Commentary

Fighting Health Security Threats Requires a Cross-Border Approach

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INTRODUCTION

Recent multicountry infectious disease outbreaks of Ebola (2014) and Zika (2016–present) have raised global awareness of the importance of health security and the systems and capacities needed to prevent, detect, and respond to global health threats. Several mechanisms exist through which individual countries can plan and frame health security strengthening, such as the World Health Organization’s (WHO) International Health Regulations (IHR), the Joint External Evaluation tool, and the Global Health Security Agenda (GHSA). The IHR came into force in 2007, manifested in the form of bilateral agreements between individual countries and the WHO. They aim to reduce the spread of diseases internationally while minimizing disruption of travel and trade. Regional and multisectoral cooperation, however, has not yet been systematized or institutionalized in a manner befitting a security threat that crosses borders easily and indiscriminately. We know that an infected individual can travel from country to country and continent to continent in a matter of hours—and that health security is unachievable without a regional coordinated response.

Nowhere is this more evident than in the countries and territories of the Caribbean. The Caribbean comprises some 30 small island and mainland countries and territories with 40 million Spanish, French, English, and Dutch speaking residents and over 50 million cruise and international tourist arrivals per year principally from North America and Europe. Diversity and vulnerability to external shocks, whether manmade or natural, characterize the region. With our small health systems and deeply intertwined and tourism-dependent economies, we recognize that uncontrolled disease outbreaks pose an existential threat. Our region is the first to take on the challenges and opportunities of multisectoral, regional planning, cooperation, coordination, and monitoring of global health security strengthening. Given the small sizes of our
countries we have no choice. There is a long history of functional Caribbean cooperation in health (CCH-IV) in the region, with regional institutions that shepherded the Caribbean toward becoming the first region in the world to eliminate measles and rubella.

As an accelerating step to strengthen health security, from September 2016 through May 2017 we conducted a regional self-assessment, developed a Caribbean Region GHSA Roadmap (the Roadmap), and reinvigorated the Regional Coordinating Mechanism for Health Security (RCM-HS). The process of developing and endorsing the Roadmap and then bringing it to life through improved communications, coordination, and cooperation is a landmark for the Caribbean region. We argue that this regional, multisectoral, and collaborative process is an innovative approach for other regions to consider and adapt.

**LOCAL, NATIONAL, REGIONAL, AND GLOBAL HEALTH SECURITY THREATS AND EFFORTS TO CONTAIN THEM**

Since the IHR were established more than ten years ago, less than a third of WHO Member States have met the minimum requirements for core capacities needed to implement the regulations. This inability to meet the IHR indicates that preconditions such as legislation and policy, funding, and multisectoral alliances were not and still are not in place to enable this capacity development. The IHR do not explicitly address regional or neighboring country cooperation in the face of similar and shared threats, yet this is very much needed given the situation of the Caribbean with many small countries in close proximity and ease of air, sea or land crossings. In the face of this situation, in 2014 and 2016, the Conference of Heads of Government of CARICOM considered the public health threats of Ebola, and epidemics of chikungunya and zika, spread by climate-sensitive mosquito vectors, and issued a 10-point plan to Stop Ebola There and Here with national and regional level actions to be taken.

The GHSA—a partnership of nations, international organizations, and stakeholders—was created in 2014 through a shared understanding of the “essential need for a multilateral and multi-sectoral approach to strengthen both the global capacity and nations’ capacity to prevent, detect, and respond to infectious diseases threats.” The approach is organized according to 19 capacities. Figure 1 lists these capacities and their indicators in the context of the Caribbean regional internal assessment. The Roadmap is a planning tool used by more than a dozen countries to define the ideal for each of the capacities; five-year targets; indicators and annual measurable milestones; lists of assessment, planning, implementation, and evaluation activities; and the institutions responsible for them.

