Meeting Date	**24 September 2020**	**Agenda Item**	**2.1 (i)**
Report Title	**Responding to COVID-19**		
Report Author	Dorothy Edwards, Deputy Director of Transformation Karen Jones, Head of Emergency Preparedness Resilience & Response		
Report Sponsor	Dr Keith Reid, Director of Public Health		
Presented by	Dorothy Edwards, Deputy Director of Transformation Dr Keith Reid, Director of Public Health Karen Jones, Head of Emergency Preparedness Resilience and Response		
Freedom of Information	Open		
Purpose of the Report	The purpose of this report is to provide an update on the Health Board response to COVID-19.		
Key Issues	We have not seen any further peaks in COVID-19 demand in July/August and overall hospital activity was low during this period. However, there is evidence of an increase in positive cases and also a recent increase in September in suspected patients attending hospitals. Testing has been a key focus throughout August and there has been a significant increase in testing over recent weeks, where the Margam CTU has been functioning at full capacity. The number of positive cases remains low in absolute terms, but the rate of increase in positive cases is an indicator of increasing transmission. Regional Test, Trace and Protect (TTP) teams have seen a significant increase in workload from late August onwards. As part of the development of Q3/Q4 plan, work is continuing to consider our service response to future waves of COVID-19 and to also ensure a robust and integrated winter plan that recognises broader risks including those relating to EU exit in January 2021. The Protect and Response plan was submitted on the 20th August 2020 and a table top exercise has been undertaken to stress test these arrangements. There has been recent feedback as a result of Welsh Government peer review and the plan will be further appraised and will remain live, flexible and adaptable to needs.		

	Work is now progressing to deliver a mass vaccination programme and the delivery of influenza vaccination as an adjunct to the COVID-19 response. A table top exercise was undertaken on the 20th August 2020 to ensure that the proposed model was fit for purpose and to further enhance the operational planning. A COVID-19 Vaccination Delivery Plan has been submitted to Welsh Government on the 3rd September 2020 and will continue to be refined as national planning parameters change. At the time of writing this report, the situation in Wales remains fluid with increasing incidence of COVID-19 in a number of different counties, which has led to the introduction of local lockdown arrangements in Caerphilly in line with the Welsh Government Coronavirus Control Plan. There is evidence of more widespread transmission in other counties in Wales.			
Specific Action Required ***(please choose one only)***	**Information**	**Discussion**	**Assurance**	**Approval**
	☒	☐	☒	☐
Recommendations	Members are asked to: • **NOTE** progress in responding to COVID-19 and key activity during July and August 2020 • **NOTE** the overarching critical risks to the Health Board relating to the pandemic.			

UPDATE IN RESPONDING TO THE CORONAVIRUS PANDEMIC

1. INTRODUCTION

The purpose of this report is to update Swansea Bay University Health Board on the continuing response to the COVID-19 pandemic.

2. BACKGROUND

The Board established its preparedness and response framework to the global pandemic on the 31st January 2020 in response to the growing national and international threat from the Wuhan Coronavirus 2019. Since then, a significant amount of work has been undertaken across the Board both in terms of preparedness during February 2020 and in responding to the pandemic since March 2020.

The number of hospital admissions has remained stable throughout July and August with no further hospital deaths reported since late May 2020. However, there has been a noticeable increase in the number of positive tests since late August which has continued into September. Since May, the number of positive cases has been between 1-2 per day, but since 28th August, this increased to 8-10 per day.

In August 2020, Welsh Government published its Coronavirus Control Plan for Wales which sets out how Wales will respond to increased levels of COVID-19. A series of triggers/early warning measures are set out within the plan. There was a relaxation of Wales lockdown measures on the 31st July 2020 and 28th August 2020. At the time of writing, the first local lockdown has come into force in the Caerphilly County Borough area, in response to the rising number of cases.

There has been an increasing trend of cases across Wales and more prominently in a number of Local Authority areas including Neath Port Talbot and the Test, Trace and Protect service has seen a rise in workload since the end of August. The number of tests being undertaken in the community has also ramped up significantly in September with Margam operating over capacity and capacity fully utilised at Liberty. A review of capacity at both sites is underway.

As cases across Wales have reached a threshold of 20 per 100,000 population, Welsh Government have confirmed that face coverings are now mandatory in confined spaces with effect from 14th September 2020 and have also adjusted the rules on indoor gatherings with a maximum of 6 people allowed to meet which must be individuals within an extended bubble.

In August and September, there have been changes to quarantine arrangements following international travel with a number of countries being added to a list of areas where returning travellers must observe quarantine.

Military support for the testing centres was transitioned to a commercial provider at the end of August, and there will be a further change in Military Liaison Officer

(MLO) arrangements at the end of September.

We remain deeply grateful for the support that the Military have provided to us over the course of the pandemic and their role has been instrumental to us being able to respond effectively. This was acknowledged in a recent event to mark the partnership that has been forged through an Armed Forces Forum.

3. GOVERNANCE

Leadership, Operational Management and Control Arrangements

The COVID Coordination Centre (CCC) has continued to operate and the governance structure remains in place. Since the last Board meeting, Gold has continued to meet on a weekly basis. Units have maintained Silver Command arrangements, including a dedicated Community Silver meeting that coordinates the health and social care response.

The response structure is being further refined and all the cells have been asked to complete a review proforma in order to inform our planning ahead of winter and a potential further COVID resurgence. This will provide assurance that our governance arrangements continue to be robust and transparent. Following the review there will be an updated governance diagram disseminated.

In addition, the South Wales Local Resilience Forum has fully transitioned to the Recovery Coordination Group, (RCG) and the Strategic Coordination Group, (SCG) moved into a dormancy phase at the end of July 2020.

However, in light of the changing situation across Wales, the Strategic Coordinating Group (SCG) reconvened in September and arrangements in place now to mobilise SCG arrangements. The RCG continues to meet fortnightly and similarly each organisation submits a SITREP, on a two weekly basis via the South Wales Local Resilience Forum (SWLRF). The respective multi-agency organisational risks are collectively monitored as part of the RCG. To support the strategic structure, a Tactical Recovery Group, (TRG) has been formed.

The South Wales Local Resilience Forum and Pan Wales Resilience have undertaken interim debriefs. There has been Health Board participation in both exercises and the reports have been submitted to the COVID-19 Gold meeting for further consideration. The multi-agency learning will be tracked via the South Wales Local Resilience Training and Coordination Group and any specific health requirements will be gleaned during this process. It was helpful that the Health Board held its own interim debrief prior to this process in order that we could contribute from a specific organisation learning perspective.

Public Health Wales undertook a pan Wales, strategic table top exercise on the 7th August 2020, again the Health Board was represented, the learning highlighted in the COVID-19 Gold meeting and this also helped to inform the Protect and Response planning arrangements.

Over the last month, a number of requests have been received for submission of various evidence based data to support external and internal audits. Also, the Government have confirmed that a public inquiry will occur. Consequently, the Board is actively seeking employment of an Archivist on a fixed term contract to support the Board in maintaining a comprehensive record of the emergency and its response. It is believed that we are the first Health Board in Wales to consider such a role and Hywel Dda UHB are following suit. It is hoped that an appointment will be made mid-September 2020.

System Wide Capacity Planning & Delivery

Welsh Government confirmed that the planning assumptions issued on the 24th June remain extant which suggest that Wales needs to consider a contingency plan for 5,000 COVID acute beds and 350 critical care beds which translates into 621 acute beds for Swansea Bay and 46 critical care beds respectively.

Further modelling data was released by Welsh Government at the end of August which includes 4 models to support the NHS to develop capacity and demand plans. The preferred model nationally is a model developed in Swansea University. Locally, two of these models (Swansea University and Armakuni) have been further developed within Swansea Bay and are being used to inform the development of the Q3/Q4 plan with revisions received from Welsh Government on 11th September.

As part of the Q3/Q4 plan, a new local escalation framework is under development with early warning metrics and triggers that align with the national coronavirus control plan referred to earlier. We understand that WG will be providing further information on specific trigger levels in mid September.

The level of Medically Fit for Discharge (MFFD) patients has been on an upward trajectory since mid July. Actions is underway in all Units to review and escalate issues through the new rapid discharge pathway, and a review of the hospital to home service is underway.

In response to a review of capacity arrangements, a decision was made to consolidate field hospital provision onto the Bay Hospital site. This enables the Llandarcy Field Hospital to be handed back and the decant process is now well advanced. A separate report on field hospitals is covered elsewhere on the agenda.

Workforce and Psychological Health and well being

Absence levels over the summer period reduced to normal levels, although there are early signs of an increase in COVID related absence emerging in September. Workforce challenges remain on all sites, and particularly in light of recent service pressures that has led to surge capacity being opened on both Singleton and Morriston.

A detailed workforce scoping paper has been considered through Senior Leadership Team setting out how the Health Board will respond to further waves and the principles which will guide how we make decisions around deployment of staff. A workforce modelling tool has been developed to support the Q3/Q4 planning cycle and models the impact of staff absence of between 15 and 25% of the workforce. In addition to being able to staff hospital capacity there are further workforce demands being introduced through the need to continue to staff testing centres; undertake antibody testing and to support an extended flu and a new COVID vaccination programme. Given the above, the Board has agreed to recruit further numbers to our HCSW bank at an early stage in preparation for a second wave of the pandemic, helping to avoid an urgent campaign at the last minute.

Following changes to shielding arrangements which formally 'paused' in mid August, staff who had been shielding were reviewed and risk assessed using an all Wales risk assessment tool that had been adapted from the earlier risk assessment process. This led to a reduction in the number of staff who are shielded and unable to attend work, although there remain a number of staff who are considered at high risk.

Staff health and wellbeing remains a key area of focus, and particularly in light of the additional strain on staff of responding to a second wave of COVID. A recent article in the British Medical Journal highlights the level of fatigue that staff are experiencing, particularly as the first wave of COVID was preceded by a difficult winter.

Results from the 'Working from Home and Well Being survey' analysed. Over 1,600 people responded to the survey which has provided some rich material that will help to shape our approach to flexible working going forward. The vast majority of people who have worked from home during the pandemic were positive about the experience, and would like to see some of the changes introduced in the pandemic becoming the norm.

Testing and Trace and Protect

As indicated earlier, testing has increased during August and September, most notably with an increase in tests being requested via the UK Government portal from the general public. In July, 4,400 tests drive through tests were undertaken, in August this doubled to 8,900 with over 6,000 conducted between 1st and 12th September. Conversely the number of tests in closed settings has continued to reduce, from a high point of 2,800 in May to 39 in August. There are continued issues in respect of the timeliness of test results where the test has been requested via the public portal and the test is managed through 'Lighthouse' laboratories. Staff have been reminded of the correct route to request a test which ensures that the test is managed via Welsh laboratories. A plan has been agreed for the deployment of Mobile Testing Units on a rotational basis to support local accessibility and also to be responsive to the need for rapid deployment of testing in the event of local outbreaks.

A separate report on testing and Trace and Protect is appended, and the Board will receive a copy of the Public Health Response Plan as part of this update.

Supplies, Personal Protective Equipment (PPE) & Equipment

Nationally, the availability of items on the 'restricted PPE' list remains green, and locally a minimum level of 48 hours worth of stock has been maintained consistently on all sites over the summer period, together with approximately 5 days stock held in central SBU storage. However, there are issues around the supply of some models of FFP3 masks and WG are continuing to source internationally. Locally, we are pursuing local options for enhancing our stock levels.

On the 27th July 2020, it became compulsory to wear face coverings on public transport in Wales, and from 14th September, mandatory in shops. We are awaiting guidance on the implications of the new regulations on healthcare settings.

New Infection Prevention and Control guidance was received in August which has been published on a 4 nations basis. This is being implemented.

Communications and engagement

Over the summer period there has been a continual emphasis on messaging around physical distancing as well as targeted campaigns on specific topics. The current focus is on targeted communications for young people following national evidence to emphasise importance of physical distancing and compliance with the Test, Trace and Protect programme.

