THE EBOLA BURDEN ON DEMOCRATIC REPUBLIC OF CONGO

Just about one week after the World Health Organization (WHO) declared Democratic Republic of Congo (DRC) free of Ebola, the virus resurfaced with 33 new cases and 26 deaths reported in North Kivu and Ituri by 1 August 2018. It is the tenth outbreak in the Republic. Like any other epidemic it spread through villages, towns and cities like wild fire, which spares no one along its path and shows no mercy, placing a heavy burden on a country experiencing conflict and just recovering from a major outbreak.

By the third week of December 2018, just four months after its onset, the outbreak had expanded to become the second largest ever recorded, spreading through 15 health zones and claiming at least 308 lives out of 537 confirmed cases.

“The North Kivu epidemic has become the second largest Ebola epidemic in the world, after that of West Africa.”
- Oly Ilunga, DRC Public Health Minister

The declaration by the Ministry of Public Health heralded another era of emergency response by international and humanitarian organizations, the likes of WHO, Médecins Sans Frontières, International Federation of Red Cross and Red Crescent Societies, etc. All of them working together to provide support in the form of medical supplies, medicines, equipment, donations, as well as the deployment of volunteers and staff to affected communities.
Representing the African Union, Africa CDC is also committing resources to support response efforts. In pursuit of its mandate to see an end to sudden disease outbreaks in Africa, Africa CDC support has been aimed not only to provide immediate support but also to build capacity for resilient health systems.

“The global community needs to respond to this outbreak as a crisis and not as an emergency, by quickly deploying public health assets to the affected areas expeditiously.”
- Dr John Nkengasong, Africa CDC Director

To date Africa CDC has trained and deployed 46 experts and volunteers (epidemiologists, hygienists, biologists, communication specialists, socio-anthropologists, laboratory technicians, and logisticians) to support control efforts. Working with the national government and other partners, they are supporting investigation of alerts, active case findings, contact tracking and follow-up, infection prevention and control, communication, logistics, and community-based surveillance. They organize routine visits to health facilities that have already received technical support in infection prevention and control to ensure that they are effectively applying the guidelines.

The team has conducted decontamination and briefing sessions at 15 health facilities to stop infections among healthcare workers. Contact tracing has continued and has helped in curtailing further spread of the disease and kept infections reasonably low.

“Alerts are investigated within 24 hours of notification and contact tracking is done once contacts are listed.”
- Dr Josué Bertin Mwamba, ASED/AFRICA CDC Field Coordinator

Africa CDC is supporting the training of healthcare workers at health facilities on Ebola standard precautions, case definition, hygiene and sanitation, and helping them to acquire technical skills needed to handle patients appropriately.

Through its Emergency Operations Centre, Africa CDC is supporting daily monitoring and reporting of new infections, deaths, vaccinations and cures to ensure that any support needed is provided not just for present relief but for long-term benefits.

Africa CDC support for laboratory capacity strengthening has helped improve laboratory confirmation of suspected cases. To date the Centre has provided six GeneXpert machines, 3000 cartridges, testing kits and other laboratory supplies, and trained over 300 experts in laboratory diagnosis of Ebola, ports of entry, and infection prevention and control. In collaboration with the Ministry of Public Health and the Institut National de Recherche Biomédicale, three new laboratories were set up in Beni, Butembo and Goma and...
Policy-makers and programmers in Africa require sound scientific evidence for public health decision-making. However, such evidence is not always available due to limited capacity among researchers to translate their research work into high quality scientific articles.

To bridge this capacity gap and encourage operational research that will provide scientific evidence for public health programming in Africa, Africa CDC began a series of training workshops that will help raise a team of researchers and mentors in scientific writing for Africa.

The first in this series of workshops was held in Kampala, Uganda, from 26 to 30 November 2018 in collaboration with African Field Epidemiology Network. Thirty researchers from the national public health institutes of 14 African Union Member Countries who had experimental manuscripts participated in the workshop.

Each of the participants worked with experienced authors (mentors) to develop and improve each section of their manuscripts. With monitoring support from Africa CDC, they will continue working with their assigned mentors until their papers are publishable.

In addition to the mentoring support, the participants received training in the publishing process, including identification of a suitable journal, the peer review process, what reviewers look for, reasons for manuscript rejection, ethical considerations, etc.

Articles developed through this process will be published in the *Journal of Public Health in Africa*, which has now been acquired by Africa CDC, and other international journals.
Support by Africa CDC for the establishment and strengthening of National Public Health Institutes (NPHIs) in Africa is gaining momentum as a delegation from the Centre visited four East African countries – Kenya, Madagascar, Somalia, South Sudan – in September and October 2018.

