

# Bristol COVID-19 Testing Strategy 2020- 21 (revised March 21)

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## **Executive Summary**

This Bristol Testing Strategy sets out a framework for a citywide approach to testing.

Our aims for local testing are that:

- Testing in Bristol is deployed purposefully and is informed by evidence
- Testing is used effectively to prevent the spread of Covid-19 within the community
- Testing can be deployed swiftly and effectively to contain and manage outbreaks.
- Local testing for Covid-19 is informed by and addresses the particular needs of Bristol's diverse population.

The Bristol Testing Strategy sits within the national strategy and testing framework and will maintain alignment with the South West Regional Public Health arrangements and the Bristol North Somerset and South Gloucestershire Health and Care System.

Themes with the Bristol Testing Strategy include:

- Alignment with local Pillar 1 Testing
- Alignment with the staff antibody testing programme
- Arrangements for whole care home, supported living, domiciliary care and extra care testing
- Effective deployment local testing centres
- Arrangements for the testing of vulnerable individuals
- Provision of Lateral Flow (rapid) testing in the community

This strategy will be adapted as national and regional testing system develops.

## 1. National and Regional Testing Context

On 4<sup>th</sup> April 2020 the UK government published a high-level paper outlining its plans to scale up testing capacity and capability. The report stated that the government's goal is that anyone who needs a test should have one. The report set out a phased approach, starting with patients, expanding to NHS workers and their families, then other critical key workers and subsequently expanding to the wider community over time. The paper can be viewed here:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/878121/coronavirus-covid-19-testing-strategy.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/878121/coronavirus-covid-19-testing-strategy.pdf)

The National Testing Strategy has five pillars each of which has a delivery programme:

- Pillar 1: NHS swab testing for those with a medical need and the most critical key workers: organised by local NHS hospitals (NBT and UHB).
- Pillar 2: Mass swab testing (commercial): booked through an online portal.
- Pillar 3: Mass antibody testing to help determine exposure: organised locally by the BNSSG CCG, rolled out to front line health care workers.
- Pillar 4: Surveillance testing to learn more about the disease and help develop new tests and treatments.
- Pillar 5: Spearheading a Diagnostics National Effort to build a mass-testing capacity at a completely new scale.

The Department of Health and Social Care is responsible for the national pillar 2 testing programme which consists of the establishment of regional, local and mobile testing sites. This programme is developing rapidly and includes a national ambition to have local testing available within 30 mins walk or cycle in urban areas and testing for care homes.

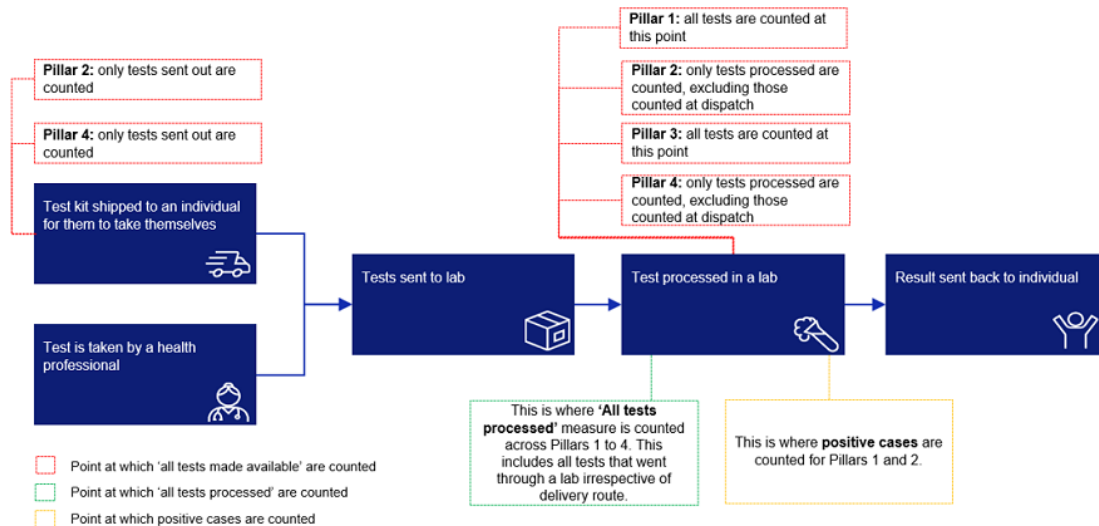
The South West Public Health community has worked closely since the start of the pandemic to ensure alignment and a systemic approach to testing and outbreak management.

