Fact Sheet for Patients: Understanding Results from the LightMix® Ebola Zaire rRT-PCR Test

December 23, 2014

What is the LightMix® Ebola Zaire rRT-PCR Test?

If you have received this Fact Sheet, your blood samples were tested to help determine whether you may be infected with an Ebola virus, including Ebola Zaire virus (detected in the West Africa outbreak in 2014). The test that was used on your blood is called the LightMix® Ebola Zaire rRT-PCR Test.

The LightMix® Ebola Zaire rRT-PCR Test is a laboratory test designed to help detect Ebola Zaire viruses in certain individuals. This test has not been cleared or approved by the U.S. Food and Drug Administration (FDA). However, due to the ongoing Ebola emergency in West Africa, FDA has authorized the emergency use of this test under an Emergency Use Authorization (EUA).

What is the Ebola Zaire Virus?

The Ebola Zaire virus is one of the four Ebola viruses that cause Ebola virus disease in humans. Ebola virus disease is a severe, often-fatal disease in humans that has appeared sporadically since it was first recognized in 1976. Recently, many human cases of Ebola virus infection have been identified in West Africa.

Two human cases of Ebola Zaire infection have been acquired in the United States as of December 21, 2014. These two human cases involved health care workers who provided care for patients with Ebola virus disease. Public health officials have determined that this virus is contagious and can spread from person-to-person. This poses a risk for an emergency.

Why was my sample tested using the LightMix® Ebola Zaire rRT-PCR Test?

Your blood sample was tested using the LightMix® Ebola Zaire rRT-PCR Test to help determine whether you are infected with Ebola Zaire virus. The results of this test, along with other information, may help your health care provider take better care of you. The test results could also help public health officials identify and limit the spread of this virus in your community.

What are the known risks and benefits of the LightMix® Ebola Zaire rRT-PCR Test?

Besides minimal potential discomfort during sample collection, there is a very small risk that the test result reported is incorrect (see next paragraphs for more information). The benefit of having this test is that the results of this test, along with other information, can help your health care provider take better care of you. Also, knowing your test results may help prevent the spread of the virus to your family or others.
If this test is positive, does that mean that I have Ebola Zaire infection?

If you have a positive test, it is very likely that you have Ebola Zaire virus (detected in the West Africa outbreak of 2014) infection. Therefore, it is also likely that you may be placed in isolation to avoid transmitting the virus to others. There is a very small chance that this test can give a result that is wrong; this is called a false positive result. However, your health care provider will decide how to care for you based on the test results, along with other factors of your illness (such as symptoms, possible exposures to the virus, and geographic location).

If this test is negative, does that mean that I do not have Ebola Zaire infection?

Most, but not all, people with Ebola Zaire virus infection will have a positive test. Therefore, if your test is negative, something else may be responsible for your illness. There is a small chance that this test can give a negative result that is wrong (called a false negative) meaning you could possibly still have an Ebola Zaire virus infection even though the test is negative. Therefore, while a negative test most likely means you do not have an Ebola Zaire virus infection, your health care provider must consider the test result together with all other aspects of your illness (such as symptoms, possible exposures, and geographical location) in deciding how to treat you.

What is an Emergency Use Authorization (EUA)?

An EUA is a tool that FDA can use to allow the use of certain medical products for emergencies based on scientific data. The U.S. Secretary of Health and Human Services (HHS) has declared that circumstances exist to allow the emergency use of in vitro diagnostics, such as the LightMix® Ebola Zaire rRT-PCR Test, for detecting the Ebola Zaire virus. At this time, there are no FDA-approved/cleared alternative tests available that can detect Ebola Zaire virus.

FDA has authorized the emergency use of the LightMix® Ebola Zaire rRT-PCR Test to test for the presence of Ebola virus in blood specimens. Use of this test is authorized only for the duration of the threat of the emergency, unless it is revoked by FDA sooner.

The information in this Fact Sheet is the minimum necessary to inform you of the significant known and potential risks and benefits of the use of the LightMix® Ebola Zaire rRT-PCR Test. You may want to discuss with your health care provider the benefits and risks described in this Fact Sheet.

How can I learn more?

Updates about Ebola Zaire virus infection or significant new findings observed during the course of the emergency use of this test will be made available at: http://www.cdc.gov/vhf/ebola/index.html. Please also contact your doctor if you have any questions.