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# PUBLIC HEALTH WALES' WRITTEN EVIDENCE ON COVID-19

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Submitted to Health, Social  
Care and Sport Committee

23 September 2020 v2

# Health, Social Care and Sport Committee

## Public Health Wales evidence session

### Wednesday 23 September 2020

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## 1. Introduction

This written submission is made to the Health, Social Care and Sport Committee prior to Public Health Wales' evidence session on Wednesday 23 September 2020. The submission sets out the work Public Health Wales has undertaken in support of Welsh Government's Test Trace Protect Strategy - reflections to date and lessons learned, preparations for the winter period and the role Public Health Wales will play in promoting the wider public health messaging to encourage the take up of the flu vaccination.

As the national Public Health Institute for Wales, Public Health Wales has played a key role in supporting the public, the Welsh Government and the wider system during our response to the coronavirus pandemic. We have provided system leadership through the provision of specialist and expert public health advice, information, intelligence and support.

This has involved working with a range of partners within the UK and internationally.

This has included:

- Providing public health advice to the Welsh Government to support the development of policy
- Delivering key public health functions and services (e.g. health protection and microbiology outbreak response and management)
- Supporting health boards, local authorities and the Welsh Government in implementing the Test Trace Protect Strategy
- Developing and disseminating surveillance and intelligence to the wider system (e.g. COVID-19 surveillance reports)
- Undertaking research, evaluation and international evidence analysis to inform policy and support the Wales's ongoing response (e.g. national public engagement survey and international horizon scanning).

We would like to take this opportunity to formally thank our staff for their continued commitment and professionalism over the course of the pandemic. They continue to work tirelessly to protect the public and support Wales' response to COVID-19.

## 2. Current Epidemiology

### 2.1 Global numbers

The pandemic continues to affect countries across the world. As of 15.35hrs 17<sup>th</sup> September 2020, there were 29,737,453 confirmed cases and 937,391 deaths worldwide<sup>1</sup>.

### 2.2 UK numbers

All four UK countries saw the peak of the first wave at the beginning of April 2020. Following the introduction of the lockdown measures, case numbers and fatalities dropped from mid-April onwards. From mid-July onwards, cases in the UK overall have risen at an increasing rate. As of the 17 September (15.45hrs Source: UK Govt COVID dashboard) September 2020, there were 381,614 cases identified in the UK. The number of people who have sadly died in the UK (17 September 2020) is 41,705<sup>[2]</sup>.

### 2.3 Wales' numbers

The peak of infection in Wales was during the first two weeks of April 2020. As of the 17<sup>th</sup> September 2020, there were 20,233 confirmed cases and 1,601 deaths<sup>[3]</sup>.

### 2.4 Epidemiology in Wales

The national incidence of confirmed cases in Wales increased during week 37 (ending 13 September 2020) compared to the previous week and is at a level last seen during May 2020. Increases were noted in different regions of Wales, but are most prominent in Caerphilly, Merthyr Tydfil, Rhondda Cynon Taff and Newport. Mobile community test sites were recently established and restrictions are currently in place in Caerphilly and Rhondda Cynon Taf. In most other areas of Wales daily numbers of confirmed cases are at low and stable levels. Age-specific incidence of confirmed cases is currently highest in those younger than 50 years. COVID-19 confirmed hospital admissions remained low and stable during week 37.

As at 1pm, 17<sup>th</sup> September 2020, there had been a cumulative total of 20,233 confirmed episodes of COVID-19 in Welsh residents, this includes testing from non-NHS Wales laboratories. Due to ongoing data cleansing following the merging of these datasets, there may be a small number of duplicate episodes included in this cumulative figure.

Of all cases confirmed in Wales, 23% were tested and confirmed in NHS Wales laboratories and were in-patients who provided samples while

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<sup>1</sup> [https://covid19.who.int/?gclid=EAlalQobChMIIntXk48zy6wIVjM\\_tCh1gqg-WEAAYASAAEgJTbPD\\_BwE](https://covid19.who.int/?gclid=EAlalQobChMIIntXk48zy6wIVjM_tCh1gqg-WEAAYASAAEgJTbPD_BwE)

<sup>2</sup> [https://coronavirus.data.gov.uk/?\\_ga=2.195989608.51722093.1600253429-1160851531.1600253429](https://coronavirus.data.gov.uk/?_ga=2.195989608.51722093.1600253429-1160851531.1600253429)

<sup>3</sup> <https://public.tableau.com/profile/public.health.wales.health.protection#!/vizhome/RapidCOVID-19virology-Public/Headlinesummary>

attending a hospital, 62% were from individuals in the community (including key workers tested through occupational health departments and community testing units, care home staff and residents, other closed settings and hospital outpatient departments). Additionally, 15% of cases were tested and confirmed in non-NHS Wales laboratories.

A proportion of individuals testing positive in the most recent weeks may have been identified through screening following outbreaks and incidents in a variety of settings, or through enhanced testing in the community by mobile testing units. In addition to actual symptomatic cases of COVID-19, some of the positive tests included may be low-level positive test results where the individual subsequently tested negative within a short time frame of approximately 2 to 3 days after the original sample, these may be interpreted as 'false positive' test results if the individual remained asymptomatic. These are currently not removed from surveillance datasets.

As at 13<sup>th</sup> September 2020, there have been 3,723 confirmed case admissions to hospital (i.e. positive test taken within 28 days prior to admission, or less than 2 days after admission). There have been 423 admissions to critical care. As at 13<sup>th</sup> September 2020 there were 53 confirmed cases currently in hospital wards, five of whom were in a critical care ward.

The mean age of patients confirmed with SARS-CoV2 in hospitals is 70.9 years and the mean age of patients individuals with SARS-CoV2 in other locations is 45.4 years, this may include screening tests for non-symptomatic individuals. During week 37, incidence increased across all age groups, with highest incidence being seen in those aged 30-49.

## **2.5 Incidents and outbreaks**

As at 9am on 14<sup>th</sup> September 2020, provisional data indicates that there had been 783 respiratory/COVID-19 incidents in care homes reported to Public Health Wales since 1st March 2020 with 57% having one or more confirmed cases of SARS-COV2 linked to the incident in Tarian (the national case and incident management system). The cumulative number of staff and residents testing positive was 2,809. Policy and local implementation of testing strategies has changed over time and this could affect the number and trends in confirmed cases and incidents. Local incidents not recorded on Tarian are not included in these figures.

Across parts of Wales, there are cases that can be linked to clusters and outbreaks. These are in a variety of settings ranging from exposures in pubs, house parties, hospitals, imported infection from foreign travel, workplaces and factories.

Enhanced community testing has been set in place in parts of Caerphilly Local Authority and Rhondda Cynon Taf Local Authority, following increases in confirmed cases in the area. In Caerphilly and Rhondda Cynon Taf Local Authority restrictions have also been set in place and social distancing reinforced.

There were 45 new respiratory incidents recorded in the Tarian case and incident management system in week 37; this is an increase from week 36. Of the 45 respiratory incidents, 24 were in residential homes, 11 in other settings, 6 in school or nursery settings and 2 in hospitals and other community settings respectively.

## **2.6 Mortality**

As at 17<sup>th</sup> September 2020, there were 1,601 deaths in confirmed cases reported to Public Health Wales through rapid mortality surveillance in hospitals and care homes. The mean age of fatal cases reported through rapid mortality surveillance was 79.1 years (95% CI 78.6 – 79.7). The weekly number of deaths reported through rapid mortality surveillance peaked during the week ending 12<sup>th</sup> April 2020 at 236, this was one week later than the peak week for the number of confirmed cases in Wales.

According to provisional death certificate data provided by ONS, there were 4 COVID-19 deaths in Welsh residents registered with COVID-19 mentioned on the death certificate during week 36 (ending 4<sup>th</sup> September 2020). This has decreased from a peak of 412 during the week ending 24 April 2020. Of the deaths registered during the week ending 4<sup>th</sup> September 2020, 3 are reported as having occurred in hospital and 1 at home. According to EuroMoMo analysis, the weekly number of all cause deaths in Wales has decreased and is at levels expected for this time of year.

Further information including the latest available data can be found using the following [Public Health Wales Rapid COVID-19 surveillance link](#) (*publically available*).

*\*Please note that the hyperlinks provided in the footnotes take you to information that is updated daily. As a result, the figures may differ to those included within this paper.*

## **3. Test Trace Protect Arrangements**

### **3.1 Background**

On the 13<sup>th</sup> May 2020, the Minister for Health and Social Services published the Welsh Government's *Test Trace Protect Strategy*. This was informed by the expert public health advice within the Public Health Protection Response Plan submitted by Public Health Wales. The Strategy sets out detailed system-wide action that will be undertaken to support the Welsh Government's Framework for Recovery.

The roles and responsibilities of a range of agencies and the public are set out within the Strategy. Those identified for Public Health Wales are described as:

*'Providing leadership and specialist advice on public health approaches. Responsible for coordinating contact tracing, advising on sampling and testing, laboratory analysis of tests, health surveillance and providing expert health protection advice and analysis of the spread of the virus in our communities through a range of health surveillance indicators'.*

A Welsh Government Test Trace Protect Programme Oversight Group has been established to oversee the implementation of the Strategy. In addition, Public Health Wales established an internal programme to implement its contribution to Test Trace Protect. The Public Health Wales Response Programme was established in early May 2020, which consisted of a series of work streams, including:

- contact tracing and case management
- sampling and testing
- surveillance
- communications and engagement
- digital
- people
- international learning and intelligence
- research and evaluation
- quality, safety, information governance and risk
- finance and supply chain.

A Stage 1 Plan (which ran until early June 2020) and Stage 2 Plan (from June to end of August 2020 - subsequently extended to the end of September 2020) incorporated the outputs of the work streams. We implemented a programme management approach that utilises recognised methodologies and specialist integrated planning resources. This allowed us to develop a robust staged implementation plan, to deliver at pace, a number of key products required for us to mount an effective response to COVID-19.

A mid-stage assessment of the plans was undertaken during late July/early August 2020, which provided the opportunity to review progress, highlight achievements and inform the next stage of planning.

A further plan to take the organisation into 2021 is currently being developed. This will incorporate our ongoing health protection response to the pandemic, focused work in relation to the broader non-COVID related

harm to the population's health and well-being, the reactivation of our services and our organisational recovery.

The plan aims to enable the safe reactivation of defined services while recognising that the ongoing health protection response will be our key priority for at least the remainder of 2020. As at the 18<sup>th</sup> September 2020, Public Health Wales continues to operate at the 'enhanced' emergency response level as set out within our Emergency Response Plan.

Regular progress reports on the implementation of the Plan are reviewed by the Public Health Wales Gold Group, the Executive Team and the Board. As previously reported to the Committee, the Public Health Wales' Board and Committees continue to operate within Welsh Government guidelines and in line with the All-Wales Governance Principles, with some approved variations to Standing Orders. From March 2020, the Board has operated remotely and has met virtually with increased frequency. The Board recommenced live streaming its meetings in July 2020.

### **3.1.1 Providing expert health protection advice and support**

As part of our statutory health protection role, Public Health Wales has provided specialist advice and support to a wide variety of partners and response structures, including NHS Wales, local authorities, emergency services, the Criminal Justice system, education, social care and voluntary services. During each phase of the response, Public Health Wales has, and continues to provide specialist public health advice to the Welsh Government and partners.

Public Health Wales also attends the twice-weekly Chief Medical Officer Team briefings, which is complemented by regular engagement between Public Health Wales' Executive Team and the Chief Medical Officer several times a week. These continue and are underpinned by weekly engagement between named senior leads.

Other notable examples of support to Welsh Government include:

- Specialist advice on infection prevention control and personal protective equipment, including supplementary guidance for health care and social care professionals
- Public Health guidance to residential care homes as described earlier
- Guidance to Environmental Health Officers in relation to prevention actions in care home and enclosed settings
- Specific advice on the development of critical worker testing to inform Welsh Government policy
- Advice to inform and consider international learning from COVID-19 and the broader indirect harm that is impacting on population health and well-being.



## **3.2 Public Health Wales' support of Test Trace Protect (TTP)**

A substantial amount of work has been undertaken by the organisation to support the implementation of Test Trace Protect. Key deliverables to date are set out below.

### **3.2.1 Support to the development and delivery of the contact tracing service**

Public Health Wales has provided active support to the development and delivery of the contact tracing service established in Wales including the development of job profiles, an e-training package for contact tracing, operational notes, scripts, standard operating procedures, flowcharts and data sets.

In addition, modelling advice and support was provided to inform the potential activity of cases and contacts and resulting resource requirement.

To fulfil its national role in Test Trace Protect, Public Health Wales is responsible for producing an operating framework for contact tracing that enables specialist public health protection advice and support to the regional and local level.

### **3.2.2 Contact tracing management digital system (Microsoft Dynamics)**

Public Health Wales provided significant technical support to support the development of the contact tracing management digital system (Microsoft Dynamics).

This involved working closely with the Welsh Government and the NHS Wales Informatics Service (NWIS) in providing technical expertise and advice for the design and build of the Customer Relationship Management system (CRM) to support contact tracing across Wales

### **3.2.3 Establishment of a National Contact Centre and National Health Protection Response Cell**

The COVID-19 Phase 2: Case Finding and Contact Tracing Operating Framework produced by Public Health Wales for the Contacting Tracing Service in Wales, sets out the three-tier model agreed for contact tracing and outlines the detailed operating arrangements. The Framework is intended to support the public health and public service system in Wales to deliver a common approach based on evidence and expertise. The three-tiered approach across Wales at a national, regional and local level is supported by a digital infrastructure to enable real-time information sharing.

This enables an agile approach to responding to clusters, incidents and outbreaks of COVID-19 due to the consistency in training, the digital system and model of delivery. This has been invaluable over the recent

weeks and months in providing 'mutual aid' for contact tracing capacity from any part of Wales to regions where incidents and outbreak are occurring.

The National Response Tier is delivered by Public Health Wales and is responsible for the development of the national operating framework, including guidance, Standard Operating Procedures (SOPs), contact tracing scripts, protocols and supporting materials. The national tier coordinates at an all Wales level, and supports the Welsh Government with advice to enable them to strategically manage the pandemic; ensuring access to Health Protection specialist advice for all the Regional Response Cells.

The National Response Tier also provides a point of contact for the sharing of intelligence across Test Trace Protect teams in Wales and information between Wales and other nations in relation to positive cases and/or contacts and other cross border issues including those relating to port health.

In *Test Trace Protect* Public Health Wales' role in contact tracing is therefore to provide specialist advice, guidance and training to partners; provide access to specialist resource to advise and give appropriate support to the regional level on complex cases, complex clusters, complex incidents and outbreaks; provide technical advice to the Welsh Government and to provide a number of functions at a national level including a helpline for professional enquiries. The functions include the following, which will be subject to review and ongoing activity analysis to ensure the model is proportionate to demand.

The Public Health Wales National Tier of response is delivered through a National Contact Centre which provides a single point of contact for all public and professional enquiries into Public Health Wales and a National Health Protection Response Cell. The National Health Protection Response Cell:

- Provides expert advice and appropriate support to the *Test Trace Protect* programme on the future development of contact tracing
- Provides specialist resource to advise on and give appropriate support to complex clusters, incidents and outbreaks
- Contributes specialist Health Protection advice to policy and guidance in response to COVID-19.

The Cell uses a range of staff including Consultants in Communicable Disease Control (CCDC), Consultants in Health Protection, Health Protection Nurse/Practitioners, Consultants in Public Health, Specialist Practitioners and administrative support. Whilst there is a range of roles, the overall numbers of staff with specialist health protection expertise is very small especially when considering the broad call on their time and skills. Therefore, to support these specialist staff, Consultants in Public Health and Public Health Nurses/Practitioners support the CCDCs, Consultants in

Health Protection and Specialist Health Protection nurses and have been mobilised to the Cell and have received specialist training to enable this.

The National Health Protection Response Cell supports the regional tier both proactively and reactively, offering advice and appropriate support in response to complex cases or scenarios, and close working relationships have been established.

To support Test Trace Protect, Public Health Wales has mobilised a large proportion of staff resource from across the organisation to support the roles described above. The organisation will ensure that this resource will be agile, with the ability to respond to changing challenges across Wales, including the potential of response to the management of multiple concurrent incidents and outbreaks as we progress through this phase of the pandemic.

### **3.2.4 Sampling and Testing**

#### **3.2.4.1 Sampling**

Since the outset of the pandemic, Public Health Wales has been building capacity for COVID-19 testing in Wales and supporting the capacity building for sampling centres (run by health boards) and web-based sampling. The scope of Public Health Wales' sampling and testing work to date has included:

- supporting health boards to increase sampling capacity for antigen and antibody testing across NHS Wales to meet the requirements of the Welsh Government's testing plan
- increasing the testing capacity in Public Health Wales laboratories and accessing additional capacity from across the UK
- working with the Welsh Government and health boards (managing sampling centres) to create a simple end-to-end referral and results process for Wales
- working with the Welsh Government, health boards and Local Resilience Forum (LRF) partners to help them to maximise the sampling capacity in Coronavirus Testing Units, Population Sampling Centres and Mobile Testing Units and any additional capacity that may be required.

There is now a mixed-model for sampling that includes health board-run Coronavirus Testing Units (CTUs), Population Sampling Centres (PSCs), commonly referred to as 'drive-throughs' and mobile testing units (MTUs). Mobile Testing Units transferred from the military at the end of August 2020. 15 of the units are with the health boards, supported by a Department of Health and Social Care (DHSC) in England defined commercial provider. A further three units are stationed with the Welsh Ambulance Service NHS Trust (WAST), responding to outbreaks. Discussions are currently taking place with the DHSC regarding walk-in

sampling sites. These will add further sampling capacity in addition to providing better access to sampling in certain locations within Wales.

### **3.2.4.2 Testing**

Since the start of the pandemic, Public Health Wales' microbiology service has built on its system leadership responsibilities and, together with the Welsh Government, has sought to procure both platforms and reagents on behalf of all medical microbiology services in Wales (there are seven Public Health Wales and three health board medical microbiology laboratories within Wales). This was undertaken to ensure that we have sufficient provision across Wales in order to meet the testing capacity needs throughout the pandemic. The intention has been to have centralised platforms that can do large volumes of tests, at a given time, and then provide local capacity to support quicker turnaround times for results through medium-sized platforms and rapid antigen testing machines across Wales.

To enable Public Health Wales to do this, in very challenging situations, we have had to adapt to the situation to secure sufficient testing capacity. This has included working with partners such as the Life Sciences Hub and the Welsh Government to identify and procure platforms that are more technically demanding and require an increased workforce and new skills in addition to pursuing the fulfilment of commercial agreements to bring new platforms into the UK.

Despite these challenges, Public Health Wales has actively continued to increase the testing capacity for Wales. This has been through the addition of high throughput platforms at the University Hospital Wales and Magden Park, along with the proposed provision of medium-sized and rapid PCR (antigen) machines in each of the medical microbiology laboratories in Wales.

In August 2020, in response to a request from the Minister for Health and Social Services, a business case to increase laboratory capacity and turnaround times across Wales was submitted and approved. The proposal will deliver rapid (under 4 hours) testing capacity for COVID-19 on all acute hospital sites plus timely (less than 12 hours) high throughput testing regionally.

The changes to the service will include:

- additional staff and equipment for Public Health Wales' regional laboratories based at University Hospital Wales (Cardiff), Moriston Hospital (Swansea) and Ysbyty Glan Clwyd (Rhyl) testing laboratories, so that they can operate 24 hours a day, seven days a week
- the creation of six additional Hot Labs at hospitals across Wales, which will have rapid, under four hour, testing equipment and new testing equipment for other conditions to free up staff to work on COVID-19

testing. These will operate from 08.00 – 22.00 hours, seven days a week.

Up to 170 Whole Time Equivalent (WTE) new jobs will be created across the service as a result of the changes. Public Health Wales has launched a recruitment drive to fill these positions. A project Board has been established to oversee the recruitment and it is anticipated (subject to successful recruitment processes) that 90% of the appointments and all but one of the hot labs will be complete by the end of November 2020. Recruitment will be undertaken on a regional basis to enable maximum flexibility of appointments. This will better enable cross cover between the hot labs and the regional labs and provide additional resilience for testing within Wales.

