Northeast DRC EBOLA OUTBREAK

CRISIS INFO # 5 (15.11.2018)

THE TIMELINE

- **30/7:** MSF is informed about suspect cases of Ebola near Beni/Mangina, North Kivu. On 31/7, an MSF team from the nearby project in Lubero (three hours away) arrives (with the MoH) to investigate.
- **1/8:** The MoH declares an Ebola outbreak in Mangina, North Kivu, in north-eastern DRC.
- **6/8:** An MSF isolation unit is installed in the Mangina reference health centre, trainings are held on the use of personal protective equipment (PPE), triage, and infection prevention & control (IPC).
- **7/8:** Results of genetic analysis from the national laboratory confirm that the circulating virus is of the Zaire species, but a different strain from the one reported in the Equator outbreak earlier this year.
- **8/8:** Vaccination of frontline health workers begins under WHO's supervision (not done by MSF).
- **14/8:** MSF's treatment centre opens in Mangina (in tents 300m from the isolation unit). 37 suspected and confirmed cases are admitted on opening day. Originally designed for 30 beds, its capacity has immediately been extended to 68 beds and can be extended to 74 if needed.
- **14/08:** Decontamination of the local health centre in Mangina and other health centres where confirmed cases had transited.
- **24/08:** MSF begins offering experimental therapeutic drugs to patients in the ETC in Mangina.
- **28/08:** MSF opens a transit centre in Makeke (Ituri province).
- **08/09:** MSF opens an isolation centre in Butembo and begins building an ETC.
- **09/09:** MSF sends a team to Luhotu (one hour from Lumbero) to investigate a recent case.
- **19/09:** Makeke transit centre closes, because a new ETC opens, constructed by IMC.
- **20/09:** MSF opens a 28-bed (12 isolation, 16 hospitalisation) ETC in Butembo in partnership with the Ministry of Health.
- **22/09:** An attack attributed to ADF makes at least 19 dead (of which 14 civilians) in Beni. The following week, Beni is declared 'ville morte' and Ebola response activities come to a virtual stop.
- **24 /09:** MSF sends a team to Tchomia, on Lake Albert in Ituri, following notice of 2 confirmed cases. MSF sets up an isolation unit and, with the Ministry of Health, prepares to set up a 12-bed ETC.
- **27/09:** MSF ends its presence in Luhotu as no new cases have appeared.
- **12/10:** Opening of the CTE in Tchomia.
- **17/10:** WHO discusses whether the situation is a Public Health Emergency of International Concern (PHEIC) but announces publicly that for now, no PHEIC will be declared.
- **17/10:** MSF starts vaccinating front line workers in the city of Beni
- **20/10:** An attack attributed to ADF in Beni's Rwenzori area makes at least 12 dead. Ten people are also reportedly abducted. On the next day, Beni is declared again "ville morte" and some demonstrations happen in the city. On Monday, all activities restarted well.
- 05/11: The Tchomia ETC is handed over to the MOH. The outbreak reaches the 300rd case, 3 months after its beginning
- 07/11: MSF opens an Isolation Center in the premises of the General Hospital in Bunia, Ituri.
- 09/11: The outbreak reaches the 319th case and becomes the biggest ever known in the country.
- 15/11: MSF opens a transit center for suspect cases in Beni, the current epicenter of the outbreak, to enhance the capacities of the current ETC.