Fatalities

Revised Reasonable Worst Case scenario suggests that the number of deaths could be higher than in the first peak. Work is taking place on a regional basis to model this, and we are actively engaged in this. In the meantime, a decision was made over the summer to renegotiate the contract for body storage to 100 spaces, which was a reduction on the level in place during the first wave. This has proved to be more than ample for over the current period, and will be reviewed as part of the Q3/Q4 plan in preparation for winter. Some costs are being shared with Swansea Local Authority.

Vaccination

The Board has begun planning for the delivery of a COVID-19 vaccine in response to a request from Welsh Government for an outline plan to be submitted by 3rd September. Since the plan was submitted, some minor changes to the national planning parameters have been received, so the planning continues and the plan will remain 'live' until some of the unknown parameters are confirmed.

This lack of specific detail around the availability of COVID-19 vaccine (specific vaccine, availability and quantities) significantly constrains several aspects of planning. In order to progress planning, we have made assumptions using

information available to us but there is recognition that plans may need to be significantly altered at short notice. This will have particular issues around workforce and equipment provision where there are lead times that are not within Health Board control. The scale of the requirements are significant. In SBU we need to be able to deliver circa 3,500 doses per day, over a 7 day period based on peak availability of the vaccine.

We have been advised to plan for initial availability of the vaccine in mid October with a significant ramping up of volume later in November. We are unclear as to which of the two vaccines that have been identified as being further developed in terms of clinical trials, will be available. The logistical requirements for the Oxford vaccine are less stringent than for mRNA.

In parallel, the Board is actively planning its approach to influenza vaccination and the programme is likely to start towards end of September. In addition to the normal programme, it is likely that the Board will need to respond to an expansion in eligibility and that this will also require a mass vaccination approach as primary care are unlikely to have capacity to meet the requirements this year, due to the challenges of delivering the vaccination programme alongside COVID-19.

The model for vaccination of COVID incorporates an element of mass vaccination through the Bay Field Hospital as well as local vaccination centres on hospital sites; some community provision as well as in reach to shielded population. An exercise to 'walk through' our current plans took place in August. It is expected that a more detailed plan and critical path will be developed by early October.

It is important that the Board recognise that the key constraint /risk will be in securing sufficient workforce to fulfil the requirements of the COVID vaccination programme. Unlike influenza, where a distributed model of peer vaccination across multiple locations works well, COVID vaccine requires an approach that is based on high efficiency and minimal wastage due to the nature of the vaccine (multi-dose vial and cold chain requirements). We could be responding to the challenge of mass vaccination alongside delivery of core services and at a time, when workforce pressures are significant due to the increasing prevalence of COVID in our communities. The UK is currently consulting on changes to Human Medicine Regulations to allow other groups of vaccinators to be trained to deliver COVID and influenza vaccination, however this is unlikely to be in place for October.

Physical Distancing

The Physical Distancing Cell has continued to meet through August with a key focus on extending our communications targeting both general public and also staff; and concluding the physical distancing between bed spacing work programme.

A communications campaign is ongoing , including a social media campaign aimed at promoting physical distancing to patients who visit the Health Board and targeted internal Physical Distancing messaging which will be increased over the next few weeks. Future communication plans will focus on positive re-enforcement methodology, following a meeting with a behavioural psychologist in Swansea

University. Banners are now on display across the HB and additional posters are being designed to assist the units with their messaging of across all sites.

Following a review of bed spacing measurements provided by units, a reassessment has taken place involving a visit by the Assistant Director of Health and Safety working with a staff representative and IPC lead. The majority of areas have been completed and there is a requirement to review all outstanding wards in relation with less than 20 wards remaining which will be concluded by mid September. A mitigation plan is in place which minimises the risk of a substantial loss of bed capacity (initially estimated at 200+ bed spaces). The final figure will be available once risk assessments are complete but is likely to be less than 25 beds. Mitigation measures will involve some physical screens but, in the main, achieved through the introduction of perspex curtains. A trial is underway at Morriston, and subject to the outcome of this, bulk purchase of curtains will follow. This is consistent with mitigation areas being introduced across Wales.

Equipment requests for ICT and non ICT equipment intended to promote Physical Distancing are continuing to be reviewed and allocated in line with the equipment prioritisation and request principles that have been agreed with the cell. Requests continue to be received as additional services restart.

Care Homes

Care homes have experienced unprecedented challenges in responding to COVID and Welsh Government have commissioned an external review of care homes which is being conducted by Professor John Bolton, from the Institute of Public Care at Oxford University. An initial feedback session has taken place and there are areas of good practice that will be shared across Wales.

In July, Welsh Government published an action plan setting out six areas of further work in terms of supporting the sector. The 6 areas of focus are Infection Prevention and Control, Personal and Protective Equipment, General and Clinical Support for care homes, Resident's Well Being, Social Care Workforce Well Being and Financial Sustainability.

In response, a West Glamorgan action plan has been developed and this will continue to be developed via our joint response arrangements. Care homes remain as a 'red' risk on our COVID strategic risk log.

Indoor visiting in care homes is now permitted, following a decision by Welsh Government at the end of August, however this will require careful monitoring and action at a local level if the level of community transmission increases.

There are currently a small number of care homes in the Swansea Bay area that are the focus of local support and action through the joint response mechanism and Gold will continue to be updated on a weekly basis.

Nosocomial Transmission

Public Health Wales Communicable Disease Surveillance Centre produces daily data on confirmed COVID-19 cases, based on an extract from the laboratory

information system. This data is used as the starting point for surveillance of nosocomial COVID-19. For each confirmed case, the location where the specimen was taken is identified and for specimens taken in hospital locations, is matched on NHS number with admission data taken from ICNet. The earliest admission date to the health board (where admission is continuous) is used for comparison with the specimen collection date. Cases identified in hospital are assigned to the health board of the hospital, regardless of the health board of residence of the patient. Locally, a process is in place to flag instances of potential nosocomial transmission with Units with a follow through by the IPC team. Nationally, Welsh Government have instigated a new process for rapid learning from nosocomial transmission which will be coordinated via the Delivery Unit.

Emergency preparedness, resilience and response

The risk of concurrency during the pandemic is high and a number of key risks are being closely monitored. Examples include; declaration of a major incident in Manchester on the 2nd August 2020 as COVID-19 infection rates continued to climb, which highlights that early warning indicators for regional impacts of peaks in COVID-19 infections is paramount. This is evident as we continue to see mass gatherings from illegal raves and protests, increasing the risks of the spread of infection. To note, the World Health Organisation recently stated that the duration of the current pandemic is 2 years.

In addition, Storm Francis, a severe weather episode occurred; 26th August 2020, with minimal impact in the SBUHB area, but, simultaneously, the Health Board was in declared major incident stand-by due to a significant train fire at Llangennech; this incident was quickly stood down following full scene assessment with 2 patients suffering minor injuries. Therefore, emergency preparedness is imperative as we undertake winter planning during the pandemic.

Combined with this is the readiness required for the EU Exit on the 31st December 2020, where there are a number of synergies in terms of the mitigation requirements for the risks during the COVID-19 pandemic and that for Brexit and in particular if there is not a full trade deal.

Winter Protection Plan

Currently, national guidance has not been released, however advice was received on the 20th August that a Ministerial National Winter Protection Plan for health and social care will be issued in mid-September and the Health Board will be expected to respond to this by mid-October.

Assurance of preparedness is required as we proceed into the winter months, as there will be a lot of uncertainty. Therefore, aligned to the 6 month planning requirements, contingency planning is underway to support this by scoping early warning indicators and circuit breakers to ensure planned, early mitigation measures can be invoked to allow business continuity throughout this time. This will include being able to respond to a number of potential concurrencies. It is anticipated that the planning will be scenario tested during September.

4. RISKS

There are 12 live risks on the overarching Gold risk log; 5 are 20+. There have been a number of episodes of mass gathering events in Wales and evidence of some cluster outbreaks. There is currently a watching brief due to the illegal rave in Banwen, Neath during Bank Holiday weekend where 3,000 people attended. In addition, some peaceful protests have occurred; Extinction Rebellion, NHS pay awards. A number of countries have now been included on the quarantine list and a careful monitoring of this remains in place. Wales have announced that people returning from Zante are required to self-isolate for 2 weeks, (this has not been imposed as a UK wide measure) and tests are being offered to all those recently returning.

- Access to critical care drugs and fluids
- Access to palliative care drugs
- Oxygen provision
- PPE
- Workforce (3 risks)
- Care Homes
- Capacity
- Delivery of essential services.
- BAME
- Relationships with Staff Representatives
- Test, Track and Protect Programme.
- Mass Vaccination

The only risk now assessed at 20 is fragility of care homes. All other risks are now assessed at 20 or below. 8 risks are now in the amber category. All risks are assessed at Gold on a weekly basis.

5. RECOMMENDATION

Members are asked to:

- **NOTE** progress in responding to COVID-19 and key activity during July and August 2020
- **NOTE** the overarching critical risks to the Health Board relating to the pandemic.

Governance and Assurance		
Link to Enabling Objectives ***(please choose)***	**Supporting better health and wellbeing by actively promoting and empowering people to live well in resilient communities**	
	Partnerships for Improving Health and Wellbeing	☐
	Co-Production and Health Literacy	☐
	Digitally Enabled Health and Wellbeing	☐
	Deliver better care through excellent health and care services achieving the outcomes that matter most to people	
	Best Value Outcomes and High Quality Care	☒
	Partnerships for Care	☒
	Excellent Staff	☒
	Digitally Enabled Care	☒
	Outstanding Research, Innovation, Education and Learning	☒
Health and Care Standards		
(please choose)	Staying Healthy	☒
	Safe Care	☒
	Effective Care	☒
	Dignified Care	☒
	Timely Care	☒
	Individual Care	☒
	Staff and Resources	☒

Quality, Safety and Patient Experience

All indicators of quality, safety and patient experience continue to be monitoring and actions are in place to manage how staff are deployed to ensure that risk is balanced across the Health Board.

Financial Implications

Financial implications of the COVID-19 response are being developed and will be shared with the Board. The Director of Finance has overarching responsibility for ensuring that the cost of our response (actual and planned response) are appropriately captured and assessed for discussion with Welsh Government. Planning cells have been asked to complete decision logs for all expenditure above £75k.

Legal Implications (including equality and diversity assessment)

Reporting the decisions made in terms of how the Health Board has managed risks and issues will be important in terms of legal cases arising out of the COVID-19 pandemic. Further discussions will take place on how to ensure that the Board has an appropriate information management system in place to support record keeping.

Staffing Implications

There are significant workforce implications as a result of responding to the Pandemic and these rest with the Workforce Silver Command to assess and respond to the workforce implications (short and medium term). The importance of focussing on the psychological impact of the pandemic on our current and future staff requirements is a key issue.

Long Term Implications (including the impact of the Well-being of Future Generations (Wales) Act 2015)

The Well-Being of Future Generations (Wales) Act (2015) will be assessed as part of the Board's approach to Recovery.

Report History	• Board Meeting 30th April 2020 • Board Meeting 28th May 2020

	• Board meeting 25th June 2020 • Board meeting 30th July 2020
Appendices	No appendices

Swansea Bay Multi Agency Plan
for Covid-19 Prevention and Response

The plan and associated actions are live documents and subject to modification in light of new information or evidence

Latest draft version: 19.08.20

1. Purpose

The purpose of this plan is to describe the approach to the prevention and response of Covid-19 in the Swansea Bay area in the context of a multiagency approach. The aims are to prevent, control, respond to and eliminate Covid-19 from Swansea Bay area, by reducing the spread of infection and minimising the number of cases; the outcome being to protect our health & care system and save lives.

The plan assigns key areas of responsibility and actions at Swansea Bay regional level as well as the national level, in ***Appendix 1***. Swansea Bay area incorporates the Swansea Bay University Health Board, City and County of Swansea Council, Neath Port Talbot County Borough Council together with partners in the South Wales Local Resilience Fora.

