1. Situation update

WHO, UN Agencies, International organizations, non-governmental organizations (NGOs) and partners continue to support the Ministry of Health in the Democratic Republic of Congo to rapidly investigate and respond to the outbreak of Ebola virus disease (EVD) in Likati Health Zone, Bas Uele Province located in the north-east of the country.

On 23 May 2017, no new confirmed or probable EVD cases were reported. One suspected EVD case was reported from Muma Health Area in Likati Health Zone. The last confirmed case was reported on 11 May 2017.

Currently there are a total of two confirmed cases, three probable and 30 suspected cases. The confirmed and probable cases were reported from Nambwa (one confirmed and two probable) and Muma (one confirmed and one probable). The suspected cases have been reported from seven health areas (Nambwa, Muma, Ngayi, Azande, Ngabatala, Mobenge and Mabongo). No healthcare workers have been affected to date. The majority of the cases presented with fever, vomiting, bloody diarrhoea and other bleeding symptoms and signs. The outbreak currently remains confined to Likati Health Zone.

On 23 May, 177 contacts completed the 21 day monitoring period for Ebola-like signs and symptoms. Additionally a further 101 contacts were identified who had been exposed to a suspected case of Ebola. Therefore as of 23 May 2017, 294 contacts remain under follow up for signs and symptoms of Ebola.

All seven response committees are now established and functional at national level, namely Monitoring, Case management, WASH and biosafety, Laboratory and research, Psyco-social management, Logistics and Communication. Additionally response teams have been established in the three most affected areas, Nambwa, Muma and Ngay.

This EVD outbreak in the Democratic Republic of Congo was notified to WHO by the Ministry of Health (MoH) on 11 May 2017. The cluster of cases and deaths of previously unidentified illness have 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 areas are remote and hard to reach, with limited communication and transport networks.
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, recategorization, and case, contact and laboratory data consolidation.
Current risk assessment

- The risk is high at the national level due to the known impact of Ebola outbreaks, remoteness of the affected area, and limited access to health care including suboptimal surveillance.
- The risk at the regional level is moderate due to the proximity of international borders and the recent influx of refugees from Central African Republic.
- The risk is low at global level due to the remoteness and inaccessibility of the area to major international ports.

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

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 has been deployed in 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 and supported by the MoH, INRB, WHO, MSF, UNICEF, ALIMA, IFRC, WFP, UNHAS and other partners.

Since the declaration of the outbreak, WHO (Country Office, Regional Office for Africa (AFRO), and HQ) are providing direct technical and operational support to the country, and collaborating closely with partners in order to ensure 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 country (Health Zone, Provincial and National level).
- Regular coordination meetings continue across the 3-Levels of WHO (Country, Regional and National level).
- On 23 May a meeting was held at the WHO Country office to discuss mechanisms for improvement of the data and information flow.

Surveillance

- Identification of suspect cases and contacts continues to be carried out through active search methods in the communities affected.
- On 23 May one new suspected case was identified in Muma health area.
- Challenges to rapidly communicate information from the field to the central level are experienced due to the poor/lack of network coverage.
**Laboratory**

- As of 20 May the mobile laboratory in Likati began processing samples from suspected EVD cases.
- An additional mobile lab is due to arrive in Buta to enable more timely processing of laboratory samples collected in the field.
- Additional laboratory equipment and reagents have been received from partners.

**Contact identification and follow-up**

- On 23 May, 177 contacts completed the 21 day monitoring period for Ebola-like signs and symptoms.
- A further 101 contacts were identified who had been exposed to a potential case of Ebola.
- Therefore as of 23 May 2017, 294 contacts remain under follow up across seven health areas.
- Contact follow up remains challenging due to the limited personnel and equipment (thermo-laser thermometers) and the remoteness of the affected area.

**Case management**

- The second samples for all five patients in the ETC in Likati tested negative for EVD by PCR and therefore were considered not cases of EVD.
- The most recent case was admitted on 20 May.
- A support protocol for use in the ETC has been developed by MSF, ALIMA and MSP.
- Differential diagnosis is required for non-Ebola patients.

