EBOLA VIRUS DISEASE
Democratic Republic of the Congo

External Situation Report 13

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Data as reported by: 24 June 2018

1. Situation update

The Ministry of Health and WHO continue to closely monitor the outbreak of Ebola virus disease (EVD) in the Democratic Republic of the Congo. The focus of the response remains on intensive surveillance, including active case finding, investigation of suspected cases and alerts and contact tracing.

On 24 June 2018, two new suspected EVD cases were reported in Iboko (1) and Bikoro (1) health zones. Four laboratory specimens (from suspected cases reported previously) tested negative. Since 17 May 2018, no new confirmed EVD cases have been reported in Bikoro and Wangata health zones, while the last confirmed case-patient in Iboko Health Zone developed symptoms on 2 June 2018, was confirmed on 6 June 2018 and died on 9 June 2018.

Since the beginning of the outbreak (on 4 April 2018), a total of 55 EVD cases and 28 deaths have been reported, as of 24 June 2018. Of the 55 cases, 38 have been laboratory confirmed, 14 were probable cases (deaths for which it was not possible to collect laboratory specimens for testing) and three were suspected cases. Of the 52 confirmed and probable cases, 28 died – giving a case fatality rate of 54%. Twenty-seven (52%) confirmed and probable cases were from Iboko, followed by 21 (40%) from Bikoro and four (8%) from Wangata health zones. Five healthcare workers have been affected, with four confirmed cases and two deaths.

The number of contacts requiring follow-up is progressively decreasing, with a total of 1 534 contacts having completed the mandatory 21-day follow-up period. As of 23 June 2018, 172 contacts were under follow up and all (100%) were reached on the reporting date. If no additional cases are confirmed, all contacts will complete the mandatory monitoring on 27 June 2018.

Context

On 8 May 2018, the Ministry of Health of the Democratic Republic of the Congo notified WHO of an EVD outbreak in Bikoro Health Zone, Equateur Province. The event was initially reported on 3 May 2018 by the Provincial Health Division of Equateur when a cluster of 21 cases of an undiagnosed illness, involving 17 community deaths, occurred in Ikoko-Impenge health area. A team from the Ministry of Health, supported by WHO and Médecins Sans Frontières (MSF), visited Ikoko-Impenge health area on 5 May 2018 and found five case-patients, two of whom were admitted in Bikoro General Hospital and three were in the health centre in Ikoko-Impenge. Samples were taken from each of the five cases and sent for analysis at the Institute National de Recherche Biomédicale (INRB), Kinshasa on 6 May 2018. Of these, two tested positive for Ebola virus, *Zaire ebolavirus* species, by reverse transcription polymerase chain reaction (RT-PCR) on 7 May 2018, and the outbreak was officially declared on 8 May 2018. The index case in this outbreak has not yet been identified and epidemiologic investigations are ongoing, including laboratory testing.

This is the ninth EVD outbreak in the Democratic Republic of the Congo over the last four decades, with the most recent one occurring in May 2017. Further information on past outbreaks is available at: http://www.who.int/ebola/historical-outbreaks-drc/en/.
### Table 1: Distribution of Ebola virus disease cases by health zone in Equateur Province, Democratic Republic of the Congo, 24 June 2018

<table>
<thead>
<tr>
<th>Description</th>
<th>Bikoro</th>
<th>Iboko</th>
<th>Wangata</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New suspected</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>New probable</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>New confirmed</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total new cases</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>Cumulative cases</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total suspected</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Total probable</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Total confirmed</td>
<td>10</td>
<td>24</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>Total number of cases</td>
<td>23</td>
<td>28</td>
<td>4</td>
<td>55</td>
</tr>
<tr>
<td><strong>Deaths</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New deaths</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deaths in probable cases</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>14</td>
</tr>
<tr>
<td>Deaths in confirmed cases</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Total deaths</td>
<td>18</td>
<td>7</td>
<td>3</td>
<td>28</td>
</tr>
</tbody>
</table>

