strategies.

Key Terms

Disaster: A sudden, calamitous event that seriously disrupts the functioning of a community and causes human, material, and economic or environmental losses that exceed the community's ability to cope using its own resources.

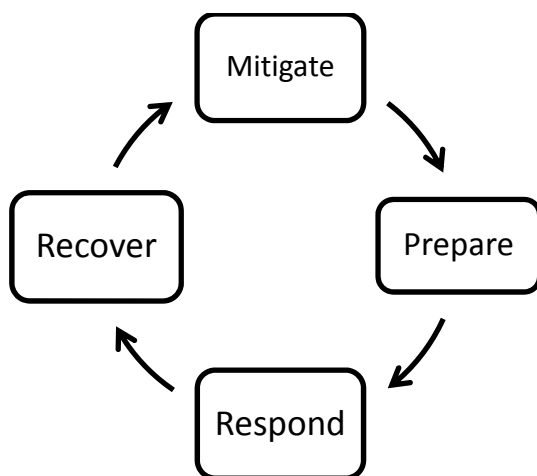
Vulnerability: The diminished capacity of a community to anticipate, cope with, resist, and recover from the impact of a natural or man-made hazard.

Hazard: A natural or technological/man-made event that occurs close to human settlements. Hazards can include environmental degradation, pollution, and accidents and result in increased frequency, complexity, and severity of disasters.

Source: International Federation of Red Cross and Red Crescent Societies. 2016. *What is a disaster?* <http://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster> (accessed November 14, 2016).

Phases of the Disaster Management Cycle

Disaster management encompasses all of the activities carried out by federal, state, and local emergency agencies, as well as other entities within the private and public sectors, to deal with hazards, risks, and disasters of all types. The figure below portrays an ongoing cycle in which individuals, communities, businesses, and systems can plan for and reduce the likelihood of a disaster, becoming a more resilient.



Mitigation: Includes any activities that prevent a disaster, reduce the chance of a disaster happening, or reduce the damaging effects of unavoidable disasters. These activities take place both *before and after* a disaster.

Preparedness: Includes plans or preparations made to save lives and support response and rescue operations. These activities take place *before* a disaster occurs.

Response: Includes actions taken to save lives and prevent further damage when a disaster occurs. These activities take place *during* a disaster.

Recovery: Includes actions taken to return to a normal or even safer state. These activities take place *after* a disaster.

Disaster Recovery Planning

Today's emergency management efforts tend to focus on the preparedness and response phases. This toolkit focuses on the recovery phase, which should be considered in two parts. *Short-term recovery* entails the immediate tasks of securing the impact area, housing victims, and establishing conditions under which households and businesses can begin the process of returning to normalcy. In contrast, *long-term recovery* encompasses reconstruction of the disaster impact area; management of the disaster's psychological, demographic, economic, and political impacts; and advancement of community resilience (Lindell, 2013). (See the examples below.) Community resilience can be described in many different ways, but overall, it is the effort to create and sustain a community's capacity to define and account for its vulnerabilities, and then develop capabilities to prevent and mitigate negative outcomes after experiencing an adverse event.

Short-term Recovery (return to normal)	Long-term Recovery (increase resilience)
Ensure that all individuals unable to return immediately to their homes have temporary shelter after a hurricane.	Improve affordable housing stock to meet community needs.
Monitor and treat water sources after contamination due to a chemical spill.	Advocate for improved enforcement of industrial regulations to prevent future spills.
Organize a volunteer network to conduct home visits for isolated older adults during a heat wave.	Design multigenerational communities with supportive housing that enables older adults to age in place with improved social connectivity.

