C 44a Ymchwiliad i effaith Covid-19, a'r modd y mae'n cael ei reoli, ar iechyd a gofal cymdeithasol yng Nghymru Inquiry into the impact of the Covid-19 outbreak, and its management, on health and social care in Wales Ymateb gan lechyd Cyhoeddus Cymru

Response from Public Health Wales



PUBLIC HEALTH WALES' WRITTEN EVIDENCE ON COVID-19

Submitted to Health, Social Care and Sport Committee

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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 Friday 12 June 2020. The submission sets out the work Public Health Wales has undertaken in support of Welsh Government's Test Trace Protect Strategy, which was published on the 13 May 2020.

As the national Public Health Institute for Wales, Public Health Wales has played a key role in supporting the public, 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, along with providing information to the public through a range of communication channels.

This has included:

- Providing public health advice to the Welsh Government to support the development of policy (e.g. Public Health Protection Response Plan and behavioural insights)
- Developing and disseminating surveillance and intelligence to the wider system (e.g. COVID-19 surveillance reports)
- Delivering key public health functions and services (e.g. health protection and microbiology outbreak response and management)
- 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)

This submission provides details of the work that we have undertaken following the publication of the Welsh Government *Test Trace Protect Strategy*, a summary of our role in the containment and delay phases of the pandemic and an overview of the wider work of the organisation.

We would like to take this opportunity to formally thank the exceptional staff of Public Health Wales, who have demonstrated their commitment, passion and professionalism over the recent months and have worked tirelessly to protect the public and support Wales' response to the coronavirus pandemic.

2. Current Epidemiology

2.1. Global numbers

The pandemic continues to affect countries across the world. As of the 8 June 2020, there were 6,931,000 confirmed cases and 400,857 deaths worldwideⁱ.

2.2. UK numbers

All four UK countries have seen the peak of first wave during the first half of April. Following the introduction of the lockdown measures, case numbers and fatalities dropped from mid-April onwards. As of the 8 June 2020, there were 287,399 cases out of a total of 5,731,576 tests completed. The number of people who have sadly died in the UK is 40,597ⁱⁱ.

2.3. Wales' numbers

The peak of infection in Wales was during the first two weeks of April. As of the 9 June 2020, there were 14,480 confirmed cases and 1410 deaths. A total of 96,921 individuals have been tested in Wales and 116,551 tests have been performedⁱⁱⁱ.

2.4. Epidemiology in Wales

The main age group affected is the 50-59 years old age range followed by the 40-49 years old age range. The peak of infection was in the first two weeks in April. However, continued viral transmission and expanded testing has meant that cases are being identified across all health board areas and there is variation in case numbers with North Wales seeing higher numbers in the recent weeks. The positivity rate for samples tested has dropped below 10% compared to the nearly 40% during the peak of first wave. The overall rate of infection in Wales in 457 per 100,000 population. The median age of people who have sadly died is 81yrs and the overall death rate is 45 per 100,000.

Please note that the endnote hyperlinks provided at the end of this paper will take you to information that is updated daily. As a result, the figures may differ to those included within this paper.

3. Public Health Protection Response Plan

3.1. Background

On the 22 April 2020, the Chief Medical Officer for Wales asked Public Health Wales to prepare a Public Health Protection Response Plan to inform the next phase of the response to the coronavirus pandemic in Wales. This was submitted as expert public health advice to Welsh Government on the

4 May 2020. It was written to support the Welsh Government's *Leading Wales out of the Coronavirus Pandemic: A Framework for Recovery.*

3.2. Process for development

The Plan involved the compilation of expert health protection advice from across the organisation which was also informed by the international evidence on the approaches to the pandemic taken in other countries.

The Public Health Protection Response Plan was also informed by a short consultation with Chief Executives from local authorities and health boards in Wales in order to provide an opportunity for comment on the draft Plan and views on its implementation. A major theme from the responses received was the importance of health boards and local authorities working together at a regional and local level to deliver contact tracing.

Three major activities for concerted public health action at scale were set out in the Plan.

These are:

- Preventing the spread of disease through contact tracing and case finding
- > Population surveillance
- Sampling and Testing

The Public Health Protection Response Plan was published on the 22 May 2020. On the 13 May 2020, the Minister for Health and Social Services published the Welsh Government's *Test Trace Protect Strategy*. Subsequently, a Welsh Government Test Trace Protect Programme Oversight Group has been established to oversee the implementation of the Strategy.

3.3. Public Health Wales' Implementation Plan to support Test Trace Protect

Public Health Wales established an internal programme to implement its contribution to Test Trace Protect. The Response Programme was established in early May 2020, which consisted of a series of workstreams, 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.

These were incorporated into a Stage 1 Implementation Plan which concluded in early June and coincides with the scaling up of our internal response for the next phase, and our support to the wider system in the preparation for contact tracing going live in Wales. A Stage 2 Implementation Plan is currently being developed and will finish at the end of August with Stage 3 being the remainder of the year. Regular progress reports on the implementation of the Plan are reviewed by the Public Health Wales Gold Group and the Board.

A substantial amount of work has been undertaken by the organisation throughout the various phases of the pandemic, including to support the implementation of Test Trace Protect.

In relation to supporting the implementation of Test Trace Protect, the Public Health Wales key deliverables to-date include:

- 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
- Significant technical support to the development of the contact training management digital system (Microsoft Dynamics)
- The establishment of a National Contact Centre and National Health Protection Response Cell within Public Health Wales to provide national expertise, co-ordinated support and specialist public health protection advice to regional and local contact tracing services
- Support to local health boards and Welsh Government on sampling strategies and delivery models including increased sampling and testing capacity, access to the UK online booking portal and automated text notification of results (Welsh Government now leads sampling and testing through a sub-group of its Strategic Oversight Group)
- Submission of a business case for a new laboratory to undertake antibody testing for COVID-19
- Active professional and technical support to the Welsh Government Tactical Advisory Group on nowcasting, sero-surveillance and modelling
- Expansion of the content of the Public Health Wales surveillance dashboard to include, for example, rapid mortality surveillance data

- Active professional communications support to Welsh Government's national communications strategy for *Test Trace Protect*
- Regular publications including a national public engagement survey and international horizon scanning.