Underlying the plan are the principles of:

- working as a system to co-ordinate activities across partner agencies
- early intervention to prevent and/or control outbreaks
- targeted surveillance and interventions at the high risk settings– care homes, educational settings, local communities, vulnerable population. Work with these settings to ensure effective management of outbreaks
- utilising the skills and experience of existing teams – well resourced, robust information, effective training
- communicate well and share data and information
- reflect, learn and improve

2. Background

COVID-19, the disease caused by SARS-CoV-2 virus was first described in Wuhan City, China in December 2019. The outbreak was declared a Public Health Emergency of International Concern by the WHO on the 30th January 2020. On the 11th March, the WHO characterised the outbreak as a *Pandemic*, i.e. an epidemic occurring worldwide, crossing international borders and usually affecting a large number of people

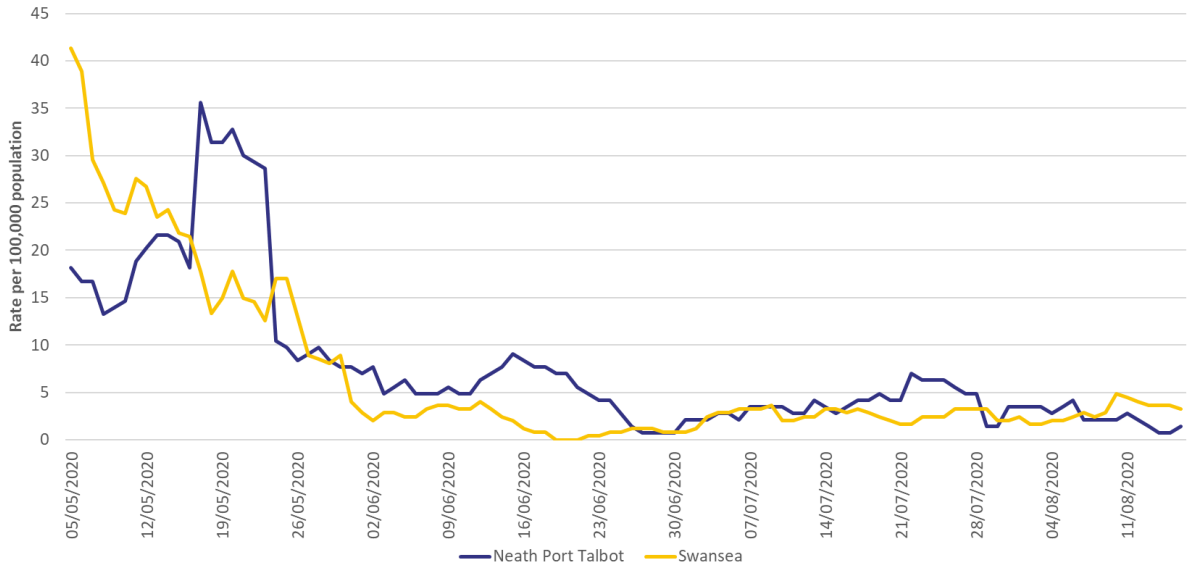
The disease has been designated a *Notifiable Disease* as defined by the Public Health (Control of Diseases) Act 2004. It is characterised by symptoms of fever, dry continuous cough and loss of taste or smell. The incubation periods, from contact to development of disease is 2 to 14 days but typically 5-6 days. The infectious period, that is when an infected person can infect someone else, is from 2 days prior to symptoms developing to 10 days afterwards, although it can be longer if the fever persists. This timeframe is not well understood as some people with Covid-19 have no symptoms, yet can infect others. The disease is spread through airborne fine particles or aerosols, direct contact with larger respiratory droplets or contaminated hands and through indirect contact with contaminated surfaces e.g. hard surfaces, clothes and utensils where the virus can persist for a number of days. The risk of transmission is increased indoors and in closer proximity to other people.

As at 18th August 2020 there have been more than 21 million confirmed cases of COVID-19 worldwide, including 770,866 deaths, reported to World Health Organisation (WHO); the true figures are likely to be higher. Currently there are limited effective treatments and no vaccine. The case fatality rates increase with age, frailty and underlying health conditions such as high blood pressure, obesity, cardiovascular disease, chronic lung disease and renal disease.

The response to COVID-19 (coronavirus) in Wales has evolved over time, from initial containment and delay phases, to the introduction of the Staying at Home and Social Distancing Policy on 23 March 2020, also known as ‘lockdown’. The primary control measures are social distancing of 2 metres, handwashing/sanitising and cleaning. Where the primary control measures cannot be achieved further mitigating measures such as screens and personal protective equipment should be used. This approach has seen large scale compliance and been successful in reducing infections, hospitalisations and deaths in Wales.

Within the Swansea Bay region disease prevalence has significantly reduced since April 2020, as can be seen in Fig 1:

Figure 1 Rate of confirmed cases of COVID-19 per 100,000 population from end April 2020 to August 11 2020:



However, Covid-19 cases are still endemic in Wales and Swansea Bay i.e. it is present in the geographical area and population. As such the risk of further increases in cases, clusters and outbreaks is high, unless the control measures and restrictions are adhered to. This presents new challenges as lockdown restrictions are eased.

3. Local Planning and Response Structures, Roles and Responsibilities

In response to the Covid-19 Pandemic, Swansea Bay multi-agency partners have developed a management and governance structure. A Gold Command was set up on January 31 2020, which included strategic, tactical and operational response arrangements as well as a number of system wide groups focussing on particular aspects of the regional response. During February 2020 emergency preparedness was undertaken as part of the UK Government 'delay' phase and following a transition to the mitigation phase, the Health Board response period ensued – Silver and Bronze groups were established and two dedicated Military Liaison Officers were assigned. A strong multi-agency partnership approach is well embedded, with Community Silver and the Health and Social Care interface Board having key roles within the response programme.

In March and April 2020, there was an intense period of planning and preparedness occurring concurrently with the response and a significant amount of service change took place. Until the Test, Trace and Protect [TTP] Programme came into play, the focus across the UK and Swansea Bay region had been on the testing of symptomatic critical workers and the following timeline demonstrates the key milestones in delivering this agenda across Swansea Bay, leading up to the launch of the TTP Programme:

Community Testing Unit [CTU] established at Margam for NHS and regional key workers	March 2020 onwards
Care Homes Testing Programme – whole home testing	May 08 2020 – June 19 2020
Population Testing Centre established at Liberty Stadium Swansea	May 8 2020
Wales TTP Plan published	May 13 2020
Online portal launch – general population	May 18 2020
Swansea Bay TTP launch	June 01 2020
Antibody Testing – education staff	June 10 2020
Care Homes staff - weekly testing programme	June15 2020–August 09 2020
Antibody Testing – SBUHB & WAST staff	July 03 2020–August 31 2020

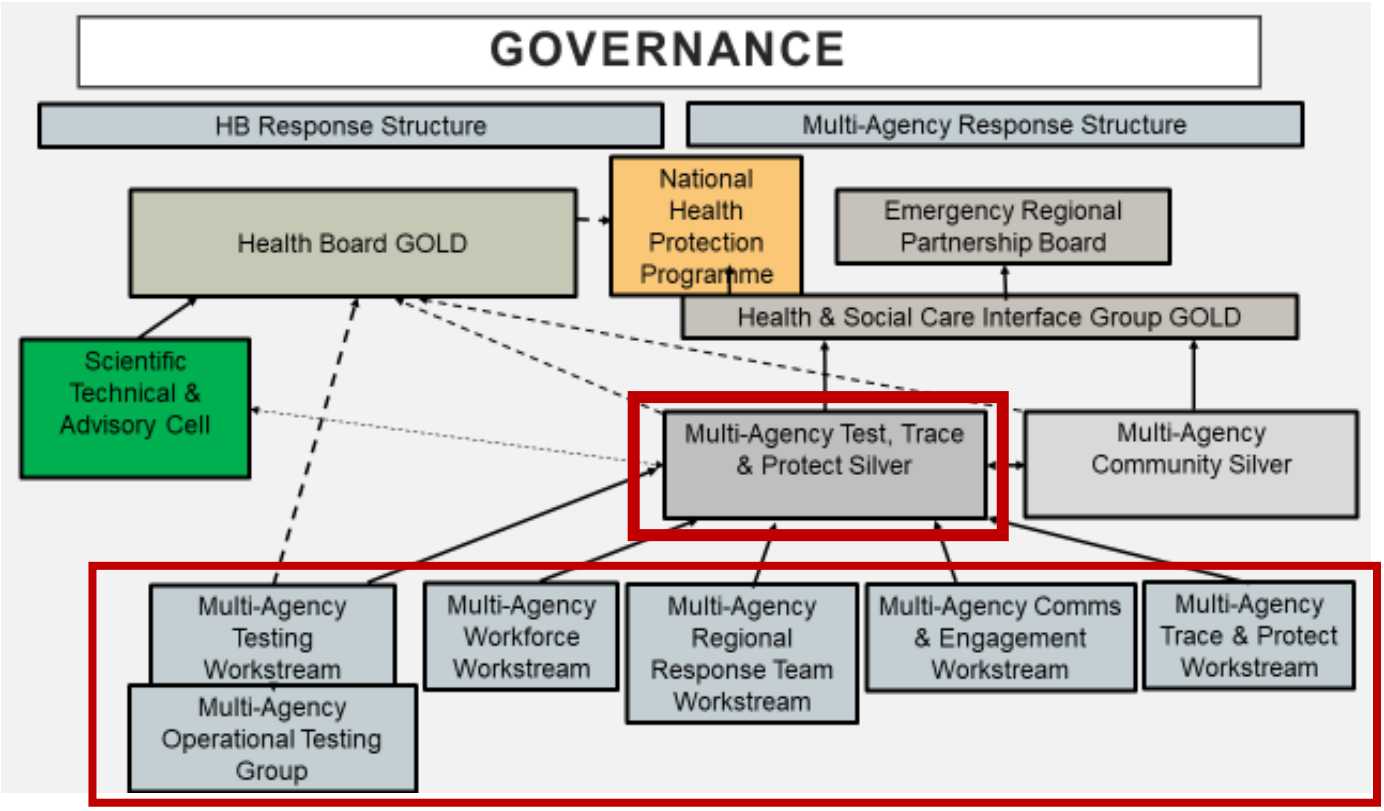
Appendix 2: timeline demonstrating the establishment of testing in Swansea Bay

The Health Board has captured activity at the Testing Units on a daily basis and completed the care homes testing programme within the timeframe set by Welsh Government. Testing activity since recording commenced in March 2020 can be summarised in the table below (as at Aug 18 2020):

Tests via the Drive Through facilities	19,624
Care homes tests (staff and residents) – via the whole home population testing programme	5,289

The TTP programme has been established with governance to support decision making and escalation along the lines set out in the diagram fig 3 below:

Fig 3:



The Health Board has embedded processes to address disease transmission and control, in line with the Outbreak Control Plan for Wales. More complex management arrangements are required when escalation and wider response is needed; clarity around the responsibilities for decision making is therefore more difficult to establish.

The Multi-agency Health and Social Care Interface Group GOLD coordinates the overall response in Swansea Bay. This group is comprised of the two Directors of Social Services plus the Health Board's Director of Strategy. Chairmanship of the group is rotated between the three Directors – membership is extended dependent on the topics for discussion and decision. The Multi-agency Health and Social Care Interface Group GOLD will meet as the TTP Multi-agency GOLD Group to coordinate the overall response in Swansea Bay. When the Group meets as the TTP Multi-agency GOLD Group, the Director of Public Health and the Director of Public Protection from both local authorities will be present to advise on the public health risks and recommended courses of action. When the Multi-Agency Gold meets to discuss matters relating to TTP the chair will be held by the Director of Strategy of the Health Board, as lead organisation.

