

# Public Health Scotland COVID-19 Statistical Report

As at 26 July 2021

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# **Contents**

Introduction	5
Main Points	6
Incidence of Variants of Concern and Variants Under Investigation	7
COVID-19 Daily Data	8
COVID-19 Testing in Adult Care Home in Scotland	14
Healthcare workers – COVID-19 Testing	15
Test and Protect	16
Quarantining Statistics	22
Lateral Flow Device Testing	24
Targeted Community Testing	27
COVID-19 Vaccine	28
COVID-19 cases and hospitalisations by vaccination status: key results and methods	28
Overall results of COVID-19 cases and hospitalisations, and deaths by vaccination status	32
COVID-19 related acute hospital admissions by vaccine status	36
Confirmed COVID-19 deaths by vaccination status	41
COVID-19 Vaccination uptake in School Teachers	43
COVID-19 across the NHS	45
Wider Impact of COVID-19	46
Weekly National Seasonal Respiratory Report	47
Contact	48
Further Information	48
Open data	48
Rate this publication	48
Appendices	49
Appendix 1 – Background information	49
Appendix 2 – World Health Organisation (WHO) Standard for Contact Tracing and Scotland Wide Performance Reporting	49
Appendix 3 – Hospital Admissions Notes	
Appendix 4 – RAPID Hospital Admissions	
Appendix 5 – Healthcare Worker Testing	
Appendix 6 – Contact Tracing	
	51

# **Public Health Scotland**

Appendix 8 – Lateral Flow Device Testing	52
Appendix 9 – Data Sources and Limitations	52

# This is a Management Information publication

Published management information are non-official statistics. They may not comply with the UK Statistics Authority's Code of Practice with regard to high data quality or high public value but there is a public interest or a specific interest by a specialist user group in accessing these statistics as there are no associated official statistics available.

Users should therefore be aware of the aspects of data quality and caveats surrounding these data, all of which are listed in this document. Therefore, the data presented are subject to change.

## Introduction

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

The Public Health Scotland <u>COVID-19 Daily Dashboard</u> publishes daily updates on the number of positive cases of COVID-19 in Scotland, with charts showing the trend since the start of the outbreak. From 26 February 2021 the Daily Dashboard also includes daily updates on vaccinations for COVID-19 in Scotland.

This report provides additional information not found in the Daily Dashboard on topics such as Test and Protect and Quarantining Statistics and COVID-19 testing in children and young people.

The accompanying interactive dashboard contains charts and data on the following topics:

- Hospital and unscheduled care
- Healthcare for cardiovascular disease
- Healthcare for mental health
- New cancer diagnoses
- Uptake of pre-school immunisations
- Coverage of health visitor child health reviews
- Infant feeding
- Child development
- Women booking for antenatal care
- Terminations of pregnancy
- Births and babies
- Excess deaths

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. Future reports will provide further data and analysis to contribute to the evidence base around the outbreak.

## **Main Points**

- As at 25 July 2021, there have been 341,015 confirmed COVID-19 cases; 9,047 of these
  were recorded in the week ending 25 July 2021, a decrease of 35.1% from the previous
  week.
- In the week ending 25 July 2021, 8,954 individuals were recorded in the contact tracing software, from which 18,987 unique contacts have been traced.
- In the week ending 25 July 2021, under the Community Testing Programme 28.4% of symptomatic and 7.4% of asymptomatic tests for COVID-19 were positive.
- In the week ending 20 July 2021, there were 450 admissions to hospital with a laboratory confirmed test of COVID-19. There has been a general fall in admissions amongst the older age groups (aged 60 years plus) since the onset of the vaccination programme. The highest number of new admissions are now in those aged 40-59 years.
- The proportion of all people who were admitted to hospital within 14 days of a laboratory confirmed COVID-19 positive test has declined, from 13% in the week commencing 25 January 2021, to 3% in the most recent week commencing 05 July 2021.
- The number of new admissions to Intensive Care Units (ICUs) for confirmed COVID-19
  patients has seen a small increase, from 44 in the week ending 17 July 2021, to 50 in the
  week ending 24 July 2021.
- In the week ending 25 July 2021 there were 21,419 people who arrived in Scotland from outside the UK, of which 17,854 were required to quarantine (of which 613 were quarantined in a hotel).

