

**Addendum to the twelfth SAGE meeting on Covid-19, 3rd March 2020
Held in 10 Victoria St, London, SW1H 0NN**

This addendum clarifies the roles of the SAGE attendees listed in the minute. There are three categories of attendee. Scientific experts provide evidence and advice as part of the SAGE process. HMG attendees listen to this discussion, to help inform policy work, and are able to provide the scientific experts with context on the work of government where appropriate. The secretariat attends in an organisational capacity. The list of attendees is split into these groups below.

Attendees:

Scientific experts: Patrick Vallance (GCSA), Chris Whitty (CMO), Jonathan Van Tam (Deputy CMO), Angela McLean (CSA MoD), Charlotte Watts (CSA DfID), Carole Mundell (CSA FCO), Phil Blythe (CSA DfT), Neil Ferguson (Imperial), John Edmunds (LSHTM), Graham Medley (LSHTM), James Rubin (King's), Sharon Peacock (PHE), Peter Horby (Oxford), Steve Powis (NHS), Gregor Smith (dCMO Scotland), Maria Zambon (PHE), Andrew Rambaut (Edinburgh), Brooke Rogers (King's).

Observers and Government Officials: Stuart Wainwright (GoS).

Secretariat: [redacted]

Names of junior officials and the secretariat are redacted.

Participants who were Observers and Government Officials were not consistently recorded therefore this may not be the complete list.

12th SAGE meeting on Wuhan Coronavirus, 3rd March 2020
Held in 10 Victoria Street

Summary:

1. SAGE discussed the impact of potential behavioural and social interventions on the spread of a Covid-19 epidemic in the UK, including the resulting public response. Going forward, agreement on the optimal timing of these interventions will be required.
2. NHS England confirmed it has sufficient information in relation to the reasonable worst case (RWC) scenario for operational planning.

Situation update:

3. PHE have implemented a surveillance and monitoring plan as per previous SAGE discussions.

ACTION: PHE to confirm level of disease surveillance already in place for next SAGE meeting (March 5).

Impact of potential interventions

4. SAGE reviewed non-clinical interventions to reduce and delay Covid-19 transmission, including their potential impact and behavioural science implications.
5. Adequate seroprevalence data and of behavioural data is required to track and assess effectiveness of these interventions in real time during an outbreak.
6. Social distancing for over-65s is likely to have a significant effect on overall deaths and peak demand for critical care beds, but will not significantly reduce overall transmission. This would be most effective for those living independently; it will be a challenge to implement this measure within communal settings such as care homes.
7. There is currently no evidence that cancelling large events would be effective.
8. There is likely to be geographical variation in the timing of localised peaks of the epidemic.
9. SAGE noted the importance of assessing the wider health implications of these interventions, e.g. the effect of self-isolation on mental health.

ACTION: SPI-M to provide timings for when interventions should be implemented for next SAGE meeting (March 5)

ACTION: SAGE participants to put basic confidence statements today around the evidence available for the impact of potential interventions.

Behavioural science considerations

10. Key to minimising barriers and facilitating compliance with the proposed interventions are communication, feasibility and equity.
11. Coherent and unambiguous communication, and suggesting replacement behaviours, will help increase compliance.
12. Encouraging positive behaviours as social norms can be powerful.
13. Many of the proposed measures will be easier to implement for those on higher incomes. Government should address this to avoid tension within communities and detrimental effects on compliance.
14. Unintended consequences should be considered – including potential alternative behaviours (e.g. people congregating elsewhere when events are cancelled).
15. Consideration should be given to how and when measures will be removed, and any impact this may have on the transmission of the disease (e.g. causing a second peak).

ACTION: PHE to begin drafting public guidance on potential interventions, informed by evidence of what constitutes effective guidance (including from behavioural science) – and to advise where there are evidence gaps requiring rapid research.

Science advice for NHS planning

16. NHS England confirmed it now has sufficient information for operational planning.
17. Singapore have developed a serology test with some cross-reactivity with SARS, meaning a second test for presumptive positives will be required.
18. Serology data from Wuhan will be extremely helpful in planning the UK response to Covid-19.

ACTION: SAGE secretariat to circulate clinical parameters broken down by age group before next SAGE meeting (March 5)

ACTION: PHE to ensure CO-CIN data is cross-checked against UK Severe Influenza System data.

ACTION: PHE to develop with **SPI-M** a proposal for required levels of serosurveillance for next SAGE meeting (March 5).

Most likely scenario

19. SAGE advised that infection attack rate and infection fatality rate are likely to be lower than the reasonable worst case, but this will depend on the effectiveness of potential interventions covered above.

Next SAGE meeting

20. It was agreed that SAGE would review excess deaths, age-related risks and vulnerable groups, and reasonable worst case numbers.

ACTION: NHS England to provide reasonable worst case and most likely case figures for deaths not resulting directly from the virus but from changes in care regimes – for next SAGE meeting (March 5).

List of actions

PHE to confirm level of disease surveillance already in place for next SAGE meeting (March 5)

SPI-M to provide timings for when interventions should be implemented for next SAGE meeting (March 5)

SAGE participants to put basic confidence statements today around the evidence available for the impact of potential interventions

PHE to begin drafting public guidance on potential interventions, informed by evidence of what constitutes effective guidance (including from behavioural science) – and to advise where there are evidence gaps requiring rapid research

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NHS England to provide reasonable worst case and most likely case figures for deaths not resulting directly from the virus but from changes in care regimes – for next SAGE meeting (March 5)

Attendees

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By phone: Maria Zambon, Andrew Rambaut, Brooke Rogers, [REDACTED]