Additional benefits will include testing for a range of respiratory pathogens (including influenza). The proposal is complementary to the development of the laboratory at Imperial Park 5, which is primarily focused on delivering serological testing for COVID-19.

Platform and test kit capacity has risen slowly but has been boosted through the operationalisation of the PerkinElmer platforms. The use of this platform is not without challenges, due to the need for significant space and temperature control.

### **3.2.4.3 Capacity**

Since the start of the pandemic Public Health Wales has been seeking to increase its testing capacity for Polymerase Chain Reaction (PCR) tests<sup>2</sup>. This capacity has been further bolstered through Welsh Government's decision to utilise the UK Lighthouse Laboratories set up by the Department of Health and Social Care.

At the present time, samples from Population Sampling Centres, Mobile Testing Units and the majority of care homes are being processed through Lighthouse Laboratories. To date, this has enabled the Public Health Wales capacity to be focussed on supporting in-hospital testing, Coronavirus Testing Units (to test key workers), along with supporting the testing for outbreaks.

More recently, there have been a number of issues with the processing of tests within Lighthouse Laboratories. This has led to delays in their turnaround of results. There have been a number of reasons for this including increased demand for testing, reduced Lighthouse Laboratory capacity and backlogs of testing of care homes. This is expected to continue for a number of weeks to come. The Welsh Government is working closely with the Department of Health and Social Care and the UK Government to resolve this. At the same time, Public Health Wales is supporting the Welsh

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<sup>2</sup> A PCR test is a diagnostic test that checks to see if someone is infected with the coronavirus.

Government in further developing a sustainable solution for Wales which will optimally combine Welsh and UK Lighthouse Laboratory testing capacity.

With the current Lighthouse Laboratory testing challenges, Public Health Wales is currently working with the Welsh Government to support the sampling and testing of the population by best utilising the existing Welsh testing capacity. This will mean that a proportion of tests that would have normally been processed within Lighthouse Laboratories, will now be processed within Public Health Wales laboratories. When the situation in the Lighthouse Laboratories is resolved, Public Health Wales laboratory capacity will be switched back to its more focused purpose in responding to rapid surge requirements for incidents and outbreaks where mass population sampling in a rapid turnaround time is required.

Public Health Wales is advising the Welsh Government and the wider system on demand management and the flow of samples through the different testing capacity to help ensure that the tests are undertaken based on clinical and system priority. For example, hospitalised patients, key workers, symptomatic citizens, care home routine screening.

### 3.2.4.4 Overall Activity

The figure below shows the weekly number of PCR tests that have been analysed in NHS Wales labs and non-NHS Wales labs respectively.

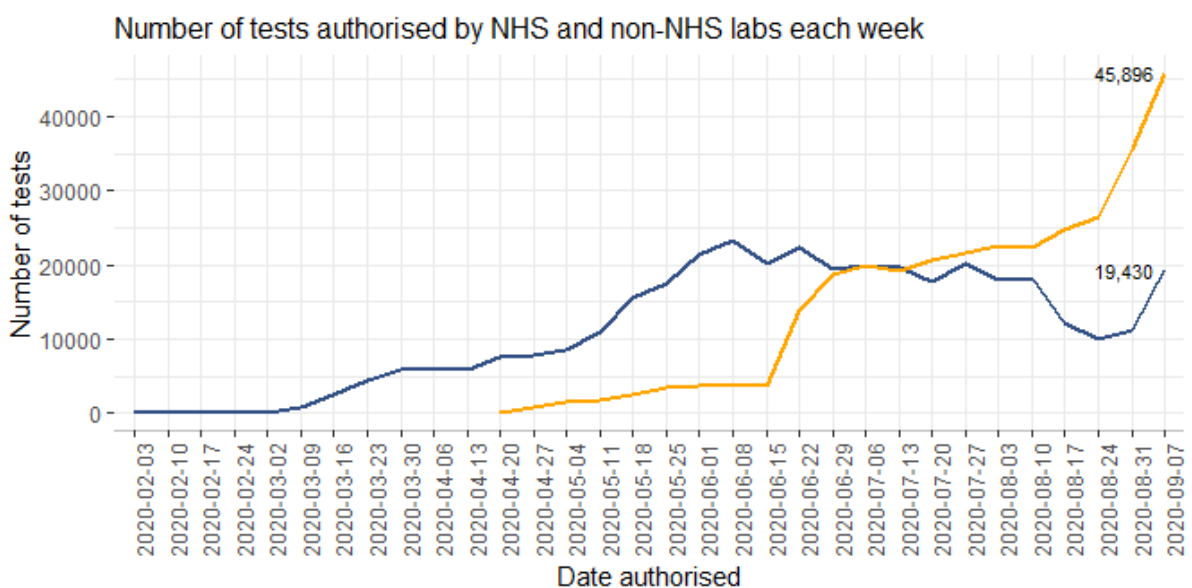


Figure 1: Number of tests authorised in NHS Wales and non-NHS Wales laboratories

### 3.2.4.5 NHS Wales Laboratories

For activity being channelled through NHS Wales laboratories, the information is reported by broad 'sampling pathways', that are visible within the scope of the underlying datasets. The sampling pathways are:

- Community
- Hospital

➤ Other

The 'Community' category includes specimens collected at Community Test Units (CTU) and Population Sampling Centres (PSC). Public Health Wales monitors tests collected at community locations by further sub-categories of "Asymptomatic keyworker and resident screening" or "Community Symptomatic Tests" which is to reflect the policy of regular screening testing in Care Home settings. Hospital refers to tests conducted on in-patients.

The 'Other' category includes tests collected at locations such as Prisons and GP Surgeries or where the collection location is unknown (missing, illegible etc).

The table below shows the number of tests authorised in NHS Wales laboratories from the 7 September to the 13 September 2020, split out by sampling pathway.

Sampling pathway	Weekly total
NHS Wales lab - Community tests	13688
NHS Wales lab - Hospital tests	5406
NHS Wales lab - Other or unknown tests	336
<b>Total</b>	<b>19430</b>

There has been a recent increase in NHS Wales laboratory activity. This is the result of increased sampling demand in addition to the switching over of some activity from Lighthouse Laboratories to NHS Wales laboratories.

### 3.2.4.6 Non-NHS Wales Laboratories

Tests that are analysed by Non-NHS Wales laboratories (often referred to as Lighthouse Laboratories, although this does include laboratories that are not formally part of the Lighthouse partnership) are reported by the 3 sampling pathways:

- Non-NHS Wales lab – Community
- Non-NHS Wales lab - Home delivery
- Non-NHS Wales lab - Organisation Portal; (previously Care Home Test).  
(Community refers to samples collected at community sites such as Regional Test Sites (e.g. Abercynon)).

The Organisation Portal was originally only for use by Care Homes in order to bulk order test kits. As of the end of August 2020, its use has expanded to any registered organisation that needs to bulk request test kits.

However, it is still mostly Care Homes that utilise this requesting mechanism.

For the week commencing 7<sup>th</sup> September 2020, 45,896 tests were analysed by non-NHS Wales laboratories.

### 3.2.4.7 Turnaround Times

For pandemic surveillance to work most effectively it is essential that samples are processed rapidly and results conveyed both to the public and contact tracers as quickly as possible. There has, therefore, been a strong focus on turnaround times (TAT) during the outbreak.

At the present time Public Health Wales monitors turnaround times for samples tested in Wales as well as samples tested in UK lighthouse labs.

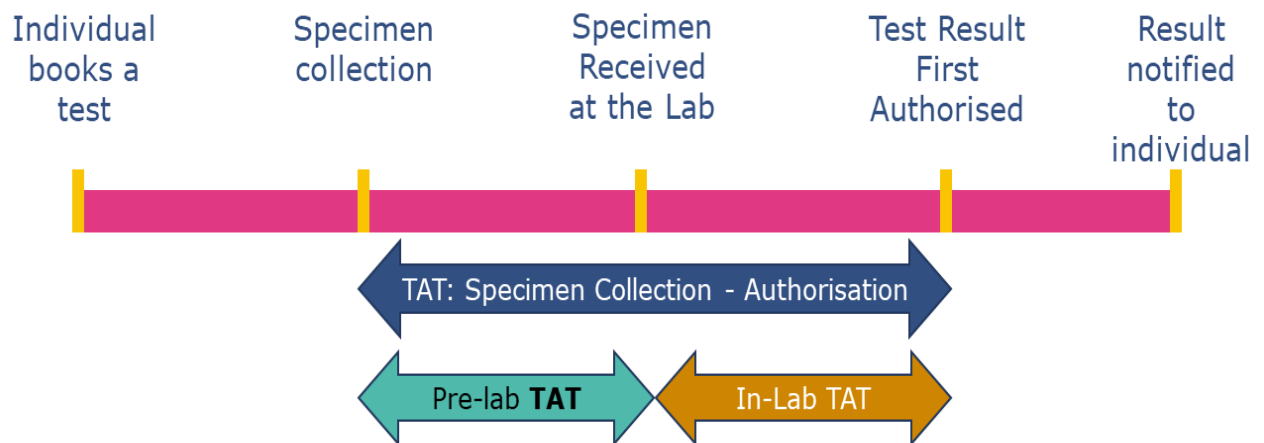


Figure 2: Turnaround times for critical time intervals

For samples tested in Wales the data collected enables the analysis of:

- the sample collection at a sampling centre, to the specimen result and authorisation in the laboratory. This is indicative of the end-to-end process. Public Health Wales continues to work with Welsh Government and DHSC to gain access to data to monitor the full end process
- the pre-lab process – from sample collection at sampling centre to specimen received in the laboratory. This helps in providing an understanding of any issue external to laboratories, such as couriating of samplings or batching;
- the in-laboratory process – from sample reception to authorisation of the test result in the laboratory.

Turnaround times are generally reported as a proportion of tests authorised within 1, 2, or 3 days of the starting timestamp (often specimen collection).



### 3.2.4.8 NHS Wales Laboratory: Turnaround Times: Collection to First Authorised

The turnaround time NHS Wales test results is shown below and is based on all tests authorised since early February 2020. This is indicative of the 'end to end' process for sampling and testing. It will include any in-laboratory issues in addition to external issues such as batching of samples and any delay in conveying samples into the laboratories.

Public Health Wales has been working closely with the Welsh government and partners to improve the process, and consequently the turnaround time.

Turnaround time NHS Wales Test Results (all tests authorised since early February 2020)

Sampling pathway	Number of tests	1 day	2 days	3 days
<b>NHS Wales lab - Community tests</b>	258,898	41.9%	72.9%	<b>89.4%</b>
<b>NHS Wales lab - Hospital tests</b>	92,012	80.8%	96.8%	<b>99.1%</b>
<b>NHS Wales lab - Other or unknown tests</b>	16,684	57.3%	84.4%	<b>94.2%</b>
<b>Total</b>	<b>367,594</b>	<b>52.4%</b>	<b>79.4%</b>	<b>92.0%</b>

Figure 3 below, shows the percentage of tests authorised within 1, 2 and 3 days of specimen collection over time for NHS Wales labs across all sampling pathways.

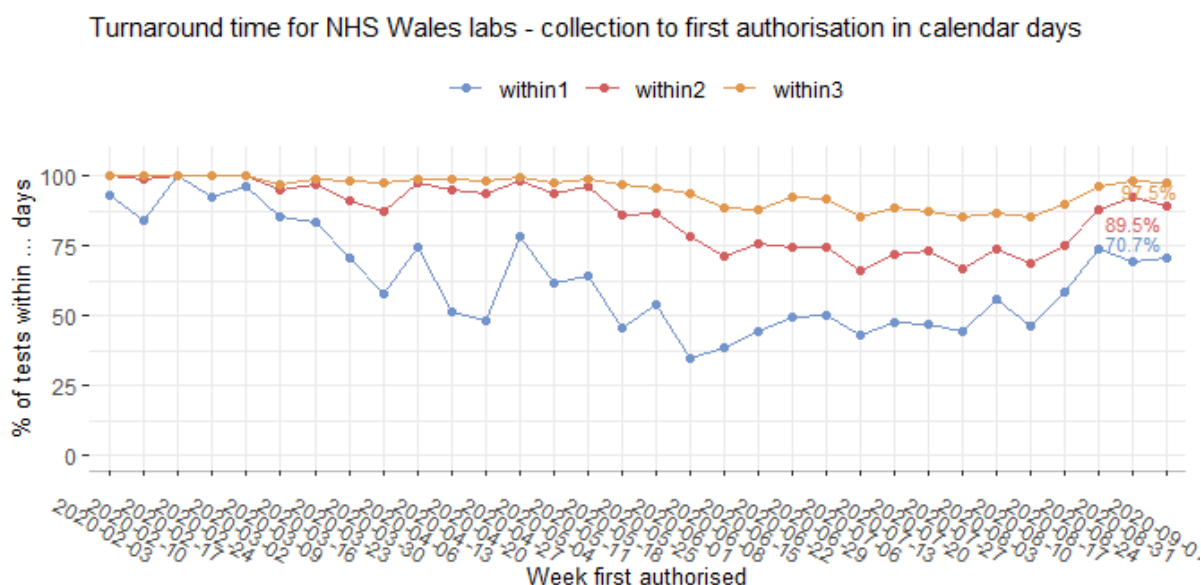


Figure 3: Percentage of tests authorised within 1, 2 and 3 days of specimen collection by week for NHS Wales labs

The proportion of tests being authorised within 1 day of specimen collection is currently circa 70% (similar to the previous fortnight). This is noteworthy

given the unplanned sudden increase in testing volume for the week commencing 7 September 2020.

Much work is being undertaken to understand TAT for the asymptomatic screening for keyworkers and residents and also to understand TAT by health board that operate the sampling facilities. For example, Figure 4 shows the percentage of tests authorised by NHS Wales labs within 1 day of specimen collection shown by the number of samples collected at community locations by health board.

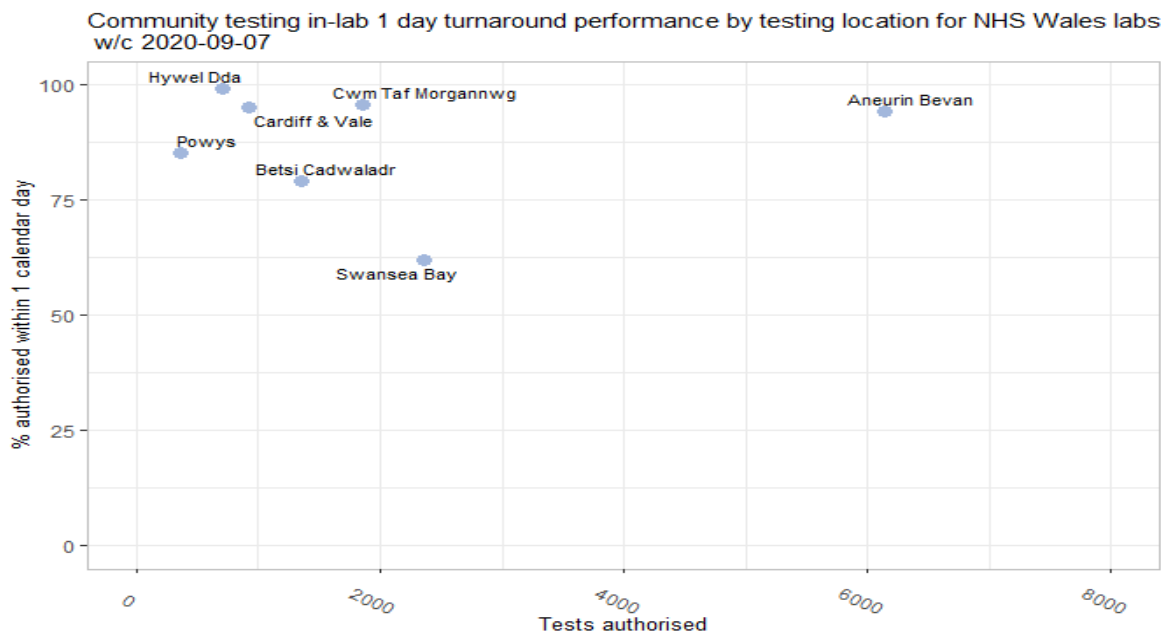


Figure 4: Percentage of tests authorised by NHS Wales labs within 1 day of specimen collection shown by the number of samples collected at community locations by health board

It indicates that for the week commencing the 7<sup>th</sup> September 2020, a lower proportion of samples collected within the Swansea Bay community facilities were authorised within 1 calendar day of being received at the laboratory. The reasons for this are currently being investigated.

### 3.2.4.9 NHS Wales Laboratories: In-Laboratory Turnaround Times

As noted above, 'In lab' turnaround time is calculated from when the specimen is received at a NHS Wales Laboratory and booked onto the electronic system, to when the result is first authorised. It is reported as a proportion of tests authorised within 1, 2, or 3 days of specimen being received by a laboratory.

Figure 5 and the table below indicates the proportion of tests being authorised in 1, 2, or 3 days from being received at an NHS Wales laboratory by the sampling pathway, since February 2020.

Sampling pathway	Number of tests	1 day	2 days	3 days
<b>NHS Wales lab - Community tests</b>	258,898	85.5%	98.1%	<b>99.6%</b>
<b>NHS Wales lab - Hospital tests</b>	92,012	90.5%	98.6%	<b>99.6%</b>
<b>NHS Wales lab - Other or unknown tests</b>	16,684	76.4%	91.5%	<b>97.5%</b>
<b>Total</b>	<b>367,594</b>	<b>86.3%</b>	<b>98.0%</b>	<b>99.5%</b>

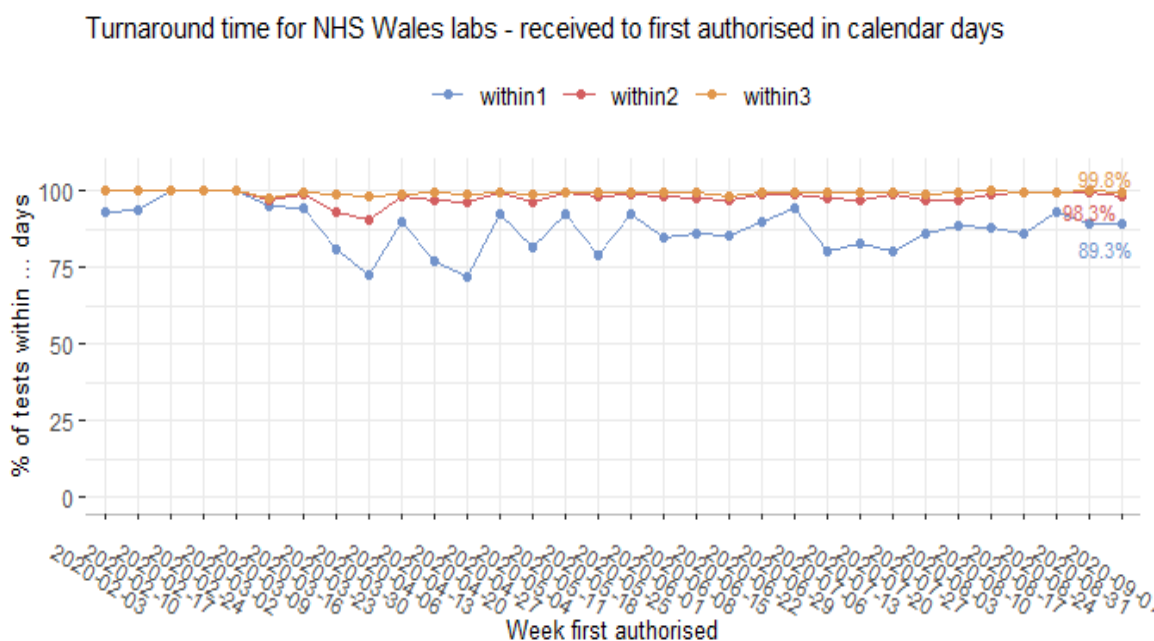


Figure 5: Percentage of tests authorised within 1, 2 and 3 days of being received at an NHS Wales lab by week

For the past few weeks, in-lab turnaround for NHS Wales has been maintained at nearly 90% of specimens being authorised within 1 calendar day of reception at a laboratory.

