

FROM THE MINISTER OF HEALTH



Castle Buildings
Stormont Estate
BELFAST, BT4 3SQ
Tel: **I&S**
Email: private.office@health-ni.gov.uk

Date: 1 April 2020

FROM: ROBIN SWANN, MINISTER OF HEALTH
DATE: 1 April 2020
TO: FIRST MINISTER / DEPUTY FIRST MINISTER

COVID-19 MODELLING

Introduction

1. As I have previously signalled, to better inform our response to the Covid-19 spread my Department has been working on producing modelling, via a group chaired by the Chief Scientific Advisor.
2. The modelling group has considered three scenarios, a best case scenario, a worst case scenario and a reasonable worst case scenario. I would emphasise that this modelling work is particularly sensitive to assumptions based on emerging data, and thus will change and evolve as we move forward. To properly track that, it will be updated and refined, at least on a weekly basis, as more data becomes available and those modelling assumptions are amended. **It is important to emphasise that these scenarios are not predictions or forecasts, rather models of potential scenarios for planning purposes.**

Modelling Results

3. A detailed briefing note is attached separately. This sets out the process for producing the modelling results and the judgements of the modelling group for each scenario. The key one to highlight is the reasonable worst case scenario, which the modelling group considers, on the balance of probabilities, represents an upper limit for patient flows in wave one for critical care requirements and deaths. In summary, that key scenario suggests that at the peak during wave one, which is likely to occur 6-20 April 2020, we can anticipate the following:

Description	Best Judgement
Peak number of Covid-19 patients requiring ventilation and critical care beds during the first wave of the epidemic	180
Peak number of Covid-19 patients requiring oxygen in the first wave of the epidemic	400
Peak number of Covid-19 hospital admissions during the first wave of the epidemic (per week)	500
Number of cumulative Covid-19 deaths in the first 20 weeks of the epidemic.	3,000

4. The best case and worst case scenarios are included in the briefing note for completeness, and to provide lower and upper bound possible outcomes.
5. The modelling does not go beyond the first wave of the epidemic, as its path will depend heavily on future social distancing measures and the extent to which these are adhered to. Future modelling will consider these issues.

Surge Planning

6. The modelling feeds directly into the ongoing development of the Covid-19 surge plan for critical care, which the Department is currently finalising and will publish shortly.

Confidentiality

7. While I feel it is important to share the full briefing paper with Executive colleagues, I do not intend to publish it, but rather will only be publishing the reasonable worst case scenario. I feel this is essential, as putting the best case scenario into the public domain risks the unintended consequence of creating a false sense of security as regards the impact of the spread. This, in turn, may lead to reduced adherence to the important measures we have put in place to counter that. I trust colleagues will understand my position, and will respect the importance of that.

Conclusion

8. I hope the attached modelling is useful and I will ensure that the Executive is updated as further iterations of the modelling briefing note become available.
9. I am copying this memo to Executive colleagues.

Personal Data

**Robin Swann, MLA
Minister of Health**