

Thirty-ninth SAGE meeting on Covid-19, 28th May 2020 Held via Zoom

Summary

1. SAGE approved updated estimates of R (including for the 4 nations) and noted ongoing high incidence of infection in the UK.
2. SAGE advised strongly that identification of high-risk institutional settings is essential (e.g. homeless shelters and prisons) and that plans to reduce transmission in these setting must be proactive. Research is also needed to better understand risks in these settings.
3. SAGE agreed the importance and urgency of identifying (high contact) occupations at greatest risk of infection and transmission, and of involving workers themselves in designing layers of protection.
4. SAGE gave advice on the alert level proposals and noted the importance of linking Joint Biosecurity Centre alert levels to NPIs both nationally and locally – and of building public trust in the approach to setting and changing alerts.

Situation update

5. SAGE approved SPI-M nowcasts, for which data streams are now aligning more closely. SAGE noted that projections are downwards for all nowcasts.
6. SAGE also approved the following estimates of R: the UK is between 0.7 and 0.9; England is between 0.7 and 0.9; Scotland is between 0.6 and 0.9; Wales is between 0.7 and 1.0; Northern Ireland is between 0.7 and 1.0.
7. There is no evidence of difference in R across the 4 nations – but R is easier to estimate for England, given larger amounts of data.
8. SAGE advised that as R and numbers come down, the challenge in managing the epidemic will be to identify and tackle local outbreaks. Virus sequencing may help understand origins of outbreaks and transmission patterns.
9. Nosocomial infection in hospitals outside London – albeit at reduced levels compared to earlier in the outbreak – remains a significant concern. The NHS has a new site-specific nosocomial sitrep. The SAGE nosocomial subgroup continues to give science advice to the NHS.
10. According to CO-CIN data, 1 in 3 people admitted to hospital with Covid-19 have died.
11. SAGE noted ongoing high incidence of infection – at around 10,000 cases per day.
12. SAGE reiterated the importance of detailed field investigation of generation time, i.e. the time between onset of symptoms in a primary and secondary case. This has been noted before and SAGE reiterated the importance of this study being undertaken, ideally by PHE.
13. SAGE noted a verbal report of outbreaks in schools, including residential settings and schools for children with special educational needs: these need to be investigated and PHE are doing so.
14. Whilst there is currently no new data for SAGE to review its advice on 2-metre distancing, the Environmental and Modelling Group is producing further advice on mitigations for different transmission routes. It was noted that the advice provides enough information for further policy decisions to be made.

ACTION: GCSA to share UKRI email on REF recognition with SAGE attendees

ACTION: SAGE secretariat to work out how to provide a rapid meeting summary for public release on a routine basis

ACTION: PHE to review its capacity to model infection rates in essential retail currently open in order to assess effectiveness of distancing measures (by 29 May); Jeremy Farrar and ONS to consider alternatives if PHE unable to action

ACTION: PHE to provide a response to the need for an epidemiological study into Covid-19 generation time; **SPI-M** to provide details of research needs to PHE (and to UKRI in parallel)

ACTION: COG UK to produce an update at future SAGE meeting (timing to be determined by Sharon Peacock)

ACTION: UKRI to provide status report on review cohort studies following discharged Covid-19 patients and additional longitudinal studies (by 4 June)

ACTION: PHE to circulate emerging data from Covid-19 outbreaks (e.g. in special educational needs settings) to relevant sub-groups (including Children), JBC and DfE (by 29 May)

ACTION: SAGE participants to provide comments by email to **CMO** on *Serology testing strategy – for discussion at SAGE* paper (by 31 May)

High-risk institutional settings

15. SAGE endorsed the paper by Andrew Hayward and Ian Hall, which highlights risks in the homeless sector, prisons sector (including custody suites), in immigrant reception centres and other institutions featuring vulnerable populations and communal facilities.
16. SAGE advised strongly that efforts to limit transmission in these settings (including testing and surveillance) must be proactive (rather than waiting for outbreaks to occur) – and that they must be treated differently from settings such as care homes, given trust issues and particular challenges around test, trace and isolate.
17. SAGE advised that research is needed to understand both environmental and human issues in these settings (including co-morbidities and mental ill health), and that thinking is needed about seasonal challenges, especially winter.
18. SAGE also noted the importance of engaging experts and trusted third parties who understand marginalised groups, such as inclusion health teams.
19. If required, SAGE will establish a dedicated small group to focus on issues around high-risk institutional settings.
20. SAGE noted that a discussion has already taken place with MoJ, HO and MHCLG and the paper was shared.