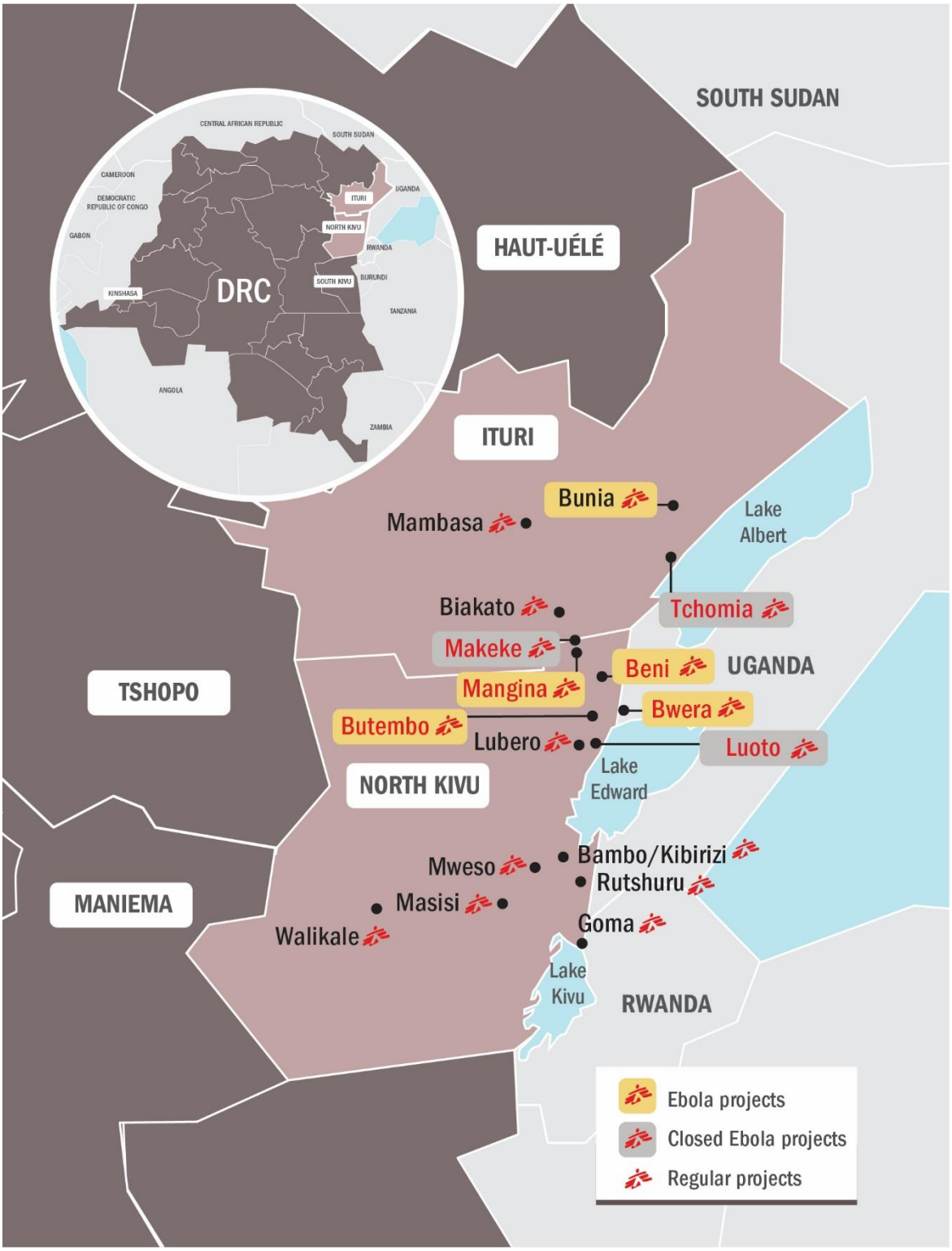
THE AREA

Mangina, the first epicentre of the outbreak, (40,000 inhabitants) is located in North Kivu, in north-eastern Democratic Republic of Congo. Since October the epicentre has moved to Beni, the administrative centre of the area, 32 km away (45 minutes by car) and home to approximately 420,000 inhabitants. Butembo, located 1.5 hours by car to the south of Beni, is a city of about 1 million inhabitants which is also seeing new confirmed cases every week.

The region of North Kivu is a densely populated area of conflict, where more than one hundred armed groups are estimated to be active. Moving around some areas in the region is quite difficult and sometimes impossible. Kidnappings and car jackings are relatively common and skirmishes between armed groups occur regularly across the area. While most of the urban areas are relatively less exposed to the conflict, attacks and explosions have nonetheless taken place in Beni as well, sometimes limiting MSF action.

