What modelling and data for the « active circulation of the COVID-19 » in the absence of mass or representative sample testing and limited access to PCR diagnosis ?
Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand


On behalf of the Imperial College COVID-19 Response Team

WHO Collaborating Centre for Infectious Disease Modelling
MRC Centre for Global Infectious Disease Analysis
Abdul Latif Jameel Institute for Disease and Emergency Analytics
Imperial College London
“If the virus is allowed to spread through the French population, given its high transmissibility, it is expected that at least 50% of the population will be infected after one or more epidemic waves (Anderson et al., 2020). For a level of mortality which is currently estimated at 0.5-1%, this corresponds to hundreds of thousands of deaths in France with a significant excess mortality due to the saturation of the resuscitation services (Anderson et al., 2020).
France has been heavily affected by the SARS-CoV-2 epidemic and went into lockdown on the 17 March 2020. Using models applied to hospital and death data, we estimate the impact of the lockdown and current population immunity. We find 3.6% of infected individuals are hospitalized and 0.7% die, ranging from 0.001% in those <20 years of age (ya) to 10.1% in those >80ya. Across all ages, men are more likely to be hospitalized, enter intensive care, and die than women. The lockdown reduced the reproductive number from 2.90 to 0.67 (77% reduction). By 11 May 2020, when interventions are scheduled to be eased, we project 2.8 million (range: 1.8–4.7) people, or 4.4% (range: 2.8–7.2) of the population, will have been infected. Population immunity appears insufficient to avoid a second wave if all control measures are released at the end of the lockdown.
Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak

Issued on: March 13, 2020

In December 2019, a novel (new) coronavirus known as SARS-CoV-2 ("the virus") was first detected in Wuhan, Hubei Province, People’s Republic of China, causing outbreaks of the coronavirus disease COVID-19 that has now spread globally. The Secretary of Health and Human Services (HHS) declared a public health emergency on January 31, 2020, under section 319 of the Public Health Service Act (42 U.S.C. 247d), in response to COVID-19. I have taken sweeping action to control the spread of the virus in the United States, including by suspending entry of foreign nationals seeking entry who had been physically present within the prior 14 days in certain jurisdictions where COVID-19 outbreaks have occurred, including the People’s Republic of China, the Islamic Republic of Iran, and the Schengen Area of Europe. The Federal Government, along with State and local governments, has taken preventive and proactive measures to slow the spread of COVID-19.
Modelling behind lockdown was an unreliable buggy mess, claim experts

Data that predicted 500,000 could die in UK unless extreme measures were taken is impossible to replicate, say scientific teams

‘In our commercial reality, we would fire anyone for developing code like this’

‘Any business that relied on it to produce software for sale would likely go bust’

‘It looks more like a bowl ofangel hair pasta than a finely tuned piece of programming’

‘The early 2000s were yet another confirmation that their modelling approach was flawed to the core’

Imperial’s programming could go down as the most devastating software mistake of all time

Tread carefully when predicting fatality rates

Funeral firms told to expect up to 85,000 extra deaths in summer
Relativ risk by airport: it was a good question

Figure 4
(A) Country-specific risk of importation assuming one case imported to Europe from the multi-source seeding of Figure 1 and (B) relative risk by airport, January 2020

A. Importation risk per country (%) assuming one case imported to Europe (data as at 27 Jan 2020)

B. Relative risk by airport*

* When a city is served by several airports, these airports are considered as one entity. For each country, only the four most important cities in terms of agglomeration of airports and passenger traffic are represented.

Updated to data as at 27 January 2020.
Europe

How a prayer meeting at a French megachurch may have led to scores of coronavirus deaths

The evangelical church of Bourtwiller in Mulhouse, France, was at the center of a cluster of coronavirus cases in the region. (Jean-Francois Badias/AP)
Military airport in Creil (Oise) : an other route of Covid-19 in France ?

Le 31 janvier, la première rotation a ramené des Français à bord d’un A340 de l’Armée de l’air de l’escadron de transport 3/60 « Esterel », stationné sur la BA 110 de Creil. La ministre de la Santé, Agnès Buzyn, a accueilli les rapatriés avant leur prise en charge par la brigade de gendarmerie de l’air (BGA), le Service de santé des armées et le groupement de soutien de base de défense (GSObdD) d’Istres, d’Orange et de Salon-de-Provence, pour une mise en quarantaine. 48 heures après, un deuxième rapatriement par un A380 affrété spécialement par l’État a eu lieu. Une troisième rotation, via la base d’Istres, a été effectuée le 9 février. Les experts NRBC du Centre d’expertise aérienne militaire (CEAM) ainsi que les équipes NRBC-E de la BA 120 de Cazaux, ont été mobilisées pour assurer la désinfection de l’avion et des moyens de transport des passagers, avec le soutien des pompiers de l’air des BA 115 d’Orange et BA 125 d’Istres.


Counterfactual analysis – interventions vs no interventions
How to compare strategies of different countries?