

NI COVID 19 Modelling Group Conference Call – 11 August 2020

Attendees

Ian Young DoH (Chairperson)
Frank Kee QUB
Adele Marshall QUB
Declan Bradley PHA
Paul McWilliams SIB
Brid Roissetter SIB
Aaron Gorman SIB
Rob Brisk SHSCT
Paul Montgomery DoH

Key issues discussed

Update

- Ian indicated that the 7 day average for new cases had risen to above 20 while the % of tests with a positive result had increased to 0.9%. In addition, the 7 day average of hospital admissions with community acquired Covid-19 had risen from 0-2 at the start of July to 8-10 currently as the increase in cases started to feed through.
- The value of R calculated by Paul McWilliams for today is 1.68 with a confidence interval of 1.38-1.99 for inpatients (1.5 based on cases) while the latest estimate from Magda Bucholc is 1.32. In this context it was agreed that a range of 1.2-2.0 should be reported to the Executive. The increase above 1 is being driven by clusters.
- There was a discussion about the possible measures to identify local geographical areas of concern where intervention was required based on the incident rate and % of positive tests. Although an approach was being considered for England, it was unclear whether this would be appropriate for NI in terms of the coverage of the area under enhanced controls and/or the effectiveness of a localised intervention.
- Ian indicated that the funding request in respect of the Contact Survey for children was being considered by Finance Division within the Department of Health with a decision expected this week. This was in the context that schools were due to reopen at the start of September with advice being provided to schools later this week which would have a focus on site specific adjustments.
- It was highlighted that this could lead to a further number of clusters in the context that the tracing service was already having difficulties in identifying existing clusters at the current time. Paul McWilliams indicated that he was working to

provide real time analysis of clusters rather than the contact tracing team having to rely on manual interpretation of spreadsheet data.

Contact Survey- Cycle 4 data

- Brid Roissetter from SIB presented the results from the fourth cycle of the adult Contact Survey.
- The first three cycles of the survey had shown little variation in the overall number of contacts, but had provided important insights. In particular, there were significantly more physical (touching) contacts than non-physical (short conversation) contacts within houses than outside while most age groups had more non-physical than physical contacts. The main exception was in respect of those aged 18-19 who also had much longer durations of contact. The Contact Matrix reflected the tendency for people to be in contact with individuals of a similar age as well as different generations of the same family.
- The results from the fourth cycle of the survey showed a significant increase in the average number of contacts, from 4.97 to 6.39 while the dominant eigenvalue increased from 7.938 to 11.298.
- The increase in the number of contacts was driven by those aged 18-19 (although small in numbers) as well as those in the 25-34 and 55-64 age bands, in particular, due to an increase in non-household/work contacts. The increase for the 25-34 and 55-64 age bands was potentially linked to a reduction in the number of respondents self-isolating although this may be due to a misinterpretation of the question by survey respondents.
- The results implied that the value of R had risen to 0.9 as a measure of community acquired infections excluding clusters. It was suggested that this implied that the position, excluding clusters, was broadly stable in NI. However, the reopening of schools would be expected to increase the value of R under this basis to above 1. The two main approaches to stop this would be to reduce the number of contacts in the community or increase the mitigation measures.
- There was a discussion about how the responses to the mitigation questions in the survey could be used to adjust the estimated value of R, for example, by applying an adjustment factor to contacts involving mitigation. Frank Kee agreed to check what approach, if any, has been adopted by John Edmunds to adjust for the impact of mitigation measures.

AOB

- The concept of a social contact budget was discussed which moved on to the suggestion that users of the Contact Tracing mobile phone app could be informed of the number of contacts they had each day to support positive behaviour. The

scope for contact data from the app to be used as a real time Contact Survey was also discussed.