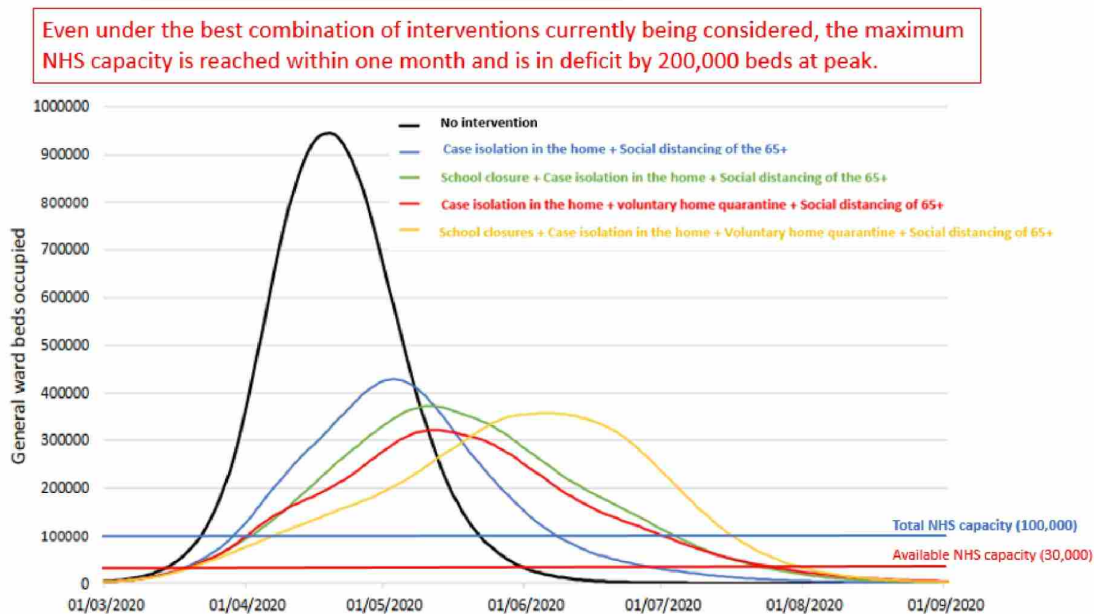


Briefing on COVID-19 Response

We all agree that the goal of our COVID-19 response should be to preserve as many lives as possible by preventing the NHS from collapsing under the stress of the epidemic.

The problem is that under **all measures currently being considered**, the NHS will start to **fail catastrophically in approximately one month**.



There are two strategies:

- 1) **The current plan:** We slow down the epidemic and shift the peak backwards. This builds herd immunity. However, the NHS will collapse in about 1 month, **costing tens to hundreds of thousands of lives**, with these people dying in horrific circumstances, alone, in hospital corridors.
- 2) **An alternative plan:** We attempt to prevent the spread of the virus in order to gain time. This time allows us to mobilise a wartime-like response to create the extra capacity the NHS needs. This requires we take urgent and decisive action. We currently **DO NOT KNOW WHAT INTERVENTIONS ARE REQUIRED TO ENSURE THE SUCCESS OF THIS PLAN** although it is likely to require Wuhan-style restrictions of non-essential movement within a month.

Only the Prime Minister can decide between these two strategies.

The alternative plan would consist of rolling out additional measures:

- **Stopping social gatherings.** Includes shutting, in order of significance, bars/pubs, restaurants, cinemas, night clubs, sporting fixtures, places of worship and theatre. These represent about 12m contact hours of activity per day, or 5.3% of all hours outside home, school or work. Assuming a 3-fold higher risk of transmission than other activities, preventing them might reduce transmission outside household, school or work contacts by **16%**. On its own, this has limited potential for delaying or reducing the peak of the outbreak, or in reducing the total number of cases and deaths.
- **Social distancing of entire population.** All households reduce contacts outside the household or school/workplace by **75%**. School contact rates are assumed to be unchanged. Workplace contact rates are reduced by **25%**. Household contact rates are assumed to increase by **25%**. This policy implies cessation of all activities outside the household (including social contact between different households) bar the essentials and attending school and work.
- **Extreme social distancing (Wuhan-style lock-down).** Identical to social distancing (above), but including school and work closures. Results in lock down of all non-essential movement of people and services. Except for employees of essential services, all individuals in the population are required to stay at home and only leave for visits to food shops and pharmacies. All visits to healthcare (GP and A&E) are discouraged except in cases of threat to life. Lockdown of public transportation, including buses, trains, ferries and flights. The definition of essential services/personnel and threat to life have yet to be determined.

However, it is clear that any additional measures (not yet considered) must be enacted swiftly, and in a geographically targeted way.