MEMORANDUM E (20) 215 (C)

FROM: **ROBIN SWANN MLA**
MINISTER FOR HEALTH

DATE: **17 September 2020**

TO: **EXECUTIVE COLLEAGUES**

FINAL EXECUTIVE PAPER: HEALTH PROTECTION (CORONAVIRUS, RESTRICTIONS) (No. 2) REGULATIONS (NORTHERN IRELAND) 2020: SECOND REVIEW OF THE NEED FOR THE RESTRICTIONS AND REQUIREMENTS

Introduction

1. This paper reports on the second review of the need for the restrictions and requirements in the Health Protection (Coronavirus, Restrictions) (No. 2) Regulations (Northern Ireland) 2020 ("the No. 2 Regulations"). The review has concluded that the current restrictions, including the local restrictions brought in this week, are a necessary and proportionate response to the epidemic at this time.

Background

2. The No. 2 Regulations require the Department of Health to review the need for the restrictions and requirements in the Regulations at least every 28 days. The current restrictions and requirements are summarised in Annex A.

3. At the conclusion of the first review, on 20 August, we agreed that the existing restrictions remained necessary and proportionate, having taken into account:
   a. current COVID-19 restrictions, including requirements in relation to face coverings and international travel;
   b. the progress of the epidemic;
   c. the current level of demand on health and social care services and their capacity to respond to a significant increase in cases;
   d. the capacity of the health protection services to respond to cases and outbreaks, in particular the Test, Trace and Protect strategy;
   e. the adverse impacts of the restrictions, on the economy and on people's health and well-being;
   f. demographic differentials in the impacts of the epidemic;
   g. the imminent re-opening of schools, and
   h. significant increases in transmission in other jurisdictions and regions in the UK and other parts of Europe.

4. We agreed also, in light of the sustained increase in transmission observed in NI over the previous few weeks, to tighten the restrictions on gatherings, specifically reducing from 30 to 15 the limit on the number of people taking part in a gathering, and restricting indoor gatherings in private dwellings to 6 people from no more than 2 households (where the previous limit was 10 individuals from up to 4 households).

5. LPP/LAP

LPP/LAP The position as regards the other key factors listed above is substantially as it was at the time of the first review.

6. This review has been informed by the four guiding principles that we agreed in May: focus on purpose; necessity; proportionality; reliance on evidence. The purposes of the Regulations are (i) to protect the health of the population by limiting the spread of COVID-19 infection in order to minimise the numbers of cases and deaths, and (ii) to ensure as far as possible that the health care system has the capacity to care for COVID-19 patients and care for all patients, present and future.

7. As regards the need for specific restrictions, we will, in parallel with these reviews, continue to consider proposals. As we have done until now, we will not be bound to the timing of these reviews to make amendments to the regulations; rather, we will propose amendments to either ease or tighten restrictions as soon as the need is identified.

8. The local restrictions brought in this week are a case in point. In response to particularly high incidence of COVID-19 in certain parts of Northern Ireland we agreed on 10 September that local restrictions should be introduced in order to interrupt community transmission occurring through indoor social gatherings in households, and using postcode areas as the basis for determining the geographical extent of the restrictions. The No. 2 Regulations have been amended to introduce these restrictions. It is expected that the impact of these restrictions on transmission will take around two weeks to become apparent. The new restrictions will be kept under review and will be reviewed within two weeks of being introduced. These restrictions will be retained only as long as they are deemed necessary and proportionate. Local restrictions may need to be introduced urgently in further areas in response to spikes in incidence.

Course of the epidemic

9. As of 15 September the key indicators of the epidemic are as follows.

Current estimate of R (hospital inpatients): 0.8 – 1.5 (probably above 1)

Current estimate of R (new positive tests): 1.0 - 1.3 (probably above 1)

Average number of new positive tests per day last 7 days: 90.3 (unchanged from 91.3)

7-day incidence based on new positive tests: 33.3 / 100k (unchanged from 33.6)

14-day incidence based on new positive tests: 64.9 / 100k (up from 58.3)

7-day average of total tests (pillar 1 and 2) which are positive: 1.81% (down from 1.92)

Tests per 7 days per 1000 population: 20.5 (up from 19.6)

Number of new positive tests in over-60s in last 7 days: 92 (up from 61)

Proportion of total positive tests occurring in over-60s: 16.5% (up from 9.5)

