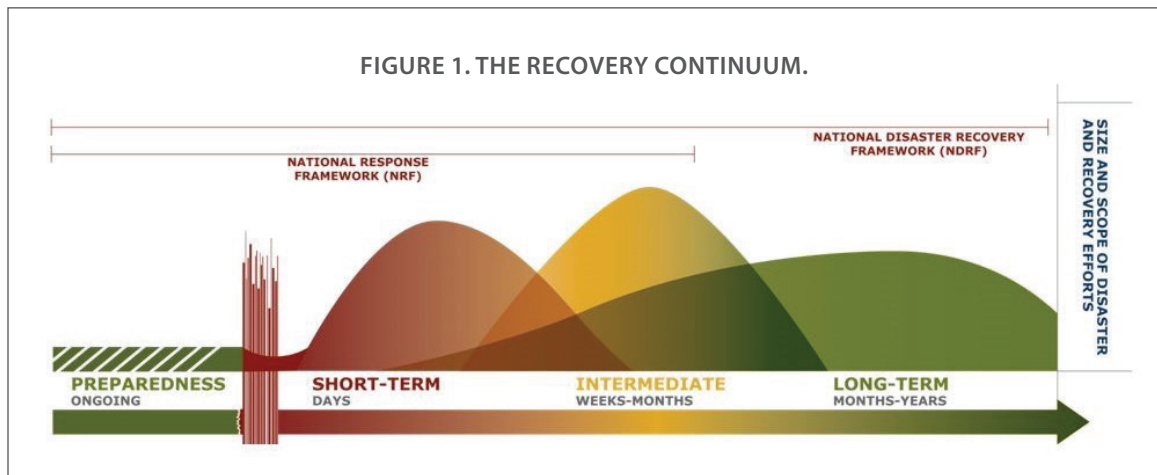




Local Public Health Recovery: An Operational Tool Focused on the Local Role in the Recovery Process

Introduction

The National Disaster Recovery Framework (NDRF) describes “recovery” as a process of returning community services to normal, repairing affected infrastructure, and improving the resiliency of a community following a disaster.¹ Disaster recovery is typically discussed in terms of three phases: short-term, intermediate, and long-term recovery. These phases are not independent; instead, they complement one another and have considerable overlap. Depending on the severity of the disaster, recovery phases can be as short as a few days or as long as several months. Figure 1 describes the overlapping nature of recovery phases as well as the integration of the National Response Framework (NRF) and NDRF.



Source: FEMA.

Local public health plays a critical role when it comes to disaster recovery because incidents typically begin and end at the local level. There are some issues that only local public health can address, such as the restoration of critical community services. As with emergency response, effective and efficient recovery requires a clear understanding of stakeholder roles and responsibilities throughout the recovery process. The Health and Social Services Recovery Support Function (RSF) outlines the key objectives for the recovery of public health, healthcare, and social services functions in the local community, which include assessing and prioritizing the health and social service needs of the community; restoring healthcare, public health, and social services functions; and restoring and improving resilience of healthcare system and social service capabilities.² Federal planning and guidance provide a foundation for disaster recovery and acknowledge the primacy of locally led recovery planning and operations. However, over the years, public health has identified a need for a tool focused on the local role in the recovery process, as local health departments (LHDs) often lack recovery plans

or have plans that omit specific operationalized functions related to disaster recovery.

This report summarizes a landscape analysis of LHDs’ role in recovery conducted by the National Association of County and City Health Officials (NACCHO).³ The report includes a review of recovery-related documents, local plans, and federal guidance, and is designed to provide LHDs with a tool that is practical and focused on the local role in the recovery process. NACCHO also conducted key informant interviews to collect information from locals with firsthand experience in recovery. The sections below provide an overview of each recovery phase, including pre-disaster recovery planning and operational checklists highlighting key recovery objectives and activities associated with each phase. It is important to note that given the unique characteristics and structure of individual LHDs and jurisdictions, the recovery checklists are not meant to serve as a universal template for public health recovery. These checklists provide an operational overview of the recovery process and are designed to be customizable to fit the unique needs of each LHD.