North Kivu shares a border with Uganda to the east (Beni is approximately 100 km from the border). This area sees a lot of trade, but also traffic, including 'irregular' crossings. Some communities live on both sides of the border meaning that it is quite common for people to cross the border to visit relatives or trade goods at the market on the other side.

The outbreak has spilled in to the neighbouring province of Ituri, but the majority of cases still occurs in North Kivu.



THE OUTBREAK

The numbers

Total number of cases as per Ministry of Health data on the 16/11/2018 (you can always find the latest numbers on the twitter account of the Congolese Ministry of Health: https://twitter.com/MinSanteRDC)

- Total number of cases: 344 (304 confirmed + 40 probable*)
- Total number of people died: 202 (162 confirmed + 40 probable)
- Total number of people cured: around 100

* 'Probable' refers to community deaths that have links to confirmed Ebola cases but which were not tested before burial.

The situation today

14 health zones in North Kivu and Ituri provinces (Ituri: Mandima, Komanda & Tchomia. North-Kivu: Mabalako, Beni, Oicha, Butembo, Kalunguta, , Masareka, Musienene , Kyondo, Katwa,, Vuhovi & Mutwanga) have so far reported confirmed or probable cases of Ebola.

More than 3 months after the declaration of the epidemic, the epicentre has moved from the town of Mangina to the much bigger city of Beni, where the number of confirmed cases has shown a clear increase in October. The fact that many of the new cases are not linked to any previously known chains of transmissions is a concern, as it makes it more difficult to trace contacts and control the evolution of the outbreak. Moreover, the number of cases keeps increasing in the ETC of Butembo, a city three times bigger than Beni in terms of inhabitants, although most patients are "imported cases" from health zones outside of the city.

Another reason for concern is the geographically scattered pattern of the outbreak. The epidemic is very close to the Ugandan border, increasing the risk of a spill over into this country. The government of Uganda has started a vaccination campaign targeting 3000 front line workers as a preventive measure. The South Sudanese government announced the enhancement of its Ebola related capacities and some Rwanda Red Cross Staffs followed a safe and dignified burial training.

Epidemiological teams are still working on identifying all active chains of transmission. This is not simple given that the local community in the affected areas is highly mobile and moves from village to village for work and family reasons, as well as to seek healthcare. Sick people have been known to visit more than one health centre before being identified as suspect cases and referred to an Ebola Treatment Centre.

The beginning of the outbreak

Retrospective investigations point to a likely start of the outbreak back in May. The delay in alert/response can be attributed to several factors, including a breakdown of the surveillance system due to strikes by local health staff whose salaries had not been paid for several months, as well as the difficult security situation (limitations to movement, difficulty of access).

A person died at home after presenting symptoms of haemorrhagic fever. Family members of that person developed the same symptoms and also died. A joint Ministry of Health/WHO investigation on site found six more suspect cases, of which four tested positive. This result led to the declaration of the outbreak on 1 August.

The national laboratory (INRB) confirmed on 7 August that the current outbreak is the Zaire species of the virus. This is the most deadly species, but also the one for which a vaccine and treatments are in development. It is the same species that affected West Africa in 2014-2015 as well as Equator province, in western DRC, earlier in 2018 – although the virus' strain was different from one outbreak to another, so the outbreaks are *not* linked.

MSF'S ROLE

At the Ministry of Health's request, MSF is part of the national strategic groupcoordinating the intervention on several pillars of the response:

- Caring for patients affected by the virus in ETC (Mangina, Butembo, Tchomia) and suspect cases (Beni, Bunia);
- Communication & Health Promotion toward the communities;
- Vaccination of frontline workers;
- IPC (Infection Prevention & Control): protecting local health structures (and their workers) by helping with screening patients at the entrance, hand and foot disinfection, capacity for short-term isolation of suspect patients and decontamination of the facilities where confirmed Ebola patients have transited;
- Trainings of staff;
- Supporting surveillance activities.