First COVID +ve hospital admission in last week: 21 (up from 7)

7-day average number COVID occupied hospital beds: 21.1 (up from 16.4)

10. Over the last week, we have seen a plateauing in cases and an increase in hospital admissions. Of note, this has been during a period when there has been some difficulty accessing tests, so it is possible that case numbers may be somewhat suppressed. R is likely to be above 1, both for cases and hospital admissions. (An explanatory note on modelling the epidemic and on the significance of R is at Annex 2.) The proportion of cases in individuals aged >60 years has risen from under 10% to just under 16%, still significantly below wave 1 of the epidemic where around 50% of cases were in this age group. It is likely that in wave 1 of the epidemic the testing strategy did not identify the large majority of cases in younger people, who tend to be less ill or symptomatic. If this is correct, then the current increase in cases should be viewed as the precursor of increasing cases in the over-sixties with resulting pressure on the hospital system and increasing deaths.

11. The indicators above generally show a stable number of cases in the last week, with an increase in hospital admissions. 14-day cases per 100k have increased and remain higher than UK and RoI, though testing is also higher in NI. Community transmission remains widespread, associated with multiple small clusters rather than a small number of larger outbreaks.

Regional variation in cases

12. There is marked variation in COVID cases between Local Government Districts, with Causeway Coast and Glens the lowest. The main concerns are currently in relation to Antrim and Newtownabbey, where no predominant cluster has been identified and numbers are rising. All LGDs are under 50/100k at present.

New COVID cases per 100K population over the last 7 days:

24th Aug	31-Aug	6-Sep	14-Sep	LGD
30.9	33.0	45.6	49.1	Antrim and Newtownabbey
7.5	7.5	18.0	20.5	Ards and North Down
6.1	43.4	37.4	41.6	Armagh City, Banbridge and Craigavon
22.2	41.0	62.0	43.6	Belfast
21.5	11.8	15.3	4.2	Causeway Coast and Glens
19.2	8.0	11.9	27.9	Derry City and Strabane
1.7	3.4	13.7	13.7	Fermanagh and Omagh
19.4	22.2	47.1	38.8	Lisburn and Castlereagh
68.5	31.0	46.8	25.9	Mid and East Antrim
6.8	6.1	8.8	6.8	Mid Ulster
7.8	21.7	24.4	20.6	Newry, Mourne and Down

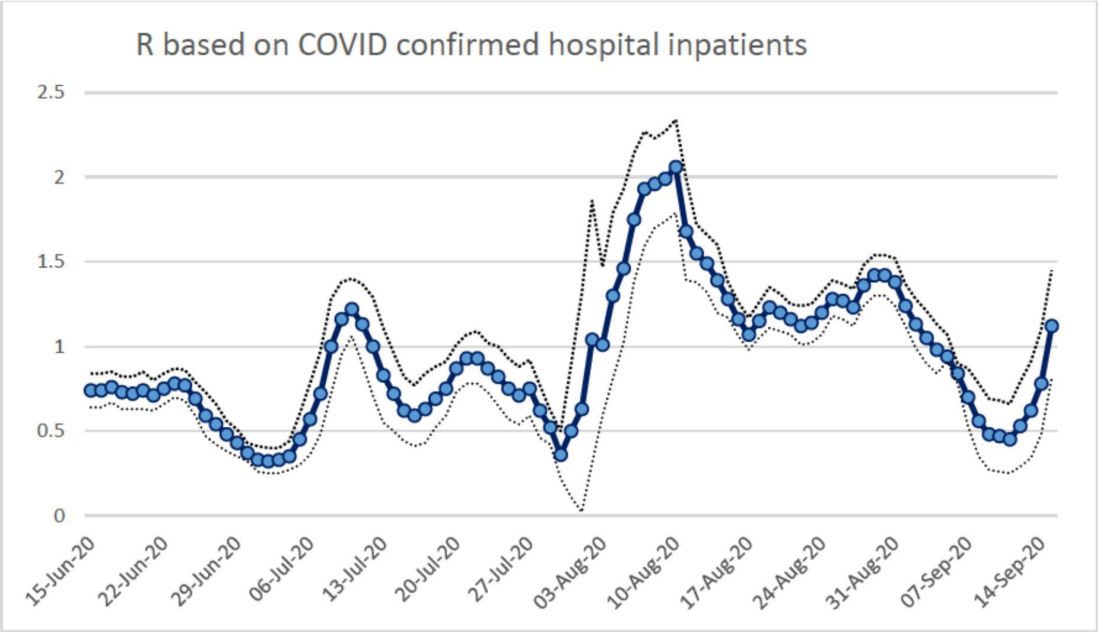
13. Further insight is possible from looking at a postcode level. COVID cases for all postcodes with a population above 10k and an incidence of >40/100k over the last seven days are indicated below, with postcodes which are currently the subject of local restrictions highlighted in red. None of the postcodes currently under local restriction have fallen below 40/100k this week, although some postcodes in urban areas under restriction will fall below this level.

