

## COVID-19 Strategic Intelligence Group

2.00 pm on 8 June 2020 by Zoom Video Conference

### Present:

Professor Ian Young	Chief Scientific Officer, DOH
Dr Michael McBride	Chief Medical Officer, DOH
Dr Naresh Chada	DCMO, DOH
Professor Frank Kee	Centre for Public Health, QUB
Professor Hugo Van Woerden	Director of Public Health, PHA
Professor Diarmuid O'Donovan	Centre for Public Health, QUB
Dr Declan Bradley	Consultant Public Health Medicine, PHA
Professor Stuart Elborn	Faculty Pro-Vice-Chancellor, School of Medicine, Dentistry and Biomedical Sciences. QUB
Dr. Eugene Mooney	Senior Statistician, DOH
Professor Fiona Alderdice	Nuffield Department of Population Health, University of Oxford
Dr. Michael Quinn	Head of Clinical Information, HSCB
Tricia Lavery	DOH (Secretariat)

### Apologies

Professor Cathy Gormley-Heenan	Pro-Vice-Chancellor (Research and Impact), Ulster University
Dr Jenny Mack	Public Health Registrar ST4, DoH
Dr. Liz Mitchell	Chair of Contact Tracing Service Steering Group, DoH
Dr Lourda Geoghegan	DCMO, DOH

## Welcome

1. Prof Young welcomed all participants to the meeting and also welcomed Dr. Michael Quinn, who now replaces Dan West on the group. Prof. Young confirmed that all were content with the note of the last meeting.

## Status Update

2. Prof Young provided a situational update to the group.
  - 2.1. In terms of the course of the epidemic, the value of R last week was 0.7-0.9 and a value of R for this week, which will be determined tomorrow by the modelling group, is expected to show a further decrease.
  - 2.2. The introduction of the Test, Trace, Protect Service and the effective impact of same would be one possible explanation for this anticipated decrease. A second contributory factor could be the very good weather of a few weeks ago and there could be other factors. However, the reduction in R is reassuring. It is important to note that R is not the only number that counts. As the overall activity of the epidemic becomes less then there is greater uncertainty around R and other metrics of the activity of the epidemic become increasingly important.
  - 2.3. The overall number of newly-diagnosed cases per day had now been down in single figures on a number of days, falling to as low as 3, despite relatively high volumes of testing. The number of hospital admissions of community-acquired cases of COVID has now been consistently in single figures for over a week and on several days there have also been zero deaths. Whilst the number of ICU beds occupied by COVID patients is in single figures, it remains between 6 and 10 and relatively stable.
  - 2.4. The total number of hospital in-patients with confirmed COVID at present, in terms of community-acquired COVID, is around 50 to 60. In terms of nosocomial cases in hospital the figure is approximately 20% of that number. Feedback suggests that the message around all people with symptoms getting tested needs reinforced for both primary care settings and the general public.
  - 2.5. Looking at the current state of transmission of the epidemic these latest figures are quite reassuring and provides the Executive with some discretion to consider potential further relaxations of the current regulations.
  - 2.6. Looking at the latest modelling from the NI modelling group, the estimate of new community-acquired cases per day is running at 40 per day, giving a prevalence in the community of around 300 cases. This equates to between 1 in 5000 to 1 in 10,000 people in the community being currently infected.

- 2.7. Continuing last week's discussion around a Reasonable Worst Case (RWC) Scenario for Northern Ireland, a new model carried out by our modelling group was discussed, showing the impact of scenarios of R being allowed to rise to 1.2 and 1.5 from 8 June 2020 which incorporates the capping of ICU COVID occupancy at 200.
- 2.8. There is a high degree of confidence that an ICU occupancy rise to 20 can be detected by our monitoring and R estimated relatively quickly. The model shows that if R is allowed to stay at 1.5 until August followed by an immediate full lockdown for 4 weeks, then allowed to rise again before a further 4 weeks of full lockdown in October, this would enable the ICU occupancy to be capped at 200. If R is maintained at or below 1.2, ICU occupancy would peak at approximately 150. The difference in the two models is about the slope of the curve, with a broader and lower peak with R at 1.2 as opposed to a much steeper, higher one with R at 1.5.
- 2.9. This modelling is purely illustrative of the steps needed to maintain capacity of the system with a higher degree of social interaction. Allowing R to rise to 1.5 would also incur more deaths than allowing R to rise to 1.2. Any decision around any of the RWC scenarios remain a policy decision for the Executive.

### **Non-pharmaceutical interventions modelling (Paper 2)**

3. Prof Young presented the paper, which was carried forward from the previous meeting on 4 June and which was published relatively recently.
- 3.1. Prof. Young advised that the latest modelling from SPI-M will be released tomorrow and this will allow comparisons with our own modelling however there is clearly a lower incidence of COVID-19 in NI than in England
- 3.2. There being no further comments, the paper was noted.

### **Long term residential healthcare settings (Paper 3)**

4. Prof Young presented the paper which is a review of the Republic of Ireland (ROI) management of the position in care homes. As the paper is currently believed to not be in the public domain, it is to be treated as confidential at this time.
- 4.1. Across ROI there have been a substantial number of deaths in care homes, and the paper outlines some of the analysis of what happened. It makes the point that despite best efforts and adherence to good practice very quickly when recommendations were made, they still had a major problem.
- 4.2. In NI we have taken suitable measures around our own care homes and the

situation is much improved in that sector.

