

# Public Health Scotland COVID-19 Statistical Report

As at 8 June 2020

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## Introduction

On 1 March 2020, the first person in Scotland was tested positive for COVID-19. On 17 March NHS Scotland was placed in an emergency footing by the Cabinet Secretary. Schools have been closed since 20 March and the country has been in lockdown since 23 March. Scotland entered phase one of easing out of lockdown on Friday 29 May 2020.

Since the start of the outbreak Public Health Scotland (PHS) has been working closely with Scottish Government and health and care colleagues in supporting the surveillance and monitoring of COVID-19 amongst the population.

The primary focus of this report is a look at some of the demographic characteristics (age, sex, deprivation) of people affected by the virus. It also looks at some of the wider impact of the virus on the healthcare system, comparing recent trends in activity with historic norms.

There is a large amount of data being regularly published regarding COVID-19 (for example, [Coronavirus in Scotland – Scottish Government](#) and [Deaths involving coronavirus in Scotland – National Records of Scotland](#)). This report complements the range of existing data currently available.

The coronavirus pandemic is a rapidly evolving situation. This report provides an analysis of the data up to 8 June 2020. Future reports will provide further data and analysis to contribute to the evidence base around the outbreak.

### Main Points

- Between 28 May to 7 June 2020, 681 cases were recorded in the contact tracing software, from which 741 contacts have been traced.
- As at 1 June 2020, there were 179,728 individuals on the shielding list in Scotland. This equates to around 3.3% of the Scottish population.
- As at 8 June 2020, there have been 15,639 confirmed COVID-19 cases, equating to 286.3 confirmed cases per 100,000 population.
- 9,682 (62%) of confirmed cases, as at 8 June 2020, were female; 5,950 (38%) were male.
- The number of confirmed cases increases with age. For those aged 75+ the rate is 1,122.91 per 100,000 compared with 328.3 per 100,000 for those aged 45-64, a 3.4-fold difference.
- Between 1 March 2020 and 2nd June 2020, there had been 5,784 admissions to hospital with a laboratory confirmed test of COVID-19.
- As at 7 June 2020, 516 confirmed COVID-19 patients have been treated in an Intensive Care Unit.
- As lockdown started, around 38,000 people completed NHS 24's Coronavirus Self Help Guides which advised around 16,500 people to self-isolate.
- On average 103 people have attended the COVID-19 assessment centres each day, over the last two weeks. (*NHS Grampian data is included from 1 May 2020*)

## Results and Commentary

### Test and Protect

On 26 May 2020, the Scottish Government set Test and Protect - Scotland's approach to implementing the 'test, trace, isolate, support' strategy. This strategy is designed to minimise the spread of COVID-19.

Public Health Scotland is working closely with the Scottish Government to implement 'Test and Protect'. Since 28 May 2020, once an individual receives a positive result, a team of contact tracers will then gather details on individuals who have been in contact with the person who tested positive. The contact tracers will then proceed to contact these individuals and advise them to isolate.

The data within this report is the number of contacts which are recorded in the contact tracing software. As this is a new process and the recording within boards is embedding, there will be data quality issues, which will be resolved in the coming weeks through close management with PHS and NHS Boards. The figures presented below are provisional and will be updated in subsequent publications. However, the figures shown below give an indication of activity on contact tracing across NHS Boards.

Since 28 May to 7 June 2020, the test and protect figures are:

Cases\* – 681 (of which 481 have completed contact tracing)

Contacts traced – 741

\*A case is generated for each positive result with a test date on or after 28 May. This includes tests derived from Scottish laboratories (see [COVID-19 Confirmed Cases](#)) and from UK Government laboratories (which will be published in subsequent publications).

The number of cases are higher than the numbers of positive cases reported. This will be the subject of further exploratory work; including reporting the total number of positives cases though all testing channels (future publications).

### Shielding Patients

Shielding is for people who are at very high risk of severe illness from COVID-19. Shielding is a measure to protect extremely vulnerable people from coming into contact with COVID-19, by minimising all interaction between them and others. Shielding measures should be used when an extremely vulnerable person is living in their own home, with or without additional support, this also includes people living in long-term care facilities.

Individuals are identified for shielding if they have a disease or condition on this list:

- Solid organ transplant recipients.
- People with cancer who are undergoing active chemotherapy or radical radiotherapy for lung cancer
- People with cancers of the blood or bone marrow such as leukaemia, lymphoma or myeloma who are at any stage of treatment
- People having immunotherapy or other continuing antibody treatments for cancer
- People having other targeted cancer treatments which can affect the immune system, such as protein kinase inhibitors or PARP inhibitors
- People who have had bone marrow or stem cell transplants in the last 6 months, or who are still taking immunosuppression drugs.
- People with severe respiratory conditions including all cystic fibrosis, severe asthma, severe COPD, severe bronchiectasis and pulmonary hypertension.
- People with rare diseases, including all forms of Interstitial Lung Disease/Sarcoidosis, and inborn errors of metabolism that significantly increase the risk of infections (such as SCID, homozygous sickle cell).
- People on immunosuppression therapies sufficient to significantly increase risk of infection or who have had their spleens removed.
- People who are pregnant with significant heart disease, congenital or acquired.
- People who are receiving renal dialysis treatment.
- Or if an individual's GP or Hospital Specialist thinks they would benefit from following the shielding advice.

The Scottish Government has and is continuing to write to all individuals who have been identified as vulnerable to provide further advice about shielding, to give details of the help and support available to shielding individuals and to provide instructions about how to access these services.

As at 1 June 2020, there were 179,728 individuals on the shielding list in Scotland. This equates to around 3.3% of the Scottish population. Since the shielding period started in late March, a further 2,925 individuals were identified for shielding and have subsequently died. Table 1 shows the distribution of shielding individuals by NHS Board of Residence.

**Table 1: Number and Percentages of individuals on shielding list by NHS Board of Residence**

NHS Board of Residence	Number shielding	Percentage of population shielding
NHS Ayrshire and Arran	15,518	4.2%
NHS Borders	4,532	3.9%
NHS Dumfries and Galloway	5,794	3.9%
NHS Fife	11,585	3.1%
NHS Forth Valley	11,819	3.9%
NHS Grampian	15,263	2.6%
NHS Greater Glasgow and Clyde	40,009	3.4%
NHS Highland	11,197	3.5%
NHS Lanarkshire	23,426	3.5%
NHS Lothian	25,115	2.8%
NHS Orkney	724	3.3%
NHS Shetland	793	3.5%
NHS Tayside	13,135	3.1%
NHS Western Isles	818	3.1%
Scotland	179,728	3.3%

Table 2 shows that 55% of those on the shielding list are female (98,565) and just over half of those shielding (51%) are aged 65 and over.

**Table 2: Number and Percentages of individuals on shielding list by Age Group and Sex**

Age group (years)	Male	Female	Unknown	Total	Rate per 100,000 population
0 - 4	528	434		962	347.5
5 - 14	1,504	1,138		2,642	448.6
15 - 44	10,430	12,259		22,689	1,109.9
45 - 64	26,575	34,854		61,429	4,090.0
65 - 74	21,978	25,087		47,065	8,237.1
75 - 84	15,546	18,702		34,248	10,335.6
85+	4,239	6,091		10,330	8,372.8
Unknown			363	363	
<b>All Age groups</b>	<b>80,800</b>	<b>98,565</b>		<b>179,728</b>	<b>3,305.0</b>

Figure 1 shows the high rate per 100,000 population of those on a shielding list is in those aged 75-84 years.

**Figure 1: Individuals on shielding list Rate per 100,000 population**

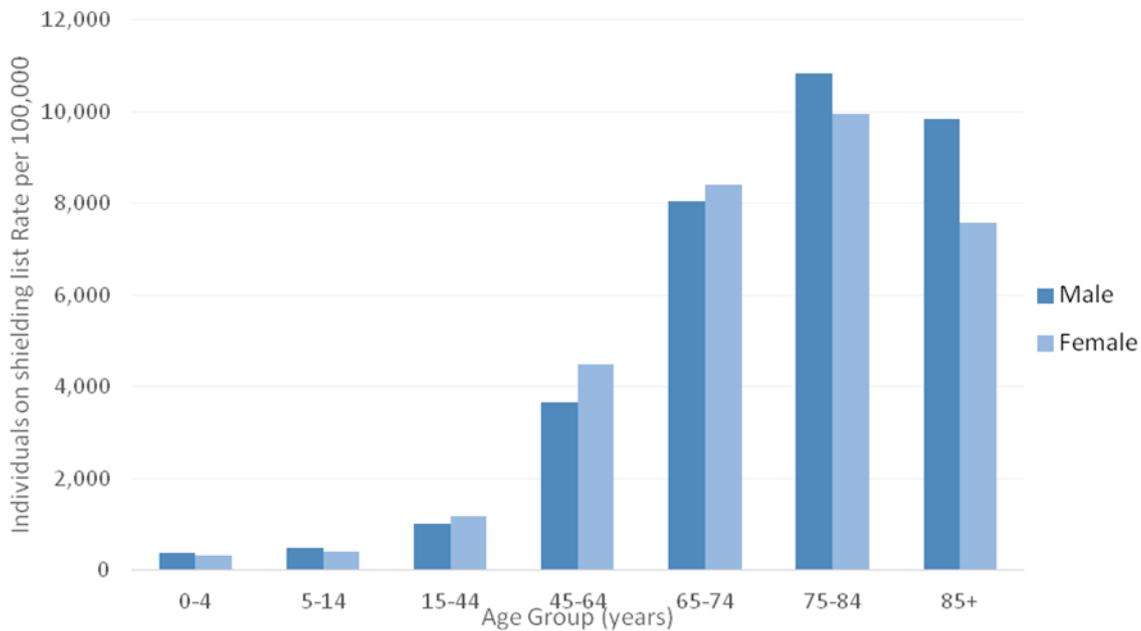
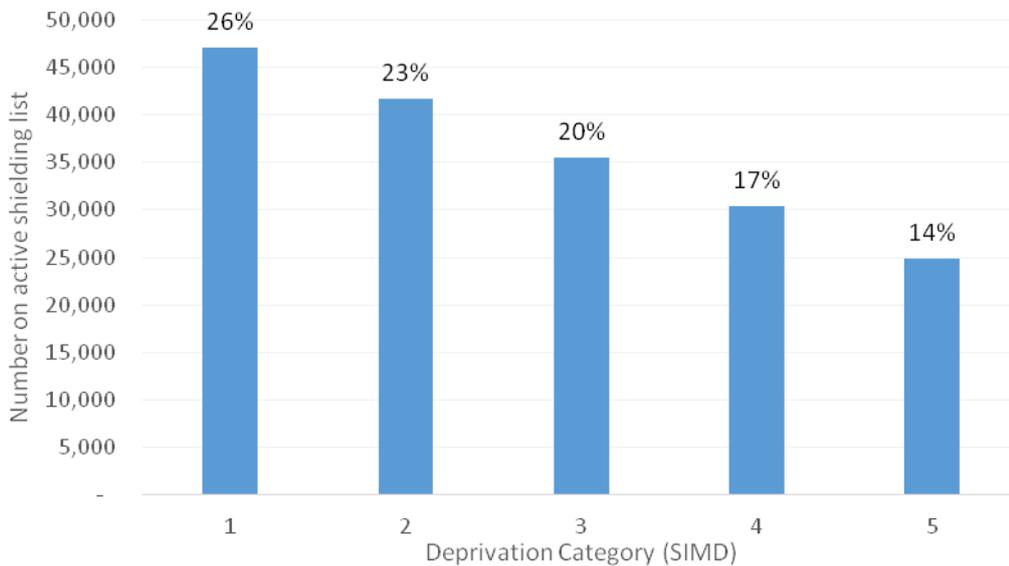