Leads = Directors of Social Services, Neath Port Talbot & Swansea Local Authority/Health Board Director of Strategy

To support the implementation of the TTP programme the Multi-Agency TTP organisational structure (highlighted above) became operational on May 19 2020, in preparation for the June 1st 2020 implementation. The structure functions at regional level with localised teams supporting, organised around the two Local Authority areas. The Executive Lead for the TTP Programme is the Health Board's Director of Strategy working with Director of Public Health. There is a dedicated Regional Operational

Lead identified from Health Board – Assistant Director of Strategy & Partnerships, supported by a small Programme Management team.

To deliver the TTP programme the workstreams have specific remits:

- **Testing** – to set the TTP Programme's policy on testing, in line with Welsh Government guidance and instruction. This Workstream is supported by the Operational Testing Group which runs the Testing Units across the region, resources the testing for the population, plus delivery of the care homes testing programme.
  Lead = Director of Public Health

- **Contract Tracing and Digital** – working on digital issues relevant to the delivery plan developed and approved by TTP Silver. This Workstream monitors index case trends, digital reporting and linkages with other cells, in particular workforce cell in terms of resources. It also provides advice and guidance and overarching coordination of contact tracing through virtual contact centre.
  Lead = Swansea Local Authority Director of Place

- **Regional Response** – a specialist team made up of Local Authority Public Protection colleagues, SBUHB Public Health and Public Health Wales. The Team manages complex Covid-related issues across the region and works closely with the local Contact Tracing Teams to provide expert advice. Key responsibilities include:
  - Population surveillance
  - Incident/Cluster/Outbreak Management and Control
  - Consideration and prioritisation of advice and enforcement in the Swansea Bay region

  Lead = Swansea Local Authority Head of Housing and Public Health

- **Communications & Engagement** – this Workstream aligns regional communications activities to amplify national communications messages. It also focused on raising awareness and understanding of the national Test, Trace, Protect strategy as well as how the Test, Trace & Protect service can be accessed within Swansea Bay. Its key task now is on ensuring any local spikes/clusters/outbreaks are communicated effectively, plus supporting the emerging health protection strategy with appropriate engagement and messaging.
  Lead = Neath Port Talbot Local Authority Assistant Chief Executive and Chief Digital Officer.

- **Workforce** – this workstream focuses on the staff resource required to run and deliver the Testing elements of the programme as well as the resources aligned to the Contact Tracing requirements.
  Lead = Swansea Local Authority Deputy Chief Executive

Consideration is currently being given to merging the Contact Tracing and Workforce workstreams, recognising that the development of the workforce plan and initial phase of recruitment have been completed.

The escalation processes are in line with the Communicable Disease Outbreak Plan for Wales, July 2020, including the process for regional escalation and to the Local Resilience Forum. In line with the

Coronavirus Control Plan for Wales, published by Welsh Government, the hierarchy of escalation can be set out as:

Advice for the introduction of additional local or regional measures, beyond those powers already held locally, to protect public health is expected to come from the Health Protection Advisory Group [HPAG], chaired by the Chief Medical Officer for Wales. Leadership for the wider local or regional measures rests with Welsh Ministers, working in concert with local elected Leaders to coordinate local and regional responses.

Governance structures for the whole TTP programme will be reviewed to ensure they are still fit for purpose and support delivery of the Prevention and Response Plan.

4. Framework for Action

There are seven areas identified for further action to achieve the aims of the plan, as follows. The broad approach is contained in this plan; actions are further detailed in the Action Plan at Appendix 1.

4.1 ***Surveillance***

The current situation is:

- Public Health Wales, working with regional colleagues have developed and are now producing a COVID-19 weekly surveillance and epidemiological summary. This contains headline summaries across Wales along with surveillance data from General Practice, ambulance calls, confirmed episodes and clusters, incidence and prevalence of confirmed cases in hospital, Intensive Care Unit admissions, incidents and outbreaks, mortality, doubling and halving times. In addition there are Health Board and Local Authority level summaries and bi-weekly local authority level summaries.

- A geographical map highlights cases to Middle Super Output Area [MSOA] through a tool known as Tableau, with a filter feature to examine the data by date, incident type, occupation and geographical area. The MSOA is a defined geographical area based on Census output areas with an average of 7500 persons. There are 410 MSOAs in Wales, 9 in the Swansea Bay region.

- There is emerging TTP intelligence from this process, which has identified some common risk groups, settings and behaviours that are driving Covid transmission. Development work is ongoing to use the intelligence from this process. There are risks if it is not easily accessible e.g. cross border clusters being missed. Work is ongoing to share information and data between these systems to identify clusters in particular settings or communities.

- Work is ongoing to identify genomic sequencing and different lineages of the virus which may be helpful in identifying clusters going forward and support the investigation of clusters, incidents and outbreaks.

- Research is underway to evaluate the effectiveness of the TTP process in self-isolating contacts and reducing the transmission of Covid-19.

- A task and finish group has been established to take this work forward with representation from the Communicable Disease & Surveillance Centre [CDSC] and the newly established Regional Health Protection Support as part of the National Health Protection Cell.

This initial work needs to be further developed to provide timely identification of cases and clusters and use intelligence from the TTP process and from social media to inform action. The detailed actions to enable this are set out in Appendix 1. In particular:

- Regular reporting of data, intelligence and the Dashboard for review to the multi-agency and to take on board lessons learnt and share good practice from within and beyond the region :

    - Regional Response Team Bronze [RRT] x2 per week – this Team will review the data from CRM Business Intelligence Tool and the Communicable Disease and Surveillance Centre reports, issued bi-weekly (example of the report is attached at ***Appendix 2***)

    - TTP Silver groups x1 per week – weekly report presented by RRT Bronze

    These arrangements are flexible and will be increased/reduced in frequency as required.

- Development of a strategic level Dashboard of data to inform multi-agency planning in response to any increases or decreases in incidence. This includes the *top of the pyramid indicators* e.g. TTP capacity and performance, number of cases and contacts, hospital admissions, ICU admission/utilisation and deaths.

- Timely development and sharing of intelligence from TTP e.g. breaches of guidance, social and broadcast media to identify geographical, occupational and social clusters in communities

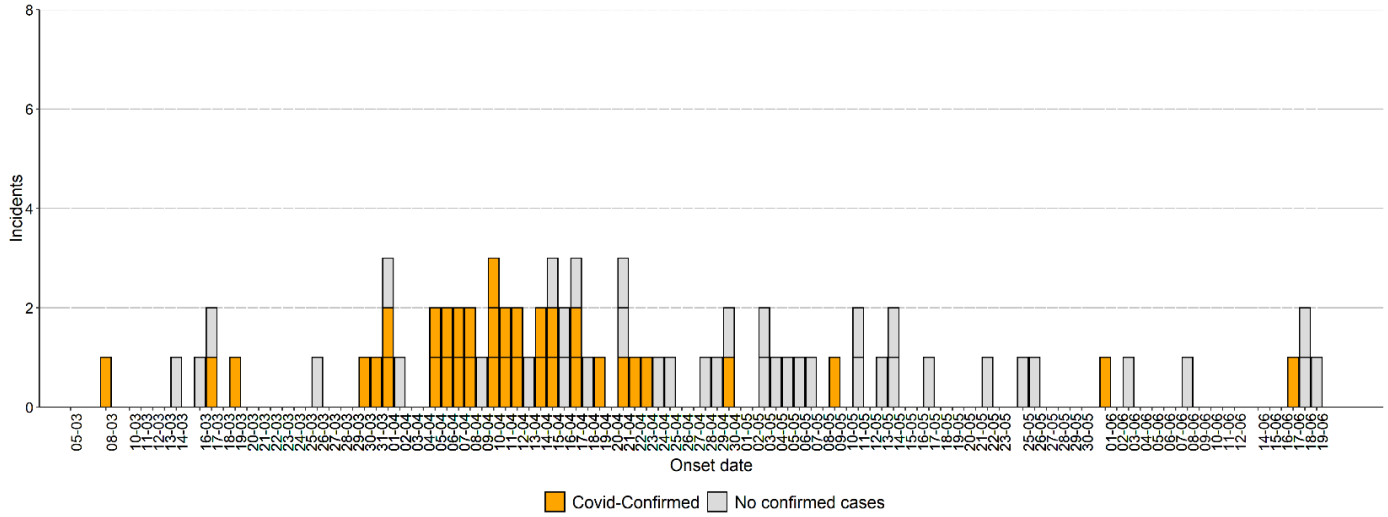
- Identification of other clusters using genomics – social, workplace, schools, communities

- Intelligence from Health Board regions, outbreaks, incidents and clusters are highlighting areas of higher risk and non-compliance with primary control measures in specific groups e.g. younger people, health and care workers, migrant workers. To address and specifically target these areas as they emerge, experts in behavioural science and communications need to work together to effect behaviour change, using appropriate messaging on different platforms.

4.2 Management of Clusters, Incidents and Outbreaks

The majority of clusters and incidents to date in Swansea Bay have taken place in NHS settings and Care Homes (both residential and nursing).

Notifications of residential home incidents and outbreaks, by date of onset of symptoms in first case, Swansea Bay UHB; from 1st March 2020- 25th June 2020:



Source: Public Health Wales Enhanced COVID19 Reporting,

The support provided to Care Home Settings has transitioned from the Public Health Wales Enclosed Settings Team to the Local Authority Environmental Health Officers [EHOs] and regional TTP Teams, with the public health advice from Public Health Wales National Health Protection Cell in the Swansea Bay region. This work is now complete with an agreed list of settings and action between Public Health Wales, Local Authority, regional TTP and the West Glamorgan Regional Externally Commissioned Care Group (a sub group of the multi-agency community silver group). This allows a risk based approach to focus on those that need the most support.

This provides the assurance that these settings are supported to manage and control the transmission of Covid-19 and ensure a collaborative approach going forward. Public Health Wales Health Protection Team will lead the management of incidents in Care Home settings and EHOs will provide support via regular monitoring calls to the homes throughout incidents.

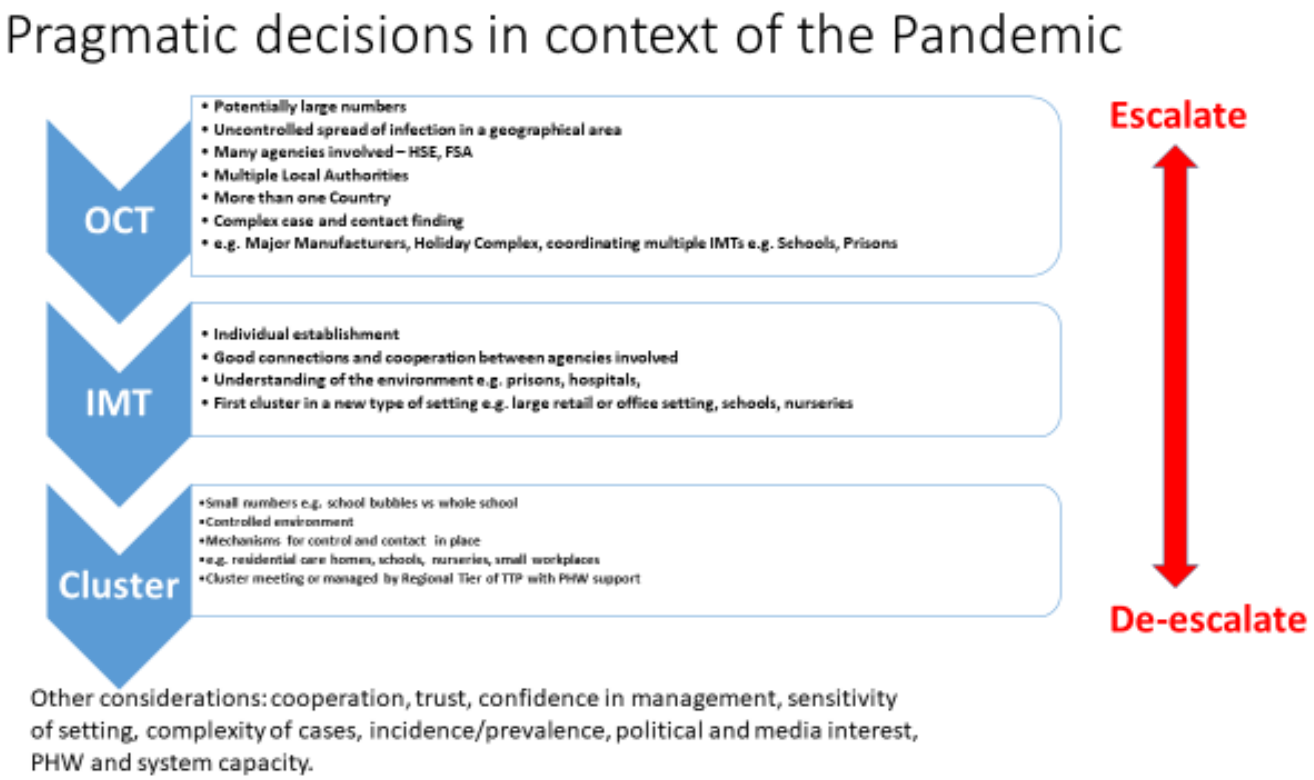
Whilst there has been a cluster of cases in staff and prisoners (23 in total) in Swansea Prison, this incident is now closed. An All Wales Prison Management Group has been established to monitor establishments, share guidance and learning and support the easing of lockdown measures in the prison environment.

