

COMMENTARY

MOVING FORWARD TO 2014: GLOBAL IHR (2005) IMPLEMENTATION

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WHEN THE MEMBER STATES OF THE World Health Assembly agreed to adopt the revised International Health Regulations in 2005 (IHR [2005]), no one thought that the next steps would be easy. The original 194 States Parties committed to improve global health security by strengthening the framework for managing public health emergencies.¹ IHR (2005) represented a response to the challenge posed by emerging infectious diseases, from the insidious spread of HIV/AIDS over decades to the SARS crisis, in an era of commonplace international trade and travel. The revised regulations aimed to improve early detection and response to public health events that might affect populations across borders by increasing the transparency and timeliness of reporting. The agreement replaced historical lists of notifiable diseases with an algorithm for assessing public health threats in context, and it conferred new authorities on the World Health Organization (WHO) to collect information and facilitate rapid evidence-based responses. Countries agreed not only to share information promptly, but to develop and sustain the capabilities needed to detect, assess, report, and respond to any potential public health emergency of international concern. This unprecedented commitment offered a foundation for a truly global disease detection and response network, capable of containing emerging disease threats when and where they occur to reduce the toll on economies and human lives. IHR (2005) entered into force in June 2007, beginning a 5-year period for each nation to evaluate

its own current core capacities from the local to the national level and to develop a plan of action for closing any gaps.²

In June 2012, all States Parties were obligated to report to WHO either that they had achieved the core capacities required to implement the revised IHR fully or that they would require a 2-year extension to implement their action plans.

As of late March 2013, 42 countries (out of 194 reporting States Parties) had indicated to WHO that they had achieved all of the core capacities required to implement IHR (2005) fully; 110 countries requested a 2-year extension with an implementation plan. An additional 42 countries neither submitted an extension plan nor indicated that they are in compliance (Figure 1). As each nation assessed and reported its own capacities, the self-imposed stringency of the evaluations most likely varied. However, we can clearly say that approximately 80% of the world's countries have *not* met their international legal obligations to implement IHR (2005).³

These shortfalls reflect the scope of the tasks rather than a lack of commitment on the part of health ministries worldwide. Countries must be prepared to carry out the core functions of public health surveillance and response for infectious and noninfectious hazards (including zoonotic, foodborne, chemical, and radiological/nuclear events as well as communicable disease outbreaks) at the local, intermediate, and national levels and at points of entry. These capabilities depend on an adequately trained and equipped public health workforce, a strong surveillance and response framework, a functional national public health laboratory

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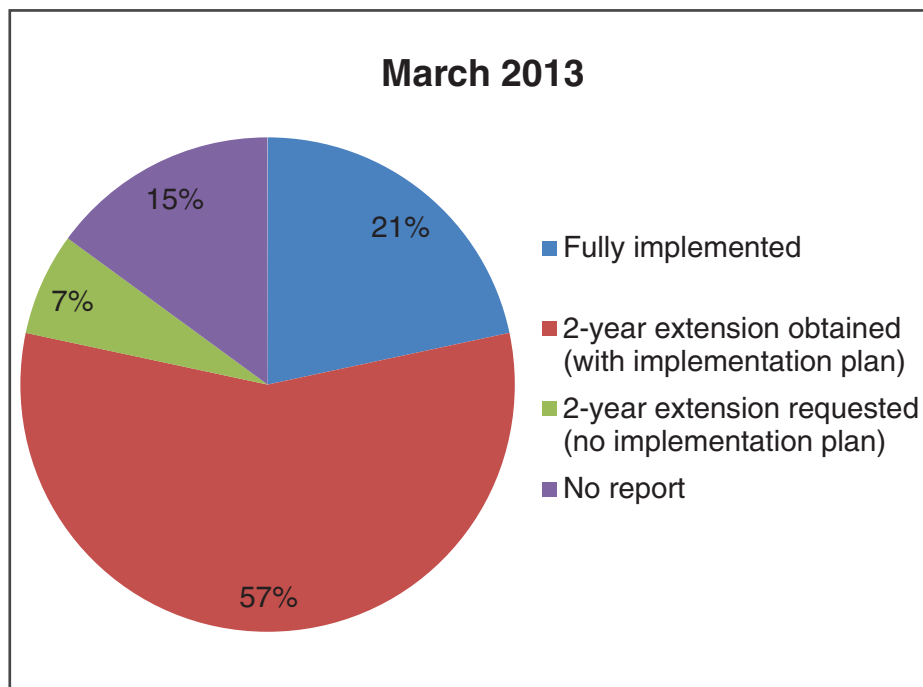


Figure 1. Status of Country Reports to WHO on Implementation of IHR (2005). Color images available online at www.liebertonline.com/bsp

network, a solid legal and regulatory foundation, and robust multisectoral coordination.

Many countries have struggled even to draft a national plan of action with specific activities, timelines, and budgets, as indicated by the silence from a quarter of all States Parties. Adding to the challenges, the global economic climate has taken a toll on the willingness of donors to expand their health assistance commitments, and development partners have often proved as daunting as their national counterparts by the complex demands of implementing IHR (2005).