3.4. Public Health Wales' organisational recovery

Alongside the work of the response programme, Public Health Wales has developed a plan for our organisational recovery following the coronavirus pandemic. The plan aims to prepare the organisation for a 'new normal' and the safe reactivation of defined services while recognising that the ongoing response will be our main focus for at least the remainder of 2020.

This will focus on the safe reactivation of a number of our key public health services and functions that were paused during the peak of the pandemic (e.g. screening programmes), continuing to support our staff, ensuring our infrastructure is operating effectively and putting in place arrangements to capture learning from the previous phase of the response.

4. Test Trace Protect Strategy

On the 13 May 2020, Welsh Government published their *Test Trace Protect strategy*, which was informed by the expert public health advice submitted by Public Health Wales within the Public Health Protection Response Plan. 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'.

Public Health Wales has established an Implementation Plan to support the implementation of Test Trace Protect and to take forward the specific role and responsibilities, including support to the wider system, that are set out within the Test Trace Protect Strategy.

A summary of our main functions within the recovery phase is set out below:

4.1. Contact Tracing

Public Health Wales is involved in contact tracing by supporting partners in local authorities and health boards in implementing the contact tracing system for Wales. The support provided by Public Health Wales includes:

- 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
- developing job profiles, e-learning packages, scripts, user stories and work flows to local authorities and health boards to support contact tracing
- providing modelling advice and support to inform the potential activity of cases and contacts and resulting resource requirement.

To fulfil the 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
- contingency arrangements for a limited contact tracing case management in advance of the NHS Wales Contact Tracing System becoming operational
- the process to establish an evaluation framework for contact tracing case management across Wales. This includes capturing learning to date and a real time evaluation of the case and contact tracing model. Further detail is outlined in the 'Research and Evaluation' section of this submission
- a national Health Protection Response Cell and a national Contact Centre to provide health protection expertise and advice nationally and at a regional level on outbreak and incident management, support and process self-reporting for the public when it commences and provide a general enquiries service.

4.2. Sampling and testing

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 and web-based sampling. Public Health Wales will continue to provide expert advice to support further expansion of sampling capacity, increased testing capacity in Public Health Wales' laboratories and expert advice on antibody (serology) testing in the next phase of the response. The Welsh Government has approved the use of two web portals in Wales to allow keyworkers and the general population to book tests.

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 Welsh Government and health boards (managing sampling centres) to create a simple end-to-end referral and results process for Wales
- working with Welsh Government, health boards and local resilience forum (LRF) partners to help them to maximise the sampling capacity in Coronavirus Testing Units (CTUs), Population Sampling Centres (PSCs) and mobile testing units (MTUs) and any additional capacity that may be required.

4.3. Population Surveillance

Public Health Wales is further developing our surveillance systems in close co-ordination with the Welsh Government's Technical Advisory Cell (TAC), including providing advice on the development and utility of R (the estimate of the Reproduction number) and other indicators, and use of models to predict the outcome of specific interventions.

The COVID-19 Surveillance system being established will have 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)

4.4. Communications

Public Health Wales has played a key role in supporting the Welsh Government following the publication of their *Test Trace Protect* strategy, particularly around the dissemination of key information, behavioural

insights and evaluation and proactive external communications with the public and stakeholders.

We have also played a key role in supporting the Welsh Government and providing the public and stakeholders with information in our role as the national Public Health Institute for Wales. Using our various channels, we have disseminated key information to support Welsh Government's Test *Trace Protect Strategy* and to promote the Public Health Protection Response Plan, through stakeholder and social media activity.

We will continue to support Welsh Government through:

- > Applied behavioural science and evaluation to help shape the messaging
- > Sharing content on our digital channels
- > Disseminating content to stakeholders and sharing feedback.

5. Summary of the key role of Public Health Wales in the containment and delay phases of the pandemic

5.1. Establishing testing capability and building sampling capacity

Since the start of the outbreak, Public Health Wales has been working closely with the Welsh Government, health boards, the Department of Health and Social Care (DHSC) in England (coordinating the UK Government's Testing Strategy) and other stakeholders to support the development of sampling capacity in Wales. It is important to note that, like many organisations in this unprecedented and fast-paced time, we have been involved in ramping up existing activities at scale and at pace and driving activities that are not our core function, are new skills for us and have involved many of our staff working above and beyond to support partners and the people of Wales.

At the outset of the pandemic, our microbiology and health protection teams were undertaking sampling in the community and it was clear that this would need to be scaled up at pace across Wales as the numbers of people increased. The organisation provided extensive support and guidance to health boards to establish their multi-agency community sampling teams and the Coronavirus Testing Units, which initially provided testing for healthcare workers.

During March, Public Health Wales and the Welsh Government were assessing the possibility, and sites, for establishing high volume testing solutions for Wales in addition to the Coronavirus Testing Units that had already been set up by health boards to test their health care staff. In the middle of March, initial conversations with the DHSC took place in relation to mass sampling centres in Wales as part of the UK Government's support for testing across the UK, and have continued since that time. In response to the pandemic, the UK Government had 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:

- Wales uses a single dry throat swab rather than the two wet swabs used in the DHSC model
- Swabs that would have been analysed in UK laboratories would have had their results stored in England. At the start of the outbreak, there was no opportunity to report the data back in Wales and be stored within the Welsh Clinical Portal which was a similar situation for other parts of the UK
- There was a need to develop a more digital solution to support mass testing within Wales as a number of the processes within the laboratories involved manual input of data. This has resulted in the development of electronic test requesting.

5.1.1. Referral

Due to the challenges outlined above, Public Health Wales worked with partners to develop a 'proof of concept' digital end to end process. The ultimate aim of the process would be to enable identified key workers, in line with Welsh Government policy, to book a test online and either book a home test, or receive an appointment to attend a testing centre in Wales.

A pilot took place on the 25 and 26 April 2020 with South Wales Police, and a subsequent business case was submitted to Welsh Government to support ongoing development of the portal. The business case was approved on the 27 April 2020.

