

## Participants

OW Owner of the cell phone

LC Lee Cain

PV Patrick Vallance

DC Dominic Cummings

CW Chris Whitty

BJ Boris Johnson

SC Simon Case

SM System Message

BJ **Boris Johnson** 26 Aug 2020 5:29 AM +00:00

What is the mortality rate of covid ?

I have just read somewhere that it has fallen to 0.04 per cent from 0.1 per cent

So by my maths that is down from one in a thousand to about one in two thousand

(And I seem to remember that when the plague began we thought the fatality rate was one in a hundred)

So if all 66m people in uk were to be infected we could expect 33000 deaths

And we have already had 41k

Is that why the death rate is going down ?

Is it possible that covid is starting to run out of potential victims ?

How can we possibly justify the continuing paralysis to control a disease that has a death rate of one in 2000?

CW **Chris Whitty** 26 Aug 2020 5:56 AM +00:00

It's somewhere between 0.4% and 1% depending how you calculate it. But in practice it's a lot lower than this if you are young (esp children) and significantly higher if you are old or have multiple other medical conditions.

CW

**Chris Whitty** 26 Aug 2020 5:58 AM +00:00

It has probably gone down a bit due to better medical management but there is still appreciable mortality in older people.

PV

**Patrick Vallance** 26 Aug 2020 6:03 AM +00:00

Mortality on older age group can still be as high as 6%. Overall as Chris says it is between 0.4 to 1, and in the under 45 health it is very low. Some evidence that people may be getting infected with lower amounts of virus but that is not clear yet.

BJ

**Boris Johnson** 26 Aug 2020 7:08 AM +00:00

Here is the Financial Times

The global "case fatality rate" — total deaths as a proportion of confirmed cases — has fallen by half over the past three months to below 0.04 as of Monday.

BJ

**Boris Johnson** 26 Aug 2020 7:10 AM +00:00

Is this a misprint ?

BJ

**Boris Johnson** 26 Aug 2020 7:16 AM +00:00

Or is the British case fatality rate for some reason much higher than the global rate and if so why ?

SC

**Simon Case** 26 Aug 2020 7:28 AM +00:00

Have just read FT article. No sources for their global stats quoted.

DC

**Dominic Cummings** 26 Aug 2020 8:00 AM +00:00

Could be FT is cos of mix up due to definition : IFR vs CFR

DC

**Dominic Cummings** 26 Aug 2020 8:01 AM +00:00

My understanding is CFR is more robust but is determined by testing rates to detect cases ?

PV

**Patrick Vallance** 26 Aug 2020 8:02 AM +00:00

The IFR calculation is highly dependent on ability to measure deaths accurately and get total infection numbers. The numbers we quote are not UK numbers they are estimates of overall (although I am worried that our CFR maybe higher than it should be for some reason). Recently the infections have been in younger age groups and so the more the disease is in the young the lower the overall estimate appears. I will ask the epidemiologist to produce a 1 pager on this

DC

**Dominic Cummings** 26 Aug 2020 8:20 AM +00:00

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OW

**Owner of the cell phone** 26 Aug 2020 8:28 AM +00:00

We have a new data tool that Jenny Harries has been developing to define your risk should you be exposed to Covid. Age is the biggest determinant, then sex followed by other conditions inc obesity.

What this means is that the overall mortality is pretty meaningless - because the mortality of high risk groups is still v high, but of low risk groups is v low.

BJ

**Boris Johnson** 26 Aug 2020 8:46 AM +00:00

MAtt as I read this chart an 80 yr old covid patient has a SIX per cent chance of dying and if you are under 35 your chances are negligible

BJ

**Boris Johnson** 26 Aug 2020 8:48 AM +00:00

If I were an 80 year old and I was told that the choice was between destroying the economy and risking my exposure to a disease that I had a 94 per cent chance of surviving I know what I would prefer

OW

**Owner of the cell phone** 26 Aug 2020 9:04 AM +00:00

Chances of dying as an under 35 is negligible - but you still transmit.

So it's important to let people know their risk - the big challenge is whether it's possible to segment those with the higher risk

PV

**Patrick Vallance** 26 Aug 2020 9:54 AM +00:00

It seems that the FT figure is 0.04 (ie 4% not 0.04%) and is the case fatality rate not the infection fatality rate (which would be 0.4-1% overall).

**Dominic Cummings** 26 Aug 2020 9:55 AM +00:00

Yup. Bad explaining from ft

BJ

**Boris Johnson** 26 Aug 2020 10:06 AM +00:00

Eh

BJ

**Boris Johnson** 26 Aug 2020 10:06 AM +00:00

?

BJ

**Boris Johnson** 26 Aug 2020 10:07 AM +00:00

So what is 0.04 if it is not a percentage ? (Five marks; show working)

DC

**Dominic Cummings** 26 Aug 2020 10:08 AM +00:00

0.04 as a probability means 4%

DC

**Dominic Cummings** 26 Aug 2020 10:08 AM +00:00

0 = 0%. 1=100%

0.04 = 4%

DC

**Dominic Cummings** 26 Aug 2020 10:09 AM +00:00

It's just confusion of using probability figure or % figure.

They aren't clear.

This is a common confusion!

DC

**Dominic Cummings** 26 Aug 2020 10:10 AM +00:00

We'll get a proper note explaining it all later today