Pre-Disaster Recovery Planning

LHDs can take many steps to increase a community’s readiness and resiliency prior to a disaster. One such step is the creation of a pre-disaster recovery plan specific to recovery operations. A recovery plan is intended to be used in conjunction with other established operational procedures, plans, and protocols. Pre-disaster recovery planning actions involve training, exercising, identifying partners and resources, and organizing to build, sustain, and improve operational capabilities. When creating a recovery plan, it is important to establish protocols, roles, and responsibilities for emergency recovery operations. Having a plan in place prior to an incident will help LHDs more effectively manage their role in recovery operations, leverage assistance, and coordinate with partners following an incident.

The following checklist highlights common pre-disaster recovery planning objectives and outlines key activities by functional area.⁴ The activities listed below are not an exhaustive list of every activity that should take place, but rather activities and priorities that should be considered during the pre-disaster planning process.

Pre-Disaster Recovery Planning			
Objectives			
<ul style="list-style-type: none"> • Conduct/review your community health assessment or threat assessment. • Engage stakeholders in pre-disaster recovery planning using a whole-community approach.⁵ • Integrate community stakeholder programs and services into the disaster recovery planning process. • Leverage pre-disaster preparedness activities in recovery planning. 			
Functional Area	Activities	Responsible Party	Date Completed
<i>Note that this is not an exhaustive list and some functional areas may overlap.</i>			
Administrative	<input type="checkbox"/> Establish a protocol to track staff time engaged in recovery activities.		
	<input type="checkbox"/> Establish a protocol to manage donations received following a disaster.		
	<input type="checkbox"/> Establish a transparent system to manage and account for all recovery resources.		
	<input type="checkbox"/> Coordinate the prioritization of essential services across all departments, including The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC).		
	<input type="checkbox"/> Integrate fiscal, legal, and administrative authorities and practices that govern funding, procurement, contracting, and hiring appropriately into all stages of emergency preparedness and response.		
	<input type="checkbox"/> Review the Federal Emergency Management Agency (FEMA) reimbursement process. <ul style="list-style-type: none"> • <i>Many resources are reimbursable if they have been included in your jurisdiction’s hazard mitigation plan.</i> 		

Pre-Disaster Recovery Planning				
Clinical	<input type="checkbox"/>	Work with emergency preparedness to create trainings and exercises based on your hazard analysis. ⁶		
	<input type="checkbox"/>	Establish partnerships among clinical, community, healthcare coalitions, and other health organizations that can assist in linking community members to health services following a disaster.		
	<input type="checkbox"/>	Develop strategies to address the behavioral health needs of staff following an incident.		
	<input type="checkbox"/>	Identify a mechanism to prioritize distribution of prophylaxis. <ul style="list-style-type: none"> <i>This mechanism may depend on local public health policy on working with private sector critical infrastructure and the Strategic National Stockpile.</i> 		
Emergency Preparedness	<input type="checkbox"/>	Engage and convene a whole community collaborative planning team.		
	<input type="checkbox"/>	Define the scope of the recovery planning activities.		
	<input type="checkbox"/>	Determine community risks, impacts, and health consequences of the incident.		
	<input type="checkbox"/>	Determine roles, responsibilities, and resources of whole community partners.		
	<input type="checkbox"/>	Develop pre-disaster partnerships to ensure engagement of all potential resources.		
	<input type="checkbox"/>	Conduct/review the community health assessment and/or threat assessment.		
	<input type="checkbox"/>	Pre-identify a management structure for recovery operations, including establishing a Local Disaster Recovery Manager (LDRM) role and set of functions.		
	<input type="checkbox"/>	Identify limitations in community recovery management capacity and the means to supplement this capacity, such as training and education, and make that capacity available to all relevant stakeholders.		
	<input type="checkbox"/>	Establish clear leadership and operational coordination.		
	<input type="checkbox"/>	Establish a framework for post-disaster decision-making.		
	<input type="checkbox"/>	Prepare, review, and approve the pre-disaster recovery plan.		
	<input type="checkbox"/>	Implement and maintain the plan by identifying and utilizing ongoing preparedness activities.		
	<input type="checkbox"/>	Establish continuity of operations plans to ensure essential recovery services can be delivered during all circumstances. ⁷		
<input type="checkbox"/>	Coordinate recovery planning with local, county, and state emergency management and public health partners.			

