## 1. Welsh Government Response to current COVID-19 epidemic

## **Background**

Welsh Government actions to manage and mitigate the risks arising from COVID19 are aligned with the approaches of the 3 other national Governments across the UK. They are kept under constant review.

A determined effort has been made by Devolved Administrations and UK Government to use the best scientific evidence and information available to inform policy decisions.

A great deal of work has been undertaken by the Scientific Advisory Group for Emergencies (SAGE) to help inform policy decisions. Welsh Government are an active part of this process.

The over-arching objectives for managing and mitigating the impact of the current epidemic has been to reduce direct (or indirect) harm and ensure that the NHS remains able to cope with demand.

#### **Behavioural and Social Interventions**

On Monday 16<sup>th</sup> March a series of interventions, based on SAGE advice were rolledout. These measures implement the next stages of the plan to delay and flatten the peak and protect those at greater risk of serious illness. The measures come with a number of significant economic and social impacts, but clinical advice is that these should be rolled out now. These interventions sit alongside the current advice to selfisolate for seven days if you become symptomatic (persistent cough and/or fever) and live alone.

The new interventions include:

1. **Household stay at home**: when any member of a household is symptomatic, the other members of the whole household should stay at home for 14 days.

#### 2. Social distancing:

- A. Advice to the whole population: to reduce social contact where they can through 'soft' social distancing e.g. encouraging home working, advising against social mixing, not going into crowded areas when unnecessary.
- B. Advice to specific groups: for those groups in a more vulnerable category the advice is to follow this social distancing guidance more rigorously:
  - i) 70+ (regardless of medical conditions);
  - ii) under 70 with defined long-term medical conditions;

- iii) pregnant women.
- 3. **Shielding the most vulnerable**: Within the next week, we will move to shield the most vulnerable. Individuals in this category will be contacted.
- 4. **Large gatherings**: in light of the above measures, advice that large gatherings should not go ahead, and that public and emergency service cover would not be provided to any large events. This is advice rather than a ban and is consistent with the decision announced by the Health Minister on Friday 13 March.
- 5. **Schools** are not yet subject to control measures, however this policy is under active review by the scientific advisory groups.

#### 1. Household stay at home

If someone has symptoms of COVID-19, however mild, they should stay home for 7 days from when symptoms started. All other household members must stay at home for 14 days.

The 14 day period starts from the day when the first person in the house became ill. If anyone else in the household shows symptoms, they stay in the house for 7 days from when first showing symptoms.

Individuals who have recovered may leave the house after 7 days if they are better.

Vulnerable individuals (such as the elderly and those with underlying health conditions) should be kept as separate as possible for the duration of the household stay at home period.

If any members of the household show symptoms once the household is out of the "stay at home" period, the household will need to stay at home for 14 days again.

It is likely that people living within a household will infect each other or be infected already.

The objective of household isolation is to prevent these people from transmitting in the community. This policy is modelled to delay the peak by 2-3 weeks and reduction in peak incidence of maybe 25% (uncertainty range at least 20-30%).

# 2A. Social Distancing for all

Everyone should now start to reduce their non-essential social contact.

Who this applies to: We are asking everyone to change their daily routines and social and leisure activities.

Social distancing is being advised to reduce the spread of the disease and support the NHS.

It is modelled to have a substantial reduction in peak of up to c.50–60% and reduce cases and deaths by around 20-25%. Each social distancing measure has social and economic impacts.

People should do activities that promote health and wellbeing but avoid contact with others as much as possible. We will provide guidance on how people can look after their mental health and wellbeing.

Measure Effect on transmission	Measure Effect on transmission
Advising against social mixing in the community (e.g. at the cinema, theatre pubs, restaurants,	High. Modelling indicates that gatherings of groups of 10 or more people are responsible for
clubs)	10-20% of contacts
Advising against receiving friends and family in	High. Would reduce the opportunities for close,
the house	sustained contact and therefore transmission
Remote access to NHS and other essential	Unlikely to be a high percentage of people's
services Unknown.	interpersonal contact. But could protect the
	vulnerable
Advising varying of daily commute - less public	Low. Would only apply to those who take public
transport	transport and have options. Evidence suggests
	that public transport has a minimal role in
	transmission.

