

Twitter Thread by [Nick Stripe](#)

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THREAD – Mortality 2020

Today we published England & Wales mortality statistics for the w/e 25 Dec

Nearly a full year's data for 2020

In the last 52 weeks there were:

c.604k deaths registered across E&W

This is:

c.73k deaths (14%) above the 5-yr avg = excess deaths

1/11

Remember the bank holiday effect which affects weekly figs

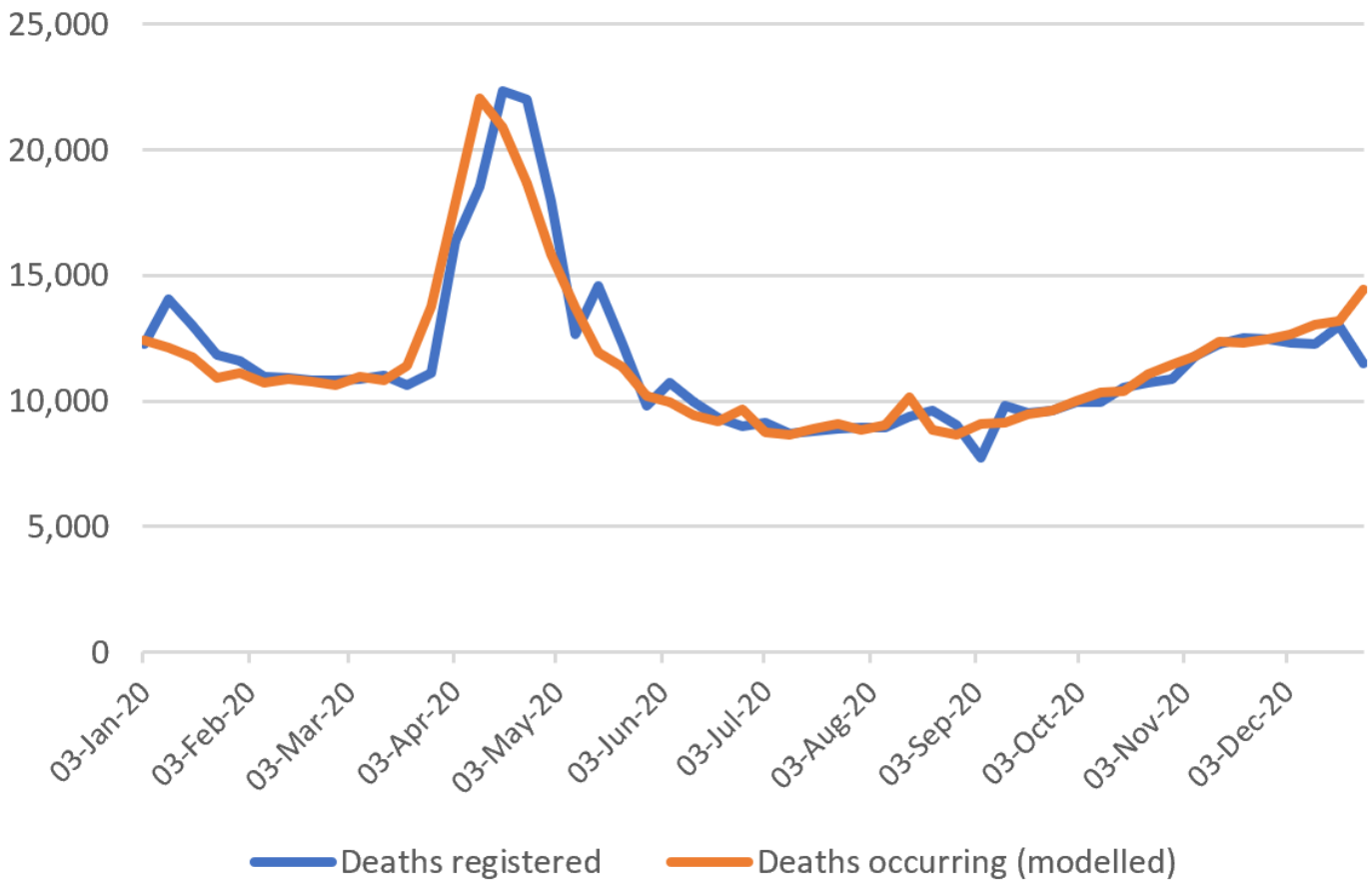
And the lag between deaths occurring and being registered

