POLICY BRIEF 40

Produced by EQUINET: SEATINI
With TARSC, University of Limpopo
April 2016

Implementing the International Health Regulations in east and southern Africa: Progress, opportunities and challenges

When the International Health Regulations (IHR) were adopted in 2005 by member states of the World Health Organisation (WHO), State Parties were given up to June 2012 to have developed minimum core public health capacities to implement them. This included having surveillance, reporting and response systems for public health risks and emergencies and measures for disease control at designated airports, ports and ground crossings. In East and Southern Africa (ESA), the IHR are being implemented within an Integrated Disease Surveillance and Response (IDRS), which is a comprehensive, evidence-based strategy for strengthening national public health surveillance and response systems in African countries. This policy brief outlines the progress made and deficits in ESA countries in achieving the core capacities to implement the IHR. It proposes national measures to strengthen public health systems to both meet gaps in the implementation of the IHR and to link responses to health emergencies and outbreaks to health systems strengthening in ESA countries.

Renewed attention on the IHR in the face of cross border epidemics

Giving truth to the adage *prevention is better than cure*, epidemics always bring high costs to communities and countries. The full costs of the Ebola epidemic in West Africa have not yet been assessed, for example, but it has exacted high burdens in the "direct, short-term cost of control, patient care, and hospital admission, and in the indirect, longer-term dislocation of the regional economies" in the region (Castillo-Chavez et al., 2015).

The epidemic raised new attention on the implementation of the International Health Regulations (IHR), adopted in 2005 by member states in the WHO, including by all states in the WHO African region. The IHR require that all countries have the ability to detect, assess, report and respond to potential public health emergencies of international concern (PHEIC) at all levels of government, and to report such events rapidly to the WHO to determine whether a coordinated, global response is required. However, it took nearly three months in Guinea for the Ministry of Health and international partners to identify the Ebola virus as the cause of an epidemic that had already led to about 50 deaths since its first reported case in December 2013 (WHO 2015). Without adequate detection and reporting of the cases, the epidemic spread into Liberia and Sierra Leone. The strengths and weaknesses of the response to the epidemic are more fully discussed in another EQUINET brief (Loewenson et al 2015).

The response in other ESA countries, namely Democratic Republic of Congo (DRC) and Uganda provides useful learning for the region. As shown in *Table 1* overleaf, early detection, reporting and communication helped Uganda to contain the spread of the disease. From first case to confirmation and controls being implemented, the time delay was about 2 weeks. This also signals effective communication between local levels of health systems and national responses. The time between epidemics of over 6 years points to the strength of the prevention and control systems. In Democratic Republic of Congo (DRC) the time frames for these responses were longer and a new outbreak took place within a shorter time frame, suggesting weaker prevention, detection and response systems and communication with local levels.

Table 1: Uganda and DRC responses to Ebola, 2000-2007

Timelines, Capacities and Responses	Uganda	DRC
First Identified Case	Oct 7, 2000	Oct 21, 2001
Local Authorities Alerted of Abnormal Primate Deaths	None	Nov 17
First Laboratory Tests Submitted	Oct 7	Nov 30
Local/National Authorities Alerted of Potential Outbreak	Oct 14	Nov 24
National Guidelines Announced	Oct 15	Dec 8
Lab tests confirmed Ebola	Oct 14-15	None
Border Control Isolation Procedures Implemented	Oct 16	None
WHO Notified	Oct 15	Dec 8
WHO Task Force Arrives	Oct 17	Dec 11
WHO Reports End of Outbreak	Feb 28, 2001	May 7, 2002
Next known Outbreak in the region	Nov 30, 2007	June 21, 2002

Source Young 2013

These experiences point to the core capacities identified in the IHR (2005) as necessary not only for responses to cross border epidemics, but to prevent them and strengthen health systems. Health systems are more able to prevent and manage epidemics when they have good information and communication systems with health literate communities; when central surveillance systems link coherently to primary care level; and when they can mobilise the personnel, resources and services to respond rapidly to outbreaks (Loewenson et al. 2015). This has raised attention to renewed efforts to the core capacities identified in the IHR in *Box 1* below.

Box 1: IHR Core capacities

1. Rapidly determine the control measures required to prevent spread of risks;
2. Provide specialized staff, laboratory analysis of samples (domestically or through collaborating centres) and logistic assistance (e.g. equipment, supplies and transport);
3. Provide on-site assistance as required to supplement local investigations;
4. Provide a direct operational link with senior health and other officials to rapidly approve and Implement containment and control measures;
5. Provide direct liaison with other relevant government ministries;
6. Provide, by the most efficient communication available, links with hospitals, clinics, airports, ports, ground crossings, laboratories and other operational areas for dissemination of information and recommendations from WHO on events in the country and in other countries;
7. Establish, operate and maintain a national public health emergency response plan, including the creation of multidisciplinary/multisectoral teams to respond to events that may constitute a public health emergency of international concern; and
8. Provision of the above on a 24-hour basis.

Source: WHO 2008

Progress in implementing the IHR core capacities in ESA countries

The IHR (2005) required all States Parties to have established the minimum public health core capacities in *Box 1* by June 2012. Countries unable to meet that deadline would need to request for an extension to 2014. In exceptional circumstances a request could be made to extend to June 2016.

