11. Public Health Scorecard:
A Tool to Reduce and Manage Biological Risks – original content contributed by UNDRR

In 2017, UNDRR created the **Disaster Resilience Scorecard for Cities**, which "provides a set of assessments that allow local governments to assess their disaster resilience, structuring [it] around UNDRR's Ten Essentials for Making Cities Resilient".[16] UNDRR also developed the Disaster Resilience Scorecard for Cities: Public Health System Resilience – Addendum,[17] which "strengthens and integrates coverage of the many aspects of public health that are relevant to disaster planning, mitigation and response, helping to ensure the integration of public health issues in[to] disaster risk management."[18]

The Public Health Addendum "aims to help local governments identify areas that require strengthening in relation to public health issues".[19] It addresses the non-medical issues of a medical emergency, including hospitals, quarantine facilities, nursing homes, health clinics, doctors' offices, mental health facilities, laboratory and testing facilities, public-sector health departments, water and sanitation, food distribution mechanisms, pharmaceutical and medical supply distribution, community information and alert systems, technical skills, staff, and equipment required, and other aspects of a fully functioning public health system. In this way, the tool covers the hardware and the software (human resources) required to handle and recover from a health emergency. The Public Health Scorecard links hospitals, communities, schools, community centres, non-profit organizations, law enforcement, faith institutions and elected officials.

"The Addendum is structured in sections around the same 'Ten Essentials for Making Cities Resilient' as the Scorecard:

- Integration of public health and governance (Essential 1);

- Integration of public health and disaster scenarios (Essential 2);
- Integration of public health and finances (Essential 3);
- Integration of public health and land use/building codes (Essential 4);
- Management of ecosystem services that affect public health (Essential 5);
- Integration of public health and institutional capacity (Essential 6);
- Integration of public health and societal capacity (Essential 7);
- Integration of public health and infrastructure resilience (Essential 8);
- Integration of public health and disaster response (Essential 9);
- Integration of public health and recovery/building back better (Essential 10).

In total, there are 23 questions/indicators, each with a score of 0-5, where 5 is best practice."[20]

Methodology

Local authorities need to understand that resilience is a long-term objective. It cannot be achieved in a short time. Depending on the objectives, the resilience functions may play out over a long time. In other words, the strengthening of the health infrastructure and the establishment of the surge capacities of doctors and nurses may take years, while emergency planning and simulations for a pandemic may be conducted on an annual basis.

16. UNDRR, Disaster Resilience Scorecard for Cities. Available at Disaster Resilience Scorecard for Cities | Making Cities Resilient (undrr.org).
17. https://mcr2030.undrr.org/public-health-system-resilience-scorecard.
18. https://www.unisdr.org/campaign/resilientcities/toolkit/article/disaster-resilience-scorecard-for-cities.html.
19. https://mcr2030.undrr.org/public-health-system-resilience-scorecard
20. Public Health System Resilience Scorecard | Making Cities Resilient (undrr.org).

Local authorities also need to understand that the Health Scorecard Addendum is not about the health sector alone. To use the Scorecard effectively, the consultations must include other relevant sectors and stakeholders. Without a multi-stakeholder approach, the resulting action plan will be left lacking ownership and not be implemented. Apart from sectors and stakeholders within the local government, the national government will have a key role to play in providing support.

Another important consideration is that hazards do not act alone, and the impact of a hazard may become amplified due to underlying stresses. In other words, a community already impacted with poverty will most likely be more impacted by a pandemic, as their livelihoods opportunities are reduced, as seen in the case of migrant labor."[21] Chronic economic, societal, or environmental stresses can worsen the impact of earthquakes, floods and pandemics and the hazards can worsen the chronic stresses.

Workshop

The Scorecard is to be used by local authorities in a workshop-based approach to:

- Build consensus and working relationships between different sectors and departments in the government, as well as with other stakeholders who may be external to the government.
- Develop a draft action plan of activities that the government should undertake to reduce the gaps as identified using the Scorecard.

The workshop methodology includes several steps, including:

1. Determining the objectives: All should be clear about what the objectives of the exercise are in order to develop an action plan and strategy to reinforce and strengthen the public health systems in the government. This can also be an opportunity to provide an orientation, and resources, on terminology, the methodology to be adopted, etc., to ensure that all participants in the exercise and the workshops are on the same page and level of understanding and competency.

2. Identifying the stakeholders: The list of stakeholders is not the usual health department personnel alone, as economic and planning, finance, public transport, utilities, etc., all play a role and are impacted by the biological hazards, including pandemics. External stakeholders such as civil society organizations and their networks, private-sector service providers, business councils and chambers of commerce need to be involved to ensure that the developed plan and strategy are relevant, practical, and effective.

3. Carrying out initial research: To determine and answer questions pertaining to the pre-existing resources that could be used, the data required, and the sources of data. This step would require a study of the Scorecard to determine who should be invited and contacted, what data is required, and what the potential source of the required data will be.

4. Conducting the workshop: The Scorecard exercise includes going through each question, discussing the options for the answer, and arriving at the most suitable score via consensus. Each session can be designed around this methodology. The workshop can be conducted virtually in several short sessions, replacing face-to-face workshops.

   (a) The first step is the scoring. Once the scores are agreed, the participants can decide on whether they want to develop an action plan for all the questions and gaps or only for the questions which scored below a certain criterion, e.g., a score of 3 or below. Such a prioritization ensures that the weakest areas are strengthened first.

   (b) The action plan must have actions to address the gap identified through the scoring, the time frame, and the roles and responsibilities—who will lead, who will support, etc. Normally the plan should be valid for a period of three to five years.

5. Implementation: Once the action plan is developed and finalized, it should be endorsed by the appropriate level of government to ensure it legal status. This could be the mayor's office or the city council. Such endorsement

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21. S. Bhatia (2021), "The Public Health System Resilience Addendum: A Tool to Help Governments Manage Biological Hazards Better and Prepare for an Uncertain Future", in COVID-19 Pandemic Trajectory in the Developing World: Exploring the Changing Environmental and Economic Milieus in India, M. Mishra and R.B. Singh (New York, Springer, 2021).

guarantees that the strategy and action plan will become part of the documents that are considered when the development plan of the government is budgeted and funded. Endorsement ensures continuity even with a change in political leadership.

Conclusion

The benefits of completing the Public Health Scorecard extend far beyond the development of a plan. The conversations and dialogue that the process enables, and the silos [that] it can break, are more important than the scores. Often, informal relationships are developed between the departments, which can greatly improve coordination during emergencies. The Scorecard encourages intersectoral discussions, which means departments that may not regularly exchange information are empowered to discuss planning and implementation issues with each other. When completed in a collaborative and consultative mechanism, local governments can:

- Understand how resilient their public health systems function.
- Create awareness and identify the remaining challenges.
- Enable dialogue between key city stakeholders.
- Enable discussions to decide the priorities for investment and action.
- Promote the development of a resilience strategy or an action plan that integrates public health issues with other issues of resilience.
- Promote the development of projects that enhance the resilience of the public health systems of the local government and contribute to overall resilience.

This tool can be used by local governments, cities as well as national governments, as the indicators are sufficiently generic for all levels of administration. The use of such a tool can help governments to prepare for biological hazards and health emergencies, including pandemics in the future.

UNDRR Public Health System Resilience Addendum
Source: UNDRR, https://mcr2030.undrr.org/public-health-system-resilience-scorecard