

INVESTIGATING PROBABLE EBOLA CASES OF SIERRA LEONE - VISOV - CEDRIC MORO - 11 april 2014

Guinea

On 24th February (approximately), Mr. Sahr Zonas died with signs of haemorrhaging. Mr. Zonas was a health worker living and working in Guékédou town (Guékédou prefecture, Guinea).

•On 3rd March (approximately), three individuals living in the same compound as Mr. Zonas also died. All were reported to have fever and bleeding. These individuals were Mr. Sahr Fasa, a health worker in Macenta; Mrs. Zonas, the wife of Mr. Zonas (deceased); and Mr. Fayiah Laffalay, the great-uncle of Mr. Zonas

•Around 8th March, Sahr Laffalay is taken to Fangamandu (Guékédou prefecture, Guinea), passing one night in Dubema en route to Fangamandu. He is treated as an outpatient. In Fangamandu, he stays at the home of Lamine Touray. As his illness progresses, he begins to bleed from nose and mouth.

•The corpse of Fayiah Laffalay is transported from Guékédou and buried in Boidu village (Sowa chiefdom, Kono district, Sierra Leone).

Sahr Laffalay (14-20 years) accompanies the corpse (of Fayiah Laffalay) to Boidu and begins to feel ill with fever and malaise. Sahr Laffalay lived in the same compound as Mr. Zonas and his grandfather. Sahr Laffalay spends 4-5 days in Boidu where his illness progresses.

On 10th March, Sahr Laffalay died.

His body was wrapped and transported to Boidu where it was prepared for burial. Sahr Laffalay is buried the same day he died.

On 19th March, the KGH Lassa fever team was notified of a report of a 14-year-old boy who attended a funeral in neighbouring Guinea travelled to Buedu, Sierra Leone and died from a haemorrhagic illness. A team was deployed to Buedu, Kailahun District to investigate (see previous report dated 23rd March) and were unable to corroborate **any such activity in the vicinity of Buedu Town.**

However, the cause of death of the 14-year old, who had cared for his diseased grand-dad, and had visited him in the area associated with an Ebola outbreak in Guinea remained, unexplained. KGH sources say their investigation was hampered by the **lack of a blood sample from the deceased** that is required to test for VHFs. Frantic efforts were therefore made to test the 15 surviving relatives, which proved negative for Lassa fever. Ironically, the negative test triggered fears of an Ebola spread into Sierra Leone because of the clinical similarities of Ebola and Lassa fever. According to a member of the VHFC that conducted the tests and an expert on clinical care for viral haemorrhagic fevers at the KGH, Dr. Sheik Humarr Khan, **"the mere fact that they are negative for Lassa further raised the suspicion of them to be likely positive of Ebola or any other viral haemorrhagic fever (VHF) because the clinical manifestations of these patients are those of a VHF"**.

On 23rd March, there was discussion with central MOHS that the suspicious death may have occurred in Kono District. Two villages in the southeast corner of Kono District were identified with names similar to **Buedu. The Kono District Medical Officer, Dr. Francis Jayah** was notified. On 24th March, Dr. Jayah sent surveillance officers to investigate suspicious deaths near the country border in Sowa chiefdom. District Surveillance Officer Sahr Amara Moiba visited the village of Boidu that evening and confirmed that a recent death had occurred in an individual with travel history to Guinea. Mr. Moiba conducted a preliminary investigation, documented close contacts and sensitized the community to Ebola and notified them that an investigation team would come the next day.

At a press conference held in Freetown on 24 March 2014, the Chief Medical Officer (CMO) of Sierra Leone, Dr. Brima Kargbo said the Lassa fever team have **ruled out viral haemorrhagic fever (VHF) such as Ebola and Lassa** to be the likely cause of death of **two male septuagenarians** in the Buedu area of Kailahun district, another area of Sierra Leone along the Guinea border. He added that the deaths were likely caused by chronic illness rather than Lassa or Ebola.