By sampling pathway, the in-lab turnaround is evenly balanced. Understandably, a higher proportion of hospital tests are authorised within 1 calendar day of being received by the laboratories.

### 3.2.4.10 Non-NHS Wales Laboratories - Turnaround Times: Collection to First Authorised

The turnaround times from specimen collection to first authorised is similarly calculated for tests analysed by the Non-NHS Wales laboratories, from when the individual provides a specimen to when the laboratory authorises the result. For home delivered kits, the start time is the point at which the details are submitted on the returns portal for home tests, and at test centres, it is the time the person was scanned as leaving.

The turnaround time to date for non-NHS Wales test results based on all tests (since testing commenced) is shown in table below and over time in Figure 6.

Location	Number of tests	1 day	2 days	3 days
<b>Total</b>	<b>313,469</b>	<b>46.6%</b>	<b>69.3%</b>	<b>85.8%</b>

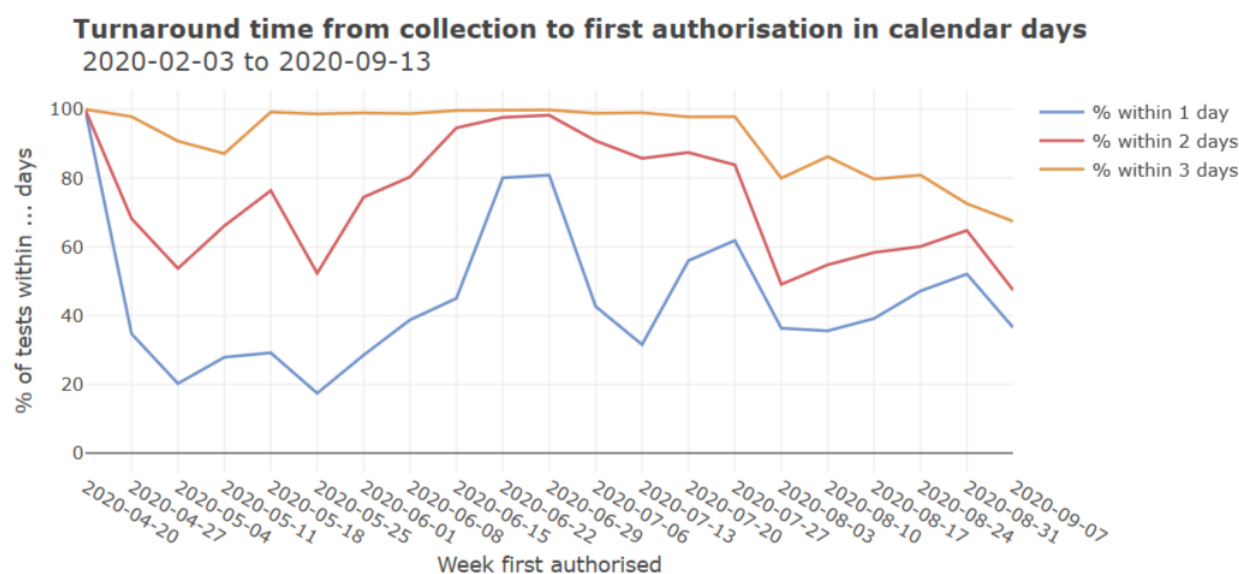


Figure 6: Percentage of tests authorised within 1, 2 and 3 days of specimen collected by week for Non-NHS Wales

As a general rule for the past few weeks, non-NHS Wales laboratories have prioritised tests collected through test centres in place of tests ordered for home delivery or through the organisation portal. It is perhaps disingenuous to report this overall value as the sampling pathway has clearly influenced the turnaround performance, but is the best in light of the current inability to appropriately discern tests by pathway.

The data provided by non-NHS Wales laboratories does not include an equivalent 'Specimen received at lab' timestamp and therefore, it is not possible to calculate an in-lab turnaround time for tests analysed at non-NHS Wales labs.

### 3.2.4.11 Non-NHS Wales labs – Indeterminate results

In recent weeks, there has been growing concerns regarding the rate of indeterminate or void results being issued by non-NHS Wales laboratories.

This is where the test result is not identified as 'positive' or 'negative' and therefore, often leads to the individual having another test. For the week commencing 7<sup>th</sup> September 2020, 4% of results were issued as Indeterminate.

However, there is variance by day and by testing laboratory. Certain laboratories have higher throughput on certain days of the week and other laboratories are recording a high proportion of indeterminate results. By

way of comparison, circa 0.5% of results are classed as Indeterminate by NHS Wales laboratories. Therefore, this raises concerns of quality of testing at non-NHS Wales laboratories and will be monitored.

### 3.2.4.12 Antibody testing

The majority of antibody testing<sup>3</sup> capacity and activity is the responsibility of health boards and is subject to a UK allocation process for kits from Abbot, Roche and Euroimmun. An Antibody Task and Finish Group has been established by the Welsh Government which sits under the National Sampling and Testing Group, chaired by the Welsh Government.

### 3.2.4.13 Activity

The following figure shows the number of antibody tests that were analysed in NHS Wales laboratories by the date of first authorisation.

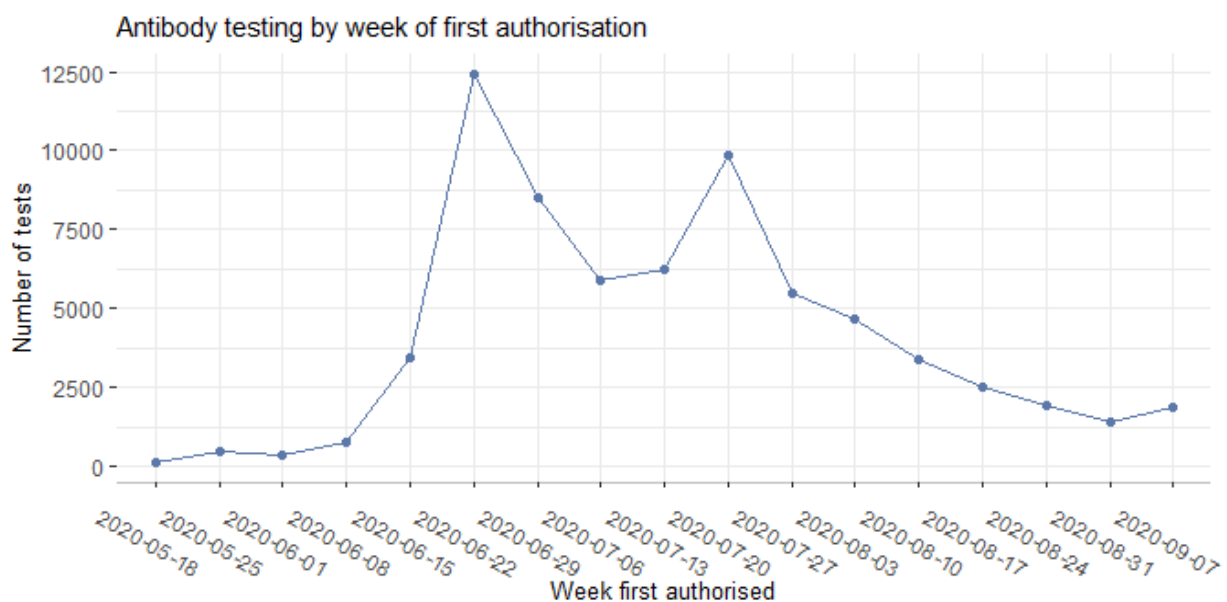


Figure 7: Number of serology tests analysed in NHS Wales labs by week

This figure does not include any information relating to lateral flow antibody tests as the results are not currently available to the WLIMS information system. This equates to circa 13,000 test results, with the majority from Cardiff and Vale University Health Board. There are plans to add Lateral flow results to provide a rich picture of serology results.

## 3.2.5 Results

At the start of the outbreak, the provision of results to key workers and employers was a manual process undertaken by Public Health Wales and health boards. As the volume of tests increased, an alternative solution was developed. In late April 2020, Public Health Wales developed a mobile phone text solution for key workers. This was piloted at Rodney Parade and

<sup>3</sup> An antibody test is a blood test to check if someone has had coronavirus (COVID-19)

Cardiff City Stadium, whereby the result was texted to the key worker who had been tested. All health boards and trusts are using the text service for results, which is part of a Public Health Wales contract.

### **3.2.6 Business Case for a new Laboratory**

In May 2020, Public Health Wales submitted a business case to the Welsh Government to create additional laboratory space to undertake Antigen and Antibody testing. This was approved at the beginning of June 2020 and work progressed with Shared Services with a view to having the site at Imperial Park 5 (IP5) operational from the beginning of August 2020.

Subsequently, in late June 2020, the Department for Health and Social Care (DHSC) approached Welsh Government to house a UK Lighthouse Laboratory in South Wales. IP5 was identified as a possible site and, following visits from the DHSC and the Welsh Government, it was agreed that the Lighthouse Laboratory would go into the planned Public Health Wales (Lab1) site. The Welsh Government confirmed that funding for Lab 1 would still be available for Public Health Wales to create its own laboratory for Wales (Lab 2). A second laboratory was identified within IP5 as a laboratory for Public Health Wales to progress Antibody testing. It is anticipated that this will be operational from the beginning of 2021.

### **3.2.7 Support to the Welsh Government Tactical Advisory Group**

Nine senior members of Public Health Wales staff sit on the Welsh Government Tactical Advisory Group. These members including our experts in microbiology, surveillance and health protection. The group provides active professional and technical support to the Welsh Government.

### **3.2.8 Public Health Wales Surveillance Dashboard**

Public Health Wales has developed surveillance for several aspects of the COVID-19 infection, alongside existing surveillance for acute respiratory infections. A public-facing dashboard provides details of new cases, tests, rapid deaths reporting, indicators of symptom reports from primary care, and information on hospital-onset cases of COVID-19. In addition, we produce a weekly epidemiological COVID-19 report, bi-weekly updates of rates by local authority, and individual analyses for incidents and outbreaks. We are also working to implement focus reports for areas of concern to describe cases more completely.

The COVID-19 Surveillance system has the following components:

- Sensitive surveillance to describe the pattern of infection and to identify clusters, outbreaks and geographic spread
- Monitoring the rate of transmission by area in real time using modelling (for impact of control measures)
- Surveillance and analysis for risk groups for death and poor outcomes
- Serological surveillance and the identification of immune individuals

- Monitoring the impact on the health and social care system (through hospital, community outbreak and occupational health elements).

We work with Test Trace Protect teams on reporting and incidents with occupation and 'place of work' data recently being added to the system to enable the identification of clusters in a particular workplace (including schools). Further developments are being considered.

### **3.2.9 Communication**

'Risk communications' is a public health intervention in its own right and Public Health Wales has undertaken extensive communications and engagement activity from the outset of the pandemic situation. Whilst Welsh Government has led on the development of the Test Trace Protect communications campaign, Public Health Wales has played a key role in supporting the campaign's development and dissemination. Specifically, we have advised on behavioural insights and evaluation and have proactively disseminated key information to support Welsh Government's Test Trace Protect through stakeholder networks, social media and traditional media.

At the same time, the Public Health Wales Communications Team have played a critical role in leading and coordinating communications in support of the outbreaks and clusters which have emerged since lockdown has ended. We have executed this work in line with the All Wales Communicable Disease Control Plan and have undertaken workshops across the four Local Resilience Forum Media Cells to ensure each of the TTP areas has a clear understanding of roles and responsibilities in the context of outbreak control.

We will continue to support Test Trace Protect through:

- Applied behavioural science and evaluation to help shape the messaging
- Providing communications leadership and targeted communications support to outbreaks and clusters
- Maximising reach through the use of a range of channels, including digital channels and through our stakeholder engagement network to reach a wide range of groups and communities

In January 2020, we started publishing a daily statement providing an update on our response for the media and public. This allowed us to meet the demand for information proactively. The daily statement became the mechanism for Public Health Wales to notify the public and media of new cases of coronavirus in Wales, and also on the number of fatalities, prior to information becoming routinely available on the data dashboard.

We set up a dedicated COVID-19 website, which is designed to carry up-to-date public messages, as well as guidance for health and social care workers.

In April 2020, Public Health Wales launched a wellbeing campaign to help mitigate the negative impacts of Covid-19 on people in Wales. Our 'How

Are You Doing?’ campaign was developed with expertise from our behavioural science unit and was designed to provide evidence-based support and advice to address mental, physical and social wellbeing. This campaign continues to run, with a focus on supporting the public and third sector partners, using two-way feedback to inform messages. Particular emphasis is given to supporting vulnerable groups and communities with specific needs.

### **3.2.10 Regular Publications**

The Public Health Wales World Health Organization Collaborating Centre (WHO CC) aims to proactively gather, monitor, assess and synthesise COVID-19 related learning, data, public experience and emerging evidence; providing real time actionable intelligence for policy and decision making.

In this respect, Public Health Wales is providing support in four main areas:

- COVID-19 Health Impact Assessments (HIAs)
- National Public Engagement Survey on well-being and behaviours
- International Horizon Scanning and Learning
- Dashboard of broader health indicators.

The WHO Collaborating Centre has (and continues to) developed a series of rapid Health Impact Assessments (HIAs), which build a picture of the range of impacts of COVID-19 and the policy responses on health, wellbeing and equity in Wales for the short, medium and longer term. Topics include; ‘Staying at Home and Social Distancing Policy’ in Wales in response to the COVID-19 pandemic (June 2020); COVID-19 and a post pandemic world: HIA of Home and Agile Working in Wales (2020); Housing Security and Homelessness in Wales in the time of COVID-19: A HIA (2020) and Climate Change in Wales – Health Impact Assessment (2021).

The purpose of the reports is to support Public Health Wales, decision makers and partner organisations to prioritise actions that can promote and protect health by mitigating negative impacts and identifying opportunities during the acute response and recovery phase.

Over recent months, the WHO CC has conducted interviews with thousands of people aged 18 or over across Wales, to understand how COVID-19 and related response measures affect the wellbeing of people in Wales. The results of these surveys are intended to inform and support Public Health Wales, the Welsh Government and other key stakeholders’ decision-making processes.

A number of reports focusing on people’s views on lockdown and recovery have been completed. In addition, special reports have been published on Deprivation, Age and Gender and on Ethnicity. Further work is planned to follow up with a proportion of the individuals who responded to the initial survey.



The WHO CC has established a joined-up approach and sharing of intelligence with the Welsh Government Office for Science, which aims to provide a gateway to and from global, European and UK networks and agencies. This includes the WHO and International Association of National Public Health Institutes (IANPHI). Public Health Wales is also working closely and supporting WHO and Welsh Government by examining health equity, social and economic impacts of COVID-19.

The key messages emerging from the international socio-economic work include that:

- COVID-19 pandemic outbreak is having an enormous economic impact, including on employment and working practices
- COVID-19 response and recovery are likely to exacerbate inequalities and deprivation, mental health problems, lack of societal cohesion and can destabilise communities over generations.
- the focus should be on balancing and mitigating wider public health, health service, social and economic impacts, including equity and vulnerability
- a sustainable economic recovery is possible only with COVID-19 transmission under control by giving priority to investing in health and social protection and avoiding the harmful impacts of austerity. There is an opportunity to 'build back better' - developing a different economy that is more equal and inclusive'.

Public Health Wales is examining routine data sources on health-related issues that may be affected by COVID-19 or the restrictions related to its control. These will be incorporated into the Public Health Wales COVID-19 dashboard with other direct measures of infection and testing. Results from the National Public Engagement Survey and the work from the Violence Prevention Unit will also form part of emerging broader dashboard of public health indicators.

Going forward, Public Health Wales will include in its plan for the remainder of the year a focus on addressing population impacts of COVID-19, including employment, vulnerable groups and mental wellbeing.

### **3.3 Data Breach**

On the afternoon of Sunday 30<sup>th</sup> August 2020, Public Health Wales inadvertently published a report on a public facing website which contained personal data relating to 18,105 people who had tested positive for COVID-19 since February 2020. Although the website was public facing, it is not one generally accessed by members of the public, but by trusted partners. After being alerted to the breach the document was removed at 09.55 hours the following morning (31<sup>st</sup> August 2020) and in the time it was available it viewed 56 times.

In the majority of cases (16,179 people) the information consisted of people's initials, date of birth, geographical area and sex meaning that the

risk they could be identified is low. However, for 1,926 people living in nursing homes or other enclosed settings such as supported housing, or residents who share the same postcode as these settings, the information also included the name of the setting. The risk of identification for these individuals therefore is higher but is still considered low.

There is currently no evidence that the data has been misused. The Information Commissioner's Office and the Welsh Government were informed on the 2<sup>nd</sup> September 2020, and an external investigation has been commissioned and has commenced into the full circumstances surrounding the data breach and any lessons to be learned.

In the meantime, immediate steps have been taken to prevent a similar incident from happening again. These include establishing an Incident Management Team to instigate remedial actions which have already resulted in changes to our standard operating procedures so that any data uploads are now undertaken by a senior member of the team. We have also informed our health board and local authority partners and have kept them up to date with the position.

A set of Frequently Asked Questions has been developed (available at [www.phw.nhs.wales](http://www.phw.nhs.wales)) together with a dedicated email and phone number for people to contact us if they have concerns.

A formal press release was issued on the 14<sup>th</sup> September 2020 and the Chief Executive gave a number of press interviews on the subject.

We would like to take the opportunity once more, through this submission, to apologise profusely for this breach of people's personal details. We have already taken immediate action to prevent it happening again and the investigation will provide further detail as to how it occurred, whether further actions are required and what lessons must be learnt.

## **4. Learning to date on Test Trace Protect**

Set out below are a number of examples of learning relating to our response to the pandemic. These are not intended to be exhaustive and reflect our views which are not necessarily the views of others. .

### **4.1 Sampling**

In response to the pandemic, the UK Government developed a digital booking solution, drive through centres and home delivery of testing kits to individuals. The UK solution presented significant challenges at that time if used within Wales including different sampling methods and results would have been stored in England with no opportunity to report back into Wales. This highlighted the need to obtain a digital solution to support mass testing within Wales. This resulted in the development of electronic test requesting. Use of electronic test requesting has been transformational for data collection and was a key enabling factor in scaling up test capacity within Wales labs.

## **4.2 Contact Tracing Cell**

As part of the COVID-19 response, Public Health Wales activated a Contact Tracing Cell (CTC) on the 27<sup>th</sup> February 2020, during the containment phase, in response to a single travel-related confirmed case diagnosed in Wales. The Cell scaled up rapidly as the case definition changed during the containment phase. By 12<sup>th</sup> March 2020, the UK moved into the delay phase of the outbreak. Lessons identified from this rapid scale up included; the need to be clear on the essential skills and knowledge required to support this work, the benefit of tailored staff training to meet this need and the value the public placed in communicating directly with the staff during the contact tracing process. These lessons were implemented as staff were deployed to the National Contact Centre and subsequent Health Protection Response Cell.

## **4.3 Enclosed Setting Cell**

On the 25<sup>th</sup> March 2020, Public Health Wales established its Enclosed Settings Cell, as a result of becoming aware, through the notifiable disease system, of incidents (of both confirmed COVID-19 and undiagnosed respiratory infections) in care homes across Wales. This cell became fully operational at the end of March 2020 and was set up to enable staff within enclosed settings to have access to relevant Infection Prevention and Control advice and identify pathways, where required to escalate issues so local teams could offer more intensive support.

Due to the rapidly developing nature of the pandemic, policy and guidance was issued regularly by Welsh Government. The effective operation of the Cell involved a range of functions and tasks, which evolved over time, whilst the rest of the system established the ability to respond to care homes locally and as policy was changing for the sector. The learning also enabled advice to be provided and guidance adapted from the Department of Health and Social Care in England for use in Wales as appropriate. There was also close engagement with Care Forum Wales, the NHS, local authorities and Care Inspectorate Wales - which included an exchange and learning process in relation to the information reported to each organisation.

