

Collection

Scientific evidence supporting the government response to coronavirus (COVID-19)

Evidence considered by the Scientific Advisory Group for Emergencies (SAGE).

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The national and global response to the spread of coronavirus continues to develop quickly and our knowledge of the virus is growing. These statements and accompanying evidence demonstrate how our understanding of coronavirus has evolved as new data has emerged.

The evidence was often compiled very rapidly during a fast-moving response and should be viewed in this context. The papers presented here are the best assessment of the evidence at the time of writing, and their conclusions were formed on this basis. As new evidence or data emerges, SAGE updates its advice accordingly. Therefore, some of the information in these papers may have been superseded at a later date.

This page will be updated on a regular basis with the latest available evidence provided to SAGE.

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Introduction to the evidence

[Scientific Advisory Group for Emergencies \(SAGE\): Coronavirus \(COVID-19\) response - publication scheme](#)

29 May 2020 Corporate report

[Coronavirus \(COVID-19\): scientific evidence supporting the UK](#)

Related content

[Scientific Advisory Group for Emergencies \(SAGE\): Coronavirus \(COVID-19\) response - participants](#)

[EMG/SPI-B: Mitigating risks of SARS-CoV-2 transmission associated with household social interactions, 26 November 2020](#)

[TFC: Children and transmission - update paper, 17 December 2020](#)

[SAGE 71 minutes: Coronavirus \(COVID-19\) response, 3 December 2020](#)

[SPI-B: Possible impact of the COVID-19 vaccination programme on adherence to rules and guidance about personal protective behaviours aimed at preventing spread of the virus, 17 December 2020](#)

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Meeting minutes and supporting papers

[SAGE meetings, April 2021](#)

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SPI-B background papers

These papers were produced by SPI-B to provide background information supporting the provision of advice to SAGE.

[SPI-B: Publications to date by SPI-B participants and relevant polling work of possible interest to participants, 6 March 2020](#)

30 March 2020 Research and analysis

[SPI-B: Insights on self-isolation and household isolation, 9 March 2020](#)

30 March 2020 Research and analysis

[SPI-B: The role of behavioural science in the coronavirus outbreak, 14 March 2020](#)

30 March 2020 Research and analysis

[SPI-B: Theory and evidence base for initial SPI-B recommendations for phased changes in activity restrictions, April 2020](#)

12 June 2020 Research and analysis

[SPI-B: Behavioural principles for updating guidance to minimise population transmission - background paper, 20 April 2020](#)

26 June 2020 Research and analysis

[SPI-B: Extended paper on behavioural evidence on the reopening of large events and venues, 21 August 2020](#)

11 September 2020 Research and analysis

[TFMS: Behavioural paper supporting the consensus statement on mass testing, 27 August 2020](#)

11 September 2020 Research and analysis

[SPI-B: Principles for co-production of guidance relating to the control of COVID-19, 8 July 2020](#)

22 January 2021 Research and analysis

Modelling inputs

Emerging evidence about COVID-19

[Emergence of a novel coronavirus \(COVID-19\); A protocol for extending surveillance used by the Royal College of General Practitioners \(RCGP\) Research and Surveillance Centre \(RSC\) and Public Health England \(PHE\)](#)

[Early dynamics of transmission and control of COVID-19: a mathematical modelling study](#)

[Inferring the number of COVID-19 cases from recently reported deaths](#)

[Feasibility of controlling COVID-19 outbreaks by isolation of cases and contacts](#)

[Estimates of the severity of COVID-19 disease](#)

[Novel coronavirus 2019-nCoV: early estimation of epidemiological parameters and epidemic predictions](#)

[Estimation of country-level basic reproductive ratios for novel Coronavirus \(COVID-19\) using synthetic contact matrices](#)

[A spatial model of COVID-19 transmission in England and Wales: early spread and peak timing](#)

[The efficacy of contact tracing for the containment of the 2019 novel coronavirus \(COVID-19\)](#)

Reports from Imperial College London

[Epidemic size estimation in Wuhan City](#)

[Epidemic size estimation in Wuhan City - update](#)

[Transmissibility of COVID-19](#)

[Severity of COVID-19](#)

[Phylogenetic analysis of SARS-CoV-2](#)

[Relative sensitivity of international surveillance](#)

[Infection prevalence estimated from repatriation flights](#)

[Symptom progression of COVID-19](#)

The models

[BBC dataset](#)

[POLYMOD](#)

Specific pieces of modelling on interventions provided to SAGE

[Impact of non-pharmaceutical interventions \(NPIs\) to reduce COVID-19 mortality and healthcare demand](#)

16 March 2020 Research and analysis

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