

# Study reveals worrying disparity in excess deaths during pandemic

June 7 2021, by Michael Addelman

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A study led by researchers at the Universities of Manchester and York published in *The Lancet Regional Health—Europe* today (07/06/21) has revealed strong disparities in rates of excess deaths in England and

Wales during the first 30 weeks of the COVID-19 pandemic.

According to the research team, deaths compared with those expected from historical trends were unequally distributed, both geographically and socioeconomically.

The highest excess mortality rates in England and Wales were in the West Midlands, the North East, and the North West. The lowest rates were in the South West of England and Wales.

There were 62,321 excess deaths in England and Wales in the first 30 weeks of the [pandemic](#). Of these, 46,221 were attributable to respiratory causes, including COVID-19, and 16,100 to other causes.

Only 78 excess deaths per 100,000 people occurred in the South West of England and in Wales; 130 per 100,000 occurred in the West Midlands.

And 93 excess deaths per 100,000 people occurred in the most affluent fifth of areas, whereas there were 124 per 100,000 in the most deprived.

Other findings included:

- There were 6,887 excess cardiovascular & diabetes, and 1,668 excess cancer deaths over the study period.
- There were fewer than expected cancer deaths in hospitals (-6,655), hospices (-2,186), and [care homes](#) (-917), but more in private homes (10,665).
- The overall excess mortality rate for England and Wales directly attributed to COVID-19 infection or respiratory causes was 77 per 100,000 population

Professor Evan Kontopantelis, a data scientist from The University of Manchester led the study. He said: "Our analysis provides a

comprehensive picture of excess deaths during the first 30 weeks of pandemic, including major causes both related and unrelated to COVID-19 infection.

"The models demonstrate that the COVID-19 pandemic has caused many more deaths than would have been expected during the same time-period.

"But for England and Wales, these deaths were not evenly distributed across the population, with rates varying markedly by region, and between deprived and less deprived neighborhoods."

The analysis was carried out using Office of National Statistics weekly mortality data from December 2014 to October 2020 for England and Wales.

In England and Wales, a fifth of excess deaths during the first wave of the pandemic—from 7 March to 8 May 2020—were attributable to causes other than COVID-19.

Delayed responses to acute [health conditions](#) and exacerbations of pre-existing health conditions led to substantial increases in mortality for [cardiovascular disease](#), diabetes and other conditions.

However, mortality rates for some health conditions, including other infectious respiratory diseases, fell.

The researchers say the variation in rates reflects population susceptibility, in terms of age and pre-existing disease as well as local factors such as housing density, transport infrastructure and air quality.

But a population's occupational mix and ability and willingness to engage in public health measures such as social distancing and the capacity and

quality of local public health, social and healthcare services could also play a part.

Professor Doran, from the Department of Health Sciences at the University of York and senior author of the study, added: "These results emphasize that regional and socioeconomic variations are relevant to decisions about future pandemic planning, including current and future phases of vaccination roll-out.

"Immediate and longer-term recovery planning for communities and their [health](#) and social services should reflect historical disparities as well as the COVID-19 related patterns described in this study."

The paper "Excess deaths from COVID-19 and other causes by region, neighborhood deprivation level and place of [death](#) during the first 30 weeks of the pandemic in England and Wales: a retrospective registry study," is published in *The Lancet Regional Health-Europe*.

**More information:** Kontopantelis E, et al. Excess deaths from COVID-19 and other causes by region, neighbourhood deprivation level and place of death during the first 30 weeks of the pandemic in England and Wales. *The Lancet Regional Health – Europe*. 2021 May 3.

Provided by University of Manchester

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