However, at the beginning of May 2020, the issues of results not being reported back in a timely manner to Scotland and Northern Ireland from the UK Government laboratories had reportedly been resolved. In addition, there continued to be the opportunity to access the UK Government testing capacity to supplement that of the domestic capacity within Wales. As a consequence, a Ministerial Decision was taken on the 11 May 2020 to utilise the UK Government web portal for test requests which also enabled access to additional UK Government testing capacity with tests being sent to UK laboratories outside of Wales and the results reporting to the individual and into the Welsh system.

Since that time, Public Health Wales has supported the Welsh Government and the NHS Wales Informatics Service with the development and integration of the UK Government portal with the Welsh information systems.

5.1.2. Population Sampling Centres

On the 30 March 2020, Public Health Wales was contacted by Deloitte regarding the test centre that they had set up at Cardiff City Stadium. Public Health Wales, worked closely with the Welsh Government, DHSC and Deloitte to set the site up to be functional and it opened on the 7 April 2020. Since that time, the site has been run by Public Health Wales. From the 10 June 2020, the site was taken over by Cardiff and Vale University Health Board, in line with other Population Sampling Centres.

Public Health Wales has since worked closely with health boards, Deloitte and the DHSC to establish further Population Sampling Centres across Wales. The current sites are as follows:

Site	Date opened
Rodney Parade (Newport)	01/04/20
Cardiff City Stadium	07/04/20
Carmarthen Show Ground	30/04/20
Llandudno	29/04/20
Abercynon Park and Ride	07/05/20
Liberty Stadium (Swansea)	10/05/20

5.1.3. Mobile Testing Units

At the end of April 2020, additional capacity was made available by the DHSC in the form of Mobile Testing Units. Since their arrival in Wales, these have been operated by the military. Public Health Wales has worked closely with the military and health boards to ensure that appropriate standard operating procedures are in place and that they have bene effectively deployed by the health boards who manage them.

They are currently deployed as follows:

Health Board	Location	Deployed		
Betsi Cadwaladr	Llandudno RTC	1 May 2020		
Hywel Dda	Carmarthen RTC	1 May 2020		
Cwm Taf Morgannwg	Abercynon RTC	4 May 2020		
Swansea Bay	Swansea Bay RTC	6 May 2020		

Powys	Welshpool Hospital CTU	6 May2020	
Powys	Bronllys Hospital CTU	6 May 2020	
Aneurin Bevan	Rodney Parade	10 May 2020	
Cardiff and Vale	Cardiff and Vale	10 May 2020	

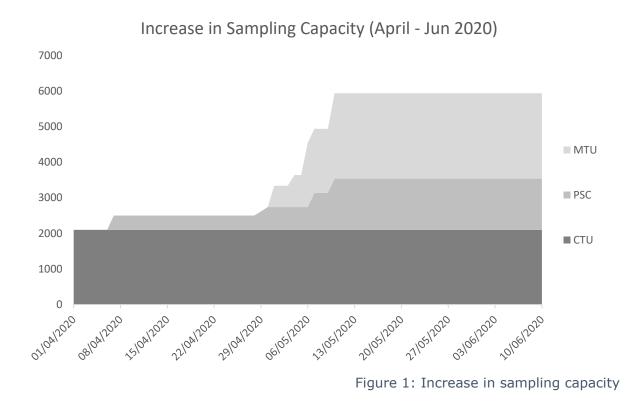
Table 1: Mobile Testing Unit Deployment

The table below provides a summary of the current sampling capacity available for Wales for the public and key workers to be able to access (as at 8 June 2020):

Health Board	Population	MTU capacity	PSC capacity	CTUs (x20)	Total Current Sampling Capacity
Betsi Cadwaldr	~649,000	300	120	500	920
Hywel Dda	~386,000	300	120	500	920
Powys	~133,000	600	-	200	800
Cwm Taf	~450,000	300	400	500	1,200
Aneurin Bevan	~600,000	300	-	100	400
Cardiff and Vale	~445,000	300	400	300	1,000
Swansea Bay	~390,000	300	400	-	700
Totals	~3,053,000	2400	1440	2100	5940

 Table 2: Current Sampling Capacity (source: Welsh Government)

Figure 1 (below) shows the increase in sampling capacity since April 2020.



5.1.4. Home delivery of test kits

The home delivery of test kits is now available to the population in Wales through the UK.gov portal. When a kit is ordered, it is delivered to the home by Amazon. Once the individual has undertaken the swab, it is collected by a courier and transferred to a laboratory in the UK.

5.1.5. Future developments

Conversations are ongoing between the DHSC, Welsh Government, Public Health Wales and health boards regarding the possibility of two further Population Sampling Centres in North Wales and Gwent.

At the time of writing, discussions are also taking place between the military, DHSC and Welsh Government regarding the potential for additional mobile testing units for Wales.

5.1.6. Testing

Since the start of the pandemic, Public Health Wales' microbiology service has grasped its system leadership responsibilities and 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 done to ensure sufficient provision across the system 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.

However, given that we are dealing in an unprecedented global pandemic that is affecting every country worldwide, the global supply chain for equipment and testing reagents has been under significant pressure for an extended period of time. This has resulted in substantial challenges, with timelines given for provision, often failing to occur as planned.

Public Health Wales has therefore had to adapt to the situation to secure sufficient testing capacity, including:

- Working in partnership with the Life Sciences Hub and the Welsh Government to identify and procure platforms that are more hands-on and technically demanding than many other commercial platforms that offer integrated systems with minimal requirements for staff interactions. This has meant an increased workforce and new skill requirement
- Pursuing the fulfilment of commercial agreements using what leverage is available to expedite or coordinate supply efforts e.g. liaising with NHS Scotland to utilise flight freight to bring platforms into the UK from South Korea
- Working in partnership with universities in Wales so that they can produce the lysis buffer with ingredient lists to fill the commercial gap and undertake 3D printing for reusable consumables.

