

 Public Health Agency	Special Schools Testing Programme 2021	 ea Education Authority
OptiGene Direct COVID-19 RT-LAMP Frequently asked questions (FAQs)		

1. What type of test will be used for the routine asymptomatic testing?

The test being used for asymptomatic testing in special schools is the saliva OptiGene Direct RT-LAMP (loop-mediated isothermal amplification) assay. This test is used for detection of the virus that causes COVID-19.

2. Why was this test chosen?

A technical and clinical evaluation showed that the saliva LAMP test is sensitive and accurate enough to be used for COVID-19 testing, including those without symptoms.¹ This can be especially useful in certain settings to help identify those who may be infectious, and therefore more likely to transmit the virus.

A pilot study of the saliva testing with students, found the method to be very easy and extremely popular with parents and staff. It also enabled improved school attendance in this study. The sample of saliva is easy to collect, in comparison to a nose or throat swab, and it can be done at home.

The tests can also be turned around quickly, meaning results are rapidly available. This is particularly useful for asymptomatic individuals in order to inform efficient action.

3. How does the test work?

The test uses a sample of saliva, provided in a small pot. This is then sent to a laboratory, where it is tested for the COVID-19 virus using a technique called loop-mediated isothermal amplification (LAMP).

The result of the test will tell participants if they have an active COVID-19 infection at the time they took the test. As with other tests, people can test negative if they are in the early incubation phase of developing the infection, and so may test positive at a later time. The test has been found to be more accurate in people who are more infectious at the time of testing, and this is useful as these are the people most likely to transmit the virus.

This test does not tell participants whether or not they have had the virus in the past, and a negative result does not protect them from catching the virus in the future.

4. How is the test performed?

The saliva test is easy to collect at home and is demonstrated in the short video attached.

<https://sway.office.com/Zj9xSnaXoZvCzTsm?ref=Link>

The test involves taking a sample of saliva from inside of the mouth. This should not cause any pain or discomfort to the person having the sample taken. A standard set of instructions for taking the saliva test will be included in every test pack. (*continued overleaf...*)

¹ <https://www.gov.uk/government/news/clinical-evaluation-confirms-accuracy-of-lamp-test>

You will receive a test kit for obtaining and returning the sample of saliva. In the test kit you will find a test tube and a pipette. This will have come in a sealed bag. The test tube has a 'fill' line on it, and the sample needs to be to at least half of the fill line. It can be difficult to get enough saliva to reach the fill line. The pipette has a soft end and can be used to help draw up saliva. The best place to try is under the tongue, or in the cavities at each side of the lower jaw. You can put a little off the end of the pipette if this is too narrow. Some children may be able to spit into the tube. When the sample is complete, put the lid on the test tube, and place the sample in the bag provided. Seal the bag and return the sample.

The sample MUST be fresh so please only collect this on the day it is requested. You must use a new pipette for each sample taken. The pipette can be disposed of alongside regular household waste.

5. What is the accuracy of the saliva LAMP test?

An evaluation of the saliva LAMP test concluded that it has very good sensitivity. This is a measure of how good the test is at picking up the virus that causes COVID-19.² The test will pick up about 79% of positive cases, or 4 out of 5 people. This means we would expect to miss one out of five people with a positive test. In samples with a higher viral load, the sensitivity of the test is higher and increases to around 94%, meaning the test is very likely to pick up infection in people who are likely to be more infectious. These are the people we really want to pick up.

The other aspect of test accuracy that we are interested in is the potential for false positive results, i.e. if someone receives a positive result but does not actually have the infection. The salivary LAMP test is shown to be very accurate in this respect, and it would be extremely unlikely to report a false positive result.

Overall, the evidence would suggest the test is very good at picking up infectious people with the virus, and false positive results are extremely unlikely. This test is therefore useful for regular testing in certain settings to help prevent spread of the virus. The ability to rapidly and accurately identify individuals with high levels of infective virus will facilitate prompt isolation and reduce risk of transmission.

