Deaths involving coronavirus (COVID-19) in Scotland

Week 13 (29 March 2021 to 04 April 2021)

Published on 08 April 2021

This statistical report includes provisional statistics on the number of deaths associated with coronavirus (COVID-19) and the total number of deaths registered in Scotland, for week 13 of 2021

Key Findings

COVID deaths

- As at the 4th of April, there have been a total of 9,997 deaths registered in Scotland where the novel coronavirus (COVID-19) was mentioned on the death certificate.
- Of the total number of deaths registered in week 13 (29 March to 4 April), there were 38 where COVID-19 was mentioned on the death certificate. This is a decrease of 24 deaths on the previous week. Note that the figures will have been affected by the public holiday on Friday the 2nd of April, as most registration offices were closed. This means that the total number of registrations for week 13 is likely to be an undercount.
- Of deaths involving COVID-19 in the latest week:
    - 47% (18 deaths) were aged 75+, and 21% (8 deaths) were aged under 65.
    - 53% were male (20 deaths) and 47% female (18 deaths).
    - There were 15 deaths in Greater Glasgow and Clyde Health Board area, 6 in Ayrshire and Arran, with 5 in both Lanarkshire and Lothian.
    - At council level, the highest number of deaths occurred in Glasgow City (6). City of Edinburgh, East Dunbartonshire, North Lanarkshire, South Ayrshire and West Dunbartonshire all had 3 deaths.
    - The majority of deaths (76%) occurred in hospitals (29 deaths), with 5 deaths at home or in non-institutional settings and 4 deaths in care homes.

Registration data is affected by public holidays

As noted above, the public holiday in week 13 will affect counts of death registrations, as most registration office would have been closed. As a result, death registrations were likely to be lower than the actual number of deaths that occurred.

The effect of public holidays on registrations, compared to the actual number of deaths can be seen in Figure 2, where death registrations were lower than expected due to public holidays at the turn of the year, before they became a lot higher than expected as registrars caught up with the backlog.

Care should therefore be taken in interpreting weekly data around the turn of the year and in the most recent week as it is affected by public holidays and won't give a reliable indication of the trend.

All-cause deaths and excess deaths

- The provisional total number of deaths registered in Scotland in week 13 of 2021 (29 March to 4 April) was 969.

- The average number of deaths registered in the corresponding week over the five year period between 2015 and 2019 was 1,118 so there were 149 (13%) fewer deaths registered in week 13 of 2021 compared to the average. This number is artificially low due to the Good Friday public holiday in week 13 of 2021. As Easter does not occur in the same week each year, the five-year average is not similarly affected. Easter public holidays fell in week 13 in only 2 of the 5 years (2016 and 2018) so the comparison against the five-year average should be made with caution.

- In week 13 there were 69 fewer deaths in care homes compared to the average (27% below average), 53 excess deaths at home or in non-institutional settings (17% above average) and 130 fewer deaths in hospitals compared to the average (24% below average).

- There were 149 fewer deaths across all settings in the latest week, compared with the five year average. This is because deaths from respiratory causes (-54), cancer (-45), circulatory causes (-41), dementia and Alzheimer's (-19) and other causes (-17) were all below average for this time of year. The number of deaths where COVID-19 was the underlying cause of death was 27.

Measuring excess deaths in 2021

Excess deaths are calculated by comparing the current year to the five year average from previous years. This average is based on the actual number of death registrations recorded for each corresponding week in the previous five years. Moveable public holidays, when registration offices are closed, affect the number of registrations made in the current week and in the corresponding weeks in previous years.

Usually, the previous five years are used to compare against the most recent year to calculate excess deaths. In 2020, excess deaths were measured by comparing the 2020 figure against the average for 2015-2019. For 2021 we would generally calculate excess deaths by comparing the 2021 figure against the average for 2016-2020.

As excess deaths are a key measure of the effect of the pandemic, it is not appropriate to compare the 2021 figure against the 2016-2020 average as that average will be affected by the pandemic with higher deaths in Spring 2020. We have therefore decided to continue to use the 2015-2019 average to measure excess deaths in 2021.

