



Disaster Recovery Guidance Series

Health Sector Recovery

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About this Guidance Note

Disasters and emergencies often have disproportionate impacts on a country's health system¹ and the overall health of women, men, girls, and boys. Disasters can cripple health facilities (by destroying infrastructure or leaving a facility unable to function due to loss of critical components such as power and water), leading to their inability to provide lifesaving medical care. The interruptions of routine public health programs, such as vaccination campaigns, are common in the wake of a disaster, setting back gains to overall public health. Health workers are often unable to perform their duties because they have been personally affected or are unable to reach their workplace. Financial resources earmarked for health may be directed to other priorities. Recognizing these realities as countries move to post-disaster recovery will help to maintain pre-disaster levels of health and may offer opportunities to introduce measures to improve the overall resilience of the health system.

This Guidance Note (the Note) for Post-Disaster Health Sector Recovery is intended to provide action-oriented guidance to local and central government health sector officials who face post-disaster challenges related to health sector recovery. It lays out the policy, planning, financial, and implementation decisions and activities that go into developing and putting into effect a Health Sector Recovery Plan. Additionally, common pitfalls are outlined as well as ways to overcome them.

While recovery is not a linear process, the Note is structured around three phases:

- **Immediate**, or initial recovery efforts as the sector transitions from response to recovery.
- **Short-term**, or recovery planning and initial implementation.

*The recovery phase is an opportunity to **Build Back Better** by integrating disaster risk reduction into development measures, as outlined in the Sendai Framework for Disaster Risk Reduction. During recovery, cross-cutting issues can be incorporated into operations more easily and less expensively than if introduced at a later stage. For example, including gender equality and women's empowerment, community engagement, and resilience to climate change in the recovery process can reduce gender inequality, gain community buy-in, and support the development of climate-smart health systems.*

■ **Medium-term** reconstruction efforts.

The three tables on the following pages summarize areas of work within each health sector recovery phase and presents key milestones, including where multilateral agencies and other support may assist recovery efforts.

The suggested milestones are aligned with three functions:

- **Lead**—health officials have or take control to make things happen.
- **Support**—health officials work with other recovery leaders to assist them in their recovery work.
- **Enable**—health officials share resources and tools (for example, people, systems, platforms, data, and physical assets) that will help others to lead their components of recovery.

This Note is accompanied by an extensive Reading List that is available on the Global Facility for Disaster Reduction and Recovery's (GFDRR) Recovery Hub website, under the Health section 'Knowledge Documents' (reference to this list is made throughout this Note by *).²

¹ The World Health Organization defines health systems as: (i) all the activities whose primary purpose is to promote, restore, and/or maintain health; (ii) the people, institutions, and resources arranged together in accordance with established policies; to improve the health of the population they serve, while responding to people's legitimate expectations and protecting them against the cost of ill-health through a variety of activities whose primary intent is to improve health.

² <http://www.gfdrr.org/health#knowledge>.

Health Sector Recovery Milestones by Phase of Recovery³

Immediate Recovery Milestones and Support: *Make Safe, Provide, Plan, and Repair*

Area	Milestones	Support for Milestones
Assistance	<p>LEAD Seek assistance from, preferably pre-identified, experts in health sector recovery as required.</p>	<p>Sources of experts include the International Recovery Platform (IRP), Pan American Health Organization (PAHO), World Bank (WB), World Health Organization (WHO), regional development banks, and Ministries of Health or District Health Boards who have faced similar recovery efforts.</p> <p>Consult with multilateral agencies or bilateral partners about technical or financial assistance for the transition from response to health sector recovery.</p> <p>Consult, and if possible, partner with organizations that work on women's (and health) issues to ensure the specific health needs and vulnerabilities of women and men, girls and boys are addressed.</p>
Information Gathering	<p>LEAD Identify damages, losses, and needs as well as gaps in baseline information, potential emerging problems, and new vulnerable populations as defined in accordance with Annex 1 of the International Health Regulations.</p> <p>Study lessons learned from other health sector recovery experiences.</p>	<p>A post-disaster needs assessment* and a risk assessment will generate inputs for the Health Sector Recovery Plan. For example, these assessments produce information on damaged health facilities, losses associated with the reduction in health service delivery, and associated community needs.</p> <p>Additional sector-specific investigations of damages, losses, and needs might need support from the central government.</p> <p>Additional investigations of damages, losses, and needs disaggregated by sex and age, if not addressed in the post-disaster needs assessment or in additional sector-specific investigations, might be needed.</p> <p>Consult and disseminate lessons learned and best practices (for an outline of relevant case studies and lessons, see IRP Guidance Note on Health*).</p> <p>Use local informal and formal health and community networks to identify community health needs and concerns. Consult with both women and men to ensure recovery is designed to meet their respective needs and accords with what is culturally and socially appropriate.</p>

³ The International Recovery Platform (IRP) defines the recovery phase as “The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors. The recovery task of rehabilitation and reconstruction begins soon after the emergency phase has ended, and should be based on pre-existing strategies and policies that facilitate clear institutional responsibilities for recovery action and enable public participation. Recovery programmes, coupled with the heightened public awareness and engagement after a disaster, afford a valuable opportunity to develop and implement disaster risk reduction measures and to apply the ‘build back better’ principle.”