Pre-Disaster Recovery Planning			
Environmental Health	<input type="checkbox"/>	Work with emergency preparedness to create trainings and exercises based on the environmental health threat assessment.	
	<input type="checkbox"/>	Create recovery plan annexes based on your threat assessment.	
Epidemiology & Disease Control	<input type="checkbox"/>	Complete a baseline community health assessment. ⁸ <ul style="list-style-type: none"> • <i>A baseline assessment will enable progress to be measured post-disaster using indicators such as the community health status.</i> 	
	<input type="checkbox"/>	Work with emergency preparedness to create trainings and exercises based on your LHD's existing epidemiological threat assessment.	
	<input type="checkbox"/>	Create recovery plan annexes based on your threat assessment.	
Medical Examiner	<input type="checkbox"/>	Participate in trainings and exercises for recovery activities.	
	<input type="checkbox"/>	Identify an agency that will work in collaboration with the medical examiner's office and be responsible for obtaining, establishing, and managing an appropriate physical facility and staff for a family assistance center (FAC).	
	<input type="checkbox"/>	Coordinate with partners to establish pre-disaster processes.	
	<input type="checkbox"/>	Include death assessment protocols and outline cause of death definitions in mass fatality plan. <ul style="list-style-type: none"> • <i>Death designations affect family FEMA funding during a declared emergency or major disaster.</i> 	

Additional Considerations

The following should be considered in addition to the key objectives and recovery activities listed above:

- **Adaptability:** A plan should address all the known and anticipated hazards, while at the same time be flexible enough to manage unanticipated ones. Take the time to think through how your plan will be able to adapt to unexpected hazards.
- **Stakeholder and partner engagement:** Involving stakeholders and partners early in the planning process is important to ensure inclusiveness. Note that the stakeholders and partners involved will likely change over time; therefore, stakeholder and partner engagement should be an ongoing process.
- **Equity in pre-disaster recovery planning:** Although disasters are widespread, they do not affect all people equally. Disasters can disproportionately affect some populations within a community, including low-income populations, older adults, individuals with access and functional needs, and minority populations. These groups are more likely to be displaced, have mobility issues, and have limited access to resources. Engaging community leaders to communicate directly with these populations can help ensure that recovery plans meet their needs.
- **The HHS emPOWER Map:** The U.S. Department of Health and Human Services (HHS) emPOWER Map is a publicly available, interactive tool that integrates de-identified Medicare billing data, real-time natural hazard data, and GIS mapping to highlight the

number of at-risk individuals using electrically-dependent, life-maintaining, and assistive durable medical equipment and devices in geographic areas down to the zip code level. The HHS emPOWER Map is a valuable tool for use during response and recovery from local disasters.

Resources

- [Pre-Disaster Recovery Planning Guide for Local Governments](#) (FEMA): This guide is designed to help local governments work with community stakeholders to develop a recovery plan that includes recovery roles and capabilities, organizational frameworks, and specific policies and plans.
- [Public Health Preparedness Capability 2: Community Recovery](#) (CDC): One of the nation's key preparedness challenges has been determining appropriate state and local public health preparedness priorities. To assist state and local public health departments in their strategic planning, the Centers for Disease Control and Prevention (CDC) developed 15 capabilities to serve as national public health preparedness standards. This capability supports incorporating post-incident health recovery into planning and response.
- [Local Mitigation Planning Handbook](#) (FEMA): This is a tool for local governments to use to develop or update local hazard mitigation plans. The handbook offers practical approaches, tools, and examples of how communities can engage in effective planning to reduce long-term risk from natural hazards and disasters.
- [Healthy, Resilient, and Sustainable Communities After Disasters: Strategies, Opportunities, and Planning for Recovery](#) (Institute of Medicine): This report contains tools and resources associated with disaster planning and recovery activities for health improvement planners and promotes the integration of health considerations into recovery decision-making across a range of disciplines and stakeholder groups.
- [NACCHO Toolbox](#): Local Recovery Plans and other resources: The NACCHO Toolbox is a free, online collection of public health tools that have been created and shared by members of the public health community. A range of resources and tools, including local recovery plans, can be found by using the search function. Users can also filter through the resources and tools by toolkit name, the state of origin, or the upload date.
- [The HHS emPOWER Map](#): The HHS emPOWER Program resulted from a collaboration between the Office of the Assistant Secretary for Preparedness and Response and the Centers for Medicare and Medicaid Services, and provides dynamic data and mapping tools to help communities protect the health of more than 3.9 million Medicare beneficiaries who live independently and rely on electricity-dependent medical equipment and healthcare services.
- [Essential Functions and Considerations of Hospital Recovery](#): This resource was developed by the Harvard School of Public Health Emergency Preparedness and Response Exercise Program through a contract with the Emergency Preparedness Bureau at the Massachusetts Department of Public Health, with funding from the ASPR Hospital Preparedness Program. This document is intended to assist hospitals organize, develop, and refine their recovery capabilities in accordance with federal guidance.
- [Topic Collection: Recovery Planning](#) (ASPR TRACIE): Planning for recovery is just as essential as planning for response. Ideally, recovery plans would be developed before a disaster and would begin to be implemented during the response phase to support healthcare facilities and providers, establish continuity of care, and maintain financial viability. The resources in this collection highlight planning guidance/guidelines, tools, lessons learned, and promising practices to assist healthcare emergency planners with recovery planning.