## 2B. Social distancing for vulnerable groups

For those who are vulnerable because of their age, a pre-existing health condition, or are pregnant, it is especially important they take action to reduce the chance of getting coronavirus. We would strongly advise these people to follow the social distancing measures that have been advised for the whole population to reduce their risk.

The intervention applies to specific groups who will be advised to adhere to the social distancing guidance rigidly. These people may be at increased risk of serious COVID-19 disease. As such, the individual, friends, family, and carers should take steps to minimise exposure to others, and risk of infection.

#### These groups are:

- i) 70+ (regardless of medical conditions)
- ii) Under 70 with long-term medical conditions but not in the high-risk category
- iii) Pregnant women

The same measures will apply as to the general population, but these individuals will be strongly encouraged to comply to reduce their own risk. This intervention negligible impact on delay to peak, but a peak reduction of 25%-35% in deaths and

demand for hospital beds and critical care beds. Overall, this could lead to a 15-35% reduction of cases and deaths.

Group/Action	Wash hands more often	Household isolation for 14 days if one member of your family or household has a new continuous cough or high temperature	Self -isolation for 7 days if you live alone and you have a new continuous cough or high temperature	Social mixing in the community, eg cinema, theatre pubs, restaurants, clubs, weddings, funerals OR religious services	Having friends and family to the house	Use remote access to NHS and essential services eq via telephone or internet	Vary daily commute and use less public transport	Home working
0 – 69	Yes	Yes	Yes	Advised against	Advised against	Advised	Advised	Advised
70+	Yes	Yes	Yes	Strongly advised against	Strongly advised against	Strongly advised	Strongly advised	Strongly advised
Any age Member of a vulnerable group with an underlying health condition (ie anyone instructed to get a flu jab each year)	Yes	Yes	Yes	Strongly advised against	Strongly advised against	Strongly advised	Strongly advised	Strongly advised
Pregnant women	Yes	Yes	Yes	Strongly advised against	Strongly advised against	Strongly advised	Strongly advised	Strongly advised

## 3. Shielding the most vulnerable

Those individuals who are most vulnerable are strongly advised to follow the social distancing guidance from now. Later this week they will be contacted by the NHS with more detail about the steps they should take.

Who this advice applies to:

The aim of this intervention is to prevent infection in the most vulnerable and at greatest risk of serious COVID-19 disease. They are principally those who carry immediate heightened infection risks:

- i) immune deficiency disease;
- ii) people receiving immunosuppressant medication and some cancers;
- iii) those with organ disease which prevents or limits an adequate infection response.

The public health advice will be strict: to self-isolate at home and minimise all contacts for 13-16 weeks. This means no shopping, leisure or travel and food or medication deliveries to be left at the door. Where care worker support is essential, people should follow PHE guidance.

These individuals will be contacted proactively by personal letter from the NHS (central NHS or GP practice or specialist) with advice on what they should do and why, as well as a document to share with their employer if needed.

This intervention may have a 15-35% reduction in deaths and cases.

#### 4. Mass Gatherings

In light of the 'social distancing' measures large gatherings should not take place in order to alleviate pressure on public services

Whilst not an outright ban on large gatherings, our advice is that such gatherings should not take place.

Whilst there is limited clinical evidence to suggest banning large gatherings prevents transmission of the virus, advising against gatherings aligns with the Government's approach on social distancing and maintains public confidence in the Government's overall interventions.

Although event organisers should make decisions on a case-by-case basis, we would expect the advice on emergency services provision to impact organisers of events such as large music events and festivals, major sporting fixtures and large cultural events.

Organisers of events that do not usually require public and emergency services support should make decisions about how to proceed on the basis of the government's wider social distancing measures. This intervention will have negligible impacts on health, but will reduce pressure on front line services.

#### 5. Schools

Scientific evidence suggests that schools and children play an important role in flu outbreaks as well as the transmission of other communicable diseases.

Modelling suggests closing schools for COVID-19 would result in a no more than three weeks delay to peak and possibly much less 10%-20% reduction in peak hospital demand with closures of 8-13 weeks (if children have similar role in transmission as in pan flu) with a modest (<5%) reduction in cases and deaths.