# **Results and Commentary**

# **Incidence of Variants of Concern and Variants Under Investigation**

Since early May 2021, there has been a rapid increase in the Delta variant detected through whole genome sequencing (WGS) in Scotland. The Delta variant has been the dominant COVID-19 variant in Scotland since 31 May 2021.

Public Health Scotland (PHS) continues to monitor COVID-19 Variants of Concern, in collaboration with other Public Health Agencies in the UK.

The latest <u>information on the number of such variants detected by genomic analyses across</u> the UK is published by Public Health England.

# **COVID-19 Daily Data**

The Public Health Scotland <u>COVID-19 Daily Dashboard</u> publishes daily updates on the number of positive cases of COVID-19 in Scotland, with charts showing the trend since the start of the outbreak.

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. A person can have multiple tests but will only ever be counted once. The drop in the number of confirmed cases at weekends likely reflects that laboratories are doing fewer tests at the weekend.

- There have been 341,015 people in Scotland who have tested positive, at any site in Scotland (NHS and UK Government Regional Testing centres), for COVID-19 up to 25 July 2021.
- In the week ending 25 July 2021 there were 9,047 confirmed COVID-19 cases.<sup>1</sup>
  - 1. Correct as at 25 July 2021, may differ from more recently published data on the COVID-19 Daily Dashboard

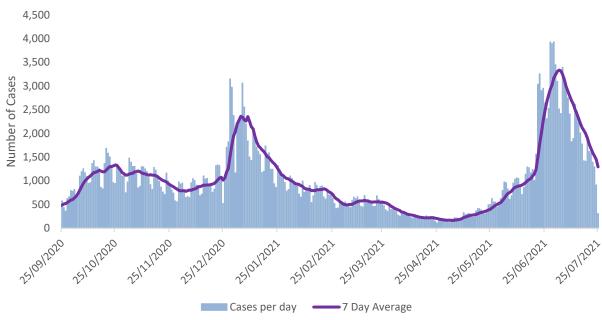


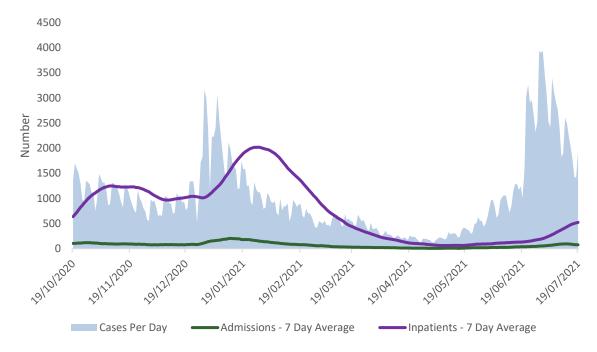
Figure 1: Number of Positive Cases per day with 7 Day Average

The daily dashboard also now includes data on Hospital Admissions and ICU admissions for patients with COVID-19:

- In the week ending 20 July 2021, there were 450 admissions to hospital with a laboratory confirmed test of COVID-19.
- In the week ending 24 July 2021 there were 50 new admissions to Intensive Care Units (ICUs) for confirmed COVID-19 patients.

Figure 2: Number of Positive Cases, Admissions and Inpatients, as at 19 July 2021<sup>2</sup>

The number of confirmed daily COVID-19 cases reduced from 2,483 to 1,937 between 13 July and 19 July. During this same time period, the daily COVID-19 confirmed hospital admissions has decreased from 96 to 76 (seven-day rolling average). However, the seven-day average of inpatients in hospital has increased by 19% (from 438 to 523).



2. Please refer to Appendix 3 - Hospital Admissions Notes for definitions of hospital admissions and inpatients.

Additional charts and data are available to view in the <u>interactive dashboard</u> accompanying this report.

Data is also monitored and published daily on the <u>Scottish Government Coronavirus website</u>.

Please note that the changes described in the <u>COVID-19 Daily Dashboard</u> from 28 July 2021 are not reflected in the data provided in this report, but will be seen in next week's report due on 04 August 2021.

#### **COVID-19 Hospital Admissions**

There is increasing interest in whether or not the age of people admitted to hospital who have a laboratory confirmed case of COVID-19 is changing over time. The table below shows a breakdown across all ages and by age group for the most recent four weeks. Data from 03 March 2021 is available on the Covid Statistical Report website.