Short-Term Recovery

The short-term recovery phase addresses the health and safety needs beyond rescue, such as assessing the scope of damage and need, the restoration of basic infrastructure, and the mobilization of recovery organizations and resources. Short-term recovery activities are typically initiated as soon as areas are secure enough to begin the initial disaster assessment. This phase can last from days to weeks following an incident and typically overlaps with emergency response and intermediate recovery. Emergency Support Function (ESF) #14, Long-term Community Recovery, supports the transition of resources from incident response to recovery operations.

The following checklist outlines common short-term recovery objectives and activities by functional area. It is important to note that the activities listed below are not an exhaustive list of every activity that should take place, but rather key activities that should be considered during the short-term recovery phase.

Short-Term Recovery			
Objectives			
<ul style="list-style-type: none"> Evaluate needs, capabilities, and service gaps in public health, medical, behavioral health, and social services and set recovery priorities. Expedite restoration of the healthcare system to support physical and mental health and well-being. Coordinate service delivery, meet changing healthcare and social service needs, and prioritize services for vulnerable populations. Develop and implement risk communications and public health messaging. 			
Functional Area	Activities	Responsible Party	Date Completed
<i>Note that this is not an exhaustive list and some functional areas may overlap.</i>			
Administrative	<input type="checkbox"/> Restore access to vital records. <ul style="list-style-type: none"> <i>Vital records managers will need to coordinate with coroners and medical examiners to manage fatalities caused by the incident.</i> 		
	<input type="checkbox"/> Document all recovery-related costs, including personnel hours, equipment purchases and usage, and supplies, in accordance with internal financial tracking policies.		
	<input type="checkbox"/> Manage human resources needs related to recovery activities.		
	<input type="checkbox"/> Manage offers of assistance, including volunteers, and other donated goods.		
	<input type="checkbox"/> Coordinate and leverage applicable federal resources for health and social services. <ul style="list-style-type: none"> <i>Integrate efforts across government offices, the private sector, and nongovernmental organizations (NGOs) during the implementation phase of recovery activities, including leveraging recovery funds.</i> 		
	<input type="checkbox"/> Refer to existing authorities and declarations to accelerate, modify, streamline, and accountably manage fiscal and administrative practices and procedures.		

Short-Term Recovery			
Clinical	<input type="checkbox"/> Coordinate and provide immunizations and prophylaxis to control and prevent communicable diseases (if applicable). <ul style="list-style-type: none"> • <i>Focus immunization efforts on responders, survivors, and volunteers.</i> 		
	<input type="checkbox"/> Restore the provision of basic health services such as pharmaceuticals, medical supplies, and emergency medical services.		
Emergency Preparedness	<input type="checkbox"/> Facilitate transition operations from emergency response to recovery. <ul style="list-style-type: none"> • <i>Establish a new Incident Command System (ICS) or management structure, as needed.</i> 		
	<input type="checkbox"/> Assign health department public information officer to the public health ICS. ⁹		
	<input type="checkbox"/> The RSF leads should coordinate with respective ESF leads to handoff operations effectively and efficiently. <ul style="list-style-type: none"> • <i>ESF #14 is responsible for the initial coordination of recovery support.</i> 		
	<input type="checkbox"/> All communications efforts to the public must go through a Joint Information Center (JIC) and must include collaboration from social service providers and health sectors. ¹⁰ This strategy will reduce redundant messaging and ensure clear communications.		
	<input type="checkbox"/> Coordinate messaging and communications with HCC partners.		
	<input type="checkbox"/> Communicate messaging on public health threats and available medical and behavioral health services to the public through the JIC.		
	<input type="checkbox"/> Coordinate medical and public health volunteer efforts with local agencies and voluntary organizations involved in recovery efforts.		
	<input type="checkbox"/> Mobilize Medical Reserve Corps and other volunteer teams to support recovery efforts.		
Environmental Health	<input type="checkbox"/> Coordinate with the Community Planning and Capacity Building RSF to provide services (e.g., recovery resources, various types of social and human services) to survivors at Disaster Recovery Centers.		
	<input type="checkbox"/> Conduct surveillance of the environment in the affected community to determine whether post-disaster conditions may cause adverse public health effects.		