The South West Public Health England Centre serves all local authorities in the region, working to trial and tested standard operating procedures to manage situations and outbreaks. Local Outbreak Management Plans have been aligned across the region and Public Health England has produced a Regional Outbreak Management Plan which sets the regional context and includes a statement on testing.

A South West Test, Trace and Enable Oversight Group brings together regional, local and national partners with responsibility for testing in the South West. South West Directors of Public Health are members of this group.

## 2 The National Laboratory System

The diagram below outlines how tests from the different pillars are processed through the laboratory system and counted.



Each Pillar utilizes different laboratories who provide their testing capacity estimates for the individual pillars each day. Estimates are collated centrally, and an updated time series is published weekly. For each pillar, capacity relates to the following labs:

- Pillar 1 capacity – projected lab capacity for NHS, PHE and Roche labs for England and lab capacity from Devolved Administrations.
- Pillar 2 capacity – projected lab capacity in the Pillar 2 network, including labs in Northern Ireland, Glasgow, Manchester, Milton Keynes and Cambridge
- Pillar 3 capacity – projected current capacity to process serology tests to show if people have antibodies from having had COVID-19
- Pillar 4 capacity – projected lab capacity for the Oxford University laboratory (COVID 19 infection Study, Biobank Seroprevalence Survey and an element from the care homes study), Eurofin lab capacity for Ipsos MORI swab tests

Positive test results are fed into the Second Generation Surveillance System (SGSS) managed by PHE. The individual and the Test and Trace System are notified of all positive results for follow up. Non identifiable information about numbers of cases is made available to Directors of Public Health via the secure Public Health Information system.

### **3 Bristol Local Outbreak Management Plan and testing**

The Bristol Local Outbreak Management Plan sets out the local responsibilities for oversight and swift mobilisation of local testing capability; identifying methods for local testing to ensure a swift response that is accessible to the entire population; including accessibility of testing for vulnerable individuals; establishing local pop-up sites, hosting mobile testing units at high-risk locations, rapid asymptomatic testing and surge testing.

A Bristol, North Somerset and South Gloucestershire Testing Cell meets monthly with a particular focus on:

- Oversight of local pillar 1 (NHS) testing arrangements
- Maintaining a coordinated approach for essential staff testing
- Ensuring linkages with primary care
- Information sharing about the development of pillar 2 testing
- Mutual aid, gap analysis and the development of local solutions to risk management and surge capability

A Bristol, North Somerset and South Gloucestershire Care Provider Cell also meets weekly with a particular focus on care home support, supported living, domiciliary care and extra care including whole care home testing.

Coordination for mobile testing roll out now comes under the direct management of Department of Health and Social Care through regional coordinators.

This Bristol Testing Strategy sets out a framework for a citywide approach to testing.

Our aims for local testing are:

- Testing in Bristol is deployed purposefully and is informed by evidence
- Testing is used effectively to control the spread of Covid-19 within the community
- Testing can be deployed swiftly and effectively to contain and manage outbreaks
- Local testing for Covid-19 is informed by and addresses the particular needs of Bristol's diverse population and varying physiological responses both within and between individuals and groups.

## **4 Bristol Testing Framework**

### **4.1 NHS Testing – Pillar 1**

Pillar 1 testing of staff and patients is undertaken by NHS Trusts. Bristol will maintain an overview of Pillar 1 testing through the BNSSG monthly testing oversight group.

Positive cases are followed up through the Test and Trace system and managed by local NHS organisations in line with Covid-secure strategies.

All patient facing NHS staff are tested twice weekly with LFDs. In general practice GPs have stocks of PCR tests for symptomatic patients, staff and their households.

The local authority Public Health role lies in action to identify, prevent and contain widespread community transmission.

In prisons staff are tested twice a week with LFDs and once a week with PCR tests. New inmates are PCR tested on arrival, and resident inmates are LFD tested on court appearances, transfer and release.

