



REPUBLIQUE DEMOCRATIQUE DU CONGO
Ministère de la Santé
Institut National de Recherche Biomédicale

INRB Statement

From May 8th to July 25th, 2018, the Democratic Republic of the Congo faced its ninth Ebola outbreak, which affected 54 people, including 33 deaths in the health zones of Bikoro, Iboko and Wangata, in the Province of Equateur. Institut National de Recherche Biomédicale (INRB), in collaboration with its partners, deployed 3 mobile laboratories on the 3 affected sites (Mbandaka, Bikoro and Itipo) to contribute quickly and efficiently to control this epidemic. A total of 432 samples were collected from these 3 laboratories, of which 51 were positive in real-time RT-PCR. These came from the 38 confirmed cases for the whole period of the epidemic (8 May- 25 July 2018). On July 10th, samples from the mobile laboratories arrived at INRB, and processing of samples and sequencing began. Thus far 23 samples have been processed yielding 15 coding-complete genomes that will be released shortly on GenBank as well. Initial phylogenetic analysis indicates these genomes are closest to the 2014 DRC outbreak (**Figure 1, blue labels**). Further analysis will need to be conducted on these preliminary findings as the main focus is to finish processing available samples from the outbreak, which will be made available as soon as they are generated.

Unfortunately, on August 1st a new cluster of cases was discovered in the region of North Kivu and confirmed at INRB. Samples were prepared for sequencing at INRB. Two full genome sequences were obtained (**Figure 1, red labels**). The data confirms that the current EVD cases in Nord Kivu (July 30th and ongoing), DRC are caused by a distinct EBOV “strain” than the one causing the outbreak in Equateur province. Based on this findings, although both events are caused by the same ebolavirus species (EBOV), the outbreaks appear not to be connected. On that basis, the available vaccine should work against the new strain.

Partners and collaborators

This work is part of ongoing research collaborations between several partners:

Institut National de Recherche Biomédicale (INRB)

US Army Medical Research Institute of Infectious Diseases (USAMRIID)

Institut Pasteur de Dakar, Dakar, Senegal (IPD)

TransVIHMI (IRD, INSERM, University of Montpellier)

Data availability

Genome sequences for all samples had been shared with all local and international partners working in the DRC. The information reported here is being shared pre-publication to help the research and public health communities respond to the current Ebola virus disease outbreak. Please note though that this data is still based on work in progress and should be considered preliminary. Our analysis of this data is ongoing and a publication communicating our findings is in preparation. INRB will distribute these data to any entity or collaborator that needs it. Please communicate with Drs. Muyembe-Tamfum and Ahuka for further coordination.

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Figure 1.

