Addendum to Precautionary SAGE meeting on Covid-19, *22nd January 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), Charlotte Watts (CSA DfID), Jonathan Van Tam (Deputy CMO), Neil Ferguson (Imperial), Carole Mundell (CSA FCO), Peter Horby (Oxford), Christine Middlemiss (CVO DEFRA), James Rubin (King's College), Cathy Roth (DFID), Jeremy Farrar (Wellcome), Phil Blythe (CSA DfT), Pasi Penttinen (ECDC), David Lalloo (LSTM), Maria Zambon (PHE), Ben Killingley (UCL), John Edmunds (LSTHM), Jim McMenamin (Health Protection Scotland).*

Observers and Government officials: *Rupert Shute (dCSA HO), Kavitha Kishen (DfT), Stuart Wainwright (GoS), Tasha Grant (CCS), 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 a complete list.

UPDATED, valid as of 1700 23 January

Precautionary SAGE meeting on Wuhan Coronavirus (WN-CoV)
22 January 2020
Held in 10 Victoria St, London SW1H 0NN

Situation update

1. DHSC provided an update on current declared cases, deaths and geographic spread.
2. China has recently revised case definitions. This makes comparisons difficult.
3. It was reported that diagnostic testing capability in Wuhan is overwhelmed.
4. There is considerable uncertainty around the data, with almost certainly many more cases than have been reported; a reasonable worst case cannot be made reliably under such circumstances.
5. WHO has received some environmental sampling from Wuhan: information on the zoonotic reservoir may be forthcoming shortly.
6. *** *Following the meeting, authorities in Wuhan announced the suspension of public transport, including outbound trains and flights, from 0200 GMT 23 January.* ***

Current understanding of WN-CoV

7. There is evidence of person-to-person transmission. It is unknown whether transmission is sustainable.
8. The incubation period is unclear – but appears to be within 5 to 10 days; 14 days after contact is a sensible outer limit to use.
9. It is highly probable that the reproductive number is currently above 1.
10. It is currently estimated that the mortality rate for WN-CoV is lower than for SARS, but it is too early to reliably quantify that rate.
11. There is insufficient information currently on the genetic strain to comment on WN-CoV's origin.
12. There is no evidence yet on whether individuals are infectious prior to showing symptoms.
13. There is no evidence that individuals are more infectious when symptoms are more severe, but that is likely.
14. There appears to be very little genetic diversity in WN-CoV based on sequences available so far.
15. It is reasonable to argue – based on lessons from MERS and SARS, and consistent with exported cases of WN-CoV – that individuals returning from Wuhan are no longer at risk if they show no symptoms after 14 days.

Summary and review of NERVTAG conclusions

16. NERVTAG does not advise port of entry screening, irrespective of the current limited understanding of the epidemiology.
17. NERVTAG does not advise use of screening questionnaires, pilot declarations or requiring confirmation of exit screening at Wuhan.
18. NERVTAG does support public health information efforts via leaflets, posters and broadcast messengers to passengers.
19. SAGE supports NERVTAG's position both on the value of port screening and on monitoring measures.
20. SAGE would review its position on port screening only if a simple, specific and rapid test was available and was deployable at scale across the UK. Temperature and other forms

of screening are unlikely to be of value and have high false positive and false negative rates.

Transport-related issues

21. The European Centre for Disease Prevention and Control (ECDC) has just published "Risk assessment guidelines for infectious diseases transmitted on aircraft (RAGIDA) - Middle East Respiratory Syndrome Coronavirus (MERS-CoV)".
22. ECDC advises use of MERS guidelines for the current outbreak, but acknowledges the limitations of its evidence base.

UK health readiness and planning

23. The UK currently has good centralised diagnostic capacity for WN-CoV – and is days away from a specific test, which is scalable across the UK in weeks. The sensitivity of the test is currently unknown. There are conflicting reports of the sensitivity of diagnostic tests from upper respiratory tract sampling.
24. DHSC is developing advice for UK healthcare workers on testing potentially infected individuals.
25. SAGE agreed that DHSC and PHE criteria for testing potentially infected individuals were appropriate, i.e. those with symptoms or signs of WN-CoV, and a history of travelling to or living in Wuhan in the 14 days prior to symptom onset, including those who accessed Wuhan healthcare facilities. SAGE advised that DHSC and PHE should be ready to revise those criteria as the situation evolves.
26. DHSC and PHE also preparing plans for isolating potentially infected individuals and the follow up of contacts.

    ACTION: CMO to share the latest iteration of the PHE isolation plan for suspected cases and contacts with some of the SAGE participants, in particular behavioural scientists, to get their view of its proportionality and advice on how to communicate uncertainty, in order to improve subsequent versions.

    ACTION: CMO/DHSC and **PHE** to consider how NHS primary care facilities might respond to an increase of cases and potential cases.

    ACTION: CMO/DHSC and **FCO** to work together to ensure consistent messaging on travel advice to/from Wuhan.

27. There are no practical preventative actions that HMG might undertake ahead of Chinese New Year.

Triggers for escalating HMG response

28. Of DHSC's current triggers, there has been infection of healthcare workers and probably some sustained human-to-human transmission, but not geographical spread unconnected to Wuhan.
29. SAGE agreed that HMG should review its response either in the case of onward spread of WN-CoV person to person outside of China or a severe confirmed case in the UK.
30. SAGE is unable to say at this stage whether it might be required to reconvene.

Summary of actions

CMO to share the latest iteration of the PHE isolation plan for suspected cases and contacts with some of the SAGE participants, in particular behavioural scientists, to get their view of its proportionality and advice on how to communicate uncertainty, in order to improve subsequent versions.

CMO/DHSC and **PHE** to consider how NHS primary care facilities might respond to an increase of cases and potential cases.

CMO/DHSC and **FCO** to work together to ensure consistent messaging on travel advice to/from Wuhan.

Attendees

SAGE participants: Patrick Vallance, Chris Whitty, Charlotte Watts, Jonathan Van Tam, Neil Ferguson, Carole Mundell, Peter Horby, Christine Middlemiss, James Rubin, Cathy Roth
By phone: Jeremy Farrar, Phil Blythe, Pasi Penttinen, David Lalloo, Maria Zambon, Ben Killingley, John Edmunds, Jim McMenamin

Observing: [redacted] Rupert Shute, Tasha Grant, [redacted] Kavitha Kishen, [redacted] Stuart Wainwright, Samantha Harris, [redacted]
Secretariat: [redacted]