Figure 2 shows the number of shielding individuals by deprivation category from the most deprived 20% of the population to the least deprived 20% of the population. The highest proportion of shielding individuals (26%) was accounted for by the most deprived 20% of the population, with around 14% falling into the least deprived 20% of the population.

**Figure 2: Number of individuals shielding by deprivation category**



The deprivation category of a further 455 individuals is unknown.

Individuals may be advised to shield for a number of reasons as outlined above and an individual may fall into more than one of the shielding groups. Table 3 shows the number of individuals categorised by shielding group. Almost 45% of individuals on the shielding list

have been identified as having a severe respiratory condition (i.e. cystic fibrosis, severe asthma, severe COPD, severe bronchiectasis and pulmonary hypertension).

**Table 3: Number of individuals by shielding group**

Shielding Group	Number shielding
Transplant	6,724
Cancer	21,337
Respiratory diseases	80,180
Rare diseases	10,509
Immunosuppression	37,459
Pregnant with heart disease	70
Clinician identified	46,681
<b>Total Individuals</b>	<b>179,728</b>

An individual may fall into more than one shielding group, but is only counted once in the total.

Individuals are categorised as clinician identified if no other group is specified.

### COVID-19 Confirmed Cases

The first part of this report contains information on cases of COVID-19 that have been confirmed by laboratory testing.

The total number of people within Scotland who have, or have had COVID-19, since the coronavirus outbreak began is unknown. The number of confirmed cases is likely to be an underestimate of the total number who have, or have had, COVID-19. This is because there are affected persons in the population infected with the virus, many of whom display mild symptoms and who do not require specialist hospitalised treatment. These people are not likely to have had a laboratory test for COVID-19.

For the reporting period of this report, those tested are mainly patients who are, or have been, in hospital. It also includes other groups of people such as key workers and some testing carried out in care homes. The number of confirmed cases includes people from all those groups who have been tested.

As the number of people being tested for COVID-19 increases, the pattern observed in the data within this report may change.

As at 8 June 2020;

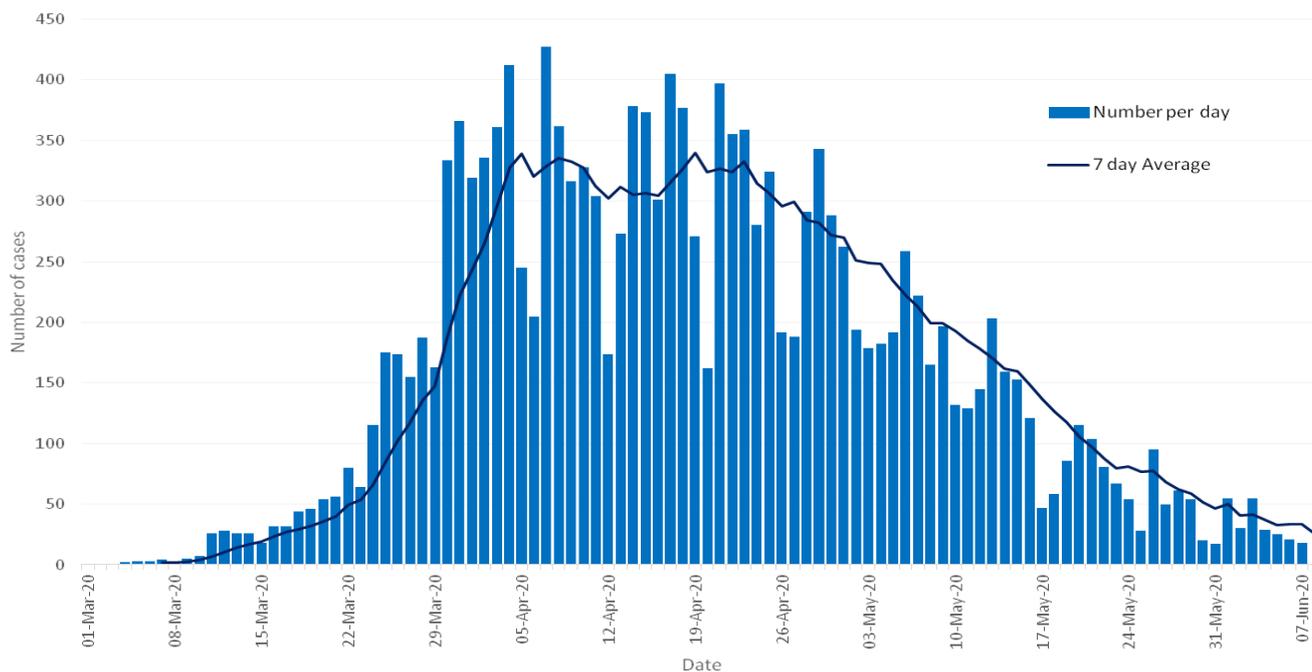
- There have been 15,639 people in Scotland who have tested positive for COVID-19 since the start of the outbreak.
- This equates to 286.3 people per 100,000 population having tested positive for COVID-19.

The numbers of newly confirmed COVID-19 cases, on both a daily and cumulative basis, are shown in Figure 3 and Figure 4 respectively. Figure 3 shows a decreasing 7 day moving average for positive cases across Scotland. There has been a decreasing trend since 23 April 2020 with a current 7 day moving average of around 25 cases. This data is monitored and published daily on the Scottish Government Coronavirus website (<https://www.gov.scot/coronavirus-covid-19/>). The drop in the number of confirmed cases at weekends likely reflects that laboratories are doing fewer tests at the weekend.

*Note that the number of confirmed cases shown for each day may differ slightly from data published on the Scottish Government website. This is because the data below has some cases added retrospectively and assigned to days based on the most up to date records.*

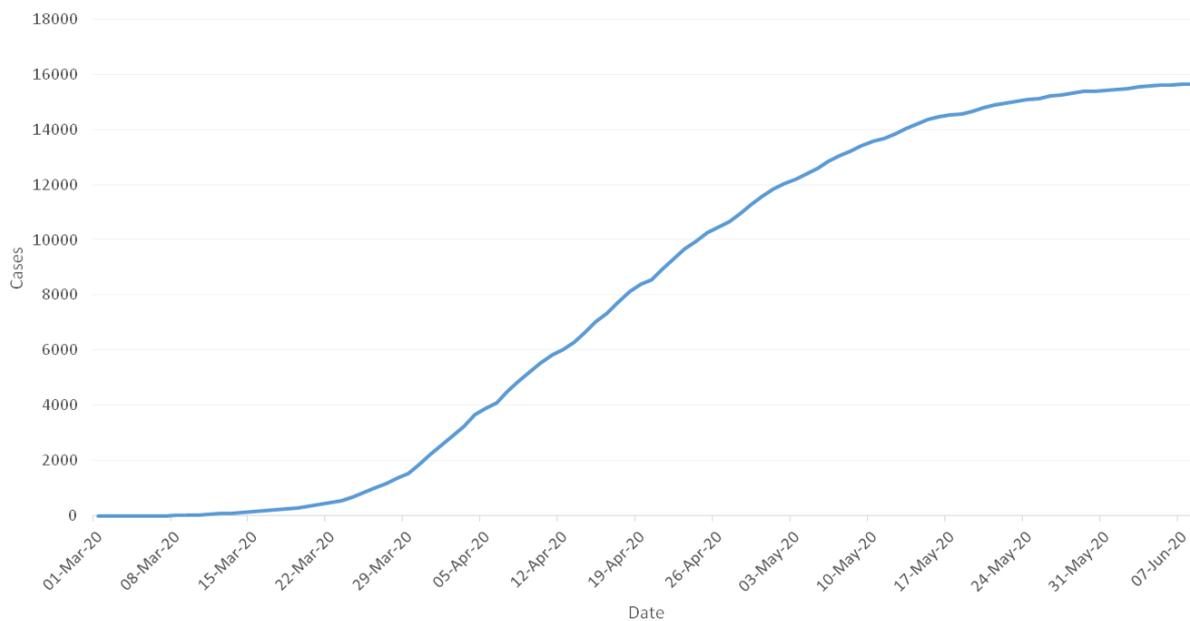
**This has no impact on the overall number of confirmed cases.**

Figure 3: Daily number of confirmed cases and 7-day moving average



Note: Date refers to the date the sample was received into the PHS Surveillance System.