Figure 1: Weekly deaths involving COVID-19 in Scotland, week 12 2020 to week 13 2021

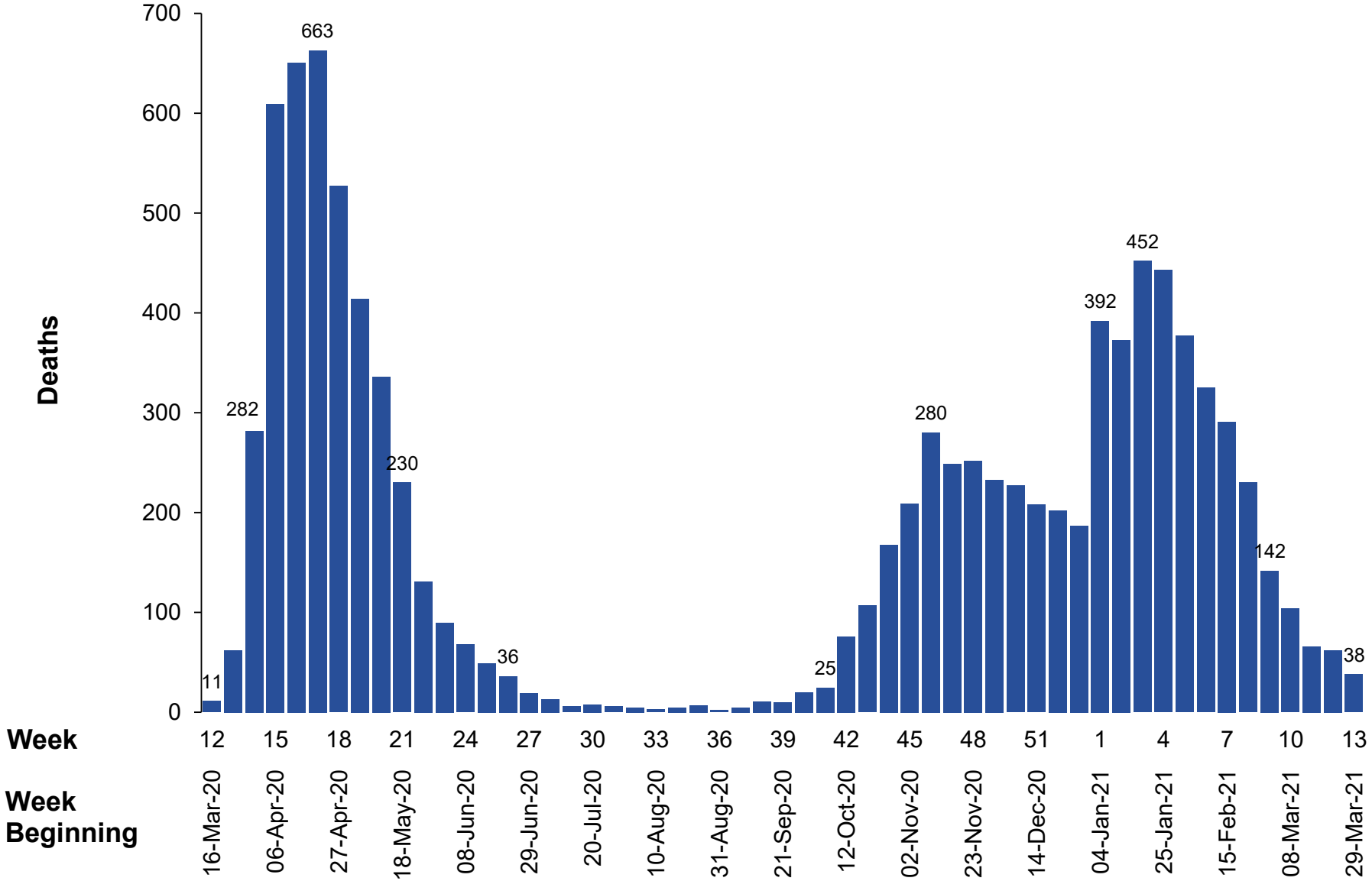
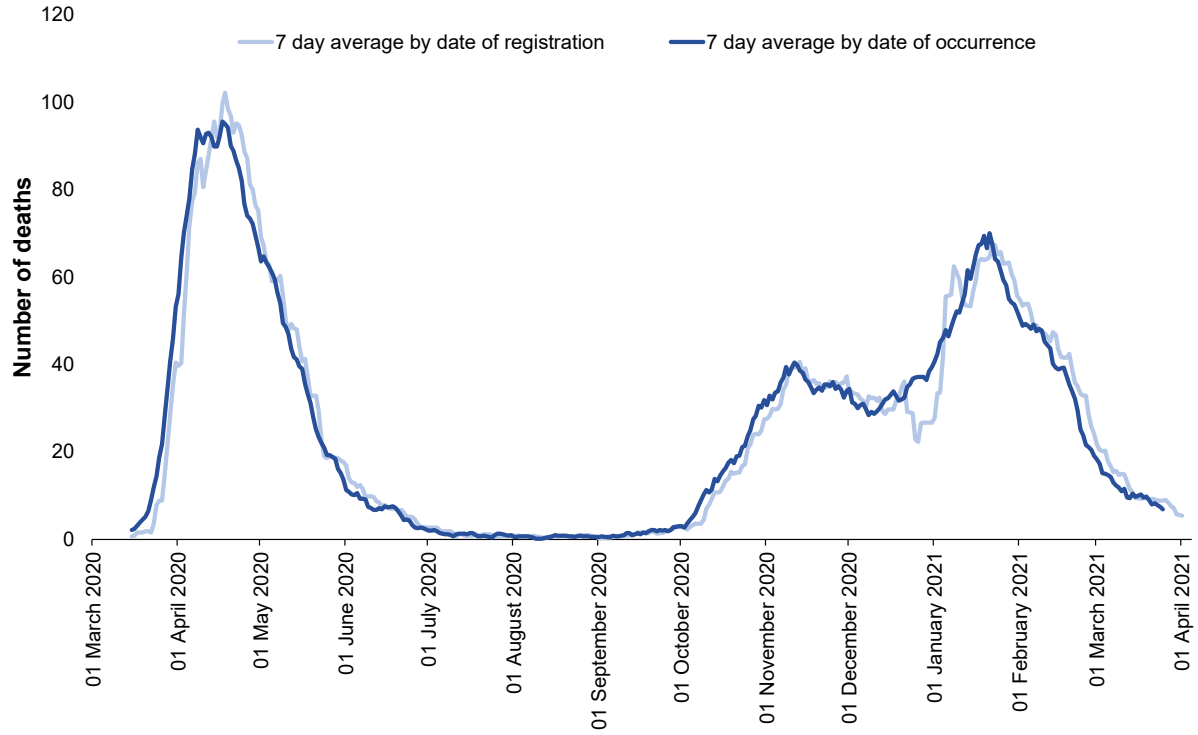


