

Monthly Mortality Analysis, Scotland

February 2023

Published on 16 March 2023



This statistical report includes provisional statistics on deaths occurring in February 2023.

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1. Main Points

- There were 4,925 deaths in February 2023, a fall of 27% from the previous month. The number of deaths were similar to average levels for February (1% below the average), when comparing to previous years.
- Taking into account the size and age structure of the population, the rate of mortality was 1,161 per 100,000 population. This was 6% lower than the average rate for February.
- Excess deaths (based on number of deaths) have fallen to their lowest level since February 2022 (5% below the five-year average). The highest level seen in the past year was in December 2022, when deaths were 18% above the five-year average.
- The leading cause of death in February 2023 was dementia and Alzheimer's disease (13% of all deaths).
- For females, the leading cause of death was also dementia and Alzheimer's disease (17% of all female deaths in February). For males, the leading cause was ischaemic heart diseases (15% of all male deaths in February).

2. Introduction

This publication focusses on mortality in Scotland, with breakdowns by council area, health board, age, sex, cause of death, location of death and deprivation quintile.

The data in this publication for 2022 onwards is still provisional and subject to change. Finalised data for the 2022 calendar year will be confirmed in June 2023.

How can these statistics be used?

- To look at emerging and seasonal trends in mortality in Scotland.
- To understand excess deaths
- To investigate how causes of death, and rates of mortality vary across Scotland.

This short report only gives a look at some of the headline figures every month, with much more information available in our downloadable datasets. These datasets all have interactive charts built in, to aid users in exploring the latest trends.

The data in this report is based on the date a death occurred, other analysis can be based on the date a death was registered.

What are you looking for?

Data from this report

Weekly deaths data

Where is it?

[Monthly mortality tables](#)

[Weekly deaths registered](#)

3. Differences between this data and other NRS mortality data

There are differences in the way we present deaths data in our various statistical releases. Users should consider the following factors when comparing figures from different publications.

Date of occurrence and date of registration

The data in this report focusses on deaths by date of occurrence. Other NRS datasets focus on deaths by date of registration. Deaths by date of occurrence are generally a more accurate measure as they are not affected by public holidays and other factors which may delay registration. Deaths by date of registration are more timely and can be produced more quickly, which is why we use this measure for our weekly data.