Figure 4: Cumulative number of confirmed cases



Note: Date refers to the date the sample was received into the PHS Surveillance System.

## Age and sex profile of confirmed cases

- Table 4 shows the number of confirmed cases by age and sex as at 8 June 2020. 62% of confirmed cases are female; 38% of confirmed cases are male.
- Around one in four confirmed cases (24%) were in the 15-44 age group; one in three (31%) in the 45-64 age group and over four in ten (43%) aged 65 years and over.
- 42 children aged under 5 years had tested positive for COVID-19.

**Table 4: Total number of confirmed cases by age group and sex as at 8 June 2020**

Age group (years)	Male	Female	Unknown	Total	Rate per 100,000 population
0 - 4	19	23	0	42	15.5
5 - 14	33	33	0	66	11.1
15 - 44	1,106	2,707	5	3,818	186.0
45 - 64	1,849	3,076	1	4,926	328.3
65 - 74	860	689	1	1,550	268.0
75 - 84	1,194	1,302	0	2,496	736.8
85+	883	1,852	0	2,735	2,152.1
Unknown	6	0	0	6	
<b>All Age groups</b>	5,950	9,682	7	15,639	286.3

Amongst those aged 15-44 years, more than twice as many females than males have been confirmed as having COVID-19. There are likely to be a number of reasons behind this difference, including the testing of NHS and care home staff who are predominately female.

Laboratory confirmation of COVID-19 was more common in older than younger age groups. As at 8 June 2020, 1,122.91 per 100,000 people aged over 75 years were confirmed as having COVID-19. This contrasts with a rate of 328.3 per 100,000 for those aged 45-64 years, a 3.4-fold difference.

### COVID-19 Admissions into Hospital

This section looks at the profile of admissions into hospital for patients who were either COVID-19 positive up to 14 days before their admission or had a positive result during their stay. COVID-19 related admissions have been identified as the following:

*A patient may have tested positive for COVID-19 14 days prior to admission to hospital, on the day of their admission or during their stay in hospital*

If a patient has tested positive after their date of discharge from hospital, they have not been included in the analysis.

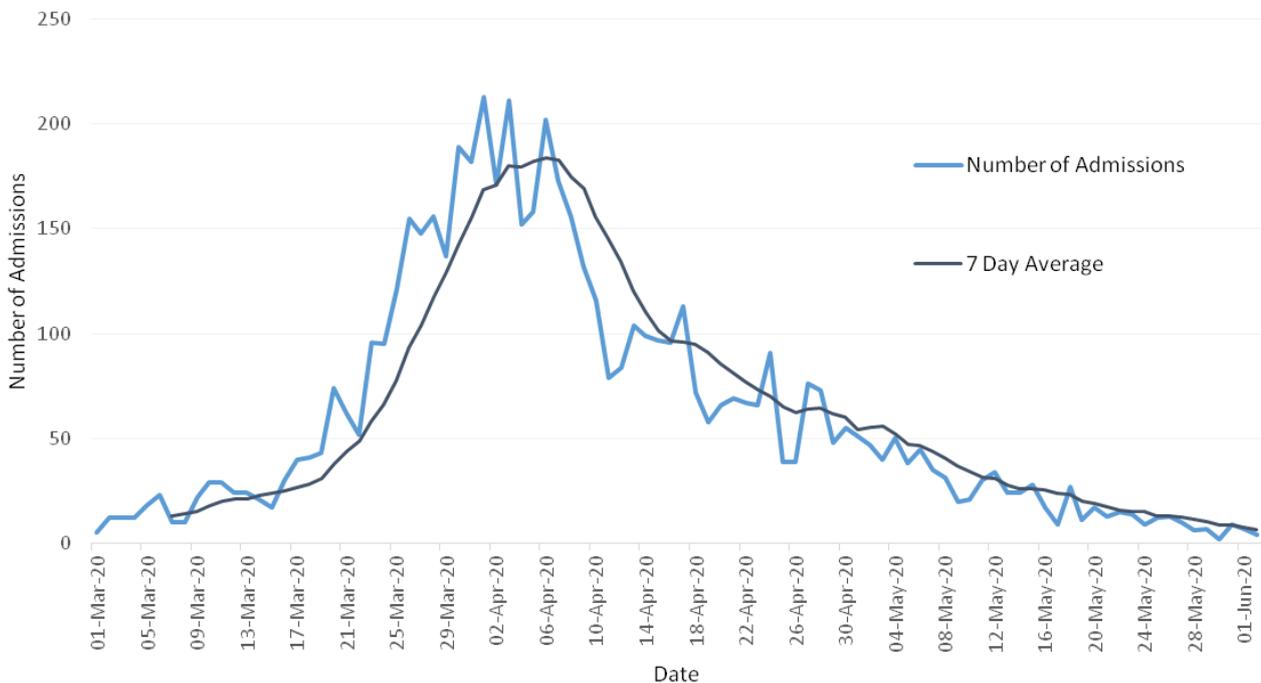
Please note that babies admitted to neonatal care or pregnant women admitted to maternity/obstetric settings are not included in this analyses as they are not captured via the RAPID dataset. Data now includes admission to Golden Jubilee National Hospital.

Between 1 March 2020 and 2nd June 2020, there had been 5,784 admissions to hospital based on the above definition.

### Daily profile of admissions into hospital

Figure 5 shows the daily profile of admissions into acute hospitals. *Data are correct as at the time of data extract at 9am on Sunday 7 June 2020. Data only goes up to 2 June 2020 due to data completeness. Data are reviewed and validated on a continuous basis and so may be subject to change.*

**Figure 5: Daily profile of Hospital Admission for those with a positive COVID-19 result and 7 day moving average up to 2 June 2020**



The number of daily admissions increased sharply from 22 March 2020 to more than 200 admissions per day during the 1st week of April. Since then the number of admissions per day into hospital has reduced and, in the two weeks up to 2<sup>nd</sup> June 2020 the average was 10 admissions per day.

The number of days a patient stays in hospital will vary depending on how unwell the patient is. For those patients who have been discharged from hospital (5,361), 54% of patients were in hospital for 7 days or less, 21% were hospitalised for between 1-2 weeks, 11% for between 2-3 weeks and a further 14% for more than 3 weeks. The overall average length of stay for patients who have been discharged from hospital is around 10 days (10.8).

Note that there may be a time lag with some data for the most recent days and some of the above figures may change as more data is submitted.

## Patients in Intensive Care

COVID-19 varies in severity from very mild symptoms through to those requiring hospital admission and the most ill who require intensive care treatment and supported ventilation. This section looks at the age and sex profile of those patients who have been admitted into Intensive Care Units (ICU).

Note that this analysis does not include patients in High Dependency Unit (HDU) wards. As this data becomes available, this will be further analysed and published. Also, this analysis only contains adult ICU information.

A total of 516 COVID-19 patients had been admitted into ICU with some staying for more than two weeks.

Table 5 shows the age and sex profile of patients who are, or have been, in ICU (up to 7 June 2020) with a confirmed laboratory test for COVID-19.

Most ICU patients to date have been in the 45 – 64 years age group (288; 56 %).

**Table 5: Number of Confirmed COVID-19 patients who have been admitted to ICU, by age group and sex**

Age group (years)	Male	Female	Total
15 - 44	33	17	50
45 - 64	196	92	288
65 - 74	112	32	144
75 - 84	28	5	33
85+	1	0	1
<b>All Age groups</b>	<b>370</b>	<b>146</b>	<b>516</b>

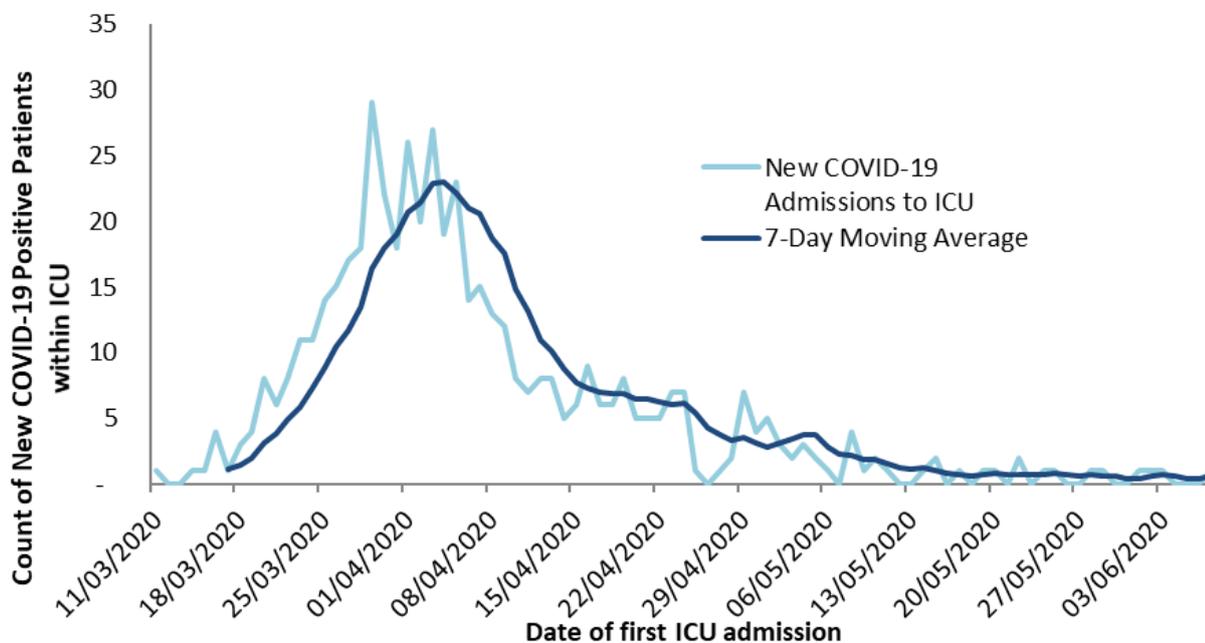
01 Mar 2020 to 7 June 2020.

Anyone aged <15 has been excluded from this analysis.

