Mali's Ministry of Health has confirmed the country's second fatal case of Ebola virus disease. The case occurred in a nurse who worked at a privately-run clinic in the capital city, Bamako.

The nurse, who was showing Ebola-like symptoms, was isolated on the evening of 10 November following suspicions of Ebola infection in a patient from Guinea who was treated at the clinic in late October. These suspicions were raised by an alert from health authorities in Guinea. The nurse died during the night of 11 November.

Testing was done at the biosafety level 3 laboratory in Bamako. In line with standard procedures, samples are being sent to a WHO-approved laboratory for confirmation and further virological analysis.

Like Mali's first case, this second case is associated with the outbreak in Guinea. Chains of transmission are being investigated by health officials and WHO staff in both Mali and Guinea.

The 2 confirmed cases in Mali are not linked. They arise from independent chains of transmission involving different villages and different families across the border in Guinea.

Background about the new case: the transmission chain starts in Guinea

According to the preliminary investigation, a 70-year-old male resident of Kourémalé village, in the Siguiri prefecture of Guinea, had onset of symptoms from an undiagnosed disease on 17 October. On 18 October, he was admitted to a private clinic in the mining town of Siguiri.

The town, which is located along Guinea's 800 km border with Mali, was an intense focus of Ebola virus transmission from early July to mid-August.

As his condition did not improve, he was transferred to another clinic located just across the border in Mali. On 25 October, he travelled by car, together with 4 family members to seek

treatment at the Pasteur Clinic in Bamako.

He was suffering from acute kidney failure, a complication often seen in late-stage Ebola virus disease. Multiple laboratory tests were performed, but not for Ebola.

He was treated at the Pasteur Clinic from 25 October until his death, from kidney failure, on 27 October. In addition, a friend who visited him at the clinic also died abruptly from an undiagnosed disease. Both are considered probable Ebola cases. For both, no samples are available for testing.

The nurse, whose fatal Ebola infection was confirmed on 11 November, worked at the Pasteur Clinic.

Because of his religious status as a Grand Imam, his body was transported to a mosque in Bamako for a ritual washing ceremony. The body was then returned to the native village of Kourémalé for formal funeral and burial ceremonies. Although these events are still under investigation, WHO staff assume that many mourners attended the ceremonies.

A devastated family

In that same village, the deceased patient's first wife died of an undiagnosed disease on 6 November. His brother and his second wife are currently being managed at an Ebola treatment centre in Gueckedou, Guinea. All 3 accompanied the patient during the car trip to Bamako.

On 10 November, his daughter died from an undiagnosed disease. The family declined offers of a safe burial.

On 11 November, the man's son, who is currently at the Ebola treatment center in Gueckedou, tested positive for Ebola at the European Union's mobile biosafety level 3 laboratory there. He was the fourth family member in the car trip to Bamako. Confirmation of his infection further increases the likelihood that deaths in other family members were caused by Ebola.

Emergency measures under way

Intensive contact tracing is under way in both countries, with support from WHO, the US Centers for Disease Control and Prevention (CDC), MSF, and other international partners.

Mali stepped up vigilance and preparedness measures following confirmation, on 23 October, of the country's first Ebola case in a two-year-old girl who recently travelled to Mali from her residence in Guinea. The child died on 24 October.

The country is well-rehearsed in the emergency measures that need to be taken to hopefully hold the number of additional cases to a small number.

The implementation of emergency measures further benefits from good cross-border collaboration between the 2 ministries of health and staff at WHO offices in both countries.

To date, 28 health care workers who had contact with the deceased patient at the Pasteur Clinic have been identified and are being placed under observation. A second team, deployed in the field, is tracing contacts in the community, including at the Bamako mosque.

WHO staff in Guinea are also investigating events associated with the deceased patient's family history.

The WHO country office has requested support from a logistician and 2,000 sets of personal protective equipment, which are being dispatched by headquarters.