Short-Term Recovery			
Environmental Health	<input type="checkbox"/> Monitor vector issues relative to standing water, food disposal, and other incidents associated with outbreaks and communicate with the public as necessary. <ul style="list-style-type: none"> • <i>Sanitation, food and drinking water safety, and vector control issues may be ongoing and increase in priority during this phase of recovery.</i> 		
	<input type="checkbox"/> Conduct licensed and unlicensed food vendor inspections (including mass shelters with feeding operations).		
	<input type="checkbox"/> Monitor the safety and security of health facilities. <ul style="list-style-type: none"> • <i>Facilities may include pharmacies, clinics, other facilities providing health services, and health department-regulated facilities (e.g., restaurants, schools).</i> 		
	<input type="checkbox"/> Conduct water quality monitoring and surveillance. <ul style="list-style-type: none"> • <i>Water quality information should be obtained and provided to the community as water services are being restored and/or while boil water orders are in place.</i> 		
	<input type="checkbox"/> Conduct air quality monitoring and surveillance for smoke, particulate dust, asbestos, and potential releases from affected manufacturing, dry cleaning, and other air-permitted businesses during debris removal.		
	<input type="checkbox"/> Work with your PIO to develop messaging on indoor environment hazards including carbon monoxide, mold, hazard safety, and household chemical hazards. Update and communicate messaging as necessary.		
	<input type="checkbox"/> Coordinate with public works, debris haulers, and regulatory agencies to support debris removal activities. Monitor and provide technical support for debris removal activities, debris management site activities, and debris recycling/disposal activities.		
Epidemiology & Disease Control	<input type="checkbox"/> Consider the use of public health rapid assessment teams to conduct a post-disaster needs assessment, ¹¹ if available. <ul style="list-style-type: none"> • <i>The baseline assessment conducted during pre-disaster planning can be used to measure progress.</i> 		
	<input type="checkbox"/> Conduct health monitoring and surveillance among responders to support their health and safety during recovery.		
	<input type="checkbox"/> Continue to collect, analyze, and interpret data related to deaths, injuries, and illnesses to provide information about any adverse health effects related to the incident.		
	<input type="checkbox"/> Monitor for emergent public health hazards.		

Short-Term Recovery			
Medical Examiner	Rapidly collect and identify human remains as well as store, process, and conduct final disposition.		
	Temporary facilities may need to be established, including the following: <ul style="list-style-type: none"> • <i>Temporary morgue(s)</i> • <i>Family assistance center (FAC)</i> • <i>Facilities for the holding, collection, and final disposition of human remains</i> 		
	Identify the number of deaths related to the disaster/incident and share mortality information with epidemiology/disease control.		

Additional Considerations

The following should be considered in addition to the key objectives and recovery activities listed above:

- **Incident Command System:** ICS is a standardized emergency management system that is designed to aid in the management of resources during incidents. The adoption of an ICS-based organizational structure during recovery can help ensure an efficient transition from emergency response to recovery. ICS compliance can also support coordination throughout the recovery process.
- **Population displacement:** Following an incident, large numbers of individuals and families may be temporarily or permanently homeless and, as a result, may lose services such as food support, behavioral health treatment, or other services they had received pre-disaster. This population will need assistance to access these essential services. Community partners can serve as a key resource in linking these individuals with critical support and services.
- **Shelters:** While schools are popular facilities for shelters, they are not preferred for recovery. If schools are being used for shelters, students will be unable to attend schools and parents will be unable to leave their children and go to work. The eventual demobilization of post-disaster emergency shelters should also be considered during the planning process.

