



**START CENTER**  
STRATEGIC ANALYSIS,  
RESEARCH & TRAINING CENTER

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## EBOLA RESPONSE PROJECT

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UNIVERSITY OF WASHINGTON START CENTER AND BUERK CENTER FOR ENTREPRENEURSHIP

REPORT TO THE BILL AND MELINDA GATES FOUNDATION

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PRODUCED BY: DEICHSEL EL, MUNI KM, VEENAPANI A, MCCLELLAND RS.



## PROJECT SUMMARY

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**Background:** In the aftermath of the Ebola outbreak in West Africa, the Pandemic Preparedness team at the Bill & Melinda Gates Foundation (BMGF) engaged the Strategic Analysis, Research, & Training (START) Center at the University of Washington to compare and contrast the recommendations of various reports aimed at ensuring adequate global preparedness and response for future epidemics.

The six reports chosen were the:

- WHO's Ebola Interim Assessment Panel Report
- WHO Nabarro Advisory Report
- UN High Level Panel Report
- Harvard-LSHTM Ebola Reforms Report
- Global Health Risk Framework Report
- International Experts Group Report

The mandate of the START team was to pare out common themes and recommendations as well as differences across the reports. Additionally, the team was asked to conduct a gap analysis that outlines which of the recommendations have been implemented or funded. The goal of the gap analysis was to help BMGF to identify potential opportunities for engagement.

**Approach:** The START team took a three-step approach to address the objective of the work order. The first step was to work with the Pandemic Preparedness team at BMGF to identify six main reports to include in the review. These reports were chosen because they were generated by teams of globally respected experts and figures, were global or regional in scope, and were published in high profile journals such as the New England Journal of Medicine.

The second step was to conduct a full review and analysis of the six reports. During this process, we extracted all broad recommendations and sub-recommendations from the group of reports. These were entered, verbatim, into a data collection and analysis tool developed by the START team. Upon completion of the data entry process, the team analyzed the recommendations and sub-recommendations. Our analysis included identifying common domains and keywords for describing recommendations and sub-recommendations, and assigning codes to indicate the recommendations that addressed prevention, preparedness, and response. Domains denote recurring broad themes under which the recommendations fell while keywords are short phrases that describe key message in the recommendations and sub-recommendations. Domains, keywords, and codes were assigned by group consensus.

The last step was to conduct a gap analysis to map progress in implementation of the recommendations. We used Google to identify action being taken on the various recommendations detailed in our six reports and reviewed WHO's response to the WHO's Ebola Interim Assessment Panel Report. In comparing our search results to report recommendations, the team identified those recommendations that were being addressed, in what measure (partially or to a more advanced degree) and those that had no implementation information available, currently.



Our approach and the resulting data collection and analysis tool was also informed by discussions with the BMGF Pandemic Preparedness team and the Harvard team (led by Dr. Suerie Moon) that is working on a similar synthesis of Ebola recommendations.

**Results:** Across the six reports, we identified a total of **53 primary recommendations** and **248 sub-recommendations**. Many of the recommendations and sub-recommendations were similar across several reports. In the data collection tool, we categorized these recommendations and sub-recommendations into seven primary domains (Governance, Health Systems, Surveillance, Pandemic Preparedness, Pandemic Response, Financing, and Research and Development). Where recommendations were broad and fell into more than one domain, we included secondary and tertiary domains (not the primary emphasis of the recommendation). The team also identified a total of **45 keywords**.

Our analysis found considerable overlap across reports in terms of domains and keywords attached to recommendations and sub-recommendations. We synthesized the 53 recommendations and 248 sub-recommendations into **15 unique recommendations** (Table 1). Most unique recommendations appeared in at least 50% of the reports. A few recommendations were limited to just one or two reports. These included recommendations on inclusion of women in future epidemic preparedness and response, and incorporation of monitoring of IHR indicators into the UN Sustainable Development Goals (SDGs). Most recommendations that appeared in one place were specific to the UN High Panel report. Table 1 illustrates how the 15 unique recommendations are distributed across the six reports.

**Shortcomings of the recommendations:** Although the recommendations and sub-recommendations were expansive, and covered almost all important areas for action (from the need for new independent and rapidly responsive structures at the WHO to the need for a research and development framework that can be rapidly scaled up during times of outbreaks), they were conspicuously devoid of strong recommendations that addressed politics and ethics. There was limited discussion of how politics in the three countries most affected by the Ebola outbreak in West Africa might have impacted the response to the Ebola outbreak. This point was prominently highlighted in the *Ebola reader* issued by the International Rescue Committee (IRC), one of the non-governmental organizations (NGOs) at the frontline of the Ebola response. The reports did not include monitoring and operation plans for the recommendations. Without such plans or a responsible entity for tracking, implementation could be limited. Lastly, most reports were highly critical of the WHO, but gave scant appraisal of the national governments and non-state actors who were at the forefront of the Ebola response. These shortcomings are discussed in more detail below.