4.2.2 *An agreed approach to the Management of Clusters, Incidents and Outbreaks*

In the context of the Pandemic, where there are endemic cases in the community and the lockdown is currently being eased, it is expected that there will be more clusters of cases in different settings as people mix more freely e.g. schools, workplaces, leisure facilities and community. If there were not endemic cases in the community, each cluster of cases would be managed as an outbreak, technically, in line with the Communicable Disease Outbreak Plan for Wales, July 2020 (the Outbreak Plan). However, due to the scale of the response to the pandemic there is an agreed approach to the

management of Clusters, Incidents and Outbreaks of Covid-19 in line with the principles of the Outbreak Plan and the risks associated with each cluster. This approach remains multi-agency and can be escalated or de-escalated in line with the risk and control measures that are needed as described below to deal with relatively simple Clusters, Incident Management Team [IMT] or Outbreak Control Team [OCT].

Figure 4: Management of Clusters, Incidents and Outbreaks in the context of a Pandemic



Decision making for and in an OCT is as follows. Local Authority Director of Public Protection (DPP), Public Health Wales Consultant in Communicable Disease Control/Health Protection (CCDC/CHP) or Microbiology consider an outbreak may exist

- Immediate contact with colleagues above to jointly consider facts
- Determine whether an outbreak, needing the plan exists
- Colleagues, above, in consultation with the Executive Director of Public Health
- Outbreak *usually* declared jointly, but can be by any one party
- Chair appointed at first meeting, usually Director of Public Protection [DPP] or Consultant in Communicable Disease Control/Health Protection [CCDC/CHP].
- CCDC/CHP must inform the Office of Chief Medical Officer [CMO].
- Responsibility for handling the outbreak **must** be given to the OCT by the members' organisations, **must** be of sufficient seniority, have the delegated authority to make decisions

and ensure adequate resources are available to undertake outbreak management. For example, the DPP, DPH, CCDC/CHP or their representatives must have delegated authority to make decisions and direct resources in their organisation to control the outbreak. Core members of the OCT should discuss with the Local Emergency Manager/Local Resilience Fora Coordinator.

The Membership of an OCT can vary depending on the nature of the outbreak, the setting and the complexity of the environment. There is a core membership for all incidents or outbreaks, additional core members and support staff and co-opted professionals as needed, listed below.

Core:

Director of Public Protection (or their nominated officer of sufficient seniority) i.e. Mark Wade, City and County of Swansea Council; Ceri Morris, Neath Port Talbot County Borough Council

- Consultant in Communicable Disease Control or Consultant in Health Protection i.e. Angela Jones, Public Health Wales
- Director Microbiology Laboratory/Consultant Microbiologist i.e. Dr Robin Howe, Public Health Wales
- Lead Officer for Communicable Disease of the LA i.e. Ann Rodway, City and County of Swansea Council; Rebecca Davies, Neath Port Talbot County Borough Council
- Executive Director of Public Health of the Health Board i.e. Dr Keith Reid, Swansea Bay University Health Board

Additional core members:

- Local Authority Secretariat
- Resource Team provided by:
    - Local Authority (including EHO from the Pollution Team in water related outbreaks);
    - Public Health Wales;
    - Microbiology Laboratory; and
    - Health Board.
- Epidemiologist/CDSC
- Public Relations/Communications Officer from the regional TTP Communication Group

Co-opted Members as necessary

- Occupational Physician
- Hospital Pharmacy Representation
- Food Examiner/Public Analyst

- Water Company
- Natural Resources Wales
- Health and Safety Executive
- Representatives from other Outbreak Control Teams/LAs
- Food Standards Agency Wales
- Care and Social Services Inspectorate Wales (CSSIW)
- Port Health
- Infection Control Team
- Immunisation Co-ordinator
- Drinking Water Inspectorate
- Healthcare Inspectorate Wales
- Veterinary Laboratory Agency

Communication is key in the management and control of Clusters, Incidents and Outbreaks. There must be a disciplined approach, respecting the confidentiality of individual cases and businesses balanced with proactive communication, when needed, for example, to actively find additional cases or to reassure the public. Specialist Communications support, particularly from the established TTP Communications group, and coordination with partners is essential. One organisation will lead in managing the communications in liaison with the other organisations involved, usually Public Health Wales or the Local Authority, depending if outbreaks cross borders i.e. Wales and England. All decisions are joint and confidentiality in the proceedings must be respected. The following list includes the different communication channels that need to be considered:

- Information to cases and contacts
- Within setting and health community
    - Local Health Board – primary, secondary care if they are likely to be impacted
    - Persons responsible for implementation of control and prevention measures
- Welsh Government
- Information to the public
- Local Emergency Manager/links to Local Resilience Forum [LRF]
- Information to PHW Colleagues:
    - Local Public Health Team(s) involved
    - CCDCs
    - On call
- Written reports (consider publication) for planning, record of performance, legal issues, reference, adding to knowledge base

4.3 Escalation of multi-agency community control measures

In May 2020, The Welsh Government published its approach to moving out of the current COVID-19 lockdown, "***Unlocking our society and economy: continuing the conversation".*** This outlines a "traffic light" approach to easing restrictions in a number of key domains. In addition, it explicitly references that, where local increases in incidence cannot be controlled through 'Test Trace and Protect', it may be necessary to re-impose measures. Progression from lockdown, through red and amber to green may not proceed at the same rate for all areas and it may be necessary to reverse course in some areas should conditions worsen.

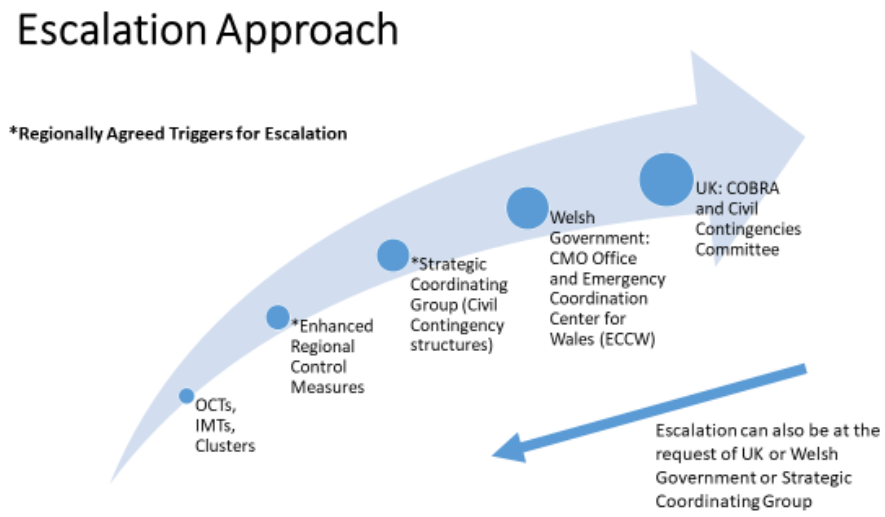
The Welsh Government is currently developing a National Covid-19 Public Health Escalation and Response Plan. Local plans will link to this to create a system wide approach. Six principles support effective implementation of an integrated national and local system:

- the primary responsibility is to make the public safe
- build on public health expertise and use a systems approach
- be open with data and insight so everyone can protect themselves and others
- build consensus between decision-makers to secure trust, confidence and consent
- follow well-established communicable disease control and emergency management principles
- consider equality, economic, social and health-related impacts of decisions

In the event that more widespread community transmission is occurring and the current setting specific control measures addressed above appear to be of limited effectiveness, a process for escalating more multi-agency monitoring, communication and enforcement within communities affected has been agreed, in principle, with multi agency partners in Swansea Bay and including the LRF. This will include an agreed process for the analysis of indicators and a staged approach to community communication, monitoring and enforcement with the support of multi-agency partners in the local area affected. Consideration of the six principles will be needed to guide and inform escalation measures.

In the event that these measures are being considered in Swansea Bay, the core members of the OCT(s) should discuss with the Local Resilience Fora Coordinator. Core members should ensure that an appropriate Executive or the CEO in their own organisation is informed urgently that this escalation is being considered. The Multi Agency Health & Social Care Gold r will also be notified to assess action needed to aid in the response.

The fig below describes the regional approach for escalation:



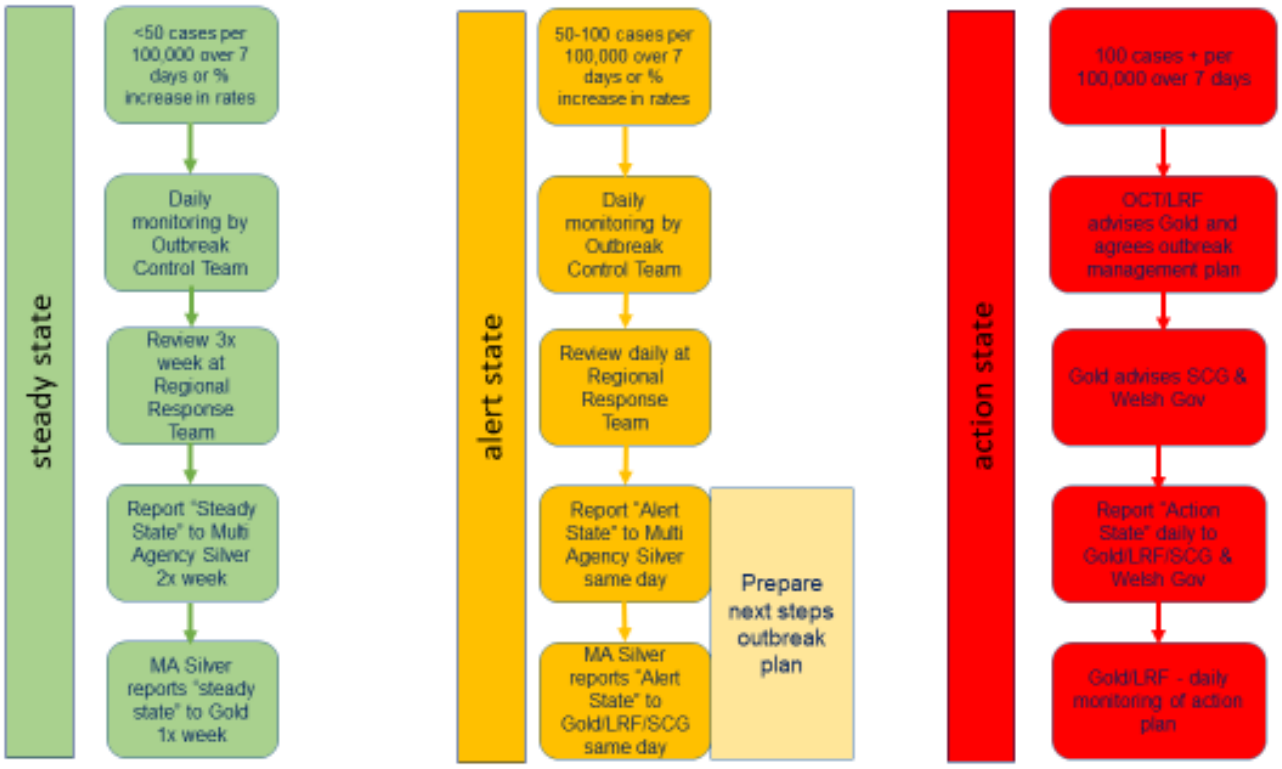
Based on the learning of the Leicester, Leicestershire and Rutland Local Resilience Forum, along with local partners, the following triggers and actions are proposed:

Escalation Triggers, Action and Governance Arrangements

Traffic light phase	Green	Amber	red
Definition	• Overall number of cases low and stable • Clusters and outbreaks limited to discreet settings – e.g. care homes, schools, businesses, defined small communities	• Overall number of cases moderate and/or rising • Evidence of some extended community transmission beyond discreet settings - in one or more areas of the LA, Health Board Region or LRF	• Overall number of cases moderate and/or rising • Evidence of some extended community transmission beyond discreet settings - in one or more areas of the Health Board Region or LRF
Triggers	<50 cases per 100,000 in last 7 days • Overall LA, Health Board Region or LRF; and • All conurbation with population >25,000	50-100 cases per 100,000 in last 7 days • Overall LA, Health Board Region or LRF; or • One or more conurbations with population >25,000	100 cases per 100,000 in last 7 days • Overall LA, Health Board Region or LRF; or • One or more conurbations with population >25,000
	<50% in last 14 days for overall LA, Health Board Region or LRF; and	50-100% increase in case rate in last 14 days for overall LA, Health Board Region or LRF; and	• >100% increase in case rate in last 14 days for overall LA, Health Board Region or LRF; or

Context		Increases cannot be explained by: • Higher rates of testing - i.e. positivity rate is not artificially low compared to previous periods or other areas. • Cases related to one or more outbreaks in discreet settings that could be managed through a response targeted at these settings • Increased recent gatherings e.g. public holidays, planned/unplanned mass gatherings	Increases cannot be explained by: • Higher rates of testing - i.e. positivity rate is not artificially low compared to previous periods or other areas. • Cases related to one or more outbreaks in discreet settings that could be managed through a response targeted at these settings • Increased recent gatherings e.g. public holidays, planned/unplanned mass gatherings

Actions in response to triggers and escalation are noted below in fig 4 below:



For comparison, the 7 day case incidence in Swansea Bay is 2.56 per 100,000 as at 16 August 2020.

An agreed suite of measures is being developed by multi-agency partners to support the escalation process, having regard to the six principles and the intelligence available in respect of the risks. This will include:

- Targeted communication to heighten awareness and action for the primary control measures in the population and protection of the most vulnerable citizens
- Additional access to community sampling and rapid testing
- Proactive support and advice to high risk premises e.g. businesses, schools, places of worship
- Increased presence and advice from the Police in communities
- Enforcement action as necessary by Local Authority enforcement officers and Police
- Closure or cancellations e.g. playgrounds, beaches, parks, planned events

This will be reviewed if additional powers are granted to Local Authorities, as announced recently by Welsh Government.

4.4 Escalation to the Strategic Coordinating Group

In the event that the prevalence of Covid-19 is increasing in the population and the existing control measures through Cluster, Incident and Outbreak Management, along with escalation of community control measures, are not containing the outbreak the issues of concern should be escalated to the Strategic Coordinating Group in line with the Outbreak Control Plan and the Civil Contingencies Act, 2004 detailed overleaf. This may be due to local services being overwhelmed or where it creates wider strategic issues or risks that may have a serious impact on the public e.g. social cohesion and public order. This may necessitate the implementation of civil restrictions on health protection grounds on a local or regional basis e.g. “Containment”, the requirement for a coordinated strategic response by public authorities or a requirement for mutual aid, including Military Aid.

In the event that these measures are being considered in Swansea Bay, the core members of the OCT(s) should discuss with the Local Resilience Fora [LRF] Coordinator. Core members should ensure that an appropriate Executive or the CEO in their own organisation is informed urgently that this escalation is being considered. The Multi Agency Health & Social Care Gold will also be notified to assess action needed to aid in the response. The LRF Coordinator will prepare an initial assessment using the Joint Decision Model to determine whether the outbreak should be escalated to the Chair of the LRF or another strategic commander.

Should the LRF Coordinator believe a Strategic Coordination Group [SCG] may be required, a conference call between the Chair of the LRF, or SCG if already sitting, and the Chair of the Outbreak Control Team should be convened as soon as possible.

The purpose of this meeting will be to agree a response and command protocol in order to ensure quick communication between agencies, stakeholders and the public.

A request for the activation of an SCG may also be made by any LRF member agency or the Welsh or UK Governments using usual protocols. This may therefore be used as an alternative route for activation by the organisations of OCT Core Members. In such cases, the Chair of LRF should consult with the Chair of OCT to seek their views on the appropriateness of this request.

If an SCG is thought likely to be required, the LRF Co-ordinator must inform Welsh Government.

5. Sampling and Testing

Sampling and testing for Covid-19 remains a challenging area. Opportunities for sampling have improved with online booking for community drive through centres or home testing kits (currently 86% of all testing at the Community Testing Units is derived from online bookings). There is sufficient capacity to sample anyone in the population with Covid-19 symptoms. The care homes testing programme commenced in May 2020 and to date over 5,200 residents and staff have been tested across the region. However, general uptake is low – only 62% of drive-through capacity was utilised in June and 32% in July - there may be little incentive to come forward for testing due the repercussion of self-isolation for cases, household contacts and social contacts along with potential loss of income. This in turn has implications for the interpretation of prevalence data and continued transmission.

As noted above, demand for testing across the region is below the Welsh average – 474.50 tests per 100,000 population compared to 573.06 all Wales - and disease prevalence remains at a consistently low level at 5.1% of confirmed cases across Wales with a positivity rate of 0.5% of those tested *(data taken from the PHW Communicable Disease Surveillance Centre report as at August 16 2020)*.

A local testing plan is being developed in response to the national all Wales testing strategy, which focus on four priority areas:

- **Controlling and preventing transmission of the virus by supporting contact tracing –** to prevent and protect spread of the disease amongst the population and to trace the spread of coronavirus, understand transmission dynamics and to ensure that testing can support targeted action through local outbreaks in communities or within businesses.
- **Protecting Our NHS services** – to prevent, protect and deliver testing to support the safety of staff, patients and clients.
- **Protecting vulnerable groups and managing increased transmission rates** – to safeguard and control infection in groups, communities or settings where there are greater risks.
- **Developing future delivery** –to utilise health surveillance and new technologies to improve our understanding of the virus through the use of intelligence and to innovate new ways to test across the population.

Swansea Bay is currently developing a framework to address these key themes, with the baseline position that the region will concentrate on its ability to react quickly, within flexible resources, to outbreaks and clusters.

Testing facilities have improved with NHS Laboratories in Wales, Lighthouse Laboratories in England and Wales as well as the use of private laboratories. However, the turnaround times and data are inconsistent and this remains challenging. It has implications with speed of isolation and commencement of the Test, Trace and Protect (TTP) system for contact tracing.

Going forward we need to ensure that individuals self- present on symptoms for sampling with easy access, there is rapid turnaround of tests (<24Hrs) and good data for contact purposes with TTP. This will include access to mass community sampling as needed to respond to clusters, incidents, outbreaks

and escalation measures. The Director of Public Health will initiate this action with the support of the Health Board, commercial partners and military assistance as needed.

Genomics as a tool for outbreak identification and support needs to be fully scoped and utilised as appropriate at a national level.

In addition a targeted promotion campaign is needed to encourage uptake to effectively contain the disease. Consideration of further financial support to those that are self-isolating should also be considered by Welsh Government to encourage compliance.

6. Prevention

The TTP system has been operational since 1st June 2020 with sufficient resources at a local level to initiate contact tracing on notification of a positive result. This has been a multi-agency effort, involving the redeployment and training of staff from the public sector to meet the service demands. The system has supported other areas in Wales (North Wales), when pressured by increased incidence and outbreaks. As staff need to resume their core roles as lockdown eases, Welsh Government has agreed to fund the service going forward and discussions are ongoing to ensure the mutual aid is continued. There is a need to recruit and train additional staff for the Local TTP tier to ensure a seamless transition. The Testing Units and Contract Tracing teams have been resourced to date by staff re-deployed from substantive posts into the TTP structure. As services start to return to business as usual, a recruitment campaign to support the ongoing work programme has been authorised by all partners – staff to support the Testing Units, Call Centre and Results Hub will be appointed on a fixed term basis; this is mirrored by a recruitment campaign to appoint to the Contact Tracing teams, along the same lines. Staff will be in posts by the end of August 2020. The ability to easily flex up/down to support the testing and tracing agenda has been the core ethos behind a 50% core staffing establishment – this will enable costs to be kept at a manageable level, whilst affording the option to scale up if testing demand rises, which is expected over the winter months.

As the incidence is reducing there may be a point where TTP undertakes full contact tracing for up to 14 days prior to symptoms or a positive test becomes worthwhile to actively identify previously unknown cases and isolate routes of transmission. This will need further consideration by epidemiologists in PHW in discussion with Welsh Government.

The Regional TTP Teams are staffed predominantly by Environmental Health Officers [EHOs] who face increasing pressures to resume statutory duties and planned inspection programmes as lockdown is eased and businesses re-open. These duties include advice and enforcement of control measures at such premises. This needs continual review, consideration and assessment to secure sustainability and resilience of the TTP service. It also requires management of risk relating to other duties enforced by EHOs.

As endemic cases reduce to very small numbers consideration should be given by epidemiologists in PHW, in discussion with Welsh Government, of the benefit of TTP undertaking full contact tracing for up to 14 days prior to symptoms, or a positive test, to actively identify previously unknown cases and isolate routes of transmission.

Between the 8th June and 9th July, all travelers arriving in the UK from outside the Common Travel Area and the Republic of Ireland were required to self-quarantine for 14 days, although there were some exemptions. On the 10th July these measures were relaxed for 59 countries and further reviewed in

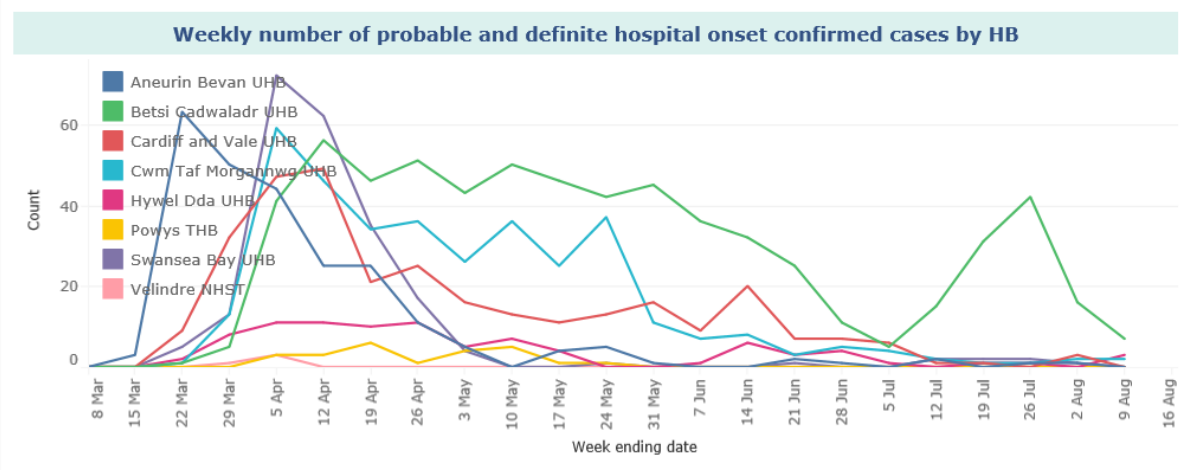
light of the transmission at regular intervals. This increases the risk of imported cases from these and other countries from foreign travelers. In order to control this, as local cases reduce, consideration should be given to monitoring compliance with the quarantine arrangements. In addition, questions should be added to the TTP process to assess any recent travel history to help monitor the impact of these measures. Recent cases histories indicate that imported cases are the greatest risk in Swansea Bay currently.