Resources

- [National Disaster Recovery Framework](#) (FEMA): This framework establishes a common platform and forum for how the whole community builds, sustains, and coordinates delivery of recovery capabilities.
- [The Health and Social Services Recovery Support Function](#) (FEMA): The National Disaster Recovery Framework introduces six Recovery Support Functions (RSF) that are led by designated federal coordinating agencies at the national level. RSFs involve partners in the local, state, and tribal governments and private and nonprofit sectors not typically involved in emergency support functions but critically needed in disaster recovery.
- [Emergency Prescription Assistance Program](#) (EPAP): This program helps people in a federally identified disaster area who do not have health insurance get the prescription drugs, vaccinations, medical supplies, and equipment that they need.



Promising Practice: Patient and Victim Tracking in the East Tennessee Region

Following the Gatlinburg fires in November 2016, the East Tennessee Regional Health Office was responsible for maintaining critical functions and systems, which included assigning support staff to assist with patient and victim tracking following the incident. Several different tracking systems were used to track patients, victims, and the deceased. The State of Tennessee utilizes a patient tracking software system that is able to track patients from EMS to the hospital. The Red Cross uses a tracking system to track individuals in their shelters, and the medical examiner's office has a tracking system for the deceased. In addition, the Department of Health established and staffed an area onsite at the Family Assistance Center where members of the public could report missing family and friends. These

reports were captured using a modified Victim Information Profile form and then entered into a REDCap database created by Tennessee Department of Health Epidemiologists.

Regional Hospital Coordinators and Epidemiologists from regional/county health departments were assigned to gather and collate the data from these tracking systems and share it with other agencies involved in the response effort to locate missing persons, including law enforcement. This made patient-tracking highly successful and integrated and ensured that all agencies involved in the effort had access to any additional data that was available and relevant to that agency's mission. For example, individuals listed as missing after the fires were accounted for within two days. Assigning support staff to collect and analyze data resources was so successful, the East Tennessee Region has now incorporated it into their recovery plan.

Intermediate Recovery

The intermediate recovery phase may begin within days of an incident and typically overlaps with both short-term and long-term recovery phases. This phase can range from weeks to months, depending on the severity of the incident. Intermediate recovery activities are often temporary and provide a bridge to more permanent long-term measures.

The following checklist outlines intermediate recovery objectives and key activities by functional area. It is important to note that the activities listed below are not an exhaustive list of every activity that should take place, but rather activities and priorities that should be considered during the intermediate recovery phase.

Intermediate Recovery			
Objectives			
<ul style="list-style-type: none"> • Coordinate community public health, medical, and behavioral health system recovery needs. • Restore healthcare, public health, and social services functions. 			
Functional Area	Activities	Responsible Party	Date Completed
<i>Note that this is not an exhaustive list and some functional areas may overlap.</i>			
Administrative	<ul style="list-style-type: none"> □ Continue the tracking of expenses and staff hours associated with recovery. <ul style="list-style-type: none"> • <i>Tracking data is essential to inform recovery and to ensure accountability for the use of resources, financial and otherwise. This tracking may be used for reimbursement, ensuring compliance with the Fair Labor Standards Act, workers' compensation, etc.</i> 		
Clinical	□ Coordinate with epidemiology/disease control to monitor the effectiveness of prophylaxis and emerging diseases (if applicable).		
	□ Coordinate community outreach units to provide additional care and services in areas with poor access to services and vulnerable populations.		
	□ Maintain medical surge as needed and support essential medical services related to the incident.		
Emergency Preparedness	□ <i>Communicate public health threat updates and access to medical and behavioral health services to the public through the JIC.</i>		
	□ Provide support and resources to help people (including people with access and functional needs) access available services.		
Environmental Health	□ Identify, manage, and control vectors.		
	□ Continue to conduct inspections to support the reopening of restaurants and other food vendors.		
	□ Coordinate messaging and communications through the JIC to inform the public of the health and safety of indoor, residential environments as people return to their homes.		
Epidemiology & Disease Control	□ Continue surveillance of ongoing and emerging diseases and assess long-term health outcomes from the incident. Continue disease control activities as required.		
	□ Implement behavioral health surveillance and monitor signs and symptoms of behavioral health impact on the community as a whole.		