As this is a rapidly changing situation, the reported number of cases and deaths, contacts being monitored and the laboratory results are subject to change due to enhanced surveillance, contact tracing activities, ongoing laboratory investigations, reclassification, and case, contact and laboratory data consolidation.
Figure 1: Epidemic curve for Ebola virus disease outbreak in Equateur Province, Democratic Republic of the Congo, 24 June 2018 (n=52)

Figure 2 Confirmed and probable Ebola virus disease cases by age and sex, Democratic Republic of the Congo, as at 24 June 2018 (n=51) (Age for n=1 female case unknown)
The province of Equateur covers an area of 130 442 km² and has an estimated population of 2 543 936 people, with 16 health zones and 284 health centres. The affected health area of Bikoro covers 1 075 km² and has a population of 163 065 inhabitants. It has 3 hospitals and 19 health centres, most of which have limited functionality.
Current risk assessment

WHO considers the public health risk to be very high at the national level due to the serious nature of the disease, insufficient epidemiological information and the delay in the detection of initial cases, which makes it difficult to assess the magnitude and geographical extent of the outbreak. The confirmed case in Mbandaka, a large urban centre located on a major national and international river, with road and air transport axes, increases the risk both of local propagation and further spread within Democratic Republic of the Congo and to neighbouring countries. The risk at the regional level is therefore considered high. At global level, the risk is currently considered low.

The IHR Emergency Committee met on Friday 18 May 2018 and concluded that the conditions for a Public Health Emergency of International Concern (PHEIC) had not been met. However, if the outbreak expands significantly, or if there is international spread, the Emergency Committee will be reconvened to re-evaluate the situation.

The risk assessment will be re-evaluated by the three levels of WHO according to the evolution of the situation and the available information.

Strategic approach to the prevention, detection and control of EVD

WHO recommends the implementation of proven strategies for the prevention and control of Ebola outbreaks. These include (i) strengthening the multi-sectoral coordination of the response, (ii) enhanced surveillance, including active case finding, case investigation, contact tracing and surveillance at Points of Entry (PoE), (iii) strengthening diagnostic capabilities, (iv) case management, (v) infection prevention and control in health facilities and communities, including safe and dignified burials, (vi) risk communication, social mobilization and community engagement, (vii) psychosocial care (viii) immunization of risk groups and research response, and (ix) operational support and logistics.

2. Actions to date

Coordination of the response

 ► Daily coordination meetings continue at the national, sub-national and local levels to review the evolution of the outbreak, identify gaps in the response and propose key actions to accelerate the implementation of public health measures.

 ► As of 26 June 2018, WHO has deployed a total of 258 technical experts in various critical functions of the Incident Management System (IMS) to support response to the EVD outbreak.

 ► WHO continues to conduct daily IMS team meetings and hold three-level conference calls to review response operations and support field teams.

Surveillance

- Active surveillance activities are ongoing, including active case search at community and health facility levels, real-time investigation of suspected cases and alerts, collection of specimens for laboratory confirmation and/or exclusion, and contact tracing.

- The Ministry of Health, with the support of WHO, CDC, Epicentre and other partners, continue to maintain an up-to-date EVD outbreak database, including line lists, contact lists, etc.

Laboratory

- Training of laboratory technicians on biosafety, polymerase chain reaction analysis and general information on EVD is ongoing in the city of Mbandaka.

- A total of 80 laboratory technicians in the city of Kinshasa were trained in appropriate sample collection, packaging and transportation as well as infection prevention and control principles.

- A full mobile laboratory was deployed to Bikoro Reference Hospital on 12 May 2018 and was fully operational by 16 May 2018. A second mobile laboratory is active in Mbandaka and a third one in Itipo has been functional since 30 May 2018.

- A National Laboratory Strategy has been developed, focusing on GeneXpert for confirmatory testing in key sites such as Ebola Treatment Centres (ETCs). GeneXpert is now fully functional in Bikoro Health Zone and Mbandaka. Additional GeneXpert machines are being sent to the affected areas.

- As of 23 June 2018, 340 samples have been tested in the different sites, leading to confirmation of 38 EVD cases.

Case management

- MSF has set up ETCs in Mbandaka and Bikoro, while two more ETCs are being set up in Iboko (MSF) and Itipo (ALIMA). MSF has started the process of transitioning the management of the ETCs in Mbandaka and Bikoro to the Ministry of Health.