**The Ambitious, Essential Steps Taken toward Regional Health Security Strengthening**

The small countries of the Caribbean are among those that struggle to build the capacity to meet IHR requirements. Arguably, at an individual country level, the degree of capacity envisioned by the IHR and GHSA may not be a reasonable or practical expectation. The high prevalence of vector-borne diseases and frequent cross-border travel challenge our small nations’ health security. A single outbreak can have devastating effects on our countries and can easily and quickly spread from one country to another.

Within the Caribbean Public Health Agency (CARPHA), the wider Caribbean Community (CARICOM), and our member countries, we know that regional and multisectoral communication, coordination, and cooperation are essential to controlling the international spread of infectious disease. Relying on international development partners to facilitate in times of crisis is not a sufficient strategy in our region—or anywhere.

In the fall of 2016, Caribbean health and security stakeholders, with the support of development partners, primarily US government agencies through the United States Agency for International Development–funded Health Finance and Governance project, worked with regional agencies and national representatives to adapt the Joint External Evaluation and GHSA tools to conduct a regional (not national) self-assessment and planning process. We looked across the 26 members of CARPHA as a whole, with national capacities and communication and coordination mechanisms as ingredients in the overall regional assessment. The countries and regional agencies that participated in the self-assessment were not reporting against defined expectations to their governments, development partners, or others but rather taking a hard look at and among themselves.

We developed this process to include an unprecedented array of essential stakeholders. In November 2016, more than 70 participants—representing the 26 member nations of CARPHA, all key regional agencies and associations involved in health and security, the private sector, nongovernment organizations, civil society, academia, and international development partners—gathered in Miami, Florida, to develop the first regional-level GHSA Roadmap. This was a landmark meeting. This inclusive, collaborative process resulted in a Roadmap that is technical and politically astute and implementable and is truly owned by the region as a whole: individual countries; members of CARICOM and
CARPHA; regional security, disaster and relief, and health agencies; the commercial private sector, including airlines, communications firms, and the tourism industry; development finance institutions such as the World Bank and Caribbean Development Bank; civil society; the Pan American Health Organization (PAHO)/WHO and other development partners.

The process and resulting Roadmap acknowledged the tension between national sovereignty and the need for regional cooperation in a complex area of the world and agreement on common goals, actions, and responsibilities. Legislative barriers that occur when dealing with sovereign countries versus territories and inadequacies in policies impacting global health threats were documented. There is an urgent need to have trusted, well-oiled lines of communication and coordination that can overcome the Caribbean region’s challenges of multiple languages, nations, and territories. As we acknowledged and measured our current ability to prevent, detect, and respond to global health threats, we identified specific and actionable steps at the national and regional levels to increase our capabilities. Perhaps equally important, we defined a process for measuring progress, advocating for resources and changes, and communicating, coordinating, and monitoring these steps (see Figure 1).

What Is the Utility and Impact of a Roadmap for Health Security?

We are constantly aware of the need to narrow the communication and cooperation gaps among member states and the regional agencies. There is now a stronger partnership among them as a result of these exercises. The Roadmap helps answer the basic question of whether we are sufficiently leveraging what we already have among us. For example, are we effectively sharing resources in times of crisis to quickly prevent and respond to emerging threats, such as the threat of cholera and other diseases that followed the 2017 hurricanes? There is now one document that references activities that countries and regional agencies are currently financing from their own coffers, development partner-funded initiatives, and activities that are essential for health security but for which the financing has not been identified.

FIGURE 1. Results of Caribbean Regional Health Security Internal Self-Assessment, December 2016
The Crowning Achievement: Implementing a Regional, Multisectoral Plan of Action

Our small countries have truly come together to address health security threats, led by the health sector and with the strong and active participation of non-health stakeholders. The Roadmap was approved by the Caribbean Ministerial Council on Human and Social Development at a September 2017 gathering of ministers from throughout the region as a regional plan for strengthening health security.[c]

One tangible result of this process has been the reinvigoration of the Caribbean RCM-HS (formerly the RCM-Ebola) through incorporation of Roadmap oversight, promotion, and implementation into its terms of reference. The GHSA Roadmap now serves as a central tool for coordinating among countries and regional agencies, communicating and advocating with development partners and countries about priority needs for support and action, and monitoring and tracking regional progress toward achievement of the IHR capacities at the regional level.