**Vaccination**

- The government of the Democratic Republic of the Congo and MSF with support of WHO and other partners are preparing to offer access to the rVSV EEBOV experimental/investigational vaccine. The vaccine will be offered to contacts and contacts of contacts of a confirmed EVD case, including Health Care Workers and Field Laboratory Workers. This will be done with informed consent.
- Approval from the national regulatory authority and Ethics Review committee of the Democratic Republic of the Congo is awaited before proceeding.

**Infection prevention and control and WASH**

- Training continues in Muma and Ngay health zones for members of the Red Cross in how to prepare chlorine solutions, disinfect homes and conduct safe burials.
- Water supply points in Likati city have been reviewed and it was discovered that only one is protected.
- WASH Standard Operating Procedures have been adapted for field use.
- Personal Protective Equipment (PPE) is being distributed to the health facilities of the affected health area and will be extended to the entire Likati health zone and bordering one for “ring” protection.

**Social mobilization, community engagement and risk communications**

- Awareness raising continues through radio messaging in Likati as well as risk communication in churches and markets.
- Advocacy with political and administrative authorities for their involvement in sensitisation of communities continue.
Health Emergency Information and Risk Assessment

**Logistics**

- WHO and major logistics partners, including WFP, and UNHAS continue to mobilize shipments of logistics equipment and supplies by air transport and by road to Likati and Nambwa to set up and support the working base for the field teams.
- A satellite communication device large enough to support a 20 member office will be ready to be deployed by the end of the week.
- Work on the Likati-Nambwa and Likati-Muma roads has started to allow movement of vehicles for easier movement of human and material resources.
- A convoy of three vehicles has been organized to test the road conditions between Buta and Likati. It took three full days to reach the destination and the road is considered impassable in this season.
- The logistics team is working on a boat transport solution to travel from Buta to Likati and Muma.

**Resources mobilization**

- The Government of the Democratic Republic of Congo has developed a comprehensive national response plan to the EVD outbreak based on the recognised effective activities to rapidly control an outbreak. The response plan and national budget amounting to US$ 14 million, has been presented and discussed with partners and stakeholders in Kinshasa.
- WHO and partners are developing a strategic response plan to support national activities and frame and coordinate the support of international partners and stakeholders.
- The Minister of Public Health of the Democratic Republic of the Congo has requested WHO’s support to strengthen the response to the outbreak, and coordinate the support of major UN, NGO and International Organizations, and partners in the Global Outbreak Alert and Response Network (GOARN). Funding is urgently needed to ensure that WHO and partners can effectively support the Government to implement activities as part of the joint rapid response. A donor alert was therefore issued for US$ 10 Million.

**Environmental investigations**

- A consortium of institutions from France, Belgium, United States, and Germany has offered to support the country in looking at the potential origin of the infection of the current outbreak, at the animal-human interface. Given the very isolated locations, and logistics challenges, and limited basic infrastructure, environmental investigations are not yet carried out nor immediately planned; health authorities want to first confirm the exact origin/index case and implement rapid containment measures to end chains of transmission, and provide support to cases and patients, and affected communities.

**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 a weekly update for operational partners. On 25 May there will be a joint teleconference with GOARN partners, Global Health Cluster, Emergency Medical Teams and Standby Partners for an update on the field situation.
- At the request of Dr Salama (Executive Director WHE), WHO HQ convened a time-limited Ebola Inter-Agency Coordination Group with senior leadership from MSF, IFRC, UNICEF, USCDC 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 24 May 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 Zimba-
bwe), and one country has issued travel advisories to avoid unnecessary travel to the Democratic Republic of Congo (Rwanda). Two countries (Kenya and Rwanda) implemented information checking on arrival for passengers with travel history from and through the Democratic Republic of 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).

On 20 May media reported closure of border of Rwanda for passengers coming from affected areas in the Democratic Republic of the Congo. On 23 May the WHO country office confirmed that the Rwandan authorities deny entry to visitors with fever who have been to the affected areas of the Democratic Republic of the Congo. Under Article 43 of the IHR (2005), this is considered as an additional measure with significant interference on international traffic. The WHO country office is now following up with MoH to obtain and review public health rational and relevant scientific information for implementing such measures. As per the IHR(2005) WHO shall share this information with other States Parties.