- WHO is providing technical advice on the use of investigational therapeutics under the Monitored Emergency Use of Unregistered Interventions (MEURI) framework and provision of essential medical supplies. Four of the five investigational therapeutics are in-country and all protocols have been approved by the Ethics Review Board (ERB). This is the first time such treatments have been available during an Ebola outbreak. Clinicians working in the treatment centres will make decisions on which drug will be most helpful to their patients, and appropriate for the setting. The treatments can be used as long as informed consent is obtained from patients and protocols are followed, with close monitoring and reporting of any adverse events. Four of the five approved drugs are currently in the country. They are Zmapp, GS-5734, REGN monoclonal antibody combination, and mAb114.
**Psychosocial care**

- A total of 60 children orphaned by EVD have been identified in Moheli, Mbuli, Mooto, and Bikoro health areas. A total of 60 food kits were delivered to former contacts in Bikoro (35) and Moheli (25) health areas, while two food kits were delivered to two bereaved families in Itipo health area.
- Psychoeducation session was conducted in Mbanga nkotese village in Iboko Health Zone, attended by 150 community members.
- A clinic for people who have been cured of EVD has been established in Bikoro, operated by the Ministry of Health, INRB and MSF. A total 24 case-patients with confirmed EVD have been cured since the onset of the outbreak.

**Infection prevention and control and water, sanitation and hygiene (IPC and WASH)**

- A meeting to plan and streamline IPC activities in Bikoro Health Zone was conducted, attended by IFRC, MSF and WHO.
- Healthcare workers in Ntondo health facility in Bikoro Health Zone were trained on IPC principles and practices.
- The National Border Hygiene Program (PNHF) and Oxfam carried out supervision of IPC activities at points of entry.
- A total of 6,000 chlorine tablets (Aquatabs) were distributed to 300 households in Mooto health area, with support from Oxfam and UNICEF.

**Implementation of ring vaccination protocol**

- Since the launch of the vaccination exercise on 21 May 2018, a total of 3,268 people have been vaccinated in Iboko (1,518), Wangata (843), Bikoro (779), Ingende (107), and Kinshasa (21), as of 23 June 2018. The targets for vaccination are front-line health professionals, people who have been exposed to confirmed EVD cases and contacts of these contacts.

**Risk communication, social mobilization and risk communication**

- IOM supported mapping of villages in Itipo to better understand the population movement patterns at entry and exit points.
- A total of 29 educational talks were organised in Bikongo, Loondo and Mapeke health areas, which were attended by about 1,500 people, including indigenous peoples.
- Megaphones were provided to 24 Cellule d’Animation Communautaire (CAC) teams in Mapeke, Mpangi, Itipo, Bukondo Buna, Bokongo, Bokatola, Butela and Loondo health areas for their awareness raising activities.
Logistics

- WHO provided four ambulances to facilitate referral of patients, which were deployed in Mbandaka (3) and Kinshasa (1). Three additional utility vehicles have been provided to support activities in Kinshasa.
- MONUSCO has set up tents to accommodate responders in Iboko to address the acute shortage of accommodation in the area.

Resource mobilization

- WHO’s rapid response and initial scale up of operations in the Democratic Republic of the Congo has been funded by a US$ 4 million disbursement from the WHO Contingency Fund for Emergencies (CFE).
- WHO and partners are appealing for rapid funding of US$ 57 million for the current response to speedily stop the spread of EVD. The amount of funding needed for the overall Ebola Strategic Response Plan has increased from US$ 26 million to US$ 57 million, based on the new planning assumption and requirements following the spread of the disease to Mbandaka (an urban area on a major transport route), the increased needs for community engagement, expanded number of contacts to be traced and followed up, and increased number of points of entry (PoE) (airports and water/land points) to be monitored.
- Funding towards the Strategic Response has been provided to WHO from Italy (€ 300 000), CERF (US$ 800 000), GAVI (US$ 1 million), USAID (US$ 5.3 million), Wellcome Trust and UK DFID (US$ 4.1 million), UK-DFID (£5 million), Germany (€5 million), Norway (NOK 8 million), Canada (CAD$ 1 million), World Bank PEF (US$ 6.8 million) and Japan (US$ 1.3 million) bringing the total to around US$ 33.9 million. The WHO Strategic Response plan has been fully funded.
- Germany’s contribution is in recognition of the critical role the WHO CFE has played in responding to the EVD outbreak in the Democratic Republic of the Congo and will go to replenish the CFE, which has so far provided US$ 4 million to Ebola response efforts.
- In-kind contributions for medevac have been received from Norway and EU ECHO for flights between Kinshasa and Mbandaka. Technical expertise has been provided by Guinea, the UK and Germany through the GOARN network.
- Firm pledges to the overall Ebola response have been received from ECHO, Ebola MPTF and the African Development Bank.
- There is a growing need to support operational readiness for PoEs in surrounding countries to prevent further spread and WHO has launched a Regional Strategic Plan for EVD Operational Readiness and Preparedness.
Preparedness

