

# **An overview of lateral flow device (LFD) testing for COVID-19 in care homes**

## **NHS South West London CCG Care Homes Information Sharing Session**

**19th January 2020**

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# Care Homes Testing Scenarios (based on current guidance)

Testing Scenarios (click below for links)	Who	*Test type	When	Why
<a href="#">Regular <sup>1</sup>whole home testing</a> (ongoing since July 2020)	<sup>2</sup> Staff	PCR	Once, every week	To promptly identify positive cases and reduce risk of infection transmission from the community into the care home (asymptomatic).
		<sup>3</sup> LFD	Twice, every week. Before working after a period of leave.	
	Residents	PCR	Once, every 28 days	To promptly identify positive cases (symptomatic & asymptomatic).
In the event of <b>1 positive person (case)</b> (staff OR residents)	Staff	LFD	Once, every day for 7 days	To promptly identify whether there has been any onward transmission within the home e.g. further positive cases for prompt isolation and potentially to manage an outbreak.
In the event of an <sup>4</sup> outbreak	Staff	PCR	Day 1 + once between days 4-7 of the outbreak	Outbreak Management - homes should <sup>5</sup> <a href="#">contact their Health Protection Team (HPT)</a> who will offer advice and may organise day 1 + day 7 tests.
	Residents	PCR	28 days since the onset of symptoms in the most recent case to declare outbreak over	
<a href="#">Visitor LFD testing</a> <a href="#">Care Home Visit guidance</a>	Friends, relatives, professionals	LFD	Prior to every visit (Outdoor and 'screened' visits. No visit during outbreak, only exceptional with LFD)	To reduce the risk of infection transmission from the community into the care home (asymptomatic). For professionals visitors not already part of a regular testing programme.

<sup>1</sup>Whole care home testing is about prevention rather than waiting until it is too late and having to deal with an outbreak. Homes should <sup>5</sup>[contact their Health Protection Team \(HPT\)](#) for advice on suspected or confirmed COVID-19 infections.

<sup>2</sup> Staff include bank, agency, volunteers etc. <sup>3</sup> Any positive results from LFD testing must be confirmed with a PCR test.

<sup>4</sup> Outbreak is defined as 2 or more confirmed cases of COVID-19 or clinically suspected cases of COVID-19 among individuals associated with a specific setting with onset dates within 14 days.

<sup>5</sup> Contact HPT if you suspect your care home has a new coronavirus outbreak and/or it has been 28 days or longer since the last case and there are new cases.

( \*PCR = Polymerase Chain Reaction tests \*LFD = Lateral Flow Device tests)



## The regular testing cadence

Key: **P** PCR test    **L** LFD test

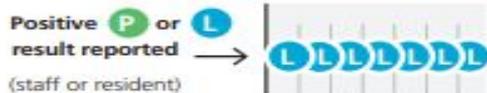


## In Tier 4, where there is a positive case found with LFD or PCR

7 days of daily LFD testing for staff, in addition to regular testing

+

Confirmatory **P** PCR test if there are any additional positives from **L** LFD testing



Please note confirmatory PCR applies to all Tiers

## In addition, for all tiers, where there's a suspected or confirmed outbreak

Contact your local HPT

+

**P** PCR Testing for residents and staff on day 1 and once more between days 4-7 of the outbreak

+

Isolation of staff and/or residents who tested positive.



## Key Guidance

[Care Home COVID-19 Testing Guidance: For testing of staff and residents](#)

(See page 5 for diagram opposite)  
(See page 22 for LFD full process)

Other useful flowcharts; [Coronavirus \(COVID-19\) tests available for adult social care in England](#)

[Management of staff, patients and residents who have been exposed to COVID-19](#)

# What is Lateral Flow Device Testing?

**Lateral Flow Tests** are a new technology which enables rapid display of Covid-19 test results within 20-30 minutes and do not require a laboratory to process.

## How does LFD testing work?

The LFD detects a COVID-19 antigen on a swab sample that is produced when a person is infectious with COVID-19. If this antigen is present, then a coloured strip will appear which indicates a positive result.

## Why LFD testing?

main objective of this effort is to ensure the ongoing safety of the entire care home community by offering quicker and more regular testing for identification people with COVID infections and to promptly isolate them. LFD tests are much faster than the Polymerase Chain Reaction (PCR) coronavirus tests.



Image credit: <https://www.combined.nhs.uk/>

**No test is 100% accurate nor 100% sensitive!**

# Evidence for LFD testing

Brand of lateral flow devices(LFD) tests used for care homes: **Innova SARS-CoV-2 Antigen Rapid Qualitative Test Kits**

The results of the [Innova evaluation](#) published on 11th November 2020 show:

- The \*specificity of the test was recorded as 99.68% - the overall false positive rate was 0.32%, although this was lowered to 0.06% in a lab setting.
- Overall \*sensitivity of 76.8% for all PCR positive individuals but detects over 95% of individuals with high viral loads, and minimal difference between the ability of the test to pick up viral antigens in symptomatic and asymptomatic individuals. However, sensitivity varied according to who was performing the test.
- LFDs find at least half of the cases that PCR testing detect and about three-quarters of those who have very high amounts of virus present when an individual is tested. High amounts of virus means that an individual is more likely to be infectious.
- Lateral flow testing is not a fool proof solution: it should be seen as an addition to PPE and other IPC measures and must not be seen as a way of relaxing their use.