A report by the Scottish Intensive Care Audit Group (SICSAG) has been published on the Public Health Scotland [website](#). This report will provide a more detailed analysis of patients being treated in intensive care units.

*In the first report published (6th May), counts shown included any patient who had contact with ICU since 1st March 2020 and had a positive COVID-19 test at any time. This definition was adjusted to reflect reports from SICSAG to only include patients with a positive COVID-19 specimen date prior to discharge from an intensive care unit. Therefore, current data are only comparable to figures previously reported by PHS since 13th May 2020.*

**Figure 6: Number of New COVID-19 Patients Admitted to ICUs, 11 March to 09:00 7 June 2020 (n=516)**



Please note:

*Counts include any patient with a confirmed positive COVID-19 test (confirmed by linkage to ECOSS) taken prior to discharge from an ICU in Scotland. Counts do not include any COVID-19 suspected cases who have not yet been lab confirmed. Therefore there may be a lag for recent days where patients may still be awaiting the results of COVID-19 tests.*

*Counts do not include any re-admissions from COVID-19 patients previously admitted to an ICU and re-admitted post discharge; counts are unique patients only.*

*Individual patients are identified using their CHI number as recorded within the ICU admissions system. There may be a very small number of patients where CHI was not recorded, for whom linkage to ECOSS for COVID-19 status may not have been possible.*

*Data are correct as at the time of data extract at 9am on Sunday 7 June 2020. Data are reviewed and validated on a continuous basis and so may be subject to change.*

### **COVID-19 Activity in the Community**

Before the COVID-19 outbreak, when GP Practices and Dentists are open during the day, NHS 24's 111 service generally only advises self-care or for people to contact their GP, unless it is immediately life threatening, in which case they contact a 999 Ambulance. When GP Practices and Dentists are closed, NHS 24 can also direct people to Emergency Departments, Minor Injuries Units and Primary Care Out of Hours services for further clinical input, which could involve a Nurse or GP telephoning or visiting the person at home, or arranging attendance at a Primary Care Emergency Centre.

In response to COVID-19, NHS 24 adapted their service provision. People who are concerned about COVID-19, or who experience symptoms, are advised to seek advice from NHS Inform website, the COVID-19 advice helpline or to contact NHS 24's 111 service if their symptoms worsen and they need clinical advice, following which they may be;

- provided with self care advice or be asked to contact their own GP
- referred to a COVID-19 community hub for further clinical telephone triage, they may then be asked to attend assessment centre or receive a home visit by a Nurse or Doctor
- referred to acute services via the Scottish Ambulance Service or advised to attend hospital, depending on their symptoms.

### NHS 24 Covid-19 Activity

Over and above the existing out of hours 111 phone service, NHS 24 provides a range of additional services by phone and a number of digital platforms. Some of these services have been adapted with dedicated COVID-19 platforms. These phone lines/digital platforms include:

- 24/7 COVID-19 telephone assessment through 111
- NHS inform
- Breathing Space
- Coronavirus Helpline Webchat
- NHS inform Voicebot Calls
- NHS inform Chatbot Session
- Coronavirus Self Help Guides

More information on these services can be found in the Glossary.

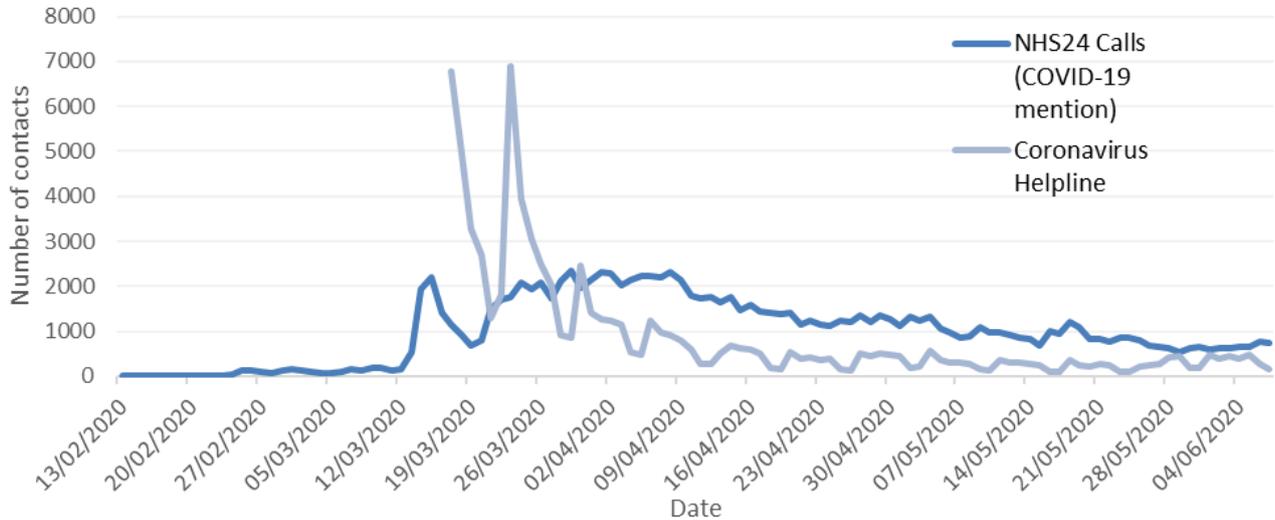
### COVID-19 Contacts with NHS 24 111 and COVID-19 Advice Helpline

Figure 7 shows the trends in contacts with the 111 service where COVID-19 has been recorded as the reason for a person contacting the service, and also the number of calls to the dedicated COVID-19 advice helpline (this COVID-19 advice helpline information is [published daily](#) by the Scottish Government).

There are four distinct peaks in calls to the helpline: one when it first opened, one at a similar time as the announcement that schools were to close, one the following week when lockdown was announced and finally a smaller peak at the end of March when cancer screening was paused. Since then calls have been steadily falling, with lower demand at the weekend for the helpline.

From the 23 March 2020, the 111 service expanded to take calls 24/7 and now directs people with COVID-19 symptoms, who are not triaged to self care, to the COVID-19 community hubs for further assessment. Contacts to NHS 24 (Monday to Friday 8am – 6pm) which are non COVID-19 related are now referred directly to the patient's GP. From the 28 March to the 9 April there were over 2,000 COVID-19 daily contacts with the 111 service, which have since reduced to around 650 per day.

**Figure 7: Number of NHS 24 111 COVID-19 contacts and COVID-19 advice Helpline calls**

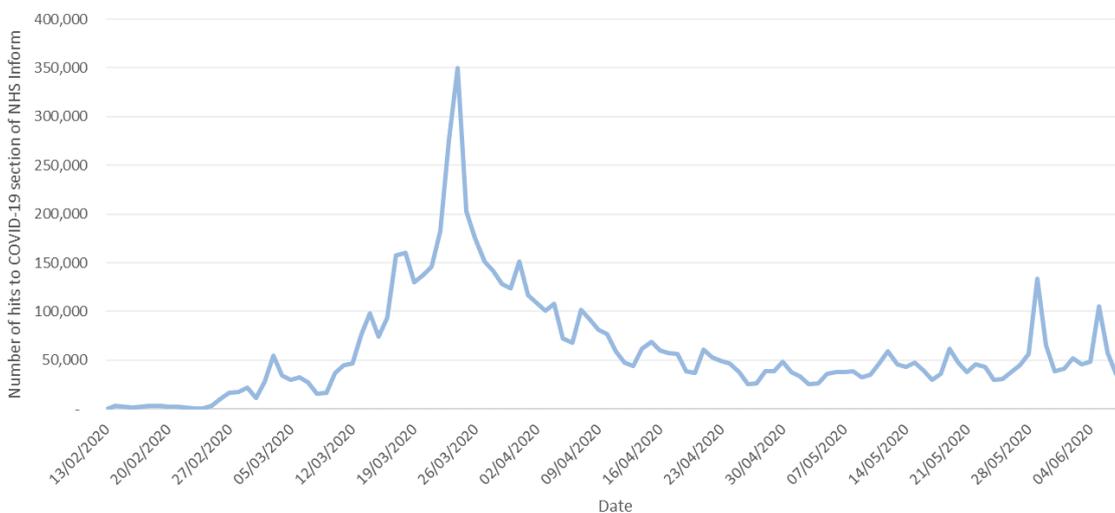


**NHS Inform Contacts for COVID-19**

NHS inform is Scotland’s digital health and care resource, providing the up to date standardised information on COVID-19 from a health perspective. Information is provided in a range of languages and alternative formats ([www.nhsinform.scot/coronavirus](http://www.nhsinform.scot/coronavirus)).

Figure 8 shows the number of hits to the COVID-19 section of the NHS Inform website. The number peaked on 23 March at around 350,000 hits per day. For the past two weeks the number of hits has been around 51,000 per day on average.

**Figure 8: Number of Hits per day on the COVID-19 section of NHS Inform**

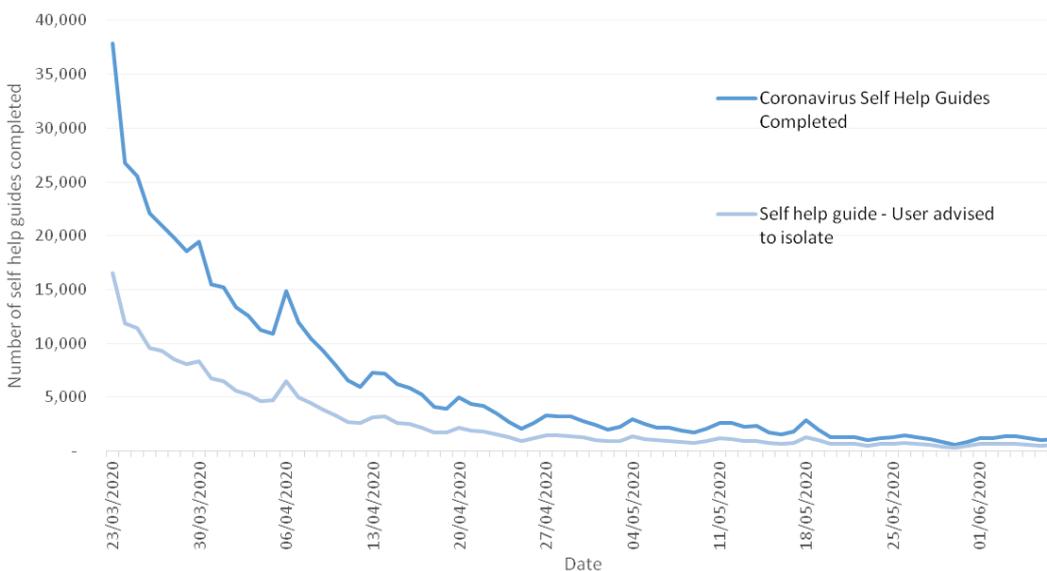


**Please note this website is available worldwide and not all contacts are made from within the United Kingdom/Scotland**

### COVID-19 Self Help Guides

NHS 24 have developed Coronavirus Self Help Guides in response to the pandemic – a short assessment for initial COVID-19 symptoms with directions for accessing further information or into a service as appropriate. This information is aligned to the 111 triage model. The chart below looks at uptake of these guides showing a peak when lockdown started and a steady fall to just over a thousand from mid May.

