

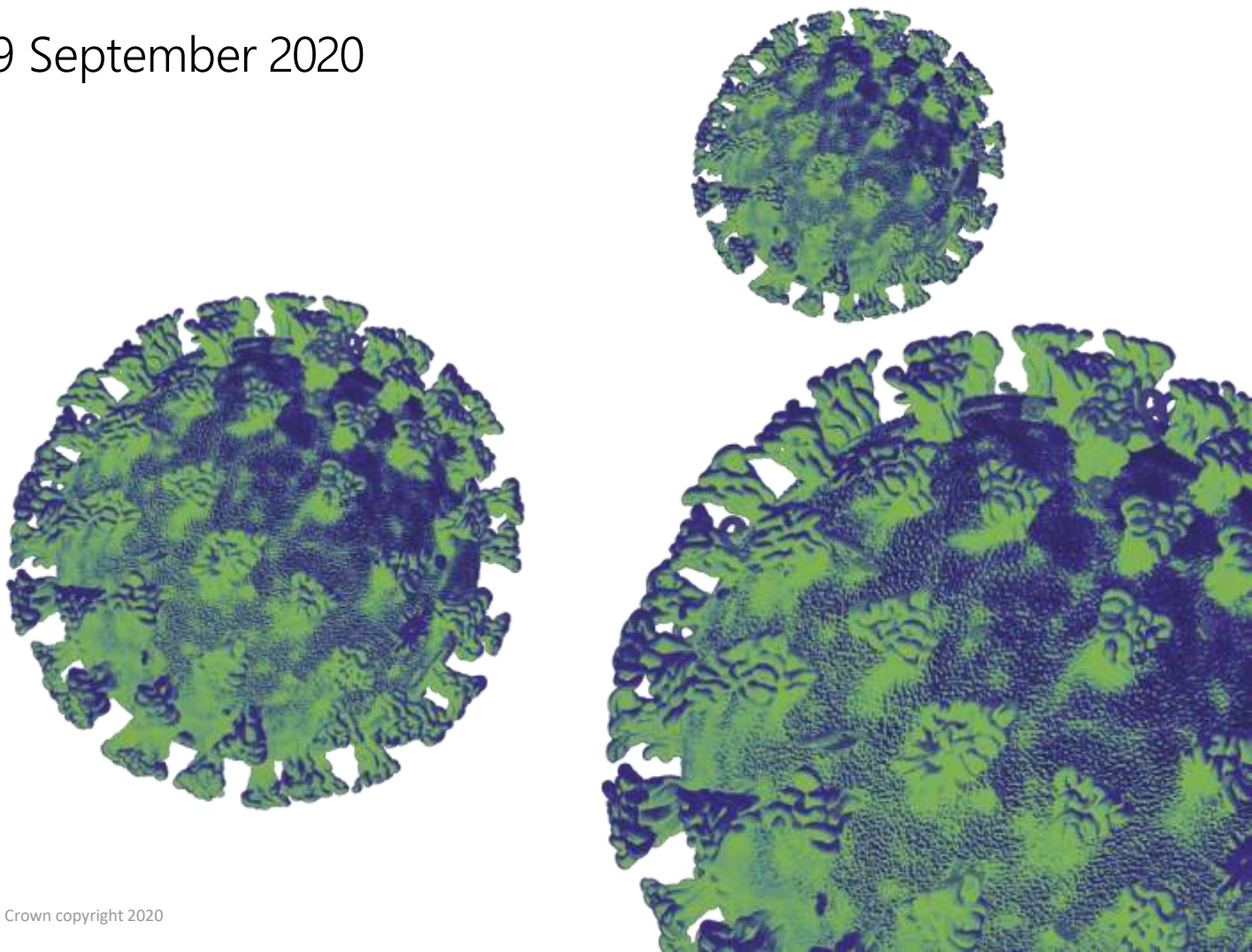


Llywodraeth Cymru  
Welsh Government

# Technical Advisory Group

## New Reasonable Worst Case Scenario for the Winter

09 September 2020



## **Technical Advisory Group - New Reasonable Worst Case Scenario for the Winter**

### **What is a reasonable worst case scenario?**

- A 'Reasonable Worst Case' (RWC) scenario is a way of considering the most challenging outcomes that could reasonably occur as a result of COVID-19 in Wales. It is not a forecast or a prediction of what is most likely to happen, but provides important information to help the government prepare and respond in a range of different scenarios.

*'The Reasonable Worst Case is not what will happen, it is what could happen'*

- A RWC scenario for Wales has been developed to help people in Wales and public bodies prepare for COVID-19 over the coming Winter. For example how many healthcare workers might be required to staff ICU beds, or how many COVID-19 tests might be required for social care workers.

### **How has the Reasonable Worst Case Scenario been developed in Wales?**

- A number of RWC scenarios (or 'models') for winter 2020/21 have been considered by the Technical Advisory Group of the Welsh Government numerous other models relevant to Wales.
- Four main model scenarios were chosen for consideration from a variety of sources.

### **Which scenario has been chosen and why?**

- The Swansea University RWC has been agreed to be used by Welsh Ministers. The Swansea University model was adopted for a number of reasons including:
- The projected peak is similar to the previous peak seen in Wales and could therefore reasonably be expected to be seen in a RWC scenario.
- This model uses Welsh viral genomic data to accurately consider the number of unique introductions of the virus into Wales.
- The model allows estimates of reaction times to be included in assumptions (e.g. timing between national decisions and implementation of interventions. As the

RWC aims to represent the most challenging scenario, we need to consider that the signal and appropriate public health responses may not be clear, responses may be delayed and how the public respond to COVID-19 control measures may be unpredictable.