14. Of note, BT60 is above the previously agreed threshold of 80/100k for imposing localised restrictions, and all cases appear due to household or community transmission. My Department is therefore considering adding BT60 to those areas under local restriction.

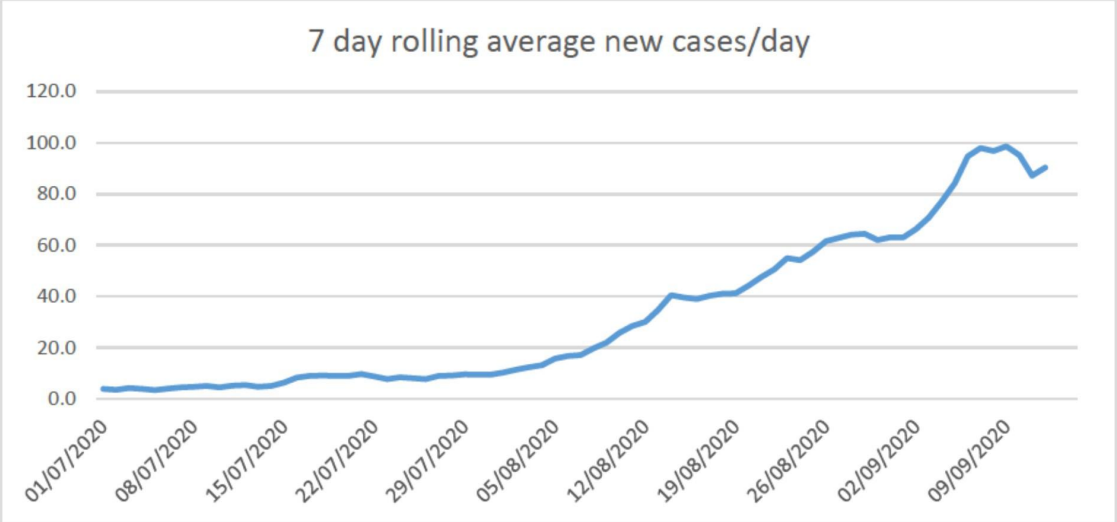
Postcode	CasesN	Cases/100k
BT29	51	383.87
BT43	30	137.63
BT7	21	110.83
BT60	32	106.45
BT9	27	94.21
BT8	26	90.26
BT17	24	74.18
BT12	21	72.91
BT28	27	67.55
BT15	18	66.88
BT36	29	64.31
BT32	15	61.57
BT67	14	59.22
BT14	18	56.54
BT10	7	55.66
BT39	12	51.35
BT11	13	46.36
BT16	7	45.12
BT6	13	43.33
BT25	6	40.13