Following a disaster, an array of public and private resources are made available and mobilized to aid in a community's recovery by restoring public health, medical, and social service systems; supporting safety, psychosocial well-being, and social connections among community members; and rebuilding physical infrastructure, such as housing, transportation facilities, and public works systems—all elements that influence the health of the community and its members. In these circumstances, communities face a choice: they can work to restore services and systems to their pre-disaster state; or through careful advance planning and coordination, they can invest the resources made available for recovery to rebuild in a way that supports health throughout the community. Given the potential to realize these benefits, communities that make returning to the pre-disaster state the goal for recovery are missing important opportunities that can:

- **Improve the quality of life**—Many steps that improve the physical and social environments of a community also improve quality of life for individuals (such as their health, housing, availability of work and education) by making communities more livable and reducing the chronic stresses associated with inadequate access to basic needs.
- **Reduce health-related costs**—Changes to the physical and social environments that promote health will reduce the unsustainable costs associated with the treatment of disease.
- **Stimulate economic vitality**—Failure to attend to the social determinants of health (employment, education, food access) can lead to high human service costs and a vicious cycle of disinvestment and depopulation. Healthy, livable communities attract community members and businesses, spurring improvement in economic vitality.
- **Reduce vulnerability to hazardous events**—Social vulnerability and deficiencies in physical health increase the susceptibility of individuals and communities to the negative effects of a hazardous event. Disasters result in a variety of significant societal and financial costs that can be reduced through health improvement and resilience initiatives that bolster the ability of individuals and communities to cope with adversity.

Rebuilding for a Healthier Community

Many communities across the United States today are characterized by poor health status that comes with substantial personal, financial, and societal costs. This poor health status results not just from the choices of individuals and the quality of the public health and medical care systems they access, but also from the “social determinants of health”—the contexts that shape the choices people make and the power dynamics that shape the systems they access (e.g., the overwhelming impacts of poverty and racism). These contexts include:

- the neighborhood (for example, design that accommodates walking and biking, the presence of grocery stores that sell fresh fruits and vegetables, the availability of affordable quality housing);
- the environment (for example, pollutants or toxins in the air and water);
- the availability of services (for example, the presence of transportation and social services); and
- social factors (for example, the presence of violence and racism; opportunities for participation, leadership, and political influence).

Given the importance and the broad range of these social determinants of health, it is clear that rebuilding after a disaster in a way that produces a healthier community requires the efforts of and coordination among a wide array of sectors and community stakeholders. A healthy community cannot be created through the efforts of any single sector or stakeholder group without consideration for how these efforts affect and are affected by those of others. For example, a town might decide to rebuild in a more environmentally conscious or “greener” manner to improve environmental quality and save energy costs. While these are worthy goals, this action could reduce the availability of affordable housing stock. This unintended consequence might in turn make recruiting new staff for the rebuilt greener hospital more difficult because of the town’s higher cost of living. In short, all communities are complex systems in which what happens to any one component has ripple effects on all the other components.

Accordingly, rebuilding after a disaster to achieve a healthier community requires buy-in and coordination among all sectors and stakeholders, and this level of collective effort requires careful, focused planning. This toolkit is intended to help initiate and foster support for that planning process.

The Importance of Public Engagement

Collaborative planning is a method through which citizens can determine a collective vision for the recovered community, identify obstacles and opportunities they may encounter in attaining that future, and measure their progress toward achieving recovery (Schwab, 2014). True public engagement depends on the community’s access to a range of assets, including political capital, or the ability of an individual, community, sector, or faction to advocate for itself. More broadly, political capital connotes access to and the ability to influence those individuals and institutions with the power to distribute resources.

In part because of the amplified perception of and emphasis on risk, the recovery phase following a disaster can be a time to exercise political capital to take advantage of new resources, make information available to decision makers, and create options for policy change. Thus it is important to consider how to build political capital at all levels before undertaking community planning initiatives or making decisions to approve or disapprove projects. Questions asked might include: “Do I have a way to communicate our needs to decision makers?” “Do we have the support of the community?” “Are all community members represented, especially key constituents?” and “Are there other issues in the community that should have priority over my issue?”