It is important to note, that the figures presented below may include patients being admitted and treated in hospital for reasons other than COVID-19.

COVID-19 related admissions have been identified as the following: A patient's first positive PCR test for COVID up to 14 days prior to admission to hospital, on the day of their admission or during their stay in hospital. If a patient's first positive PCR test is after their date of discharge from hospital, they are not included in the analysis.

Table 1: COVID-19 hospital admissions by age as at 20 July 2021<sup>3</sup>

Age Band	23 June – 29 June	30 June – 06 July	07 July – 13 July	14 July – 20 July
0-9	26	23	23	20
10-19	16	26	28	21
20-29	40	61	69	45
30-39	48	73	84	58
40-49	37	48	84	71
50-59	39	62	73	78
60-69	32	58	83	54
70-79	42	67	71	56
80+	37	66	94	47
Total	317	484	609	450

Source: RAPID (Rapid and Preliminary Inpatient Data)

There has been a general fall in admissions amongst the older age groups (aged 60 years plus) since the onset of the vaccination programme. The highest number of new admissions are now in those aged 40-59 years.

<sup>3.</sup> Please refer to Appendix 4 - RAPID Hospital Admissions for explanatory notes regarding RAPID Hospital Admissions.

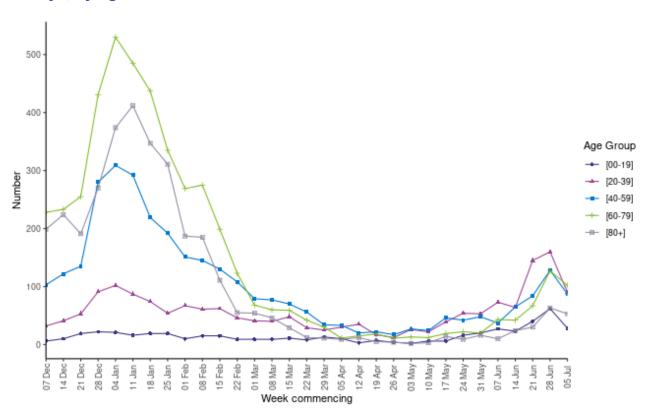


Figure 3: Trend in Hospital Admissions, who have tested positive for COVID-19 within 14 days, by age

In recent months, the proportion of all people who were admitted to hospital within 14 days of a laboratory confirmed COVID-19 positive test has also declined, from 13% in the week commencing 25 January 2021 to 3% in the most recent week commencing 05 July 2021 (Figure 4).

This reduction can be explained by a change in the age profile of people acquiring COVID-19. Although those over 60 with COVID-19 are more likely to be admitted to hospital than younger age groups (Figure 5), the proportion of newly reported cases in the over 60s has reduced in recent months (Figure 6).

Figure 4: Proportion of weekly cases admitted to hospital within 14 days of a first positive test