The delegation held meetings with relevant top government representatives and other stakeholders to assess the capacity of existing NPHIs and their preparedness to respond to public health issues, and to identify the support needed for establishment where NPHIs do not exist.

Despite strong commitment and buy-in from the leadership of the ministries of health for the actualization of functional and effective NPHIs, the delegation identified several setbacks such as the lack of NPHI-specific legal frameworks, procedures and guidelines; overlapping mandates; shortage of skilled workforce and laboratory supplies; limited coordination; and inadequate funding.

They shared the Africa CDC framework for the establishment of NPHIs and sample legal frameworks from other countries with the national stakeholders. They noted the need for the development of NPHI-specific roadmaps and strategic plans by the countries and the adoption of a change management approach that will ease integration of the various public health agencies into the NPHIs. They highlighted the importance of developing partnership and stakeholder engagement plans as well as a national public health research agenda that will help improve evidenced-based decision-making.

Africa CDC will continue to support these countries as they establish and strengthen their NPHIs, including supporting high level advocacy for funds allocation by the governments.
Africa CDC, in collaboration with WHO, is raising a core team of first line rapid responders for health emergencies in Africa.

Drawn from 22 African countries, the 54-member team has undergone two rounds of training in infection prevention practice, disinfectant preparation, outbreak investigations, communication techniques, data analysis, and reporting.

“This is a continental team recruited from five African Union regions and 22 Member States, we’re building surge capacity to support Member States in their effort to control and contain outbreaks.”
- Dr Merawi Aragaw, Medical Epidemiologist at Africa CDC

The training was held in Addis Ababa from 19 to 23 and 26 to 30 November 2018 and it consisted of technical theoretical presentations, group discussions, practical skill drills such as interviewing a patient, community engagement, infection prevention and control, hand washing, safe and dignified burials, and preparation of disinfectant chlorine solution.

“The objective of the training is to build capacity individually and collectively as a team. There is also the knowledge aspect, we started with team building and we’re doing practical experience sharing. This is the first time we’re including experience sharing and it is adding a lot of wealth to participants.”
- Dr Boukare Bonkoungou, Training Officer at WHO

Members of the team include contingents from Member States who participated in the Ebola response in West Africa in 2015. With the support of their countries, they will work in the field as volunteer first responders and help train other individuals and groups in their regions and countries.

Following the training, Africa CDC will support pre-deployment logistics and procurement for rapid deployment of the team whenever there is a need across the continent.
The first case of cholera outbreak was reported in Zimbabwe on 5 September 2018 when 25 patients were admitted at the Beatrice Road Infectious Disease Hospital, Harare. By early morning 6 September, the number of admissions had risen to 52, of which 11 cases were confirmed using rapid diagnostic test kits and 17 confirmed positive for Vibrio cholerae O1 serotype Ogawa using the stool sample culture and sensitivity test.

The Ministry of Health and Child Care declared a cholera outbreak on the same day and requested assistance for immediate response to control the outbreak. Following reports of 20 cholera-related deaths, the Minister of Health, Obadiah Moyo, declared a state of emergency for Harare on 11 September.

“We are declaring an emergency for Harare to enable us to contain cholera, typhoid and whatever is going on. We don’t want any further deaths,” said the Minister.

The underlying factors to this outbreak are believed to be contaminated water sources, including wells and boreholes, as residents of Harare suburbs had to get water from shallow wells and boreholes which were contaminated by sewage from burst pipes.

“This whole problem has arisen as a result of blocked sewers. The other problem is that garbage hasn’t been collected on a regular basis. There is water problem.”

- Dr Obadiah Moyo, Zimbabwe Minister of Health

The outbreak spread rapidly affecting mostly people in the 0-5 (19.6%), 16-25 (20.1%) and 26-35 (19.6%) years age groups mainly in Glenview and Budiriro areas of Harare. By 29 November 2018, a cumulative 10,443 cases, of which 10,165 were suspected and 278 confirmed, had been reported, including 59 deaths.

Through its three staff members and a finance officer from the African Union, Africa CDC has worked with the Government of Zimbabwe and other partners in the National Task Force to support response activities. Specifically, the Centre has conducted three training workshops on integrated disease surveillance and response, rapid response, case management, and infection prevention control and helped with the procurement of laboratory kits, consumables and five modular DNA/RNA sequencers, flow cells and sequencing kits.

Amid various challenges, efforts to contain the outbreak are yielding results as the number of new cases and deaths reduces.
Representatives of nine Central Africa Member Countries – Burundi, Central African Republic, Congo Brazzaville, Cameroon, Democratic Republic of Congo, Equatorial Guinea, Gabon, Sao Tome and Principe, and Chad – have reviewed and approved governance documents for the Central Africa chapter of the Regional Integrated Surveillance and Laboratory Network (RISLNET). This followed the official launch of the network by the Minister of Health of the Republic of Congo during a workshop in Congo Brazzaville on 7-9 November 2018.