As the emerging evidence highlighted the need for a focus on prevention, a specific proactive and preventive intervention was developed with Environmental Health Officers in all 22 local authorities to ensure that those homes that had not yet been affected by COVID-19 received high quality preventative advice and risk assessment.

As the response to the pandemic has evolved, the Enclosed Settings Cell has now been incorporated into the National Health Protection response cell.

## **4.4 Research**

Public Health Wales is currently participating in three open research studies. These include the Phase II/III Trial of ChAdOx1 nCoV-19 vaccine, COVID-19 Genomics UK Consortium: large scale and rapid severe acute respiratory

syndrome coronavirus 2 sequencing capacity to the four UK Public Health Agencies and a Precarious Employment survey and Impact of Covid-19. In addition, we are also a partner in two awarded funding applications to the National Institute for Health Research (NIHR)/UK Research and Innovation (UKRI) COVID-19 Rapid Response Rolling Funding Call. These are:

- COVID-19 Genomics UK (COG-UK) consortium: A collaboration between Public Health Wales/Cardiff University /University of Edinburgh /Cambridge University / Sanger Institute
- Controlling COVID19 through enhanced population surveillance and intervention (Con-COV): a platform approach: A collaboration between PHW and Swansea University.

A number of other bids are currently awaiting a decision.

Learning from these research studies will be shared both internally and externally once available.

#### **4.5 Multi-Agency Exercises**

Public Health Wales has organised and facilitated a number of multi-agency exercises.

These have included:

- Exercise *Seren City* on 3<sup>rd</sup> March 2020 for all category 1 responders in Wales, which explored the multi-agency response to a request to put an urban setting in lockdown in response to COVID-19
- Two 'walk through' exercises to support health boards and local authorities with the implementation of the Test Trace Protect strategy
- Exercise Barod: an examination of how The Communicable Disease Outbreak Plan for Wales can be used by Outbreak Control Teams, Strategic Coordinating Groups and Recovery Coordinating Groups in response to COVID-19. The exercise took place on 07 August 2020 and one hundred and twenty one colleagues participated from across agencies in Wales.

These have provided key stakeholders with the opportunity to identify any key issues and learning that need to be addressed during the various phases of the pandemic.

#### **4.6 Early learning from clusters/ incidents and local outbreaks**

Public Health Wales provided support to the Welsh Government to identify early learning from cluster/incidents and local outbreaks that occurred prior to July 2020. This early learning was circulated to all NHS organisations, Local Authorities and Local Resilience Forums in Wales.

Learning included:

- the requirement to reinforce the use of the Communicable Disease Outbreak Plan for Wales

- recognition that the Outbreak Control Team (OCT) should be seen as the strategic partnership mechanism through which all decisions on declarations of incident/outbreak and 'control actions' and communications are agreed
- the value of clear and timely multi-lingual guidance to the public
- the importance of regular surveillance of background community infection rates
- the need for accurate data gathering during mass sampling and testing.

#### **4.7 International Learning**

The International Horizon Scanning and Learning work stream focuses on COVID-19 international evidence, experience, measures, transition and recovery approaches, to understand and explore solutions for addressing the on-going and emerging health, wellbeing, social and economic impacts (potential harms and benefits).

The learning and intelligence is summarised in weekly reports to inform decision-making. These may vary in focus and scope, depending on the evolving COVID-19 situation and public health / policy needs. This work is aligned with and feeding into the Welsh Government Office for Science and into Public Health Wales Gold Command. It is part of a wider Public Health Wales' systematic approach to intelligence gathering to inform comprehensive, coherent, inclusive and evidence-informed policy action. The focus of the reports has included areas such as obesity, BAME, employment and the environmental and social economic impact of PPE.

#### **4.8 Approach to systematically capturing and using organisational information and learning**

Public Health Wales has approved an approach to the systematic capture and use of organisational information and knowledge from COVID -19. The approach sets out how key information about Public Health Wales' input into the pandemic response will be captured, stored and used. In addition, the approach sets out how, through an agreed framework, we will support organisational learning from COVID-19. All of these components will enhance our knowledge of the pandemic; provide organisational learning and strengthen our repository of information which would assist future inquiries.

#### **4.9 Corporate Analytics**

Our Covid-19 response to-date has shown the value of high-quality, robust performance information that is presented in accessible ways. Through our Corporate Analytics Team, we have developed a new corporate Performance and Assurance Dashboard that utilises cutting-edge business intelligence tools and data visualisation techniques.

The Dashboard will provide an analysis of key information to provide knowledge and actionable insights to the Board and Executive Team on a

monthly basis. It does this by integrating key corporate information around a number of areas to support effective decision-making and assurance. This includes: finance, people, risk, quality, COVID-19 and the delivery of our key public health services.

We have delivered this work through an agile project approach, which focuses on understanding stakeholder needs, delivering value early through minimum viable products and iteratively improving based on feedback. In delivering this work, we have worked to recognised data and analytical quality standards.

## **5. Preparations for the Winter Period**

Public Health Wales' preparations for winter focuses on prevention (further information below) and support of the flu campaign across Wales. This year this also includes the potential for a COVID -19 vaccine programme.

Earliest assumptions for the delivery of a COVID-19 vaccine programme are that it would commence prior to the end of 2020. This period coincides with the delivery of flu vaccine in primary care which, with infection control processes for COVID-19 in place, is estimated will take longer than normal to deliver, some estimates up to three times longer although recent guidance that a sessional mask and hand hygiene between patients is appropriate for most immunisations will ease this. As a result, existing primary care venues and staff are unlikely to be able to accommodate a COVID-19 programme at the same time, and data allowing the vaccines to be given simultaneously are unlikely to be available at that time. Therefore planning assumes an alternative workforce, venues and logistics will be required.

Prioritisation of groups for vaccination is based on the advice of the UK Joint Committee for Vaccines and Immunisations, who currently recommend frontline health and social care workers and followed by those at increased risk of serious disease and death from COVID-19 infection stratified according to age and risk factors should be vaccinated first.

An established infrastructure exists for immunisation delivery planning in the NHS, with extensive experience of delivering large vaccination programmes in primary care, schools and to NHS staff. The process of introducing new immunisation programmes is led by Welsh Government and Public Health Wales' Vaccine Preventable Disease Programme (VPDP), in collaboration with health boards and trusts. A Wales COVID-19 Vaccine Delivery Programme Board (Wales CVB) was formally convened on 4<sup>th</sup> June 2020 and established a number of work streams.

All health boards have carried out a table top planning exercise for the delivery of COVID-19, supported by Public Health Wales. Health boards are provided with a regularly updated planning document outlining likely delivery parameters relating to immunisation processes, vaccine handling and storage and other logistics. The resource documents and a report on

the exercises to date have been made available to all health boards to assist them in planning their own exercises.

Public Health Wales has collaborated with the Welsh Government funded Small Business Research Initiative to issue an invitation to industry to develop innovative commercial solutions to some of the challenges of immunisation in this context. The process is complete and unfortunately no suitable solutions were identified.

The Public Health Wales Evidence Service has undertaken a rapid assessment of the literature on mass vaccination, focussing on six key areas including intelligence on novel delivery methods such as drive through clinics, and these reviews have been made available to health boards and trusts, and shared with other UK public health agencies to support their planning. It is important to note that there remains significant challenges to be overcome in relation to COVID-19 vaccination, including recruitment of immunisers and support staff, data management and call / recall of clinical risk groups.

Prior to winter 2019, Public Health Wales produced a report<sup>4</sup> recognising the health impacts of winter weather and identifying the actions required to mitigate poor health during winter. The document was aimed at supporting policy makers, health and care services and third sector organisations, in addition to the public to plan for winter, improving the health of current and future populations. The document was circulated widely to NHS organisations, local authorities and third sector organisations at the time of publication and has subsequently been recirculated.

## **6. Role of Public Health Wales in Promoting the Flu Vaccination**

The COVID-19 pandemic has impacted significantly on the health of the population of Wales and on the delivery of health services, and is expected to continue to impact well into 2021. The groups most vulnerable to COVID-19 are similar to those most vulnerable to influenza and for whom annual flu vaccination is recommended every autumn.

It is likely that in the winter of 2020/21 we will see co-circulation of influenza and COVID-19, therefore achieving a high flu vaccine uptake to protect those at increased risk and reduce impact on health services is a strategic priority. With the possibility of a COVID-19 vaccine being available at the same time as the flu vaccination during this winter, flu programme planning and COVID-19 vaccine planning are being jointly planned to enable efficient planning and service delivery.

Public Health Wales Vaccine Preventable Disease Programme (VPDP) leads on the national planning, delivery and evaluation of the national component of the NHS annual influenza programme for Wales.

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<sup>4</sup> <https://phw.nhs.wales/news/winter-health-how-we-can-all-make-a-difference/report/>

Collaboration and support are key themes with open dialogue between health boards, NHS trusts and Public Health Wales, and other key partners. Proactive and reactive support, guidance and communication underpin the campaign in Wales. A key element of the planning cycle is reflection on feedback and lessons learned, and an ability to adapt, to help strengthen this annual programme.

The Welsh Government has extended eligibility for flu vaccination to the household members of those on the shielding list and, subject to additional vaccine being available in November and December, to those 50 to 64 years of age, to be confirmed at the time. Public Health Wales has secured additional funding of £198,500 from Welsh Government for a business case to support this enhanced influenza programme.

The necessary measures to ensure flu vaccinations can be administered safely in line with social distancing and Infection Prevention and Control guidance has been agreed and published. Access to sufficient PPE is being planned centrally as 'once for Wales'.

VPDP team members and Welsh Government colleagues attend and contribute to the UK Flu Programme Board led by Public Health England, to ensure the annual flu programme for Wales is well engaged with UK flu programmes. VPDP is represented in membership of the Wales Immunisation Group, convened by Welsh Government. This is a platform to raise and discuss immunisation issues in Wales, and a valuable opportunity to ensure the annual flu programme is aligned to other immunisation programmes.

The National Influenza Action Group, convened by Public Health Wales, is an opportunity to share expert advice and intelligence between organisations, and for Public Health Wales to facilitate and coordinate the influenza campaign in Wales. Membership includes all NHS Wales organisations and other key partners. The group enables efficient working in influenza immunisation programmes across the system including Welsh Government, health boards and trusts, third sector organisations, professional bodies, and local authorities, supporting local and national conversations on governance and accountability. It is a forum for timely discussion and resolution of issues related to influenza and delivery of the influenza immunisation campaign in Wales. The group make recommendations for action to members and a range of stakeholders as appropriate. Feedback is that the National Influenza Action Group meetings demonstrate and support strong leadership. Weekly emails are sent to members during the flu season and as required prior to the season to keep everyone informed of new information and resources in a timely way.

The COVID-19 Programme Board has met since June 2020 and considers the enhanced flu vaccination programme and the strategic issues around planning and delivery of the enhanced programme as well as the COVID-19 vaccination programme.



A detailed, comprehensive communications plan has been developed in partnership with Welsh Government. Monthly flu planning and progress meetings are convened by VPDP, with communications, Welsh Government, and Immunisation Coordinator representation. A number of strategies (Communications, Digital and Stakeholder) are in the process of being developed.

It is proving difficult to engage with some key professional groups as their work patterns and availability has been affected with COVID-19 work. However, partnership working continues with others such as Care Inspectorate Wales, Social Care Wales, Care Forum Wales, Community Pharmacy Wales and Asthma UK/British Lung Foundation.

Injectable flu vaccines supply in primary care is ordered directly from manufacturers and suppliers by practices and pharmacies. In addition, the Welsh Government are securing additional stocks to support higher uptake and extension of the programme.

## **7. Appendix A: Test Trace Protect Implementation Plan Stage 2**

Please see separate attached document.

# Public Health Wales' Test Trace Protect Implementation Plan

End Stage Assessment of Stage 1

Stage 2 Plan

16 June 2020



GIG  
CYMRU  
NHS  
WALES

Iechyd Cyhoeddus  
Cymru  
Public Health  
Wales

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# Test Trace Protect

## Public Health Wales' Implementation Plan

### Introduction

As the National Public Health Institute for Wales, Public Health Wales has a key role in supporting Welsh Government and the wider system on health protection matters. We host the national health protection service for Wales and as such, have a key leadership role which has been at the forefront of the coronavirus pandemic.

We have provided system leadership throughout the pandemic by providing specialist and expert public health advice, delivery, information, intelligence and support. This has involved working with partners across Wales, the UK and internationally, as well as providing information to the public through a range of channels.

At the request of the Chief Medical Officer, in early May we prepared the *Public Health Protection Response Plan* to provide advice to Welsh Government for the recovery phase. This formed the basis of the Welsh Government *Test Trace Protect* strategy which has directed the system response in Wales for reducing the spread of the virus<sup>1</sup>. Our Stage 1 Implementation Plan (4 May to 8 June) translated the strategy into the Public Health Wales contribution to *Test Trace Protect* and at the close of Stage 1 the first section of this document sets out the progress made in a short time.

Alongside the provision of health protection advice to Welsh Government, Public Health Wales is also:

- ❖ developing and disseminating on a regular basis surveillance and intelligence to the wider system e.g. Covid-19 surveillance reports
- ❖ delivering key public health functions and services such as effective health protection and microbiology outbreak response and management
- ❖ undertaking research, evaluation and analysis of international evidence to inform policy and support the wider system's ongoing response, such as our national public engagement survey and international horizon scanning

Public Health Wales' strategic aim in response to the pandemic is: *"to protect the public, optimise outcomes for individuals and the population, and facilitate the functioning of essential services in Wales as appropriate"*. The underpinning specific objectives are to:

- ❖ continue to monitor and assess the risks to public health in Wales to enable appropriate professional public health support and advice
- ❖ provide leadership and specialist advice on Public Health approaches

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<sup>1</sup> Public Health Protection Response Plan was published on 21 May <https://phw.nhs.wales/news/covid-19-public-health-wales-health-protection-response-plan-published/>

Test Trace Protect (14 May) <https://gov.wales/test-trace-protect-html>

- ❖ coordinate and enable the delivery of the public health protection response in the next phase of the pandemic

The Implementation Plan has been aligned to the *Test Trace Protect* strategy, to our role as a National Public Health Institute and, also, to our emergency planning arrangements. The Plan has four public health response work streams focussing on:

- ❖ contact tracing
- ❖ surveillance
- ❖ sampling and testing
- ❖ communications and engagement

These work streams are supported by essential 'enablers' including finance, digital, workforce, quality, safety, research and evaluation, and international learning and intelligence. There are also a number of operational 'cells' that are also aligned to our work e.g. the rota cell.

This Plan provides an account of the progress we have made in Stage 1 to 8 June. It also sets out our plan for Stage 2, which runs to the end of August. The Implementation Plan may be required to support activity beyond Stage 2 and this will be incorporated in a Stage 3 Plan later in the year.

We deliberately kept Stage 1 very short. This was largely to ensure that key products were delivered on time. The end of the stage was aligned with a common milestone in *Test Trace Protect*, namely, the start of contact tracing across Wales and specifically the 'Go Live' of the NHS Contact Tracing System (Phases 1 and 2 in the *Test Trace Protect* Operational Note<sup>2</sup>). Our decision to make Stage 2 cover almost three months is a signal that we expect to move into a more stable period. Our plans on pages 19 to 48 show that while we are continuing to develop products and services to support the *Test Trace Protect* strategy, we will be monitoring and improving those areas already delivered.

Stage 1 has been completed successfully. It has involved the production of large number of tangible products, some of which will support our partners, and others will strengthen our internal arrangements to deliver services to the public or the health and care sector. Some key products from across the programme include:

- ❖ the development of an Operating Framework to support contact tracing which went live as planned on 1 June
- ❖ technical and clinical input into the development of the NHS Wales Contact Tracing System which was operational from 9 June
- ❖ establishing the National Contact Centre incorporating a National Health Protection Response Cell
- ❖ successful business case for a new COVID laboratory
- ❖ the eLearning package for contact tracing that went live on 28 May 2020 to the wider system
- ❖ enhanced passive surveillance of virological screening and diagnostic testing in hospital

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<sup>2</sup> [..\Test Trace Protect\200526 - PHW NWIS WG - TTP Operational Note.pdf](#)

The first section of this document provides a detailed account of progress by each work stream and also the programme management deliverables for the stage. Inevitably, in a stage of such short duration, some slippage has occurred and this is identified in the document. Stage 2 plans to pick up these products and identify the activities needed for completion.

At the time of writing, those products or activities that have deadlines of between the 3-8 June have been reported as on schedule for completion by the end of the stage.

A number of key products from Stage 1 have benefitted from rapid consultation and feedback and Public Health Wales is grateful for the engagement of partners.

Section 2 of the document sets out the plans for Stage 2 which end on the 31 August. Inevitably, the fluidity and uncertainty that characterises a global pandemic response means that plans are changing rapidly.

# Section 1

## End Stage Assessment of Stage 1



## Section 1

### End stage assessment of stage 1: the 4 May to the 8 June 2020

#### 1.1 Contact tracing progress in stage 1

During Stage 1 Welsh Government published *Test Trace Protect*, its strategy aimed at enhancing health surveillance in the community, undertaking effective and extensive contact tracing, and supporting people to self-isolate where required to do so. The strategy confirmed that Public Health Wales would provide national co-ordination, expert advice, and support on contact tracing methods and priorities. Public Health Wales would also ensure that there are robust all-Wales standards and comprehensive guidance for how contact tracing should operate.

In terms of the operating model for contact tracing in Wales, the *Test Trace Protect* programme expected it to be delivered through regional arrangements with local teams being deployed through Health Boards and Local Authority partnerships. These teams would be hosted and staffed outside of Public Health Wales and would, in the first phases of operation, contact trace individuals who had received a positive test result.

The *Test Trace Protect* strategy is overseen by a Test Trace Protect Strategic Oversight Group established and chaired by Welsh Government with representation from all health boards, local government and Public Health Wales. Several sub-groups were set up reporting to the Oversight Group including a contact tracing group, a digital cell group and a sampling and testing group. Public Health Wales co-chaired the contact tracing group and actively contributed to the delivery objectives of the other groups.

#### Delivery against plans

What we said we would do	What we did
Provide expert advice to establish contact tracing services across Wales	<p>Produced and consulted on an Operating Framework for the delivery of contact tracing</p> <p>Produced revised workforce modelling following the publication of <i>Test Trace Protect</i></p> <p>Developed a suite of materials including:</p> <ul style="list-style-type: none"><li>❖ Role descriptions for key positions</li><li>❖ Training resources</li><li>❖ Scripts for contact tracing</li><li>❖ Standard Operating Procedures for Contact Tracer, Contact Adviser and Clinical Lead, including escalation between regions</li><li>❖ Letter templates</li></ul> <p>Organised and facilitated two 'walk throughs' (21 and 28 May)</p>

What we said we would do	What we did
Establish a National Contact Centre incorporating a National Health Protection Response Cell	Staffing has been identified to support a medium call volume (1000 calls per day)
Transition the Enclosed Settings Cell into the National Health Protection Response Cell to provide advice on closed settings and support the activities of the health board regional cells	Progress has been slower than planned but this is expected to complete week commencing 15 June
Development of the Customer Relationship Management (CRM) system to support contact tracing	<p>Through the Strategic Oversight Group digital sub-group and working with the NHS Wales Informatics Service (NWIS) and the system developer (Microsoft), Public Health Wales has provided:</p> <ul style="list-style-type: none"> <li>❖ Expert advice on the system specification, commissioning and procurement of the CRM</li> <li>❖ Developed workflows, scripts and user stories to inform the product specification and enabled the build and configuration of the CRM adapted for application in Wales</li> <li>❖ Tested the minimum viable product at each stage of its development</li> <li>❖ Actively supported training on the system</li> <li>❖ Worked closely with Welsh Government and NWIS information governance to ensure relevant data sharing agreements are in place prior to the system going live</li> </ul> <p>The Public Health Wales requirements for the content of the national dashboard have been developed and shared with NWIS and Microsoft</p>
Publish an evaluation of contact tracing in the containment phase of the pandemic	A 'Rapid Evaluation of Early Phase 1 covid-19 Contact Tracing Cell' was undertaken

## 1.2 Sampling and testing progress in stage 1

The Sampling and Testing work stream was initially established as a cell as part of the COVID-19 incident management arrangements. The initial focus of the cell / work stream was to prepare NHS Wales for high-volume testing. The scope included:

- ❖ supporting health boards to increase their sampling capacity,
- ❖ improving Public Health Wales laboratory testing capacity for polymerase chain reaction (PCR) antigen and antibody testing (serology)
- ❖ supporting the development of the full end-to-end process that includes referrals for tests (online process); Electronic Test Requesting (ETR) and results notification to patients.