CARPHA now works more closely with the Caribbean Disaster and Emergency Management Agency, the Caribbean Community Implementation Agency for Crime and Security, and others to track passenger movements on cruise liners and flights, a key step to coordinated regional prevention and tracking the spread of disease. PAHO/WHO plays a valuable role in guidance provision, capacity building, information sharing, and bilateral tracking, while CARPHA coordinates among security and health actors and others in the CARICOM system. The RCM-HS, chaired by CARPHA, is the inclusive platform for independent, UK, US, French and Dutch interests to improve coordinated sharing of information and response to threats. Using the Roadmap as tangible evidence of the interconnected nature of health security, the national councils of security and law enforcement are now encouraged to take on more health issues such as vector control, chemical hazards, and surveillance. In addition, we now have standard operating procedures for the harmonized management of illness in tourism establishments and on cruise ships and airlines, developed at the regional level, which outlines roles and responsibilities under different circumstances.

A well-coordinated GHSA Roadmap can be used as a mechanism to advocate for the region as a whole. For example, some US State Department country pages still display outdated warnings from the US Centers for Disease Control and Prevention about health dangers that no longer exist. We have used the Roadmap as evidence of regional priorities in conversations with development partners and have already secured funding to conduct Joint External Evaluations at the national level in three countries and to hold more regular meetings of the regional RCM-HS. A new World Bank project is being negotiated to support health security in three of our smaller island states. Lastly, the RCM-HS is developing a Stop the Epidemic There and Here fund—a longstanding regional priority that had not moved forward for some years—with a strong feasibility study and evidence and articulation of funding priorities (using the GHSA Roadmap). The fund will be used to provide quick support for member nations in cases of health emergencies.

Health security has been given new and higher attention and priority at the national and regional levels since the 2016 assessment and Roadmap development. We have incorporated elements of the Roadmap into the new Caribbean Cooperation in Health strategy as milestones/targets of regional public goods that will be subject to annual monitoring by CARPHA and review by the Council of Chief Medical Officers and the Council for Human and Social Development ministers. We have integrated some major activities into the CARPHA Work Program (2018–2020), which is financed by countries, PAHO/WHO, the Centers for Disease Control and Prevention, and others. The monitoring will be annual, with periodic evaluation and adjustment through the RCM-HS to ensure that the document remains current and relevant. We propose that other regions explore an innovative regional mechanism and approach such as that pursued in the Caribbean and in much the same way enable multiple countries to strengthen health security and detect, prevent, and respond to threats beyond and across borders.

NOTES

[a] According to the WHO, “The International Health Regulations (IHRs) are an international legal instrument that is binding on 196 countries across the globe, including all the Member States of WHO. Their aim is to help the international community prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide.” For more information, see: http://www.who.int/topics/international_health_regulations/en/.

[b] The workshop was facilitated by Abt Associates through the United States Agency for International Development–funded Health Finance and Governance project.

[c] The Council for Human and Social Development promotes human and social development. Specifically, Article 17 of the Revised Treaty of Chaguaramas.
(https://treaty.caricom.org/) states the duties of the Council as promoting health, education, and the rights and welfare of workers and women, among other priorities. The Council meets annually and consists of ministers designated by the Member States. For more information, see www.hfgproject.org.

**DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST**

No potential conflicts of interest.

**FUNDING**

This manuscript was funded by the U.S. Agency for International Development (USAID) as part of the Health Finance and Governance project (2012–2018), a global project working to address some of the greatest challenges facing health systems today. The project is led by Abt Associates in collaboration with Avenir Health, Broad Branch Associates, Development Alternatives Inc., the Johns Hopkins Bloomberg School of Public Health, Results for Development Institute, RTI International, and Training Resources Group, Inc. This material is based upon work supported by the United States Agency for International Development under cooperative agreement AID-OAA-A-12-00080. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

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