The IHR (2005) agreement implicitly recognized that mutual assistance would be essential for countries to meet their obligations. Article 44 calls on States Parties to provide technical cooperation and logistical support to facilitate implementation and to mobilize financial resources for capacity building. No standing fund to support IHR implementation has ever been created. Few private sector actors have supported strengthening public health systems under the IHR framework, which requires an all-hazards rather than a disease-specific approach. Together with a handful of other major development partners, the US government began to increase investments in IHR capacity-building through bilateral and multilateral channels late in the initial 2007 to 2012 implementation period—often with security agencies and resources playing a key role.

Many nations have a long way to go before the next deadline in 2014. Moreover, the obligation of all WHO Member States to strengthen and sustain their IHR capacities does not end in 2014. The global community remains committed to making real progress in building and sustaining national core capacities to detect, assess, report, and

respond to public health emergencies of international concern, but the actual mechanisms for providing this support have lagged far behind the deadlines and the needs.

TECHNICAL GUIDANCE AND STANDARDS

In December 2010, WHO released the *Checklist and Indicators for Monitoring Progress in the Development of IHR Core Capacities in States Parties* (referred to as the IHR Monitoring Framework). The IHR Monitoring Framework (updated in 2011 and 2012) identified 20 country-level indicators for use by States Parties in assessing IHR core capacity development.⁴ Although the Monitoring Framework describes outcomes that countries should be able to achieve functionally, it does not prescribe *how* countries should achieve these outcomes. While the framework is useful to national health leaders and WHO for monitoring progress from year to year, it was never intended as a “how-to” guide for national IHR implementation.

During a series of regional IHR stakeholder meetings convened by WHO in late 2012 and early 2013, health authorities from dozens of countries called attention to unmet needs for specific technical assistance, especially in areas where the revised IHRs demand new competencies (eg, developing capacities for surveillance and response at points of entry and for noninfectious hazards). Article 44 calls on States Parties to collaborate on the development of core capacities, and the IHR Monitoring Framework stresses that countries that have successfully achieved core capacity indicators should share lessons learned and best practices. This simply has not happened in a systematic way across all

WHO regions, due in part to the lack of resources and a defined global mechanism for sharing such information.

In the short term, learning from the experiences of national public health leaders and their partners may highlight promising practices in IHR implementation—if not “best bargains,” at least a few easy wins. WHO headquarters and regional offices have generally lacked the resources to research best practices across core capacities, points of entry, and other hazards. Well-resourced countries could contribute effectively to IHR implementation by documenting, compiling, and reviewing lessons learned and by helping countries identify best practices and adapt them for local context. These best practices could be used to develop or to validate national strategies, allowing countries to estimate costs of achieving their desired targets for national budgeting and to seek development assistance.

While all countries must ultimately implement IHRs in a way that builds on existing systems and best serves national needs, there is no reason that every country should have to develop guidance such as outreach and education materials de novo. Some WHO regional offices have developed, or helped Member States develop, materials that can be used as templates and adapted nationally. Others can and should follow suit, and high- and middle-income countries can play significant roles. The US Centers for Disease Control and Prevention (CDC), for example, hosts a designated WHO Collaborating Center for IHR Implementation of National Surveillance and Response Capacity. With resources, this center could play a key role in collecting, reviewing, and disseminating lessons learned from IHR implementation and could work with WHO to help national authorities evaluate and adapt these for local use through direct technical assistance and by facilitating reciprocal visits of national technical leaders in their own regions.

“POTENTIAL HAZARDS”

In addition to defining the core capacities required to detect, assess, report, and respond to potential public health emergencies at each level of the health system, the IHR Monitoring Framework explicitly identified “potential hazards” that call for specific consideration: zoonotic, foodborne, chemical, and radiological/nuclear events. Almost every nation with a functional health system has developed some capacities to detect and respond to high-priority infectious diseases, particularly locally common epidemic-prone or endemic diseases. However, many lack well-developed systems to address this cluster of potential hazards (which are clearly quite distinct from each other in terms of risk factors). As of 2011, more than two-thirds of countries that completed WHO questionnaires reported developing at least some capacities for addressing food safety and surveillance and responding to zoonotic events. However, these capacities were far from even. Although the majority of countries had developed plans or policies for surveillance of foodborne and zoonotic events, half of the countries reporting from WHO’s Regional Office for the Americas and more than half of the countries reporting from

WHO’s African and Southeast Asian regions still faced challenges in sharing information on food safety across sectors. While coordination between the animal and human public health sectors appeared slightly better, countries in the African region, in particular, reported gaps in information-sharing underlying shortfalls in timely responses to zoonotic events of national or international concern.⁵

In contrast, chemical and radiological safety were identified as relative weaknesses across most WHO regions. Fewer than half of responding countries globally reported having achieved the attributes required to detect and respond to chemical and radiation emergencies, with countries of the African region lagging the farthest behind.⁵

Although very different in terms of approach and baseline capabilities, these gaps in preparedness for zoonotic and food safety events—which require approaches similar to those for other infectious diseases threats—and in chemical and radiological safety measures point out the challenges in engaging stakeholders across sectors and communities in IHR implementation. Realistically, countries still facing major infectious disease burdens have more urgent priorities than chemical and radiological safety efforts, particularly in the absence of obvious risks. However, the knowledge to develop at least a strategy for addressing these threats exists outside the health sector. At the national level, militaries have often developed protocols and tools for managing chemical and radiological risks. Internationally, organizations such as the Organization for the Prohibition of Chemical Weapons and the International Association for Atomic Energy can be tapped to provide technical assistance and guidance.