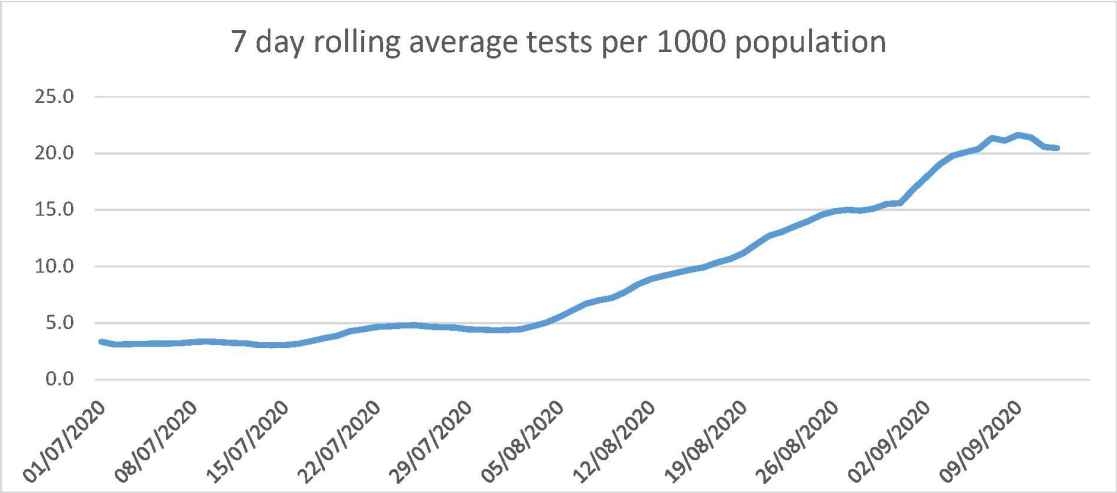
Trends for R for Northern Ireland

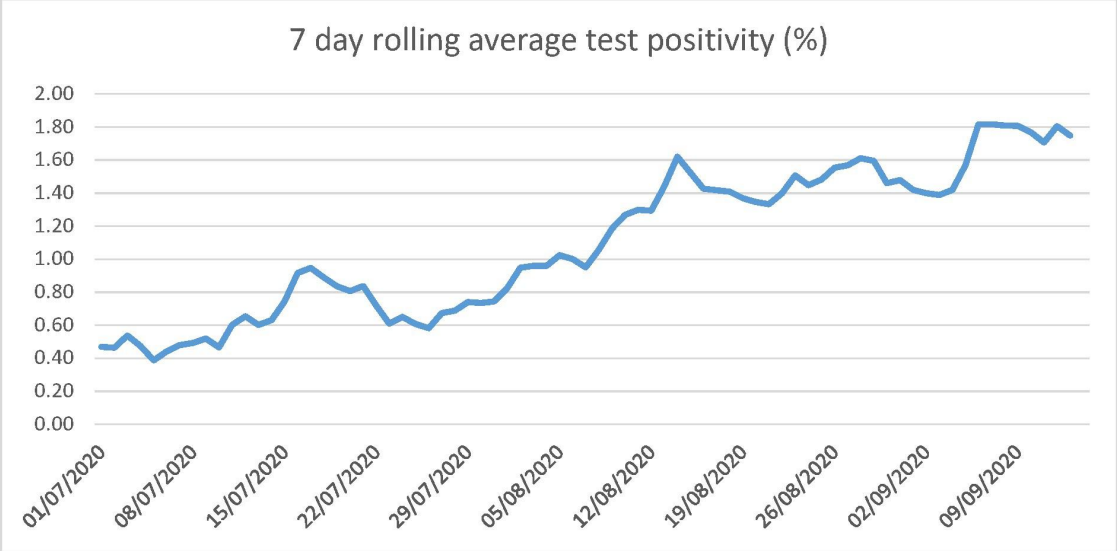
15. The graph below shows how R has changed over time during the course of the COVID-19 epidemic in Northern Ireland using hospital in-patients with community acquired COVID-19 as an example. The value of R differs somewhat when other inputs are used, and is currently likely to be above 1 for both cases and hospital admissions.



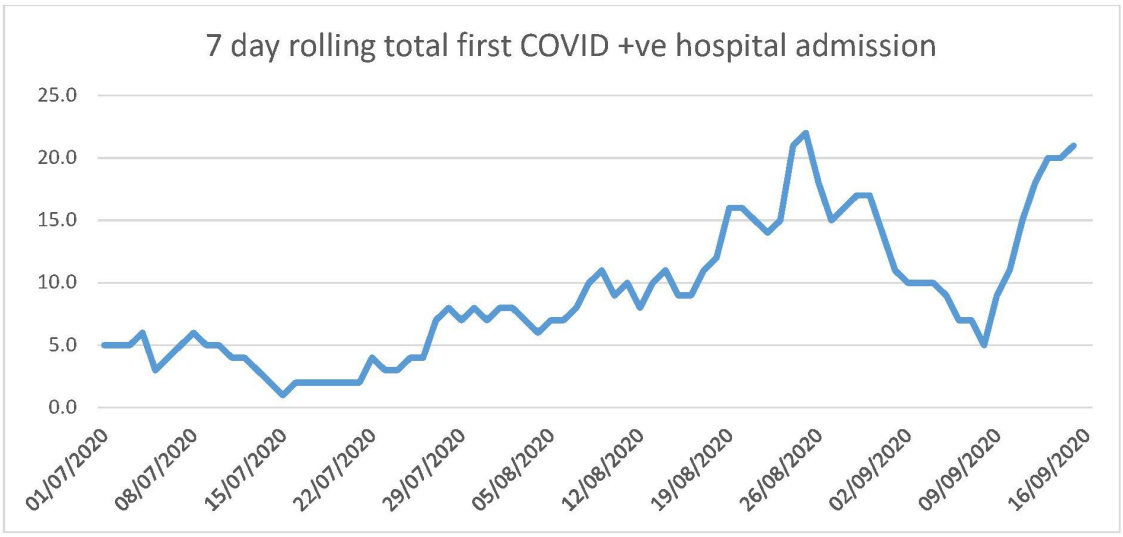
16. The graphs below show that the number of new COVID-19 cases, testing and test positivity have all been reasonably stable over the last week.

