Sierra Leone has a long history of health emergencies resulting from recurrent disease outbreaks and natural disasters that affect human, animal, and environmental health. The unprecedented West Africa Ebola Virus Disease (EVD) outbreak in 2014–2015 affected more than 14,000 people in Sierra Leone and killed another 3,956. The country’s fragile health system suffered a severe shock and the epidemic took a heavy toll on the health workforce, with 221 deaths. The severity of the outbreak was exacerbated by limited investment in the country’s health system and a lack of access to affordable health services, as the health sector was largely dependent on external funding sources.

Ebola is not the only threat in Sierra Leone. Maternal and child mortality rates are among the highest in the world. Communicable diseases such as cholera, yellow fever, Lassa fever (an endemic viral haemorrhagic fever) and rabies present significant public health threats. Flooding and landslides leave communities dangerously vulnerable to waterborne disease outbreaks and cholera. Zoonotic diseases also have a serious impact on human health. Numerous outbreaks have devastated livestock and caused significant losses in agricultural productivity and food security.

To address the recurrent health threats, better planning, preparedness and coordination are urgently needed.

The same health threats in Sierra Leone affect many other countries. The EVD outbreak in West Africa revealed an alarming level of unpreparedness to manage health emergencies and disasters in other countries in the region. A 2015 independent review of the response to the EVD outbreak recommended changes in how countries evaluate public health capacities and emergency response capacities, as required by the International Health Regulations (IHR 2005).

Following the 2015 independent review, WHO developed the IHR Monitoring and Evaluation Framework for all WHO Member States, comprising four components, one mandatory and three voluntary.

First, countries undertake a mandatory annual self-assessment of their IHR capacities and report the results to the World Health Assembly. Second, a multi-pronged external peer-reviewed evaluation (a joint evaluation exercise (JEE)), involving both domestic and international experts, is undertaken every four to five years to assess a country’s IHR capacities and its ability to prevent, detect, and rapidly respond to public health threats. This voluntary test helps countries identify the most critical gaps within their human and animal health systems, and prioritize actions to improve preparedness and response capabilities. Since the 2016 launch of the JEE tool, 91 countries have volunteered and completed the assessment.

In addition to the JEE, countries undertake simulation exercises (SIMEX) to test their readiness to prevent, detect and respond to a health emergency. Finally, after-action reviews (AAR) have been instituted for countries to assess their response to an emergency, and to identify...
best practices, gaps and lessons learned. The SIMEX and AAR are voluntary elements of the WHO IHR Monitoring and Evaluation Framework, requested by the country and supported by the three levels of WHO.

Sierra Leone was the sixth country in the African region to conduct a JEE in October 2016. Fourteen experts from 10 countries participated in the five-day evaluation, together with more than 60 participants from government partner agencies. They assessed 19 technical areas to identify the most critical gaps within the country’s human and animal health systems. Several recommendations were developed, including:

- Revise public health laws and legislation;
- Create a budget line for IHR and ensure funding from domestic and international sources;
- Strengthen the National IHR Focal Point and World Organisation for Animal Health functions;
- Strengthen cross-border collaboration and surveillance; and
- Develop a “multi-hazard” National Public Health Emergency Preparedness and Response Plan, integrated with points of entry (air, land, sea) and contingency plans.

In addition to taking on board these recommendations, Sierra Leone developed a multi-year National Action Plan for Health Security (NAPHS) to better prepare for and manage health security threats in a coordinated way. The Ministry of Health and Sanitation took the lead in the planning, including mapping all actors involved in implementing health security activities. In October 2017, the Ministry convened more than 75 in-country and international experts in a workshop to finalize and cost a five-year action plan. As a next step, WHO convened a Prioritization and Resource Mapping (REMAP) workshop in April 2018, focused on prioritizing activities and aligning ministries, programmes, partners and donors. The aim was to align and agree on the first two years of NAPHS implementation.

Impact

Led by WHO, the REMAP process attracted new partnerships, funding and technical support. When a resource mapping workshop showed some overlap in donor-funded projects, WHO encouraged donors to be more flexible in their earmarking of funds to achieve better coordinated results. As a result, more than US$ 50 million of new and reprogrammed funding was identified, both domestic and external, with domestic funding representing about 20% of the total. Almost all national activities are now funded, including previously unfunded activities such as linking public health and the security sector. Finally, WHO convened a roundtable discussion between donors and key government decision makers, which resulted in elimination of bottlenecks and better alignment among all stakeholders.

Conclusion

The WHO REMAP process in Sierra Leone is an innovative model that not only identified US$ 50 million of additional or untapped funding, but also prompted more effective and efficient use of those funds and less project duplication.

The collective approach undertaken by the Ministry of Health created an environment of partnership and dialogue. Partners worked together to ensure better coordination and reduce earmarking. The Government now provides an update on progress to WHO every three months.

The resource mapping is leading into the NAPHS implementation phase. Stronger national leadership and ownership of the whole process, improved donor coordination and mapping of provincial activities and investments by donors is resulting in country ownership and broad support across all sectors involved in the development of IHR capacities. In this way, Sierra Leone will be equipped to prevent, detect, and respond to any health emergency.

The work undertaken by Sierra Leone illustrates how an at-risk country can take the steps necessary to better prepare for a health emergency in a coordinated fashion, along with domestic and international partners. It also shows that not only large contributions, but also small and steady investments by partners can make a huge impact in strengthening the health system, and it highlights how investing in preparedness during ‘peacetime’ leads to a better response in a health emergency. It represents a successful model that, if replicated, could have a global impact on how developing countries prepare for and respond to health emergencies.