Public Health Wales provides expert advice to the sampling and testing sub-group of the Strategic Oversight Group.

### Delivery against plans

What we said we would do	What we did
<p>Provide expert advice for a single point of access for booking a test</p>	<p>Following the decision by Welsh Government to implement the UK Government online booking portal in Wales Public Health Wales has supported the rapid development of this model</p> <p>Currently keyworkers and the general population are able to book either a home test or a test at a Population Sampling Centre (PSC)</p> <p>Further work is required to enable booking at coronavirus testing units (CTUs) and mobile testing units (MTUs) and ultimately automate the Electronic Test Request process</p> <p>Additionally, the care homes portal has gone online for two health boards with further work needed to fully implement across Wales</p>
<p>Increase sampling capacity by:</p> <ul style="list-style-type: none"> <li>❖ Working with health boards and Welsh Government to increase sampling capacity at PSCs, CTUs and MTUs</li> <li>❖ Working with the UK Government Department of Health and Social Care on an approach to improving sampling and testing capacity through additional PSCs and lighthouse laboratories</li> <li>❖ Supporting the mobilisation of Mobile Testing Units (MTUs) with health boards and the military</li> <li>❖ Working with NHS Wales Shared Services Partnership (NWSSP) to create a supply chain for self-test swab kits in Wales</li> </ul>	<p>There are currently 20 CTUs, 6 PSCs and 8 MTUs in operation across Wales providing a combined daily sampling capacity of 7,557 (as at w/c the 8 June)</p> <p>Discussions are at an advanced stage for a lighthouse laboratory in Wales. A new PSC is in the process of being set up in Deeside and progress is being made towards a new PSC in Abergavenny. Both are likely to use the full UKG sampling model.</p> <p>There are currently 8 MTUs in operation.</p> <p>There is a supply chain to support sampling in Cardiff City Stadium, the MTUs and some of the PSCs offer both administered and self-swab.</p>
<p>Expand testing capacity by:</p> <ul style="list-style-type: none"> <li>❖ Increasing testing capacity within laboratories</li> <li>❖ Rolling-out medium throughput testing to regional laboratories</li> <li>❖ Rolling-out rapid testing to most acute hospitals</li> <li>❖ Present a business case for a new laboratory facility</li> <li>❖ Rolling-out serological testing in Public Health Wales' laboratories</li> </ul>	<p>Increased capacity by use of various platforms to circa 12,000 per day</p> <p>Installed three Starlet machines in Rhyl, UHW and Singleton. A fourth starlet and six Nimbus machines are planned to be installed in phases starting w/c the 15 June and complete by w/c 6 July.</p> <p>Of the ten medical microbiology sites, eight have a rapid testing platform with plans for the remaining two sites to be fulfilled by end of June 2020.</p> <p>Secured approval and funding for the development of a laboratory at Imperial Park 5, Newport</p>

What we said we would do	What we did
	Approval of a prioritised recruitment plan to support testing including Imperial Park 5
❖ Develop an efficient, automated process for the text notification of results for Wales	Now in use by all but one health board improving the efficiency by which results are received by individuals along with a link to advice contained on our web site which is continually updated

### 1.3 Population Surveillance progress in stage 1

Stage 1 focused on a number of immediate developments and improvements to active and passive COVID-19 surveillance to improve the breadth and depth of analysis available to the Welsh Government's Technical Advisory Group (TAG) and Cell (TAC), as well as strengthen Public Health Wales's COVID-19 surveillance dashboard and reports.

#### Delivery against plans

What we said we would do	What we did
Provide expert analysis and advice to the Welsh Government's Technical Advisory Group (TAG) and Cell (TAC)	Actively contributed to the publication of: Short term forecasts for COVID-19 including estimates of Rt (COVID transmission) and for new hospital admissions (halving times) 'Circuit breaker' indicators for monitoring virus transmission and alerting Welsh Government to additional COVID-waves
Develop new surveillance indicators	New surveillance indicators have been developed: ❖ Hospital and ICU patients with respiratory infections ❖ A weekly mortality surveillance report ❖ Rapid surveillance of mortality in confirmed cases in hospitals and care homes ❖ A weekly enclosed settings surveillance report ❖ Inclusion of genomic data in the Public Health Wales dashboard ❖ Introduction of a weekly epidemiological summary including modelling results and commentary ❖ Introduction of detailed mortality surveillance and analysis using ONS data
Improve the existing Public Health Wales COVID-19 surveillance dashboard	Electronic test request data from new community testing units and routine analysis of care home mortality (using ONS data) has provided enhanced information on reasons for testing

What we said we would do	What we did
Secure Public Health Wales' involvement in the Oxford Phase III COVID vaccination trial	Secure and, recruitment commenced 25 May and vaccination commenced 1 June
Expand the workforce to enable further development of surveillance activities	8.4 wte additional analysts (at Bands 5 and 6) secured through internal staff mobilisation  External recruitment has commenced to fill critical existing and new posts  Other analytical functions of Public Health Wales have been engaged in discrete COVID-19 surveillance projects

## 1.4 Communications and engagement progress in stage 1

During stage 1, Public Health Wales supported Welsh Government following the publication of their *Test Trace Protect* strategy. This has included providing specialist communications, behavioural science and research and evaluation support to existing and future national campaigns.

Using our various channels, we have disseminated key information to support Welsh Government's launch of the test and trace system and to promote the Public Health Protection Response Plan, through stakeholder and social media activity. The purpose of this was to explain the role of Public Health Wales, help the public to understand the public health interventions, and to be clear about their role.

We have also continued to develop and strengthen our internal communication mechanisms with staff. This has involved significant work to scope the implementation of Facebook Workplace, along with regular communications to staff through a variety of different channels.

## 1.5 People progress in stage 1

With the exception of external recruitment all the deliverables identified within the Stage 1 schedule have been completed. External recruitment has therefore been carried over to the Stage 2 workforce work stream schedule subject to financial approvals. Recruitment documentation and preparation is ready and approaches already made to colleges and universities to identify suitable candidates and ensure all substantive vacancies can be progressed at pace. Preliminary candidate sourcing has commenced with potential agencies, discussions on mutual aid have taken place with other parts of the NHS, and previous vacancies from within virology and microbiology have been trawled and potential applicants identified and preliminary emails issued to determine interest.

### Delivery against plans

What we said we would do	What we did
Develop and implement a staff resourcing plan	Redeployment to the National Contact Centre and National Health Protection Response Cell continues (see variance from plans)  All internally mobilised requirements for the surveillance work stream have been secured, apart

What we said we would do	What we did
	<p>from 1.0 wte consultant and discussions are ongoing within the workstream</p> <p>A resilience and sustainability report was discussed at Gold – key vulnerabilities, for example, microbiology remain the subject of ongoing activity</p> <p>Refresher and update training for the National Contact Centre has been delivered</p> <p>The eLearning package for contact tracing went live on 28 May 2020 to the wider system</p>
Monitor and act to support staff wellbeing and safety	<p>Results of the first internal communications and wellbeing survey was discussed at Gold and recommendations will carry forward to the next phase</p> <p>People Support Plus launched as a single point of contact for staff, data, usage and trends that are currently being reviewed to determine next steps</p>
Review policies and procedures	<p>Several workforce policies have been adjusted temporarily to support the response to COVID-19. Some of these are the result of national agreement following new legislation, others on an all-Wales basis, and some are local to Public Health Wales</p> <p>For all-Wales adjustments, Public Health Wales considers these to be a minimum and we have gone ‘over and above’ on many positions. Further changes / amendments may be required as part of our organisational recovery plan</p>

## 1.6 Digital progress in stage 1

Over the last month the focus for the Digital work stream was to work alongside NHS Wales Informatics Service (NWIS) and the Welsh Government to develop the Microsoft Dynamics Customer Relationship Management system, which is the NHS Contact Tracing System (or CRM) in support of the NHS Wales *Test Trace Protect* strategy. Progress is recorded in section 1.1 Contact tracing.

## 1.7 International learning and intelligence progress in stage 1

### Delivery against plans

What we said we would do	What we did
Continue the National Public Engagement Surveys	Weekly reports have delivered (available <a href="#">HERE</a> ), focusing on people’s views on recovery. In addition, special reports have been published including on demographics and specific groups and ethnicity

What we said we would do	What we did
Continue to publish the International Horizon Scanning reports	<p>Weekly reports have been delivered and shared with key stakeholders across Wales (available <a href="#">HERE</a>). These have focused on various topics including testing, prevention, adherence to and easing lockdown, health system recovery, re-opening education, impacts on employment and specific / vulnerable groups, outbreak epidemiology, and care homes</p> <p>COVID-19 webinars on Wales’ response have been delivered to WHO Regions for Health Network (21 May)</p> <p>Joint work has been undertaken with WHO including contributing to COVID related violence prevention and socio-economic recovery (29 May)</p> <p>In May Public Health Wales participated in webinars organised by IANPHI (International Association of National Public Health Institutes) on exiting lockdown and future transmission trends (with US CDC and University of Washington), and held a bilateral meeting with the Department of Health, Government of Western Australia to discuss border controls</p>
Undertake health impacts assessments	<p>A Health Impact Assessment of the ‘Staying at Home and Social Distancing Policy in Wales’ in response to the COVID-19 pandemic has been produced and is being finalised for publication (before the end of June)</p>
Produce a COVID-19 dashboard of broader health trends	<p>An interim Word / PDF format reporting tool has been developed prior to developing an interactive R software based profile that will provide data on the impact of COVID-19 on public health in Wales; a report will be published in June</p> <p>Work underway has already helped to support the development of the Live Fear Free campaign with Welsh Government (includes work on asylum seekers and refugees, domestic abuse, mental health support, children, and hate crime) and the Violence Prevention Unit (VPU) has produced weekly reports on COVID-19 and violence that is circulated to 265 professional contacts across Wales</p>

## 1.8 Research and evaluation progress

The Public Health Protection Response Plan stated that the “learning from research and evaluation will be used to continuously refine and adjust our approach”. All non-COVID-19 research activities

were suspended across Public Health Wales on 18 March 2020 and internal resources realigned to support research and evaluation to inform the COVID-19 response.

### Delivery against plans

What we said we would do	What we did
Conduct rapid evaluations	<p>Completed a 'Rapid Evaluation of Early Phase 1 Covid-19 Contact Tracing Cell'</p> <p>Undertaken a 'Rapid Evaluation of the closed settings Cell' to be published in June 2020</p> <p>Developed a real time evaluation plan supporting Public Health Wales' contribution to <i>Test Trace Protect</i>; work will continue in stage 2</p>
Conduct COVID-19 related research	<p>Outputs and activities conducted so far includes:</p> <p>National survey exploring the impact of COVID-19 on employment and health</p> <p>Community Covid-19 Response map published in partnership with the University of Bristol and The Alan Turing Institute  <a href="https://covidresponsemap.wales/index.html">https://covidresponsemap.wales/index.html</a></p> <p>Three COVID-19 research studies within Public Health Wales have commenced</p> <p>Four funding applications made to the National Institute for Health Research (NIHR) / UK Research and Innovation (UKRI) COVID-19 Rapid Response Rolling Funding Call</p>

## 1.9 Quality and Safety, Information Governance and Risk Management

Quality and Safety, Information Governance, and Risk Management (QSIGRM) approaches focus on improving outcomes (population/organisational/service user) that reduce or prevent harm. These underpinning principles have been paramount during the organisational response to the recovery from COVID 19 and must continue to be demonstrated during the next stage of the Implementation Plan.

QSIGRM has focused delivery in two ways:

- ❖ Supporting the work streams
- ❖ Providing approaches and products to provide assurance to Gold and the Board

### Delivery against plans

What we said we would do	What we did
Support other work streams in the domains of quality and safety, information governance and risk	The work stream has supported the following activities:



including the development of an approach to risk management	<p>An end to end process for quality assurance and improvement for sampling, testing and the issuing of results to service users (key workers and patients)</p> <p>Development of the digital system and national dashboard including advice on compliance with legislation and guidance</p> <p>Provided expert advice to the development of workforce training materials and advice where subject experts</p> <p>Provided expert advice to support the establishment of the National Contact Centre</p> <p>Provided expert advice in the development of the National Public Health Information Campaign</p>
Provide approaches and products to provide assurance	<p>The work stream has delivered the following:</p> <p>Data Protection Impact Assessment template</p> <p>Risk Assessment Toolkit updated to meet COVID-19 response</p> <p>Weekly reports to Welsh Government on incidents, concerns and complaints and advised on complaints reporting</p>

## 1.10 Finance

The financial analysis of the implementation plan is complete. It shows the overall costs of the programme if 100% of the testing identified in the Public Health Response Plan is carried out in our laboratories in Wales at an average cost per test. The recruitment tracker held by the Workforce work stream is costed and shows the total cost of the staffing resource required to support the plan. This includes the cost of staff internally mobilised and new recruitment. The total full year cost of the workforce plan at the 29 May is £9.5m with expected costs in 2020-21 of £8m, which is included in the total cost above.

The assumption is that Welsh Government will fund the cost of the current testing strategy and those areas specifically agreed such as the IP5 revenue costs. Regular dialogue is taking place and all costs are clearly identified in our monitoring returns.

A number of public health funding sources have been identified, including current establishment budgets for mobilised staff. This contribution from Public Health Wales budgets of £4.5m is already assumed and an assessment of all other Public Health Wales spending plans is being undertaken as we move through the response and recovery plan; to ensure that budget is identified before any additional commitments are made.

It is proposed that once identified these budgets are re-directed to the work streams to manage within the funding made available. Delegated limits and procurement hierarchies will need to be agreed, as part of stage 2 of the implementation plan.

Following completion of the financial assessment of the implementation plan, budget sign-off is required for recruitment to commence in line with work stream plans.

The business case for Imperial Park 5 (capital and revenue) has now been formally approved.

### 1.11 Relationships

Although identified as a separate work stream, in fact, Public Health Wales has worked closely with partners across the NHS and local government throughout the pandemic. This has continued and will now be treated as business as usual.

### 1.12 Programme Management

The Implementation Programme was established and operational from early May. Each workstream had identified a leadership cohort comprising:

- ❖ an executive sponsor / lead director
- ❖ an incident director / lead consultant
- ❖ a lead manager
- ❖ a planning lead (senior manager level)
- ❖ an experienced project support / co-ordinator

Each work stream has set up its planning, monitoring and assurance processes.

Each work stream contributes to the weekly updates on the plan (see page 47). The Planning Leads and support join a twice weekly check-in session that provides a rapid information exchange from Gold.

Oversight of the programme has been through the Gold meeting. The membership of the work streams ensures that there is connectivity to the Incident Management Team

During this short stage, engagement has been very good. Work streams have risen to the challenge of tight turnaround times, which has meant that deadlines have been achieved.

Following a review of governance arrangements in early June the Business Executive Team meeting will be reinstated from 9 June, Gold will revert to strategic coordination of the response from 11 June and the Silver Group will stand down from 12 June.

### 1.13 Variance from Stage 1 Plans

Significant work was undertaken by relevant work streams over the past month to prepare for the next phase of the response to the pandemic and specifically to support Welsh Government, Health Boards and Local Authorities in their preparation to deliver *Test Trace Protect*. However some deliverables identified within the stage 1 plan have not been delivered within the original timescales and are identified here.

What we said we would do	Comment
Complete transition of the enclosed settings cell by the 1 June	Discussions with health boards have taken longer than expected and the closing audit has taken longer to complete
Revised completion date week commencing the 15 June	
Full staffing of the National Contact Centre and National Health Protection Cell	The process of mobilising staff is underway but competing demands on staff means that risks remain around the organisation's ability to deploy / recruit the number of staff required by the workstreams within the timescales needed
Revised completion week ending the 12 June	
Surveillance deliverables	<p>A number of key surveillance deliverables identified within the stage 1 plan were not delivered within the original timescales because of competing pressures from frequent requests for analyses with short turnaround times, numerous enquiries for data, and the (good) news about the opportunity to progress the vaccine trial earlier than anticipated</p> <p>The main impact of this is in relation to a delay in the flow of active surveillance data on COVID-19 from general practice and hospitals. This does not affect the daily dashboards but will delay the more detailed epidemiological surveillance planned</p>
Outstanding surveillance work will carry forward to the stage 2 plan	

### 1.14 Emerging issues from Stage 1

During the first stage of the plan several issues emerged that will need to be incorporated into the next stage of the plan.

Progress with the vaccine trial will mean that Public Health Wales will need to start planning for possible vaccine introduction as early as October 2020. Progression of plans by the NHS in Wales to restart essential healthcare services means that Public Health Wales has had to divert some professional advisory time to support the preparation for this. This includes expert advice on the production of guidance, infection prevention and control, and staff and patient testing. This will increase over the next few months and also includes an expectation that paused screening programmes delivered by Public Health Wales will restart from the end of June 2020.

Following a statement by the Prime Minister on 10 May new requirements for border control (14-day quarantine) has introduced additional work for staff involved in port health that will need to be reflected in next stage planning assumptions. It is expected that this issue will translate into business as usual very quickly.

Several data quality and information governance risks have been highlighted through the contact tracing, surveillance, and sampling and testing work streams including in relation to information governance of the new contact tracing CRM, results notifications and poor data collection methods.

# Section 2

## Stage 2 Plan

## Section 2

# Stage 2 plan in brief

<p><b>Contact Tracing</b></p> <p>Establishing an effective National Contact Centre incorporating a national health protection response cell providing expert and timely advice</p> <p>Providing expert advice and support to the Test Trace Protect programme on the future development of contact tracing</p> <p>Enabling the regional contact tracing centres to access effective and timely professional health protection advice on complex cases and clusters</p>	<p><b>Sampling and Testing</b></p> <p>Building capacity and resilience in the Public Health Wales laboratory system</p> <p>Providing expert advice to the <i>Test Trace Protect</i> programme and stakeholders</p> <p>Continuously improving processes relating to testing and giving results</p>	<p><b>Population Surveillance</b></p> <p>Completing, maintaining and improving surveillance outputs for COVID-19 and other acute respiratory infections</p> <p>Developing new areas of surveillance, such as serological surveillance and the identification of immune individuals</p> <p>Scoping and developing wider surveillances</p> <p>Delivering regular epidemiological studies to stakeholders</p>
<p><b>Communications and Engagement</b></p> <p>Supporting Welsh Government's: <i>Together we keep Wales safe campaign</i></p> <p>Developing and implementing our Strategic Communications Plan</p> <p>Continuing the 'How are you doing?' campaign</p> <p>Internal communications</p>	<p><b>People</b></p> <p>Staff Wellbeing and Engagement</p> <p>Workforce resourcing</p> <p>Sustainability</p>	
<p><b>Digital</b></p> <p>Ensuring our Communicable Disease Surveillance Centre (CDSC) has access to relevant data</p> <p>Working with NWIS to ensure there are seamless data flows between the NHS Contact Tracing System and the multiple arrangements for testing</p> <p>Supporting the strengthening of our internal communications and collaboration</p> <p>Continuing to support the development of the National Dashboard as part of the NHS Contact Tracing System</p>		
<p><b>International Learning and Intelligence</b></p> <p>National Public Engagement Survey to understand public acceptance, compliance and broad impacts of COVID-19 measures across Wales and in specific population groups</p> <p>International Horizon Scanning to build strong links with international agencies and partners to develop insight and learning from other countries</p> <p>Covid-19 Health Impact Assessments (HIAs) to promote a whole of government and whole of society approach to COVID-19 recovery planning and interventions</p> <p>Developing a dashboard of broader health trends in health and well-being</p>	<p><b>Research and Evaluation</b></p> <p>Understanding the efficiency and effectiveness of Public Health Wales' contribution to <i>Test Trace Protect</i></p> <p>Generating new knowledge on the indirect impact of COVID-19 on health and communities</p> <p>Supporting Public Health Wales to contribute to the international knowledge on COVID-19 through research</p>	
<p><b>Quality, Safety, Information Governance and Risk Management</b></p> <p>Providing effective and timely information governance advice</p> <p>Supporting effective risk management</p> <p>Improving quality and safety</p> <p>Effective user experience and engagement</p>		
<p><b>Finance and Supply Chain</b></p>		
<p><b>Programme Management</b></p>		

## Stage 2 Plans (8 June–31 August 2020)

### Introduction

Each area within the Stage 2 plan has identified the key priorities for Public Health Wales for the next three months. Each plan also sets out the associated products and delivery schedules. This shows that Public Health Wales will produce well over 100 deliverables in support of *Test Trace Protect*. We have developed an approach to reactivating our services and some clinical services will need to start in a phased way at the end of June. We will need to ensure the primacy of the pandemic response and clear plans in both areas provide a sound basis for monitoring these critical factors in the coming weeks.