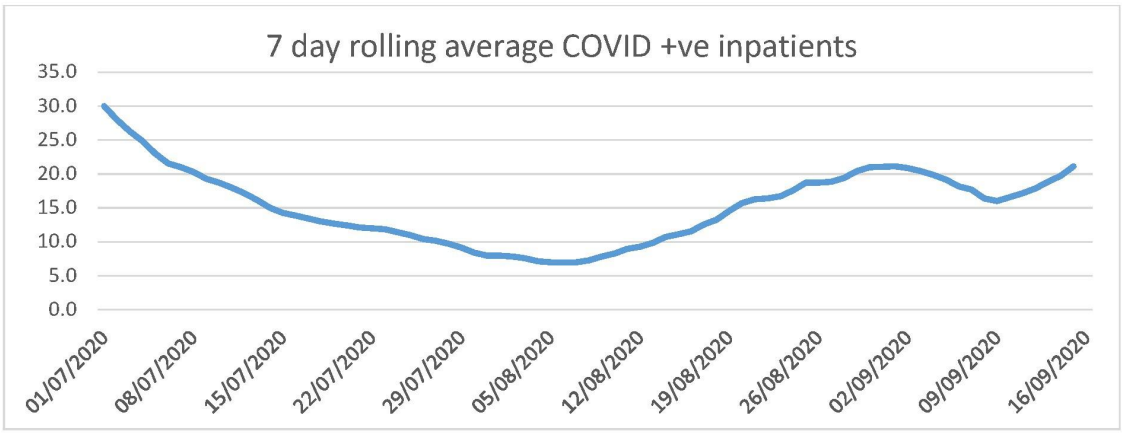






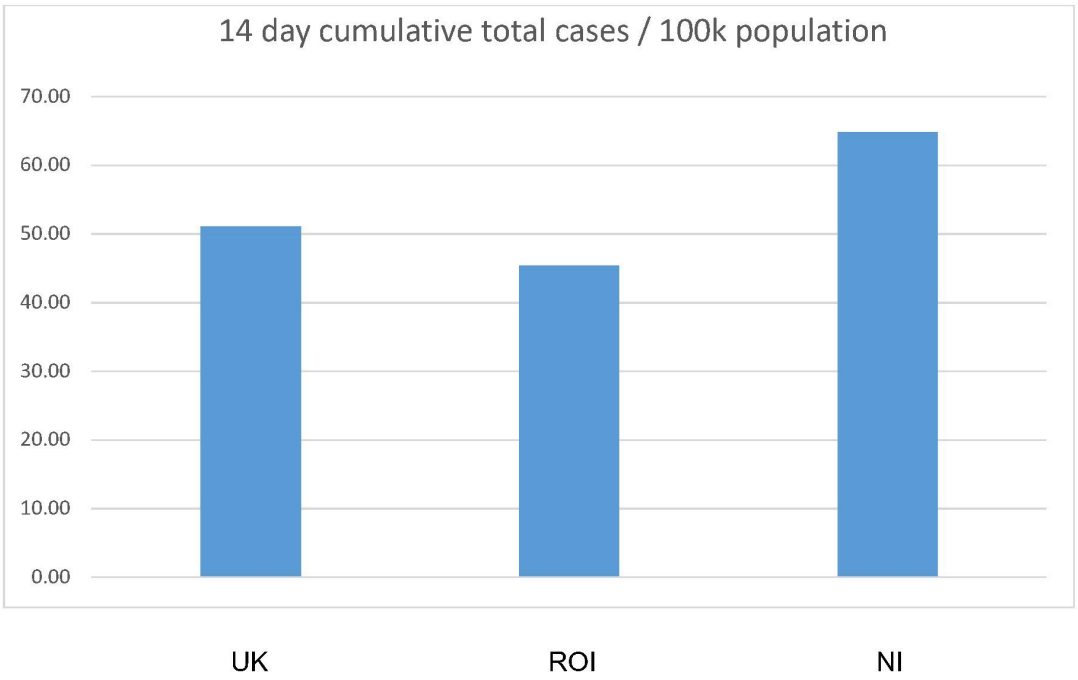
17. The following graphs show first hospital admission of COVID-positive patients over a rolling 7-day period. To give context, this peaked at 260 during wave 1. In addition, the seven-day rolling average of hospital inpatients is shown, which peaked at around 290 during wave 1.