POINTS OF ENTRY

All Member States must be able to detect, report, and respond to potential public health emergencies at designated airports, ports, and ground crossings. Some of the requirements at points of entry, such as ship inspection and sanitation, build on long-standing obligations. Others, encompassing surveillance and response at borders, place new demands on core capacities and intersectoral collaboration. Even nations that have made the most progress in implementing the IHRs struggle with how best to detect and respond to diseases as they move between nations. There is currently no standard for how to understand when success has been achieved, but individual nations have developed approaches that could be shared with others. This is a place where nations could come together to share practices, develop collaborative guides and metrics, and offer mutual assistance to provide a common understanding and path for moving forward on points of entry.

RESOURCES FOR IMPLEMENTATION

WHO and individual countries need to build a business case for IHR implementation in order to garner appropriate

resources and time. To make use of existing knowledge and to institutionalize IHRs as part of routine health system functioning requires a concentrated investment in outreach and education, from high-level policymakers to community leaders, and in between. Most importantly, it requires the identification of resources.

The obligations spelled out in IHR (2005) are binding on governments, not just health ministries. This was devised to enhance connections across sectors and from national down to community levels, promoting essential collaboration among health, agriculture, commerce, trade, transportation, defense, law enforcement, and other partners. Despite this, the IHR commitment in and of itself has often failed as leverage to help health leaders build cross-sectoral relationships, in large part because of the lack of resources.

Recently, IHR implementation activities have been supported by security funds, primarily from the US Departments of Defense and State, as well as through the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction, through the biological security working group.⁶ While these funds have been extremely important to IHR implementation activities, it is not clear if funding from the security community is sustainable. In order for progress in building IHR core capacities to be sustained, IHR must become part of a holistic approach to health system strengthening and be fully integrated into the planning processes used by governments and their development partners.

MOVING FORWARD

The clock is ticking. We are 5 years into the IHR implementation framework, and it is obvious that 5 years was an overly ambitious timeline for most countries in the world. The international community has just begun to hit its stride in offering the financial and technical assistance needed to help countries move forward, but major gaps still exist. The IHRs offer an unprecedented opportunity to build global capacities to detect and respond to events in real time, but nations face many competing priorities. Building core capacities to detect, assess, report, and respond to public health emergencies is hard. Countries are facing many other hard tasks at the same time, including building capacities to detect, assess, report, and respond to endemic infectious diseases, growing noncommunicable disease burdens, and other threats to population health in a nation. Both of these approaches help countries protect the lives of their citizens, create a safer world, and ensure healthier populations. Partner nations and international organizations must do what they can to help—and that means learning from what has worked in capacity-building at every level and sharing and acting on those lessons.

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REFERENCES

1. World Health Organization. *International Health Regulations (2005)*. 2d ed. Geneva: WHO; 2008. <http://www.who.int/ihr/9789241596664/en/index.html>. Accessed May 2, 2013.
2. Fischer J, Kornblat S, Katz R. *The International Health Regulations (2005): Surveillance and Response in an Era of Globalization*. Washington, DC: Stimson Center; 2011. http://www.stimson.org/images/uploads/The_International_Health_Regulations_White_Paper_Final.pdf. Accessed May 2, 2013.
3. World Health Organization. Implementation of the International Health Regulations (2005): Report by the Director-General. Geneva: WHO; 2013. http://apps.who.int/gb/ebwha/pdf_files/WHA66/A66_16-en.pdf. Accessed June 4, 2013.
4. World Health Organization. IHR monitoring framework: checklist and indicators for monitoring progress in the implementation of IHR core capacities in states parties. Geneva: WHO; 2012. <http://www.who.int/ihr/checklist/en/>. Accessed June 4, 2013.
5. World Health Organization. *Summary of 2011 States Parties Report on IHR Core Capacity Implementation*. Geneva: WHO; 2012. http://www.who.int/ihr/publications/WHO_HSE_GCR_2012.10_eng.pdf. Accessed May 2, 2013.
6. Global health security collaboration between the Global Partnership Against the Spread of Weapons and Materials of Mass Destruction and international organizations [press release]. December 26, 2012. US Department of State. <http://geneva.usmission.gov/2012/12/17/highlighting-the-work-of-the-global-partnership-in-counteracting-biological-threats/>. Accessed June 4, 2013.

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