1. Situation update

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 rapidly investigate and respond to the outbreak of Ebola virus disease (EVD) in Likati Health Zone, Bas Uele Province in the north-east of the country.

On 31 May 2017, no new confirmed, probable or suspected EVD cases were reported. The last confirmed case was reported on 11 May 2017. There are currently a total of two confirmed, three probable and 12 suspected cases.

The confirmed and probable cases were reported from Nambwa (two confirmed and two probable) and Ngayi (one probable). The suspected cases are reported from four health areas (Nambwa, Muma, Ngayi and Ngabatala). The outbreak remains confined to Likati Health Zone. As of 31 May, 29 further contacts completed the monitoring period and did not show signs and symptoms of Ebola, 72 contacts remain under follow up.

The previously undertaken modelling to determine the risk of further cases was updated with newly available onset dates for the five confirmed / probable cases. Results suggest the risk of further cases is currently low but not negligible, and decreases with each day without new confirmed/probable cases. As of the reporting date, 76% of simulated scenarios predict no further cases in the next 30 days.

All seven response committees are functional at a national level, namely monitoring, case management, water sanitation and hygiene (WASH) and biosafety, laboratory and research, psycho-social management, logistics, and communication. Additionally response teams have been established in the affected areas.

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, 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 WHO according to the evolution of the outbreak 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 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), 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 is 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 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.

Surveillance

- Identification of suspect cases and contacts continues to be carried out through active search methods in the communities affected.
Laboratory

- The mobile laboratory in Likati continues to undertake testing for EVD cases.
- A laboratory has been established at the general hospital in Buta which will assist in providing differential diagnosis for patients who test negative for EVD; the list of available tests, in addition to Ebola PCR, includes: Hepatitis B, Hepatitis C, Hepatitis E, Yellow Fever (ELISA), bacteriology (Shigella, Salmonella), haemoculture and malaria (rapid diagnostic test).

Contact identification and follow-up

- On 31 May 2017, 29 contacts completed the follow up period.
- 72 contacts remain under follow up and are expected to complete monitoring on 2 June 2017 if none show signs or symptoms of EVD.

Case management

- The case management commission has defined the profiles of nurses and medical doctors (2 nurses and 1 medical doctor per health area) to be deployed to the Likati Health Zone. Deployment is to last at least 3 months to ensure primary health care as well as training of local health care providers. A minimum package of activities is being developed and funding is being sought.
- Support is being provided to survivors on prevention against potential sexual transmission of the virus.

Vaccination

- The protocol for a possible ring vaccination has been formally approved by the national regulatory authority and Ethics Review Board of the Democratic Republic of the Congo Vaccine.
- International vaccine deployment and cold chain shipment to DRC is not advised at this point. Planning and arrangements should be in place for immediate deployment if necessary.
- The government of the Democratic Republic of the Congo and MSF with support of WHO and other partners are working on detailed planning and readiness to offer access to the rVSV ZEBOV experimental/investigational vaccine, within the Expanded Access framework, with informed consent and in compliance with good clinical practice.
- Planning and readiness should be completed urgently to be able to rapidly initiate ring vaccination should an EVD laboratory confirmed case be identified outside already defined chains of transmission. The vaccine would be offered to contacts and contacts of contacts of a confirmed EVD case, including health care workers and field laboratory workers.
- MOH, with support from WHO and partners continue active surveillance and response activities, including completing the contact follow-up period for already identified contacts, and conducting rapid laboratory evaluation of suspected cases as per WHO guidelines.

Infection prevention and control and WASH

- Following a rapid review of WASH/IPC requirements in four health areas and the Likati hospital, gaps have been identified in terms of lack of latrines, showers, waste management equipment, and running water.

Social mobilization, community engagement and risk communications

- Negotiations are ongoing with mobile phone providers for broadcasting of awareness and prevention messages to increase coverage of these key messages.
Logistics

- The logistics team is defining the phase out support plan. A number of working stations, telecommunication equipment, and staff transportation will be secured to support the remaining activities for the month of June.
- Support will be provided to WHO partners for the decontamination of the facilities and equipment that has been used during the response.
- The UNHAS helicopter contracted by the WHO is operational again. Transport planning is being established to ensure the right frequency of rotation for the transport of WHO staff members and partners.
- A VSAT is set and functional. It is providing communication access to WHO, MOH and partners.