Immediate Recovery Milestones and Support: *Make Safe, Provide, Plan, and Repair (cont.)*

Area	Milestones	Support for Milestones
Leadership, Governance and Coordination	<p>LEAD</p> <p>Activate a preferably pre-prepared and high-level Post-Disaster Health Sector Governance and Leadership Framework that outlines roles, responsibilities, and commitments after a disaster event.</p> <p>Confirm, in the context of the event, the right institutions and people are in place or address the gaps.</p> <p>Confirm the lead agency to ensure critical recovery decisions and clear communications.</p> <p>Clarify and communicate health sector recovery roles.</p> <p>Develop accountability and transparency mechanisms for policy, planning, legal, and operational actions and financial information.</p>	<p>IRP, PAHO, WB, and WHO can advise governments on developing a pre-prepared and high-level Post-Disaster Governance and Leadership Framework and on appropriate associated legislation.</p> <p>Community and health networks have strong grassroots knowledge of health issues to support the identification and channeling of resources to address the different health needs of women and men in the communities. For example, community clinics, health departments, local governments, nongovernmental organizations (NGO), and the private sector.</p> <p>The coordination and definition of roles and responsibilities during recovery should be supported by national legislation or a Memorandum of Understanding (before a recovery plan formalizes the roles or preferably before the disaster occurs in the leadership framework).</p> <p>Financial accountability should be achieved through regular independent audits of comprehensive financial information.</p>
Communications	<p>LEAD</p> <p>Approve and implement the cross-key agency communications plan, ideally developed and drafted with partners' pre-disaster as part of the Post-Disaster Governance and Leadership Framework, to provide consistent and clear communications to partners and all affected residents. Under this plan, key messages are identified and agreed among sector recovery leaders (single source of truth). Those responsible for communicating should be aware of gender issues.</p> <p>ENABLE</p> <p>Support and provide women, men, girls, and boys with relevant information to initiate self-recovery at the community and individual level, including psychosocial recovery *. Pay attention to vulnerable groups.</p>	<p>Use local informal and formal health and community networks to identify community health needs and concerns. These needs and concerns will inform the communications plan.</p> <p>Identify/develop communication templates* for high-concern, risk, crisis, and change management situations.</p>
Funding	<p>LEAD/SUPPORT</p> <p>Confirm funding needs and allocations for health sector recovery. Confirm any cost-sharing arrangements.</p>	<p>A post-disaster needs assessment*, in conjunction with any pre-planned Post-Disaster Recovery Framework*, can determine overall recovery funding needs. A more in-depth health sector assessment might be required, including for mental health support.</p> <p>International financing institutions can advise on adapting public financial management systems to support the government and provide international best practices.</p>

Immediate Recovery Milestones and Support: *Make Safe, Provide, Plan, and Repair (cont.)*

Area	Milestones	Support for Milestones
Human Resources	<p>ENABLE Address the capacity and capability of the health workforce for their own recovery needs and well-being.</p>	<p>Human resources, training, and procurement should be supported by the central government.</p> <p>Support the workforce's well-being throughout each phase of recovery; staff and their families often are impacted by the disaster itself, and recovery work will conflict with their business as usual requirements.</p>
Strategy and Planning	<p>LEAD <u>If not drafted pre-disaster</u>, investigate, scope, and draft a Health Sector Recovery Plan using best practice templates from support agencies. For example, post-disaster recovery framework*.</p> <p><u>If developed pre-disaster</u>, complete the pre-prepared Health Sector Recovery Plan template. Adjust the draft to suit the disaster context.</p> <p>Test that the right legal instruments for health sector recovery are available or seek help if required.</p> <p>Catalyze social, health, and environmental impact assessments described in the draft Health Sector Recovery Plan.</p> <p>Identify planning documents for recovery objectives and map hazard.</p>	<p>The European Union, United Nations, World Bank, and regional agencies can assist the government in developing a disaster recovery framework*, which might inform a Health Sector Recovery Plan.</p> <p>There are guides and tools to undertake health and environmental impact assessments*. Multilateral agencies can advise on the most appropriate health impact assessments for the context.</p> <p>Risk assessment mapping information is available through the U.S. Federal Emergency Management Agency*.</p>
Consultation	<p>LEAD Confirm with health sector partners on the appropriate mechanisms to use for consulting stakeholders on the draft recovery plan.</p> <p>Agree to a gender-sensitive approach for consulting affected communities, engaging with both affected women and men.</p>	<p>The lead recovery agency should provide guidance on appropriate consultation mechanisms that are to be used for stakeholder engagement on the draft health sector recovery plan.</p> <p>The consultations might be carried out with other sector recovery consultations, including a broader post-disaster recovery framework.</p>
Monitoring and Evaluation (M&E)	<p>LEAD Investigate recommended recovery indicators for the M&E plan.</p> <p>Draft or activate the pre-prepared M&E framework that reflects the recovery plan vision, goals, and activities. Identify where baseline information is missing.</p> <p>SUPPORT Share the M&E framework with other recovery leaders.</p>	<p>Local agencies might provide relevant indicators when developing an M&E framework and IRP, PAHO, WB, and WHO might have templates/examples to support relevant M&E frameworks*.</p> <p>Include recovery indicators disaggregated by sex and age, where possible.</p>

Immediate Recovery Milestones and Support: *Make Safe, Provide, Plan, and Repair (cont.)*

Area	Milestones	Support for Milestones
Infrastructure	<p>LEAD Identify priority health sector repairs with partners.</p> <p>SUPPORT Make functional buildings safe and identify possible buildings for demolition.</p> <p>Initiate repairs to critical infrastructure, where able.</p> <p>Re-establish health sector lifelines, including power, sewerage, and piped water network.</p> <p>LEAD/SUPPORT Identify and initiate interim health sector accommodations, and communicate options to affected population. Develop an exit strategy for temporary accommodations. Keep in mind temporary structures often become permanent.</p>	<p>Understanding and allocating the cost of immediate repairs required for infrastructure and lifelines will take time. In this immediate period, a cost indemnity agreement should be designed and agreed between the central government and lead local infrastructure owners to guarantee immediate repair action.</p> <p>International health organizations or the American Society for Healthcare Engineering can advise on repair prioritization criteria.</p> <p>Qualified engineers and contractors will need to support ‘make safe’ decisions, asbestos, and health and safety regulations for premises.</p> <p>Central governments should consider advising the health sector on temporary accommodation options.</p>
Health Service Delivery	<p>LEAD Address immediate health and safety issues, meet health needs, and re-establish critical health services.</p> <p>New health risks, often derived from water issues (cholera, hepatitis, etc.), accompany disasters and require immediate attention.</p> <p>Train health professionals on gender and its implications for health, including on gender-based violence (GBV) prevention and response. GBV can spike in the aftermath of disasters.</p> <p>Ensure the health needs of women and men are assessed and met. Focus on reproductive, maternal, newborn, and adolescent health.</p> <p>Make health facilities accessible for both women and men. Understand the respective barriers to ensure equal access.</p>	<p>Seek support from or resource-sharing with neighboring/ undamaged health facilities.</p> <p>Prior to any disaster, explore a mutual aid/assistance arrangement with neighboring facilities and support networks. The arrangement sets expectations and commitments, including financial recoupment*.</p>