Figure 2: Deaths involving COVID-19, Date of Occurrence vs Date of Registration



The figures throughout this report are based on the date a death was registered rather than the date the death occurred. When someone dies, their family (or a representative) have to make an appointment with a registrar to register the death. Legally this must be done within 8 days, although in practice there is, on average, a 3 day gap between a death occurring and being registered. This gap can be greater at certain times of the year such as Easter and Christmas when registration offices are closed for public holidays.

In general, the trend in COVID-19 deaths by date of registration (the NRS headline measure) has a lag of around 3 days when compared with the figures on date of death. For most of the period examined, the trend based on date of occurrence precedes that based on date of registration by around 3 days. However this changed over the Christmas period.

Based on date of registration, the trend, which had been falling since mid-November, continued to fall with a substantial dip around Christmas (as registration offices closed for public holidays) and then increased rapidly in early January as registration offices caught up with the backlog of registrations. The trend based on date of occurrence shows a different picture and indicates that deaths began to increase as early as mid-December, and continued to increase through most of January. Towards the end of January the seven day average for deaths by date of occurrence began to fall and has continued to fall since.

This report includes all deaths which were registered by 4th of April. There will, however, be deaths which occurred before this date but were not yet registered. In order to include a more complete analysis based on date of occurrence, we need to wait an additional week to allow the registration process to fully complete. The trend based on date of occurrence therefore only includes deaths which occurred by 28th March as the majority of these are likely to have been registered by now.