Emerging evidence suggests that children often experience milder symptoms of COVID-19 infection compared with other age groups, particularly older people. Older family members often care for children during school holidays. If schools are closed for significant periods this may increase exposure of more vulnerable adults, who may then require hospital care. A significant number of children also receive free school meals and there is a concern that by closing schools for long periods will have negative impacts on these children. Lastly, a proportion of front line staff (nurses, care workers) will have children of school age, closing schools is likely to have a detrimental impact on staffing levels for health and care service providers.

Further modelling analysis is being undertaken to consider each of the points above and will report-back to decision makers in the coming days.

# 2. COVID-19: Scientific and Technical Advice to Welsh Government

## **Background**

A pneumonia of unknown cause detected in Wuhan, China was first reported to the World Health Organisation (WHO) Country Office in China on 31 December 2019. The outbreak was declared a Public Health Emergency of International Concern on 30 January 2020. On 11 February 2020, WHO announced a name for the new coronavirus disease: COVID-19.

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans.

Coronaviruses are zoonotic, meaning they are transmitted between animals and people. Detailed investigations found that SARS-CoV was transmitted from civet cats to humans and MERS-CoV from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans.

Common signs of infection include respiratory symptoms, fever, cough, shortness of breath and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, kidney failure and even death.

Standard recommendations to prevent infection spread include regular hand washing, covering mouth and nose when coughing and sneezing, thoroughly cooking meat and eggs. Avoid close contact with anyone showing symptoms of respiratory illness such as coughing and sneezing.

The 2019–20 coronavirus outbreak was confirmed to have spread to the United Kingdom (UK) on 31 January 2020 from China, when the first two cases with the respiratory disease COVID-19, caused by the new coronavirus SARS-CoV-2 were confirmed in Newcastle upon Tyne in two people who were members of a family of Chinese nationals staying in a hotel in York. The first case of coronavirus in Wales was confirmed on 2 March 2020. The patient, believed to be from the Swansea area, recently returned from northern Italy, where the virus was contracted.

On the 11 February, the Welsh Government Chief Scientific Adviser for Health began joining biweekly Scientific Advisory Group Meetings for Emergencies (SAGE) meetings and briefing CMO and the Health Protection Team in the Health and Socials Services Group. On 27 February, the Welsh Government established a Technical Advisory Cell (TAC), which is chaired by the Chief Scientific Adviser for Health. The

TAC provides scientific and technical information interpreted for Wales in adherence to advice provided by the <u>UK Scientific Advisory Group for Emergencies (SAGE)</u> for COVID-19. Membership include experts from Welsh Government and Public Health Wales (PHW).

## **Purpose of Technical Advisory Cell**

The Technical Advisory Cell sits within the Emergency operating function of Welsh Government, providing evidence-based, technical advice for policy makers. The priorities of the Cell align with the wider priorities of SAGE.

The Cell provides advice to the Chief Medical Officer, senior officials and Ministers based on the interpretation of those data, models and the latest scientific advice. It is not a decision-making group.

Further information will shortly be made available to the public on the work of SAGE for COVID-19.

#### Action to date

SAGE has sought to model the dynamics of the epidemic in the UK. Initially a "Pan Flu" assumption was made to support planning, due to extant procedures in dealing with mass outbreaks. A Reasonable Worst Case (RWC) Scenario was developed and this was refined as further information was gathered e.g. infectivity, doubling time, period of illness, vulnerable groups. A Most Likely Case was also considered; which as more information became available also mapped to the RWC.

Outputs of the epidemiological models developed by Imperial College London, that have been used to strategically plan for the RWC, have been used by Wales. The same calculations have been made to project impacts and track the progress of the epidemic in Wales. The RWC calculations have been shared with NHS Planners and Local Resilience Forums for planning purposes.

Analysis of control measures was undertaken to ensure that the optimum interventions were deployed so that the spread of the virus and the demand on NHS Services does not outstrip NHS capacity. The current control measures were predicted to have the maximum impact when aligned with the RWC e.g. lower the peak demand by 66%.

SAGE and TAC continue to model and track the outbreak and advise on actions to be taken in order to minimise harm and protect vital NHS functions.