Excess deaths by underlying cause and area deprivation

A Management Information release for Scotland

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About this release

A sizeable proportion of the excess deaths in Scotland during the COVID-19 pandemic have not been coded as being directly due to COVID-19. In this report we investigate which underlying causes have contributed to these non-COVID-19 excess deaths, and how these vary by deprivation.

This report examines excess deaths in the 14 weeks since the registration of the first COVID-19 deaths in Scotland until numbers of deaths from all causes had returned to typical levels (16 March to 21 June 2020, inclusive), by underlying cause and area deprivation level.

Main Points

- Deaths with an underlying cause of COVID-19 contributed most (82%) to the 32% excess in mortality rates in 2020.

- Other underlying causes contributing to the excess were dementia and Alzheimer’s (8% contribution), external and ill-defined causes (8%), circulatory causes (3%), other causes (3%), cancer (2%) and diabetes (2%). Deaths from respiratory causes were lower than the average for the time of year (-7% contribution). This is possibly due to COVID-19 being the underlying cause of death for some people who may otherwise have died from respiratory conditions.

- Pre-existing inequalities in mortality from dementia and Alzheimer’s, external and ill-defined causes, and circulatory causes widened further during the COVID-19 period. Inequalities in external and ill-defined causes widened the most.

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1 Excess deaths defined as those in excess of the average for the time of year. Our analysis used the pooled average for the same weeks of 2015-19 as the average for the time of year.


3 Before the provisional data are finalised, a number of deaths (often those with external causes, including drug-related deaths, alcohol-related deaths and suicides) are coded as having an “ill-defined” underlying cause, pending further routine investigation. For this reason we grouped external and ill-defined causes together for our analysis.
• In the most deprived areas, mortality rates from cancer, respiratory causes, and other causes were lower during the COVID-19 period than for the time of year, and inequalities in these underlying causes narrowed. Relative inequalities in diabetes mortality also narrowed, due to a small absolute increase but large relative increase in mortality in the least deprived areas.

Background

Using provisional death register data from National Records of Scotland we calculated the excess in age-sex standardised rates of death from key underlying causes during the 14 week period from the registration of the first COVID-19 deaths in Scotland until numbers of deaths from all causes had returned to normal levels (16 March to 21 June 2020, inclusive). We also quantified how excess mortality by cause varied by area deprivation (quintiles of the 2020 Scottish Index of Multiple Deprivation, or SIMD).

Contact

Elizabeth Richardson
Public Health Intelligence Adviser
Email: elizabeth.richardson1@nhs.net

Andrew Pulford
Public Health Intelligence Adviser
Email: andrew.pulford@nhs.net

Gerry McCartney
Consultant in Public Health and Head of Public Health Observatory
Email: gmccartney@nhs.net

Further Information

Data from this publication are available from the publication page on our website.