### What you will see in our plans

We have broadened the planning window to three months. This allows for:

- ❖ the continued 'build' of products and services that are commitments in the *Test Trace Protect* strategy and will be supplied to the *Test Trace Protect* Programme
- ❖ the completion of some products from stage 1
- ❖ the production of programme level products that will strengthen assurance and future planning, particularly as the recovery / reactivation plans are beginning to align
- ❖ consideration of new programmes and products e.g. if a UK national vaccination programme is developed

Noticeably, some work streams expect to close during Stage 2. The scope of their plans means that before the end of the stage their work will be completed and it is sensible to plan for a controlled closure now.

### Planning Assumptions

The planning environment continues to be very fluid and assumptions have been made, as follows:

- ❖ general public health protection measures (social distancing, hand hygiene and respiratory etiquette) will remain essential to the success in reducing the spread of the virus as restrictions are lifted / eased throughout June and July. Even so, transmission may increase and there may be a second peak and future plans (for our response and recovery) need to be able to flex and surge as required.
- ❖ contact tracing is, and will remain, essential to the public health protection response over the next six months at least and the contact tracing process introduced at the start of June, as well as user acceptance of the supporting digital system, will take time to bed in over the coming weeks.
- ❖ the NHS Contact Tracing System supporting *Test Trace Protect*, Microsoft Dynamics Customer Relationship Management System (CRM), will continue to be developed and delivered in phases and these will need to be planned and scheduled to minimise disruption and maximise benefit.
- ❖ additional expenditure to meet the response will be forthcoming

- ❖ a strategy for antibody testing will be produced (by a Welsh Government sub-group on testing) during this stage, which will have an impact on this stage of the Plan.
- ❖ work to develop a vaccine for COVID-19 will continue and may require further focus depending on the outcomes of existing UK-wide trials and decisions.

## 2.1 Contact tracing

### Stage 2 Plan

Using the Public Health Wales operating framework developed in Stage 1 and the timeframes set out in the *Test Trace Protect* Operational Note, contact tracing started across Wales on 1 June and the digital system went live on 9 June. Operated by regional teams, contact tracing currently starts on confirmation of a positive test result for COVID-19. Our Stage 2 plan anticipates that the *Test Trace Protect* programme will extend the current scope - to include symptomatic individuals - to align with the easing of restrictions.

In *Test Trace Protect*, our role in contact tracing is to provide specialist advice, guidance and training to partners; support and advice on complex cases, clusters, outbreaks and incidents at the regional level; and to provide a number of functions at a national level including a helpline for professional enquiries. In Stage 2 we have set out three priorities.

#### **Priority 1: Establish an effective National Contact Centre incorporating a national health protection response cell providing expert and timely advice**

Building on the learning from the arrangements Public Health Wales implemented in the containment phase of the pandemic, these will be developed to reflect the requirements of *Test Trace Protect*. By the end June we will have an operational National Contact Centre operating from 8am-8pm daily out of three sites across Wales. It will include a helpline for professional enquiries and specialist health protection advice for issues escalated from the regions. The learning from the *Rapid Evaluation of the Closed Settings Cell* (June 2020) will inform these developments.

#### **Priority 2: Provide expert advice and support to the Test Trace Protect programme on the future development of contact tracing**

Broadly this aligns to four areas:

- ❖ The on-going refinement of resources to support contact tracing arising from the Operating Framework developed in Stage 1. These will be training materials and other products that will support the ongoing development and improvement of contact tracing. Feedback from the contact tracing leads at the regional level will be an important feature throughout.
- ❖ The expansion of the contact tracing model, for example *Test Trace Protect* envisaged a self-reporting telephone line for the public to report symptoms. This is dependent on policy direction from the *Test Trace Protect* programme. However to anticipate this, by the end of June we will have produced a report making recommendations and an implementation plan for consideration.
- ❖ The NHS Contact Tracing System CRM will be the subject of ongoing development by NWIS and the supplier. Public Health Wales will continue to support and advise on these developments.

Experience from Stage 1 indicates that this could be resource-intensive and operate on a very limited planning cycle. NWIS will retain ownership of the system and Public Health Wales will chair a Service Management Board consistent with other national IT architecture.

- ❖ Continuing to learn from feedback and experience and develop a quality framework for the contact tracing service. The scale and success of contract tracing will be evaluated. Further details are outlined in the ‘Research and Evaluation’ section of this report.

### Priority 3: Enable the regional contact tracing centres to access effective and timely professional health protection advice on complex cases and clusters

Seven regional teams will lead on delivering contact tracing at the local level. These teams are led by health boards working closely with local authorities. From 15 June these regional teams will be supported by Public Health Wales as follows:

- ❖ Specialist health protection support from the National Health Protection Response Cell, including advice on enclosed settings [the Enclosed Settings Cell closed 14 June 2020].
- ❖ Consultants and nurses specialising in communicable disease control, will operate from within the National Health Protection Response cell, but will be allocated to the region providing a named contact. The specialists in health protection will be supported by general public health consultants redeployed from within Public Health Wales.

The effectiveness of these arrangements will be monitored during Stage 2.

### Contact Tracing Stage 2 Deliverables

Deliverable	June	July	August
<b>Priority 1: National Contact Centre</b> A fully functioning national contact centre with a national health protection response cell informed by the results of the <i>Rapid Evaluation of the Closed Settings Cell</i> .	30 June	weekly sitreps	weekly sitreps
Digital solution to contact tracing embedded within the national contact centre operations	30 June	weekly sitreps	weekly sitreps
Based on reaching a clear understanding of the requirements of a self-reporting telephone service, to produce recommendations and a proposed implementation plan for the Test Trace Protect programme	30 June		
<b>Priority 2: Advice and support in developing contact tracing</b> Expert advice to <i>Test Trace Protect</i> programme in a phased expansion of the contact tracing system to include symptomatic individuals		31 July	
Audit report of enclosed settings cell Tarian incidents report	25 June		
Updated Operational Framework and associated SOPs and materials following feedback/evaluation from the early operations		31 July	
Expert advice to NWIS and the system developer on the future expansion of the digital contact tracing system and active involvement		mid July	



in the governance arrangements for the system going forward through a Service Management Board			
Quality framework for contact tracing service	30 June		
Interim evaluation of the contact tracing model			30 August
<b>Priority 3: Support for regional contact tracing</b> Dedicated expert health protection support to regional contact tracing agreed and changes notified to users of enclosed settings cell	15 June	weekly sitreps	weekly sitreps
<b>Work stream Management</b> Prepare closure plan for Gold (2 July) and produce closure materials	weekly sitreps	31 July	

## Risks

Public Health Wales is involved in the Test Trace Protect programme and co-chairs the contact tracing sub-group. Risks associated with contact tracing are fed into, and managed by, the Test Trace Protect Programme led by Welsh Government. Risks associated with Public Health Wales activities during Stage 2 are set out below, together with the action we are taking to mitigate it:

Contact Tracing Risk	Mitigation
There is a risk to the provision of effective and timely specialist health protection advice to contact tracing if demand exceeds the estimated modelling or if staff are unavailable.	Work underway to identify additional resource to improve resilience.
There is a risk that the ability to support epidemiological analyses and analyse the effectiveness and efficiency of the response may be affected adversely if data quality issues continue in the CRM (NHS Contact Tracing System)	Covered in research and evaluation on page 42

## 2.2 Sampling and Testing

### Stage 2 Plan

Effective sampling and testing, and rapid turnaround of results, is critical to the success of the health protection response and therefore to reducing the spread of COVID-19. Specifically it supports:

- ❖ disease diagnosis to inform treatment and care
- ❖ population health surveillance, so that we understand the spread of the disease and can identify clusters and hot spots
- ❖ contact tracing, to control the spread of the disease
- ❖ business continuity, enabling key workers to return to work more quickly and safely
- ❖ knowing who has had the infection in the past (antibody testing).

On pages 8 and 9 we set out the progress we made in supporting the system in developing the end-to-end process involving: referring people for tests; arrangements for taking samples; the laboratory testing of samples; and the reporting of results.

As various aspects of the process have been operationalised, our role has changed. Predominantly in Stage 2, our work will focus on testing and providing results to individuals. (There is some residual work as a follow on from Stage 1 – see paragraph on page 25.) In Stage 2 we have set out three priorities.

### **Priority 1: Building capacity and resilience in the Public Health Wales laboratory system**

Alongside the laboratory capacity-building actions taken in Stage 1, Public Health Wales has a plan to commission a range of new platforms for analysing antigen samples within our existing laboratories. In addition, following Welsh Government approval on 4 June 2020, Public Health Wales plans to deliver a new COVID-19 testing laboratory at Imperial Park 5, Newport by 10 August. High-throughput platforms for antigen and antibody testing will process daily up to 7,000 and 5,000 tests respectively. Around 30 additional staff will be employed, including biomedical scientists and biomedical support workers.

Taken together, our plans for our existing laboratories and the new Covid-19 laboratory at Imperial Park will provide a robust infrastructure of local, regional and national testing, offering low volume but rapid PCR testing to support urgent clinical decision-making as well as larger volume fast PCR testing to support local requirements. Larger national capacity will be provided from the Magden Park laboratory and the main specialist virology centre at the University Hospital of Wales. In terms of antibody testing, Public Health Wales and NHS Wales blood sciences' laboratories will be used.

### **Priority 2: Providing expert advice to the *Test Trace Protect* programme and stakeholders**

Public Health Wales supports *Test Trace Protect* providing specialist advice across the programme. In terms of sampling and testing, we will be involved in:

- ❖ antigen testing – by providing expert advice to the *Test Trace Protect* subgroup on building capacity for antigen testing across Wales, and providing expert advice to Welsh Government regarding antigen testing strategy during this phase.
- ❖ antibody testing – supporting the development of the *Test Trace Protect* strategy for antibody testing through the provision of subject matter expertise to the serology subgroup
- ❖ developing and implementing genomic sequencing to support the pandemic response
- ❖ testing priorities to meet surges in demand for COVID and non-COVID testing, particularly if (next) winter pressures are significant.

### **Priority 3: Continuous improvement of processes relating to testing and giving results**

Public Health Wales has improved the sampling and testing process by introducing electronic test requesting; accessing the UK Government web-portal for home testing, keyworker testing and for the general population; as well as creating a new all Wales text notification service for antigen testing. Currently two health boards are piloting the UK Government care home testing portal. In Stage 2 we will continue to make improvements to the results process, ensuring it is safe, robust and able to link effectively with the NHS Contact Tracing System. We will be establishing a text notification results process for antibody testing. In terms of improving turnaround time for samples, we will work on

internal laboratory processes and also work with Health Boards to support improvements in the end-to-end process.

### Residual work on sampling from Stage 1

Public Health Wales is maintaining oversight of the transfer of the mobile testing units currently operated by the military to a new sustainable model. It is possible that there will be an additional ten units introduced during June and July, which might have an impact on the sustainability of the supply chain for the self-test swab kits. We will review this at the end of June.

The successful handover of Cardiff City Stadium population sampling centre to Cardiff and Vale University Health Board has now concluded successfully. As such Public Health Wales involvement in sampling has now ceased.

### Plan Management and Risk

The sampling and testing work stream provides weekly sitreps on plans and performance, which are shared with the Board of Public Health Wales. The project management of Imperial Park 5 will be reported through the Finance and Supply Chain work stream. A detailed workforce and financial plan will underpin the Stage 2 plan.

### Sampling and Testing Stage 2 Deliverables

Deliverable	June	July	August
<b>Priority 1: Enhanced testing capacity across Wales</b> Schedule of improvements to laboratory capacity for antigen testing successfully completed	30 June	weekly sitreps	weekly sitreps
Antibody Testing - new COVID-19 laboratory at IP5 operational		10 August	weekly sitreps
<b>Priority 2: Professional advice</b> Input to <i>Test Trace Protect</i> Antibody Strategy and advice to Health Boards on antibody testing		end July	
Advice on testing prioritisation as NHS services reactivate		end July	
Proposal on contribution of genomic sequencing to <i>Test Trace Protect</i>		early July	
<b>Priority 3: Improvements to testing and giving results</b> Process mapping for antigen SMS results to individuals and connectivity to contact tracing function	15 June		
Text notification process to individuals for antibody results	17 June		
Review antigen and antibody results process		30 July	
<b>Sampling - Residual activity</b> Oversee transfer of Mobile Testing Units from the Military		31 July	

Deliverable	June	July	August
Decision on review of supply chain for self-test swabs and implementation	24 June	31 July	
New Population Sampling Centres in Deeside and Abergavenny (advisory role)	30 June		
Plan for work stream closedown (mid-July) and all closure products ready for sign off [contact tracing will become business as usual for the remaining duration of the pandemic]			6 August

## Risks

Public Health Wales is involved in the *Test Trace Protect* programme led by Welsh Government and risks to the programme or the wider system are fed into, and managed by that programme governance structure. Risks associated with Public Health Wales activities during Stage 2 are set out below, together with the action we are taking to mitigate it:

Sampling and Testing Risk	Mitigation
There is a risk that the total costs for COVID testing will not be funded by Welsh Government with the result that Public Health Wales may need to postpone the reactivation of non-COVID services.	Public Health Wales is maintaining detailed oversight of estimated and actual costs. Regular discussions are held with Welsh Government on projected expenditure.
There is a risk that if the new COVID-19 laboratory is not operational by 10 August Public Health Wales may not be able to meet antibody testing levels. The delays may be caused by: <ul style="list-style-type: none"> <li>• a failure to commission the premises or equipment on schedule; or if</li> <li>• the workforce is not recruited</li> </ul>	Contingency plans are developed. Dedicated project team and specialist property advice in place. Detailed workforce plan in place and monitored on a regular basis. [There has been a very good response to a recent recruitment campaign.]

## 2.3 Population Surveillance

### Stage 2 Plan

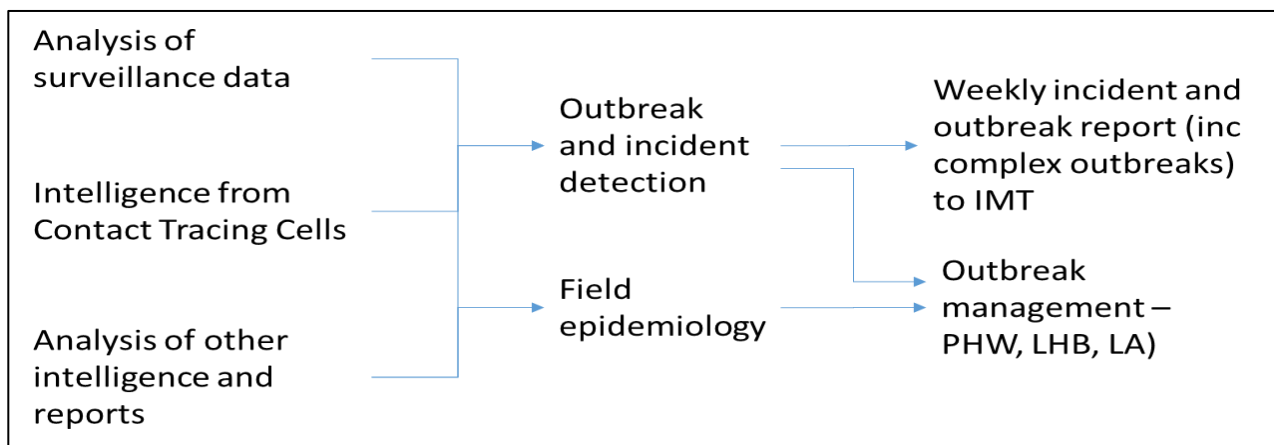
As set out in *Test Trace Protect*, Public Health Wales' role in respect of surveillance is to implement a rigorous health surveillance system and provide expert health protection advice and analysis of the spread of the virus in our communities through a range of health surveillance indicators, including:

- ❖ Monitoring incidence of the disease to ensure we can anticipate national and region testing needs
- ❖ Identifying which contacts and settings confer the highest risk of transmission, helping direct contact tracing and testing efforts

As described in the Public Health Protection Response Plan the enhanced acute respiratory surveillance system will estimate the burden of disease more accurately, provide key indicators to inform action, and measure the effectiveness of public health interventions. It will draw upon a wider

range of active and passive surveillance data to produce on-line dashboards, epidemiological reports and papers, inform and assess policy and provide further epidemiological analysis of the outbreak.

This enhanced surveillance will be essential to prevent the spread of infection, monitor the impact of the lifting of social restrictions, and support the NHS in resuming normal services whilst delivering COVID-19 related care.



To achieve this it will be important to establish high quality data flows from the national contact tracing system. Through synthesis with surveillance and other data, this will lead to improved outbreak and incident detection, which can be notified to national, regional and local incident management teams, as set out in the diagram.

By the end of June, as the contact tracing service beds down, a clear proposal on how the contact tracing outputs feed into the surveillance system will be brought forward.

Our four priorities continue to shape our plan for the enhanced surveillance system as follows:

### **Priority 1: Completing, maintaining and improving surveillance outputs for COVID-19 and other acute respiratory infections**

This will comprise:

- ❖ Sensitive surveillance to describe the pattern of infection and to identify clusters, outbreaks and geographic spread
- ❖ Monitoring the rate of transmission by area in real time using modelling
- ❖ Surveillance and analysis for risk groups for death and poor outcomes
- ❖ Monitoring the impact on the health and social care system
- ❖ Surveillance of hospital onset COVID-19 infections

### **Priority 2: Developing new areas of surveillance, such as serological surveillance and the identification of immune individuals**

- ❖ Serosurveillance for NHS health care workers, pregnant women, wider population
- ❖ Genomic sequencing strategy for detecting changes in SARS-CoV and linking to epidemiological data

### Priority 3: Scoping and developing wider surveillances

- ❖ Ensuring that surveillance systems are flexible and agile in the face of a number of different respiratory epidemics
- ❖ Flu surveillance, given the similarity of risk groups with COVID-19
- ❖ Surveillance of COVID-19 vaccine uptake, adverse events and effectiveness in readiness for a possible mass vaccination scenario with multiple delivery settings from October onwards
- ❖ Surveillance of nosocomial and healthcare associated infections and outbreaks and the impact of COVID-19 on rates of other healthcare associated infections
- ❖ Surveillance of antimicrobial resistance and antimicrobial usage to monitor for increased resistance related to antimicrobial usage in management of secondary bacterial infections related to COVID-19

### Priority 4: Delivering regular epidemiological studies to stakeholders

- ❖ Fortnightly epidemiological summary about the pandemic synthesised from existing and surveillance data, the NHS Contact Tracing System, field epidemiology and testing data
- ❖ Weekly epidemiological report to the Incident Management Team and analyses as required by the Welsh Government Tactical Advisory Group
- ❖ Peer reviewed publications of epidemiological analyses
- ❖ Joint working with the University of Swansea Secure Anonymised Information Linkage (SAIL) programme on in-depth studies

### Pre-requisites

To deliver and operate this enhanced surveillance system at scale, we will need to harness a wide range of skills across different partners in Wales, including the NHS, universities and other sectors. Internally Public Health Wales has mobilised analytical staff to meet the needs to an enhanced surveillance system and this will be monitored during Stage 2. Also critical to success is the need for continuous improvement of surveillance processes and outputs, ensuring that products are commissioned clearly, developed with users, and the value and impact is measured. Sharing of data and methods where appropriate with key partners and the wider epidemiological community is a key part of this approach.