NI, UK, ROI comparison

18. The following chart shows cases per 14 days / 100 k population across the Common Travel Area.



Other factors

Capacity of the Health and Social Care system

19. The Department is in the process of finalising a Surge Planning Strategic Framework which will set the context for individual Health and Social Care Trust Surge Plans. This will ensure that comprehensive plans are in place to address both further COVID-19 surges and winter pressures. At the same time the Health and Social Care Trusts continue to develop further 3-month rebuilding plans in line with the Rebuilding Strategic Framework published in June.

Health protection services: Test, Trace and Protect etc.

20. Testing and contact tracing remain critical elements of our response to the pandemic. The number of tests completed has increased significantly in recent weeks. This in turn has resulted in an increased workload for the Contact Tracing Service in circumstances where the test results are positive. In my report on the first review of the No. 2 Regulations I provided a substantial update on the Test, Trace and Protect (TTP) programme; the testing strategy; testing capacity; eligibility for tests; testing in care homes; the development of contact tracing; the roll-out of the StopCOVID-NI app, and testing for surveillance. Information on contact tracing is available on the PHA website [https://www.publichealth.hscni.net/covid-19-coronavirus/testing-and-tracing-covid-19/contact-tracing-service-management-information].

Wider health, societal and economic impacts of the regulations

Economic impacts

21. DfE have advised as follows.
    - The Northern Ireland economy was running around 25% below normal during lockdown.
    - There are signs of improvement in economic activity.
    - 249,600 employees in Northern Ireland have availed of HMRC's Job Retention Scheme, and 78,000 claims have been made in Northern Ireland under HMRC's Self-Employment Income Support Scheme, out of 96,000 eligible for the scheme. Many of these will have returned to work, at least part-time.
    - The claimant count now stands at 62,700 (6.8% of the workforce), an increase of 800 from the previous month's revised figure. Further job losses and the planned ending of the furlough scheme could mean that the claimant count could plausibly exceed 100,000 before the end of 2020 or shortly afterwards.
    - There are still significant risks if recovery of output and jobs is not swift and sustained. Even though the local economy is recovering, it may take years before economic activity is back to its pre-pandemic levels.

Wider Impacts on health

22. Indications from sources available to us show that, overall, population health is highly likely to be negatively affected by the wider impacts of the COVID-19 restrictions. Population health – including life expectancy growth – and inequalities are expected to be significantly affected, with the greatest effects felt by the most disadvantaged, as some long-standing inequalities have been adversely impacted by the pandemic including inequalities in education and employment. Many key behavioural risk factors are likely to be worsening, including alcohol consumption and overweight and obesity. Public health resources had been re-prioritised to support management of the direct impacts of COVID-19, and this has limited the system's capacity to address the wider impacts, however work is now underway to restart a range of services though some may still operate at reduced capacity. Emerging evidence suggests that the disease burden from conditions such as mental health is rising. It is likely to take time for the full effect to be known.

Conclusion

23. Following my consideration of the review I have concluded that the current restrictions, including the local restrictions which are to be brought in this week, are a necessary and proportionate response to the epidemic at this time. This conclusion is supported by the Chief Scientific Advisor and the Chief Medical Officer.