Sir John Bell, Regius Professor of Medicine at Oxford University, said: *'The data in this validation report demonstrates that these inexpensive, easy to use tests can play a major role in our fight against COVID 19. They identify those who are likely to spread the disease and when used systematically in mass testing could reduce transmissions by 90%.*

*\*Sensitivity means the proportion of people with a disease that have a positive test.*

*\*Specificity means the proportion of people without the disease that have a negative test.*



# Processing LFD testing in care homes

- **How to obtain/order LFD tests:** <https://request-testing.test-for-coronavirus.service.gov.uk>
- **How to carry out lateral flow device (LFD) testing**
  - Consent the staff and visitor
  - Take a throat and nasal swab sample and process with an extraction fluid and a LFD.
  - Training for staff is important. Each care home manager needs to ensure that all staff have access to the training portal (Email: [testertraining@dhsc.gov.uk](mailto:testertraining@dhsc.gov.uk) for access), complete the NHS Test and Trace online training assessment and [watch training video](#). [Watch DHSC LFD test webinars.](#)
  - Follow strict PPE, IPC, social distancing and infection control measures.
- **Who should have LFD testing in care homes (see Table on [slide 2](#))**
  - **Visitors**: All care homes, except in the event of an active outbreak, should seek to enable outdoor visiting and 'screened' visits. (see [Care Home Visit guidance](#)). Visitors to care homes can self-administer via nasal and throat swabs similar to PCR tests. Visits in exceptional circumstances such as end of life should always be supported and enabled using LFD tests. *LFD test repeated for each visit* from a relative/friend or visiting professional who is not already part of a regular testing programme.
  - **Staff**: from 24th December 2020 Staff are now required to carry out *weekly PCR staff tests PLUS 2 additional weekly LFD tests*
- **Homes with a COVID positive result must undertake** *daily staff LFD tests for 7 days.*

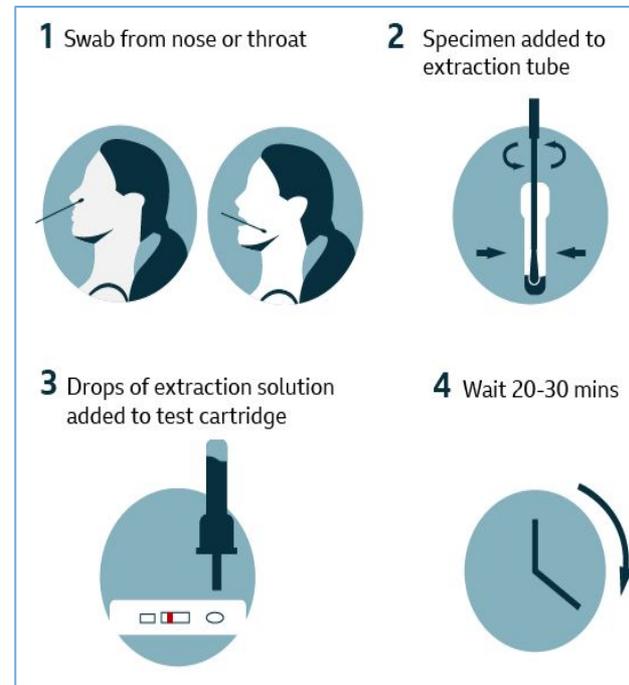


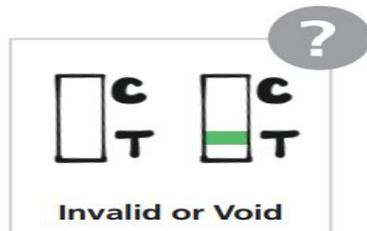
Image credit: <https://www.bbc.co.uk/>

# Processing LFD testing in care homes

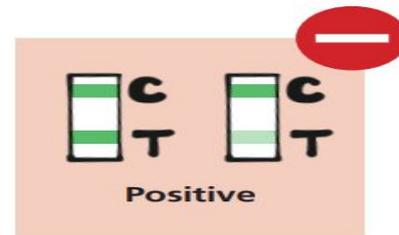
- How to interpret and report LFD test results: <https://www.gov.uk/report-covid19-result>
  - Note: interpret negative results with caution together with clinical assessment. If needed, local support for [staff return to work](#) risk assessments during an outbreak can be sought from local HPT or CCG IPC lead.



Staff or visitor can proceed and must follow PPE, IPC, hand hygiene, social distancing and all policy/requirements of the home



Retest using a spare LFD kit to receive a conclusive result. Staff member should continue to work as normal and follow PPE, IPC and hand hygiene and undertake a further LFD test on the next day. Recommended that you do not allow the visitor to complete the visit.