ACTION: SAGE secretariat to circulate SAGE-endorsed *Preventing outbreaks in institutional settings* paper to MHCLG, DfE, HO and MOJ – with clear advice to develop action plans in response to its recommendations.

ACTION: HO and MHCLG CSAs to work with Andrew Hayward to develop research studies on outbreaks in institutional settings; Jeremy Farrar to provide advice on existing serological studies if required (by 4 June)

High-connectivity occupations and reducing transmission in social networks

21. SAGE agreed the importance and urgency of identifying high contact occupations at greatest risk and of methods to reduce risks of transmission including across social networks.
22. ONS data has signalled relationships between each of a) low pay, b) high-contact occupations and c) work in healthcare settings with risk of mortality.
23. For individuals able to work from home, risk of mortality is reduced substantially. It is often the case that people working in jobs where social distancing is difficult (or solutions have not been introduced) are also reliant on public transport.
24. Public control measures need to protect such workers, many of whom cannot afford not to work.
25. SAGE agreed that making workplaces Covid-safe is complex – but emphasised the importance of "co-creation" in designing layers of protection (as opposed to single

solutions). Co-creation requires full consultation with frontline workers at most risk, including on risk assessments.

26. SAGE also agreed the importance of clear risk communication, to empower individuals to protect themselves and colleagues and be vigilant at all times – including during breaks in work (risks from social interaction in staff rooms were noted) and commuting.
27. SAGE recognised that public communication on these issues will be challenging and cannot be achieved by existing messaging alone. Engagement and education are needed for both relevant occupations and the general public.
28. The Joint Biosecurity Centre should take a close interest in this area, given the risk of outbreaks in particular occupations and related workplaces. The testing in these high-risk groups could provide a useful warning system.

ACTION: Lucy Yardley (with **Cath Noakes, Charlotte Watts, Ian Diamond and Andrew Hayward**) to expand *Communicating behaviours to reduce transmissions between social networks* paper to incorporate additional evidence (by 4 June) for distribution to CSA Network and BEIS (which was considered the most appropriate department to own the actions and messaging); **SAGE secretariat** to consider organising a related policy seminar to provide information to departments across Whitehall. A list/map of high-risk occupations would be useful.

Joint Biosecurity Centre (JBC) alert levels (JBC present at discussion)

29. SAGE endorsed papers from SPI-M and the Evaluation Sub-group on JBC alert levels; these are already informing JBC policy development, and the levels remain a work in progress.
30. SAGE noted the importance of linking alert levels to NPIs both nationally and locally (locally not necessarily defined geographically); of segmented messaging through trusted voices (e.g. by occupation, local leaders or NGOs); of public transparency around who determines alert levels and how, and direction of travel; and of keeping alert level setters separate and independent from policy makers.
31. SAGE further noted the importance of clear public communications from the beginning, in order to foster trust.
32. SAGE advised that decisions to change alert levels would be better based on more than a single criterion or measure; judgements will be required, and it is important to consider both relevant data sources and what steps will be required when thresholds are met (particularly as levels escalate between levels 2, 3 and 4).

ACTION: Welsh Government to share paper on "circuit breakers" and indicators of infection for placing in SAGE repository (by 29 May)

ACTION: JBC to follow up directly with SAGE subgroups on dialogue and advice around JBC design

ACTION: SAGE members to assist with names of potential CSO/CMO for JBC.

AOB

33. SAGE participants reaffirmed their recent advice that numbers of Covid-19 cases remain high (around 10,000 cases per day with wide confidence intervals); that R is 0.7-0.9 and could be very close to 1 in places across the UK; and that there is very limited room for manoeuvre especially before a test, trace and isolate system is up and running effectively. It is not yet possible to assess the effect of the first set of changes which were made on easing restrictions to lockdown.