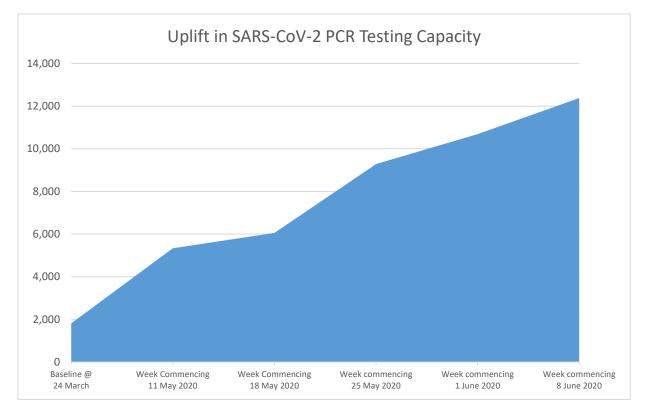
Despite these challenges, Public Health Wales has actively continued to increase the testing capacity for Wales. This has been through the addition of high throughput platforms at the University Hospital Wales and Magden Park, along with the proposed provision of medium-sized and rapid PCR (antigen)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

Whilst the diversity of platforms procured provides some resilience, it also presents technical challenges, including preparation of physical space to interfacing the machines with the NHS Wales Laboratory Information System. It also means our staff need to be competent on a wider range of platforms, which presents technical challenges as well as spreading Public Health Wales staff more thinly than desired.

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. To manage this, a business case has been developed to increase laboratory capacity. This will house the PerkinElmer platforms as well as the large Ortho Clinical Diagnostic platforms for antibody testing.

As at the 10 June 2020, the current platform and test kit capacity is 12,347 antigen tests a day. Around 10,000 are available via the main platforms at University Hospital Wales and Magden Park, with the rest coming from the other sites across Wales.

The graph below shows the uplift in testing capacity to date. To help provide context, the equivalent of the UK target of 100,000 tests and 200,000 tests a day is 5,882 and 11,765 respectively for Wales. As can be seen below, Wales achieved the 100,000 tests a day equivalent, in the week commencing 18 May and 200,000 tests a day in the week commencing 8 June 2020.



Public Health Wales is responsible for the laboratory testing of the samples we receive and the texting of results as outlined above. Whilst we support the Welsh Government and other partners in the system in providing technical and professional advice, health boards are responsible for the sampling elements of the process.

The laboratory processing times (from laboratory receipt to release of the result) demonstrate that overall, 84.3% of tests are released on day 1 (i.e. approx. 24 hours), and 97% by day 2. The laboratory staff continue to work to improve this. The table below indicates the turnaround time for

	Sampling Site	No of	Cumulative percentage reported at each day				
		Tests	Day 0	Day 1	Day 2	Day 3	Day 4
End-to- End Process	Overall	126,322	6.8	52.1	85.6	94.6	97.0
	Coronavirus Testing Units	56,510	2.6	45.4	80.9	93.0	96.8
	Population Sampling Centres	29,990	3.5	50.0	89.5	96.7	98.0
	Hospital	39,822	15.0	63.2	89.3	95.2	96.5
In-Lab Process	Overall	126,322	21.3	84.3	97.0	98.6	98.9
	Coronavirus Testing Units	56,510	16.9	84.0	98.5	99.3	99.5
	Population Sampling Centres	29,990	18.5	93.4	99.2	99.5	99.6
	Hospital	39,822	29.6	77.8	93.2	96.9	97.5

laboratories for different testing units since Covid testing commenced until midnight 10 June 2020.

However, from the time of the sample being taken (indicative of the endend process time), only 85.6% of results are realised by day 2. This is reflective of travel times and Public Health Wales is working to ensure that samples are processed in laboratories closer to their origin, where there is also more rapid testing platforms.

The Welsh Specialist Virology Service based at University Hospital of Wales has undertaken over 90% of all the tests in Wales and has been incredibly busy compared to its peers across the UK. We have received support from the All Wales Medical Genetic Service staff to help deliver the COVID-19 response and have previous experience with the PerkinElmer platforms. We have also taken on a number of temporary volunteers to support our service whilst we increase our substantive workforce.

To date, the service has coped predominantly with existing staff in most of the laboratories. This has been made manageable with the downturn in normal business activity. However, changes to lockdown and a plan to recover from COVID-19 has seen an increasing return of non-COVID activity. We are currently seeing about 60% of normal non-COVID activity for this time of the year.

Public Health Wales has created a workforce plan which has included an uplift in microbiology laboratory staff. We have plans to permanently recruit to over 50 staff. The recruitment plans are progressing well and we are

filling the posts in a blended manner, using recent graduates, ex service personnel as well as wider recruitment activities. Currently, there appears to be a significant interest in medical microbiology and we are using this to boost our recruitment.

Our response due to the supply chain has meant concentrating our efforts from a relatively small team. With more platforms becoming operational, the burden can be more broadly shared across the laboratories in Wales and, along with our recruitment, will significantly improve our resilience and service delivery.

Public Health Wales is helping to plan and coordinate the serological antibody testing programme. The majority of the testing activity will be undertaken on platforms managed by blood science department in health boards encompassing Roche and Abbot platforms. Test kits will be provided through a UK Central Allocation programme.

Public Health Wales also has the Abbot platforms at two of its laboratories (Singleton and University Hospital Wales). In addition, we have existing platforms that we can use to run antibody tests from EuroImmun. Further, Public Health Wales is in partnership with Ortho Clinical Diagnostics and this arrangement includes the loan of two machines to deliver up to 5,000 tests a day.

Collectively, and with the caveats of any changes in allocation and timing, this has the potential to be able to provide an indicative 15,000-20,000 antibody tests a day by the end of July and this will be dependent upon policy and testing application.

5.1.6. Results

At the start of the outbreak, the provision of results to key workers and employers was a manual process dealt with 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 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 with the exception of Cardiff and Vale University Health Board and Powys Teaching Health Board and discussions are continuing with them to commence the service.

