

INTEGRATING EPIDEMIC AND PANDEMIC PREPAREDNESS INTO DISASTER RISK REDUCTION

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● Introduction

THE ongoing COVID-19 outbreak is an unprecedented event in modern human history. While the World Health Organisation has declared COVID-19 a pandemic, its underlying factors, vulnerabilities and impacts go far beyond the health sector. It is an example of systemic risk: when a hazard leads not only to negative effects in parts of the system but also threatens the failure of the entire system. With its cascading and devastating impacts, COVID-19 demonstrates the inter-connected nature of risks, highlighting the urgent need for a concerted global effort to accelerate risk reduction activities.

It is clear the world needs a quantum shift in the approach and architecture in pandemic preparedness. National and local governments need to focus on pre-outbreak and outbreak planning, with the most successful preparedness and response plans to have exit strategies and recovery plans in mind.

The only solution is prevention. Prevention saves lives. A pandemic is global, but its prevention and preparedness are local. We argue that mechanisms and strategies for disaster resilience, as outlined in the SFDRR, can enhance preparedness for early and better recovery that prevents the emergence of new risks to epidemics or global pandemics such as COVID-19.

This project will provide insights on several critical problems that need to be better understood in order to improve epidemic and pandemic preparedness:

- COVID-19 is a biological disaster. There needs to be a better understanding on how risk works, especially how risk cascades with unexpected consequences, and how to build capacities to manage this.
- How can countries prepare for early and better recovery, that prevents the emergence of new risk with early and rapid actions from the DRR-related organisations, in line with the SFDRR's call for building resilience for biological hazards and pandemics?
- Pandemic preparedness has to be holistic and build national to local resilience that integrates public health and disaster risk management, with primary responsibility being health care facilities, front line health staff, and their safety, and also incorporating other functions such as supply chain management, transport planning, resource mobilisation, and early recovery planning.
- Most countries do not have operational experience in handling a combination of natural and biological hazard early warning systems. There is a strong need to create synergies among different types of hazard early warnings by reviewing the relevant existing standard operating procedures.

● Related research questions

1. Who are the major actors that should be involved in effective, multi-stakeholder preparedness planning for epidemics and pandemics, including those involved with potential cascading impacts?
2. How is epidemic and pandemic preparedness currently embedded within existing disaster risk reduction planning?
3. Do public health authorities have an adequate role in current disaster risk reduction planning?
4. Do existing early warning systems, including the last mile approach, address epidemics and pandemics? What existing early warning infrastructure could be used to strengthen preparedness planning for epidemics and pandemics?

● Project partnership

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The Association of Disaster
Risk Management
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Ministry of Health,
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Disaster Management Centre,
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