List of actions

GCSA to share UKRI email on REF recognition with SAGE attendees.

SAGE secretariat to work out how to provide a rapid meeting summary for public release on a routine basis.

PHE to review its capacity to model infection rates in essential retail currently open in order to assess effectiveness of distancing measures (by 29 May); Jeremy Farrar and ONS to consider alternatives if PHE unable to action.

PHE to provide a response to the need for an epidemiological study into Covid-19 generation time; **SPI-M** to provide details of research needs to PHE (and to UKRI in parallel).

COG UK to produce an update at future SAGE meeting (timing to be determined by Sharon Peacock).

UKRI to provide status report on review cohort studies following discharged Covid-19 patients and additional longitudinal studies (by 4 June).

PHE to circulate emerging data from Covid-19 outbreaks (e.g. in special educational needs settings) to relevant sub-groups (including Children), JBC and DfE (by 29 May).

SAGE participants to provide comments by email to **CMO** on *Serology testing strategy – for discussion at SAGE paper* (by 31 May)

SAGE secretariat to circulate SAGE-endorsed *Preventing outbreaks in institutional settings* paper to MHCLG, DfE, HO and MOJ – with clear advice to develop action plans in response to its recommendations.

HO and MHCLG CSAs to work with Andrew Hayward to develop research studies on outbreaks in institutional settings; Jeremy Farrar to provide advice on existing serological studies if required (by 4 June)

Lucy Yardley (with **Cath Noakes, Charlotte Watts, Ian Diamond and Andrew Hayward**) to expand *Communicating behaviours to reduce transmissions between social networks* paper to incorporate additional evidence (by 4 June) for distribution to CSA Network and BEIS (which was considered the most appropriate department to own the actions and messaging); **SAGE secretariat** to consider organising a related policy seminar to provide information to departments across Whitehall. A list/map of high risk occupations would be useful.

Welsh Government to share paper on "circuit breakers" and indicators of infection for placing in SAGE repository (by 29 May)

JBC to follow up directly with SAGE subgroups on dialogue and advice around JBC design

SAGE members to assist with names of potential CSO/CMO for JBC.

Attendees

Scientific experts (37): Patrick Vallance (GCSA), Chris Whitty (CMO), Jonathan Van Tam (dCMO), Angela McLean (CSA MoD), Robin Grimes (CSA Nuclear), John Aston (CSA HO), Charlotte Watts (CSA DfID), Carole Mundell (FCO CSA), Andrew Curran (CSA HSE), Stephen Powis (NHS), Mark Wilcox (NHS), Yvonne Doyle (PHE), Sharon Peacock (PHE), Paul Cosford (PHE), Maria Zambon (PHE), Ian Diamond (ONS), Graham Medley (LSHTM), John Edmunds (LSHTM), Peter Horby (Oxford), Cath Noakes (Leeds), Michael Parker (Oxford), James Rubin (KCL), Lucy Yardley (Bristol/Southampton), Wendy Barclay (Imperial), Calum Semple (Liverpool), Andrew Rambaut (Edinburgh), Ian Hall (Manchester),

Andrew Hayward (UCL), Ian Boyd (St Andrews), Jeremy Farrar (Wellcome), Venki Ramakrishnan (Royal Society), Sheila Rowan (CSA Scotland), Andrew Morris (Scottish Covid-19 Advisory Group), Nicola Steedman (dCMO Scotland), Jim McMenamin (Health Protection Scotland), Rob Orford (Health CSA Wales), Ian Young (CMO Northern Ireland).

Observers and government officials (12): [REDACTED] Emma Payne (CO), [REDACTED]
[REDACTED] Vanessa MacDougall
(HMT), Ben Warner (No. 10), Imran Shafi (No. 10), [REDACTED]
[REDACTED] Charlie Edwards (JBC), [REDACTED]

SAGE secretariat (16): [REDACTED]
[REDACTED] Simon Whitfield, Kavitha Kishen, [REDACTED] Stuart
Wainwright, [REDACTED]

Total participants: 65