5.2. Providing direct 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.

Specific examples of this include the:

- provision of public health support to the weekly meetings of the Local Resilience Forum Chairs with Welsh Government in the initial containment phase and attendance on request at the Joint Emergency Services Group
- establishment, with the agreement of the four Local Resilience Forums, of a Public Health Strategic Co-ordinating Support Group to provide expert advice to the four Strategic Coordinating Groups established across Wales. This multi-agency forum has met weekly with a wide range of stake holders attending including Welsh Government, health boards, local authorities, emergency services and other Wales wide bodies, including Food Standards Agency and Natural Resources Wales
- facilitation of twice weekly meetings with health boards during the containment phase to co-ordinate and advise on the establishment of coronavirus testing units (CTUs) across Wales
- weekly engagement meetings with health board Directors of Public Health
- contribution to a vast range of strategic meetings, at all stages of the response, including the Welsh Government twice weekly Health and Social Care Planning and Response Group, the Test Trace Protect Programme Oversight Group, daily NHS calls with partners
- provision of expert advice to a range of Welsh Government and UK groups on infection prevention control, personal protective equipment, modelling and guidance.

During the containment and delay phases, Public Health Wales has also organised and facilitated a number of multi-agency exercises.

These have included:

- Exercise Seren City on 3 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.

As part of the COVID-19 response, Public Health Wales activated a Contact Tracing Cell (CTC) on the 27 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 March 2020, the UK moved into the delay phase of the outbreak. Following this announcement, and discussions with the Chief Medical Officer, the CTC was stood down when the case definition across the UK changed and the focus of the response shifted to the healthcare setting and the growing number of cases needing diagnostic testing, concerns about within-hospital transmission and the requirement to test health care workers.

Public Health Wales, through the notifiable disease system, also became aware of incidents (of both confirmed COVID-19 and undiagnosed respiratory infections) in care homes across Wales. People living in care homes, and other similar residential settings, are amongst the most vulnerable to COVID-19 infection, with many relying on close personal care. In addition, these and other enclosed settings represented cohorts of exposed individuals who act as potential point sources for onward spread of infection into their local communities.

As a result of this growing concern, Public Health Wales established an Enclosed Settings Cell within the wider health protection response on the 25 March 2020 and this became fully operational at the end of March 2020. 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. Whist a range of settings have been supported, the vast majority of support activity has been provided to residential care home settings.

The functions delivered by the Cell have included:

- Policy and strategy: working closely with the Welsh Government policy leads on social care and public health.
- Notifications: Receiving notifications of possible or confirmed cases of COVID-19 from Enclosed Settings and ensuring that the were appropriately recorded and followed up with public health advice.
- Incident response: The provision of health protection advice following notification to support incident response including infection prevention and control measures.
- Testing process: Initially the Enclosed Setting Cell facilitated access to testing for staff and residents within Enclosed Settings. This changed over time and was appropriately taken on by health boards.
- Ongoing advice and support to settings e.g. following testing: The team provided reactive and proactive intervention and advice to these settings, including on the interpetation of test results and the action required while health boards were becoming increasingly involved.
- Public health guidance: Public Health Wales adapted guidance produced by the Department of Health and Social Care in England for use in Wales. This guidance has been updated and revised as the situation and evidence has evolved.

- Ongoing advice and engagement with partners: The team developed effective relationships with a range of partners at a local and national level, including: care home providers, health boards, local authorties. There has also been close engagement with Care Inspectorate Wales, including an exchange and learning process in relation to the information reported to each organisation.
- Proactive prevention advice: 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.
- Response to changing policy. During April and May 2020, the Welsh Government policy on testing in and relevant to care homes in Wales (residents and staff) has changed incrementally, often at short notice. These changes have had a direct impact on the provision of advice. The Enclosed Setting Cell, responded rapidly each time, ensuring updated information was given to and explained to care homes and partners.

5.3. Providing expert public health advice

During each phase of the response, Public Health Wales has, and continues to, provide specialist public health advice to the Welsh Government and partners. In the containment and delay phases, Public Health Wales facilitated daily engagement meetings between the organisation's Incident Management Team and the Chief Medical Officer for Wales' team in Welsh Government.

Public Health Wales also attended the twice weekly Chief Medical Officer Team briefings, which was 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.

5.4. Providing surveillance and information

The Welsh Government's *Test Trace Protect* strategy includes a focus on enhancing our public health surveillance and response system to enable us to prevent infection and track the virus. Public Health Wales has been transforming our existing surveillance processes so that the intensity, spread and severity of COVID-19 in the population can be modelled and tracked, including between different areas, communities and sectors.

A wide range of active and passive surveillance data is now provided via publicly accessible online dashboards to inform and assess policy and further epidemiological analysis of the outbreak is planned. 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.

5.5. Engagement with UK four nations

Public Health Wales has supported the Chief Medical Officer in relation to a four nations collaborative approach across the UK throughout the pandemic. Examples include:

- Daily attendance at the Public Health England Incident Management Team meeting
- > Attendance at the Four Nation Contact Tracing Group
- Expert contributions to support the Wales' Chief Scientific Adviser and the Wales Technical Advisory Cell (Group). Through the TAC expert contributions are provided for the:
 - modelling work in Wales
 - support to sub groups on testing and children/education
 - $\circ~$ support to sub groups of SAGE through TAC .

Extensive support has been provided to the UK Infection Prevention and Control (IPC) Cell, which is responsible for developing and overseeing the UK IPC guidance for the management of COVID-19. This has included recommended personal protective equipment (PPE) that health and social care workers have been advised to wear and also issues, such as the cleaning and decontamination of facilities, equipment and re-usable PPE, advice on aerosol generating procedures, ventilation of facilities and set up of nightingale hospitals.

6. Broader population health and well-being

As Wales begins its recovery from COVID-19, there are real opportunities to minimise risk to our most vulnerable and to capitalise on the positive aspects of lockdown measures. These opportunities are of the moment and require timely action. Action is needed to both address health and wellbeing needs but also to reduce the COVID-19 related harm. There is a need for measures that support social distancing and flexible working and schooling, as part of a public health response.

6.1. Smoking cessation

The Smoking Cessation Services in Wales have adapted the model of delivery to ensure continuation of service throughout the 'lockdown' period and there has been a steady demand for services, although overall access has reduced. While the evidence base surrounding the risk faced by smokers is unclear in relation to the infection itself, it is clear that smokers once infected do experience poorer outcomes. This has provided a motivation for smokers to consider their smoking status and this is likely to remain a motivator into the Autumn and Winter period.