We now provide modelled estimates of death occurrences to remove these

The chart below shows both registrations and modelled occurrences across 2020

2/11

Weekly deaths in 2020 (registered by 25 Dec)



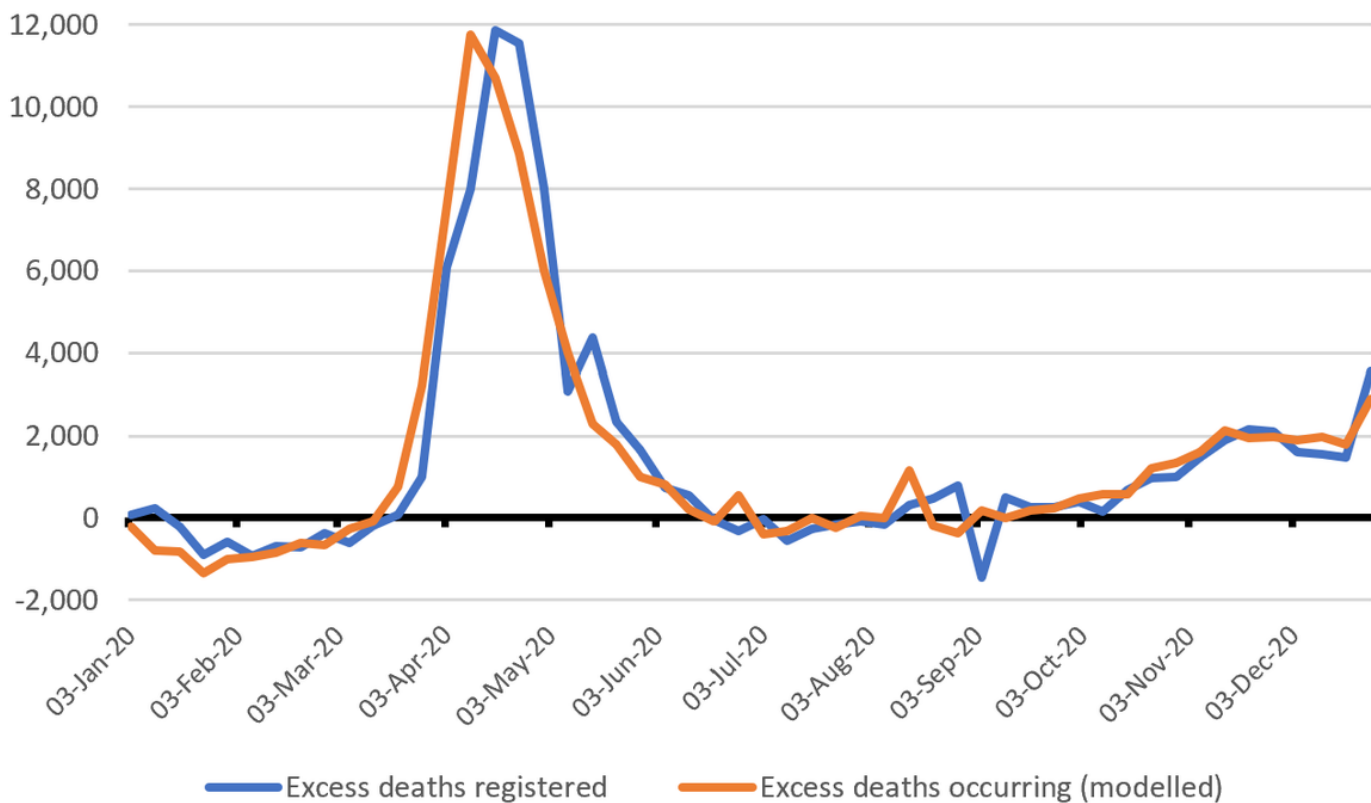
Looking at excess deaths, we began the year with death levels below the 5-yr avg

This was followed by a huge peak in the spring, driven by COVID, until lockdown1 took effect

Note the small Aug heatwave peak

And then a gradual pick up through autumn as CV took hold again

Weekly excess deaths 2020 (up to 25 Dec)