WHO is supporting neighbouring countries to systematically assess and take action on Ebola preparedness, and to develop national contingency response plans. A regional readiness and preparedness plan has been developed and published, outlining activities to ensure that the nine neighbouring countries can detect and contain Ebola should it be introduced. The regional readiness and preparedness plan requires US$ 15.5 million. This amount is being revised to take into account the national contingency plans under finalization by the countries.

- Rwanda has received US$ 635,501 from the Resolve Initiative, while Burundi received US$ 1.4 million from the World Bank for EVD preparedness and readiness activities.
- The Republic of Congo and the Central African Republic have completed training of multi-disciplinary and multi-sectoral national rapid response teams as part of EVD preparedness.

Operations partnership

- GOARN Operational Support Team and the AFRO operational partnerships team continue to engage partners in the preparation and response to the EVD outbreak.
- A joint partnership project was initiated by WHO, IOM, IFRC, UNHCR, and other partners to reinforce cross-border coordination activities between the Democratic Republic of the Congo, Congo, and the Central African Republic.

IHR travel measures and cross border health

- According to the advice of the International Health Regulations (IHR) Emergency Committee (EC), which was convened by the WHO Director-General on 18 May 2018, WHO currently advises against the application of any travel or trade restrictions to Democratic Republic of the Congo. In addition, the EC advised that exit screening at airports and ports on the Congo River is considered to be of great importance to detect probable cases and to prevent the international spread of Ebola; however, entry screening, particularly in distant airports, is not considered to be of any public health or cost-benefit value. The IHR EC advised that currently the outbreak does not meet the criteria for a Public Health Emergency of International Concern, but the vigorous response of the Government should continue to be supported by the international community.

- WHO recommendations for international travellers related to EVD outbreak in DRC were published on 29 May 2018. In general, the risk of a traveller becoming infected with Ebola virus during a visit to the affected areas and developing disease after returning is extremely low, even if the visit included travel to areas where primary cases have been reported. Transmission requires direct contact with blood or fluids of infected persons or animals (alive or dead), all unlikely exposures for the average traveller. If symptoms consistent with Ebola disease develop, travellers should seek immediate medical attention (through specific hotline numbers). Travellers should be informed about where to obtain appropriate medical assistance at their destination and whom to inform should they become ill.

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There is a possibility that a person who has been exposed to Ebola virus and developed symptoms may board a commercial flight or other mode of transport, without informing the transport company of his/her status. Such travellers should seek immediate medical attention upon arrival, mention their recent travel history, and then be isolated to prevent further transmission. Information of close contacts of this person on board aircraft should be obtained through collaboration with various stakeholders at points of entry (e.g. airline reservation system) in order to undergo contact tracing.

As the incubation period for Ebola is between 2 to 21 days, travellers involved in caring for EVD patients or who suspect possible exposure to Ebola virus in the affected areas, should take the following precautions for 21 days after returning: 1) Stay within reach of a good quality healthcare facility; 2) Seek immediate medical attention (e.g. through hotline telephone numbers) and mention their recent travel history if they develop EVD-like symptoms.

As of 19 June 2018, 26 countries have implemented entry screening for international travellers coming from Democratic Republic of the Congo, but there are currently no restrictions of international traffic in place. WHO continues to monitor travel and trade measures in relation to this event.