6. How often will the test be carried out in special schools?

Weekly testing is recommended. Although you might have a negative result from the saliva LAMP test, this just means that no active COVID-19 infection has been detected at the time of the test. This will not tell you if you are incubating the virus in the early stages. Virus particles may not yet be detectable during the early stages, but these may go on to increase. The evidence would suggest that the risk of false negative results for those who have active infections and particularly those who are more infectious, is unlikely.

It is also possible to test negative one day and positive some days later if a new infection is acquired after the negative test. Regular testing increases the likelihood of picking up those with the infection promptly, and reducing the risk of transmission or spread within certain settings.

² <https://www.gov.uk/government/publications/rapid-evaluation-of-optigene-rt-lamp-assay-direct-and-rna-formats/rapid-evaluation-of-optigene-rt-lamp-assay-direct-and-rna-formats>

7. Why is asymptomatic testing important in this setting?

In certain settings, where there is a higher risk of spread, testing people without symptoms of COVID-19 is important as this may help to identify those at risk of spreading the virus without being aware of it. The evidence shows that some people with COVID-19 don't have symptoms, but they can still transmit the virus. There is also evidence to show that people may be infectious for a few days before developing symptoms.

Once it is known that someone has the virus, they can start to self-isolate in accordance with government guidance, along with any close contacts. This will reduce the risk of the virus spreading. In certain settings where people require more support, such as certain school environments, this means the support and education can continue in a more secure environment.

8. Why might people not have symptoms but still test positive?

The average time between being exposed to the virus and developing symptoms is estimated as being five days. Most people will develop symptoms four to six days after picking it up, but this can be shorter or longer, which is the reason people with high risk exposures are advised to self-isolate for 10 days. Importantly, people may have the virus in their saliva and other secretions before they develop symptoms. They can therefore still transmit this to others, such as in droplets whilst talking, if they were in close contact.

9. What does my child do whilst they await their results?

Whilst awaiting results of the test, if your child remains asymptomatic, they can continue to attend school, and continue to adhere to the public health advice as normal. Should they become symptomatic with any of the typical symptoms of COVID-19, they should self-isolate in accordance with public health advice. Typical symptoms of COVID-19 include:

- a high temperature – this means you feel hot to touch on your chest or back (you do not need to measure your temperature); OR
- a new, continuous cough – this means coughing a lot for more than an hour, or 3 or more coughing episodes in 24 hours (if you usually have a cough, it may be worse than usual); OR
- a loss of or change in sense of smell or taste.

For further information please see: <https://www.publichealth.hscni.net/covid-19-coronavirus/covid-19-information-public>

10. What do I do if my child receives a positive result?

If your child receives a positive result, they will need to go home and self-isolate for at least 10 days from the date of the test, along with all other members of the household.

The guidance for self-isolation following a positive saliva LAMP test is as follows:

- If the person has symptoms of COVID-19 – they need to self-isolate for 10 days from when symptoms started.
- If they have not had symptoms – self-isolate for 10 days from when they had the test.
- If they get symptoms while self-isolating – the 10 days of self-isolation will restart from when symptoms started.

Everyone in the household other close contacts will also need to self-isolate for at least 10 days.

Further information on how to self-isolate can be accessed via the following link:

<https://www.nidirect.gov.uk/articles/coronavirus-covid-19-self-isolating>

11. When should saliva LAMP testing resume after a positive test result?

For Saliva LAMP testing, you should restart testing again once the period of self-isolation following the positive test has ended.

12. Should participation in the testing programme continue after receiving the COVID-19 vaccine?

Yes, please continue to participate in the testing programme as planned. No vaccine is 100% effective, and it is therefore still possible to pick up the infection and transmit this to others, even though the risk is reduced.

13. Will the vaccine affect the result of the saliva LAMP test?

No, the vaccine will not affect the result of the test. The test picks up infection, rather than vaccine response.