- The Swansea model considers some of the specifics of why Wales is different to other parts of the UK such as having a slightly older population on average, and having more people living in rural areas.

### **What does the model tell us?**

- The following table shows the number of infections, hospital admissions, maximum total (and ICU) bed occupancy required, and deaths estimated to occur due to COVID-19 for the RWC models for Wales between 1st July 2020 and 31st March 2021.
- It is important to reinforce that this is a deliberately pessimistic scenario in terms of challenging public services; it is not what we think will happen. Public services, employers, communities and the public in Wales are continuing to work together to prevent spread of the virus and prevent hospital admissions and deaths while recognising that COVID-19 control measures can also cause harm.

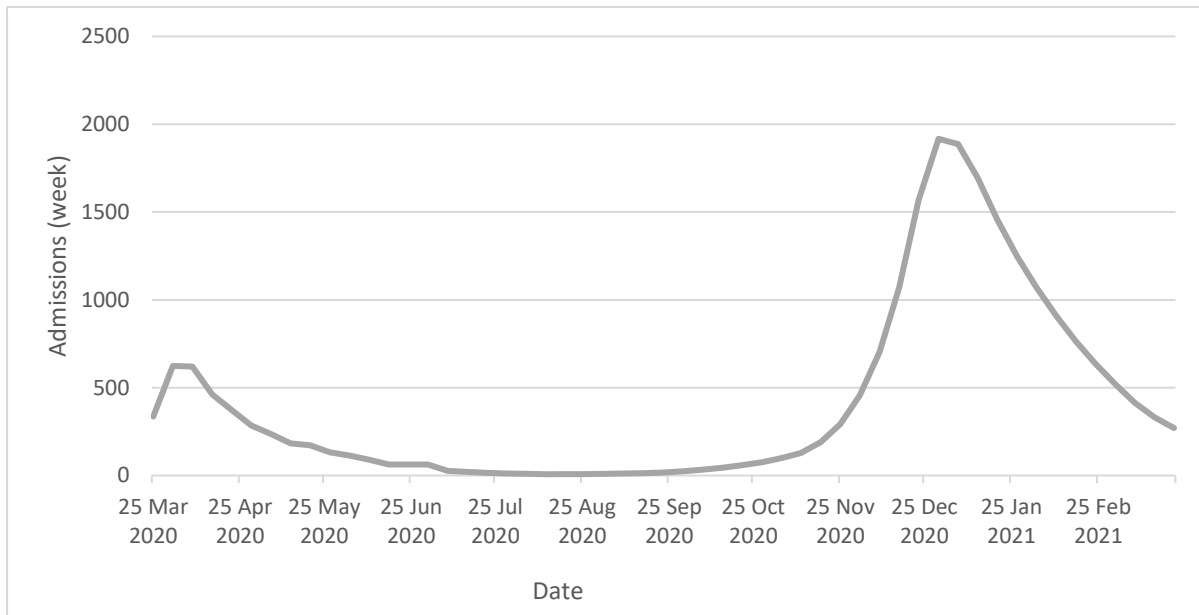
## Headline figures for RWC:

	Infections	Hospital admissions <sup>1</sup>	Deaths <sup>2</sup>	Max total bed occupancy <sup>3</sup>	Max ICU bed occupancy <sup>6</sup>
<b>Model 3: Swansea University RWC</b>	636,000	18,200	6,300	1,300	190

### Number of covid-19 hospital admissions per week

- As shown in the following graph, the Swansea model shows the next peak to occur between December 2020 and January 2021. This graph shows hospital admissions but other outcomes will show a similar shaped curve.

*Confirmed COVID-19 Admissions (per week)*



### What will also be considered when we apply the scenario?

- Based on the emerging evidence alongside local and national discussions, the following points have been agreed and included in the model:
  - There is likely to be an increasing number of younger people with COVID-19, due to their different behaviours and activities. Younger people are more likely to have mild symptoms or no symptoms and therefore may be less likely to be tested. This may lead to an increase in cases in other groups of people.

<sup>1</sup> Hospital admissions refers to confirmed COVID-19 patients admitted to hospital for COVID-19.

<sup>2</sup> ONS deaths.

<sup>3</sup> Bed occupancy (including ICU bed occupancy) refers to beds occupied by confirmed COVID-19 patients.

- A higher proportion of infections may be in harder to reach groups, such as people from Black, Asian and Minority Ethnic (BAME) communities.
- At first, there will be a slow increase in the number of new cases, but the number of infections will increase more quickly over time. However, the change in infection numbers is not expected to be as high, thanks to the steps taken to reduce infection risk, natural caution amongst the population, and increased testing.
- As we move into Winter, infected people may be more likely to assume their symptoms are caused by another illness, such as the flu. This means they may be less likely to report symptoms and there may be diagnostic uncertainty and additional pressures on the health system.

### **What's next?**

- We are looking at additional scenarios within the Swansea model which include increased length of stay in hospital and intensive care, which would produce a higher level of peak occupancy.
- We are producing results at more local levels, whilst acknowledging that the virus will not follow the same path across different localities.
- We are looking at additional scenarios with different policy responses to potential increases in the number of COVID-19 cases.
- We are discussing potential additional scenarios such as an Autumn peak, best case scenarios, and the most likely scenario.
- Planning for Winter is underway and this information can be used to help inform this further. As new evidence or data emerges, the modelling can be updated.
- We are continually refreshing our model assumptions and looking at medium term forecasts, including considering the increase in cases that has been observed in the first two weeks of September 2020.