In total, more than 100 MSF staff members are currently working in Ebola projects in North Kivu and Ituri. This excludes MOH personnel working in MSF structures, in order to keep a clear distinction between MSF and MOH in our public communication.

Isolation and treatment centres

MSF first helped to improve an isolation unit for suspect and confirmed cases that the local staff had quickly set up in the Mangina health centre, the first epicentre of the outbreak, where patients were isolated and cared for, while a treatment centre was being built. The treatment centre opened on 14 August. The centre had initially a capacity of 68 beds; it has since been reduced to 24 beds as the volume of activity in Mangina has dwindled and the focus of the outbreak shifted to other areas.

An isolation centre was also built in early August by MSF in Beni and handed over to the Ministry of Health, who assigned it to another NGO, Alima. This is now a treatment centre supported by Alima.

A second ETC built and run by MSF is operational in Butembo, a town estimated to be home to 1,000,000 people that sees imported cases from Beni. MSF responded to the alert by setting up an isolation centre in a local hospital in Katwa, followed by an Ebola Treatment Centre – jointly operated by MSF and the Ministry of Health on 20 September, with a capacity of 32 beds (12 beds for confirmed and 20 for suspect cases).

A third ETC was opened on 12 October following the appearance of confirmed cases in Tchomia, Ituri Province, on Lake Albert (on the Ugandan border). This treatment centre was handed over to the MOH on 5th November, following an extended period with no new cases being reported. MSF supported the Ministry of Health personnel working in the centre by providing training, logistic support and technical expertise.

MSF also operated for a few weeks a 7-bed transit centre in Makeke (on the North Kivu-Ituri border), where suspect patients could be isolated and tested for the virus and transferred to Ebola Treatment Centres in Mangina or Beni. The centre has now been closed because the Ministry of Health and IMC (International Medical Corps) opened an ETC in Makeke.

During the first week of November, MSF opened a new, Isolation Centre on the premises of the General Hospital in Bunia, Ituri, with a hospitalisation capacity of 16 beds as well as a screening point at the entrance (with more than 2,000 people screened each day) and a small isolation unit for suspect cases.

In Butembo, an extension of the new ETC has just been completed and will allow the teams to increase the capacity of the structure to a total of 64 beds.

On 14 November, MSF opened a Transit Center for suspect cases in Beni. The new transit centre is located approximately 200 meters from the existing ETC supported by Alima. Confirmed cases are transferred by ambulance from the Transit Centre to the ETC; those who turn out to be negative are referred to other health structures in the area, to facilitate their access to care for other health problems.

Treatment with developmental drugs

In these ETCs, MSF teams have been progressively increasing the level of supportive care (oral and IV hydration, treatment for malaria and other coinfections as well as treatment of the symptoms of Ebola) and have also been able to offer new experimental therapeutic treatments to patients with confirmed Ebola infection under the MEURI protocol. A team of clinicians makes the choice on an *ad hoc* basis between five potential drugs (Remdesivir (GS5734), REGN3470-3471-3479, ZMapp, mAb114 and Favipiravir). The treatments are given only with the informed consent of the patient (or a family member if they are too young or too sick to consent) and are provided in addition to the supportive care.

These five drugs have not passed clinical tests yet and we are unable to measure their efficacy - yet their utilization has been approved by the ethical committees of the Ministry of Health and MSF, because it is believed they may improve a patient's chances to survive. While caution must be exercised, these treatments are an added resource to the response. Because of their untested status, their utilization is subject to a strict protocol which places particular emphasis on the informed consent of the patient. Discussions on the implementation of a proper clinical trial are ongoing.

Infection prevention and control

In addition to patient care in ETCs, MSF is active in several pillars of the Ebola intervention. Health centres in Mangina and Beni that have seen positive cases are being decontaminated – MSF is also involved in these infection prevention and control activities. Furthermore, MSF teams work in the Beni and Mangina surrounding areas as well as in Bunia, Ituri, visiting eight health centres and training staff on the proper triage of Ebola suspects, as well as setting up isolation areas in case of need and providing material for all these activities..

