

Annex

SPI-M

A working group of SPI-M-O has agreed scenarios for government planning. Two scenarios have been agreed, accounting for the policy measures put in place to date: a Reasonable Worst Case scenario, where measures do not control the epidemic, and an optimistic scenario, where control is achieved.

Limitations

Estimates are based on scenarios and not forecasts. It is not possible to meaningfully forecast the epidemic at this stage, as:

- Its epidemiology is still uncertain, although our picture of it is improving.
- It is not yet possible to assess how contact patterns have changed, will change over time and, crucially, the impact of that on transmission rates. It is not that case that, for example, a reduction of leisure activities of 80% would reduce transmission from leisure activities by 80%.
- The impact of interventions will become apparent in around 3-4 weeks.

The fewer cases that happen as a result of the policies enacted, the larger subsequent waves are expected to be when policies are lifted – next phase of work will be around release phase and indirect harm. As we cannot predict how policies will change, the terms “Reasonable Worst Case” and “Optimistic Scenario” are only in relation to the number of deaths seen in a first wave.

Impact of policies

It is not possible to estimate the effect of policies enacted on contact rates, especially within households. The models are therefore assumption driven, and “poor” and “good” compliance are subjective measures.

Models are suggesting around 10,000 deaths (at UK level) in the first wave of an optimistic scenario and 65,000 deaths (at UK level) in the first wave in the worst case scenario. Peaks times were slightly different as a result of different assumptions of the time lag between infections and deaths.

Other papers presented to SPI-M

Initial work on forecasting – key results

- A second wave is likely if controls are relaxed too early, SAGE will now focus on this.
- Considerable levels of compliance with social distancing measures are necessary to reduce R_t below one. Data is emerging to suggest R value is lower in community, but there may be regional variation.

Social contact