1 COVID-19 Test Trace Protect General Update

Maintaining and continuing our response to the COVID-19 pandemic and the Test Trace Protect Protect programme remains the key priority for the organisation.

A number of outbreaks and incidents have steadily continued to emerge across the country and a verbal update on them will be provided at the meeting. In addition to responding to the outbreaks and incidents, we continue to learn and apply the learning from both an all Wales perspective and also to subsequent incidents/outbreaks.

This includes developing Guidance for meat and food plants on prevention and management of coronavirus (COVID-19) and working closely with the Local Resilience Fora and the Welsh Government to align the respective roles and responsibilities between an Outbreak Control Team (OCT) and the Strategic Coordinating Groups.

In addition, we have worked closely with the respective health board in areas where incidents and outbreaks are occurring to undertake rapid sampling (health board responsibility) and testing (laboratory testing) at scale which has included completing rapid laboratory turnaround times for test results in order to support the management and containment of the incident/outbreak as appropriate.

We are actively involved in a wide range of Welsh Government meetings relating to Test Trace Protect (TTP) and also the wider COVID-19 response which include the TTP Programme Board, TTP Programme Oversight Group, a range of Ministerial meetings and COVID-19 Learning meetings. We also continue to lead and chair the all Wales weekly Public Health Strategic Coordinating Group and undertake daily and weekly engagement with the breadth of stakeholders across different sectors.

2 NHS Wales COVID-19 Operating Framework Quarter 2 Summary for Public Health Wales

On the 1 July 2020, as part of the COVID-19 NHS Operating Framework, I submitted the quarter 2 summary response for the organisation to Dr Andrew Goodall, Director General Health and Social Services/NHS Wales
Chief Executive. It includes the relevant aspects of how the organisation has responded to the pandemic over the last few months, the non-COVID-19 essential services that we deliver and the planning for resuming our national population screening programmes for the Quarter 2 period.

It outlines a substantial amount of work that is going on across the organisation. It continues to reiterate the importance of balancing the resumption of services against the need to deliver an effectively resourced health protection response whilst anticipating the potential for another resurgence of COVID-19. I have attached the submitted quarter 2 return in appendix 1.

3 Public Health Wales’ Role in COVID-19 Vaccine Research and the Vaccine Implementation Programme

3.1 COVID-19 Vaccine Research

The ChAdOx1 vaccine against SARS-CoV2 is currently the most advanced in development of the many candidate vaccines under development or testing [1]. In common with several others, it aims to generate an immune response against the virus outer spike protein which helps it enter cells. The vaccine itself is a genetically adapted version of a chimpanzee adenovirus, which normally causes mild respiratory infections, with the spike protein encoded in the genome [2].

Phase I/II results for safety and efficacy in healthy volunteers have just been published in the Lancet [3]. The vaccine produces overall and neutralising antibody to the virus, along with cellular (T-cell) responses, which increase after a second booster dose. The levels of antibody are similar to those seen in recovered patients. In the previous macaque models, the vaccine was also shown to be protective against pneumonia, but we do not yet have effectiveness results in humans.

Phase II/III trials for the vaccine started across a number of sites in the UK, to recruit up to 10,000 volunteers to test vaccine effectiveness in participants in the community. The aim is to measure effectiveness against symptomatic COVID-19 infection, that is, whether the vaccine prevents disease in the real world. To assess this, volunteers are randomised to either the ChAdOx1 vaccine or the MenACWY meningitis vaccine, and followed up for symptoms (and testing) for COVID-19.

Public Health Wales has worked with the Aneurin Bevan University Health board, who host the vaccine site in Gwent, the Cardiff University Centre for Trials Research, and Health and Care Research Wales, to rapidly set up the research site and recruit participants. Public Health Wales has provided the site principal investigator, along with support from our research department and staff volunteers from our Communicable Disease Surveillance Centre (CDSC) and public health training.
To date we have recruited and vaccinated over 400 participants, of which half will have received the experimental vaccine. Levels of infection are relatively low in the community, so effectiveness may take longer to determine. The participants have been screened for excluding conditions and prior immunity, followed by visits for vaccination and blood tests, and then follow up visits which are ongoing. Booster doses may also be tested as part of the research.

