Seventy-fourth SAGE meeting on COVID-19, 22nd December 2020
Held via Video Teleconference

Situation Update

1. R estimates continue to increase and are clearly above 1 in London, the Midlands, the South East and the East of England. It is concerning that estimates have now also moved above 1 in the South West of England where capacity to cope with increased hospital admissions is more limited. The latest estimate of R for the UK is 1.1 - 1.3. For England it is 1.1 - 1.4, for Scotland 0.9 - 1.1, for Wales 1.0 - 1.3, and for Northern Ireland 0.8 - 1.1. Doubling time estimates are currently very heterogeneous, likely reflecting a changing situation, but in some smaller areas are as short as a week.
2. R estimates rely on lagged data and cannot yet account for the most recent impact of policy changes or any changes in transmission that have not yet been reflected in epidemiological data. These estimates may also be less accurate until more is known about the new variant B.1.1.7 (also known as variant of concern 202012/01). Changes in testing behaviours also increase the uncertainty.
3. NERVTAG and PHE have assessed the currently available evidence on the new variant and have published their assessments and evidence. There is high confidence that this variant is spreading faster than other SARS-CoV-2 virus variants currently circulating in the UK, based on several different analyses. The cause (or causes) of that faster spread are unclear, but evidence is consistent with an increase in transmissibility being a factor. This includes some evidence of lower Ct values in those infected with this variant, which is consistent with some increase in viral load (though there are possible confounding factors). There is also some evidence that the variant is more likely to transmit within households.
4. It is not yet known whether there is a difference in generation time or duration of infectious period.
5. There is not yet any evidence which suggests a different disease course from other variants (data on this is likely to be available in around 10 days).
6. It is not yet clear whether the faster spread observed with this variant is consistent across age groups, or if there is a greater increase in transmission relative to other variants in some age groups.
7. Whilst it is theoretically possible that the mutations might alter immune recognition, this is currently considered low probability on the available evidence. Current rates of vaccination are unlikely to significantly change the epidemiology in the near future, though this would change if rates increase as planned.
8. There is currently no evidence of any association between the new variant and increases in transmission in particular settings (e.g. hospitals or care homes).
9. It is important for public health that data on the sensitivity of tests to the new variant, including Lateral Flow Devices (LFDs), are publicly available. PHE reported that LFDs detect the variant with similar sensitivity to wild type virus.
10. Existing mitigation measures (e.g. social distancing, ventilation, hand hygiene and mask usage) remain important, but given the increase in risk associated with the new variant, a commensurate strengthening in the measures taken (rather than a need for different measures) may be needed (i.e. greater use of all these mitigations). There is no evidence for differences in routes of transmission or different survival on surfaces.
11. It is highly unlikely that measures with stringency and adherence in line with the measures in England in November (i.e. with schools open) would be sufficient to maintain R below 1 in the presence of the new variant. R would be lower with schools closed, with closure of secondary schools likely to have a greater effect than closure of

primary schools. It remains difficult to distinguish where transmission between children takes place, and it is important to consider contacts made outside of schools.

12. It is not known whether measures with similar stringency and adherence as Spring, with both primary and secondary schools closed, would be sufficient to bring R below 1 in the presence of the new variant. The introduction of Tier 4 measures in England combined with the school holidays will be informative of the strength of measures required to control the new variant but analysis of this will not be possible until mid-January.
13. The potential for the new variant to increase transmission associated with the return of universities in the new year also needs to be considered. Students are likely to begin travelling ahead of the start of term, including some who will plan to travel while there are railway engineering works taking place (which reduce capacity and therefore may reduce the ability to socially distance).
14. Adherence will remain critical to the effectiveness of interventions, and clear and consistent policy and messaging will remain important in supporting understanding and enabling adherence.
15. There are other variants with some of the same mutations as B.1.1.7 being identified elsewhere in the world, and global surveillance will be important, for these and for other variants. It is currently the case that in many countries the emergence of new variants may not be identified quickly due to limited sequencing capacity.
16. A variant in South Africa has some similar and some different mutations. It is spreading rapidly and has mutations that raise theoretical concerns in terms of immune recognition.

ACTION: EMG to update paper on mitigations in line with SAGE feedback, and paper to be shared with PHE and relevant government departments.

ACTION: PHE to share information on new variant and South Africa variant with policymakers and ministers for consideration of action.

Attendees

Scientific Experts (31): Patrick Vallance (GCSA), Angela McLean (MoD CSA), Cath Noakes (Leeds), Charlotte Watts (FCDO CSA), Graham Medley (LSHTM), Ian Boyd (St Andrews), Ian Diamond (ONS), Ian Young (NI), Jeremy Farrar (Wellcome), Jim McMenamin (Health Protection Scotland), John Edmunds (LSHTM), Julia Gog (Cambridge), Kamlesh Khunti (Leicester), Maria Zambon (PHE), Mark Walport (UKRI), Mark Wilcox (NHS), Michael Parker (Oxford), Peter Horby (Oxford), Wendy Barclay (Imperial), Harry Rutter (Bath), Rob Orford (Wales), Sheila Rowan (Scotland CSA), Sharon Peacock (PHE), Susan Hopkins (PHE/NHST&T), Jeanelle de Gruchy (ADPH), Andrew Morris (HDR UK), Lucy Yardley (Bristol/Southampton), Russell Viner (RCPCH), Wei Shen Lim (Nottingham), Jonathan Van Tam (dCMO), Sarah Walker (Oxford)

Observers and government officials (21): Paul Monks (BEIS CSA), Phil Blythe (DfT CSA), Jennifer Rubin (HO CSA), Rupert Shute (HO dCSA), Andrew Curran (HSE CSA), Alan Penn (MHCLG CSA), Gideon Henderson (DEFRA CSA), Osama Rahman (DfE CSA), Robin Grimes (MoD Nuclear CSA), Tom Rodden (DCMS CSA), Rob Harrison (CO), [redacted], Daniel Kleinberg (Scotland), [redacted], Anna Seale (JBC), James Benford (HMT), [redacted]

Secretariat (all GO-Science) (16): Stuart Wainwright, Simon Whitfield, [redacted]

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Total: 68