- **Limited political analysis:** The Ebola outbreak struck countries that have seen massive political, economic, and social upheaval due to civil wars. The resulting breakdown in governance and trust between and within state and non-state actors was not factored into any of the reports. The team believes this ignores the “ground realities” that may be encountered in future pandemic responses.
- **Lack of implementation analysis:** The reports focused on setting technical, logistical, and strategic norms. However, there was limited information around operationalizing these norms



(for example, there was limited discussion of cost and other resources required to implement recommendations). The team believes this was a missed opportunity that would have helped guide various agencies in their preparedness and response to future epidemics.

- **Overwhelming focus on WHO:** The WHO is mostly a convener, rather than an implementer, of large-scale public-health interventions. Nonetheless, most reports concentrated on evaluating and recommending new strategies for WHO. While it is important to define the scope of the institution that is the “face” of public health emergencies, the team believes that more specific and actionable recommendations could be uncovered if other actors (e.g. NGOs, other UN agencies, international militaries, etc.) were evaluated. However, we recognize that such a set of recommendations would take substantially more resources than an evaluation of the WHO response.

**Current State of Implementation of Recommendations:** In order to assess progress in implementation of the recommendations, we used a combined approach involving an internet search and a virtual meeting with Suerie Moon, the first author of the Harvard and London School of Hygiene and Tropical Medicine Ebola report. This approach yielded limited available information on progress of implementation. We identified the following information:

- In terms of setting up regional structures, some progress has been made in setting up the African Center for Disease Control. Reports available on the CDC website indicate a memorandum of cooperation was signed by US Secretary of State John Kerry and African Union Commission Chairperson Nkosazana Dlamini Zuma in 2015 to formalize the creation of the African CDC.
- The European Union has taken the initiative to launch a global health reserve corps, the European Medical Corps, to respond faster to future emergencies.
- In response to the recommendations of its panel, the WHO Director General has set up an advisory group to guide reforms at WHO, including formation of a new center that will be responsible for pandemic preparedness and response, creation of a global health emergency workforce, development of a research and development blueprint, and supporting priority International Health Regulations (IHR) core capacities. WHO also convened a multi-stakeholders workshop in July 2015 in Cape Town aimed at strengthening cooperation between countries to coordinate and intensify strategic development and maintenance of health security preparedness at country level. The organization has also committed to working with OCHA to ensure that key players (UN agencies, funds and programs, international non-governmental organizations) are aware of the IHR and public health emergencies.
- The WHO and the World Bank co-hosted a stakeholders meeting on pandemic financing in Washington, D.C., in September 2015, to bring together countries and development partners to explore ways to strengthen global pandemic financing. Plans to operationalize the WHO’s \$100 million Contingency Fund for Emergencies were presented and discussed by Member States and other financial contributors at the financing dialogue meeting in November 2015.



- Lastly in terms of IHR, G7 countries committed to a funding plan for IHR core capacities for the next five years in at least 60 countries. The WHO, in its response to the recommendations, also committed to focus on supporting Member States to carry out joint assessments, develop, implement and test national plans, and monitor implementation. WHO also indicated that the IHR review committee was to meet for further deliberation about some of the recommendations including: ways to measure progress on implementation of core capacities; incentives to encourage countries to notify WHO of public health risks; and disincentives for unilateral actions that interfere with international traffic and trade. Sue Moon indicated the IHR committee report will be released in the coming weeks.

**Conclusions:** The START team reviewed six reports containing recommendations for the global health community to improve pandemic preparedness and response for future epidemics. In general, the group of reports, provide sufficient high-level recommendations, but lack detailed operational guidance for many of the recommendations. Moving forward, we believe that accountability from the global health community will be key for implementation of these recommendations and continued engagement on this agenda.



**Table 1.** Distribution of START team's 15 unique recommendation across six reports

Title	Advisory group on reform of WHO'S work in outbreaks and emergencies	Policy recommendations for the G7	Protecting humanity from future health crises	Report of the Ebola Interim Assessment Panel	The Neglected Dimension of Global Security (GHRF)	Will Ebola change the game? Ten essential reforms before the next pandemic
Org/Authors	WHO Advisory Group	Independent Expert Group	UN High-level Panel	WHO Panel	Commission on a Global Health Risk Framework for the Future	Harvard-LSHTM Panel
Strengthening health systems		✓	✓		✓	✓
Commitment to SDGs			✓			
Address gender dimensions			✓			
Center for emergency preparedness and response	✓	✓	✓	✓		✓
IHR implementation & compliance		✓	✓	✓	✓	✓
Triggering response & escalation	✓		✓	✓	✓	✓
R&D framework for vaccines, diagnostics, and therapeutics		✓	✓	✓		✓
Develop a framework to ensure, govern, and enable equity		✓	✓			✓
Building manufacturing capacities for vaccines, diagnostics, and therapeutics		✓	✓		✓	✓
Ongoing multilateral focus	✓	✓	✓	✓	✓	✓
Improve function & structure of WHO	✓		✓	✓	✓	✓
Refining existing treaties and frameworks		✓	✓	✓		
Coherence between IHR and the WTO legal frameworks			✓			
Institutionalize accountability			✓		✓	✓
Investment from member states to achieve recommendations	✓	✓	✓	✓	✓	✓