6.2. COVID risk reduction as we return to normal life

A small behaviour change unit is being established by Public Health Wales to support the behaviours required to prevent COVID-19 transmission and harms, such as social distancing or accessing testing. There are opportunities to minimise COVID-19 risk as people return to school and work whilst maintaining and capitalising on gains that have been made as a result of COVID-19 lockdown, such as improvements in air quality, flexible working arrangements and active travel. This work will aim to make the most of such opportunities.

6.3. Wider determinants of health

Given the risks to the economy and the widening of inequalities, Public Health Wales will be re-establishing and strengthening its focus of work on the wider determinants. This will allow us to support communities, the Welsh Government and partners and also pro-actively influence other agencies in their work focused on good, fair work; education and skills for the future; safe, healthy and secure housing and our surroundings including transport and air quality

7. International Health and learning from other countries

The World Health Organization Collaborating Centre (WHO CC) at Public Health Wales 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:

- 1. COVID-19 Health Impact Assessments (HIAs)
- 2. National Public Engagement Survey on well-being and behaviours

- 3. International Horizon Scanning and Learning
- 4. Dashboard of broader health indicators.

7.1. COVID-19 Health Impact Assessments

The WHO CC is developing a series of rapid Health Impact Assessments (HIAs), which will 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.

More specifically, the HIAs will enable a better understanding of:

- > Potential wider health and well-being impacts across society
- Potential positive/negative impacts or unintended consequences for the determinants of health and well-being
- > Impacts on different population groups in Wales
- > Any widening of health inequity
- Learning on ways to improve public health responses and outcomes should similar measures be required in the future.

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.

Each analysis involves building on the methodology developed by the Wales Health Impact Assessment Support Unit and the WHO CC. It draws upon a range of evidence sources, including from key stakeholder organisations, to develop a deeper understanding of the challenges and opportunities facing Wales as it responds to the pandemic.

A Health Impact Assessment of the Staying at Home and Social Distancing Policy in Wales in Response to the COVID-19 Pandemic is nearing completion. This report sets the scene and provides the framework for the subsequent HIAs. There is considerable complexity in undertaking these analyses as the evidence and policy responses are rapidly evolving. The pace of change means that the reports need to be produced rapidly in order to support decision making in real time. However, some of the learning can also support future decisions should there be a need to re-introduce policies, for example during any future pandemic waves.

The findings will be built upon with work underway on two further reports:

i. Health Impact Assessment of Working from Home in response to the COVID-19 Pandemic

ii. Analysis of the links between COVID-19, Brexit and Climate Change.

7.2. The National Public Engagement Survey on wellbeing and behaviours

Over recent months, the WHO CC has been conducting 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, Welsh Government and other key stakeholders' decision-making processes.

Seven 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. The latest report provides a regional breakdown of survey findings

Recent findings include:

- 75% of people think the restrictions in place to manage coronavirus are about right
- > 19% of people agree that schools should open within the next 3 weeks.
- 19% strongly agree, and 53% agree that Welsh Government is responding well to the problems caused by coronavirus
- Over the last week, 16% of respondents said they had been worrying a lot about their mental health and wellbeing
- > 52% of people are worrying about losing someone they love to the virus
- 94% agree that people should be made to maintain social distancing when outside
- 87% of people think stronger relationships between people in communities will be a positive longer-term impact of coronavirus.
- 64% of respondents think that people having a better work life balance will be a positive long-term impact as a result of coronavirus.

7.3. International Horizon Scanning and Learning

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 are also working closely and supporting WHO and Welsh Government by looking into the health equity, social and economic impacts of COVID-19 with a focus on recovery.

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'.

7.4. Dashboard of broader health indicators

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 ('profile') 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.

8. Research and Evaluation

8.1. Public Health Wales COVID-19 research activities

There are currently three open research studies within Public Health Wales, including:

- Phase II/III Trial of ChAdOx1 nCoV-19 vaccine
- COG-UK: large scale and rapid SARS-CoV-2 sequencing capacity to the four UK Public Health Agencies
- Precarious Employment survey and Impact of Covid-19

Public Health Wales is also a partner in four funding applications to the National Institute for Health Research (NIHR)/UK Research and Innovation (UKRI) COVID-19 Rapid Response Rolling Funding Call.

This includes:

Ethnicity-4C-UK: Understanding ethnic inequalities in COVID-19 to inform policy

- Using a health literacy approach to develop more effective targeting of social distancing measures to promote compliance
- Controlling COVID19 through enhanced population surveillance and intervention
- > Asylum seekers and refugees: effects of COVID-19 on health.

8.2. COVID-10 Evaluation and Impact Opportunities

The Public Health Protection Response Plan stated that "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. An example of this was the publication in May 2020 of the 'Rapid Evaluation of Early Phase 1 covid-19 Contact Tracing Cell'.

Public Health Wales has also actively sought opportunities to engage in developments. It is one of the 10 partner organisations working with the Oxford Vaccine Group on phase three of the SARS-CoV-2 trial. The trial in Wales commenced on 27 May 2020 and will be focused on NHS patient-facing staff aged between 18-55 years with a high risk of exposure to COVID-19. Welsh Government will chair a SARS-CoV-2 vaccination programme board to advise on statutory coordination and delivery of the vaccine if the trial is successful.

9. Communication and Engagement

Public Health Wales has worked in close collaboration with the Welsh Government's Health and Social Services Communications Team to ensure that information is shared between agencies. 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, before this information became routinely available on the data dashboard.

Our communications focus is to ensure the dissemination of public health messages and guidance. In order to deliver accurate, timely and consistent messages to the public, we developed joint Communications Plans for the Contain and Delay phases of the pandemic response. 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.

10. Impact of the pandemic on Public Health Wales and its statutory functions

10.1. Leadership and Governance

Public Health Wales has a reputation for strong leadership and good corporate governance, which is reflected in recent assurance ratings we have received from our auditors. Board members work together to ensure effective oversight and scrutiny, balanced with support and guidance. The governance arrangements of Public Health Wales have needed to rapidly adapt to the changing landscape as the pandemic has developed, which we have done without compromising good governance. The Incident Management arrangements put in place by Public Health Wales included the establishment of Gold command and an Incident Management Team to oversee the management at an early stage of the incident.

