1. Situation update

The Ebola virus disease (EVD) outbreak in Likati Health Zone, Bas Uele Province in the north east of the country remains stable. As WHO, UN Agencies, international organizations, non-governmental organizations (NGOs) and partners continue to support the Ministry of Health (MoH) in the Democratic Republic of the Congo to ensure the outbreak remains controlled, planning is also underway to declare the end of the outbreak on 2 July 2017.

Since our last update on 27 June, no new confirmed, probable or suspected cases have been reported. Two alerts were reported between 27 June and 28 June. One alert was from Mobenge and the other, a community death in Tobongisa, was considered a suspected case. All the alerts and the suspected cases were subsequently discarded following further investigation.

Cumulatively, since the start of the outbreak, there have been five confirmed and three probable cases. The last confirmed case was isolated on 17 May 2017 and tested negative for EVD by PCR for the second time on 21 May 2017. Of the confirmed and probable cases, four survived and four died, resulting in a case fatality rate of 50%. The confirmed and probable cases were reported from Nambwa (three confirmed and two probable), Muma (one probable), Ngayi (one probable) and Mabongo (one confirmed).

All seven response committees are maintaining functionality at the national level, namely monitoring, case management, water sanitation and hygiene (WASH) and biosafety, laboratory and research, pyscho-social management, logistics, and communication. A response team will remain in the affected areas until the declaration of the end of the outbreak.

The declaration of the end of the outbreak is expected on 2 July following a 42 day period since the last confirmed case tested negative for the second time. The 42 day period is twice the maximum incubation period for Ebola and is used to confirm the interruption of human to human transmission of the disease. Following this period enhanced surveillance will continue for 90 days together with heightened infection, prevention and control measures.

This EVD outbreak in the Democratic Republic of the Congo was notified to WHO by the MoH on 11 May 2017. The cluster of cases and deaths of previously unidentified illness had been reported since late April 2017. Likati Health Zone shares borders with two provinces in the Democratic Republic of the Congo and with the Central African Republic (Figure 1). The affected area is remote and hard to reach, with limited communication and transport infrastructure.
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. Geographical distribution of confirmed and probable cases of Ebola virus disease in the Democratic Republic of the Congo as of 26 June 2017
Current risk assessment

The previous risk assessment undertaken on 16 May 2017 was re-evaluated on 6 June 2017 by WHO in light of the evolution of the outbreak and the available information.

- The overall risk at the national level has been revised to moderate due to the fact that a rapid response team was deployed, field investigation identified cases and contacts and all contacts completed their 21 day monitoring period. A response team remains in the field and treatment units are established.
- The risk at the regional and global level is low as no cases have been reported outside of Likati health zone and the area is remote with limited access and transport to/from the affected area.

WHO advises against the application of any travel or trade restrictions on the Democratic Republic of the Congo based on the currently available information. WHO continues to monitor reports of measures being implemented at points of entry.

WHO’s 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 strategies include (i) coordination of the response, (ii) enhanced surveillance, (iii) laboratory confirmation, (iv) contact identification and follow-up, (v) case management, (vi) infection prevention and control, (vii) safe and dignified burials, (viii) social mobilization and community engagement, (ix) logistics, (x) risk communication, (xi) vaccination, (xii) partner engagement, (xiii) research and (xiv) resource mobilization.

2. Actions to date

In support of the MoH and the other national authorities, an interagency rapid response team was deployed to Likati Health Zone to support the immediate investigation of the outbreak and rapidly establish key pillars of the response at the epicentre. The interagency response team is coordinated by the MoH, and supported by WHO, Institut National de Recherche Biomédicale (INRB), Médecins Sans Frontières (MSF), United Nations Children’s Fund (UNICEF), The Alliance For International Medical Action (ALIMA), International Federation of Red Cross and Red Crescent Societies (IFRC), World Food Programme (WFP), and United Nations Humanitarian Air Service (UNHAS) and other partners.

WHO continues to provide direct technical and operational support to the country, and is collaborating closely with partners to maintain a rapid and effective response to this outbreak.