4.3. There was discussion around whether or not frequent testing and re-testing across the care home sector would be beneficial. ROI have introduced a 4 week trial of weekly testing of all health and care staff in care homes, a total of 50,000 staff. This weekly testing should identify asymptomatic individuals and may be of help, along with a wider package of measures, in reducing the introduction of infection into care homes. The NI testing across the care home sector should indicate the prevalence of the virus across both residents and staff of our care homes.

4.4. Prof. Young stated there is a need to think ahead to a potential autumn/winter resurgence of a community epidemic and to consider how we could prevent the problems encountered in the first wave. Frequent testing could be key to this. This is probably something to be kept on the agenda for this group and to work towards preparations for an autumn/winter outbreak.

**In Summary, this topic will be kept under review and revisited by the group again and given consideration in relation to any potential impacts on the testing strategy along with infection prevention and control**

### South Korea Daegu response (Paper 4)

5. Prof Young presented the paper, which was noted.

### Super-spreading (Paper 5)

6. Prof Young presented the paper which looks at transmission clusters and super-spreading events. The paper mentions the parameter,  $K$ , an indicator of overdispersion.

6.1.  $K$ , is potentially an important parameter and highlights the fact that as we move into this stage of the epidemic the big risk is probably less to do with community transmission, which is low, and more to do with outbreaks linked to individuals who, for whatever reason, have a high propensity to transmit.

6.2. The paper discusses the concept of reverse tracing, which involves trying to identify who a newly confirmed positive case was infected by. It could therefore identify a common source when a cluster would emerge. Reverse tracing would be easier to carry out when there are only small numbers of cases. **It was agreed to bring the paper to the Contact Tracing Steering Group for discussion.**

6.3. It may be advisable to consider issuing some specific advice to groupings in certain settings. For example with church choirs where people are singing in

a cold church and therefore generating aerosols in a cold air setting with reduced humidity, which is an environment that seems to facilitate spread of the virus.

- 6.4. The notion of a super-spreader is thought to be both a biological and behavioural issue and possibly better described as an event rather than an individual.
- 6.5. The concept of super-spreading will be kept under review by this group.

## Viral dynamics of infection (Paper 6)

7. Prof Young presented the paper, which is the most recent view by NERVTAG of viral dynamics, and which the group have looked at relatively frequently.
  - 7.1. The paper appears to provide the evidence base for potentially extending the isolation period of symptomatic individuals from 7 days to 10 days. Given the relatively low level of transmission in NI currently, combined with pushing the message for everyone with symptoms to get a test, it may be something to now consider.
  - 7.2. **This will be raised at the UK CMO call later today for consideration,** although there would be implications for other jurisdictions and it would be preferable for all to move together to prevent the complexity of communicating separate messages across the UK nations.
  - 7.3. The issue of viral dynamics and extension of the self-isolation period will be kept under review by this group.

## Ethnicity (Paper 7)

8. Prof Young presented the paper, which was discussed at SAGE.
  - 8.1. The paper considers whether or not the increased risk of contracting COVID amongst BAME individuals is likely to be due to wider factors including socioeconomic deprivation, involvement in high contact/risk occupations, geography, household size and comorbidities.
  - 8.2. Whilst the ethnicity issue has received quite a lot of coverage in the professional press recently, this relates mainly to England. The proportion of BAME individuals in the NI population as a whole is relatively small although higher among health and social care workers, but for the individuals themselves it remains a significant issue.
  - 8.3. There is not currently any specific HR or OHS guidance within the department around this issue, **and it was agreed to raise this with the Workforce Gold**

## Cell for consideration of further action.

### Transmission and mitigating measures (Paper 8)

9. Prof Young presented the paper, which looks at transmission and the recurrent question of social distancing.
  - 9.1. The paper supports maintaining 2m where possible, but also highlights a number of potential mitigations that could be used in situations where a 2m distance cannot be maintained. There is a challenge around “can’t maintain” versus “don’t want to maintain” the 2m distance and the introduction of economic priorities into the balance, which clearly need to be considered.
  - 9.2. There is increasing pressure to move away from 2 m distance to 1.5m or 1m, and it is recognised that there will come a point when it is necessary to balance economic benefit versus transmission risk in relation to the epidemic. The possible mitigations outlined in the paper are useful and could help with formulating advice on making specific activities safer where distancing of 2m is not possible.
  - 9.3. **It was agreed to ask the NI modelling group or SPI-M whether it would be possible to do some modelling around the impact of an unmitigated reduction of 2m to 1m distance, and then to also consider the impact of the same reduction in conjunction with some of these mitigations.** It would be expected that the mitigations ought to produce something between the effect of unmitigated 1m and 2m distance, thus offsetting the impact of the reduction to 1m.
  - 9.4. It would be preferable however, to introduce some of these mitigations whilst maintaining the 2m distance and to measure the effect of this, before taking the further step of a reduction to 1m.
  - 9.5. **It was agreed to draw the attention of other relevant NICS departments to the paper.**

### Extended use of face masks in hospitals (Paper 9)

10. Prof Young presented the paper, which looks at the use of medical masks by healthcare workers and the use of face-coverings by the public in hospitals.
  - 10.1. This measure was announced by England towards the end of last week, and this paper, which came to SAGE, appears to underpin that action. It was introduced in the context of the level of nosocomial outbreaks in hospitals in England, which are more severe compared with Northern Ireland.
  - 10.2. It was agreed to keep the issue under review and the paper was noted.

## **AOB**

11. As there was no other business, the meeting ended.

## **Date of next meeting**

12. Next meeting will be on Thursday 11 June at 3pm and will be via Zoom video conference.