Immediate Recovery Milestones and Support: *Make Safe, Provide, Plan, and Repair (cont.)*

Area	Milestones	Support for Milestones
Medicines, Supplies, and Technology	<p>ENABLE Ensure medical or other supply arrangements are functioning and bringing in needed supplies.</p> <p>SUPPORT Where these arrangements are not functioning, co-develop medical supplies and logistics plans with partners.</p>	WHO, the private sector, the central government, and NGOs might be well placed to support the development of a medical supplies and logistics plan.
Implementation	<p>SUPPORT Initiate support to local and central government authorities to allow clean drinking water supply and support the return of beaches and rivers to normal health levels for swimming.</p>	The Department of Water and Sanitation (or equivalent) or local government might lead. While initiated early, it can take years to complete.

**Short-term Recovery Milestones and Support:
*Begin to Rebuild, Return Services, and Reduce Obstacles***

Area	Milestones	Support for Milestones
Information Gathering	<p>LEAD Confirm baseline information for decision-making monitoring and evaluation.</p> <p>SUPPORT Develop data-sharing protocols and agreements with agencies that have access to and stewardship of required data.</p>	<p>Investigate other sources of quality data, supported by discussions with the private sector and NGOs.</p> <p>The central government should provide data-sharing protocol and agreement templates.</p>
Leadership, Governance, and Coordination	<p>SUPPORT Buy-in to coordinated project management office and tools to align activities and to reduce duplication. It will also facilitate communications and collaboration and support real-time information flows between and among critical health facilities.</p>	The lead recovery agency should establish a project management office to develop governance and coordination templates and monitor recovery activities.
Communication	<p>LEAD Update the public health sector communications plan as required to ensure consistent and up-to-date messages.</p>	<p>Messaging will need to be checked and updated in consultation with partners.</p> <p>Ensure the communications plan reaches both women and men. This might require different measures, messages, and communication tools.</p>

Short-term Recovery Milestones and Support: *Begin to Rebuild, Return Services, and Reduce Obstacles (cont.)*

Area	Milestones	Support for Milestones
Funding	<p>SUPPORT Identify funding opportunities, including joint collaborations to pool resources. This includes cost-sharing agreements, where appropriate.</p> <p>Develop a draft framework for whole of health sector recovery funding and financing and related template agreements for implementation with partners.</p> <p>Develop a funding plan for implementing resilience and betterment measures for the health sector.</p>	<p>International financing organizations can advise on funding opportunities and a financial plan for implementing resilience and betterment measures.</p> <p>National government should provide recovery leads with a joint draft framework for ‘whole of health sector recovery’ funding and financing and related template agreements for implementation with partners.</p>
Human Resources	<p>ENABLE Evaluate gaps in workforce capacity and capability; upscale or add workforce skills to meet recovery objectives.</p> <p>Evaluate and support the well-being of the workforce.</p>	<p>Staff support from undamaged facilities or international health organizations might be utilized to provide training or resolve capacity and capability gaps.</p> <p>Psychologists can provide tips for people and workforces impacted by disaster*.</p>
Strategy and Planning	<p>LEAD Review the current policy and regulatory environment to ascertain its appropriateness to enable post-disaster health sector recovery.</p> <p>Promote new policy or regulatory requirements, where necessary, to affect positive and timely recovery.</p> <p>Approve the health sector recovery plan to direct and to coordinate recovery activities and agencies involved in recovery.</p> <p>Outline and analyze key planning decisions for the health care sector, such as planning for land-use and settlement patterns. Decide on the suitability of health sector land for rebuilding, including for hospitals, clinics, and laboratories.</p> <p>Work with recovery leaders across the whole of recovery to develop a coherent built environment (land, lifeline infrastructure, and critical social infrastructure) recovery prioritization model that ensures the coordinated financing and repair of all forms of infrastructure, including health infrastructure.</p>	<p>The review of the current policy, regulatory environment, and the development of any new regulations or policies might be led by the Ministry of Health, but it needs to be undertaken in consultation with local authorities and health agencies.</p> <p>Assess whether the current policy and regulatory environment is sufficiently gender-sensitive to meet the needs of women and men.</p> <p>Multilateral agencies can provide quality technical assurance to support decision-making, including urban planning exercises (see IRP Guidance Note on Pre-Disaster Recovery Planning*).</p>

Short-term Recovery Milestones and Support: *Begin to Rebuild, Return Services, and Reduce Obstacles (cont.)*

Area	Milestones	Support for Milestones
Consultation	<p>SUPPORT Develop an engagement framework to ensure the health sector recovery plan reflects engagement inputs.</p> <p>LEAD Engage residents on the health sector's future and on the nature and coordination of recovery activities (draft recovery plan). Design the engagement strategy to effectively and equally engage women and men.</p> <p>ENABLE Engage private sector health providers to identify their recovery needs and to consider ways for the government to support the private sector.</p>	A wider engagement strategy should be developed by the central government and used by the health sector recovery lead agency (see IRP Guidance Note on the Private Sector*).
Monitoring and Evaluation	<p>SUPPORT Re-assess initial needs and the recovery plan (inputs, outputs, outcomes, results, etc.). Modify the process as required by results. Disaggregate the indicators by sex and age.</p> <p>LEAD Reconfirm and communicate on health recovery indicators.</p> <p>Strengthen efficiency and effectiveness of institutional arrangements where M&E reveals gaps and weaknesses.</p>	Partners, regional and international financial institutions, private sector (for example, insurance agencies), and research institutions might be able to provide M&E technical assistance or the required data.
Infrastructure	<p>SUPPORT Provide oversight for the demolition of, and repairs to, health sector infrastructure.</p> <p>SUPPORT Decide on long-term repairs and on health sector infrastructure delivery.</p>	<p>Use PAHO/WHO's Hospital Safety Index to inform reconstruction efforts.⁴</p> <p>The ministry responsible for buildings safety and the Ministry of Health could provide joint advice on demolition and health and safety guidelines.</p> <p>Sector recovery lead or a coordinating recovery authority should make the decisions on repairing or demolishing health sector infrastructure.</p> <p>If the infrastructure is insured, insurance companies assess the damages and make payouts to public and/or private health sector agencies.</p>