Vaccination development and trials continues in many parts of the world, with a best case scenario of availability in January/February 2021. If this is successful, there will need to be effective planning to deliver a vaccination programme at scale across the entire population.

In addition, there are other infectious diseases that are preventable and have vaccination programmes to limit impact in the most vulnerable population, although uptake is variable. With the Autumn and Winter approaching, bringing with it the seasonal pressures for the NHS and social care from influenza in addition to Covid-19, both of which spread more effectively in the indoor places used to shelter from inclement weather, there is a need to maximize the existing vaccination programmes and drive a higher uptake to protect the NHS and social care from the consequences. This will be supported by a clear communication campaign to gain support and compliance from the vulnerable populations targeted as well as NHS and Care Home staff.

6.1 *Reducing Nosocomial Transmission*

The Health Board is committed to ensuring that patients who are admitted to hospitals or other health care environments are protected from harm. The Health Board is focussing on implementing guidance from the national Nosocomial Transmission Group (NTG). Data available from Public Health Wales indicates that our rates of nosocomial transmission in Swansea Bay have reduced significantly from an initial peak in April 2020.



The Health Board is implementing guidance from the NTG and in response a Physical Distancing cell has been established and actively working to minimise the risk of transmission of COVID-19 across the Health Board for staff, patients and visitors.

The work focuses on the approach to ensuring compliance with Regulation 7A of The Health Protection (Coronavirus Restrictions) (Wales) Regulations 2020. The Regulations require that a person must have regard to guidance issued by the Welsh Ministers about reasonable measures to be taken to ensure that a distance of 2 metres is maintained between persons. This Regulation came into force on 7th April 2020.

The first set of guidance 'Operational Guide for the safe return of health care environments to routine arrangements following the initial COVID-19 response' was released in May 2020. 'COVID-19 Guidance For Bed-Spacing in Healthcare Settings' was issued on 26th June 2020.

The *Operational Guide* required Swansea Bay UHB to consider how to safety deliver healthcare during the pandemic and covered a range of specific areas that the Board needed to consider. In response, key actions have been taken forward to implement the guidance as follows:

- A detailed risk assessment process to assess all areas of the Board and ensure that working areas can maintain the required 2 metre distance in areas where staff are not required to wear Personal Protective Equipment
- A physical review of all buildings that are in the Health Board ownership to ensure safe working areas as well as appropriate physical distancing measures in place in communal areas such as corridors; entrances, stairwells and other facilities
- A detailed and comprehensive communications programme is in place to share information with staff, patients and visitors learning from behavioural science experts.

At the outset of the pandemic, the Health Board sought to minimise the number of people who were physically required to attend work, and as part of the UK wide lockdown, significant numbers of staff were able to undertake their duties at home. This continues, and a 'home working' cell is now operational to consider the short and medium term requirements. As lockdown has eased and the formal requirement at a Welsh Government level for home working has been lifted; the Board continues to encourage staff to home-work and this will continue into the autumn and winter period.

COVID *bed spacing* guidance has been reviewed and a further risk assessment process will be completed by the end of August. At an all Wales level, Infection Prevention & Control leads have acknowledged the formal guidance which requires spacing of 3.7m between the centre of a bed and the centre of the adjacent bed. However, in view of the need to balance the potential risk of COVID transmission against the overall potential loss of beds in the system which has the potential for significant patient harm, then it has been agreed that a minimum gap of 2m is critical providing that there are further risk mitigation measures to reduce potential transmission (such as the use of screens).

Swansea Bay UHB has an Infection Control and Prevention Team (IPC) to support the Health Board in preventing healthcare associated infection (HCAI) and combating antimicrobial resistance (AMR) through good infection practices.

A framework for Infection Prevention and Control has been developed and will be operational from October 2020. The framework sets out the role of the corporate IPC team and the accountability within each of the Board's 5 Delivery Units. The corporate IP&C service will have a greater emphasis on prevention, and to achieve this, will provide support and advice for each Delivery Unit to develop and establish arrangements that demonstrate responsibility for infection prevention is effectively devolved to all individuals and groups in the organisation involved in delivering care.

A named IP&C Facilitator has been identified for each unit and Delivery Units will be responsible for the provision of services in which high standards of infection prevention & control standards are embedded, and where staff deliver safe patient care in safe environments of care. IPC advice and support is available on a 7 day basis.

Each Delivery Unit will be accountable for identifying, assessing and managing risks in relation to healthcare associated infections, antimicrobial stewardship, decontamination and immunisation. The corporate IP&C team will be responsible for providing specialist advice and support to the Delivery Units to support them in achieving the shared vision of embedding infection prevention in everyday practice and sustaining improvements in order to reduce HCAIs and keep patients, staff and visitors safe.

In respect of COVID-19 the key focus from an IPC perspective will continue to be:

- Implementation of PPE guidance in line with national requirements
- A rigorous approach to hand hygiene
- Effective approach to the management of positive cases within a hospital environment focussing on the prevention of nosocomial transmission including proactive support to clinical staff managing patients
- Education and training
- Surveillance and monitoring of individual results
- Audit and assurance functions to support the above.

There is a 'live' dashboard that is used on a daily basis to provide situational awareness of the pandemic and our response. Nosocomial transmission indicators are being included in the second phase development of the COVID-19 dashboard.

A regional seasonal pressures plan, across the Swansea Bay health and care system is being prepared, to complement this Prevention and Response Plan. This contains the detailed actions of the local flu vaccination and other prevention activities.

6.2 *Vaccination Delivery Plan*

Swansea Bay UHB has begun planning for the delivery of a COVID-19 vaccine in response to a request from Welsh Government for a plan to be in place by September 03 2020, in readiness for potential vaccine availability from October 2020. The first available vaccine will be targeted towards front line health and social care workers and those on the list of shielding individuals.

The UK government have announced the advanced purchase of 4 different COVID-19 vaccine technologies, all of which remain in clinical trials.

Welsh Government has indicated that up to 1.5m doses of the Oxford/Astrazeneca vaccine could be available over a four month period with early supplies available in October and November and the bulk delivered in January and February 2021. One other vaccine candidate may be available in late 2020 (mRNA) with the remaining vaccines not available until 2021.

Welsh Government recognise that there are a number of parameters that remain unknown, and that it is likely that work on licencing and regulation of the vaccine is likely to be concurrent with delivery.

The planning parameters that Welsh Government has provided so far are:

- The Oxford vaccine is estimated to be a 2-dose schedule to be delivered at least 1 month apart, and with an estimated interval of 3-4 weeks between influenza and COVID-19,. However, there is potential that the Joint Committee on Vaccination and Immunisation (JCVI) may recommend a single dose depending on the outcome from clinical trials.

- Vaccines will be drawn from multi-dose vials and administered as an intramuscular injection, with a 15 minute observation period following administration. Paracetamol may be recommended after administration
- The Oxford vaccine will require storage at 2-8C with a shelf life of around 6 months. The mRNA vaccine is likely to require special cold chain and storage conditions and is likely to have a short shelf life.

The vaccine will be free but not mandated and early public opinion work indicates that in Wales, around 8 out of 10 adults are likely to take up the offer of a vaccination if offered.

The Health Board has established an 'Immunisation Silver' group to coordinate our overall planning of COVID-19 vaccine as well as providing strategic oversight of influenza planning. As there is significant uncertainty over the timing of the availability of COVID-19 vaccine, work on the delivery of influenza continues apace, in order to maximise the opportunity to vaccinate as many individuals as possible ahead in the early Autumn period, ahead of the planned delivery of COVID-19 vaccine.

There are 5 working 'cells' supporting the planning phase and it is likely that the scope and number of cells will flex as the plan develops and further guidance becomes available. The table below sets out the current scope:

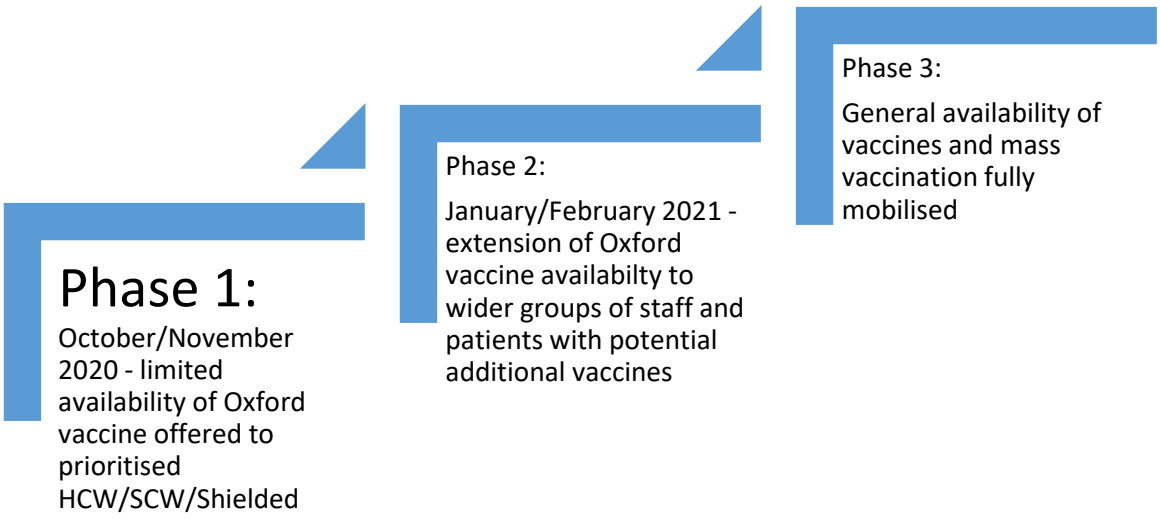
Work Cell	Scope (August 2020)	Lead
Clinical Governance	• Localisation of WG guidance • Consent process • Development of protocols and policies in line with legislation/regulation • Research • Professional Engagement • IPC requirements	Associate Medical Director/Assistant Direct of Nursing
Workforce	• Workforce model • Identifying and training immunisers • Administrative resources • Pay and rations • Occupational Health • Mobilisation of workforce response	Assistant Director of Workforce & Organisational Development
Digital	• Booking system • Call/recall system • Data management & integration • Intelligence • Data flows	Associate Director of Digital Services
Supply/Logistics	• Receipt/Storage/Formulation • Distribution • Management of Cold Chain • PPE • Transport • Waste Management • Security	Clinical Director – Pharmacy and Medicines Management

Operational Delivery	• Delivery Model • Delivery locations – identify and mobilise • Demand and Capacity Planning • Operational Management • Physical Distancing	(To be finalised)

In accordance with Welsh Government requirements, the Health Board will run a desk-top mass vaccination exercise to further inform planning for services. This will take place on 20th August 2020 and will involve partners from other agencies including the Local Resilience Forum and colleagues in Local Government.

The Silver Immunisation Cell is reporting into Gold to ensure Executive oversight of progress via a highlight report on a weekly basis.

The proposed mass vaccination delivery model for Swansea Bay will be a hybrid model combining elements of mass vaccination, local delivery and also an 'inreach' model recognising that there will be patients who are unable to travel due to their vulnerability or mobility (for example, those in closed settings or housebound patients). The model will need to be flexible to adapt to the availability of vaccines and therefore a phased approach will be required that can adapt to the availability and targeting of the specific vaccine. If the amount of vaccine in phase 1 is below expectations, then further prioritisation of groups will be required. It is unclear as to whether this will be determined nationally or locally.