Coordination of the response

- Regular meetings of the Health Emergency Management Committee (COGUS) at all levels of the response operations continue in the Democratic Republic of the Congo at Health Zone, Provincial and National level, with MOH, and partners.
- Regular coordination meetings of WHO incident management teams in Kinshasa, Brazzaville, and Geneva continue across the 3-Levels of WHO.
- Post-response arrangements are being planned.

Surveillance

- The post-outbreak surveillance response plan for the following 90 days has been sent to the national surveillance committee.
Laboratory

- Briefing and practical exercises conducted amongst clinical staff on the utilisation of Ebola rapid diagnostic tests, phlebotomy, preservation and transport of samples.

Case management

- Support is being provided to the four survivors on prevention against potential sexual transmission of the virus.
- In order to increase access to and use of primary health care services, free health care is operational in Likati covering consultations and essential drug provisions. This has increased service utilisation. Between 31 May 2017 and 28 June 2017, 8,352 patients across 11 health areas.
- The Ministry of Health and WHO have jointly distributed 34 medical kits including essential drugs for malaria, acute respiratory disease and diarrhoeal disease.

Infection prevention and control (IPC) and WASH

- Ongoing distribution and community sensitization on aquatabs and hand washing measures by Red Cross volunteers.
- Community deaths continue to be alerted with safe burials conducted. Joint surveillance and WASH teams are also deployed to investigate and sensitize funeral attendees.
- PPE has been distributed to the teams conducting safe burials
- A distribution plan for bucket with taps in collaboration has been developed.

Social mobilization, community engagement and risk communications

- The psychosocial support plan are currently being finalized
- Sensitization of mosque and church leaders on Ebola
- Awareness-raising sessions through video projections have been held
- Continued community sensitization on use of aquatabs and handwashing by Red Cross volunteers.

Logistics

- Since the beginning of the outbreak, WHO has set up and maintained an airlift between Kinshasa and the affected area, and provides logistic support to response activities. Three logistic bases in Kinshasa, Kisangani, and Likati are still operational and continue to assist with deployment of WHO staff and partner organizations (including UNICEF, MSF, ALIMA, and Red Cross), to and from the affected areas including transportation of over 10 metric tons of materials and equipment.
- WHO logistics team continue to support the distribution of donated drugs and hospital supplies to the health areas in Likati as part of the temporary free medical care programme.
- Planning for the repatriation of staff and return or distribution of equipment has commenced.
- An electrical lighting system has been installed at the Likati hospital

Partnership

- WHO and GOARN continue to mobilize partners to provide technical and logistical support to the country, and work closely together with UN Clusters, stakeholders and donors to ensure appropriate support for the response.
- GOARN Operational Support Team hosts weekly assessment and coordination teleconference for operational partners on current outbreaks of international concern, particularly the EVD outbreak in DRC.
- At the request of Dr Salama (Executive Director of the WHO Health Emergencies Programme) at WHO HQ convened a time-limited Ebola Inter-Agency Coordination Group with senior leadership from MSF, IFRC, UNICEF, US CDC and WFP, to provide agency updates about response actions and discuss any critical coordination issues.
IHR travel measures

WHO does not currently recommend any restrictions of travel and trade in relation to this outbreak.

As of 26 June 2017, nine countries have instituted entry screening at airports and ports of entry (Kenya, Malawi, Nigeria, Rwanda, South Africa, Uganda, the United Republic of Tanzania, Zambia and Zimbabwe), and one country has issued travel advisories to avoid unnecessary travel to the Democratic Republic of the Congo (Rwanda). Two countries (Kenya and Rwanda) implemented information checking on arrival for passengers with travel history from and through the Democratic Republic of the Congo. These measures are within the prerogative of the States Parties and do not qualify as additional health measures that significantly interfere with international traffic under Article 43 of the IHR (2005).

In addition, Rwanda instituted denial of entry for passengers with fever travelling from the affected areas in the Democratic Republic of the Congo, which significantly interferes with international traffic, in accordance with Article 43 of the IHR (2005). WHO is working with Rwandan authorities to receive the public health rationale and scientific evidence for this measure. It is expected that the measure will be rescinded once the outbreak in Democratic Republic of Congo is declared ended.