A programme management approach has recently been overlaid to help plan, coordinate and monitor the delivery of Public Health Wales' contribution to the Test Trace Protect Strategy. As at 8 June 2020, Public Health Wales continues to operate at the 'enhanced' response level as set out within our Emergency Response Plan.

Public Health Wales' Board and Committees continue to fulfil their roles to their full extent whilst operating in a very challenging environment, with some approved variations to Standing Orders. From March 2020, the Board has operated remotely and has met virtually and with increased frequency. The Board has adopted a lean approach and as a result has decided to stand down two Committees (People and Organisational Development and Knowledge, Research and Information), with relevant statutory roles being reallocated to other Committees or being directly retained by the Board. The Audit and Corporate Governance Committee and Quality, Safety and Improvement Committee have been retained. The Board has met monthly and will continue to do so until at least September 2020, although aims to livestream Board meetings from June 2020. Regular briefings and communications continue to be in place between Board meetings. Members of the Board have met weekly for updates, given the pace and change throughout the pandemic.

The Board and its Committees continue to operate within Welsh Government guidelines and in line with the All-Wales Governance Principles. Critically, the Board continues to lead the organisation through the pandemic, in a unitary approach, in support of our core values and behaviours, whilst maintaining its challenge, scrutiny and support roles in equal measure.

10.2. Staff well-being

The well-being of our staff has been central for the arrangements put in place by Public Health Wales from the commencement of the COVID-19 response. Incremental improvements have been made based on feedback and available technologies.

These have included:

- The development of a People Support + helpline for staff for support on human resource, training, IT and estates
- Regular staff briefings with a wide range of supporting material which can be accessed remotely, including arrangements for regular updates from the Chief Executive , Executive Team and senior managers
- Our Employee Assistance Programme which is available to staff and a counselling listening service.
- Our staff survey which received over 800 responses with over 75% of respondents feeling connected and of the opinion that we are sharing the right information to enable them to do their jobs
- Weekly Local Partnership briefings are in place with recognised Trade Unions.
- Staff mobilisation for the internal and external mobilisation of staff to support the response to COVID-19 (including providing mutual aid for NHS partners where appropriate)
- Temporary changes to a number of our workforce policies to further support our response
- Home working arrangements deployed and the introduction of social distancing arrangements in our National Contact Centres
- Processes put in place for infection prevention arrangements and personal protection equipment monitoring to ensure the safe working of our staff who have to work on the front line
- Putting in place a staff risk assessment process when lockdown commenced, which has now been further enhanced with the introduction of the all-Wales risk assessment tool

The response from Public Health Wales staff has been truly remarkable. Since our response began, we have seen individuals and teams step into new roles and functions, staff deployed to other parts of the NHS as part of mutual aid arrangements, IT and data developments fast tracked to a new level, changes to the estate plans to mobilise home working, development of contact centres and 24/7 services, and willingness from everyone to want to play their part in our response in protecting the public in Wales.

10.3. Impact on the services provided by Public Health Wales

10.3.1. Immunisation

In Wales, certain immunisation programmes have been suspended since the 17 March 2020, to allow available NHS resources to be directed to the effort to combat COVID-19. The paused immunisation programmes include school age programmes (such as teenage boosters and human papillomavirus (HPV) vaccines), the shingles vaccination for those aged 70 to 79, and travel vaccinations.

Public Health Wales is reminding parents of the importance of young children continuing to attend for their routine immunisations when invited. This is vital in preventing outbreaks of serious childhood diseases, including whooping cough and measles. Immunisation programmes prevent avoidable GP appointments and hospital admissions because of vaccine-preventable diseases. Keeping children out of hospital is especially important during our response to COVID-19.

Practices have put in place arrangements to safely offer immunisation clinics. GP surgeries throughout Wales have put in place measures to ensure that vaccination clinics operate in 'clean' areas that are physically separated from patients that are ill. Prior to attending a vaccination session, patients will be contacted to check they are well, and instructed not to attend if they are unwell or self-isolating due to suspected COVID-19 infection.

COVID-19 has significantly impacted on the delivery of immunisation programmes in Wales, and as a result the incidence of vaccine preventable diseases may increase. Many diseases controlled through routine programmes are serious childhood or adult infections with complications that may require hospital treatment. Adult clinical risk groups recommended additional immunisations are similar to those for severe COVID-19 infection.

NHS Wales offers around 1.5 million doses of routine child and adult vaccines annually covering 16 infectious diseases. Certain key ages and risk groups have been prioritised to minimise negative impacts.

On the 17 March 2020, the Welsh Government issued guidance on 'Covid-19: Temporary Primary Care Contract Changes', which advised continuation of the Childhood Immunisation Scheme and Pertussis Immunisation for Pregnant and Post-natal Women, and suspension of Influenza and Pneumococcal Immunisations Scheme. On the 31 March 2020, Welsh Government issued a Chief Medical Officer's letter to practices (WHC 2020 006) advising that immunisations should continue in line with clinical advice and scheduled timings as far as possible, and emphasising the strategic importance of flu planning. The Vaccine Preventable Disease Programme (VPDP) in Public Health Wales has met with health board immunisation and child health colleagues for planning and to support continuation of services in addition to public messages about continuing key immunisation programmes being delivered via a press release, interviews and social media.

Immunisations for infants, pre-school and pregnant women continue to be delivered with phone calls in advance, to screen for fever and possible COVID illness in addition to discussing social distancing and Infection Prevention and Control. Longer appointments are being scheduled with various models in place.

School immunisation programmes remain suspended. However, two health boards are offering school age vaccinations in community hub settings and Cardiff and Vale University Health Board continues to deliver immunisation through practices.