How do NRS compile these statistics?

- Weekly figures are based on the date of registration. In Scotland deaths must be registered within 8 days but in practice, the average time between death and registration is around 3 days.

- Figures are allocated to weeks based on the ISO8601 standard. Weeks begin on a Monday and end on a Sunday. Often weeks at the beginning and end of a year will overlap the preceding and following years (e.g. week 1 of 2020 began on Monday 30 December 2019) so the weekly figures may not sum to any annual totals which are subsequently produced.

- Deaths involving COVID-19 are defined as those where COVID-19 is mentioned on the death certificate, either as the underlying cause of death or as a contributory cause. Cause of death is coded according to the International Statistical Classification of Diseases and Related Health Conditions 10th Revision (ICD-10). The relevant codes included in this publication are U07.1, U07.2, U09.9 and U10.9.

- Figures include deaths where 'suspected' or 'probable' COVID-19 appears on the death certificate.

- From the week beginning 22 March 2021, new ICD-10 codes issued by the World Health Organisation (WHO) were also used to code deaths involving COVID-19. U09.9 is used for 'post-COVID' conditions, when death occurred after acute or ongoing COVID-19. U10.9 is used in the rare cases where 'Kawasaki-like' syndrome is caused by COVID-19. Data back to March 2020 has been recoded to ensure consistency of the time series.

- Data are provisional and subject to change in future weekly publications. The data will be finalised in June 2021. Reasons why the data might be revised later include late registration data being received once the week's figure have been produced or more information being provided by a certifying doctor or The Crown Office and Procurator Fiscal Service (COPFS) on the cause of death.

- Certain user enquiries for ad-hoc analysis related to COVID-19 deaths have been published on our website.

- The weekly publication includes breakdowns by sex, age, health board, local authority and location of death. It also includes an analysis of excess deaths by location and broad cause of death. We also publish a comprehensive and detailed analysis of mortality on a monthly basis.

- NRS mortality data (COVID-19 and excess deaths) continue to be made available on a weekly basis through the Scottish Government's COVID-19 dashboard

Index of available analysis on registered deaths involving COVID-19

Breakdown	Frequency	When Added	Latest Period Covered	Date Last updated
Age group	Weekly	8th April 2020	Week 12	8th April 2021
Sex	Weekly	8th April 2020	Week 12	8th April 2021
Location	Weekly	15th April 2020	Week 12	8th April 2021
Health Board	Weekly	8th April 2020	Week 12	8th April 2021
Local Authority	Weekly	22nd April 2020	Week 12	8th April 2021
Excess deaths by cause	Weekly	22nd April 2020	Week 12	8th April 2021
Excess deaths by cause and location	Weekly	17th June 2020	Week 12	8th April 2021
Age-standardised mortality rates – Scotland	Monthly	13th May 2020	February	17th March 2021
Age-standardised mortality rates – sub-Scotland	Monthly	17th June 2020	March – Feb combined	17th March 2021
Leading causes of death	Monthly	13th May 2020	February	17th March 2021
Pre-existing conditions	Monthly	13th May 2020	February	17th March 2021
Deprivation	Monthly	13th May 2020	March – Feb combined	17th March 2021
Urban Rural	Monthly	13th May 2020	March – Feb combined	17th March 2021
Daily occurrences by location of death	Monthly	13th May 2020	February	17th March 2021
Occupation	Monthly	17th June 2020	March – Feb combined	17th March 2021
Intermediate Zone	Monthly	17th June 2020	March – Feb combined	17th March 2021
Ethnic Group	One-off	8th July 2020	March to mid-June	11th November 2020
Disability	One-off	24th March 2021	March to Jan	24th March 2021

National Records of Scotland

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our aim is to provide relevant and reliable information, analysis and advice that meets the needs of government, business and the people of Scotland. We do this as follows:

Preserving the past – We look after Scotland's national archives so that they are available for current and future generations, and we make available important information for family history.

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.

You can also follow us on twitter @NatRecordsScot

Enquiries and suggestions

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

For media enquiries, please contact communications@nrscotland.gov.uk

For all other enquiries, please contact statisticscustomerservices@nrscotland.gov.uk