⁴ Following the 2010 Haiti Earthquake, cholera proliferated. In response, public health officials and doctors at Les Centres GHESKIO teamed up with architects and designers at MASS Design Group to build a state-of-the-art Cholera Treatment Center in Port-au-Prince. The center enables responders to treat the ill while preventing water re-contamination. The facility also incorporated elements of sustainable design to minimize energy use and environmental impact. New facilities and interventions are necessary to respond to emerging climate-related health impacts. Integrate low-carbon and environmentally friendly strategies enables a truly climate-smart approach. friendly strategies, enabling a truly climate-smart approach.

Short-term Recovery Milestones and Support: *Begin to Rebuild, Return Services, and Reduce Obstacles (cont.)*

Area	Milestones	Support for Milestones
Health Service Delivery	LEAD Review alternative health support and service delivery models. Introduce new services, as required.	Other district health boards, Ministries of Health, and PAHO/WHO can provide advice on service delivery models and support options based on experience and lessons learned. All models need to be modified to suit the immediate health sector and recovery priorities.
Medicines, Supplies, and Technology	SUPPORT Re-stock all medicines, technology, and other supplies.	Restocking supplies might depend on the private sector/pharmaceutical companies.
Implementation	LEAD Deliver early health sector recovery plan projects to instill confidence; use Build Back Better principles. SUPPORT Oversee the prioritization and re-establishment of fresh water supply, sanitation, and health and safety to meet community health priorities.	Use PAHO/WHO's Hospital Safety Index to guide retrofitting and reconstruction efforts*.

Medium- to Long-term Recovery Milestones and Support: *Complete Rebuild, Restore, and Improve*

Area	Milestones	Support for Milestones
Leadership, Governance, and Coordination	SUPPORT Strengthen the institutional capacity to pursue longer-term health development goals.	National government should support this milestone by identifying longer-term health development goals and indicators.
Communications	LEAD/SUPPORT Continue to identify the recovery concerns of both women and men. Provide clear, agreed-upon responses via multiple outlets to reach the widest audience.	Continue to use community and health networks to identify community needs and disseminate key messages.
Funding	SUPPORT Prepare for diminished funding in the medium-term recovery phase as donors and political interests dwindle*. Revisit the funding and finance plan developed in the first phase, as access to sources of capital change. LEAD Confirm funding resources for the next stage.	International financing institutions can advise on ways to approach issues associated with access to resources and confirming additional resources.
Human Resources	ENABLE Take actions to reduce staff burnout. LEAD Identify resources to reduce burnout in the next stage.	The central government and district health board should provide measures to prevent staff burnout (mental health days, psychosocial support, etc.) and the processes to monitor staff at risk of burnout. A transition team might be required to identify next-stage resource requirements.

Medium- to Long-term Recovery Milestones and Support: *Complete Rebuild, Restore, and Improve (cont.)*

Area	Milestones	Support for Milestones
Strategy and Planning	LEAD Introduce policy and legal mechanisms for health sector improvements as needed based on issue/solution identification.	If required, and as recovery issues are identified, the central government might initiate a review of the National Healthcare Act or introduce new policy and legal mechanisms.
	LEAD/SUPPORT Review the National Health Care Act, as required.	A recovery-wide land-use planning recovery plan developed by the lead recovery agency to support land-use decisions will inform the planning decisions for the health sector. This will also be an opportunity for the Health Sector to support planning decisions that encourage safer and healthier communities.
	SUPPORT Seek opportunities to encourage healthier re-settlement (location) or co-locations for health facility rebuilds.	
Monitoring and Evaluation	SUPPORT Review and report on, as part of the broader recovery program, progress toward the recovery indicators and financing/funding. Report on the effectiveness of the recovery program and recommend areas for policy and implementation adjustments to stay on track.	An independent evaluator might provide stakeholders the required assurance on progress or lack of progress/issues and credibility. Evaluate health sector recovery activities, decisions, and next steps to inform the transition, including lessons learned.
		The evaluation should determine whether the activities have benefitted women and men equally.
Infrastructure	SUPPORT Ensure health facilities are designed to accommodate women's needs for privacy.	Use PAHO/WHO's Hospital Safety Index to inform reconstruction and retrofitting efforts in health facilities*.
	SUPPORT Follow design codes and building code requirements for healthcare facilities. Take advantage to build sustainability into reconstruction.	
Service Delivery	LEAD Strengthen primary care services and psychosocial support through smarter delivery models and innovation, including climate-smart models and models that assess the different needs of women and men for equal and effective treatment.	Central government should support primary care services by investigating smarter, more resilient delivery models, including climate smart models. Additional funding for psychosocial support is likely to be needed.
Implementation	SUPPORT/LEAD Government and strategic partners continue to implement health sector recovery plan.	Multilateral organizations are helpful in putting a program management structure in place and supporting momentum.
Transitioning	SUPPORT/ENABLE Phase out health sector recovery operations. Transfer recovery responsibilities, as necessary. Put in place new arrangements as necessary. For example, support the monitoring and evaluation of recovery and develop continuity plans for health facilities.	A clear plan for transition, including the associated communications plan, should be led by the recovery agency lead.