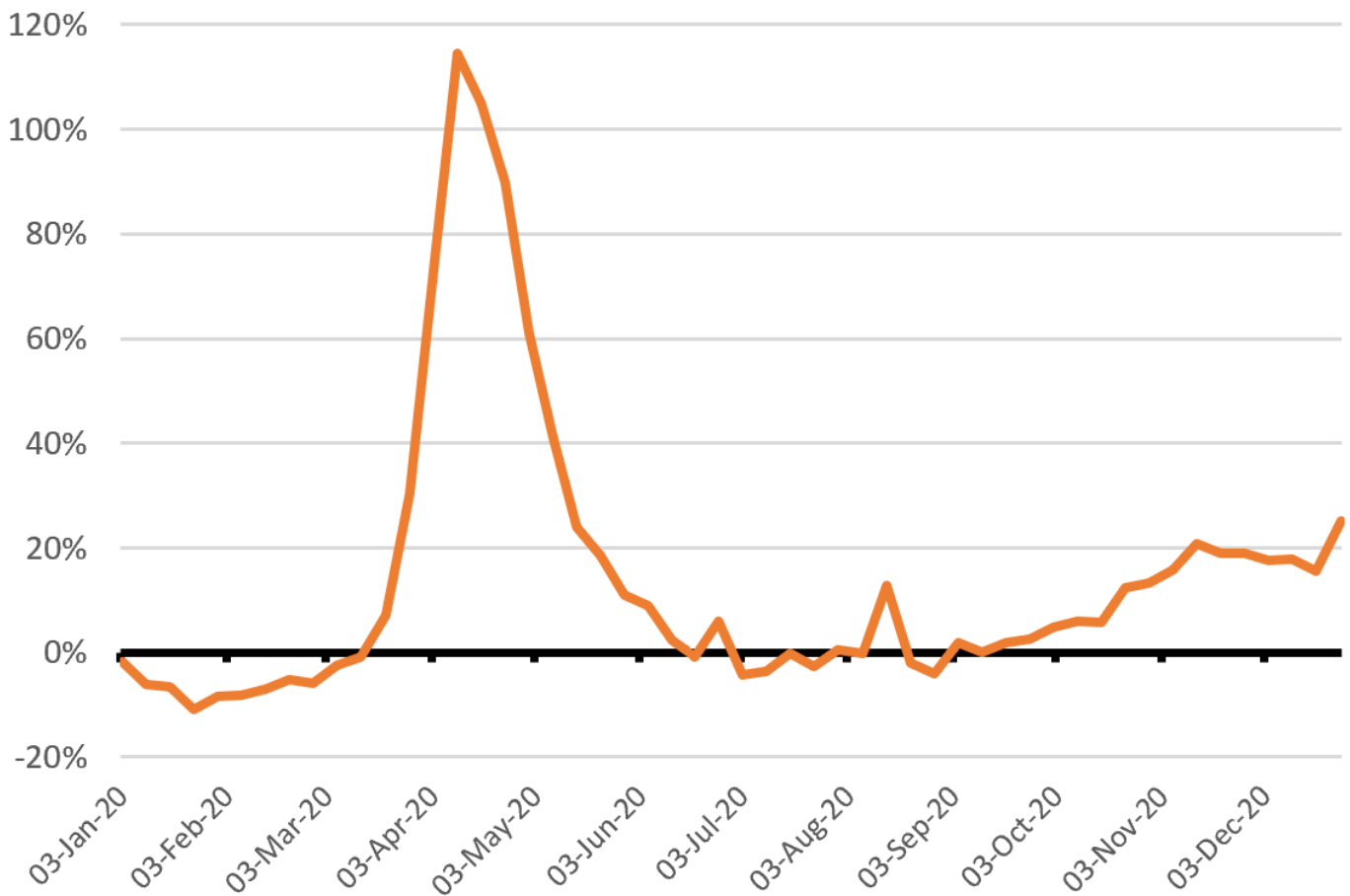
A seasonal effect means more deaths in winter than summer

The pattern of excess deaths as a % of normal weekly deaths is similar

There is a noticeable jump in the latest w/e 25 Dec

Given the recent alarming rise in CV infections this will increase further in Jan