• Separation of staff and patients • Bay Field Hospital Mass Vaccination Centre operational for staff (**HCW/SCW)** supported by 2-3 local centres to support local access for patients (based on cluster areas) • In reach team • Potential hospital based vaccination centres on 3 sites for front line staff (high volume for 1-2 weeks)	• Separation of staff and patients • Bay Field Hospital Mass Vaccination Centre operational for **HCW/SCW** supported by 4-5 local centres to support local access for patients • In reach team for vulnerable patients and closed settings	• Bay Field Hospital centralised mass vaccination centre operational 7 days per week for **critical workers and patients** supported by up to 10 Local Vaccination Centres based on cluster areas • In reach team for vulnerable patients & closed settings

Early indications of the numbers of people in the initial priority groups identified in phase 1 below have been provided by Welsh Government as follows:

- **Health Care workers –** of the estimated 13,000 employees in SBUHB around 9,000 are front line workers. There will be additional requirements in respect of front line, independent contractors including GPs, dentists, optometrists and pharmacists as well as their staff.
- **Social Care workers –** estimated at 6,300 across residential, domiciliary, day care and other staff
- **Shielded Population** – the shielded lists during the first wave of COVID-19 totally 15,000 in SBUHB.

Phase 1 plans therefore need to be able to respond to around 30,000-32,000 people (estimated to include contractor professions) based on 100% uptake. At this stage, and in order to minimise wastage the vaccination model aims to deliver circa 1500 vaccines per day over a 22-25 day period, then repeated to provide for a 2nd dose to complete the course.

The following summarises the position in respect of other elements of the model

Operational Delivery – the operational delivery cell have sketched out the proposed delivery model as set out above. Work is ongoing to scope out potential site locations and consider practical issues such as flow, car parking and operational delivery issues over a 6-12 month period. These will be considered at the testing exercise on 20th August.

Workforce – it is likely that there will be changes to regulations in November 2020 to widen the number of immunisers available. Given the particular requirements around the vaccine model (eg. multi-dose vial), the workforce model will require support to assist in drawing up the vaccine as well as delivering the vaccine, and supported by an effective administrative resource

Digital – national planning guidance indicates that NWIS will be asked to support development of a call/recall model and to capture and monitor data from vaccination centres. Locally, a booking

system is required to ensure flow through the centres and manage physical distancing requirements. Integration and data flows between primary care are critical.

Clinical Governance – national Infection Prevention and Control guidance is available and there will be a need to ensure safe administration of the vaccine supported by local protocols, policies and standard operating processes.

Logistics – the logistics cell is working through the key requirements, in conjunction with national advice and support on vaccine storage, transportation & administration. As this will be a 'high value' vaccine, security arrangements need to be continually assessed and consideration.

7. Mitigation and Control

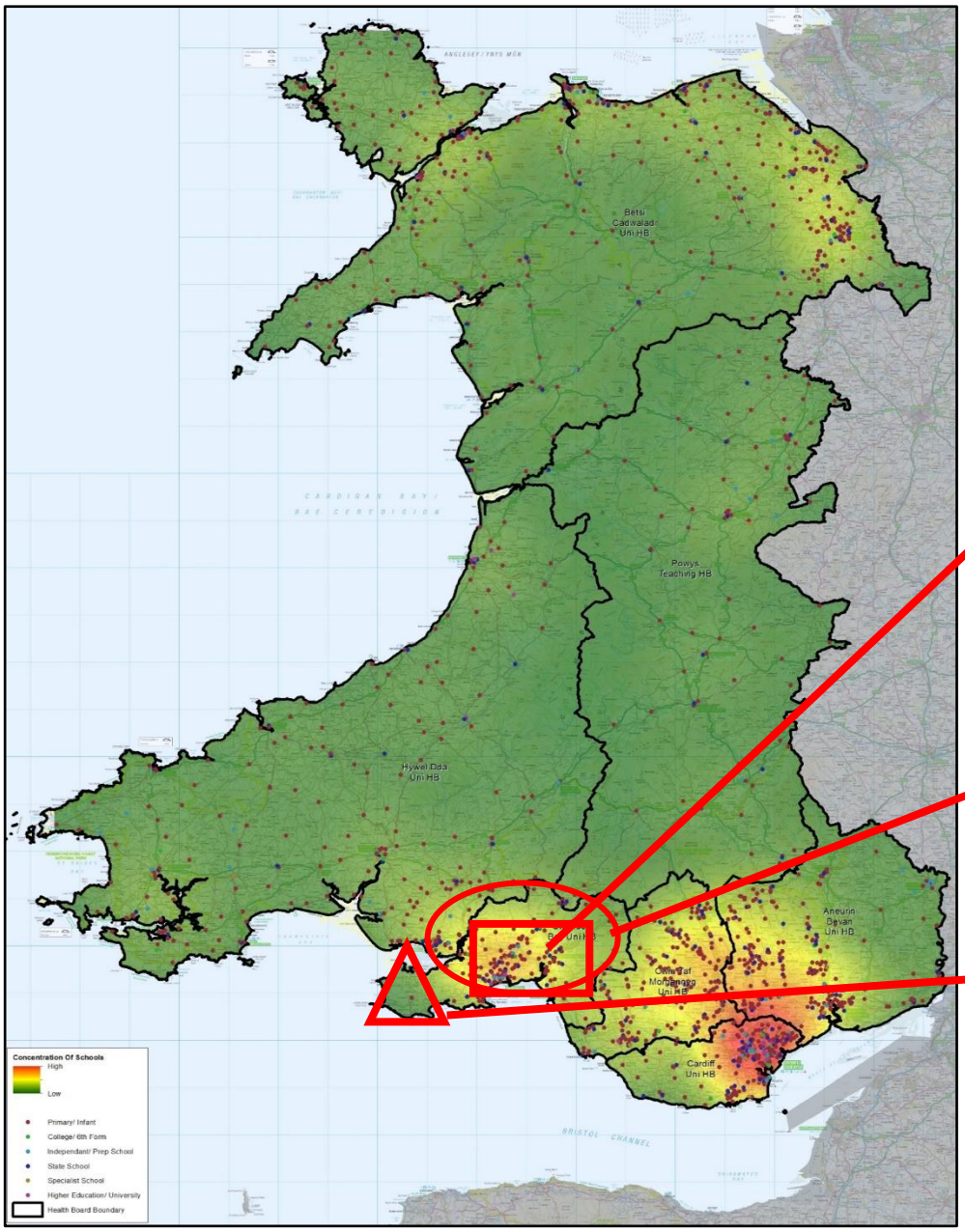
The primary control measures for Covid-19 remain social distancing 2m, handwashing, respiratory etiquette and cleaning. Secondary control measures are introduced to mitigate occasions where the primary control measures cannot be achieved e.g. environmental screening, Personal Protective Equipment [PPE] and face coverings. The approach to date has been to focus on education for compliance using enforcement as a last resort. This has been largely successful reducing the incidence of and deaths from Covid-19 and the associated impact on the NHS.

As lockdown is eased and people begin to meet more frequently, some are less compliant with the control measures. For example, in Leicester it was the social mixing of younger people that drove the increased incidence that resulted in the reestablishment of lockdown. There have been similar examples locally with beach parties, illegal use of gyms and poor control measures in some pubs.

Going forward we need to be prepared for changes in guidance, including the primary control measures and the impact of reducing these successful measures. An assessment of the risk posed by businesses opening, should inform the monitoring of compliance and the work undertaken by the Military to identify high risk transmission areas should inform this. This includes:

- Factories – TATA Steel within Swansea Bay
- Educational settings including universities
- Industrial /Factory Settings (not food production)
- Caravan Parks, Holiday Parks and campsites
- Care Homes – across the region

The map below shows three high risk transmission areas/sectors within the Swansea Bay region, all will need to be actively monitored to quickly highlight and mitigate disease spread:



Swansea area of SBUHB due to density of all school settings - has 3rd highest number of pupils.

High concentration of factories e.g. TATA Steel

Tourist area/caravan parks

It should be noted that some of these premises are adjoining the border of Swansea Bay and many residents will have employment in these establishments. In addition there should be focused enforcement led by surveillance and intelligence, including from social media.

Proactive work in these areas is ongoing, including:

- Contact and advice to all businesses prioritising high risk and larger employers
- Development of guidance and support to further education, schools and pre-school settings, including information and processes for cluster, incident and outbreak control
- Support and guidance for “Covid secure” universities including quarantine of overseas students, accommodation, campus controls, vaccination of students and advice to students.

- Collaborative arrangements to support the more vulnerable groups including the voluntary sector, community networks and partnerships

8. Communication

Communication has been an important thread in each of the areas identified to date, with clear actions already identified. There has been a consistent message around the primary and secondary control measures, however, this is likely to become more confused as households can join together and people return to work and a new normal for the country, until a vaccine is developed or Covid-19 is eliminated. There is already confusion over the different approaches taken by the Devolved Administrations, there is message, lockdown and PPE fatigue and the associated impact on individuals from fear to ambivalence.

In order to address these issues, some of which are outside the control of region, communication plans need to strive for:

- Clarity of messages
- Focussed messaging to areas of greatest risk
- Communication of clusters areas
- Increased knowledge, confidence and compliance
- Understanding and confidence of Multi-Agency partners

The Swansea Bay Communication plan is regularly reviewed and update to respond to local and national changes as well as evaluation of local reach and read. The plan references links to the TTP Communications sub-group, the Strategic Coordinating Group Communications Cell and the Welsh Government communications Group leading the response.

9. Review and monitoring

This plan will require regular review to determine the success of its implementation and to evaluate the expected outcomes. The attached action plan (Appendix 1) will form the basis of a “performance report” to be appraised weekly by the Multi-Agency Silver Cell. Particular attention will be given to the surveillance report, including triggers and intelligence, which will be monitored bi- weekly by the Regional Response Team TTP (Bronze) and weekly by the TTP Silver. Onward reporting to the Gold Cell structures will also be established, as well as feedback on Plan delivery progress to Welsh Government.

Governance process for monitoring and review:

Regional Governance	Role	Communication
Strategic Coordinating Group	Assess multi-agency response needed in Local	Welsh Government (ECCW)

	Resilience Fora area	
Multi Agency Gold	Implement measures for escalation or de-escalation	Multi Agency Chiefs and Leaders
Multi Agency Test, Trace and Protect Silver	Weekly review of Surveillance reports, Strategic Dashboard and local intelligence and Action Plan progress	Multi Agency Community Silver Multi Agency Chiefs and Leaders
Multi Agency Regional Response Team (Bronze)	Review Public Health Wales Bi-Weekly Surveillance reports	Multi Agency Test, Trace and Protect Silver

In addition to the formal governance structure the following reviews are undertaken:

Sub-Regional Governance	**Role**	**Communication**
Cluster, Incident and Outbreak Control Core Team(s)	Assess need for escalation	Multi Agency Gold Chair, Local Resilience Fora Coordinator, Welsh Government Executive Public Health Wales
Regional Consultant in	Report and review cases, clusters,	Welsh Government Intelligence Cell

Health Protection	incidents and outbreaks bi-weekly	Report clusters, incidents and outbreaks to CMO Office

A mechanism to exercise and stress test this plan is being developed and learning from this and the implementation of other measures describes, will feedback into the governance system and be shared with partners as appropriate through national networks and governance structures.

10. Conclusion

A multi-agency response is required at a regional level on a range of actions. This needs to be supported at a national level by Welsh Government, Public Health Wales and NWIS. The Action Plan in ***Appendix 1*** sets out the actions needed in each of the six areas identified, highlighting both national and regional contributions.

11. Recommendations

This plan is considered at Regional and Local level with a view to approving, implementing and prioritising action to prevent, control, respond to and eliminate Covid-19 from Swansea Bay area.

The plan is a "live" document are will be reviewed and updated in light of new guidance, changes in prevalence and new evidence.