Breaking Down this Guidance Further

Information Gathering

Immediate Phase

To determine material, human, and resource needs and priorities, the information gathering process involves:

- Assessing the impact (as in, damages and losses) of a disaster on human health and the health care system.
- Understanding the quality of post-disaster health care.
- Identifying new vulnerable population groups and their locations.
- Identifying new and emerging health issues (for instance, a spike in mental health-related issues).

To avoid duplication of efforts, identify the points at which data are being collected and establish data collaboration protocols and data-sharing agreements.⁵ Where data collection resources are scarce, consider assigning a mandate (and resources) to research institutions to identify risks, conduct surveys, assess the health impact, etc. Promote information sharing; hoarding of data can be detrimental to recovery objectives.

Examples of the information to be collected and evaluated include:

- Baseline data (disaggregated by age and sex) on local health conditions and services and how the health system responded to existing needs (to expose weaknesses and support Build Back Better principles during recovery). Where there is no sex-disaggregated data, focus groups have proven to be an effective measure to identify disparities in access to

health service delivery and needs between women and men.

- A rapid assessment of vulnerable groups (the elderly, women, people with disabilities, indigenous people, and youth, among others), including the mapping of existing and emerging vulnerable populations. Their needs could be identified through consultations and partnerships with NGOs.
- Water quality and environmental sanitation and hygiene, particularly in relief shelters.
- Census information: Tracking destinations as people move from shelters to permanent housing, in order to maintain continuity of health service records.
- Community wellbeing: how the community as a whole is recovering.
- Schools, businesses, housing, transportation, and the availability of the workforce all impact recovery of health facilities. Health facilities do not operate in a vacuum. They rely on the same power, water, workforce, security, communications, and infrastructure as other businesses.

Establish or re-establish a Health Management Information System (HMIS) that collects and agglomerates relevant, reliable sex- and age-disaggregated data and provides a sound

Assessing the impact of a disaster on human health and the health care system is key to understanding post-disaster access to primary and secondary health care services, assessing health promotion and disaster prevention efforts, targeting resources, and identifying opportunities to enhance and upgrade health.

⁵ Data-sharing agreements would stipulate ongoing ownership of the shared data and set out ways to create metadata standards so that data layers can be agglomerated in a useful manner for policymakers.

information basis for both short- and longer-term forecasting, insight-development, and planning.

Short- to Medium-Term Phase

Conduct ongoing research to identify needs and issues, understand their implications, test underlying assumptions and priorities, allocate resources, and monitor progress. Use this information to guide recovery activities and decisions, such as where to rebuild a destroyed health facility.

Leadership, Governance, and Coordination

Immediate Phase

Good leadership, governance, and coordination is a fundamental building block of any health sector recovery. Key steps include (not in any specific order):

- Investigate current governance and leadership arrangements to see where they can best be maintained and leveraged.
- Preferably, activate a pre-prepared and high-level Post-Disaster Health Sector Governance and Leadership Framework that outlines roles, responsibilities, and commitments after a disaster event.
- When such a framework has not been developed or the scale of the disaster exceeds such a framework, it may be necessary to review leadership frameworks used by others and their associated lessons and to develop recommendations for how to best build on existing arrangements.
- Identify and get a mandate for a health sector recovery lead (such as, the Ministry of Health). Ensure the lead agency has the capacity and capability to provide the necessary leadership.
- Clarify health sector recovery roles and responsibilities, including those of the municipality, the district health board, the private sector, and partners (to empower local institutions and reduce duplication of efforts).
- Identify key health sector stakeholders and partners, including community health clinics and health networks, that have grassroots in the community. Identify key stakeholders and partners that can ensure women and men's different needs and vulnerabilities are properly understood and addressed such as NGOs working specifically on gender equality and women's empowerment.
- Identify coordination entities within the health sector.
- Agree with partners on institutional and coordination arrangements, instruments, and accountabilities. Even though certain coordination strategies, mechanisms, and platforms may exist, new ones may need to be developed or modified to focus on recovery activities and ensure consultation needs.
- Consider informal coordination mechanisms: between local government and the community, within government (local and central), and between government and the international community. Agree on procedures and criteria for collaboration through a formal agreement such as a Memorandum of Understanding.
- Ensure coordination of health, nutrition, and water and sanitation agencies, given the cross-cutting nature of the issues each will be addressing. Focus on monitoring illnesses and on adopting timely measures to avoid risks of epidemics.

Short- to Medium-Term Phase

A coordinated project management system is critical for efficient workstreams and imperative for aligning all actors. This will facilitate communication and collaboration and support real-time information flows between

and among critical health facilities. As the recovery progresses, strengthening institutional capacities to pursue longer-term health development goals is important. In particular, there may be greater opportunities for joint action to achieve common goals, including with the private sector.

When multiple actors are involved, recovery may be delayed and efforts duplicated. It is critical to have a concerted health sector recovery approach, led by the government where possible, to focus on funding and resources. The role of external actors is important, but it must be managed within the overall context of recovery.

Communication

Immediate Phase

One trusted source of truth and communications should be established immediately. Someone from the affected community or country, representing both central and local government, is ideal. An open and transparent relationship with the media, in which accurate, clear, timely, and up-dated information is provided, will help to ensure the public receives the information needed to manage expectations, reduce uncertainty, and defuse rumors.

Communication on health sector and broader recovery efforts should support the hearing impaired and the blind. Interpreters are critical for those with communication challenges, including those who do not understand the local language. An online mechanism will help to widely disseminate existing issues, concerns, and gaps in knowledge; support a clear vision of damages and resulting needs; coordinate volunteers; provide a space for technical manuals to guide the recovery process; and share joint-agency messages on recovery efforts, service delivery, and health information. Advice can be prepared before a disaster so that it requires minimal adaptation.

Public health and sanitation campaigns can disseminate information on safe drinking water, vector control, and other health and safety issues (asbestos awareness, etc.)*. Depending on potential health risks, material on tuberculosis, malaria, and dengue prevention; HIV awareness and prevention; and hygiene promotion can be prepared and distributed. Public campaigns should also address issues related to gender-based violence since they are often present in post-disaster situations and a major cause for severe mental health issues.