Rapid Response Team

One of the critical components of the Ebola response is the ability to react quickly to new alerts, being able to investigate them and decide on setting up new structures for the intervention: for this, MSF set up a Rapid Response Team composed of a doctor, nurse and water and sanitation expert, an HP and an epidemiologist. Further south in North Kivu, on 9 September MSF sent this rapid response team to Luotu, a village outside of Lubero, in response to alerts of a positive case. The team was not only involved in case investigation but also in building a small isolation unit in an existing structure to receive suspect cases. The positive case had spent time in the health centre before dying at home, many of the health centre staff, as well as family are high risk contacts. Fortunately, no confirmed cases were registered and MSF withdrew its staff on 27/09 from this centre, leaving the structure to the Ministry of Health. The same team was deployed to Tchomia when the first confirmed case appeared there.

Vaccination

MSF vaccinated 480 frontline workers (health staff, religious leaders, burial workers etc.) from Makeke (on the Ituri-North Kivu border) up to Biakato, as the population from Mangina often moves in this direction. In October MSF teams also vaccinated 606 people, being either health workers or potential contacts of confirmed Ebola patients, in the city of Beni. In November, MSF vaccinated 150 health workers in Butembo. Plan is for 1700.

Surveillance

The surveillance strategy is led by the MoH/WHO. One MSF epidemiologist in Beni and one in Butembo support the surveillance activities.

Health Promotion

MSF health promotion teams in Beni work in support of the IPC teams and vaccination teams, as these activities require intensive communication with the community. The HP teams are also in contact with local leaders of several health zones, to exchange information about Ebola and the community. MSF also runs HP activities around the ETCs in Butembo and Mangina, in Bunia (Ituri).

Emergency preparedness

MSF's teams in Uganda have been mobilized to be ready in case the outbreak spills over across the border. They have installed an isolation tent in Bwera, a small town directly across the border from Beni and Butembo. MSF's regular project in Hoima (Uganda) has also set-up an isolation tent. In South Sudan, MSF supports the Government in preparations for a possible outbreak in the country.

Likewise, all MSF regular projects in the North Kivu and Ituri areas have also been supplied with Ebola equipment including PPE and have put proper hygiene and infection control protocols in place to safeguard staff and patients from the risk of contamination should the epidemic spread further.

MSF remains ready to support the authorities of these – and other – neighbouring countries in the implementation of their response to the Ebola outbreak in DRC.

OTHER MSF PRESENCE IN EASTERN DRC

North Kivu

MSF has been operational in North Kivu since 2006. Today, we have regular projects in North Kivu:

- Bambo: ER, paediatrics, nutrition and support 3 health centres.
- Kibirizi: ER, paediatrics, nutrition and support 2 health centres.
- Lubéro: ER, paediatrics, nutrition and support 2 health centres.
- Rutshuru (planned): surgery, ER, paediatric nutrition.
- Goma: HIV support at Virunga Hospital + 5 health centres, Eprep for mass casualty plans, cholera treatment centres.
- Masisi: support regional hospital, health centres and mobile clinics for malaria care
- Mweso: support 12 health centres and the general hospital.
- Walikale: general hospital on pediatric, nutrition, maternity and laboratory services and 4 health centers.

Ituri

- Bunia: support to 9 health centres in 2 health zones - primary healthcare and referrals.
- Mambasa: medical care for victims of sexual violence and treatment for sexually-transmitted infections (reopening after a period of standby as teams supported the Ebola intervention).

South Kivu

(South Kivu is not affected by the current Ebola outbreak.)

- Lulingu: post-conflict assistance to both displaced and host communities in the area.
- Kalehe: primary and secondary health care.
- Mulungu-Kaniola: primary and secondary health care, EPI, pediatrics, referrals.