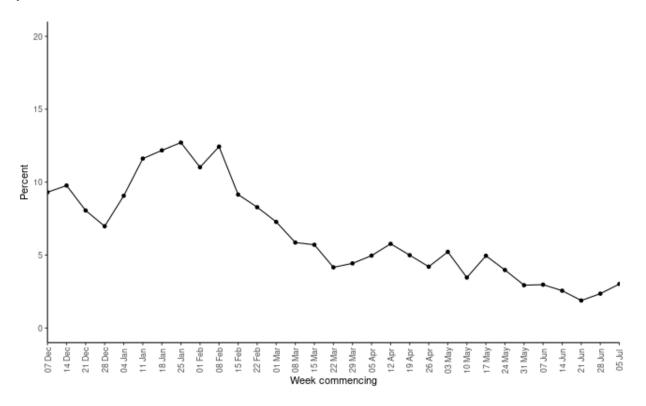
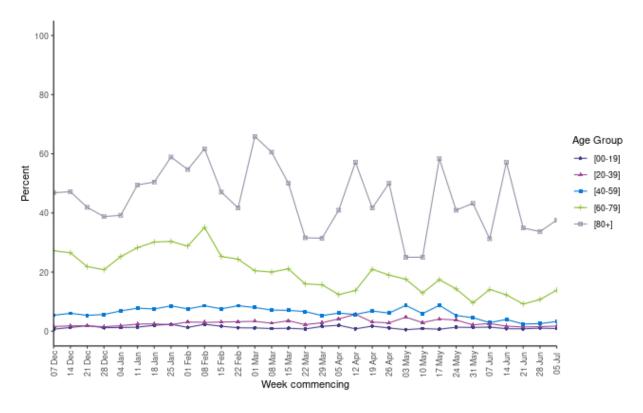
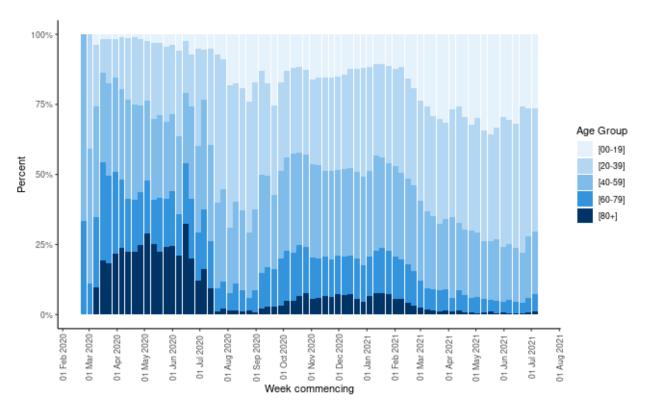


Figure 5: Proportion of weekly cases admitted to hospital within 14 days of a first positive test by age group







# **COVID-19 Testing in Adult Care Home in Scotland**

As of 20 January 2021, Public Health Scotland took over reporting of weekly testing data on COVID-19 in adult Care Homes in Scotland – data prior to 11 January 2021 can be found on the Scotlish Government website.

This data is provisional management information submitted to the Turas Care Home Management system by Care Homes, and details numbers of people (i.e. staff and residents) tested in the last week. The numbers capture both those tests undertaken via NHS routes and those done via the Scottish Social Care portal.

Figures are an undercount in some cases as complete data was not collected for all Care Homes.

It is the responsibility of Boards to work with care homes as part of their oversight arrangements to quality assure this data. The role of PHS is to collate and publish only. Please use this information with caution.

Table 2: Adult care home testing for week ending 25 July 2021

Further information on COVID-19 testing in Adult Care Homes can be found at <u>Coronavirus (COVID-19): trends in daily data</u> - gov.scot (www.gov.scot).

NHS Board	Care Ho confirmed	Care Homes with no confirmed COVID-19	
	Staff tested	Residents tested	Staff tested
Ayrshire and Arran	369	105	2,885
Borders	24	0	655
Dumfries & Galloway	0	0	1,185
Fife	210	129	2,768
Forth Valley	295	139	2,049
Grampian	229	*	4,135
Greater Glasgow & Clyde	841	630	7,071
Highland	309	289	2,236
Lanarkshire	517	268	3,418
Lothian	1,083	773	4,874
Orkney	0	0	157
Shetland	0	0	258
Tayside	553	*	2,862
Western Isles	56	31	236
Scotland	4,486	2,372	34,789

Please note some of the data is suppressed due to disclosure methodology being applied to protect patient confidentiality

# **Healthcare workers – COVID-19 Testing**

In July 2020, the Scottish Government expanded COVID-19 testing (PCR) to include key healthcare workers in oncology and haemato-oncology in wards and day patient areas including radiotherapy; staffing wards caring for people over 65 years of age where the length of stay for the area is over three months, and wards within mental health services where the anticipated length of stay is also over three months. A data collection was initially set up to monitor the expansion of testing starting in July 2020. Weekly trend data, broken down by health board, is available on the interactive dashboard.

Work was undertaken with Boards to improve the quality of the data and this collection has moved over to Public Health Scotland. This management information must be treated with caution as it may be subject to change as the quality of the data improves. Public Health Scotland is working closely with SG and Boards to improve data definitions and quality to ensure consistency across Scotland. As a result, data may be revised in subsequent weeks and any changes will be clearly signposted.