Short- to Medium-Term Phase

If not already available, key partners can develop a health system communications plan* that includes, among other areas, a gender-sensitive community-level awareness program. It could detail which health services are affected and where to receive service support. Additional material could be widely disseminated on emergency preparedness and other safety measures, hygiene promotion, disease awareness and prevention (* for an example related to Zika virus infection), immunization, etc.

Funding

Immediate Phase

Health recovery strategies and plans must be linked to available resources. Realistic cost estimates for recovery, based on damage, loss, and needs assessments* and a framework for allocating and monitoring funding are required to embark on recovery activities and to cover higher-than-expected operating costs as well as resilience and improvement measures. Determine funding available through the public and private sectors, including international agencies. An agreed-upon funding framework in this phase will save time and efforts and help to focus action where it is most needed. It will also identify where additional funding is needed.

Key steps to the funding process include:

- Clarify insurance expectations.

- Confirm additional funding needs beyond existing baselines. Information obtained through assessments should include costs for infrastructure, human resource, materials, and health treatment costs. Highlighting costs for Build Back Better, where possible, is recommended.
- Integrate transparency and accountability of decisions and financial management into the recovery phase. One way to achieve this is by integrating public participation of women and men in decision-making processes. This will pay off in terms of better planning, improved implementation, and reduced corruption.
- Establish criteria and principles agreed upon with partners to prioritize the allocation of funds. These priorities need to be considered and understood alongside other recovery priorities. Consider the following questions:
 - Who are the beneficiaries of this assistance?
 - What are the needs of the women and men, girls and boys who will receive the assistance?
 - For what purpose, how much, and in what form will assistance be provided?
 - What conditions and obligations are attached to the assistance?
 - How will compliance and outcomes be monitored?
- Confirm cost-sharing arrangements and schedules. Development partners and the private sector provide both financial and in-kind assistance. Clearly signaling what is needed from partners may increase what is offered. Development partners will have technical experience that governments may utilize. The schedule for the cost-sharing arrangements sets out the process for managing and resolving what is known and unknown.
- Mobilize funds for health sector recovery and develop systems for delivering funding.

- Establish a tracking (M&E) and accountability system, including fraud checks and independent audits.
- Initiate allocation and channeling of financial resources.
- Develop an exit strategy for financing free medical services, in parallel with the above steps.

Short-Term Phase

If not tackled during the immediate phase, identify and agree with key institutions the financing requirements to fund repairs or to re-establish critical health sector programs and systems and to Build Back Better. While the government should finance essential public health services and activities, mechanisms could help cover essential clinical services (health insurance, government subsidies, and a limit on out-of-pocket payments). For example, government should note opportunities to engage and leverage charitable funding for larger health sector recovery needs. Free health services are recommended for poor and vulnerable populations.

Medium-Term Phase

In the medium term, funding may begin to dry up or be re-directed, hampering sustainable recovery efforts. Audits and evaluations of funding mechanisms and allocations will need to be undertaken and any funding needs identified and addressed.

Human Resources

Immediate Phase

The rapid identification and mobilization of trained health workers is critical to immediate recovery efforts. Maintain a roster of female and male experts and establish a mechanism to determine if staff have been affected by the disaster. Ensure all are clear on responsibilities and procedures, adequate resources (human and financial) are available, and management support is provided. In addition to medical and

health staff, experts in hospital administration may be required to support the training and operational preparedness of administrators. Administrators will confront such issues as a lack of emergency supplies, loss of power, and missing client account information.

Although government procurement and human resources procedures should be well planned and transparent, procurement rules must also be flexible and agile. Some health workers will develop mental disorders after an emergency, while others will experience psychological distress. Those with pre-existing mental disorders often need more help. Ensure workers have access to psychosocial support to cope with losses of and disruption to normal routines. Where healthcare delivery has been halted due to the disaster, engage the health workforce in recovery efforts. This will help health facilities retain their skilled employees while offering employees continued employment until the facility is back to operational status.

Short-Term Phase

Give staff adequate time and space to re-charge and to support their own individual recovery efforts; recovery is a marathon not a sprint. This may be an opportune time to take advantage of the recovery phase to develop new plans for training and deploying medical workers that better meet the needs of the population. For example, capacity building in disease surveillance and training in psychosocial support may need to be improved at this stage. Ensure both women and men are trained in the lead agency and provide gender-sensitive activities to build capacity.

Medium-Term Phase

During this phase, ensure health workers have continued access to psychosocial support and flexible work opportunities. Review and, if necessary, strengthen the management of the current health system to meet changing disease

profiles and other health factors. Lastly, design a human resources development plan and make the necessary institutional arrangements.

Strategy and Planning

Immediate Phase

As part of the wider recovery effort, consider the implications of policies, regulations, and laws that oversee standards and control regulatory enforcement. For example, poor enforcement of building codes often increases the adverse impact of a disaster on health services. Legislation or regulations may enable local governments to use revenues from other areas to reconstruct, repair, and rehabilitate damaged infrastructure; a decree could allow public health services to coordinate public and private health networks.

To meet recovery objectives, a recovery plan for the sector needs to be developed in coordination with a wider recovery plan. The development of a sector recovery plan includes the following steps:

- Involve partners in drafting the Health Sector Recovery Plan. Start by defining what recovery looks like for the health sector. Establish the desired recovery outcomes (vision and goals); principles, priorities, and status of plan; definition of 'vulnerable affected populations'; and components of recovery.
- Consider the social, health, legal, and environmental impact implications of the plan's components.
- Have any legal component of the plan approved at the highest government level.
- Identify disaster preparedness and risk reduction opportunities for the health sector to reduce exposure and vulnerability.