According to the WHO, by 29 October 2015, 118 of 196 States Parties had completed a self-assessment questionnaire sent in April 2015 to monitor progress in the development of the core

capacities. From the analysis of these returns, combining all member states globally, there was progress reported in: having appropriate legislation and policy in place to implement the IHR; coordination and collaboration with other sectors for capacity-building; functional and improved detection capacities with early warning; coordinated preparedness and emergency response capacities; and improved communication to the public and to stakeholders. Challenges were noted in the detection and response capacities for chemical and radiological events (WHO 2016).

A sub-analysis for the African region based on publicly available self-assessment information from 31 March 2015 is shown in *Table 2* below, comparing to 2012 data and the global average. Thirty one of the forty six (67%) African member states responded to the questionnaire in 2015 and 28 in 2012 so reporting has marginally improved. The evidence indicates African countries are making progress on a number of core capacities since 2012, most notably in surveillance and laboratory capacities, and with large improvements in legislation and human resources since 2012. This has been attributed to an increased focus on these capacities due to the Ebola epidemic. Surveillance and laboratory capacities have been strengthened through an Integrated Disease Surveillance Response (IDSR) in Africa (WHO Afro 2015). Despite this, less progress has been reported in preparedness, in capacities at points of entry, and in dealing with chemical and food safety risks. It suggests that while the region may be better prepared to deal with infectious disease epidemics, it may be less prepared to deal with other public health risks.

Table 2: African and global IHR capacity scores, 2015

Total Responses Globally = 160 Total Responses for Africa = 31 Capacities in place	**Average capacity score for African countries (2012)**	**Average capacity score for African countries (2015)**	**% of African countries with a capacity score more than 75%,**	**Average capacity score all countries globally**
Legislation	28	60	53%	77
Coordination	46	67	32%	79
Surveillance	64	77	71%	84
Response	52	72	48%	82
Preparedness	35	53	29%	70
Risk Communications	43	61	32%	75
Human Resource	27	56	35%	62
Laboratory	63	73	58%	81
Points of Entry	32	35	13%	61
Zoonotic	60	68	55%	85
Food Safety	42	43	13%	75
Chemical	18	28	10%	56
Radiation	25	36	13%	59

Adapted from the WHO 2015a; SEATINI, TARSC 2012

1. The African average capacity score for 2015 is based on responses received from: Algeria, **Angola**, Benin, Burkina Faso, **Burundi,** Cameroon, Central African Republic, **DRC**, Eritrea, Ethiopia, Gambia, Ghana, Guinea, Guinea Bisau, **Madagascar, Malawi**, Mauritania, **Mauritius, Namibia**, Nigeria, Rwanda, Sao Tome and Principe, **Seychelles**, Sierra Leone, **South Africa**, South Sudan, **Swaziland**, Togo, **United Republic of Tanzania**, **Zambia** and **Zimbabwe. Highlighted are ESA countries.** Botswana, Lesotho, Mozambique and Kenya had not responded by May 2015.
2. The African average capacity score for 2012 is based on 28 responses by African countries namely Algeria, **Angola**, Benin, Burundi, Cameroon, Chad, Congo, DRC, Equitorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, **Kenya**, **Lesotho**, **Madagascar**, **Malawi**, Mauritania, Sao Tome and Principe, Senegal, **Seychelles**, Sierra Leone, Togo, **Tanzania**, **Zambia** and **Zimbabwe** (SEATINI, TARSC 2012)

Proposals for health system strengthening to implement the IHR

Discussions on the IHR have recently focused on enhancing global health security. The IHR is the umbrella in the global health security agenda, indicating that the global health security agenda should complement and be linked to implementation of the IHR. There has been progress towards this in ESA countries, albeit with identified deficits in port health and

preparedness. Yet the learning from countries with more rapid responses is that this cannot be isolated from the way systems function generally from community to local levels. States in ESA countries have a duty to secure the public health of their populations. This extends beyond controlling infectious diseases, to preventing risks and emergencies resulting from environmental, occupational, food safety and other hazards. It calls for proactive communication and social mobilisation, for prevention and control of communicable and non-communicable diseases; for the organisation of services and co-operation across sectors and communities for health promotion, and of services for the prevention, early detection, diagnosis, management of disease.

This implies that in addition to addressing remaining functional core capacities for implementing the IHR 2005, there is need to ensure capacities for public health at national, district and community level. An evaluation tool for monitoring the implementation of the IHR is being considered at the 69th World Health Assembly in May 2016. The framework includes a self-administered assessment tool, after-action review, simulation exercises and independent possibly external, evaluation. A regional approach to such assessment may best support country capacities, whereby countries report and the WHO regional committee is used as a forum for countries to share good practice, support and hold each other accountable at a regional level. It would be important for all African countries to participate in such reporting and review. Any global review should motivate and not substitute national processes to update national laws, authorities and capacities to strengthen their wider public health systems, within health system strengthening, including to:

- Ensure the protection of public health in national constitutions and laws; updating public health law to address new risks and approaches and ensure capacities to enforce it;
- Establish a focal point for the IHR, adequately fund health systems, delivering on the Abuja commitment to 15% of the government budget to health, and allocate sufficient funding for public health awareness, competencies, workforces and systems;
- Develop policies, plans and programmes to audit, prevent, monitor and control public health challenges, including through health impact assessments of new developments, in a multi-sectoral collaboration and with communities; and
- Popularise the principles and provisions of national public health law and of the IHR within countries, with government and local authorities, civil society and private sector.

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Produced March 2016 with support from IDRC Canada
Cite as: SEATINI, TARSC, with U Limpopo (2016) Implementing the International Health Regulations in east and southern Africa: Progress, opportunities and challenges, EQUINET Policy brief 40, EQUINET Harare

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