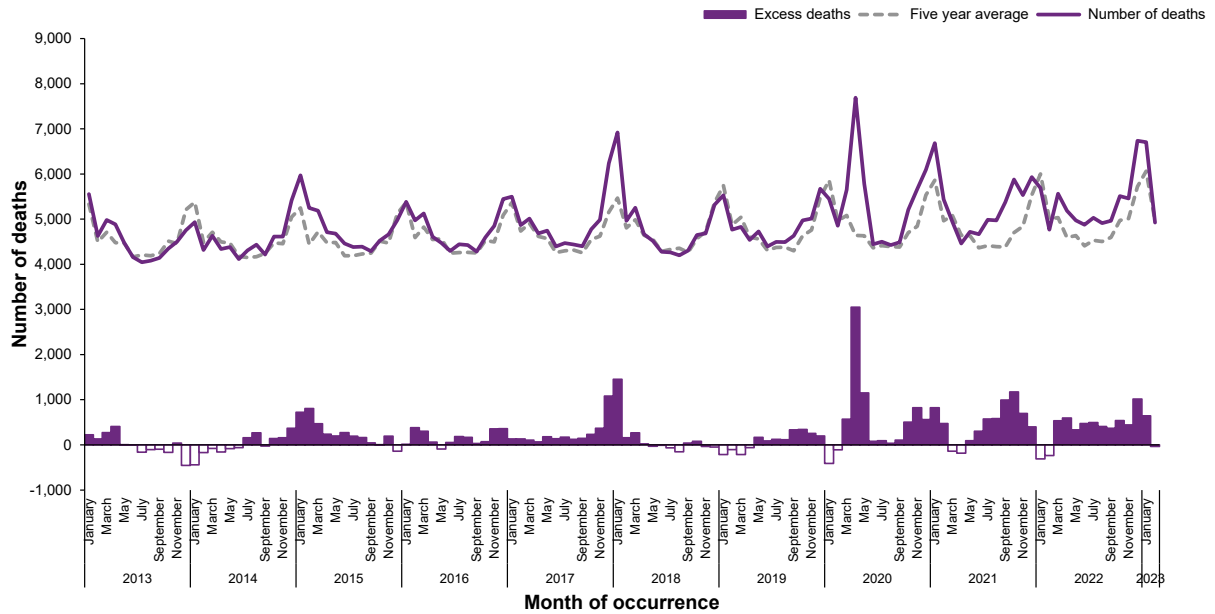
Weekly data and monthly data

The data in this report looks at monthly death data. Other NRS datasets look at weekly data. Weekly data does not fit neatly into calendar months or years, e.g. weeks 1-4 of a year are not the same thing as data for the calendar month of January.

4. Excess deaths at lowest level for a year

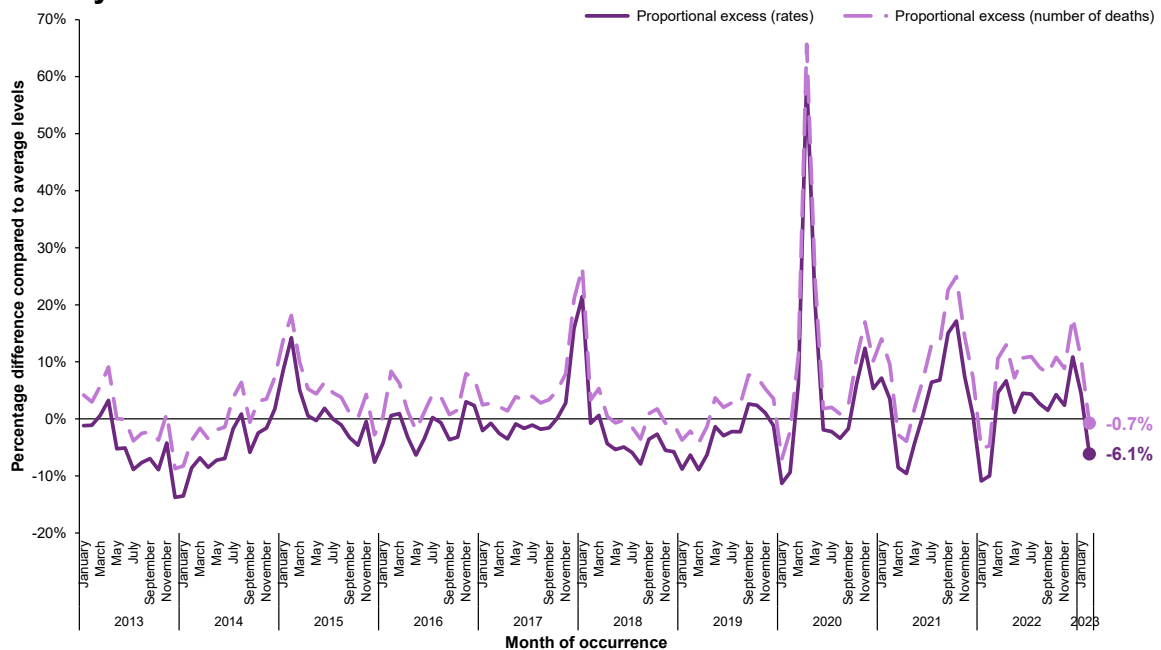
In February 2023 there were 4,925 deaths, which was similar to the five-year average for February.

Figure 1: Number of deaths in Scotland by month, with five-year average



Source: [Table M1 – Monthly Mortality Analysis](#)

Figure 2: Proportional excess mortality, based on age-standardised rate of mortality and number of deaths.



Source: [Table M1 – Monthly Mortality Analysis](#)

Excess deaths fell in February 2023, having previously been at higher levels through most of 2022 and in January 2023 (Figure 1).

