COVID-19 Strategic Intelligence Group

12.00 pm – 10 August 2020 - Zoom Video Conference

Present:

Professor Ian Young	Chief Scientific Officer, DOH
Dr Lourda Geoghegan	DCMO, DOH
Dr Declan Bradley	Consultant Public Health Medicine, PHA
Professor Fiona Alderdice	Nuffield Department of Population Health, University of Oxford
Professor Frank Kee	Centre for Public Health, QUB
Professor Diarmuid O'Donovan	Centre for Public Health, QUB
Dr. Michael Quinn	Head of Clinical Information, HSCB
Tricia Lavery	Secretariat, DoH

Apologies

Dr Michael McBride	Chief Medical Officer, DOH
Dr Naresh Chada	DCMO, DOH
Professor Hugo Van Woerdon	Director of Public Health, PHA
Gerry Waldron	Head of Health Protection, PHA
Dr. Liz Mitchell	Chair of Contact Tracing Service Steering Group, DoH
Dr. Eugene Mooney	Senior Statistician, DOH
Professor Cathy Gormley-Heenan	Pro-Vice-Chancellor (Research and Impact), Ulster University

Welcome

1. Prof Young welcomed all participants to the meeting.

   1.1. Prof. Young confirmed that all were content with the note of the last meeting as issued.

Status Update

2. Prof Young provided a status update to the group.

2.1. Last week saw an increase in the numbers of reported cases on a daily basis, which subsequently feeds into an increase in R. Last week R was reported as being between 1.0 and 1.8, and believed to be around 1.3 bases on both cases and hospital admissions. This week R is likely to be higher than that at around 1.8 with the upper confidence limit overlapping with 2.

2.2. In terms of average number of cases per day, numbers at the start of July were around 4 per day, and at the end of July this had risen to around 10. The figure reported on Friday 7 August was 18, which represents a significant rise. There are some arguments that increased numbers of cases is a consequence of increased testing, which is to be expected with an effective Test, Trace, Protect Strategy

2.3. A further measure is the percentage of tests which are positive. At the start of July the positivity rate was 0.3% (1 in 300), and as of Friday 7 August the positivity rate had risen to just below 0.9% (1in 110-120), another significant rise.

2.4. There has been evidence of clustering of cases, the recent significant cluster in Newcastle, Co. Down featuring in the media. However looking at a breakdown of cases by Local Government District (LGD), there are cases in other areas which are fairly widespread across NI.

2.5. The 14 day incidence of cases per 100,000 of the population (a widely-used international indicator) for the UK overall is around 15 and as of Friday 7 August, the NI figure is 10.3 (likely to rise this week), with RoI as of yesterday sitting at 15 also. This shows that the gap between NI and the rest of the UK is closing significantly and it appears that cases in RoI will exceed those in the UK later this week and there is a clear upward trajectory on the island of Ireland.

2.6. It was commented that, following a call this morning with CEO in PHA, a new weekly review meeting will be introduced from Wednesday of this week, given that indicators are now going in an upward direction and with the recent restrictions that were introduced in 3 counties within RoI and media reports today of a large number of cases in meat plants across RoI. It was agreed that Prof. Young would be invited to attend this meeting.

2.7. In terms of local restrictions or interventions, there have been some early discussions from the Joint Biosecurity Centre (JBC) which suggests levels for escalation. The main indicator they are looking at is incidence per 100K of the population on a 7-day basis and they have proposed various boundaries to look at levels of risk with less than 20 new cases per 100K per week being considered "business as usual" and then considering boundaries of more than 20, more than 40, and more than 80 on a rising scale of risk. As of Friday the overall figure for NI was 6.6 so very much "Business as Usual" however local figures for the Newry, Mourne and Down LGD may have exceeded this and so the Modelling Group have been asked to work with PHA to try and begin to provide daily estimates by LGD to see if there are any areas that may be crossing those thresholds. Prof. Young has shared this information from the JBC with the Modelling Group and with Dr. Declan Bradley, PHA and proposed this be tabled

for discussion at the meeting on Wednesday.