Influenza programme planning has been enhanced. Public Health Wales is discussing the delivery of the primary school flu vaccination programme with health boards. There are many unknowns, including whether primary schools will be open to all or some pupils in the autumn, and how many redeployed school nursing staff will have returned to their roles. Public Health Wales will shortly re-convene the National Influenza Action Group (NIAG) meetings to coordinate national flu programme planning and delivery.

Debriefing on the 2019/20 season is delayed due to COVID-19 prioritisation. We are in close contact with the other UK countries and the Flu Programme Board to help identify and explore different potential scenarios. Public Health Wales is developing plans that build on collaborative working to reach as many people as possible with the combination of a strong public communications strategy and service delivery support. There will be a focus on young children, health and social care staff and individuals with long term health conditions which also puts them at increased risk of severe COVID-19.

Flu programme planning with Welsh Government and other UK countries continues. Health boards are anticipating national guidance regarding what changes are needed for the process of administering flu vaccinations safely in line with social distancing and Personal Protective Equipment (PPE). Access to sufficient PPE will be needed. Public Health Wales will support Welsh Government to issue guidance on delivery in due course.

10.3.2. National population-based Screening Programmes

Following the announcement from the UK Government on the 16 March 2020, which advised against non-essential social contact and non-essential travel, Public Health Wales undertook a risk assessment on the ability and safety to deliver screening programmes and submitted these to the Public Health Wales Board and the Welsh Government. There was agreement on the recommendation to suspend all invitations and cancel screening clinics from the 18 March 2020 for Diabetic Eye Screening Wales (DESW), Wales Abdominal Aortic Aneurysm Screening Programme, Breast Test Wales, Bowel Screening Wales (BSW) and Cervical Screening Wales. It was recommended that we should complete all screening pathways for those participants who have been screened.

Agreement was also obtained to continue with Antenatal Screening Wales, Newborn Bloodspot Screening and Newborn Hearing Screening programmes given that all have short windows of intervention and failure to identify conditions can result in severe and life-threatening complications and/or part of routine antenatal and post-natal care. A press release, which included Ministerial support for the decision, was released by Public Health Wales on the 20 March 2020. The recommendations taken in Wales mirrored the decisions taken in Scotland and Northern Ireland.

Public Health Wales has started to develop plans for the recovery of our screening programmes, once it is deemed safe to do so. The recovery will need to be carefully planned with robust failsafe's to account for the cohort of eligible individuals that have not been invited during the pause period, those not assessed further in the pathway, in addition to the cohorts of eligible population that will need to be invited routinely in the remaining period of the financial year or therein. This will result in a significant extra activity, which will need to be assessed as to how it can be recovered safely.

It needs to be noted that, although we will ensure that the priority risk groups are invited for screening as soon as possible from the reinstatement of screening programmes, an effective recovery is only achieved with a simultaneous invitation of all clinical priority groups as well as a proportion of the routine eligible cohort. This is because we need to mitigate against the creation of peaks and troughs in the screening programme, including in the call and recall elements as well as further in diagnostic and treatment pathway. This will mean however, that it will take at least 12 months for each programme to recover fully and some will take longer.

10.3.3. Impact on the work of the Health and Well-being Directorate

The response to the pandemic has had a significant impact on programmes delivered by our Health and Well-being directorate. The majority of staff

within the Directorate have been redeployed to support the Public Health Wales' CVID-19 response.

10.3.4. Health Improvement

In relation to Tobacco Control, Public Health Wales has maintained support for smokers who wish to quit through the Help Me Quit service and worked closely with health boards to enhance delivery using non-face to face methods. The risk arising from the pandemic has also been used to motivate smokers who wish to quit. The remaining Tobacco Control work, including support to the development of a Tobacco Action Plan from 2021 and the introduction of smoke free legislation, has been put on hold.

In relation to Substance Misuse Prevention, work has been very limited. Opportunities to enhance the impact of minimum unit pricing have been curtailed and the planned programme of work to support the revision of local licencing policy has also been deferred.

Work on obesity and nutrition has been limited to supporting the impact of COVID-19, such as providing nutritional advice in relation to the provision of food parcels. There has also been work undertaken within these areas in relation to our national *How are you doing* campaign. The substantial amount of planned work in relation to the Healthy Weight Healthy Wales programme has been on hold.

The Physical Activity programme has continued in a very limited form working closely with Natural Resources Wales and Sport Wales to ensure joined up support for individuals who wish to be more active. The Mental Health and Well-being programme of work has progressed in a very limited manner with support to the national programmes of work, such as the *How are you doing* campaign.

The Educational Settings Programme has continued to provide advice to the Welsh Government and to contribute to the development of guidance for schools on their return. The JUSTBE programme continued until schools closed but has been on hold since that time. The Pre-School Settings programme has also been on hold.

The Healthy Working Wales Programme has continued to provide advice and support in a limited way to employers and the Welsh Government and has prepared to support the return to work across Wales.

The First 1000 Days Programme has continued to provide support to the Welsh Government in relation to support to parents during the pandemic, including making available the online Solihull Parenting Programme to support parents across Wales.

10.3.5. Support for Primary Care

Public Health Wales has continued to provide a limited level of service in the context of COVID-19 and been a core member of the Welsh Government Primary and Community Care COVID-19 Sub Group. This has involved the provision of public health input to primary care in relation to care homes and other primary care work, providing ongoing dental public health advice and support to Welsh Government in the development of their COVID-19 dental plan for Wales, and maintaining a dedicated COVID-19 area on the primary care one website.

We have also maintained core primary care work and have continued to provide oversight and coordinated delivery and evaluation of the Pacesetter Programme across Wales.

Moving forward, Public Health Wales is responding to requests from the Welsh Government to pick up the work on the dental contract and will be supporting work on immunisations, inequalities and new ways of working.

10.3.6. Wider determinants of health

Our wider determinants resources have largely been re-deployed to our COVID-19 response. The Public Health Network has provided some online resources to support the wider system in their COVID-19 response and are now working on a Webinar. More latterly, the team has started to consider the impact of COVID-19 on the economy and inequalities, together with our potential response and this will become an increasing focus for us in the recovery phase.

https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200608-covid-19-sitrep-140.pdf?sfvrsn=2f310900_2

ⁱⁱ <u>https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public</u>

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