Present in the workshop were representatives of the Food and Agriculture Organization, United States Centres for Disease Control and Prevention, African Society for Laboratory Medicine, Pandora-ALERT network and World Health Organization Special Program for Research and Training in Tropical Diseases.

The workshop participants carried out a systematic review of the draft Statute to strengthen and simplify its contents and approved a final copy. They appointed Member States to lead the network for the next three years: Republic of Congo (Presidency), Cameroon (Vice Presidency), Gabon (General Secretary), Burundi (Deputy General Secretary), and Chad (Treasury). They also reviewed the wireframe for the proposed network website and suggested amendments where necessary.

Other activities to strengthen the impact of the network were proposed, including the production and piloting of laboratory manuals for use in the region, setting up of a secretariat with operational staff and training of reference laboratories staff in the region on standardized approaches to quality management systems.

Africa CDC is supporting the establishment of RISLNET as a regional network of networks to effectively address the critical need for comprehensive and quality laboratory systems and networks in Africa, and to strengthen capacities by harnessing and enhancing existing public health assets to effectively support prevention, rapid detection and resolute response to current and emerging public health threats.

On 14 July, the Government of Cameroon declared a cholera outbreak in the north and extreme north regions, which was a spill over spread from Nigeria through the Lake Chad region. The two regions have experienced repeated outbreaks in the past.

Between 27 August and 7 September 2018, Africa CDC supported a situation analysis, which showed the main challenges as the lack of coordination, late detection and response to outbreaks, and shortage of trained staff to respond to the outbreak.

Following this, Africa CDC supported the Ministry of Health to develop and implement a response plan in line with the joint support strategy for cholera outbreak in the Lake Chad Basin area prepared by four countries – Cameroon, Chad, Niger and Nigeria. The Centre is supporting the strengthening of internal and cross-border collaboration and capacity building for event-based surveillance and response. Some 135 national and regional healthcare workers have been trained in public health emergency management and rapid response team as priorities identified by the government.
IANPHI ANNUAL MEETING HIGHLIGHTS VALUE OF INVESTING IN PUBLIC HEALTH IN AFRICA

Leaders of National Public Health Institutes (NPHIs) in Africa met in November in London, England, for the International Association of National Public Health Institutes (IANPHI) annual meeting hosted by Public Health England and the fourth annual IANPHI-Africa regional network meeting.

A major part of the network meeting was formal and informal networking, with discussions focusing on establishment and extension of public health emergency preparedness and response. “You are not alone, as peers we can support each other,” said Dr. Natalie Mayet, IANPHI-Africa Chair and Deputy Director of the South Africa National Institute for Communicable Diseases (NICD).

A significant amount of time was spent discussing the Africa CDC development and legislative frameworks and scorecard for NPHIs. Although these documents are in draft form they are already being used by leaders in African countries as they work to establish and strengthen existing NPHIs.

Participants explored the role of NPHIs in facilitating joint external evaluations (JEE) and the National Action Plan for Health Security.

Dr. Victor Mukonka (Zambia NPHI), Dr. Chikwe Ihekweazu (Nigeria CDC) and Dr. Nancy Etiang (Kenya NPHI) shared updates from the South, West and East Regional Collaborating Centres, respectively.

Further discussions included the introduction of the Epidemiological Surveillance Network (RIPOST), by Dr. Alfred da Silva of the Agency of Preventive Medicine. RIPOST aims to support the West African Health Organization in reducing morbidity and mortality from potential epidemic infectious diseases by strengthening technical and managerial capacities of public health institutions in six ECOWAS Member States through a two-fold programme. These include providing in-service training for public health professionals on epidemiology, and operational research and intervention to improve national capacity for social and community mobilization to meet health information system needs for epidemic disease control and prevention.

Dr. John Paul Clarke, programme co-ordinator at the World Bank, outlined plans for the Regional Disease Surveillance System Enhancement Program (REDISSE), which, with a focus on West Africa, seeks to strengthen national, regional and cross-sectoral capacity for integrated disease surveillance and response through interdependent projects.

Participants presented a “way forward”, which included plans for the 2019 meeting to be hosted by the Ethiopian Public Health Institute.

IANPHI is a proud supporter of Africa CDC in strengthening public health capacity in Africa. The IANPHI-Africa Regional Network comprises institutes that are actively involved in Africa CDC and support its vision for a safer, healthier, integrated and prosperous Africa.