Held via Video Teleconference.

## Summary

- 1. Incidence and prevalence across the <u>UK</u> continue to increase, and data show clear increases in hospital and ICU admissions, particularly in the North of England.
- 2. In England the number of infections and hospital admissions is exceeding the Reasonable Worst Case Scenario (RWCS) planning levels at this time. Projections also indicate the number of deaths is highly likely to exceed Reasonable Worst Case planning levels within the next 2 weeks.
- 3. Data show lower incidence and prevalence in London compared to some other UK cities, but there is variation within London. The reasons for apparent lower levels in London are not known but could include some degree of immunity (lower than 20%); different population behaviours because London was hard hit in the first wave; the effects of the loss of tourism and people working from home; differences in population structure and housing densities; or differences in levels of deprivation compared to other cities.
- 4. As previously, a package of non-pharmaceutical interventions (NPIs) needs to be adopted to reverse the exponential rise in cases (see <u>SAGE 58</u>). The epidemiological impact of <u>NPIs</u> will depend on context and how they interact, and public behaviours in response to the measures.
- 5. Under any scenario it will be important to protect vulnerable and at-risk sections of the population. There are risks and negative mental health impacts associated with full shielding which should be considered by policymakers when developing advice for more vulnerable people and those who interact with them (see SAGE 50).
- 6. SAGE reiterated the importance of a consistent government strategy, clear public engagement and communication, and transparency, for increasing adherence. Explaining and showing the evidence behind decisions is important.

## Situation update

- 7. UK winter forecasts show higher than average risks of cold spells (snow and ice) in November and December, with a greater chance of mild, wet and stormy periods of weather in January to March 2021. This may have a bearing on operational aspects of the COVID-19 response.
- 8. It is almost certain that incidence and prevalence are growing overall across the UK, as shown by data from the latest ONS and REACT surveys and analysis from SPI-M. Data also show clear increases in hospital and ICU admissions, particularly in the North of England.
- 9. The latest estimate of R for the UK is 1.2 to 1.5, while the daily growth rate estimate for new infections is +4% to +9%. The latest estimate of R for England is 1.2 to 1.5, while the daily growth rate estimate is +4% to +8%. SAGE does not have confidence that R is below 1 in England or across large parts of the UK. As previously, these estimates rely on lagged data and mask wide regional variation across the country and should be therefore treated as a guide to the general trend.
- 10. The growth rate estimates equate to a doubling time for new infections of 8 to 16 days but it could be faster in some regions and age groups. These estimates do not fully reflect changes from the last 2 to 3 weeks.
- 11. While there are tentative indications in some data streams of a slight slowing in the growth rate of the epidemic, regional variation and inconsistency in data mean this cannot be concluded with any certainty. In all scenarios the epidemic is still growing.

- 12. Operational issues in the testing systems, including the demand for symptomatic testing and testing delays, as well as corrections to the data on positive cases, have increased the level of uncertainty in estimates. There are also data issues following the return of students to universities relating to where cases are recorded.
- 13. <u>SAGE</u> reviewed the <u>SPI-M</u> medium-term projections noting sensitivities in the modelling. When modelling exponential growth, beyond 2 weeks projections become more uncertain and there is more variability between models.
- 14. In England the numbers of infections and hospital admissions exceed the Reasonable Worst Case Scenario (RWCS) planning levels at this time. Near-term projections indicate the number of deaths is highly likely to exceed RWCS planning levels within the next 2 weeks. Well over 100 new deaths per day are projected to occur within 2 weeks, even if strict new interventions are put in place immediately.
- 15. <u>NHS</u> data also show increases in hospital admissions, particularly in the North West, North East and Yorkshire. If there are no decisive interventions, continued growth would have the potential to overwhelm the <u>NHS</u>, including the continued delivery of non-<u>COVID</u> treatments.
- 16. Data show lower prevalence and incidence in London compared to some other <u>UK</u> cities but there is variation within London. The reasons for apparent lower levels in London are not known but could include some degree of immunity (lower than 20%); different population behaviours because London was hard hit in the first wave; the effects of the loss of tourism and people working from home; differences in population structure and housing densities; or differences in levels of deprivation compared to other cities.
- 17. <u>CoMix</u> data suggest lower rates of contact in London than the North West of England over the summer period which may have also influenced current incidence rates.
- 18. <u>ONS</u> data also suggest a greater reduction in activity in the hospitality sector in London than elsewhere, in part due to reduced tourism.
- 19. <u>SAGE</u> has previously advised that a package of non-pharmaceutical interventions (<u>NPIs</u>) needs to be adopted to reverse the exponential rise in cases (see <u>SAGE</u> 58). As previously, the earlier additional measures are introduced the more effective they will be. Longer-term sustained measures will also be essential.
- 20. The interventions previously recommended for consideration are those which will have significant population-level impact on reducing transmission. Case control studies indicate that restaurants and bars are associated with increased transmission risk.
- 21. Policymakers will need to consider potential economic impacts and other associated harms, including of non-<u>COVID</u> health harms, alongside the epidemiological impacts of <u>NPIs</u> on Rand growth rates.
- 22. The epidemiological impact of <u>NPIs</u> will depend on context and how they interact, and public behaviours in response to the measures. Substitution behaviours are important (for example the impact of closing pubs will be reduced if people instead socialise in restaurants or private homes).
- 23. Further studies (such as case control studies, cohort studies) are needed to understand where transmission is taking place and where people are at most risk. As noted previously by <u>SAGE</u>, backward contact tracing data will also be useful and is strongly endorsed.
- 24. <u>SAGE</u> reiterated the importance of protecting the most vulnerable and at-risk parts of the population. There are risks and negative mental health impacts associated with full shielding. This should be considered by policymakers when developing advice for more vulnerable people and those