2.8. Whilst there is a big increase in the numbers of cases, this is still at a low level compared with a number of countries internationally and there may be merit in using Dr. Bradley's feed on the rolling average of hospital admission. This was running between 0 and 4 at the beginning of July but is currently around 7 to 8. Whilst this is an increase, it is proportionately less that the increase in cases. There are 2 potential explanations for this:

- That we are still in a lag period and we still see a rise in hospital admissions
- That cases currently are disproportionally higher among younger people who are much less likely to develop severe illness. However, given what we know about contact between younger and older people, we would expect this to break through into the older population through household contacts at some point.

2.9. It was commented that, in relation to the recent outbreak in Aberdeen, colleagues in Scotland reported the age range extended up to the mid-70s, but over half of the cases were in those aged 40 and under, and they believed that they were seeing a shift of disease activity into the younger age-group.

2.10. There is a little concern at the rise in the rate of transmission which led to the Executive decision last week to delay the re-opening of wet-pubs and other relaxations. This is something that remains under review.

2.11. Two issues of relevance discussed at the SAGE pre-meeting this morning, and which there is ongoing work on, are

i) **mass screening**, which would include screening at point of entry to a country; and the introduction of weekly testing of all pupils in schools. SAGE will do further work on this and produce further details on likely benefits and costs.

ii) **the likely extent of population resistance to COVID**. This is different to population immunity and relates more to the concept that there may be a proportion of the population who by virtue of genetics or perhaps previous exposure to related viruses, may be resistant to COVID as opposed to immune. There is a view emerging in Sweden that they may have around 40% population resistance to COVID, which is a different concept to herd immunity or antibody prevalence. SAGE will be carrying out further work on this which could be important at least for modelling and potentially for release of restriction if it could be further understood.

Planning and reasonable worst case scenario (Papers 2, 3, 3a & 4)

3. Prof Young presented the group of papers which look at the rather complex RWC Scenario developed by the Cabinet Office without significant consultation with the

Devolved Administrations (DAs), based on what might happen in England and which they may use in England for planning purposes. It was modelled separately for the DAs and is shared here for awareness purposed.

3.1. It suggests a second peak, similar to the first peak, occurring around February 2021, and that it would be within capacity to manage it. However this is just one scenario and certainly actually predicting what could be considered to be a RWC is difficult, and certainly having R within NI currently approaching 2 is not something that we would have anticipated at this point in time.

3.2. It was commented that SPI-M were of the opinion that the scenario, at least for England, was too optimistic. However they did note that, for Scotland and NI, it may not have the same effect because they would be multiplying up from a much lower baseline than England would be. They also made the point that one factor to consider in developing a RWC scenario is that of policy makers not responding to an increase in cases.

3.3. There being no further comments the papers were noted as being presented to raise awareness of members of the current thinking around the RWC Scenario concept.

Local Interventions (Papers 5, 6 & 7)

4. Prof Young presented the group of papers which give a relatively high level overview.

4.1. One point to note is the desire, from a behavioural aspect, to avoid the use of the term “lockdown” as people may respond negatively and with frustration to it. Hence the alternative terminologies preferred are “local interventions” or “local restrictions”.

4.2. There is also a suggestion that it is better to go in hard and early rather than to take a half-hearted approach when local interventions are required, and that a 5km radius measure would be a reasonable approach, whilst being difficult to define.

4.3. In terms of a trigger for any local interventions, whilst there is no firm agreement as to what would constitute an appropriate trigger, the idea of a certain incidence number of cases per 100K of the population per week (as discussed in para 2.7) is a reasonable way of looking at it. Retrospective examination of what happened in the LGD for the recent Newcastle outbreak in terms of how close that area came to the various thresholds previously discussed.

4.4. In terms of how local interventions could be practically actioned for NI, whilst it may be slightly vague in regulation terms, guidance or instruction could be issued, and whilst it would be possible to do this in regulation, but this will have to be explored in detail when it is first required. In a similar way to the approach to face-coverings, it would be better if compliance could be achieved voluntarily

rather than having to rely on regulation, although regulation may become necessary.

4.5. There was some discussion around whether local restrictions in somewhere the size of NI are likely to be a reasonable approach.

- It was suggested that it would be useful to liaise with colleagues both in Scotland and RoI who have implemented local restrictions to see what learning there is from their experiences.

- Whilst data can be obtained for LGDs most people are unaware of where the LGD boundaries are.

- Similarly, whilst RoI used county boundaries, most people in NI would be largely unaware of county boundaries within NI. The 3 counties currently under restriction in RoI would constitute around 450K people (around 20-25% of the NI population).