3. Summary of public health risks, needs and gaps

As the outbreak draws to an end, the withdrawal of partners from the response area is being carefully planned. This plan will also consider the gaps that will be left once partners have withdrawn. While the free healthcare policy has seen a large increase in healthcare utilization, long term financing and technical support of the facilities in Likati will need to be addressed to ensure sustainability. The most critical needs include enhanced surveillance activities, maintenance of laboratory capacity in the field to enable rapid confirmation of results, and enhancement of IPC measures. The Ministry of Health with the support of WHO and partners will be looking to address these in the 90 post-Ebola plan which is now under review by the national surveillance committee.
### Annex 1: Ebola virus disease outbreak epidemiological data

<table>
<thead>
<tr>
<th>Cases</th>
<th>Date of data collection</th>
<th>Nambwa</th>
<th>Muma</th>
<th>Ngayi</th>
<th>Azande</th>
<th>Ngabataa</th>
<th>Mogenbe</th>
<th>Mabongo</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected</td>
<td>28/06/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Probable</td>
<td>28/06/2017</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Confirmed</td>
<td>28/06/2017</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>total cases</strong></td>
<td><strong>28/06/2017</strong></td>
<td><strong>5</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>8</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Deaths</th>
<th>Date of data collection</th>
<th>Nambwa</th>
<th>Muma</th>
<th>Ngayi</th>
<th>Azande</th>
<th>Ngabataa</th>
<th>Mogenbe</th>
<th>Mabongo</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths among suspected cases</td>
<td>28/06/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among probable cases</td>
<td>28/06/2017</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Deaths among confirmed cases</td>
<td>28/06/2017</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>total deaths registered</strong></td>
<td><strong>28/06/2017</strong></td>
<td><strong>3</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Date of data collection</th>
<th>Nambwa</th>
<th>Muma</th>
<th>Ngayi</th>
<th>Azande</th>
<th>Ngabataa</th>
<th>Mogenbe</th>
<th>Mabongo</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total contacts registered</td>
<td>28/06/2017</td>
<td>197</td>
<td>116</td>
<td>180</td>
<td>11</td>
<td>10</td>
<td>6</td>
<td>63</td>
<td>583</td>
</tr>
<tr>
<td>Contacts of non-cases no longer under follow-up</td>
<td>28/06/2017</td>
<td>70</td>
<td>28</td>
<td>72</td>
<td>33</td>
<td>10</td>
<td>1</td>
<td>12</td>
<td>226</td>
</tr>
<tr>
<td>Total contacts under follow-up</td>
<td>28/06/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Contacts seen</td>
<td>28/06/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Contacts who have completed 21 days follow-up</td>
<td>28/06/2017</td>
<td>118</td>
<td>77</td>
<td>93</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>51</td>
<td>357</td>
</tr>
<tr>
<td>Contacts lost to follow-up</td>
<td>28/06/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Laboratory</th>
<th>Date of data collection</th>
<th>Nambwa</th>
<th>Muma</th>
<th>Ngayi</th>
<th>Azande</th>
<th>Ngabataa</th>
<th>Mogenbe</th>
<th>Mabongo</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases with a positive result</td>
<td>28/06/2017</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>2 cases had a positive PCR result and 3 cases were classified as positive following increasing IgG titres. The last confirmed patient had their second EVD PCR negative specimen collected on 21/05/17 following recovery.</td>
</tr>
<tr>
<td>Animal samples</td>
<td>28/06/2017</td>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Samples were collected after unusually high number of deaths in pigs. As of 12/06/17, 12 pig and 6 goat samples initially tested Ebola PCR negative. Samples from ducks that hand presented with haemorrhagic signs were Ebola-PCR negative.</td>
</tr>
</tbody>
</table>
Annex 2: Timelines of key activities during the EVD outbreak in Likati, Democratic Republic of the Congo