3. Summary of public health risks, needs and gaps

The most critical needs include access to the affected areas to enable the timely deployment of required human and material resources, the need to establish appropriate isolation and treatment facilities, the need to establish internet connectivity for coordination between the teams in the field and scaling up implementation of control interventions.

Proposed ways forward include:

- Continue rapid scaling up and sustain implementation of immediate response interventions in all the essential pillars of the EVD response.
- Provide additional means of transport for the team in the field.
- Establish additional EVD isolation and treatment facility in Muma.
- Continue to train burial teams in the safe and dignified burial of dead persons.
- Source additional laboratory technicians to scale up sample analysis.
- Continue with the deployment of national and international experts to the affected areas.
- Mobilise needed resources, including telecommunications and air transport logistics to ease communication and access to the affected areas.
- Strengthen capacity for outbreak alert and response to investigate rumours.
- Strengthen cross border collaboration and preparedness particularly in CAR, and bordering areas of the Province.
## Annex 1: Ebola virus disease outbreak epidemiological data in Likati, Democratic Republic of the Congo

### Situation as of 23 May 2017

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reported cases, deaths and contacts 23/05/2017</th>
<th>Cumulative cases, deaths and contacts 23/05/2017</th>
<th>Health area</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nambwa</td>
<td>Muma</td>
</tr>
<tr>
<td>Cases</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Suspected</td>
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<td>23</td>
<td>7</td>
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<tr>
<td>Probable</td>
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<td>0</td>
</tr>
<tr>
<td>Confirmed</td>
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<td>2</td>
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</tr>
<tr>
<td>Non-case (Negative PCR)</td>
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<td>4</td>
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<tr>
<td>Total cases registered</td>
<td>7</td>
<td>49</td>
<td>27</td>
<td>7</td>
</tr>
<tr>
<td>Total cases</td>
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<td>35</td>
<td>22</td>
<td>3</td>
</tr>
<tr>
<td>Alerts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deaths among suspected cases</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among probable cases</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among confirmed cases</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total deaths registered</td>
<td>0</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Health workers</td>
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<td>Confirmed cases among health workers</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Probable cases among health workers</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among health workers</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Admissions and discharges</td>
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<td>Admission in ETUs</td>
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<td>Discharges in ETUs</td>
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<tr>
<td>Number of cases currently in ETUs</td>
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<tr>
<td>Contacts</td>
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<td></td>
</tr>
<tr>
<td>Total contacts registered</td>
<td>101</td>
<td>520</td>
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<td></td>
</tr>
<tr>
<td>Contacts who completed 21 days of follow up</td>
<td>177</td>
<td>226</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacts currently under follow up</td>
<td>294</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacts seen today</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contacts lost to follow up</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samples collected today</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Samples currently being tested</td>
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<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Samples tested</td>
<td>38</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cases with a positive PCR results</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Date of confirmation of last case</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Age-group</td>
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<td></td>
</tr>
<tr>
<td>Cases less than 5 years</td>
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<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Deaths less than 5 years</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cases above 5 years</td>
<td>7</td>
<td>33</td>
<td>17</td>
<td>1</td>
</tr>
<tr>
<td>Deaths above 5 years</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>
Annex 2: Timelines of key activities during the EVD outbreak in Likati, Democratic Republic of Congo

- **Putative index case**: April 21, 2017
- **Initial field investigation by Likati Rapid response team**
- **Collection of 5 samples from suspected cases**
- **High level WHO and MOH meeting**: April 21, 2017
- **WHO Regional Director mission to DRC**: April 15, 2017
- **First situation report developed**: April 9, 2017
- **WHO press release on the declaration of the outbreak by the MoH**
- **EVD positive specimens testing by INRB Laboratory**
- **Official declaration of the 8th Ebola outbreak by the MoH**: April 8, 2017
- **Grading of the outbreak as grade 2 by WHO**: April 13, 2017
- **Press conference by RD and Executive Director**: April 17, 2017
- **Joint MoH and WHO leadership mission to the affected areas**: April 17, 2017
- **Mobile laboratory begins sample analysis in Likati**: May 20, 2017
- **Shipment of samples to CIMRF, Gabon**: May 16, 2017
- **Ebola Treatment Centre established**: May 20, 2017