Public Health Wales has recently joined the Oxford COVID002 vaccine trial in a partnership that includes Aneurin Bevan University Health Board, Health Care Research Wales, and the Centre for Trials Research (Cardiff University). This is a Phase III study that looks at effectiveness against symptomatic COVID-19 infection in people over 18. Secondary outcomes include hospitalised COVID-19 and asymptomatic infection (via weekly swab testing). If the vaccine proves to be effective, it may be possible to incorporate into a vaccination programme, possibly even this year.

## Surveillance Stage 2 Deliverables

Deliverable	June	July	Aug
<b>Priority 1: Completing, maintaining and improving surveillance outputs</b>			
<b>Sensitive surveillance</b>			
Passive hospital surveillance added to dashboard	19 June		
Passive community surveillance improvements to dashboard	19 June		
Sentinel GP virological surveillance updated to include COVID-19 and to respond to altered primary care attendances	22 June		
Surveillance for care homes and other settings scoped and in place	25 June		
<b>Monitoring the impact on the health and social care system</b>			
Improved outbreak surveillance established - particularly care homes	26 June		
SARI and ICU surveillances protocols with selected health boards	30 June		
In depth epidemiological investigations specified and delivered	25 June	25 July	25 August
Wider impacts of COVID monitored			31 August
<b>Surveillance of hospital onset COVID-19 infections</b>			
Surveillance indicators for nosocomial COVID-19 / respiratory infections developed, in line with agreed 4-nations approach	30 June		
<b>Priority 2: Developing new areas of surveillance, such as serological surveillance and the identification of immune individuals</b>			
Serosurveillance in place for NHS health care workers, pregnant women, wider population	30 June		
Genomic sequencing strategy in place to detect changes in SARS-CoV-2 and linked to epidemiological data	30 June		
<b>Priority 3: Scoping and developing wider surveillances</b>			
Improved flu surveillance in place			31 August
Monitoring in place for COVID-19 vaccine uptake, including data linkage to individual NHS records			31 August
Process in place for investigating COVID-19 vaccine and effectiveness, in collaboration with UK partners			31 August
Contribution to monitoring COVID-19 vaccine safety			31 August
COVID-19 factored in to the surveillance of healthcare associated infections			31 August

Deliverable	June	July	Aug
Surveillance of anti-microbial usage and resistance in place, assessing the impact of the pandemic			31 August
<b>Priority 4: Delivering epidemiological studies to enhance understanding of COVID-19</b>			
Weekly epidemiological report to Incident Management Team in place (available to wider audiences as appropriate)	30 June		
<b>Enabling activities</b>			
Key operational indicators and quality system for surveillance in place		3 July	
Data and reporting requirements for partners implemented		17 July	
Workforce requirements identified and sourced		31 July	

## Risks

The following risks will be managed by Public Health Wales unless escalation is needed

Risk	Mitigation
There is a risk that surveillance outputs will not be fit for purpose.	Improvements to surveillance quality process included in Phase 2 plan
There is a risk that surveillance products and the development of the surveillance system will be affected adversely by a range of workforce matters, including: <ul style="list-style-type: none"> <li>critical team members being drawn into operational work when Public Health Wales functions are resumed</li> <li>mobilised staff deployed to original roles</li> <li>constraints on analyst time for developmental work impacted by current demands for reporting and information</li> <li>external recruitment environment changes</li> </ul>	Where appropriate, seek extensions for mobilised people Adjustments to analyst working patterns Maximise use of networks and staff contacts to identify resources
There is a risk that staff time is used ineffectively on dealing with information requests.	Triage process for requests being put in place
There is a risk that the surveillance system may be weakened by a lack of commitment from other organisations.	Ongoing liaison with key partners to co-ordinate projects effectively and reinforce the importance of enhanced surveillance
There is a risk that virological surveillance will not be possible owing to competing priorities for test kits, staff time and laboratory capacity	Efficient financial resource management



## 2.4 Communications and Engagement

### Stage 2 Plan

In our Public Health Protection Response Plan we emphasised the importance of effective communications as a key element of the response to the coronavirus pandemic. Our plan focuses on addressing communication with the public, within and between partners, and to particular settings and groups.

Public Health Wales has a key role to play, in supporting *Test Trace Protect*, in terms of disseminating key information, behavioural insights and evaluation, together with proactive external communications with the public and stakeholders.

Our approach to this is informed by our response to date and the insights that we have gathered through research and evaluation (both internally and externally focused).

We have disseminated key information through various channels including through established stakeholder networks and through social media activity. We have also developed proposals for how we will take forward both external and internal strategic and operational communications during stage 2 of this plan. All of this activity has informed and shaped four priorities for Stage 2.

#### **Priority 1: Supporting Welsh Government's: *Together we keep Wales safe* campaign**

Drawing on social listening, we will continue to adapt and tailor weekly messages aimed at creating a sense of togetherness between the public and Public Health Wales. We will also continue to produce weekly content and develop a sense of affinity with the public. We need to further build trust with our audiences around public health initiatives and their effectiveness and safety.

Public Health Wales will support and assist in this through:

- ❖ behaviour science and evaluation to help shape messaging and improve executions
- ❖ sharing content on our digital channels
- ❖ disseminating content to stakeholders and sharing feedback

#### **Priority 2: Developing and implementing our Strategic Communications Plan**

In Stage 2 we will develop a Strategic Communications Plan that will help us build trust with external and internal stakeholders, articulate our current position to staff and stakeholders, including where we aim to be in 9-12 months' time, and tell our story in a way that the public can understand and relate to. The plan will be developed during June and July 2020 and will shape the specific activity that we will need to undertake during the following stage.

An evaluation plan has been devised by the Research and Evaluation team and has included a number of measures to understand the effectiveness of communications. Specifically, it will evaluate impact on trust in the organisation and also uptake of the desired behaviours.

### Priority 3: 'How are you doing?' campaign

This campaign, which was launched in April 2020, aims to help address the negative impacts of Covid-19 on the mental and physical wellbeing of people in Wales. Phase 2 of the campaign will focus on more local and community issues.

### Priority 4: Internal communications

The next phase of our internal communications plan will continue to focus on:

- ❖ sharing with staff what we know, when we know it
- ❖ in collaboration with the Digital work stream, we will make key information available to staff using innovative and accessible means
- ❖ keeping two-way dialogue going by answering questions that staff are sharing with us.

Internal communication plays a significant role in supporting the recovery planning process and is critical in helping staff understand our strategy for exit and recovery, and how they fit into the strategy and the role they play in its delivery. This is essential in order for staff to feel engaged and motivated.

We will deliver this during the next phase of our response through a range of channels, including a weekly video message from a senior leader, monthly Q&A sessions with staff, Chair and Vice Chair messages, recognition of what staff are doing and executive engagement on digital platforms.

### Communications Stage 2 Deliverables

Deliverable	June	July	August
<b>Priority 1: Together we keep Wales safe campaign</b>			
Planned in advance, a weekly focus on aspects of <i>Test Trace Protect</i>	From June	Ongoing	
Professional advice to <i>Together we keep Wales safe</i> campaign as required	from June		
<b>Priority 2: Strategic Communications Plan for Public Health Wales</b>		24 July	
External expertise secured following market testing started on 1 June	17 June		
Results report and recommendations from external specialists	30 June		
Strategic communications plan developed and agreed		20 July	
<b>Priority 3: How Are you Doing? campaign (Phase 2)</b>			
Weekly Wellbeing Survey results published		06 July	
Healthy eating, nutrition and food campaign	8 June	Ongoing	
Keep active campaign delivered through social media	15 June	Ongoing	
Keeping connected campaign	22 June	Ongoing	
Adjusting change – as we go back to normal campaign	29 June	Ongoing	
Managing emotions social media campaign		6 July	

Deliverable	June	July	August
<b>Priority 4: Internal communications</b>			
<b>Public Health Wales online staff engagement space</b>			
Creation of architecture of with MS Teams project and Internal Communications within Teams	12 June		
Publish appropriate communication through channels	19 June		
Align key benefits with Digital workstream benefits realisation plan			5 August
Go live with Internal Communications Channel	19 June		
<b>Public Health Wales internal communication</b>			
Six week rolling programme developed and agreed	Ready		
Preparation for implementation completed	19 June		
Weekly programme initiated	w/c 22 June and 29 June	w/c 6,13,20 and 27 July	w/c 3,10,17 24 August

### Pre-requisites

For the Stage 2 plan to succeed a number of pre-requisites have been identified:

- ❖ to help the public, public health information must be consistent, whether co-branded with Welsh Government in *Together we keep Wales safe* or produced by Public Health Wales. We will work with Welsh Government to strengthen our plans and processes in this area.
- ❖ successful internal communications relies on the commitment and availability of our senior leadership who will need to dedicate time to this important activity over the coming months. The internal communications team will support this and will produce a six-week forward looking internal communications schedule.

### Risks

Risk	Mitigation
There is a risk that the <i>How Are You Doing?</i> campaign fails to reach audiences who may be disproportionately affected by the negative impacts of COVID-19. Particularly those who are digitally excluded, or who are harder to reach via digital channels.	We intend to allocate a print and broadcast advertising budget to target messages to audiences who do not have access to digital channels. A request for additional funding has been submitted.

## 2.5 People

### Stage 2 Plan

Our workforce is key to the successful delivery of the stage 2. The leadership and management of this next stage of our response requires significant workforce mobilisation and recruitment as well as the ongoing commitment of all of our staff. In Stage 2 we will be mobilising our existing staff to operate in different roles for an extended period (for example, six or more months to undertake contact tracing) as well as recruiting to posts.

The Stage 2 plan continues our principle of putting the health and wellbeing of our staff at the heart of our response, providing them with help and support, particularly as we have acknowledged that we will be working differently for some time to come. This will mean working differently and for many this means working from home. Our policies will need to reflect this if they are to support staff and the organisation effectively. Similarly, as our services are reactivated under our Recovery Plan, we will need to plan carefully how our staff transition from current roles and return to their substantive roles in the context of a 'new normal'.

Three priorities have been identified:

#### **Priority 1: Staff Wellbeing and Engagement**

We will ensure our people continue to be safe and well whether working at home or in a work setting, and that our methods of communication, through line managers and directly to staff, are further enhanced. This includes re-emphasising the importance of organisational processes and frameworks e.g. My Contribution to meet the current and evolving workforce circumstances.

Our wellbeing work will focus on embedding the risk assessment process (including how we record and report on updates/actions), taking forward organisation-wide actions and monitoring/supporting divisional improvements to ensure our workplaces are safe to ensure that staff feel protected. This includes looking further into Screening/Microbiology survey results and working with the National Contact Centre to embed processes, ring-fence facilities and develop the responsibilities of shift leads/supervisors

The Stage 2 plans have taken account of the phased reactivation of some services and detailed workforce planning is a pre-requisite of this stage. An analysis of the potential impact of annual leave on the ability to maintain the COVID-19 response will be undertaken. We will also need to adapt the current annual leave policy in conjunction with recognised trade unions to ensure workforce resilience and wellbeing is maintained.

#### **Priority 2: Workforce Resourcing**

Having the right people in the right place at the right time requires us to mobilise our own staff, provide and receive mutual aid where possible and recruit externally. Our key areas for recruitment are surveillance, laboratory staff and health protection specialists, with the vast majority of recruitment occurring in June and July. We have robust plans in place to support delivery.

#### **Priority 3: Sustainability**

The identification of approaches to sustain our workforce requirements, including development needs for the duration of the plan and beyond and exploration of longer term options for resourcing across the whole of the organisation.

## People Stage 2 Deliverables

Deliverable	June	July	August
<b>Priority 1: Wellbeing and Engagement of Staff</b>			
Agree and communicate the procedure for documenting risk assessments and follow-up actions/review	15 June		
Divisional wellbeing survey results developed into action plans (specific areas of concern around safety for those attending work)	22 June		
Staff engagement group to support delivery of divisional level action plans linked to wellbeing survey results with targeted improvements and interventions identified and implemented as part of this group	29 June		
<b>Priority 2: Workforce Resourcing</b>			
Enhanced Surveillance - recruitment of 6 posts in Surveillance (13/14 WTE) (timescales include notice periods)	8 June		31 August
Laboratory Testing - recruitment of 21 posts to support Sampling and Testing (50 WTE) (timescales include notice periods)	8 June		31 August
<b>Priority 3: Sustainability</b>			
Analysis of the potential impact of annual leave and adaption of the current annual leave policy	15 June		
Realignment and reconciliation of workforce related data within a dashboard	29 June		
Evaluation of training (lessons learnt from training)	29 June		
Business case for the consideration of an e-rostering and overtime system developed for improved sustainability and efficiency.		6 July	

## Risks

The following risks have been identified as owned by Public Health Wales and are being monitored by the People work stream:

Risk	Mitigation
There is a risk that we will be unable to meet the workforce demands for the ongoing COVID-19 response and recovery plan resulting in a failure to discharge our functions, including the response to the pandemic	<p>Mobilisation of all Public Health Wales resources and explore further flexible working arrangements</p> <p>Active progression of recruitment plans</p> <p>Data reconciled providing clear information within a dashboard to inform decisions</p>

	Bank and agency staff are available to supplement Public Health Wales resources as well as mutual aid requests to the wider NHS.
There is a risk that the entitlement to annual leave that has been carried forward by our staff will impact on our ability to maintain the available workforce levels for our ongoing response/recovery needs	Analysis of the potential impact of annual leave on the ability to maintain the COVID-19 response and adapt the current annual leave policy
There is a risk that our staff will feel disconnected from the organisation and its purpose	Further enhancement of existing arrangements e.g. People Support Plus to support the wellbeing of staff and managers  Regular staff and line manager communications and staff survey issued to ensure improvements
There is a risk that the wellbeing of our staff could be adversely affected by the effects of COVID-19 on their work and personal lives.	A number of wellbeing initiative have been put in place and will continue to be reviewed in terms of addressing staff wellbeing needs, for example the introduction of a Wellbeing and Engagement Partnership Group, staff risk assessment tool, ongoing work within the estate to ensure it is safe and complies with social distancing regulations and Executive video briefings.

## 2.6 Digital

### Stage 2 Plan

The Digital work stream in Stage 1 focused mainly on the development of the NHS Contact Tracing System supporting *Test Trace Protect*, that is, the Microsoft Dynamics Customer Relationship Management System (CRM). In Stage 2 the Digital work stream will oversee the broader digital requirements of the Public Health Wales Implementation plan. Four priorities have been identified.

#### **Priority 1: Ensuring our Communicable Disease Surveillance Centre (CDSC) has access to relevant data**

This refers to data within the NHS Contact Tracing System CRM to enable Public Health Wales to fulfil its statutory responsibilities and includes access, for analysts in Public Health Wales, to the back-end data held on the system.

#### **Priority 2: Working with NWIS to ensure there are seamless data flows between the NHS Contact Tracing System and the multiple arrangements for testing**

It is crucial that test results are able to link into the NHS Contact Tracing System from a variety of sources. The Digital work stream will also have a role in ensuring that the digital aspects of the new COVID-19 laboratory at Imperial Park are implemented within the planned timescales.

#### **Priority 3: Supporting the strengthening of our internal communications and collaboration**

This has recently included the roll out of Microsoft Teams Lite across the organisation and in stage 2 might include the roll out of Facebook Workplace (to be confirmed). This is an internal

communications tool that will not only support the delivery of key messages to staff as part of our response but also will support the Public Health Wales Recovery Plan.

#### Priority 4: Continuing to support the development of the National Dashboard as part of the NHS Contact Tracing System

The National Dashboard will provide Public Health Wales and the *Test Trace Protect* Oversight Group with operational data on the performance of the contact tracing service. This will be used by local and regional teams for the operational management and planning of contact tracing, by Public Health Wales to inform operational and strategic planning of the Public Health Wales contribution to contact tracing, and by Welsh Government to inform Ministers.

#### Risks

The work stream maintains a risk and issues log which is reviewed on a weekly basis. The key risks are:

Risk	Mitigation
There is a risk that we have insufficient informatics resource to support the establishment of the new laboratory within the timescales required	<p>Assessment of IT implications required following approval of business case</p> <p>Prioritisation of resources to be agreed following assessment</p>
There is a risk that Public Health Wales will not have sufficient access to surveillance data from the contact tracing system to fulfil its statutory requirements	Public Health Wales staff are working to identify requirements and making representation to NWIS / Microsoft for clarity on deliverables

## 2.7 International learning and intelligence

### Stage 2 Plan

The Public Health Protection Response Plan recognised that measures to contain and control the virus and the disease it causes, can have significant unintended, potentially harmful impacts on people’s health and wellbeing. It is critical to understand these as early as possible, to monitor their evolution, to explore relevant evidence and solutions for Wales, and to inform policy and decision-making in order to mitigate or minimise harm wherever possible. Some measures may have positive impacts on wellbeing, in addition to the direct impact of limiting virus spread, and likewise, it is important that we fully understand these in order to optimise our response.

To support *Test Trace Protect*, during Stage 2 the World Health Organisation Collaborating Centre (WHO CC) on Investment for Health and Wellbeing, will continue to focus on informing policy options for an optimum balance between virus control measures and the potential negative impacts of COVID-19. We will do this through systemised intelligence and monitoring to understand the trends and learning through a variety of channels. This work has been prioritised as follows:

### **Priority 1: National Public Engagement Survey to understand public acceptance, compliance and broad impacts of COVID-19 measures across Wales and in specific population groups**

- ❖ Continue the survey to track national changes in confidence in government advice and public services, adherence to advice, physical and mental well-being and how far basic hygiene practice is embedded
- ❖ Continue to produce weekly survey reports, including information on compliance with control measures, contact between individuals informing the R (reproduction) number, understand support for measures such as face coverings and appetite for the return of educational, employment and entertainment facilities
- ❖ Publish specialist reports, including on coming out of lockdown, health conditions and urban / rural differences. Explore the impacts on specific sub-groups, such as those with children in the household or individuals vulnerable to COVID-19 infection.
- ❖ Generate a national panel which can be used to monitor trends in the longer term and understand how we can best reduce any negative impacts of measures implemented to prevent COVID-19 transmission and exploit any positive opportunities.

### **Priority 2: International Horizon Scanning to build strong links with international agencies and partners to develop insight and learning from other countries**

- ❖ Continue to provide an intelligence gateway into and out of global and European networks and organisations, including WHO, European Centre for Disease Prevention and Control (ECDC) / US Centre for Disease Control (CDC), International Association of National Public Health Institutes (IANPHI), as well as across the five nations.
- ❖ Continue to link in with public health thinking in England, Scotland, Northern Ireland and Ireland both on plans under consideration and the potential impact on health in Wales
- ❖ Support Welsh Government and key stakeholders across Wales, looking into the health equity and economic impacts of COVID-19 with a focus on recovery and building back better
- ❖ Link in with and support the international and economics teams in Welsh Government to ensure we have a joined-up resource capable of informing policy decisions.
- ❖ Work with WHO to look at the medium and long-term social and economic impacts of Covid-19 and evidence-informed approaches with a focus on health equity, economic analysis and modelling, social value and community action. This will be embedded in the Welsh Health Equity Status Report Initiative (WHESRI), working jointly with WHO and Welsh Government, and aligning with the international learning and action.
- ❖ Continue to provide weekly reports on International Horizon Scanning and Learning

### **Priority 3: Covid-19 Health Impact Assessments (HIAs) to promote a *whole of government* and *whole of society* approach to COVID-19 recovery planning and interventions**

- ❖ Complete a rapid HIA of Working from Home, carrying out literature reviews, undertaking stakeholder interviews, and collating and analysing data and health intelligence
- ❖ Examine potential positive/negative impacts for determinants of health and well-being including physical, social, mental, technological and economic aspects



- ❖ Examine the impacts on population groups, providing an insight into those vulnerable groups in Wales who may be particularly affected as a result
- ❖ Establish if there is any widening of health inequalities
- ❖ Begin a report on the links between Covid-19 recovery, climate change and Brexit. Assess the longer-term impacts of decisions and actions, thereby identifying where mitigating actions for negative impacts are needed or how to maximise any opportunities.