Excess deaths occurring (modelled) as a proportion of 5-yr average

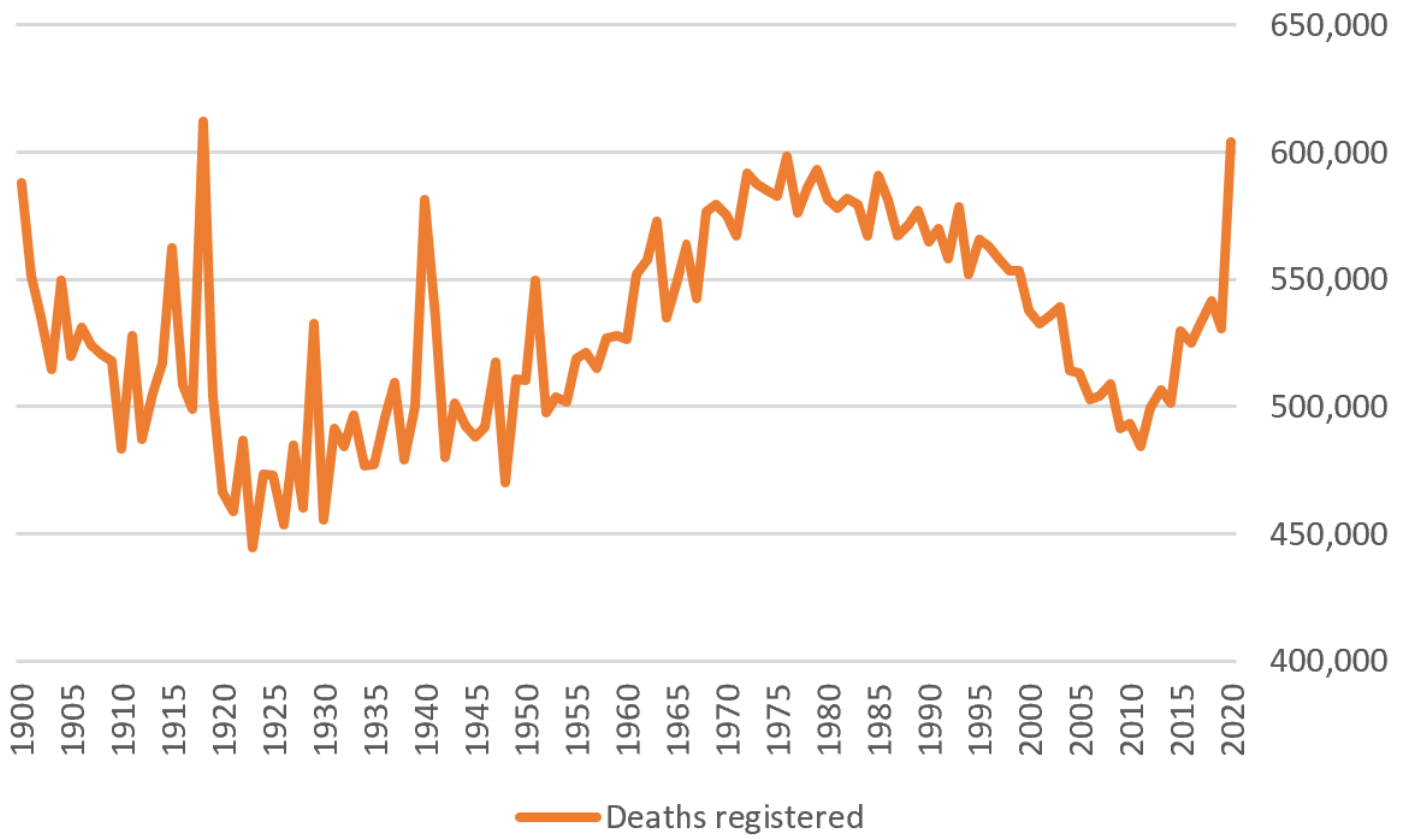


For longer term context we can compare annual deaths back to 1900

Deaths have been rising recently as life expectancy improvements have stalled, but the jump this year to over 600k is clear