Looking at excess deaths based on number of deaths suggests February 2023 was similar to average levels for February (36 deaths, or 0.7% below average), but looking at the age-standardised rate of mortality suggests mortality was 6.1% below average last month.

The year 2020 has been excluded from five year averages for the purpose of calculating excess deaths. Find out more about this [here](#).

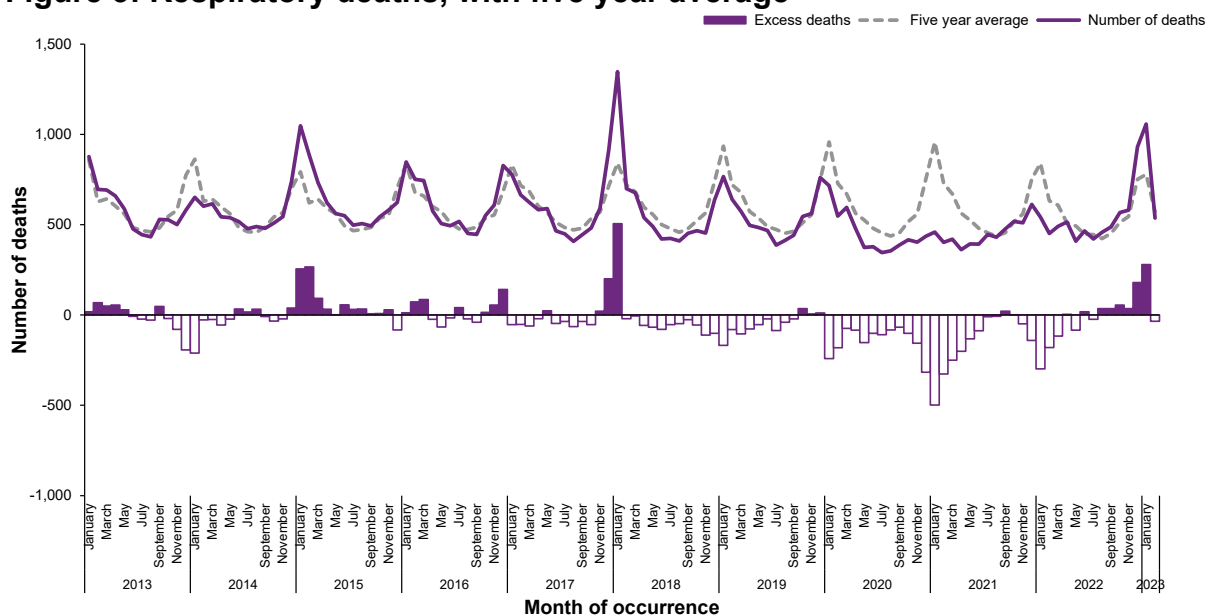
Figure 2 shows how excess based on age-standardised mortality rates is generally lower than the excess based on number of deaths. This happens because the rate takes into account the age-structure and size of the population. The population has increased over time, and has also got older (people are living longer, and there are fewer children than in previous generations). With a larger and older population, we might expect the number of deaths to be higher than it was in previous years.

The calculation of excess based on age-standardised rates takes into account the changing population structure, so it gives a more accurate picture of excess deaths by removing the impact of the growing and ageing population.

5. Respiratory deaths reached higher levels than previous two winters

Respiratory deaths are close to average levels again, after the first major increase since the COVID-19 pandemic began.

Figure 3: Respiratory deaths, with five year average



Source: [Table M1 – Monthly Mortality Analysis](#)

There were 537 deaths from respiratory causes (such as influenza and pneumonia) in February, which is 6% below average. In January 2023, respiratory deaths were 36% above average, which was the largest monthly proportional excess (based on number of deaths) since January 2018.

