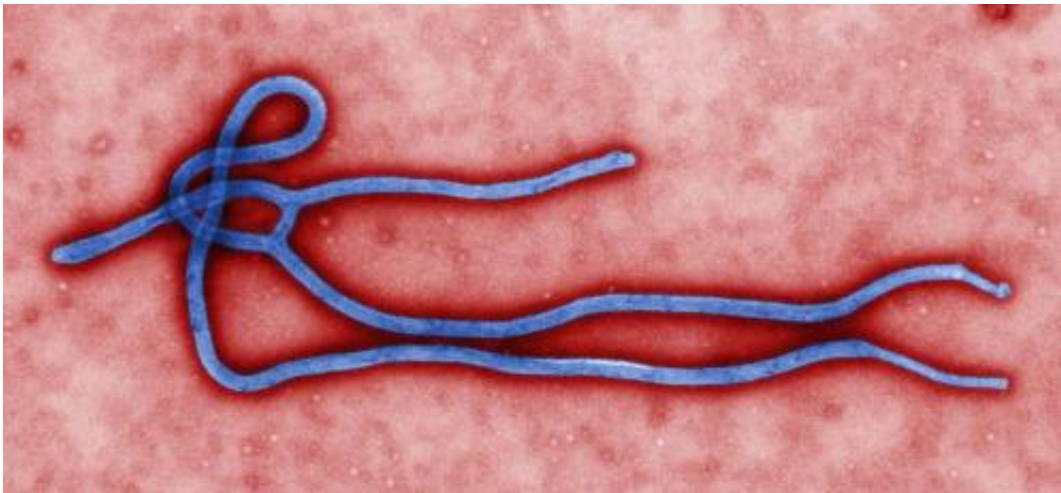


# Japanese researchers develop 30-minute Ebola test

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Ebola virus virion. Credit: CDC

Japanese researchers said Tuesday they had developed a new method to detect the presence of the Ebola virus in 30 minutes, with technology that could allow doctors to quickly diagnose infection.

Professor Jiro Yasuda and his team at Nagasaki University say their process is also cheaper than the system currently in use in west Africa where the virus has already killed more than 1,500 people.

"The new method is simpler than the current one and can be used in countries where expensive testing equipment is not available," Yasuda

told AFP by telephone.

"We have yet to receive any questions or requests, but we are pleased to offer the system, which is ready to go," he said.

Yasuda said the team had developed what he called a "primer", which amplifies only those genes specific to the Ebola virus found in a [blood sample](#) or other bodily fluid.

Using existing techniques, [ribonucleic acid](#) (RNA)—biological molecules used in the coding of genes—is extracted from any viruses present in a blood sample.

This is then used to synthesise the viral DNA, which can be mixed with the primers and then heated to 60-65 degrees Celsius (140-149 Fahrenheit).

If Ebola is present, DNA specific to the virus is amplified in 30 minutes due to the action of the primers. The by-products from the process cause the liquid to become cloudy, providing visual confirmation, Yasuda said.

Currently, a method called [polymerase chain reaction](#), or PCR, is widely used to detect the Ebola virus, which requires doctors to heat and cool samples repeatedly and takes up to two hours.

"The new method only needs a small, battery-powered warmer and the entire system costs just tens of thousands of yen (hundreds of dollars), which developing countries should be able to afford," he added.

The outbreak of the Ebola virus, transmitted through contact with infected bodily fluids, has sparked alarm throughout western Africa and further afield.

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