Other vaccine trials are being planned across the country, and the team that set up this trial are looking at how the experience can be adapted for an all-Wales vaccine research delivery model.

I would like to thank Dr Chris Williams for all of his expert leadership for us on these developments.

1. WHO draft landscape of COVID-19 candidate vaccines  
   https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines

https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31604-4/fulltext

3.2 Delivering a COVID-19 Vaccination Programme

Multiple potential COVID-19 vaccines targeting the SARS-CoV-2 virus are in development, with over 200 possible vaccines being researched worldwide and around 30 in ongoing clinical trials. The UK Government has announced that they are procuring large quantities of promising vaccines in anticipation of successful trials and licensure. These comprise several different vaccine technologies that may produce a protective immune response.

The UK Joint Committee on Vaccination and Immunisation has advised on the initial priority groups which are:

- frontline health and social care workers
- those at increased risk of serious disease and death from COVID-19 infection stratified according to age and risk factors.

As more evidence on at-risk groups emerges, the Committee will review the composition and order of priority.

Public Health Wales has commenced planning, with the Welsh Government, national and local partners, and other UK public health agencies, to deliver an immunisation programme with a COVID-19 vaccine as soon a safe and effective vaccine is licensed and available for use. As trials are still ongoing the dates for the start of a programme are not yet known. There remain
many challenges to overcome in planning such a large and urgent programme.

4 Health Foundation Funding for a Networked Data Lab for Population Health and Health Care in Wales

Public Health Wales will receive funding of up to £400,000 over two years to join a national network of experts who are working to address some of the biggest challenges facing health and care today, both nationally and in Wales. The Networked Data Lab (NDL) is a new Health Foundation initiative to build a collaborative network of analytical teams across the UK and use linked datasets to produce insights on critical areas of importance to population health and health care.

After a highly competitive process Public Health Wales, along with partners (NHS Wales Informatics Service (NWIS), Swansea University and Social Care Wales), have been successful in being awarded one of five NDLs across England, Scotland and Wales until December 2022.

NDL Wales consists of a small team embedded within the Research and Development Division, Knowledge Directorate, which will draw on the linked data within the SAIL Databank and the National Data Resource in NWIS. We will be specifically focused on addressing up to three common priority areas across the NDLs, sharing knowledge, statistical, analytical and epidemiological skills and expertise, and sharing experiences working with complex linked data with the other NDLs and the Health Foundation - an approach of “federated analysis”.

Within Wales, the programme will help to accelerate the delivery of timely and more in-depth understanding of highly relevant health challenges. Together, we can optimise the use of routine data to address health, prevention and inequalities across generations, and produce valuable insights to inform decisions to improve population health in Wales.

5 Health, Social care and Sport Senedd Committee

The report of the Health, Social Care and Sport Committee ‘s Inquiry into the impact of the COVID-19 outbreak, and its management, on health and social care in Wales was published on the 8 July.

There are 28 recommendations across a wide range of aspects of the response to COVID-19 in Wales and, whilst a number of recommendations involve us indirectly, there are two recommendations (recommendations 19 and 22) that specifically refer to Public Health Wales as follows:

Recommendation 19:
The Welsh Government, working with Public Health Wales, must aim for all test results to be returned within 24 hours.

**Recommendation 22:**

In consultation with Public Health Wales, the Welsh Government should:

- publish a strategy to increase the number of people presenting for tests in order to utilise more fully the available testing capacity;
- take steps now to provide assurances that 20,000 tests per day will be able to be delivered;
- ensure that safeguards are in place to guarantee that capacity from facilities outside Wales is fit for purpose and sufficient to meet demand.
- ensure that the system is able to respond to increases in demand, and expand to meet these.

Of note, the Welsh Government has recently concluded a revised Testing Strategy that includes both antigen and antibody sampling and testing. Our (Public Health Wales) current daily antigen testing capacity is 15,157 (although this may be subject to change) and there is uncapped additional antigen testing capacity accessible through the UK Lighthouse labs.

We will be considering the Committee’s report and working with the Walsh Government, and other partners as appropriate, on the implementation of the relevant recommendations.

**Recommendation**

The Board is asked to receive this information.

Tracey Cooper  
CHIEF EXECUTIVE