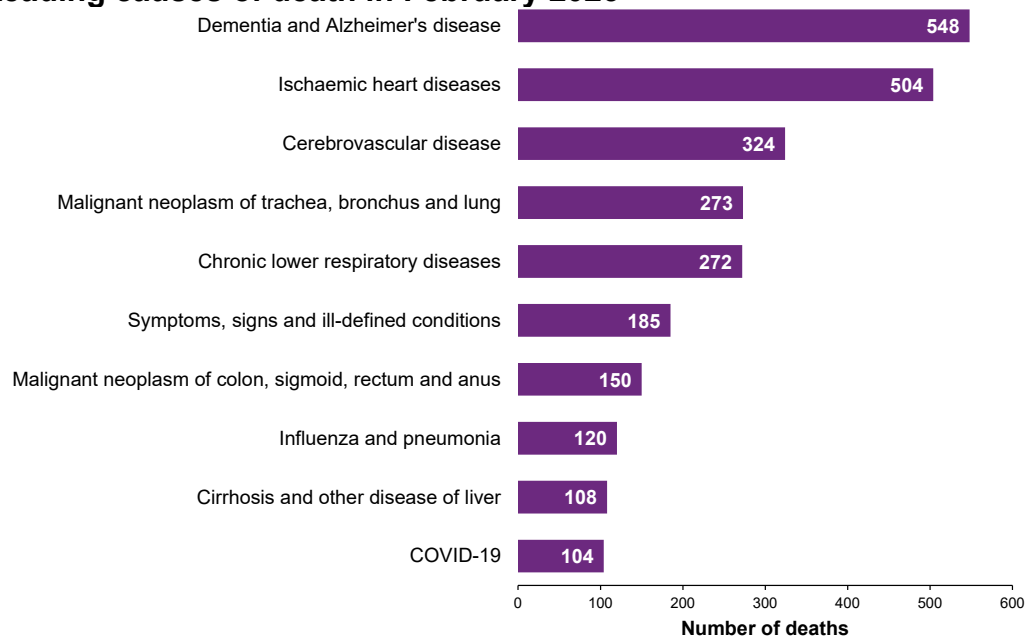
Respiratory deaths were significantly below average for much of 2020 and 2021, but increased in the winter of 2022/23 to levels which haven't been seen since before the COVID-19 pandemic.

6. Dementia and Alzheimer's disease most common cause of death in February 2023

In February 2023, there were 548 deaths from dementia and Alzheimer's disease, which was similar to the average number of deaths for this cause for February.

Dementia and Alzheimer's disease accounted for 13% of all deaths that occurred in February 2023. This was also the top cause for females (17% of all female deaths last month), but ischaemic heart disease was the top cause of death for males (15% of all male deaths last month).