Table 3: Number of COVID-19 tests and positive results for healthcare workers for week ending 22 July 2021

Area	Total Eligible Staff	Total Staff tested	Number of positive tests <sup>4</sup>	Number of Staff not tested - declined to test	Number of Staff not tested for operational reasons	Number of staff not tested for other reasons
Specialist Cancer Wards and Treatment Areas	2,462	2,400	*	24	*	*
Long Stay Care of the Elderly	719	641	*	39	*	*
Long Stay Old Age Psychiatry and Learning Disability Wards	2,492	2,353	*	56	43	40
Scotland	5,673	5,394	9	119	55	105

<sup>4.</sup> Please note some of the data is suppressed due to disclosure methodology being applied to protect staff confidentiality. See Appendix 5

<sup>-</sup> Healthcare Worker Testing for notes on staff not tested.

#### **Test and Protect**

On 26 May 2020, the Scottish Government set out the strategy for 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 and all local NHS Boards 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 are the number of contacts which are recorded in the contact tracing software. The figures presented below are preliminary and may be updated in subsequent publications. A case is generated by a positive test. However, an individual can have multiple tests, and all positive results are reported to the contact tracing system so that each result can be assessed by the contact tracer and followed up as required. In many cases, there is no follow up for a repeat positive test (because the person was already contact traced when their first positive result was reported). To reflect this, test and protect data now includes details on the number of individuals whose positive test resulted in contact tracing being undertaken. The number of individuals who tested positive is also more comparable with the figures given in the <a href="#">COVID-19 Confirmed Cases section of this report</a>, which reports on new positive cases.

Please note PHS has moved to weekly reporting of this data and cumulative data is available in the interactive dashboard.

As part of the initial response to the outbreak of the Delta variant, initially in Glasgow, secondary contacts (contacts of contacts) were contact traced by Test and Protect as appropriate. However, due to increasing volume of index and primary contacts, secondary contact tracing is now no longer being undertaken. Please note, in Tables 4 to 8 below, figures relate to Primary Contacts only.

Thereafter, as the number of contacts requiring tracing increased, the majority of contacts were notified of the need to isolate via SMS. As of last week, contact tracing has restarted.

Contact Tracing figures for the week ending 18 July 2021 (based on test date), are detailed in Table 4 below, which provides a recent time trend, a longer time trend is available on the interactive dashboard.

Table 4: Contact Tracing Scotland Trend Information<sup>5</sup>

	13 Jun	20 Jun	27 Jun	04 Jul	11 Jul	18 Jul	25 Jul <sup>p</sup>
Cases	6,359	8,944	20,179	23,760	18,705	14,214	9,049
Complete Cases	5,590	8,127	16,702	17,899	15,902	12,174	7,214
% Complete	87.9%	90.9%	82.8%	75.3%	85.0%	85.6%	79.7%
Individuals	6,286	8,879	19,984	23,477	18,494	14,043	8,954
Total Primary Contacts	31,833	49,618	77,668	66,137	51,881	41,871	27,886
Unique Primary Contacts	22,639	34,627	54,346	44,289	36,781	29,198	18,987
Average number of primary contacts per case <sup>6</sup>	5	6	4	3	3	3	3

P – Please treat as provisional as data is still being collected for the latest reported week and index/contacts being traced.

In the week ending 25 July 2021, there were 9,049 Index Cases, of which 7,214 had completed contact tracing. There are a small proportion of primary contacts who were successfully contacted but then advised that they do not need to isolate. 3,110 primary contacts were not advised to self-isolate, 2.2% of all primary contacts for which this information is known. Some of these primary contacts are children under the age of 16. Other reasons may include that the contact was wearing PPE or did not come into close contact with a positive case. Primary Contacts who receive an SMS message are told to self-isolate.

Data by NHS Board are presented in the below table for the most recent two weeks. This shows the number of individuals and the number of primary contacts by NHS Board. Comparisons between NHS Board figures should be treated with caution due to the variation in complexity of cases which the Boards are dealing with at any point in time (e.g. some cases will be straight-forward with a low number of primary contacts to be traced; others will be more complex with a higher number to be traced). These figures will be updated in subsequent weeks to incorporate any additional primary contacts who had not had their tracing completed by the time the analysis was undertaken.

In the week prior, of the 29,198 unique contacts recorded, 5,124 (17.5%) went on to test positive within ten days of their contact with an index case.

<sup>5</sup> For further information and additional notes on Contact Tracing, please see Appendix 6 - Contact Tracing.

