Transparency data

SAGE 6 minutes: Coronavirus (COVID-19) response, 11 February 2020

Published 29 May 2020

Contents

Sixth SAGE meeting on Coronavirus (COVID-19), 11 February 2020

Held in 10 Victoria Street.

Addendum

This addendum clarifies the roles of the SAGE attendees listed in the minute. There are 3 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)
- Alaster Smith (dCSA DfE)
- Angela McLean (CSA MOD)
- Charlotte Watts (CSA DfID)
- Graham Medley (LSHTM)
- James Rubin (King's College London)
- John Aston (CSA HO)
- John Edmunds (LSHTM)
- Maria Zambon (PHE)
- Neil Ferguson (Imperial)
- Phil Blythe (CSA DfT)
- Sharon Peacock (PHE)
- Wendy Barclay (Imperial)

Observers and government officials:

- Kate Thomas (DHSC)
- Samantha Harris (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.

Summary

1. SAGE agreed that HMG should continue to plan using influenza pandemic assumptions.

2. SAGE advised it is essential that the maximum amount of information is derived from confirmed cases in the UK.

3. Assuming the reproduction number and doubling time are similar in the UK to the early stages of the outbreak in Wuhan, an epidemic in the UK could be expected to peak around 2 to 3 months following the establishment of widespread transmission, but there is low confidence around this. It is predicted to have a lower peak but broader duration than a pan flu outbreak.

Situation update

4. SAGE was updated on rough case numbers and fatalities for China and other countries.

5. The UK has 8 confirmed cases, all of whom acquired the virus overseas.

6. Swabbing is taking place of individuals quarantined at Arrow Park and Milton Keynes.

7. It is not possible for the UK to accelerate diagnostic capability to include COVID-19 alongside regular flu testing in time for the onset of winter flu season 2020 to 2021.

8. Validated serology for clinical use in the UK is around 4 to 6 weeks away. Singapore and Hong Kong are close to validated serological capability.

Actions

- DCMO and PHE to understand what swabbing and subsequent testing of returning travellers has been undertaken globally, and to review results, how often swabs need to be taken to be reliable, and which tests are being used

Understanding COVID-19

Key variables

9. Case fatality rate: uncertain but planning on the assumption 2 to 3%.

10. Reproduction number (R0): unchanged at 2 to 3 in Wuhan in the early stages of the epidemic.

11. Doubling time: unchanged at 4 to 5 days.

12. Incubation period: 4 to 5 days average, with range of 1 to 14 days.

13. Serial interval (the time between successive cases in a chain of transmission): 6 days, but uncertain.

14. Duration of infectivity: 14 days as upper limit (advice to self-isolate for 14 days still stands). Peak infectivity is probably around the start of symptom onset, average 2 to 6 days.

15. SAGE will not discuss these key variables again unless and until there is a material reason to do so (significant new data), following advice from SPI-M.

16. A lack of data from China continues to hamper understanding of COVID-19. Cases outside Wuhan are not well reported. It is possible China has changed its case definition.

17. Beyond China, surveillance is focused on travellers from Hubei, providing only a partial understanding of spread.

18. Data (including serological) from the cruise ship quarantined off Japan will be informative.

19. Virus shedding may reach significant levels just before onset of symptoms and continues for 1 to 2 days after (wide uncertainty).

20. Information about children remains limited. There is no clear modelling evidence that children are either protected or less susceptible, but clinical reports suggest that severity of disease may be less.

21. In China, unpublished data suggests 90% of cases are among those over 30, with incidence approximately independent of age above this.

Actions

- Neil Ferguson to share summary paper on vulnerable groups with SAGE secretariat

22. Seasonality could be a factor in the spread of COVID-19 in the UK, but there is no current evidence for this. Seasonality of endemic UK coronaviruses is not well understood.

23. No new information available on virology: most data still quite speculative, but it doesn't appear that the virus is currently mutating.

24. Sequencing of UK cases is taking place.

25. SAGE advised it is essential that the maximum amount of clinical and biological information is derived from confirmed cases in the UK.

26. Confirmed cases in the UK need to be tested daily for stool, urine and respiratory secretions.

Actions

- PHE to ensure there are plans in place to collect the maximum amount of information from returning UK travellers who are testing positive for COVID-19, including daily swabbing and collection of blood samples; data and samples need to be made available for analysis and use by research groups
- PHE to work with SPI-M to develop criteria for when contact tracing is no longer worthwhile; this should include consideration of any limiting factors on testing and alternative methods of identifying epidemic evolution and characteristics

Modelling the outbreak in China and internationally

27. There is an apparent slowing of the epidemic in Wuhan, where case numbers seem to have flattened (uncertainty remains).

28. UK modellers are in agreement that the epidemic is close to peaking in Wuhan – potentially in the next 1 to 3 weeks, around 2.5 months after it began in early December 2020.

29. The peak in the rest of China could be around 1 to 2 months behind Wuhan, but uncertain.

30. Outside China, case numbers correlate with air travel volumes from China, suggesting limited on-going transmission has yet to be detected outside China.

Actions

- DfID to share flight data with SPI-M secretariat , to facilitate modelling of global spread of WN-CoV
- FCO and DfID to work with SPI-M secretariat to finalise the detailed break-down of data required from Chinese and other national authorities, and the routes through which this data should be shared; this request to be issued to all UK Heads of Mission in affected countries to pass to their host governments, with priority given to data from Japanese and Singaporean governments
- SPI-M to review emerging papers on global spread, and provide conclusions on plausible scenarios at a future SAGE meeting (next week, timing to be confirmed); these will be used to inform HMG international planning

Modelling for the UK

31. Assuming the reproduction number and doubling time are similar in the UK to the early stages of the outbreak in Wuhan, an epidemic in the UK could be expected to peak around 2 to 3 months following the establishment of widespread transmission, but there is low confidence around this. It would be expected to have a lower peak but broader duration than pandemic flu.

32. It is expected that the all parts of the UK would be impacted at about the same time, with only small delays between regions.

33. It is important to understand hospital bed requirements, particularly requirements for respiratory support.

Actions

- SPI-M to report how their estimates of the time from widespread transmission to peak incidence would vary with different reproduction numbers and doubling times
- SPI-M to work with NHS England and others on modelling the impact of the pandemic influenza reasonable worst case on the NHS, including the number of people requiring respiratory support

Review of reasonable worst-case scenario and planning

34. SAGE agreed that HMG should continue to plan using influenza pandemic assumptions.

35. Epidemiological terms need to be made clearer in the planning documents to avoid ambiguity.

36. SAGE advised that HMG should plan for impacts on the NHS and also on the wider UK workforce.

For discussion at future meetings

37. SAGE: Measures to limit spread (including review of school options); public behaviour; public gatherings; advice on absenteeism.

38. NERVTAG: advice to frontline workers (only revising this advice if substantive changes occur); cleaning of surfaces.

Action

- SAGE and NERVTAG secretariats to agree clear division of responsibilities; SAGE secretariat to ensure that all approved science advice is readily accessible across HMG

List of actions

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- Angela McLean
- Charlotte Watts
- Graham Medley
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- John Aston
- John Edmunds
- Kate Thomas
- Neil Ferguson
- Phil Blythe
- Sharon Peacock

By phone:

- Alaster Smith
- Maria Zambon
- Wendy Barclay

Secretariat:

- Samantha Harris

1 scientific expert and 4 SAGE Secretariat redacted.