Imbalances in political capital can make the recovery phase of a disaster take much longer or result in the perpetuation of inequities. In New Orleans after Hurricane Katrina in 2005, for example, the recovery process was significantly impeded by disputes over processes and goals for reconstruction, with tensions arising from conflicting desires to rebuild the familiar environment quickly or create a safer and more equitable city. Thus, for instance, some saw ideas for increasing green space as efforts to eliminate low-income neighborhoods, leaving the city struggling to determine how to address the needs of all community members. Although the recovery process was initiated shortly after the hurricane, with funding provided for executing the process, it took nearly two years and multiple rounds of planning to develop an officially accepted plan. The town of Galveston, Texas, experienced similar challenges following Hurricane Ike in 2008. Public housing was torn down before former residents were allowed to retrieve any remaining belongings. And because the rebuilding process that followed was limited to current residents, many former public housing occupants who were unable to return to the island had no voice in the recovery planning process. Five years after the storm, affordable public housing still was not available.

Conversely, when public engagement is pursued proactively and comprehensively, cities can rebuild to be even stronger following a disaster. Examples of the use of public engagement strategies in the aftermath of disasters are described below. The Cedar Rapids, Iowa, example in particular is touted as a potential model for other communities because it illustrates the ability to rapidly develop a publicly supported recovery plan to create a better future for all.

Examples of Public Engagement Strategies

- **Kobe, Japan**—After the 1995 earthquake, neighborhood associations organized themselves into councils to provide support to the community and become actively engaged in formulating neighborhood redevelopment plans. These councils were created to balance the top-down planning processes that had been used historically. Community members who participated in the new councils reported higher satisfaction relative to those in communities that used more traditional approaches.
- **New York, New York**—Following Hurricane Sandy in 2012, 59 percent of public housing residents accessed assistance from faith-based organizations or community centers because of perceptions that the government was overwhelmed and slow to respond. While these groups were accessible and willing to help, they lacked the needed expertise or connection to government services, so gaps and redundancies occurred. Since then, the New York City Housing Authority has established partnerships with some of these organizations, and it proposes to use them as place-based hubs for communication and coordination to improve the next disaster response.
- **Cedar Rapids, Iowa**—After widespread flooding in Cedar Rapids, Iowa, displaced more than 10,000 residents in 2008, city government quickly put into action a recovery plan that incorporated input from thousands of community members, largely as the result of an engagement process that was initiated months before the flood to develop a shared vision for the community's future. Educating the community on the plan's benefits made it possible to avoid the "not in my backyard" attitude that can impede equitable development initiatives. At the state level, the Iowa governor established a 15-member independent Rebuild Iowa Advisory Commission. To develop recommendations for recovery, the commission held town meetings across the state and talked to community members about their short- and long-term needs. This process helped focus recovery efforts on the true needs of community members, as well as provide a channel for feedback on the process.

Ideally, both disaster recovery and community planning occur in an inclusive, supportive social environment. A whole-community approach is taken to strategic planning and problem solving, involving robust civic participation by empowered community members and leadership from community organizations and public officials. Engagement of a comprehensive group of stakeholders results in a shared vision for a healthy, resilient, sustainable community. The visioning process serves as an opportunity for communities to begin to rectify a legacy of exclusion that has contributed to the inequities apparent across U.S. communities today. Community engagement does not end with the visioning process, but extends to strategic planning, implementation, monitoring, and evaluation. Leaders enable bidirectional communication between the community and decision makers to ensure the strongest outcomes.

Health directors and emergency managers often find themselves caught between these two groups, and figuring out how to communicate the needs of the community to government leaders and vice versa is difficult. Having a process for engaging stakeholders all along the way can help build an evidence base showing decision makers and leaders the direction planning should take to ensure healthy and equitable outcomes.

This engagement of different sectors with different perspectives can present its own challenges, but can be achieved in several different ways. Each community is unique, and the optimum approach for each will vary accordingly. Both top-down and bottom-up approaches should be considered by those charged with strategizing planning and engagement efforts.

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