Figure 9: COVID-19 Self Help Guides Completed



### COVID-19 Triage Protocol

The COVID-19 Triage Protocol was established to assess the needs of people with suspected Coronavirus infection, and streams people to one of four nationally agreed outcomes:

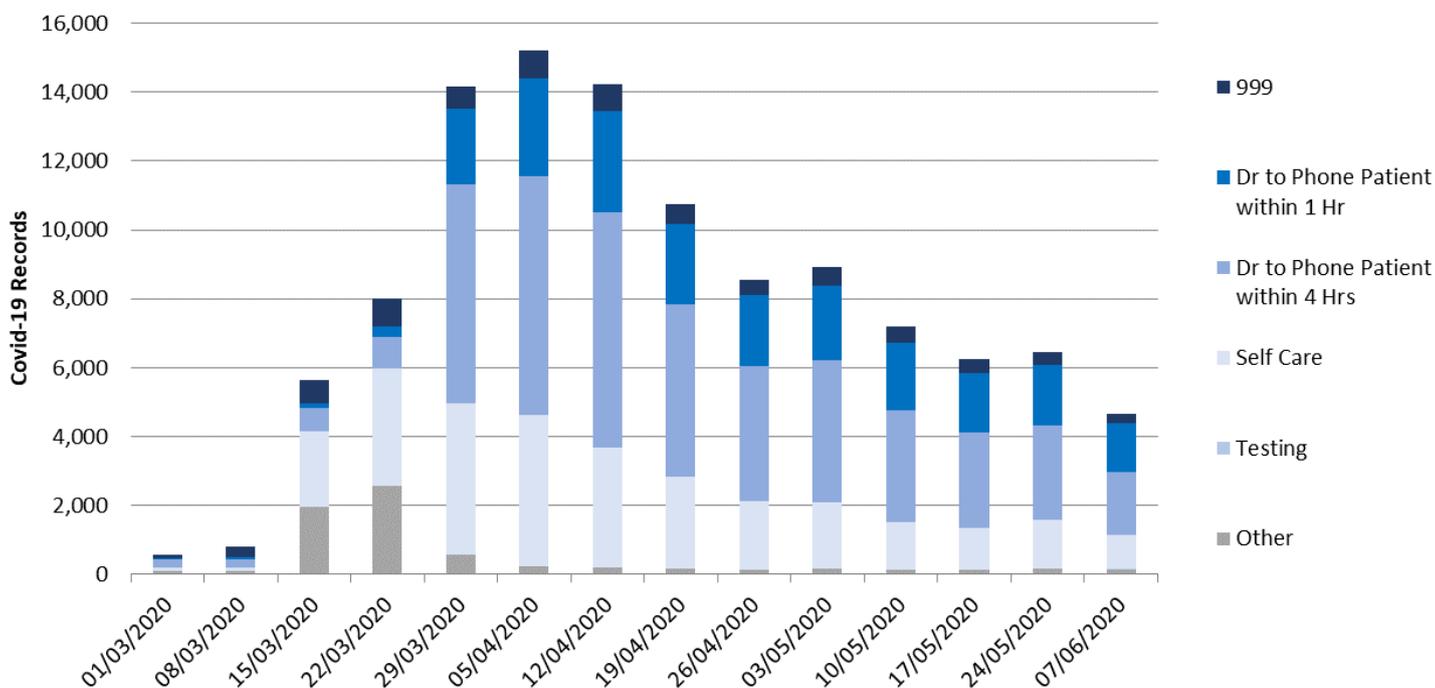
- Self-care
- Speak to doctor within 4 hours (COVID-19 Community Hub)
- Speak to doctor within 1 hour (COVID-19 Community Hub)
- 999 ambulance

There are additional outcomes used for the standard 111 service.

Figure 10 illustrates the split of the outcomes and displays the 4 agreed for the COVID-19 Protocol and Community Hub Model launched on 23 March. It shows a peak in COVID-19 records being created at the beginning of April; however it also illustrates that the proportions have changed. For example, the number of people who need to speak to doctor within 1 hour

is similar over time, but the overall percentage has increased with a concurrent drop in the number requiring self-care.

**Figure 10: COVID-19 records by outcome**



### **COVID-19 Community Hub and Assessment Centres**

People may have multiple consultations with a COVID-19 Community Hub and Assessment Centre depending on their pathway of care. For example, upon referral by NHS 24 (or other services) they will be clinically triaged over the telephone by the community hub and they may then go on to have a consultation in person at an assessment centre; this would result in one person having two consultations.

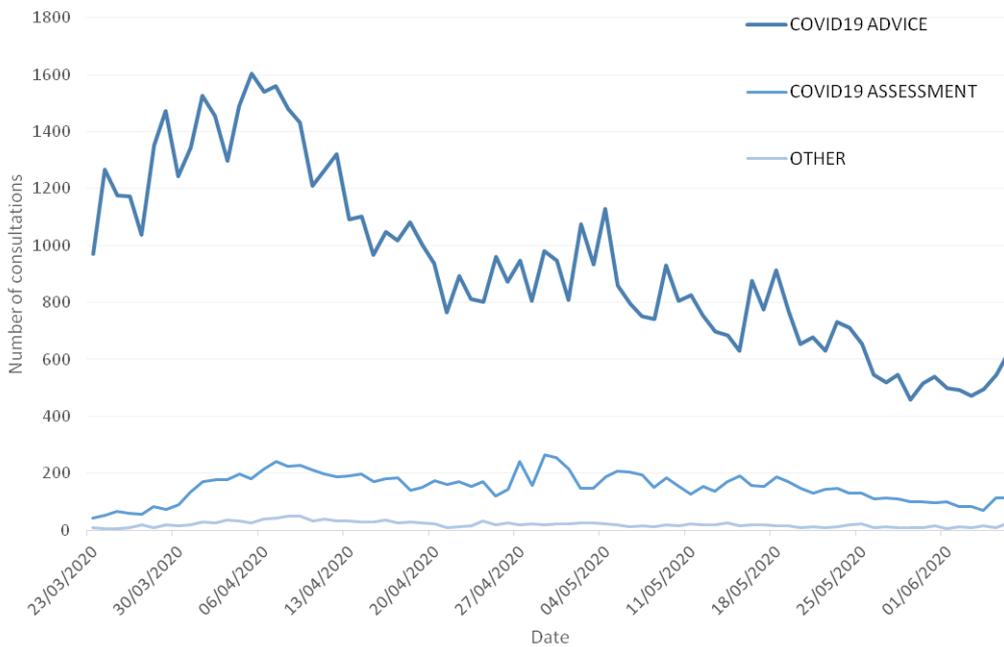
Between the 23 March and 06 June 2020 70,191 people had a total of 84,357 consultations with COVID-19 Community Hubs and Assessment Centres. (*NHS Grampian data included from 01 May 2020 onwards*)

- Overall COVID-19 related activity was highest on the 7 April with 1,842 consultations
- 85% of all consultations were advice calls.
- 59% of all consultations were with females.
- 28% of all consultations were with people living in the most deprived areas in Scotland.

### COVID-19 Community Hub and Assessment Centre, Consultations by Type

Figure 11 shows COVID-19 activity by day of the week broken down by consultation type. A person may contact the Community Hub for advice and then may be asked to come to the Assessment Centre or have a home visit. The number of consultations peaked on 7 April with around 1,800 across all types of consultations. Over the past week there have been around 600 consultations per day.

**Figure 11: Daily COVID-19 COVID Hubs and Assessment Centre Consultations**



Please note

NHS Grampian data included from 01 May 2020.

## COVID-19 Contacts with Scottish Ambulance Service

When someone telephones 999 and requests an ambulance, the Scottish Ambulance Service (SAS) record this as an incident. In some cases, multiple phone calls can be received for one incident.

The total number of incidents includes

- redirecting and referring suitable people to alternative pathways, following telephone triage and advanced triage through a SAS practitioner.
- attended incidents, where a SAS resource (e.g. ambulance, paramedic in a car, specialist paramedic) has arrived at the scene of the incident. Some incidents may be attended by more than one resource.

Following assessment and treatment by SAS crews some patients do not require to be taken to hospital. These patients can be safely left at home with follow up provided by other services including their own GP or GP OOH Services. It is in the patient’s best interest to get the care they require as close to their own home as is feasible.

Scottish Government provide [daily provisional updates](#) on the total number of incidents ambulances attend, how many were COVID-19 related and how many people were taken to hospital with suspected COVID-19.

Figure 12 below provides trends of this information, sourced from SAS, from 22 January 2020 to 7 June 2020. It can be seen that pre COVID-19 generally SAS attended around 1,800 incidents each day. However, from the middle of March this has reduced to between 1,400 and 1,600, this reflects the pattern seen with other urgent and emergency care services.