Figure 4: Leading causes of death in February 2023

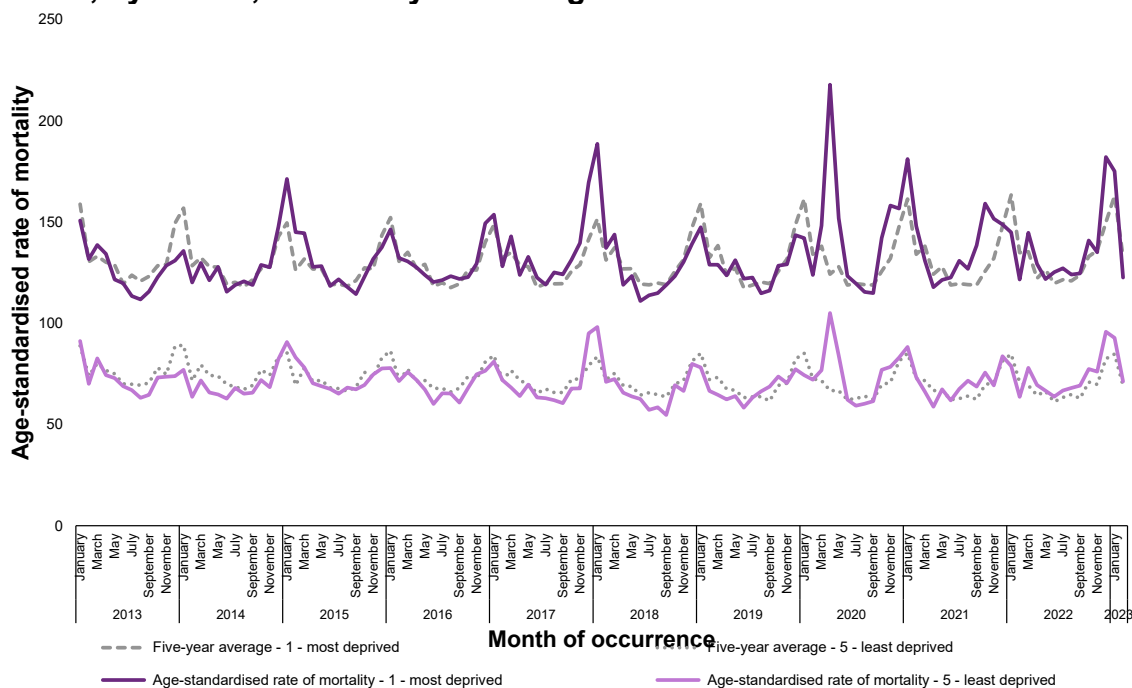


Source: [Table M4 – Monthly Mortality Analysis](#)

7. Death rate in most deprived areas 1.7 times as high as least deprived

In February 2023, the age-standardised rate of mortality was 123 per 100,000 in the most deprived areas, compared to 71 per 100,000 in the least deprived areas.

Figure 5: Age-standardised rate of mortality in most and least deprived quintiles, by month, with five-year average



Source: [Table M6 – Monthly Mortality Analysis](#)

Throughout 2020 and 2021 the excess death rate was proportionately higher in the most deprived quintile but during 2022 the excess death rate increased in the least deprived quintile.

8. Background Notes

Methodology

A full methodology document is available on the NRS website.

The data in this report comes from death registrations, where causes of death are certified by a doctor. Figures represent deaths occurring in Scotland, deaths of people whose usual residence is outside Scotland are included in these figures. Some data is provisional and is subject to change. This is because the cause of death (and other registered details) can be changed after a death has been registered.

Where can I find data?

The data used in this report can be found on the [NRS website](#). There are six tables available to download.

- [Table M1 – Deaths in Scotland by month of occurrence, sex and cause](#)
- [Table M2 – Deaths in Scotland by month of occurrence, sex, cause and age](#)
- [Table M3 – Deaths in Scottish areas by month of occurrence and sex](#)
- [Table M4 – Leading causes of death in Scotland by month of occurrence and sex](#)
- [Table M5 – Deaths in Scotland by location of death](#)
- [Table M6 – Deaths in Scotland by deprivation quintile \(SIMD\), month of occurrence and sex](#)

9. Links to related statistics

Other NRS mortality statistics:

- [Weekly deaths registered in Scotland](#)
- [Births, deaths and other vital events - Quarterly](#)

Statistics from other organisations:

- [ONS Monthly Mortality Analysis \(England and Wales\)](#)
- [NISRA Monthly Deaths \(Northern Ireland\)](#)

10. Notes on statistical publications

National Statistics

The United Kingdom Statistics Authority (UKSA) has designated these statistics as National Statistics, in line with the Statistics and Registration Service Act 2007 and signifying compliance with the Code of Practice for Official Statistics (available on the [UKSA](#) website).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is National Records of Scotland's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

Information on background and source data

Further details on data source(s), timeframe of data and timeliness, continuity of data, accuracy, etc. can be found in the metadata that is published alongside this publication on the NRS website.

National Records of Scotland

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Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.

Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.

You can get other detailed statistics that we have produced from the [Statistics](#) section of our website. Scottish Census statistics are available on the [Scotland's Census](#) website.

We also provide information about [future publications](#) on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government [ScotStat website](#).

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Enquiries and suggestions

Please get in touch if you need any further information, or have any suggestions for improvement.

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