A two man medical team from "METABIOTA" contracted by the United States Department of Defense has on Monday March 24th, 2014, briefed Ambassador Bockari Kortu Stevens at the Embassy of Sierra Leone, as they proceed as first responders in Sierra Leone to investigate, assess, evaluate, and help combat the Ebola virus that broke out in areas in the republic of Guinea that are near Sierra Leone. **"There are four suspected cases in Sierra Leone,** and we are departing this week to test and prove any available information to ascertain its existence.

On 25th March, the investigative team left Koidu for **Boidu village.** The team met with **Chief Tamba Fayiah Tauta** and the community and explained the purpose of our visit. The team asked a series of questions to individuals in the community to determine the timeline of events to death and to identify close contacts that may be at risk. **Blood samples were collected from close contacts and transported to KGH Lassa Fever Laboratory** on 26th March for Ebola virus testing. On 27 : WHO "Sierra Leone has reported **6 suspected cases, including 5 deaths.** Investigations into these suspected cases are on-going."

On 31: Director of Disease Control and Prevention in the Ministry of Health and Sanitation, Dr. Umaru Jambai dismissed rumours about Ebola cases in Kambia, Kono and other parts of the country as untrue. **He confirmed that all suspected cases have been tested negative** so far by a professional medical team.

1st april : KGH's concerns were headed to by the international scientific community including the WHO, which led to the deployment of Metabiota and the VHFC consisting of Harvard University, the Broad Institute, Tulane University and the KGH, Sierra Leone to conduct the tests for Ebola. The team arrived over the weekend and published its findings yesterday, Tuesday, April 1, 2014.

... Whilst the negative results will calm fears of a pandemic, there are concerns over the lack of a diagnostic testing facility for Ebola virus in West Africa. The KGH in Sierra Leone is the only research centre with the diagnostic, care and surveillance capabilities for Lassa, although it also helps to care for other VHF patients from the surrounding regions.

According to a statement by the VHFC (www.vhfc.org), the discovery of Ebola in West Africa dramatically changes public health approaches to viral haemorrhagic fevers, and complicates routine diagnosis for Lassa fever. **It adds that an up-to-date diagnostic testing for Ebola virus at KGH is urgently needed** to assist in the surveillance of the disease and the clinical care of patient

1st april - WHO : The Ministry of Health of Sierra Leone is maintaining a high level of vigilance following the deaths of 2 probable cases of EVD in one family who died in Guinea and their bodies repatriated to Sierra Leone. To date, active surveillance activities have identified no new suspected cases and all contacts of the

4th-5th of april - WHO

At the request of the MOHSW and WHO, the Metabiota Laboratory in Kenema, Sierra Leone, **will install Real-Time Zaire ebolavirus specific PCR,** a pan-filo PCR, Lassa virus PCR, yellow fever and Marburg virus PCRs among other assays. This technology is being transferred from its laboratory in Kenema, Sierra Leone. Metabiota will also provide training to laboratory staff in Liberia.

7april - WHO

2 probable cases of EVD were reported from Sierra Leone in one family who died in Guinea and their bodies repatriated to Sierra Leone.

10april - WHO

Although the epidemiological situation in Sierra Leone remains unchanged, the Ministry of Health and Sanitation (MOHS) continues to lead intensive EVD preparedness activities. Seven teams, each comprising of a director from the MOHS, a program officer of the Disease Prevention and Control directorate and a program officer from the national Health Education program have been dispatched to each of districts bordering Liberia and Guinea (**Kambia, Kenema, Koinadugu, Kailahun, Bombali, Pujehun and Kono districts**) to assess district preparedness with local authorities, including community-wide approaches to EVD preparedness and response and to preposition supplies. Planned activities include training of senior medical and nursing staff at the Kenema Government Hospital's Lassa Fever Unit and the training of port health and surveillance officers in Freetown.

Sierra Leone