#### Priority 4: Developing a dashboard of broader health trends in health and well-being

- ❖ Working on COVID-19 related issues for asylum seekers and refugees, on the prevention of domestic abuse, child abuse, hate crime and other types of violence and extracting data (with the police) to inform a health and criminal justice overview
- ❖ Producing weekly Violence Prevention Unit reports to 265 professional contacts across Wales
- ❖ Complete an interim reporting tool to allow monitoring of the wider impacts of COVID-19 and related control measures on health and well-being in Wales. We will develop from this basic tool an interactive R software-based profile which will provide data on the impact of COVID-19 on public health in Wales. This will include areas, such as mortality (resulting both directly and indirectly from COVID19); mental wellbeing (both anxiety and community cohesion); NHS service utilisation (including hospital admissions, Emergency Department attendance, Primary Care and screening); health related behaviours; and impacts on the wider determinants of health, such as income, employment and education.

#### International learning and intelligence Stage 2 Deliverables

Deliverable	June	July	August
Health and well-being of people across Wales	weekly	weekly	weekly
Acceptability of virus protection measures such as face coverings	weekly	weekly	weekly
Views on and adherence to social distancing, quarantine, etc	weekly	weekly	weekly
Perceived levels of infection, confidence in health systems and other public systems relevant to the COVID-19 response	weekly	weekly	weekly
Views on quarantine and adherence to restriction	weekly	weekly	weekly
Appetite for recovery measures including opening of schools, workplaces and public transport	weekly	weekly	weekly
Ad hoc requests for examinations of particular topics (e.g. food poverty, opening places of worship)	19 Jun	fortnightly	fortnightly
Regional differences in health impacts, views on restrictions, adherence to restrictions and other measures		w/c 27 July	
Demographic differences in health, views on restrictions, adherence to restrictions and other measures			w/c 24 August
Other topics of interest, driven by consultation with stakeholder but potentially including reports with a focus on households with children, individuals at higher risks of Coronavirus harms	w/c 29 June	w/c 27 July	w/c 24 August

Deliverable	June	July	August
In consultation with the needs of key stakeholders, questions will be refreshed in the survey approximately every three weeks	w/c 22 June	w/c 13 July	w/c 3 August
Health Impact Assessment of Staying at Home and Social Distancing Policy in Wales (report)	w/c 22 June		
Health Impact Assessment of Working from Home in response to the COVID-19 Pandemic (report)			w/c 10 August
Analysis of the links between COVID, Brexit and Climate Change			w/c 24 August
Weekly reporting on key international developments in reopening health, educational, entertainment and workplaces	weekly	weekly	weekly
Deeper dive into challenges and action in selected counties	weekly	weekly	weekly
Comparisons of national approaches to testing and prevention	weekly	weekly	weekly
Collation of views from WHO and other international agencies	weekly	weekly	weekly
Routine and on-going meetings and other communications with WHO on COVID-19 impacts and responses circulated	w/c 22 June	w/c 27 July	w/c 24 August
Medium and long-term social and economic impacts of COVID-19 examined. Focus on health equity, economic analysis and modelling social value and community action.	w/c 8 Jun	w/c 27 July	w/c 24 August
First iteration on wider impact of COVID on public health in Wales (mortality, morbidity, mental-well-being) including examination of wider determinants (income, employment and education)	12 Jun	10 Jul	14 Aug
COVID-19 Profile release (R software interface-based tool) to run in tandem with the Interim Word/PDF tool		10 Jul	14 Aug
Violence Prevention Unit reports on COVID and violence	fortnightly	14 Jul 28 Jul	Weekly from 11 August

## Risks

Risk	Mitigation
There is a risk that there may be insufficient capacity within the International Health team to continue to manage the Horizon Scanning weekly reports as level of information from around the world is growing exponentially	<p>Draw on resources and expertise from across the directorate</p> <p>Maintaining close collaborative working with Welsh Government, international partners and stakeholders to draw on expertise and information readily available</p> <p>Amend frequency of report publication</p>

Risk	Mitigation
There is a risk that the number of HIA requests will continue to increase with limited capacity to maintain the number of requests	<p>Draw on resources and expertise from across the directorate</p> <p>Liaise with Welsh Government on an ongoing basis to keep informed of regulation developments</p> <p>Prioritisation of work plans to anticipate requests</p>
There is a risk that the number of additional questions for the public survey cannot be sustained	<p>Liaise with Welsh Government and Executive team to prioritise survey questions to align policy decisions</p> <p>Draw on resources from across the directorate and mutual aid system to maintain sample sizes</p> <p>Request additional funding to support survey extensions to allow for additional questions to be included</p>
There is a risk that staff will be withdrawn from the public survey meaning the sample size will shrink below that required for national analyses	Extension agreements and notice periods in place so that additional resource can be sourced quickly through the mutual aid system if current resourcing is diverted
There is a risk that we will have insufficient senior staff to deliver our COVID-19 critical work (public survey, international, HIA, dashboard) owing to senior staff being pulled into other work	<p>Prioritisation of work plans to ensure COVID-19 critical work can continue to be delivered</p> <p>Make the Executive Team aware of any capacity implications that cannot be met within the team whilst developing a model for sustainable support</p>
There is a risk that other staff will be redeployed elsewhere leaving an insufficient workforce to deliver the critical COVID-19 related outputs	Make the Executive Team aware of any capacity implications that cannot be met within the Team whilst developing a model for sustainable support

## 2.8 Research and evaluation

### Stage 2 plan

Research and evaluation are essential to generate the knowledge needed to inform and refine the public health response to COVID-19. The Research and Evaluation Division within Public Health Wales is leading, and supporting the wider expertise across the organisation, to deliver a comprehensive research and evaluation programme that supports the COVID-19 response. Current activities focus on generating the insights and evidence needed to inform timely action, whilst also considering the longer term research programmes to better understand the direct and indirect impact of COVID-19 on health in Wales. The key focus in Stage 2 is defined in three priorities.

#### **Priority 1: Understanding the efficiency and effectiveness of Public Health Wales' contribution to *Test Trace Protect***

The Research and Evaluation Division will deliver the evaluation plan focused on Public Health Wales' responsibilities within Welsh Government's *Test Trace Protect* strategy. The evaluation focuses on

the effectiveness of the case finding and contact tracing system, in particular on adherence to desired behaviours and levels of trust in Public Health Wales. Real-time evaluation questions being:

- ❖ How efficient and effective is the case finding and contact tracing model? (supporting priority areas 1)
- ❖ How effective is communication to support adherence to public health guidance and behaviour change?

Analysis will focus on the equity of the approach and the value of digital solutions. The evaluation will collate learning, helping to inform, support and identify areas where further action is needed. Further activity to capture innovation and evaluate the outcomes will be developed in Stage 3.

### Priority 2: Generating new knowledge on the indirect impact of COVID-19 on health and communities

The Research and Evaluation Division is leading a number of deliverables on the direct and indirect impact of COVID-19 on health, examining the social and economic harms for individuals and communities. The activities are ongoing and linked with external academics in Wales and further afield.

### Priority 3: Supporting Public Health Wales to contribute to the international knowledge on COVID-19 through research

The Research and Development Office is supporting the organisation to enable their contribution to the national and international evidence of COVID-19. Activities include maintaining the COVID-19 Research Cell and research registry, identifying and raising awareness of research opportunities, and enabling study set up and delivery of COVID-19 studies. Mobilising support from external partners including health boards, Health Care Research Wales and universities e.g. the implementation of the Oxford Vaccine Trial

### Research and evaluation Stage 2 Deliverables

Deliverable	June	July	Aug
<b>Priority 1: Real time evaluation</b>			
Evaluation of enclosed setting cell	13 June		
Evaluation of contact tracing model -Key process indicators -Identification of those at risk of high number of contacts -Workforce model (contact tracing)	26 June	1 July onwards	30 August
Public engagement with digital tools -Covid-19 symptoms tracker -Digital contact tracing tools – process indicators -Digital contact tracing tools – national survey	15 June 26 June		1 August
Behavioural Insights on COVID-19 and adherence - Risk perception, enablers and barriers of adherence, including trust and confidence to support targeted communication and intervention (quantitative and qualitative data)		30 July and mthly update	30 August

Deliverable	June	July	Aug
<b>Priority 2: Generating new knowledge on the indirect impact of COVID-19 on the health and communities</b>			
Understanding the impact of COVID-19 on employment and health (population survey) -data collection completed -initial report	22 June		30 August
Understanding citizen-led community response to COVID-19 (qualitative study) -Plan agreed		1 July	
Examining the impact of COVID-19 on health amongst the homeless (routine data)			30 August
<b>Priority 3: Supporting Public Health Wales to contribute to the international knowledge on COVID-19</b>			
Research and Development Office functions	ongoing		

## Risks

The key risks and mitigations in Stage 2 are listed in the table below.

Risk	Mitigation
There is a risk that the ability to support epidemiological analyses and analyse the effectiveness and efficiency of the response may be affected adversely if the data quality issues continue in the CRM (NHS Contact Tracing System)	Evaluation informed data specification for CRM Supported by in build internal data validity checks and quality linkage and assurance on data by NWIS Continued engagement with the provider and NWIS
There is a risk that evaluation will fail to inform action in real time owing to a lack of engagement and slow communication on findings and lessons learnt	Development and visibility of agreed key process evaluation indicators from CRM data at IMT and Gold Visible Gold/Executive Director level support for the evaluation programme and encouragement for others to support Agreed timely communication plan for evaluation findings Ongoing liaison with key partners
There is a risk that limited finance will reduce the ability to procure sufficient data collection by a third party to inform evaluation	Ring-fence funding to support evaluation activities
There is a risk that critical insights will not be delivered owing to demand exceeding capacity	Current resource secured for stage 2 Routes to access additional capacity made available
There is a risk that delivery will be affected by the need for research and evaluation staff to respond to operational pressures. A focus on operation and process evaluation also limits	Current resource secured for stage 2 Developmental work to be included in next stage.

capacity to deliver on outcome and impact on population health	
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## 2.9 Quality, Safety, Information Governance and Risk Management

### Stage 2 Plan

This work stream is responsible for ensuring that the Stage 2 plan is fit for purpose from the perspective of quality, safety, information governance and risk. As an enabling work stream, specific work will also be planned to support other work streams delivering the plan. Key areas are outlined below:

- ❖ Supporting work streams to deliver this plan in the domains of quality and safety, information governance and risk, through direct and indirect support on key areas of delivery. To implement approaches and products which provide assurance on these domains
- ❖ Work with the other work streams to ensure the response and recovery has measures of success to propel improvement and demonstrate quality assurance
- ❖ A key aspect of quality is obtaining feedback from service users and stakeholders. The focus will be on ensuring mechanisms are in place to capture meaningful data to drive improvements.

The stage 2 priorities are as follows:

#### Priority 1: Providing effective and timely information governance advice

Providing expert professional advice to *Test Trace Protect* and this implementation plan. Ensuring data protection processes are completed to the highest quality and in-line with the expectations of the Information Commissioner's Office. Ongoing engagement and negotiation with Local Authorities and Health Boards across Wales.

#### Priority 2: Supporting effective risk management

The risk management arrangements for the delivery of this plan are embedded in the overall organisational architecture, with appropriate escalation mechanisms in place. The key elements being a better alignment of all organisational risks at strategic and operational levels, to ensure that the Board and other stakeholders can take assurance that the risks to delivery of the response to and the recovery from Covid-19 are being managed as effectively as possible. This ensures enhanced oversight for key decision making, and advising on the incorporation of risk management into a proposed Response and Recovery Dashboard.

#### Priority 3: Improving quality and safety

To ensure that quality and safety is central to delivery of this plan, and mechanisms are in place to provide appropriate quality assurance. Collaborate with work streams to develop Measures of Success and Quality Indicators, and ensuring compliance with our quality and safety statutory responsibilities through regular monitoring, feedback and support

#### Priority 4: Effective user experience and engagement

Developing and implementing approaches to capture feedback and learning from key stakeholders and service users, including seldom heard groups, to drive continuous improvement and ensure work stream activity reflects diverse needs e.g. improved reach of public information to reach groups excluded through literacy, language or digital barriers.

## Quality, safety, information governance and risk Stage 2 Deliverables

Deliverable	June	July	August
<b>Information Governance</b>			
Scope mechanism to assure GOLD in relation to information governance performance metrics	30 June		
Provide expert professional information governance advice on the effectiveness of Information sharing arrangements and data protection requirements at a national and regional level	30 June	Ongoing support	Ongoing support
<b>Risk Management</b>			
Expert professional advice for the implementation of the information governance toolkit within programme work streams	30 June		
Scope the options to incorporate Risk Management into a 'Response and Recovery' Dashboard	30 June		
Working with the Board and GOLD to better align the Strategic Risk Framework, corporate risk register and relevant programme work stream risks, to allow improved oversight of strategic and critical operational risks to inform key decisions for the Board and Gold		7 July	
<b>Quality and Safety</b>			
Determine baseline of Quality support required in each work stream: Work stream briefs and stage 2 plans used to complete the baseline assessment	22 June		
Collaborate with work streams to develop their Measures of Success and Quality Indicators (using baseline established and quality tools)	30 June – initial collaboration	Ongoing collaboration	Ongoing collaboration
<b>User Experience and Engagement</b>			
Working closely with appropriate work streams to develop an approach to capture feedback from service users to improve information for communications during COVID-19 response	22 June	Ongoing support	Ongoing support
Develop quality assurance mechanism for information for vulnerable groups and those with protected characteristics during the COVID-19 response	30 June	Ongoing support	Ongoing support
Develop a 'Rapid Equality Impact Assessment' model that can be used as services develop very quickly to ensure that key risks to equality are identified and mitigated		10 July	

### Risks

The following risks have been assessed by the QSIGR work stream as follows:

Risk	Mitigation
There is a risk that the work stream's plan will not be delivered owing to a lack of resource.	Through the mobilisation request process, ensure appropriate capacity and capability in place for workstream delivery
There is a risk that engagement with services users will not reach the levels needed owing to the pandemic restrictions.	Engaging and maintaining appropriately with known stakeholder organisations. Development of an engagement plan to facilitate capture of service user feedback

## 2.10 Finance and supply chain

### Stage 2 Plan

The Finance and Supply Chain work stream continues to oversee and report on the financial viability of the programme. It also provides help and support on procurement and supply chain matters. This is particularly important for future planning purposes as the ability to utilise emergency procurement rules is likely to diminish in coming weeks.

In terms of assisting work streams to develop financially viable plans, finance business partners are connected to work streams and will continue to help develop and monitor financial and procurement plans during this stage.

### Financial Assessment

Public Health Wales additional operational expenditure on the COVID-19 response, for April and May 2020, totalled £3.243m.

Workstream		£
Sampling & Testing	Testing – Laboratory Variable Costs – Antigen	1,561,534
	Testing – Laboratory Variable Costs – Antibody	153,927
	Testing – Workforce and Fixed Costs	517,580
	Genomics	218,400
	Results	98,838
	Sampling	754
	Imperial Park 5	0
	Referrals	0
	Surveillance	0
Contact Tracing and Case Management		441,768
Communication and Engagement		250,565
<b>TOTAL EXPENDITURE</b>		<b>3,243,366</b>

This has been funded through planned operational cost reductions, slippage on planned investments and anticipated additional in-year Welsh Government funding, as in the table below:



Source	Description	Month 1 & 2 Funding £
Public Health Wales	Delays in recruitment to vacant posts in establishment (over and above vacancy factor)	336
Public Health Wales	Allocation of internal investment funding and non-pay slippage	322
Public Health Wales	Internal Mobilisation of staff	140
Genomics UK Consortium	Funding for Genomics sequencing	218
Welsh Government	As per supplementary budget £57m identified for Testing strategy	2,227
<b>TOTAL FUNDING</b>		<b>3,243</b>

### A summary of an assessment of work stream Stage 2 plans indicates:

- ❖ Stage 2 will run until the 31 August 2020, however the costs associated with the deliverables may extend beyond this period
- ❖ detailed forecast costs of deliverables have been included within the Welsh Government monthly monitoring return for discussion, and
- ❖ whilst we always undertake to either seek funding approval from Welsh Government or identify from our own budgets, that the total quantum of funding for addressing COVID-19 across Wales remains fluid and uncertain. There is a risk that the organisation's operational cost of addressing and recovering from the pandemic cannot be contained within available funding resulting in a potential breach of the planned outturn for 2020-21.

## 2.11 Programme Management

### Stage 2

#### Approval process

Planning for Stage 2 began on the 21 May in readiness for consideration of a first draft by Gold on 4 June. An informal meeting of the Public Health Wales Board considered the draft Stage 2 plans on 5 June. The plan was approved by the Business Executive Team on 16 June and will be presented for ratification by the Board on 25 June.

In the meantime, the Programme Team will produce for ratification, a companion document to the Stage 2 plan. This will be a Controls and Assurance Plan for Stage 2 and will include the following products:

- ❖ a risk assessment across the workstreams and for the programme as a whole using the risk management toolkit issued at the end of May
- ❖ a programme-wide assessment from the enabling workstreams
- ❖ proposals on a standard approach to closing workstreams
- ❖ a review of the programme organisational structure

- ❖ the arrangements for the programme document repository
- ❖ a change control, issues management and escalation processes
- ❖ the timetable for planning Stage 3 which is expected to run from September to December 2020.

The routine programme management deliverables will continue for Stage 2. On a weekly basis work streams will continue to produce a situation report in a consistent format. The programme team use the sitreps to produce a Delivery Confidence Assessment submitted to the Gold meeting weekly.

The Delivery Confidence Assessment provides a statement of the programme’s ability to deliver against the strategic direction set by Welsh Government’s *Test Trace Protect* strategy, our own aims and objectives, and our more detailed internal implementation plan including against agreed timescales, costs and to the required quality.

The Delivery Confidence Assessment reflects the specific issues and risks identified by the programme that may impact on its ability to deliver to time, cost and quality. It is also informed by the Programme Team’s overall assessment, which uses the information gathered from a number of sources, including the work stream sitreps.

From mid-May four Delivery Confidence Assessments have been produced and considered by Gold. Each assessment was amber (the Delivery Confidence Assessment RAG ratings are included below for information). On 29 May it was agreed that Delivery Confidence Assessments and sitreps would be circulated to the Board for information.

DCA RAG	DCA Description
Green	Successful delivery of the project/programme to time, cost and quality appears highly likely and there are no major outstanding issues that at this stage appear to threaten delivery.
Amber/ Green	Successful delivery appears probable. However, constant attention will be needed to ensure risks do not materialise into major issues threatening delivery.
Amber	Successful delivery appears feasible but significant issues already exist requiring management attention. These appear resolvable at this stage and, if addressed promptly, should not present a cost/schedule overrun.
Amber/ Red	Successful delivery of the project/programme is in doubt with major risks or issues apparent in a number of key areas. Urgent action is needed to ensure these are addressed, and establish whether resolution is feasible.
Red	Successful delivery of the project/programme appears to be unachievable. There are major issues which at this stage do not appear to be manageable or resolvable. The project/ programme may need re-baselining and/or overall viability re-assessed.