**Figure 12: Number of all Attended SAS incidents**

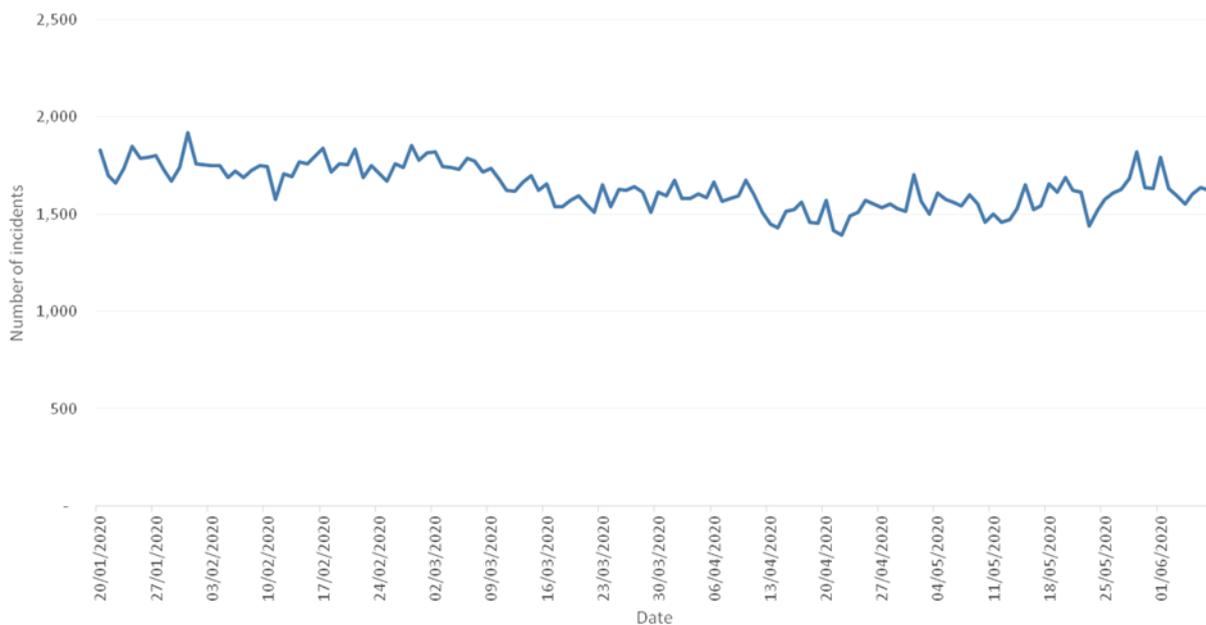
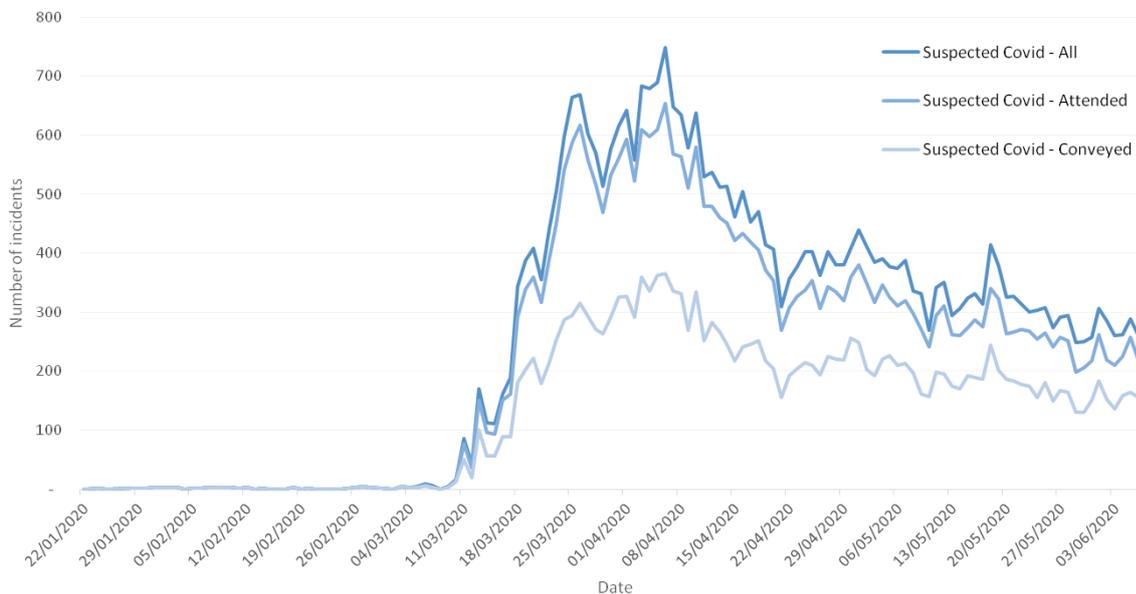


Figure 13 shows the number of incidents which are suspected COVID-19. 6 April saw the peak incidents for SAS with 56% of the incidents attended resulting in people being conveyed to hospital.

Figure 13: Number of SAS suspected COVID-19 incidents by type



### Wider Impact of COVID-19

The COVID-19 pandemic has direct impacts on health as a result of illness, hospitalisations and deaths due to COVID-19. However, the pandemic also has wider impacts on health and on health inequalities. Reasons for this may include:

- Individuals being reluctant to use health services because they do not want to burden the NHS or are anxious about the risk of infection.
- The health service delaying preventative and non-urgent care such as some screening services and planned surgery.
- Other indirect effects of interventions to control COVID-19, such as mental or physical consequences of distancing measures.

The surveillance workstream of the social and systems recovery cell aims to provide information and intelligence on the wider impacts of COVID-19 on health, healthcare and health inequalities that are not directly due to COVID-19.

Many of the existing sources that would be most suitable for this work are not sufficiently timely in terms of reporting delays, so the work has made use of the following data sources:

- RAPID dataset (Rapid And Preliminary Inpatient Data)
- A&E attendances
- NHS 24 completed contacts
- Out of hours consultations
- Scottish Ambulance Service data
- Excess deaths
- Child Health Visitors - Information on the uptake of child health reviews that are routinely offered to all preschool children by Health Visitors was published on the [interactive tool](#) for the first time on 10 June 2020.

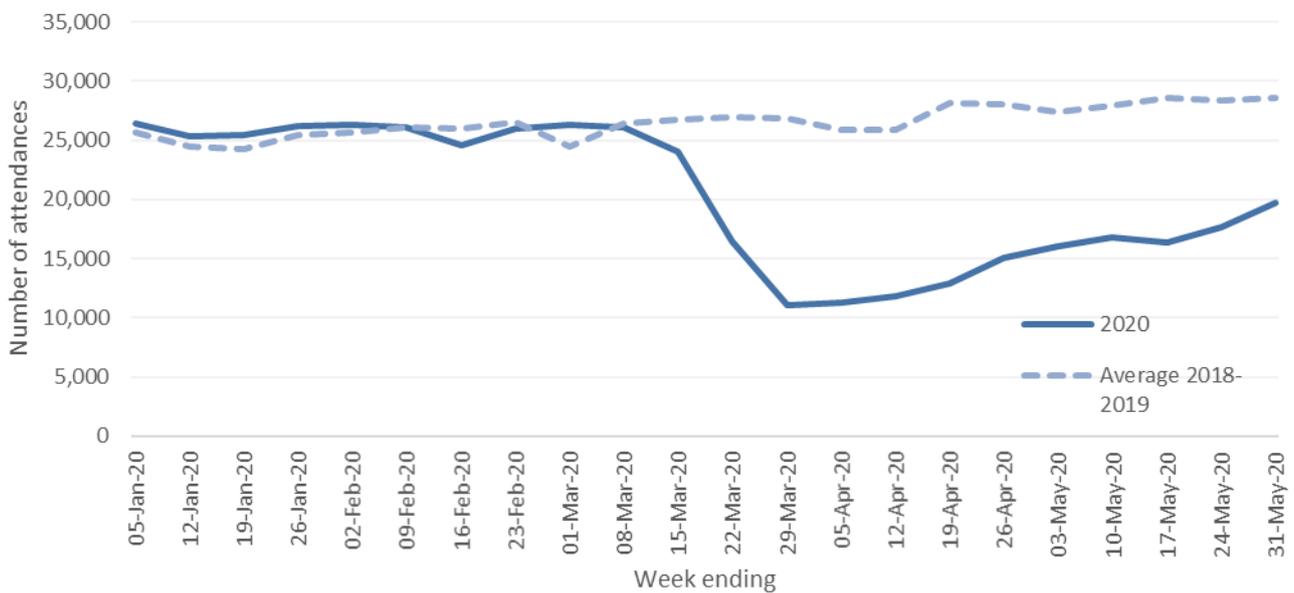
These analyses are based on a selected range of data sources that are available to describe changes in health service use in Scotland during the COVID-19 pandemic. More [detailed information](#) is available at NHS Board and Health and Social Care Partnership (HSCP) level.

### Accident & Emergency attendances

Across Scotland, A&E services would normally see around 25,000 attendances per week. However, following the introduction of lockdown measures on the 18 March, weekly attendances saw a rapid decrease of 56% to around 11,000 (Figure 14). The number of attendances is slowly starting to increase, with attendances for the week ending 31 May 2020 at just over 19,700 (19,741). The pattern of change was similar by age, sex and deprivation, as shown in the [supporting online tool](#).

This overall reduction has a number of possible causes, such as fewer traffic and workplace related injuries or reluctance to use A&E services during the lockdown period.