### **4.2 Whole Care Home Testing – Pillar 2**

All CQC registered care homes, have access to whole care home testing through a dedicated booking portal linked to Pillar 2 laboratories. This is a Department of Health and Social Care programme for residents and staff. Staff test with a PCR test and LFD test on day one of the week, followed by a mid-week LFD. Residents are tested using a PCR test once a month. Care home visitors and visiting professionals are tested on arrival at the home with LFD devices. Hospices have the same programme. It comes under the oversight of the Director Public Health and the Director of Adult Social Care.

When there is a single case in a care home the management will ensure that a confirmatory PCR test is taken (following a positive LFD), and the home will test all staff with LFDs for 7 days.

When an outbreak is identified (2 or more cases within 14 days), all staff and residents will have a PCR test, and those who test negative will have a repeat PCR test a few days later. Then return to the regular regime of testing. When the home has had no positives for 28 days the whole home will be tested to confirm that the outbreak is over.

A testing programme has been rolled out to day centres, domiciliary care and personal assistants where staff are tested weekly with PCR tests. Residents living in supported living and extra care settings are tested weekly with PCRs.

Children's Homes have a stock of PCRs to test any symptomatic staff or residents, or new residents on arrival.

### **4.3 Schools/ Department for Education led testing programme**

Since January 2021 lateral flow (rapid) testing has been provided through school and further education settings. This programme is under the direction of the Department of Education for staff and secondary and FE students. Currently children under 11 are not routinely offered asymptomatic testing.

Access to lateral flow (rapid) testing is also being made available for all households or household bubbles as well as all other individuals working with children. These tests will be available from collection points within the community.

Phase	Date of LFD testing offer	Home or on site	Frequency
Early Years – staff, inc PVI settings	15 <sup>th</sup> March	Home with requirement for confirmatory PCR	2x per week
Primary - Staff	Jan 2021	Home with requirement for confirmatory PCR	2x per week
Secondary - Staff	Jan 2021	From March move to at home with requirement for confirmatory PCR	2x per week
Secondary – students (inc SEND)	Jan – Mar 2021 for those attending school sites.	On site supervised – no requirement for confirmatory PCR	2x per week
Secondary – students (inc SEND)	From 8 <sup>th</sup> of March full return to school planned	On site supervised for 3 tests as part of schools return to full opening and then move to home testing for those that can- with confirmatory PCR (onsite will remain an option)	2x weekly
Special School - staff	Jan 2021	Primary phase at home Secondary move to at home from March 2021 with requirement Both phases require confirmatory PCR	2x weekly
FE colleges	From 8 <sup>th</sup> of March full return	on site supervised for 3 tests as part of FE return to full opening and then move to home testing for those that can- with confirmatory PCR (onsite will remain an option)	2x weekly
Post 16 training providers - staff and students	From end of March 21	home testing for those that can- with confirmatory PCR (onsite will remain an option)	2x weekly

#### 4.4 Antibody testing – Pillar 3

Oversight of local antibody testing is provided through the BNSSG Testing Cell.

Antibody testing is available locally through the NHS for frontline health care workers. A venous blood sample is taken to identify if a person has previously had Covid-19. A positive result does not guarantee immunity to infection. The purpose of the testing is surveillance.

In Bristol the testing was initially rolled out in stages. Staff at NBT, UHB, SWAFT, Sirona, Severnside and AWP were offered testing in the first phase; this was followed by opticians and dentists in the second phase; then One Care, the CCG, primary care, NHSEI and commissioned community services (e.g. Vita Health); following this hospices, CSU, national transplant and blood services. Antibody testing has been further extended by invitation to social care staff and care homes.



## 4.5 Local Testing Sites – Pillar 2

Local testing sites are a core ambition for the national testing strategy. Our role in the local authority is to identify locations based on need and local knowledge.

The local authority identified sites across Bristol. Sites are scoped by the Department of Health and Social Care (DHSC) and their agents (Deloitte) before they are approved.