Staff and visitor **must not** proceed and require an immediate confirmatory PCR test on site and **must return home to isolate immediately**, avoiding public transport and wearing a face mask. They must wait at home for their PCR test result.

- For confirmatory PCR tests
  - For staff confirmatory PCR register the confirmatory PCR kit online in the usual way, using the home's UON.
  - For visitor confirmatory PCR ask the visitor to register via <https://test-for-coronavirus.service.gov.uk/register-home-test>
  - Use the closest Royal Mail priority post box to send to the laboratory an attach Royal Mail priority post box return label. See for locations and collection times : <https://www.royalmail.com/priority-postboxes>
  - Otherwise, please ring 119 to schedule an urgent courier.
  - For positive LFD tests book a courier collection for PCR tests by 7pm the day before you start testing via <https://test-kit-collection.test-for-coronavirus.service.gov.uk/>

# Frequently Asked Questions on LFD tests in care homes

These are some questions we have come across since the LFD testing was introduced in December 2020

- **Can asymptomatic staff test with LFD within 90 days of a previously tested positive?**
  - Yes. The 90-day period rule only applies to PCR testing.
- **What happens if an asymptomatic staff member receives a positive LFD result within 90 days of a positive PCR result?**
  - The staff member can continue to work. They should not take a confirmatory PCR test and do not need to self-isolate, unless they develop new COVID-19 symptoms. If the staff member are inadvertently tested using PCR and it is positive, please refer to Guidance - COVID-19: management of staff and exposed patients or residents in health and social care settings found [here](#)
- **Are there any professionals who are exempt from LFD testing?**
  - Those who are part of a regular testing programme (such as regular NHS staff testing or testing for CQC inspectors) do not need testing on the door of the care home. However, care homes can confirm this with the professional if unsure.
- **If we get the COVID-19 vaccine, do we need to continue testing?**
  - Yes, testing continues for now until further guidance has been provided by the DHSC.
- **What are the safety and storage considerations for LFD tests?**
  - Kits can be stored at room temperature: Store extraction solution at 2 to 30°C. Store the test cartridge at 2 to 30°C.
  - LFD test kits must be stored and separated from the standard PCR test kits that have been provided for routine testing of residents and staff (and confirmatory PCR tests for those persons who return a positive LFD result).
- **How do care home managers access support?**
  - For test process call the customer contact centre for advice on 119. Lines open from 7am - 11pm daily
  - For swabbing, staff training and any other advice contact SWL CCG or local public health team.

Please visit our [Sutton Care Hub dedicated COVID-19 testing page](#) for any other information



# Frequently Asked Questions on LFD tests in care homes

These are some questions we have come across since the LFD testing was introduced in December 2020

- **How to interpret confirmatory PCR test**
  - If the confirmatory PCR is negative, the staff member can return to work.
  - If the confirmatory PCR is positive, care homes should contact their local HPT as soon as possible and if an outbreak is later confirmed they will provide care homes with PCR tests for whole home testing on day 1 and once more between day 4-7 of the outbreak. Staff and visitor must ensure their household or bubble are advised that they will also need to self-isolate and NHS Test and Trace may be in touch to contact trace.
- **Do staff always need a confirmatory PCR test if they test positive on LFD test shortly after a negative PCR test?**
  - Yes, confirmatory PCR is in addition to the weekly PCR test that all staff undertake, unless they tested positive on the day they did their weekly PCR test. (see page 6)
- **Will the vaccine protect me so I don't need to keep testing?**
  - COVID-19 vaccine has been shown to reduce the chance of people suffering from COVID-19 disease. Each vaccine has been tested in more than 20,000 people in several different countries and shown to be safe. It may take a week or two for your body to build up some protection from the first dose of vaccine. Like all medicines, no vaccine is completely effective, so you should continue to take recommended precautions to avoid infection. Some people may still get COVID-19 despite having a vaccination, but this should be less severe.
- **Can I give COVID-19 to anyone, now I have had the vaccine?**
  - The vaccine cannot give you COVID-19 infection, and a full course will reduce your chance of becoming seriously ill. We do not yet know whether it will stop you from catching and passing on the virus, but we do expect it to reduce this risk. So, it is still important to follow the guidance in your local area to protect those around you

**Staff with symptoms should instead be referred for testing at a regional / local test centre or in their own home.  
Please visit [www.gov.uk/get-coronavirus-test](http://www.gov.uk/get-coronavirus-test) to arrange a test as an essential worker.**



# Remember

- **No test is 100% accurate nor 100% sensitive!**
- **Please continue to follow current testing guidance even after vaccination in your care home**
- **ASSUME YOU HAVE COVID AND FOLLOW STRICT GUIDANCE ON PPE, IPC, TESTING, ISOLATION, SOCIAL DISTANCING, HANDWASHING AND OTHER INFECTION CONTROL MEASURES**



*Thank you for all you are doing to keep vulnerable residents and care homes staff safe*