Intermediate Recovery			
Medical Examiner	<input type="checkbox"/>	Identify appropriate timeline for closing temporary morgue site and reverting to primary morgue (if applicable) and inform Incident Command of demobilization timeline and process.	
	<input type="checkbox"/>	Monitor change in the FAC operational requirements.	
	<input type="checkbox"/>	Coordinate long-term FAC operations and identify appropriate timeline for closing the center (if applicable) and inform Incident Command of demobilization timeline and process.	

Additional Considerations

The following should be considered in addition to the key objectives and recovery activities listed previously:

- **Personnel health and well-being:** Responding to and recovering from emergencies can take a heavy toll on staff. It is important to consider the personnel health and well-being of staff not only during emergency response, but also the recovery process. This is especially important for personnel working in areas such as fatality management with long-term exposure to mass fatalities. Acute traumatic stress may increase and result in psychosocial issues and disorders. Psychological first aid is an important skill set that can be utilized following an incident to provide basic psychological care.

Resources

- [Psychological First Aid Training](#): This training is an evidence-informed modular approach to help children, adolescents, adults, and families in the immediate aftermath of disaster and terrorism. Individuals affected by a disaster or traumatic incident, whether survivors, witnesses, or responders to such events, may struggle with or face new challenges following the event.



Promising Practice: Critical Incident Stress Debriefing Team in Erie County, New York

Following a plane crash that killed 50 people in Erie County, NY, first responders, public health department staff, volunteers, and medical examiner's office personnel, in particular the forensic pathologist and members of the disaster mortuary operational response team, heavily utilized psychological first aid. The Medical Reserve Corps deployed a "critical incident stress debriefing team" comprised of mental health professionals. This team ensured that all personnel involved with the incident were able to receive the mental health services they needed.

Long-Term Recovery

The transition into the long-term recovery phase typically begins once the community is able to plan for the reconstruction or revitalization of affected areas. This phase can last for several months to years following an incident and is needed to re-establish a healthy, functioning, resilient community.

The following checklist outlines long-term recovery objectives and key activities by functional area. It is important to note that the activities listed below are not an exhaustive list of every activity that should take place, but rather activities and priorities that should be considered during the long-term recovery phase.

Long-Term Recovery			
Objectives			
<ul style="list-style-type: none"> Complete redevelopment of the affected area, which may include rebuilding or relocating damaged or destroyed social, economic, natural, and built environments, and progress towards a more self-sufficient, sustainable, and resilient community. Monitor and survey long-term health issues specific to responders and establish long-term health monitoring capacity of disaster responders. 			
Functional Area	Activities	Responsible Party	Date Completed
<i>Note that this is not an exhaustive list and some functional areas may overlap.</i>			
Administrative	<input type="checkbox"/> Emergency preparedness to coordinate the review of pre-disaster recovery plans and standard operating procedures with the collaborative planning team to incorporate best practices and lessons learned obtained through hot washes, after action reports, etc., to ensure effective recovery in future incidents.		
	<input type="checkbox"/> Ensure all expenditures and financial claims have been processed and documented.		
Clinical	<input type="checkbox"/> Ensure the coordination of environmental health and epidemiology/disease control to monitor long-term impacts of environmental health factors.		
	<input type="checkbox"/> Clinical, behavioral health, and epidemiology/disease control work together to conduct long-term epidemiological follow-up and medical monitoring of the affected population.		
Emergency Preparedness	<ul style="list-style-type: none"> <i>Determine how long public health will continue its monitoring efforts for specific conditions in coordination with state and federal partners.</i> 		
	<input type="checkbox"/> Ensure any open actions are assigned to appropriate staff or other recovery organization sections for follow up.		
Environmental Health	<input type="checkbox"/> Ensure all functions have been transitioned to their pre-disaster departments/agencies.		
	<input type="checkbox"/> Plan for upcoming stress-inducing events such as the incident anniversary, bad storms, etc.		
Epidemiology & Disease Control	<ul style="list-style-type: none"> <i>Ensure behavioral health services are available to help the community cope with post-traumatic stress and work with the community to identify what closure will look like.</i> 		
Medical Examiner			