Bristol now has established a network of four **Local (Symptomatic) Testing sites** across the city. These sites complement the Regional Testing Centres, our closest one being at Bristol Airport, and postal home tests. These sites all use PCR tests which require laboratory processing. It is the intention that local and mobile testing sites are deployed around the city to provide locally accessible testing:

- Where larger numbers of people do not have access to a car
- In areas of higher risk or vulnerable population
- Recognising the geography of the city
- Informed by epidemiological reports

Priority areas for local testing sites include:

- Areas where there are a high number of younger people and houses of multiple occupation and which are accessible to university and FE students
- Easton and Lawrence Hill; St Pauls and Ashely where there are of low car ownership and higher number of Black and Asian communities; and higher levels of deprivation
- South and North Bristol where there are areas of low car ownership and challenges getting to regional testing sites.
- Central Bristol where many people do not have cars.

Access to local testing is via a national booking portal and is available to symptomatic individuals. Options are to use the regional testing site at the Airport, or a MTU, or LTU's, or ask for a home testing kit. Testing is not generally available for asymptomatic testing (appendix 2).

If individuals arrive at the testing site without having booked a place, they will be seen, and the staff will assist them in making a booking there and then, so that their personal details are properly recorded in the Pillar 2 system. If the site is busy and has no capacity to test at that time, then they can be assisted to book a later appointment.

## 4.6 Mobile Testing Units

Bristol has also sites for the deployment of mobile testing units to support the management of local outbreaks.

When a need is identified to mobilise local testing in the event of an outbreak target at a specific location for instance a workplace, neighbourhood or school, then mobile units will be deployed at pace by DHSC. This deployment would be to settings identified in Public Health England (PHE) outbreak notifications, or to parts of the city experiencing higher prevalence of Covid-19 that are identified by Public Health Epidemiologists using heat maps.

#### 4.7 Lateral Flow (Rapid) Tests

Lateral Flow (rapid) tests are a new technology. These tests are quick and don't require laboratory processing. However, the lateral flow test is not as sensitive as the PCR test and is therefore a red light test, not a green light test. While the test is likely to detect high levels of the virus, negative results are less reliable. Anyone positive is required to isolate, however a negative result requires Covid-secure behaviours to be maintained.

No single test is perfect. Together, tests along with other types of tests and developing testing technologies are an important set of tools helping identify sources of infection.

In preparation for schools opening on 8<sup>th</sup> March 2021, the Department of Health and Social Care has designated three Local Testing Sites **as collection points for asymptomatic testing for households and household bubbles with children**. Local Testing Sites will be open in the mornings until 12.30pm for PCR symptomatic testing and in the afternoons from 1.30pm for the asymptomatic test collection. There is also limited availability for getting these household tests by posts. We are exploring the possibilities of other means of collection using community pop up and satellite asymptomatic testing sites.

We have established an asymptomatic **Community (Rapid) Testing programme** utilising lateral flow devices. Our model has a central test centre, a number of satellite test centres. Our rapid community testing is focused on essential workers and those who can't access rapid testing by another means. Participation is voluntary and we encourage everyone to undertake regular testing. It is a highly flexible model which can scale up or down as required.

#### 4.8 Testing arrangements for vulnerable individuals

Bristol has secured a modest supply of swabs for use when there is a need for urgent tests of complex single cases and vulnerable individuals, for instance a homeless person, or person with complex health or social needs. These are stored at Severnside.

Support for testing of vulnerable individuals has been secured through the Bristol North Somerset and South Gloucestershire (BNSSG) Testing Cell, provided by Bristol Ambulance Service through University Hospital Bristol.

#### 4.9 Testing to support the management of an outbreak

Outbreak management plans are being developed for various settings, as set out in our Local Outbreak Management Plan. Public Health will work with the surrounding public health teams in South Gloucestershire, North Somerset and Bath and North East Somerset (BNSSG) councils to identify and respond to cross-boundary outbreaks. For instance, the University of the West of England (UWE) site in South Gloucestershire is on the border with Bristol; the university's workers and students mainly live and socialise in Bristol, so a coordinated approach would be needed if there were an outbreak linked to this site.

In the event of a localised outbreak the national test booking portal has a facility to open a dedicated web site for specific outbreaks.