- Whilst information is currently collected on postcodes for cases, and data could be produced on incidence of cases per 100K of the population by postcode, in terms of restrictions whilst most people know the postcode they live in they would generally not have a clear idea of when they would cross into a different postcode. In general, however, LGDs are made up of a group of postcodes.

- The concept of imposing local interventions with a 5km or 5 mile radius of a particular town or city was considered an easier one to identify and understand.

- Another factor to consider is using Super Output Areas (SOA) which have an average of 2500 people (ranging from 1000 to 5000), which there is quite information available about and which are regularly used for virtually all public health analyses. Again whilst most people may not know which SOA they are in, postcodes are linked to them. Geographers have also been mapping to SOA level for the App data using fairly sophisticated techniques to take account of small areas, phasing and smoothing etc. However SOAs are too small and would need to be grouped together into a number of groups to reliable consider incidence of cases per 100K of the population

4.6. Members agreed to give further thought to this and it was agreed to return to this subject in due course.

4.7. There was some discussion around levels of engagement with local communities and suggestions were invited from all members on positive ways to better engage local communities, including use of community groups and local community leaders.

4.8. There being no further comments the papers were noted.

COVID-19 Outcome in People with HIV (Paper 8)

5. Prof Young presented the paper which is clinically relevant and , despite the HIV population in NI being relatively low, it is important that there is awareness of the issue.

    5.1. The SAGE recommendation is for it to be considered by PHE so this is being drawn to the attention of the PHA representatives on the call today.

    5.2. It was agreed that the paper would need to be shared with the Regional GUM clinic and for PHA to consider if any alert to the public was needed.

    5.3. There being no further comments the paper was noted.

Local interventions and spatial scales (Paper 9)

6. Prof Young presented the paper which discusses the concept of quarantine outside of the home.

    6.1. This paper is useful in that it suggests that 45% of transmissibility occurs before symptom onset and if individuals quarantine 1 day after symptom onset, then 60% of transmissibility will have occurred.

    6.2. It suggests, therefore, that quarantine outside the home is of somewhat limited value where people are already living in a household. However there may be some value in quarantine outside the home for cases that have not yet entered a household. These may principally be cases identified at points of entry to a country. Other countries have required individuals entering that country to quarantine in a hotel for 14 days before being allowed to travel. This is not something that has been discussed in NI from a policy perspective at present and indeed it is understood that very few cases in NI can still be directly attributed to import or are associated with travel.

    6.3. There being no further comments the paper was noted but the topic may be revisited in future.

Segmentation (Paper 10)

7. Prof Young presented the paper which covers a topic that has been the basis of ongoing discussions around what can be done better now that shielding is paused.

    7.1. This paper is considered helpful in identifying 3 segments in terms of levels of risk:

- a shielding group;
- a protector group; and
- a low-risk group (the largest segment of the population.

7.2. In terms of identifying the shielders it references Q-COVID, which is being developed by Professor Julia Hippisley-Cox for NERVTAG. Just as Q-Risk is used to identify an individual's risk of cardio-vascular disease, it is believed that Q-COVID will be able identify an individual's risk of developing severe complications with COVID.

7.3. One approach to shielding will be to advise individuals above a certain Q-COVID risk level to shield. The questions around this are how effective will this be, and what are the implications for the protector segment, who are the buffer between those shielding and the rest of the population.

7.4. It was commented that, in terms of public interpretation and understanding, segmentation is possibly not the simplest term to use and perhaps greater public involvement in what these initiatives are called to ensure people know what it means. However it is recognised that, whilst these initiatives are named using terminology determined in England and therefore may not be the best terminology for NI use, it is nonetheless important that there alignment of the terminology nationally given that there is a lot of national discussions in the media and elsewhere on such issues.

7.5. The concept of protecting the highest risk section of the population until such times as a vaccine is available is the best option to prevent wider community transmission.

7.6. It was commented that PHE Guidance on shielding has been updated today to include guidance on shielding and protecting people who are clinically extremely vulnerable from COVID-19. PHA are considering what updated may also now be required to reflect this for the NI citizen.

7.7. There being no further comments, the paper was noted and it was agreed that members would review the new PHE guidance and to revisit this topic at a later stage.

AOB

8. There being no further business the meeting ended.

Date of next meeting

9. Next meeting will be on Monday 17 August at 12pm and will be via Zoom video conference.