Only one previous year has topped 600k – 1918, the year of the “Spanish” flu

Deaths registered 1900 - 2020



Numbers of deaths are affected by population size

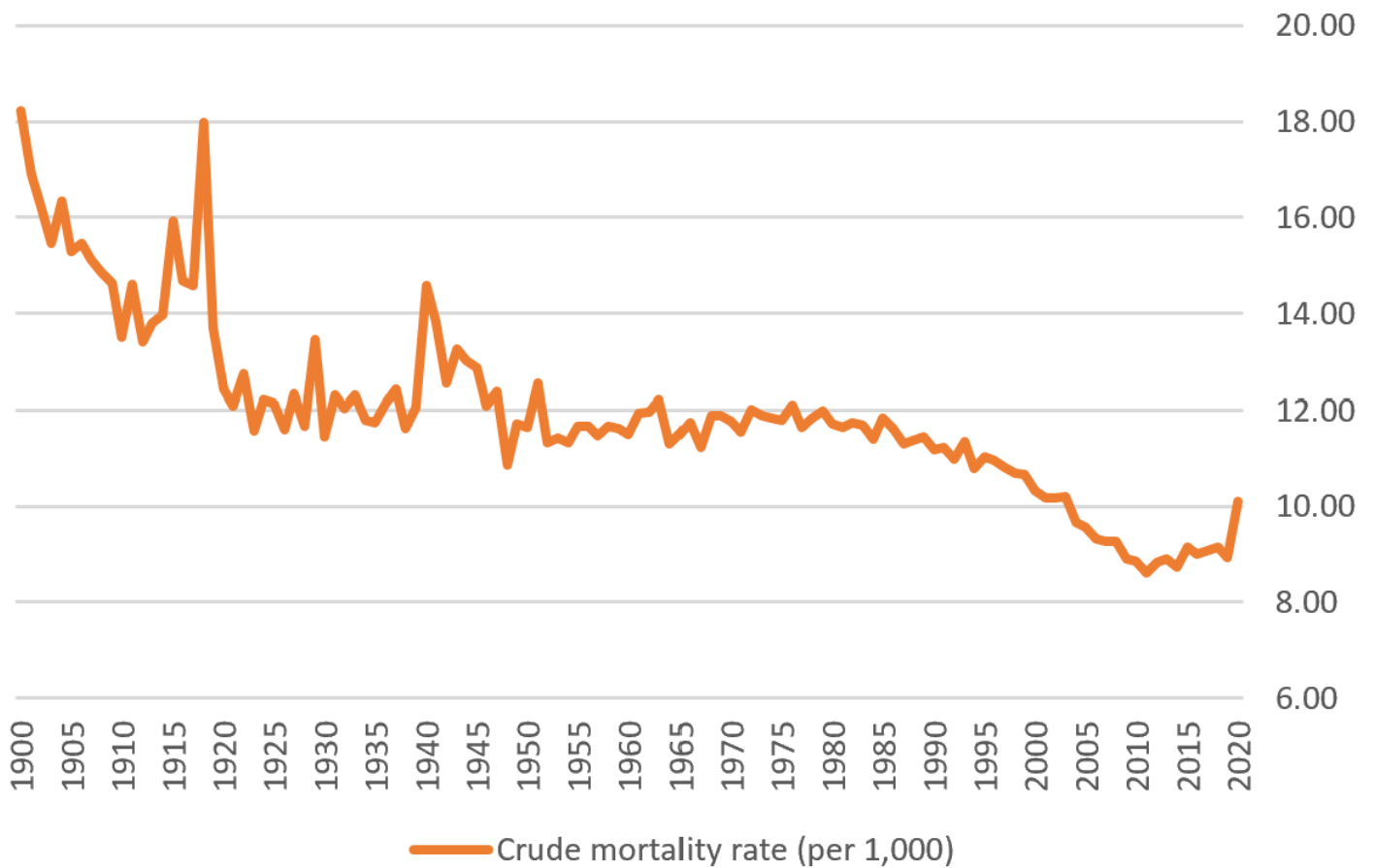
We can also consider death rates – as a proportion of the population

“Crude” death rates are shown below

All improvements in the first decade of this century will be reversed this year

“Spanish” flu did the same in 1918

Crude mortality rate (per 1,000)



Numbers of deaths are also affected by population structure, such as age. We will produce age standardised rates soon

Whilst the UK-born population is ageing, with post-war baby boomers now in their 50's to 70's, recent immigration will have predominantly been younger