**4.9.1 Care Home Outbreak:** PHE would deliver testing swabs for care home testing in addition to their stock of whole care home tests– for symptomatic and asymptomatic people who may be infected. The results would be reported through Pillar 1. PHE tracers would work with the positive people to identify contacts and contact them to ask them to self-isolate for 14 days. If two or more people tested positive the case would be escalated to PHE Level 1 as a complex case, an outbreak would be declared, and PHE would contact the home carry out a risk assessment, issue advice to the home and alert Public Health. Public Health would notify Adult Social Care, BNSSG Infection Prevention and Control Cell, CQC, Sirona and BNSSG CCG pharmacy leads; these people would then work directly with the Care Home.

**4.9.2 School outbreak:** Schools hold a stock of 10 PCR tests for emergency use where access to usual Pillar 2 symptomatic testing is difficult for the family. PHE could deliver testing swabs for symptomatic children and staff in each affected bubble however in practice this has not been needed and families have obtained tests through the online testing portal or 119. PHE, Public Health, BCC Education Department and the school would work together to manage the outbreak and also ensure student learning and safeguarding of vulnerable students is in place. If children were required to stay home for 10 days and normally had free school meals this would be addressed by the council.

**4.9.3 Workplace outbreak:** symptomatic staff would self-isolate and book a test through Pillar 2. PHE would deal with tracing exposed contacts including co-workers. If two or more people tested positive the case would be escalated to PHE Level 1 as a complex case, an outbreak would be declared, and PHE would contact the workplace to carry out a risk assessment, issue advice to the home and alert Public Health. Public Health would notify Environmental Health and work together to provide local support. MTUs and LTUs could be deployed at his stage. If the outbreak was more widespread then Public Health working with PHE would declare a large community outbreak.

**4.9.4 Hospital outbreak:** if two or more cases are identified in a hospital through Pillar 1 and Pillar 2 then the hospital will notify PHE (or PHE will identify the linked postcodes of positive cases), PHE will notify Public Health. PHE will call an outbreak management meeting with the hospital and Public Health. This group will be the expert group advising the hospital in addition to their own Infection Prevention and Control teams.

**4.9.5 Community outbreak:** symptomatic people would book testing through Pillar 2 or Pillar 1, the positive results would be sent to PHE. PHE data analysts would map all postcode information about positive cases and could identify community outbreaks. BCC epidemiologists would also map all positive cases in Bristol and Public Health, using their local knowledge, would check for community outbreaks. If the outbreak was more widespread then the local authority would declare a large community outbreak with PHE. This would lead to mobilisation of MTUs and LTUs.

**4.9.6 Large outbreak:** in the event of a large outbreak, an Outbreak Management Control Team would be instigated by Public Health England and Bristol City Council Public Health. Members would include PHE, BCC Public Health Director (or Deputy), BCC and PHE communications. Other people could be invited to join depending on the specific outbreak, for instance the manager of a workplace, police if the outbreak was in a community, and the Civil Protection Unit. The team would

decide on the way to address the outbreak, communications and request the deployment of MTUs or LTUs.

**3.9.7 Management of multiple outbreaks:** if a situation develops where there are more outbreaks than we have resources to manage then the Director of Public Health can declare a major incident and access support from the Local Resilience Forum and agencies that make it up. MTUs and LTUS would be deployed as appropriate.

**3.9.8 Community Surge Testing:** to support public health preventative action in the event of Variant of Concern being identified locally we would mobilise the sites identified for MTUs, our network of local testing centres, our network of community libraries for collect and drop and our networks of community partners to reach into communities. Community Surge Testing has been undertaken in a number of areas in the country, including Bristol, as part of national efforts to suppress the spread of new Variants of Concern. Community Surge Testing is asymptomatic testing which focuses on specific post codes to collect a population sample. PCR tests are used because of their reliability. Community Surge Testing identifies positive asymptomatic cases, helping to breaking chains of transmission and samples can also be further analysed to identify new Variants of Concern. We are planning for the eventually that the requirement to undertake community surge testing may become a feature of the new way of living as we come out of lockdown and into recovery.

## **5 Testing as part of research programmes**

Schools and universities are important settings given the likelihood of young people as transmission agents. Two programmes are underway in Bristol, described below. Test and Trace data will be analysed by age.

