

Coronavirus (COVID-19): scientific evidence supporting the UK government response

During a response to a virus of this nature, it is imperative that the public is confident the government has based its decisions on a representative range of the most up-to-date science advice. In the case of COVID-19, the Scientific Advisory Group for Emergencies (SAGE) has been providing ministers and officials with free and frank advice throughout, based on external scientific evidence and a wide source of essential information.

In fast moving situations, transparency should be at the heart of what the government does.

We have therefore published the statements and the accompanying evidence to demonstrate how our understanding of COVID-19 has continued to evolve as new data emerges, and how SAGE's advice has quickly adapted to new findings that reflect a changing situation.

Government Chief Scientific Adviser Sir Patrick Vallance:

This is an incredibly fast-moving, developing situation and as part of our collective efforts to give the clearest and most reliable scientific advice, SAGE has and continues to draw upon a huge range of experts and a huge range of evidence.

The UK is home to experts who are at the forefront of their chosen fields and we are making full use of their expertise to grow our understanding of COVID-19 as we work tirelessly to tackle this disease.

The collective evidence we have published today has played a considerable role in shaping our recommendations on when, how and why the government have made the interventions it has so far.

Background to SAGE

The [Scientific Advisory Group for Emergencies \(SAGE\)](#) provides ministers and officials with evidence-based scientific advice in emergencies, ensuring government advisers are informed and best-placed to make critical decisions based on a range of credible scientific evidence.

The advice provided by SAGE is one of many essential sources of information that government weighs up before adopting new policies and interventions, and gives maximum assurance that the complexities and implications of any policy have been properly considered.

SAGE relies on external science advice, including advice from expert groups and their papers. In the case of COVID-19, this includes the [New and Emerging Respiratory Virus Threats Advisory Group \(NERVTAG\)](#), [Scientific Pandemic Influenza Group on Modelling \(SPI-M\)](#) in the Department for Health and Social Care, and the Independent Scientific Pandemic Influenza Group on Behaviours (SPI-B).

These groups consider the scientific evidence, and provide their consensus conclusions to SAGE. Both the evidence they have considered and their consensus statements have been included in this current batch of evidence.

The growing evidence base on COVID-19

Contained within this release are the methods and findings that have informed SAGE advice on the COVID-19 outbreak to date.

Among the papers referenced here, some are pre-prints. These are academic papers that have not yet been through the peer-review process, which can take months, and have been drawn upon by SAGE to ensure that the most current evidence is being reviewed in order to provide rapid advice to policy makers.

Some of the bespoke new modelling that SAGE has drawn upon to formulate its conclusions has not yet been published here. This is to allow scientists time to publish their research through the right academic channels.

As our understanding of the virus grows, we will continue to feed into the essential scientific advice needed by the government to respond to the virus. During this time, we will update these pages with the evidence we are collecting to keep the public informed, while also continuing to provide free and frank advice to policy makers.