7/11

Our world changes too

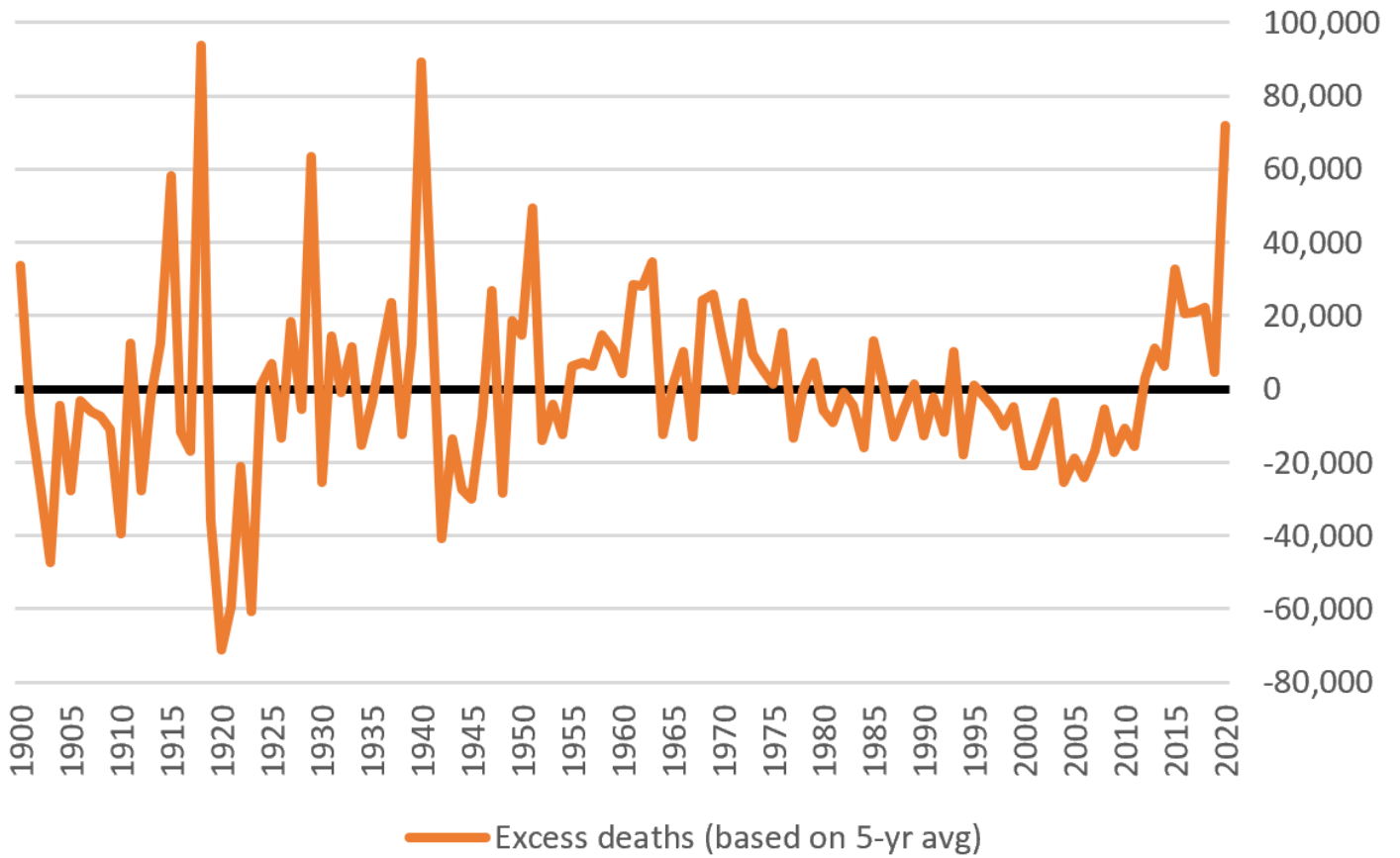
Medical advances, the NHS, welfare state, better living conditions, all mean that 14% of babies do not die before their 1st birthday. They did in 1900

Excess deaths vs the last 5 years gives current context

This year will see the most since 1940

8/11

Excess deaths (based on 5-yr avg)