### **5.1 Schools**

A large local research programme led by Bristol University in collaboration with the local authority and school leaders will support schools to have confidence and better understand incidence and prevalence and patterns of transmission among the school population. The programme will utilise university laboratories so that there is no drain on the national laboratory infrastructure. A local contact tracing system will be established, and positive results will be fed into the national test and trace system.

### **5.2 Universities**

To support universities safely manage returning students a similar sampling programme is proposed for university students. This will support and monitor the effects of a programme of behavioural interventions.

## **6 Communication and Engagement**

The Department of Health and Social Care and the Government are ultimately responsible for communication about the national testing strategy; and for communication around booking and results of tests. However, Bristol City Council, and the Local Engagement Board have a role in interpreting messages locally and in engaging with and maintaining the confidence of local communities.

In a city such as Bristol communication and engagement will need to be tailored and mediated appropriately to different groups and communities.

Communication and engagement around the deployment of local testing centres will be particularly important. While DHSC is ultimately responsible for the communication and delivery of the local testing units and for instruction via the booking portal it will fall to the local authority to manage local relationships, monitor compliance to booking instructions and to apply communication effectively.

## **7. Contact Tracing and Isolation**

Testing alone will not contain the virus; testing needs to be supported by isolation of both the person who has tested positive and the isolation of close contacts.

The majority of contact tracing is carried out by the national Test and Trace service, with completion rates currently above 80% of follow up.

The Bristol Health Protection Committee has placed a high priority on the importance of follow up of all contacts, and on arrangements in relation to adherence to isolation and quarantine instructions.

The rate of completion of follow up has improved to a good level, being consistently above the 80% at the time of writing.

A local authority Contact Tracing Partnership has been established to and this team will also undertake enhanced contact tracing in support of the specialist health protection teams.

The We Are Bristol helpline and network of community volunteers ensures that support can be swiftly provided to support isolation as required. The Benefits Team in the Council manages statutory and discretionary self-isolation payments. Local councillors, MPs and local community networks all help to make people aware of the support which is available.

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## **Appendix 1: Bristol Testing Sites**

### **Local Testing Sites**

- Victoria Rooms Car Park, Queens Road, Clifton
- Netham Park, Barton Hill
- Hengrove Leisure Park, Hengrove
- Temple Street, Temple

### **MTU Sites (These are only used when required):**

- MTU: Brislington Park and Ride
- MTU: Portway Park and Ride
- MTU: Long Ashton Park and Ride
- Imperial Retail Park, Hartcliffe Way
- Imperial Sport Ground, Whitchurch
- Computershare Car Park, Bishopsworth
- University Hall, Bristol University

### **Community Testing sites**

- Bristol Rapid Testing Centre, Wellington Road, St Pauls, Lawrence Hill ward

## Appendix 2: Local Testing Action Plan

Alignment with local Pillar 1 testing	Develop programme through BNSSG testing Cell	
Care Home Testing – P2	Maintain oversight with ASC Establish monthly meetings with the Care Sector Appoint to PH Care Home Liaison post	
Antibody Testing - Health and Care Staff	Develop programme through BNSSG testing Cell	
Local Testing Sites	Ensure access to testing for local areas Ensure students and FE students	
Testing for vulnerable individuals	Establish bank of local swabs Establish swift swab squad testing capability	
Testing to support Outbreak Management	Identify sites for fast mobilisation Understand mobile testing options and how to access these.  Work with BNSSG testing cell and local partners to develop local outbreak response capability	
Enhanced local contact tracing partnership to support testing	Establish local enhanced contact tracing partnership with skills to undertake enhanced contact tracing	
Communication and Engagement	Develop protocol to support communication and engagement around local testing sites.  Targeted communication jointly with partners	
Establish rapid Community Testing	Set up site/s and booking system Establish safe working protocol Promote as red light not green light test	
Establish capability to undertake community surge testing at speed and scale	Have MTU sites in readiness Have LTS capability to mobilise logistics  Maintain and develop team capacity and capability Maintain strong community and volunteer networks and Communications capacity  Develop local contact tracing hub to provide support	