

# Almost 10,000 excess deaths in England and Wales not recorded as COVID-related

June 9 2020, by Mike Addelman

---



Credit: CC0 Public Domain

Early results from a study led by University of Manchester data scientists has shown that of the 47,243 excess deaths in England and Wales in the first nine weeks of the COVID-19 pandemic, 9,948—over a fifth—were

not recorded as COVID-19 related.

The excess deaths were mainly in older people and in many cases likely to be directly linked to COVID-19 despite not being diagnosed as such. But, say the team, the excess deaths also include deaths driven by the inability or reluctance of people to access [health services](#) for other health needs.

The team, using Office for National Statistics (ONS) weekly mortality data, also showed the highest rates of excess deaths, linked to COVID-19 directly or indirectly, were in the West Midlands: 1,531 deaths or 26 per 100,000 people.

Although many more male deaths have been linked to COVID-19 across all age groups, female non-COVID-19 excess deaths showed similar patterns to male deaths, and female deaths outnumbered male deaths in the most vulnerable 85+ age group. COVID-19 deaths in women may, therefore, have been underreported argue the team

The researchers, using they argue more robust approaches than recent ONS analyses, analysed a time series model of weekly data from 1 Jan 2010, accounting for seasonality and any potential changes in the overall mortality trend.

"We were able to quantify excess deaths which were not recorded as being COVID-19 related, when perhaps they should have been, by analysing weekly all-cause mortality data from 1 Jan 2010 and including COVID-19 linked deaths from 7 March 2020," said Professor Evan Kontopantelis from The University of Manchester.

"There is great seasonality in mortality data, with more deaths occurring during the winter months. Using this long time series we estimated how many deaths were expected from 7 March 2020, for each population

group and region, and compared this against what was actually observed."

The regions least affected were Wales with 1,757 excess deaths (including COVID-19 deaths) and the North East with 2,239 deaths. These regions were also the least affected when the [population size](#) was taken into account.

Excess [death](#) rates overall started to increase after 20 March and peaked between 17 and 24 April, with the highest weekly peaks in London (up to 26 per 100,000 people), the West Midlands (up to 24) and the North West (up to 24).

The models developed by the team, based on historical mortality trends, illustrate the scale of the COVID-19 pandemic and its direct and indirect impacts on population health.

Professor Kontopantelis said: "We identified a large number of excess deaths which have not been linked to COVID-19. Some of these probably should have been linked, while the rest are caused indirectly by the response to the virus.

"ONS reports of COVID-19 related deaths are based on clinical judgments, which in some cases will have been made without positive testing, which might explain why so many COVID-19 deaths went unrecorded.

"Deaths during the COVID-19 pandemic have resulted directly from infection and exacerbation of other diseases. But there has also been an indirect effect from deferment of care for other conditions.

"Our figures are likely to underestimate the impact of the virus, as prior to the pandemic [mortality](#) rates for 2020 were relatively low, particularly

compared with years with high influenza activity."

He added: "We need to be cautious if we are to predict longer-term impacts, but given the sudden re-prioritisation of services, it is likely a second wave of non-COVID-19 related need is currently building in the community.

"And that could overwhelm parts of the NHS and communities with high baseline levels of morbidity. This should be recognised in planning post-pandemic health and social care services."

**More information:** Evangelos Kontopantelis et al. Excess mortality in England and Wales during the first wave of the COVID-19 pandemic, (2020). [DOI: 10.1101/2020.05.26.20113357](https://doi.org/10.1101/2020.05.26.20113357)

Provided by University of Manchester

Citation: Almost 10,000 excess deaths in England and Wales not recorded as COVID-related (2020, June 9) retrieved 25 April 2024 from <https://medicalxpress.com/news/2020-06-excess-deaths-england-wales-covid-related.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.