Short-Term Phase

During this phase, if not achieved earlier, approve the Health Sector Recovery Plan to initiate recovery activities and to coordinate with the agencies involved. Policy initiatives designed to enhance existing health services should be considered and put forth by the leadership, in coordination with all partners and with public participation of both women and men (see next section on consultation). Consider developing policies on: Build Back Better; what assistance (if any) should be provided to the private health sector assistance; transfer of staff in affected areas and facilities; direct purchase of goods, services, and equipment; healthcare waste management and disposal; access to primary health care; emergency health; emergency response; etc.

As part of the planning process, identify and map hazards that could impact key health infrastructure. Build on existing development plans, for example, to curtail sprawl and to avoid substandard services (* for an example of wind hazard maps).

Medium-Term Phase

Investigate policy mechanisms to improve the health sector (for example, guidelines for food safety, policies to reduce child mortality, improve maternal health, or ensure environmental sustainability). Review national mental health policies to reflect post-disaster needs.

Seek opportunities to encourage healthier settlements and to support zoning decisions that highlight hazards, in particular planning the location of health facilities that must be rebuilt. For example, would the facility be in a flood zone or near a potentially failing nuclear power plant? In addition to determining suitable sites for rebuilding, this is an opportunity to resolve land ownership and tenure issues across the health sector infrastructure and to Build Back Better. Importantly, ensure the needs of the disabled are included in post-disaster reconstruction

and rehabilitation and that housing, public buildings, and community facilities are accessible to all.

Consultation

Immediate to Short- and Medium-Term Phases

Engage residents on the future of the health sector and on the nature and coordination of recovery activities, including the draft Health Sector Recovery Plan. Ownership helps ensure beneficiary satisfaction and align partner and government interventions while implementation and evaluation benefit from the inputs of both women and men. Community-visioning practices, where possible, will support the health sector to clarify and to meet recovery objectives. This is also an opportunity to engage private sector health providers to identify and to consider possible government support for their recovery needs. A dedicated forum (existing or new) for early consultation may prove useful.

Monitoring and Evaluation

Immediate Phase

Measuring progress toward recovery goals is critical when measuring the success or failure of recovery programs and projects to meet the needs of the people impacted by a disaster. All partners in the process have roles in the collection, analysis, and dissemination of the results. Develop a results-based monitoring and evaluation (M&E) framework to support the implementation of the Health Sector Recovery Plan—with clear baseline information (where available), targets, expected outputs, and outcome indicators to identify when the recovery is on target and, ultimately, completed. If outside help is required to design and to implement the framework, set aside a budget for this purpose. Where baseline information is missing, enlist collaboration from partners (including the private sector) to fill the gaps. Include data disaggregated by sex and age, when possible, for better measurement of results.

Short-Term Phase

Donors require reporting on the recovery progress, or lack thereof, to ensure funds reach those in need. This means, evaluating recovery activities may overlap with continued baseline data collection; this is fine. Evaluate recovery activities and expenditures on a regular basis (every 6–12 months). If necessary, adjust the Health Sector Recovery Plan and the budget as required to overcome any identified gaps and weakness. If weaknesses are due to institutional failing rather than the Plan or budget, amendment of the institutional arrangement might be required. Sharing the reports with partners, local governments, the private sector, and the general public is best practice.

Medium-Term Phase

The results of the monitoring and evaluation processes will inform if, how, and when transition occurs.

Infrastructure

Immediate Phase

In a disaster, the health sector is central to the response. Hospitals must be able to continue functioning and be safe if they are to provide life-saving services. The structural collapse of a hospital is a worst-case scenario. More often, they are simply unable to function due to a lack of manpower, damaged or lost equipment, interruptions to the power or water supply, and/or limited or no access to the facility.

To assess building structures, to cordon off unsafe areas, and to survey health facilities' conditions, engage ideally pre-identified local engineers with disaster risk reduction expertise. The data collected—and combined with partner inputs—will inform the infrastructure planning process by prioritizing repairs, replacement, and demolition. Locate temporary health facilities in safe areas that are ideally identified pre-disaster* and plan for an emergency, transition, and permanent shelter (temporary infrastructure often becomes

permanent). Be realistic about the timing and the approach to rebuild infrastructure. In addition to, or in lieu of, temporary infrastructure, build sector settlements with infrastructure and land tenure through a participatory planning process (* for cordon off unsafe areas and for pre-disaster location scoping).

Initiate repairs to and reconstruction of critical infrastructure, making risk reduction a priority. Support the development of building guidelines to address and to codify hazard vulnerabilities. For vulnerable infrastructure, duly record them and consider developing response and mitigation plans.

Short-Term Phase

Building back better or retrofitting safer and more sustainable health infrastructure—adhering to any revised norms or codes—is the focus of short-term recovery. Develop a public works program that takes into account social and environmental impact assessments. Where feasible, deliver early health sector recovery projects to instill public confidence. Government funding may be needed to rehabilitate private sector health facilities during disaster recovery. As part of this, funding can stipulate that private sector health facilities incorporate mitigation measures for safer facilities and accessible and gender-sensitive design for facilities.

Medium-Term Phase

In medium-term recovery, major health sector construction projects should be underway. Often these repairs can take governments years to initiate, delaying recovery efforts. The PAHO/WHO Smart Hospitals Toolkit* provides a first resort to Build Back Better or retrofit health facilities. A good business case should be made for establishing new hospitals, health centers, and public health institutions to reduce redundancy and unhealthy competition. Independent reviewers can review the design quality of healthcare facilities to ensure increased resilience in the next disaster.