Figure 14: Weekly A&E attendances across NHS Scotland

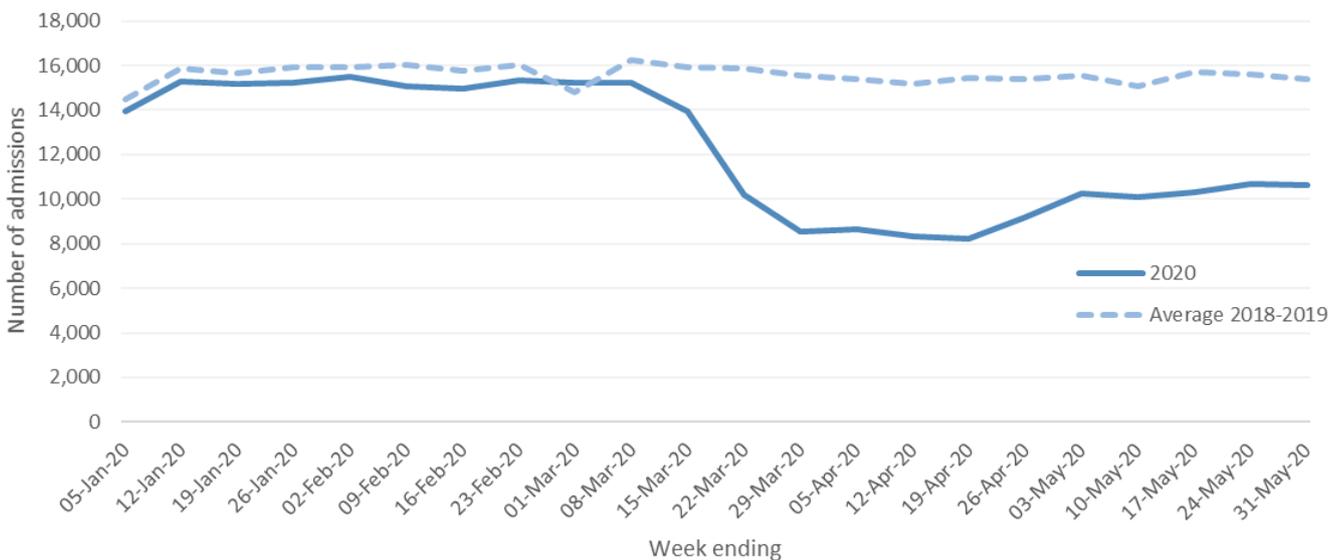


### All Admissions to Hospital

Data on hospital admissions normally comes from the SMR01 dataset, which is the official source for published data on hospital admissions. However, there is a time lag in these data being submitted and therefore they cannot be used to monitor the impact of COVID-19 at this time. The data below use the RAPID (Rapid And Preliminary Inpatient Data) dataset, a more limited but up to date management information flow which provides broadly comparable figures on numbers of admissions. Figure 15 shows the trend in the number of admissions to hospital at a Scotland level, based on the RAPID data. For comparison, the figure also shows average numbers of admissions over the two previous years.

Hospital admissions fell sharply from the second week of March, reaching levels nearly 50% below those expected on the basis of admissions during 2018-19. There has been some recovery since late April, but numbers of admissions remain around 35% below the 2018-19 average. The [supporting online tool](#) shows that similar patterns are seen by sex and by deprivation, but that falls were larger for children under 14 years and smaller for those aged 85 years and over. There were larger relative falls for surgical than medical specialties. There were much larger falls in planned admissions (around 65%) than in emergency admissions (around 40%). There were particularly large falls (around 60%) for emergency paediatric admissions. The pattern was broadly similar across NHS Boards; the low level of recorded admissions in NHS Forth Valley is likely to be due to data quality problems.

**Figure 15: All hospital admissions across Scotland, compared with the average over the previous two years (Source: RAPID dataset)**

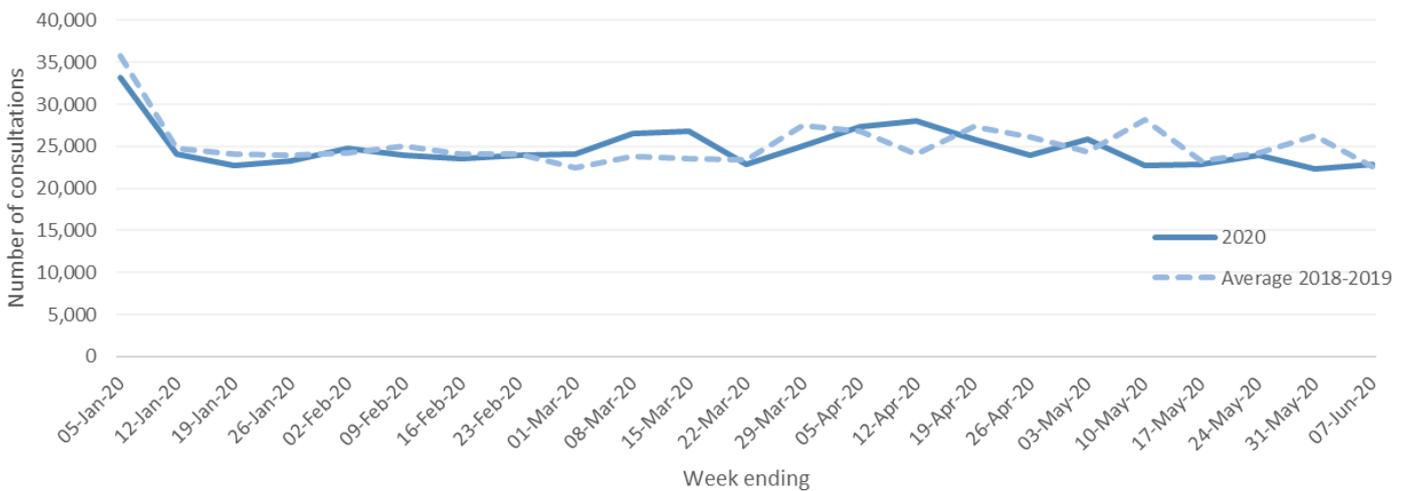


### Completed Contacts with NHS 24 111 service

Figure 16 shows completed contacts with NHS 24. The [supporting online tool](#) shows that NHS 24 111 completed contacts rose substantially for working age adults, but fell to around 50% of previous levels for children under 15 years of age, with little sign of recovery to previous levels. It is important to note that while these figures include some contacts related to COVID-19, they do not include additional services set up to respond directly to COVID-19. The figures also do not include daytime calls referred back to general practice. Compared to previous years, percentage falls in completed contacts were smaller among those living in more deprived areas.

The data used in this chart are taken from the Unscheduled Care Datamart. As previously noted, the data from March 2020 does not reflect the full extent of the demand and activity being undertaken by NHS 24 at this time. Over the coming weeks PHS and NHS 24 are working to further enhance the data and intelligence that can be shown in this publication.

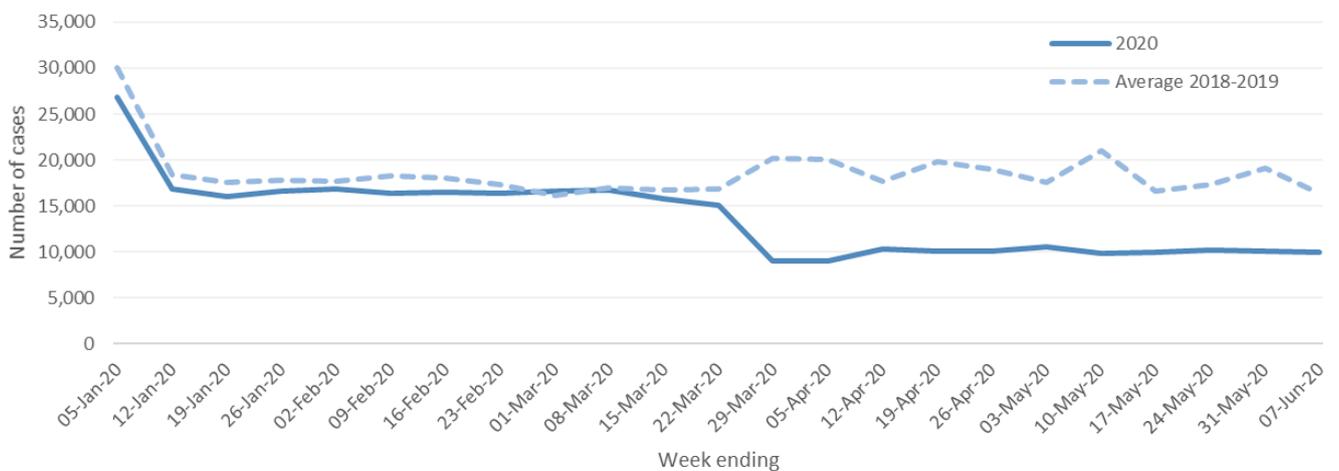
**Figure 16: Number of completed contacts to NHS 24 111 Service, compared with 2018-19 average**



### Primary Care Out of Hours service

Figure 17 shows that the OOH activity mirrored the previous two-year average until Monday 23 March when the COVID-19 community hubs and assessment centres opened. The [supporting online tool](#) shows that there were large percentage falls (around 55% overall) in consultations in out of hours services, especially for children, where the fall was around 70%. People in the out of hours period with COVID-19 symptoms would not attend an out of hours service but be directed towards a COVID-19 community hub and assessment centre. This helps to explain the reduction compared with the previous two-year average.