In collaboration with WHO, IOM, Africa CDC and other partners, the Government of the Democratic Republic of the Congo has developed a comprehensive strategic response plan for points of entry, with the goal of avoiding the spread of the disease to other provinces or at the international level. The plan includes mapping strategic points of entry and the locations of areas where travellers congregate and interact with the local population, and therefore are at risk of Ebola virus disease transmission based on population movement. The plan also includes implementing health measures at the points of entry or congregation, including risk communication and community engagement, temperature checks, provision of hand hygiene and sanitation materials, and the development of alert, investigation and referral procedures.

By 18 May 2018, a total of 115 points of entry/congregation had been listed and mapped along three cordon sanitaires in Mbandaka, Bikoro, Iboko, Ntonge, Igende, larger Equateur Province and Kinshasa/Kisangani). It is unrealistic and impractical to assume that proper screening can be conducted at all these points, and the efforts currently focus on the 30 prioritized points of entry/congregation. Further detail on this plan and implementation to date are available via the Disease Outbreak News webpage: http://www.who.int/csr/don/en/. Field exercises were also organized to identify key points of passage and congregation of travellers in Mbandaka as well as in Bikoro and its surroundings with participation of representatives from the population such as local authorities, police, church, trade. This work was facilitated by WHO and PHNF and with the support of IOM.

Screening measures of persons departing or arriving from an affected area include a travel health declaration to evaluate the risk of exposure to Ebola virus, visual observation for EVD-like symptoms, temperature check and travel health promotion measures, as well as procedures for referral of suspect cases. Any person with an illness consistent with EVD is not allowed to travel unless the travel is part of an appropriate medical evacuation. Boarding may be denied based on public health criteria.

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All 30 points of entry (ports and airports) and areas for congregation (markets) are now assessed and gaps identified. On 6 June 2018, the sub-commission of surveillance at PoEs was established and meets daily. The focus of the group is to strengthen screening and sensitization capacity in the 30 prioritized PoEs and congregation sites:

- Establish and disseminate procedures for surveillance (visual observation, screening of travellers, hand hygiene, risk communication)
• Develop a training module for surveillance at PoEs for PNHF agents deployed and to be deployed.

• Quantify gaps in terms of equipment and materials at each PoE.

On 12 and 13 June 2018, a training of trainers took place in Kinshasa for PoEs with PNHF, IOM, WHO, CDC, and JICA with plans for further training in key points of entry.

As of 26 June 2018, the risk of missed cases able to travel during the incubation period (2 to 21 days) was considered very low (outside of Equateur Province and even lower internationally). However it was decided to maintain exit screening at points of entry and congregation sites as a precautionary measure and to prepare a deactivation plan for after the end of the outbreak.

Each day, thousands of travellers are screened by PNHF personnel. However this only represents a small proportion of the populations of travellers. As an example, on 13 June 2018, 3,722 travellers were screened in Bikoro and Mbandaka and their surroundings, as well as in major ports in Kinshasa. Out of a total number of 53,258 travellers counted, around 7% were screened. All alerts detected were discarded after investigation by a rapid response team. As of 26 June 2018, no exported case had been reported.

This is the first time that such a comprehensive approach has been implemented by WHO and partners during an outbreak, including exit screening at international and domestic ports and airports, as well as locations beyond the border where travellers congregate. It is important to review the effectiveness of such measures in detecting suspect cases and the cost-benefit of such investments. A map is being developed to reflect activities at points of entry with key information to facilitate this exercise. In addition WHO has initiated a systematic review of literature to determine which circumstances or criteria need to exist for POE screening to be most effective as an outbreak response measure.

3. Conclusion

There has been significant progress in containing the EVD outbreak in Democratic Republic of the Congo. However, the outbreak is not yet over. The Ministry of Health and other national authorities, WHO, partners, and the global community continue to closely monitor the EVD outbreak in the Democratic Republic of the Congo. The focus of the response remains on intensive surveillance, including active case finding, investigation of suspected cases and alerts and contact tracing. The Ministry of Health, with support from WHO, is planning to review the ongoing response in early July in order to guide reprogramming of interventions, including developing a 90-day response plan after the outbreak.