

Flattening the curve

If you can measure it you can manage it. Government policy towards the virus is to manage down the numbers of people with the illness seeking admission to hospital, for the doubly good reason that we do not want many people seriously ill and there are limits on hospital capacity to deal with them.

They are advised by epidemiologists, people who predict the likely numbers of individuals who catch a disease in an epidemic based on past experiences of other epidemics and daily data on the course of the one they are following. In a situation where there is no known or agreed successful treatment for a disease and no vaccination to block its spread, their advice is to stop many people catching it by social segregation. In the meantime medical research may find treatments and a vaccine for future protection. It also allows rapid expansion of the capacity of the medical facilities, and wholesale transfer of trained medical personnel and wards to treating the epidemic victims.

The issue I am seeking more guidance on from the government and their epidemiological advisers is what does winning look like? When will they have flattened the curve enough?

Public Health England on behalf of the wider government publishes daily two sets of figures. One is the daily addition to the case total, and the other is the grim daily addition to the total deaths ascribed to the virus. The problem with these data sets is they are incomplete and prone to error. In default of reliable tests for significant samples of the entire population, repeated regularly, we do not know the current infection rate or the case total. Many people have caught a mild version of it – or something like it – and have self isolated. Their recovery will not be reflected in the total because they were never tested .

The Death rate is also based on a set of judgements. Worldwide practice varies, with some doctors attributing numerous deaths of people with the virus to pre-existing or other serious conditions, whilst others are more likely to regard any patient dying with the virus as dying because of the virus. The UK is currently thinking of adding more deaths to the total by ascribing death to the virus in cases not admitted to hospital. To get a more accurate figure most deaths would need to include a virus test, and protocols would need to be followed over how to judge the virus contribution to mortality.

So I am asking if we have a consistent set of figures based on clear definitions with resilient data collection, which is needed to decide how much to flatten the curve and to determine how successful policy is. We all are willing the government on because we want to cut the death rate. The next few days are crucial as we should be seeing a drop in new cases reflecting the days people are spending in isolation.