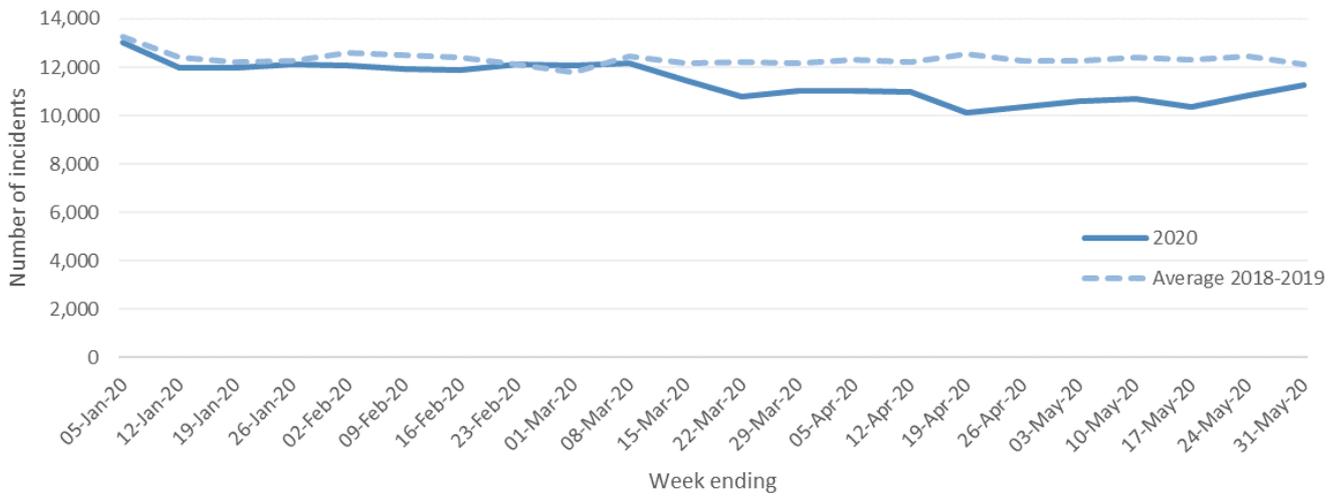
**Figure 17: Number of cases with Primary Care OOH services compared with previous years**



### Scottish Ambulance Service

Figure 18 shows the number of incidents attended by the Scottish Ambulance Service this year, compared with the previous two-year average up to 31 May 2020. When lockdown started, the number of incident attended reduced. The [supporting online tool](#) shows that the reduction was around 15% overall, though the fall was much larger for children (around 50%). This is reflective of demand and activity in other urgent and emergency cares services.

**Figure 18: Number of incidents attended by Scottish Ambulance Service this year, compared with average of previous two years**

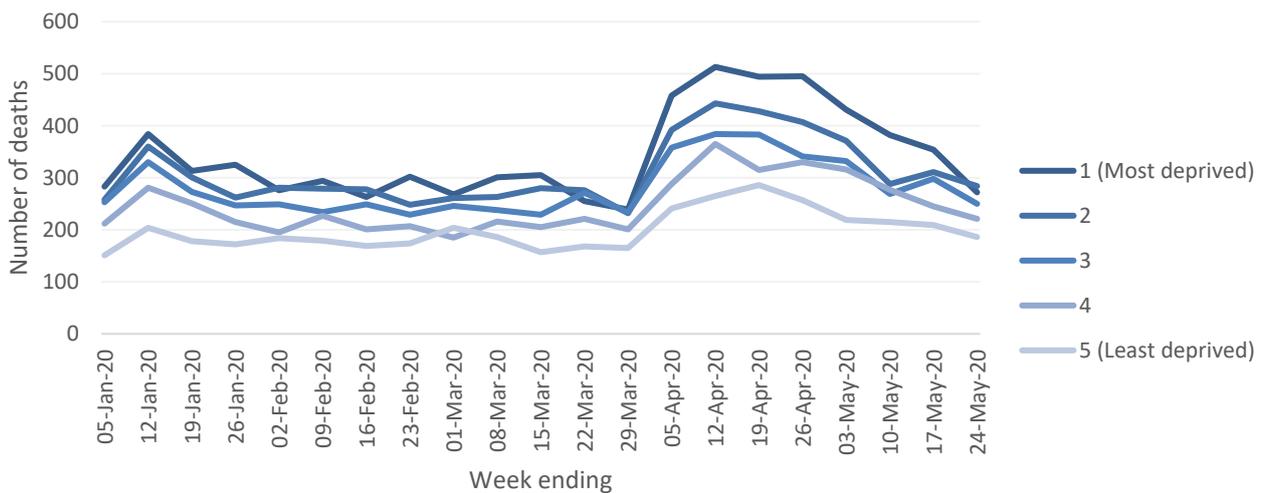


### Excess Mortality

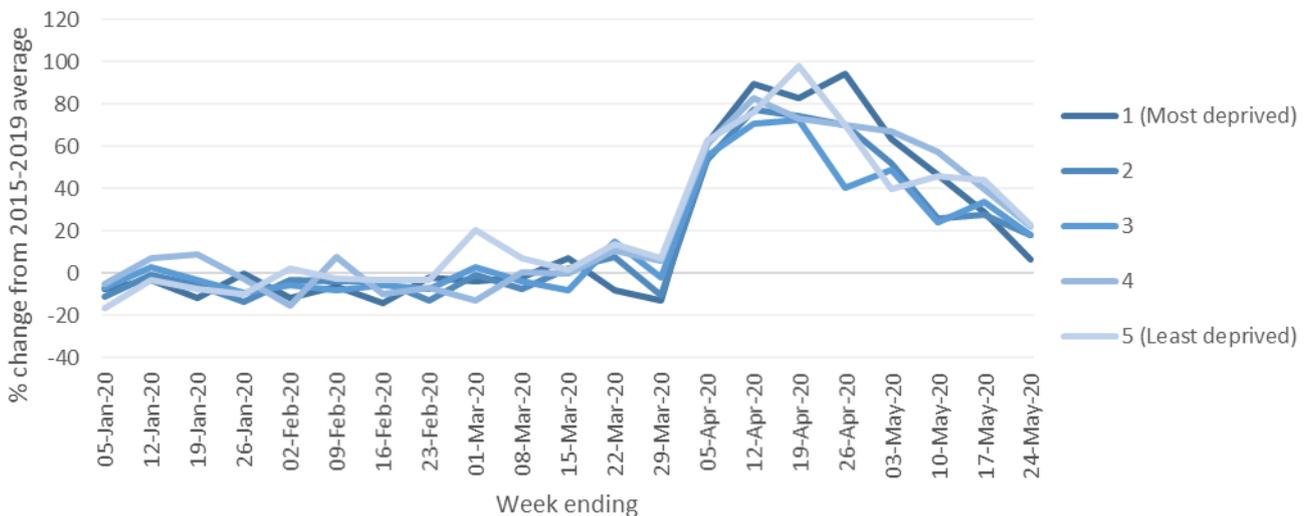
Each week National Records for Scotland (NRS) release provisional deaths data and a [report](#) about the numbers of deaths involving COVID-19 in Scotland. NRS report that weekly excess mortality (defined as deaths from any cause in 2020, both COVID-19 and non-COVID-19, compared with the average of the previous five years) peaked at 80% higher in the week ending 12 April, and had reduced to 17% higher by the most recent week (ending 24 May).

PHS are using the NRS data to provide further insight about excess mortality by sex, age group, area deprivation (quintiles of Scottish Index of Multiple Deprivation 2020), as well as at NHS Board and HSCP level. Figure 19 shows that numbers of deaths from any cause increased markedly at all levels of area deprivation from early April 2020. Figure 20 shows the excess deaths for each SIMD quintile compared with the 2015 to 2019 average: the excess was between 72% and 98% in the week ending 19 April, and had reduced to less than 25% for all quintiles by the latest week (ending 24 May).

**Figure 19: Total number of all-cause deaths by deprivation category (SIMD)**



**Figure 20: Percentage change in all-cause deaths by deprivation category compared to 2015-2019 average**



### Wider impacts summary

These analyses are based on a selected range of data sources that are available to describe changes in health service use in Scotland during the COVID-19 pandemic. Hospital admissions, attendances at A&E departments and consultations with out of hours services all fell to around half the average levels seen in 2018-19 and have since recovered only modestly. There was a smaller fall in attended ambulance incidents and no appreciable change in overall NHS 24 111 completed contacts (excluding the additional services previously noted). These falls are likely to reflect a range of factors, including public anxiety about using NHS services, changes in the delivery of NHS services in response to rising numbers of COVID-19 hospital admissions and actions to defer planned activity in order to be prepared for expected COVID-19 related demand. The changes preceded by around a week the introduction of social distancing measures. The impact was particularly large for children under 14 years, with larger percentage falls in hospital admissions, NHS 24 111 completed contacts, out of hours consultations and ambulance incidents. As expected, the falls in hospital admissions were larger for planned than for emergency admissions and larger for surgical than medical admissions. There was little evidence from these data sources that social inequalities in the use of these services increased during this period. More [detailed information](#) is available at NHS Board and Health and Social Care Partnership (HSCP) level.

## Contact

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## Further Information

**COVID surveillance in Scotland**

[Scottish Government](#)

[Daily Dashboard by Public Health Scotland](#) [National Records of Scotland](#)

**UK and international COVID reports**

[Public health England](#)

[European Centre for Disease Prevention and Control](#)

[WHO](#)

[International Severe Acute Respiratory Emerging Infection Consortium.](#)

The next release of this publication will be 17 June 2020.

## Open data

Data from this publication is available to download from the [Scottish Health and Social Care Open Data Portal](#).

## Rate this publication

Let us know what you think about this publication via the link at the bottom of this [publication](#) page on the PHS website.

## Appendices

### Appendix 1 – Background information

In late December 2019, the People’s Republic of China reported an outbreak of pneumonia due to unknown cause in Wuhan City, Hubei Province.

In early January 2020, the cause of the outbreak was identified as a new coronavirus. While early cases were likely infected by an animal source in a ‘wet market’ in Wuhan, ongoing human-to-human transmission is now occurring.

There are a number of coronaviruses that are transmitted from human-to-human which are not of public health concern. However, COVID-19 can cause respiratory illness of varying severity. Currently, there is no vaccine and no specific treatment for infection with the virus.

On the 30 January 2020 the World Health Organization [declared that the outbreak constitutes a Public Health Emergency of International Concern](#).

Extensive measures have been implemented across many countries to slow the spread of COVID-19. In the UK the current recommendations are for everyone to stay at home as much as possible and severely restrict their interactions with others outside the household.

Further information for the public on COVID-19 can be found on [NHS Inform](#).

### Appendix 2 – PHS and Official Statistics

#### About Public Health Scotland (PHS)

PHS is a knowledge-based and intelligence driven organisation with a critical reliance on data and information to enable it to be an independent voice for the public's health, leading collaboratively and effectively across the Scottish public health system, accountable at local and national levels, and providing leadership and focus for achieving better health and wellbeing outcomes for the population. Our statistics comply with the [Code of Practice for Statistics](#) in terms of trustworthiness, high quality and public value. This also means that we keep data secure at all stages, through collection, processing, analysis and output production, and adhere to the ['five safes'](#).