However, social distancing measures are not intended to be permanent and when they are relaxed it is expected that the epidemic will resume. For this reason they are expected to have limited effect on the total number of infections (and hence numbers hospitalised or dying), but they can change the shape of the epidemic curve.

Though there is some disagreement on this point, my view is that we are some way from being able to predict the impact of social distancing measures on a COVID-19 epidemic: we can't say how effective they could be and we can't say how effective they would be in actuality, so it's hard to judge what impact they might have on an epidemic we cannot reliably predict in the first place.

We can say, however, that in social and economic terms they would be extremely costly so, ideally, we would like to do the minimum necessary for as short a time as necessary.

There are two scenarios we particularly want to avoid:

1. Doing nothing, as that is likely to result in the health system being overwhelmed in a matter of weeks once an epidemic takes off.
2. Implementing extreme social distancing measures that, sooner or later, have to be relaxed and then, having already paid a high social and economic cost, experiencing a (delayed) epidemic that still overwhelms the health system.

So we need to an intermediate path. At this point my advice is that more research is needed, and SPI-M members are doing that work at this moment. This involves making some judgement as to the likely impact of different measures (but there are very few data to guide us), considering the triggers for those measures to be implemented, deciding should we start low and ramp up or start high and ramp down, and deciding how long should they last. I hope to be able to illustrate the kind of work being done when we meet tomorrow, but I must stress that these are very difficult questions to answer. Yet answers will be needed.

One thing I can say with confidence: no social distancing measures should be introduced without a clear exit strategy, i.e. there are pre-determined triggers for stopping, both in the event that the policy is apparently successful and in the (more difficult) event that it appears to fail. (The FCO will soon come up against this issue with regards to travel advice to countries experiencing COV-19 outbreaks).

Mark Woolhouse

Edinburgh 27/02/20

From: Catherine.Calderwood@gov.scot <Catherine.Calderwood@gov.scot>
Sent: 27 February 2020 11:13
To: WOOLHOUSE Mark < I&S >
Cc: CMO@gov.scot <CMO@gov.scot>
Subject: RE: COVID-19 discussions

Thank you.
Yes- a meeting would be helpful and briefing paper.
Tomorrow afternoon?
Catherine