Health Services Delivery

Immediate Phase

Successful recovery depends on broadening the capacity of four levels of health service providers: community health teams, clinics/birthing/nursing homes, community or district hospitals, and higher-level hospitals. The WHO has identified key elements of rebuilding a disrupted health sector following a disaster*:

- Identify the most vulnerable populations and respectively prioritize the resumption of critical health services, including identifying delivery challenges. In most scenarios, life-saving care and chronic-care management will top the list. Develop a system for confirming that chronic patients are receiving appropriate medical care.
- Identify the different needs of women and men, girls and boys to provide targeted support to all segments of the population.
- Explore sharing resources and technical knowledge with nearby unaffected health facilities, the Ministry of Health, other nations, multilateral organizations, or charitable agencies to support damaged facilities. Develop ideally pre-disaster mutual assistance agreements for the emergency and recovery phases.
- The Ministry of Health and other responsible entities can explore interim care options. This includes, for example, mobile medicine or vaccination centers, telemedicine, temporary facilities in schools, and transporting the sick and injured to the nearest functioning facility. It is particularly important to make primary health care services accessible at temporary resettlement sites. Hospitals or other health care facilities outside the disaster-hit areas may be able to provide interim care for lifesaving surgery and other critical care.

- Environmental health efforts should focus on disease surveillance, immunization, water quality, safe food, sanitation, waste management, and related guidelines for relief work.
- Determine where interruptions in service delivery have occurred and ensure access to medicines (including to anti-retrovirals).
- Disease surveillance should continue, particularly among vulnerable populations living in areas where the public health infrastructure and programs have been weakened (including in temporary shelters)*.

Short-Term Phase

At this phase, priority health services, community health support services, a system to ensure the uninterrupted delivery of medical care for persons with chronic illnesses or conditions, and a mechanism to redress grievances related to service delivery should be operational. A focus on psychosocial support may help reduce the effects of stress, grief, or post-traumatic stress disorder.

Medium-Term Phase

During recovery, it will be crucial not only to have functioning health services but also to strengthen primary health care services, for example, climate-smart health care initiatives. This may also be the opportunity to investigate new social and health support and service delivery models that are equitable in health services delivery and in addressing the needs of women and men, boys and girls. A strengthened primary health care service would consider the following:

- Equity—expanding services to underserved areas.
- Effectiveness—increasing access to and quality of key services.
- Appropriateness—adopting new service delivery models as needed.
- Efficiency—using savings to finance other primary health care measures.

This could include identifying opportunities to integrate services, such as a home-based support model for stronger health outcomes or identifying, engaging, and strengthening existing social capital (community-based skills, programs, and networks). Strengthening primary health care for the next disaster also means taking preparedness measures such as simulation exercises in health facilities. The community-driven approach to post-disaster recovery requires a significant investment of time and human resources, but it results in greater client satisfaction and local empowerment of both women and men if done in an inclusive manner.

Post-traumatic stress syndrome and depressive disorders often manifest only one to three months after the disaster. In vulnerable populations, this can be treated not only with counseling, psychiatric treatment, psychotropic drugs, etc., but also by rebuilding communities, livelihoods, and social interaction*.

Additionally, those who have sustained physical injuries because of the disaster will require long-term rehabilitation services, including a referral care system.

Medicines, Supplies, and Technology

Immediate Phase

Medicines and technology are among the important building blocks for the recovery of health systems *. In prolonged crises, it is common to witness interruptions in the supply of drugs and other medical equipment and supplies. The re-establishment of the cold chain, and the (re)establishment of a central pharmaceutical warehouse or a similar mechanism must be carefully planned, based on the factors impeding the supply of essential drugs and supplies to public health facilities. Consider developing a strategy for an emergency drug supply chain system to address delays encountered.

Short- to Medium-Term Phase

During recovery, it is important to restock medicines and re-institute health sector technology, defined by WHO as the ‘application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures, and systems developed to solve a health problem and improve quality of lives.’ During the recovery process, re-establish national vaccination programs to pre-disaster levels.

Implementation

Immediate Phase

Restoring drinking water and sanitation systems are key priorities. In the immediate phase, bottled water can meet the population’s needs as plans are made to restore key systems to pre-disaster levels. Distribution of supplies such as mosquito nets or latrine pans may be required to protect against malaria or address sanitation concerns.

Monitor water quality across the community and environmental sanitation and hygiene in relief shelters. Set up a system to track population movements, in order to maintain continuity of health service contacts and provision of services. Consider health protection needs associated with the recovery, including problems due to asbestos dust emerging from the rubble or demolition sites. Distribute information to the public about the harmful effects of asbestos and distribute masks as required.

Short- to Medium-Term Phase

Manage facilities for healthcare waste or develop temporary solutions (such as, for a temporary disposal facility within a municipal landfill). Consider the environmental impact of any temporary or permanent storage of healthcare waste, particularly bio-hazardous materials. Major elements of a medical waste disposal operation include assessment, equipment, and training.

Transition

Governments may set a time limit on the recovery process or may keep lead agencies in place until certain recovery objectives are met. Whatever determination is used, there will be a gradual phasing out of recovery organizations, activities, and partnerships. It will be necessary to create a clear exit strategy or transition plan to ensure recovery responsibilities are transferred where and when necessary, including financial requirements/responsibilities. New institutional, legal, or policy arrangements may also be needed to support transition. Prior to the transition, identify health sector lessons learned from participating members and partners to support future disaster recovery efforts. Workshops should be held with all stakeholders. These lessons, if learned rather than observed, can indeed support Build Back Better principles.

Pre-Planning for Recovery

Now is the time for governments to make contact with this Note, before a disaster occurs, as a part of the ongoing planning, mitigation, response, and recovery process. Identifying the owners of key functions, information sources, critical resources, and contributors prior to an event will ensure a smoother and cost-saving path to post-disaster implementation. Moreover, establishing a baseline of existing healthcare capabilities and needs will allow the government and partners to more quickly identify where service gaps exist as a result of a disaster.

Overview

This Guidance Note for Post-Disaster Health Sector Recovery is intended to provide action-oriented guidance to local and central government health sector officials who face post-disaster challenges related to health sector recovery. A summary of suggested milestones by phase of recovery lays out the policy, planning, financial, and implementation decisions and activities that go into developing and implementing a Health Sector Recovery Plan. Additionally, common pitfalls are outlined as well as ways to overcome them.

For more information on implementing recovery programs,
please visit the GFDRR Recovery Hub:

<https://www.gfdr.org/recovery-hub>



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