We can adjust by population to get crude excess death rates

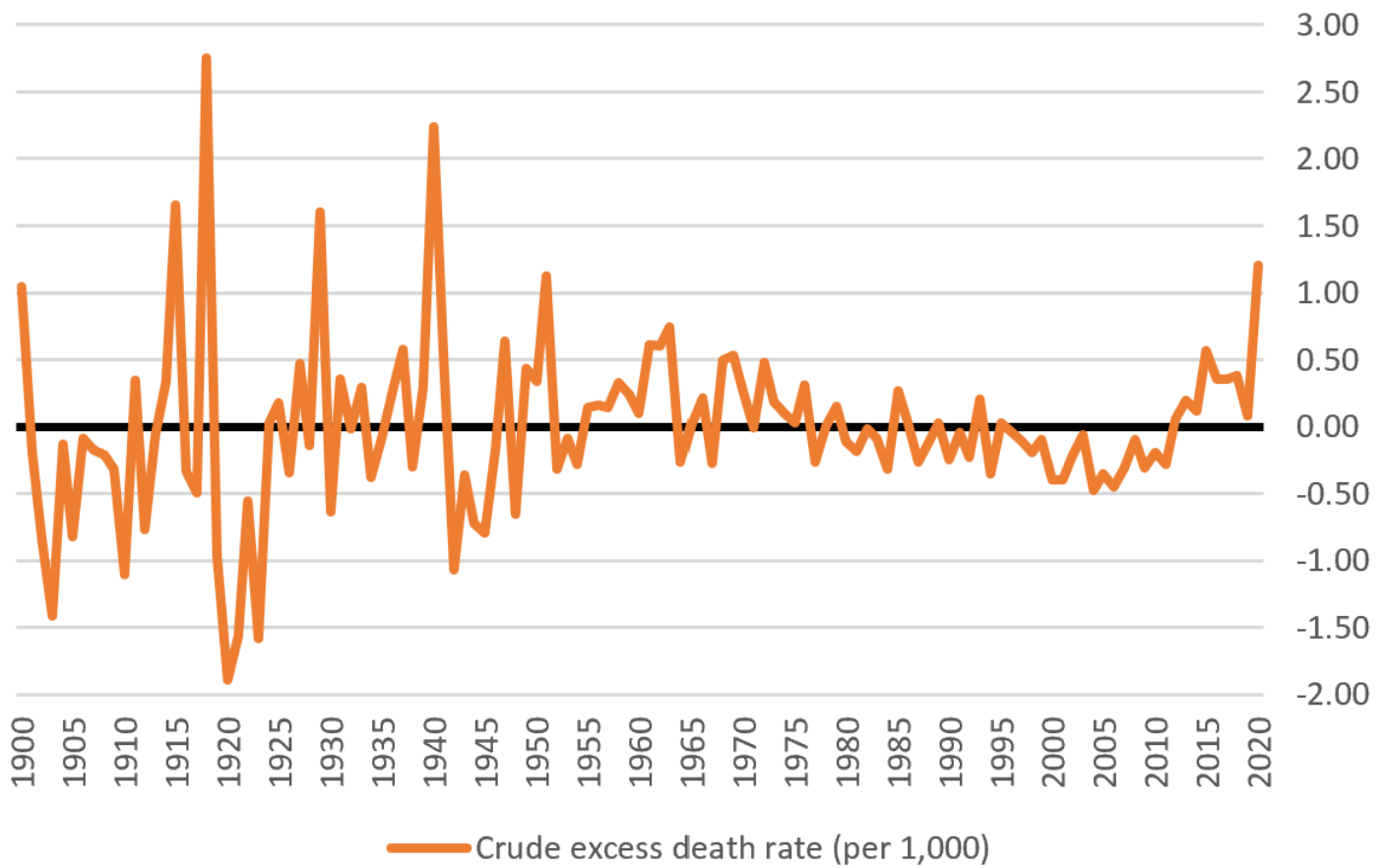
2020 will also be the highest since 1940

Even with measures taken to limit COVID spread, 2020 will still top 1951, the year of a major flu epidemic

Without all our efforts, 2020 could have been much worse

9/11

Crude excess death rate (per 1,000)



A week is a long time in a pandemic

But the basic COVID logic remains the same ■

Thank you to everyone caring for the sick in such difficult circumstances, you are heroes

My deepest condolences to all who have lost loved ones this year

10/11

<https://t.co/ZOWHIIZ3FJ>

THREAD \u2013 COVID logic

More cases = more potential for COVID to spread and mutate

More spread = more serious illness

More serious illness = more pressure on the health service

If overstretched = more deaths, limited resource for other care, longer term health issues build up

— Nick Stripe (@NickStripe_ONS) December 29, 2020

Thread on today's figures from the main ONS account below ■

Best wishes to all suffering with COVID today

And best wishes for an eventual recovery to all of you with Long COVID – I know how you feel

Stay safe and keep others safe

11/11 - ENDS

<https://t.co/6MobNvPY0B>

We've released our latest bulletin for deaths registered in England and Wales, week ending 25 December 2020.

The number of deaths registered was impacted by the Christmas Day bank holiday and trends should be interpreted with caution <https://t.co/wifM4rin3R>

— Office for National Statistics (ONS) (@ONS) January 6, 2021