Promising Practice: Community Connectedness in New York City

On Oct. 29, 2012, Hurricane Sandy made landfall north of Brigantine, New Jersey. The storm caused water levels to rise along the eastern coast of the United States from Florida to Maine. The highest storm surges took place in New Jersey, Connecticut, and New York, notably in the New York City metropolitan area. In the aftermath of the storm, social connectedness within the affected communities fostered recovery. It was found that individuals were more connected with family, friends, neighbors, and other community members in communities where faith- or community-based organizations were present and engaged. In these more connected communities, individuals were better able to access social and medical services and disaster recovery resources such as programs for temporary shelter/housing, repairing or rebuilding housing, and mental health services. Communities made up of connected individuals are built to grow more resilient with each event. Faith- and community-based organizations, which are already deeply rooted in neighborhoods, can be assets to local public health and should be included in preparedness planning. Communities that are connected are better able to identify risks, take action to withstand the effects of an incident, and recover more swiftly than less connected communities.

Additional Considerations

The following should be considered in addition to the key objectives and recovery activities listed previously:

- Recovery to preparedness: While many may consider long-term recovery as separate from pre-disaster planning, the two phases are complementary in that the recovery phase offers an important opportunity to improve emergency planning and readiness. Implementing lessons learned from previous incidents into plans will build more resilient communities.

Resources

- [Long-Term Community Recovery Toolbox](#) (FEMA): This toolbox was created to help communities coordinate projects and activities and resolve issues residents and local governments experience during disaster recovery. It is intended for use by community members, local leaders, and state and federal agencies involved in long-term community recovery.
- [Community Recovery Management Toolkit](#) (FEMA): This toolkit catalogs guidance, case studies, tools, and training to assist local communities in managing long-term recovery post-disaster. This toolkit is managed by Community Planning and Capacity Building Recovery Support Function.

- [Building Resilient Communities: An Online Training](#) (RAND): The RAND Corporation is a nonprofit institution that helps improve policy and decision-making through research and analysis. This easy-to-use, self-guided online training shows organizations and communities how to strengthen their resilience. After completing this training, you will have a real action plan to use that will help you build resilience in your organization or across your community, bolstering your capacity to respond to and recover from disaster.

Conclusion

Recovery is part of the disaster lifecycle and while comparisons can be made to other phases of the cycle, the recovery phase comes with its own unique set of considerations and challenges. This report is meant to assist local public health in recovery by highlighting some key considerations, activities, and potential challenges. Keep in mind that this report should not supplant existing plans, but rather be used as a resource during recovery operations or when updating/creating recovery specific plans. A successful recovery requires planning and collaboration from all sectors, especially local public health; and if properly planned for, the recovery process can lead to a more resilient community following a disaster.

References and Notes

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4. The functional areas are meant to coincide with common sections/programs within local health departments. Note that depending on a LHD's unique structure, activities may fall under different functional areas.
5. Whole-community partners include community leaders, faith-based organizations, nonprofit organizations, private sector entities, government officials, emergency management practitioners, and health providers including behavioral health. Many of these partners may be from your healthcare coalition.
6. A hazard analysis evaluates potential hazards, vulnerabilities, and resources in a specific community to facilitate effective planning.
7. A Continuity of Operations Plan contains the plans and strategies by which an agency or jurisdiction provides for ongoing functioning in light of a natural disaster or deliberately caused emergency (e.g., sustainment of operations).
8. A community health assessment is a systematic examination of the health status indicators for a given population that is used to identify key problems and assets in a community. The ultimate goal of a community health assessment is to develop strategies to address the community's health needs and identified issues.
9. The Incident Command System is a management system designed to enable effective and efficient domestic incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.
10. Health sectors include pharmacies, hospitals, community clinics, skilled nursing facilities, dialysis/End Stage Renal Disease centers, and behavioral health.
11. A post-disaster needs assessment is a process for identifying and prioritizing critical unmet needs for long-term community recovery.

Acknowledgments

NACCHO gratefully acknowledges the following organizations for its contributions to this project:

- Brazos County Health Department, Bryan, TX
- Erie County Department of Health, Buffalo, NY
- Harris County Public Health, Houston, TX
- New York City Department of Health and Mental Hygiene, Long Island City, NY
- Public Health – Seattle & King County, Seattle, WA
- Southern Nevada Health District, Las Vegas, NV
- Tennessee Department of Health, Knoxville, TN
- Ventura County Public Health, Ventura, CA

This project was supported by the Assistant Secretary for Preparedness and Response Cooperative Agreement. NACCHO is grateful for this support. The contents do not necessarily represent the official views of the sponsor.

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