Recommendation / Decision sought

24. I recommend that the Executive agree that:

i. the requirement in regulation 3 for a review of the need for the restrictions and requirements in the No. 2 Regulations has been duly met;

ii. the current restrictions and requirements in the No. 2 Regulations continue to be an appropriate and necessary response to the serious and imminent threat to public health which is posed by the incidence and spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in Northern Ireland, and

iii. overall the restrictions and requirements imposed by these Regulations continue to be proportionate to what the Regulations seek to achieve, which is a public health response to that infectious disease threat in the context of a now rising rate of infection in Northern Ireland.

LPP/LAP

ROBIN SWANN MLA
MINISTER OF HEALTH

Annex 1

Summary of restrictions and requirements in the No. 2 Regulations

The No. 2 Regulations, as amended:

- require the closure of certain businesses, services and premises listed in the Schedule, except for limited permitted uses, specifically:
    - bars, including bars in hotels;
    - public houses and
    - clubs registered under the Registration of Clubs (NI) Order 1996;

- require the closure of:
    - theatres (except for rehearsals);
    - nightclubs;
    - conference halls and conference facilities, including those in hotels, and
    - concert halls (except for rehearsals);

- impose restrictions on gatherings, both indoor and outdoor, of more than 15 people, unless for certain purposes and
    - if the organiser or operator of the gathering has undertaken a risk assessment and complies with relevant guidance,

and

- impose restrictions on indoor gatherings in private dwellings: no more than 6 individuals from no more than 2 households.

The No.2 Restrictions also impose restrictions on certain localities ("the protected area"), such that in the protected area:

- no-one may take part in a gathering indoors in a private dwelling consisting of people from more than one household, and

- no-one may participate in a gathering outdoors at a private dwelling which consists of more than six persons or which consists of persons from more than two households.

These restrictions are subject to exemptions in respect of certain purposes, such as work-related purposes, providing care, marriages and funerals, and in respect of linked households.

Annex 2

Modelling the epidemic: the significance of R; how R is determined; determining R for NI

1. It is important to model the COVID-19 epidemic in Northern Ireland in order to plan the delivery of Health and Social Care services and to inform decision making with regard to social distancing and other restrictions which may be required. The Reproduction Number (R) has been central to modelling the course of the epidemic to date. R is the number of individuals who, on average, will be infected by a single person with the infection. R does not have a fixed value but varies with time, and is likely to be different every day.

2. When R is above 1, the transmission of the epidemic will increase, resulting in more cases, hospital admissions and deaths. The greater the value of R above 1, the more rapid the increase. When R is below 1, there will be a fall in the number of cases, hospital admissions and deaths. The further R is below 1, the more rapid the fall will be. The Executive has indicated that keeping R below 1 is a key objective as we move forwards in the epidemic.

3. However, when community transmission of the virus is very low, R will no longer be the most important number for the purpose of policy decisions. In particular, once the number of new cases is sufficiently low in the presence of a robust testing programme and test/trace/protect strategy, number of positive tests per day is likely to be a more important parameter in the context of planning.

Determining the value of R

4. The most common approach to determining R during an epidemic is to use mathematical modelling, in particular a compartmental model using a SIR (susceptible-infectious-recovered) approach or a variation of it. Dozens of such models have been published and are in use throughout the world; there is no single standard model which everyone uses.

5. In addition to the impact of the mathematical model used, the calculated value of R is also influenced by the choice of input variable. R calculated for new COVID-19 cases will not be the same as R calculated for hospital admissions, or ICU occupancy, or deaths. There may be a significant lag (2-3 weeks) before a fall in R is apparent depending on the input variable(s) used.

6. Once the activity of the epidemic is at a low level (as at present) marked fluctuations in R may be observed over short periods of time as a result of localised outbreaks or clusters. Local measures to address the cluster or outbreak will represent the most appropriate response in those circumstances, rather than general measures which are more appropriate when there is widespread community transmission.

Determining R for NI

7. The modelling group determines R each day using a bespoke Northern Ireland SIR model. As its primary input the group uses hospital in-patients with community acquired COVID-19, but also uses a range of other inputs. We therefore have several different values for R each day, each of which has a midpoint value and a lower and upper boundary (95% confidence intervals). In addition a number of academic groups, both in the UK and ROI, model the COVID-19 epidemic and we have access to their estimates of R for Northern Ireland. R can also be determined based on a contact matrix survey, and this approach may be more reliable when levels of community transmission are very low.