Emergency Public Communication

- A photo story highlighting the work by WHO and partners in following up reports of suspect cases, training Red Cross volunteers in safe burial procedures, and community engagement explaining to villagers how to prevent the spread of Ebola virus disease has been posted on the web. It can be accessed on http://who.int/emergencies/ebola-DRC-2017/articles/working-with-partners/en/

Resources mobilization

- The Government of the Democratic Republic of the 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

- Following unusually high mortality in the local swine population in Nambwa Health Area and investigation is being undertaken by authorities. 61 samples are being tested, including: blood samples from 30 pigs and 2 goats, and nasal swabs from 29 pigs.

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.
**Preparedness**

- The Central African Republic has requested support for training in Bangassou (a city on the border with the Democratic Republic of the Congo) in two areas;
  - Case management for healthcare workers including Infection Prevention and Control
  - Contact tracing, social mobilization and alert management for community health workers
- A WHO evaluation mission will be deployed next week to Bangui, the capital of the Central African Republic to work with Country Office and Ministry of Health to develop a strategy for training in clinical management.

**IHR travel measures**

- WHO does not currently recommend any restrictions of travel and trade in relation to this outbreak.
- As of 31 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 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. WHO is currently working with Rwandan authorities to receive the public health rationale and scientific evidence for this measure, which significantly interferes with international traffic, in accordance with Article 43 of the IHR (2005).
- A request for verification is ongoing with Nigerian authorities in relation to denial of entry of human remains travelling from Democratic Republic of the Congo and potential sanctions against Kenyan Airlines in relation to this measure.

**3. Summary of public health risks, needs and gaps**

The most critical needs include continued daily contact tracing and active case search to ensure no suspected case is undetected, maintenance of laboratory capacity in the field to enable rapid confirmation of results, the need for differential diagnosis of those who remain sick but have tested negative for EVD, enhancement of IPC measures and planning for strengthening of the surveillance system post-response activities.
## Annex 1: Ebola virus disease outbreak epidemiological data in Likati, Democratic Republic of the Congo

### Situation as of 31 May 2017

#### Cases

<table>
<thead>
<tr>
<th>Date of data collection</th>
<th>Nambwa</th>
<th>Muma</th>
<th>Ngayi</th>
<th>Azande</th>
<th>Ngabatala</th>
<th>Mogenbe</th>
<th>Mabongo</th>
<th>Cumulative (since beginning of the outbreak)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suspected</td>
<td>30/05/2017</td>
<td>6</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Probable</td>
<td>30/05/2017</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>30/05/2017</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Deaths

<table>
<thead>
<tr>
<th>Date of data collection</th>
<th>Cases</th>
<th>Suspected</th>
<th>Probable</th>
<th>Confirmed</th>
<th>Total deaths registered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deaths among suspected cases</td>
<td>30/05/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among probable cases</td>
<td>30/05/2017</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Deaths among confirmed cases</td>
<td>30/05/2017</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Contacts

<table>
<thead>
<tr>
<th>Date of data collection</th>
<th>Total contacts registered</th>
<th>Contacts of non-cases no longer under follow-up</th>
<th>Total contacts under follow-up</th>
<th>Contacts seen</th>
<th>Contacts lost to follow-up</th>
<th>Contacts seen</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/05/2017</td>
<td>197</td>
<td>116</td>
<td>180</td>
<td>11</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>63</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>583</td>
</tr>
</tbody>
</table>

#### ETU admissions and discharges

<table>
<thead>
<tr>
<th>Date of data collection</th>
<th>Admissions to ETUs</th>
<th>Discharges from ETUs</th>
<th>Number of cases currently in ETUs</th>
<th>Number of suspected cases followed up at home</th>
<th>Laboratory</th>
</tr>
</thead>
<tbody>
<tr>
<td>30/05/2017</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Samples collected</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Samples tested</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cases with a positive PCR result</td>
</tr>
</tbody>
</table>
Annex 2: Timelines of key activities during the EVD outbreak in Likati, Democratic Republic of the Congo