<sup>6</sup> Scottish Government published research findings on modelling the Covid19 epidemic and reported an average of 3.8 contacts per primary case in its report Coronavirus (COVID-19): modelling the epidemic in Scotland (Issue No. 60) here. The Scottish Contact Survey (SCS) used a representative sample of the Scottish adult population, with information collected on all direct contacts. Whereas Public Health Scotland primary contacts include those who are tested and reported to Test and Protect.

Table 5: Number of individuals and the number of primary contacts by NHS Board

	Week of first positive result					
	Week ending	18 July 2021	Week ending	25 July 2021		
NHS Board	Individual	Unique Primary Contacts within Health Board	Individual	Unique Primary Contacts within Health Board		
Ayrshire & Arran	612	1,570	513	1,294		
Borders	215	551	157	304		
Dumfries & Galloway	200	579	167	440		
Fife	1,076	2,462	616	1,517		
Forth Valley	675	1,578	473	998		
Grampian	1,066	2,613	707	1,624		
Greater Glasgow & Clyde	3,317	6,015	2,148	4,165		
Highland	572	1,276	409	737		
Lanarkshire	1,790	3,917	1,285	2,918		
Lothian	2,887	5,402	1,607	3,302		
Orkney	7	19	10	24		
Shetland	44	245	28	125		
Tayside	1,249	2,620	582	1,255		
Western Isles	12	71	25	96		
Unknown Health Board	321	379	227	249		

Contact tracers, within the National Contact Tracing Centre and NHS Boards, were unable to contact a proportion of individuals with a positive test and their primary contacts:

- 26,027 individuals with a positive test were unable to be contacted since the (Case Management System (CMS) went live (8.1% of all individuals).
- 20,949 contacts were unable to be contacted since the CMS went live (1.8% of all contacts).

These figures continue to be monitored by Test and Protect teams.

#### **Completed Index cases**

Since 03 August 2020, the use of some fields within the Contact Tracing Case Management System has become mandatory – this allows for improvement in data recording and other measures to be explored as to how Test and Protect in Scotland is responding to the number of positives cases. The measures below are the initial exploratory analysis to describe the timeliness of contact tracing. Please note these are preliminary statistics and ongoing work is in place to improve recording and use of fields within the CMS to increase accuracy. The three measures are;

- the time between a sample being taken and the positive individual being interviewed
- the time between the record appearing in the CMS and the positive individual being interviewed
- the time between the record appearing in the CMS and contact tracings being completed (i.e. contacts have been interviewed or attempted to be interviewed).

These figures are now weekly measures, data are available for previous weeks within the interactive dashboard.

Please note, data in tables 6, 7 and 8 relate to index cases recorded up to 23 July 2021. Data relates only to Monday – Friday due to completeness for the most recent week - Data are provisional and will be updated in future releases.

Table 6: Time (hours) between date test sample taken (specimen date) and the positive individual being contacted <sup>7</sup>

	Week Ending 18 July 2021		Week Ending	25 July 2021
Hours taken	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases
0-24	3,270	27.6	1,889	34.5
24-48	6,183	52.3	2,855	52.1
48-72	1,605	13.6	571	10.4
Over 72	695	5.9	111	2.0
Not known	79	0.7	50	0.9

Table 7: Time (hours) between case created in CMS and the positive individual being contacted <sup>7</sup>

	Week Ending	18 July 2021	Week Ending 25 July 2021		
Hours taken	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases	
0-24	9,549	80.7	4,750	86.7	
24-48	1,644	13.9	590	10.8	
48-72	343	2.9	68	1.2	
Over 72	217	1.8	18	0.3	
Not known	79	0.7	50	0.9	

<sup>7</sup> Includes being interviewed by a contact tracer or submitting preliminary information via a CO3 form

Table 8: Time (hours) between case created in CMS to its closure 8

	Week Ending	18 July 2021	Week Ending 25 July 2021		
Hours taken	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases	
0-24	6,970	58.9	3,884	70.9	
24-48	2,435	20.6	1,023	18.7	
48-72	689	5.8	292	5.3	
Over 72	988	8.4	225	4.1	
Not known	750	6.3	52	1.0	

8 Measured by the time taken to complete the final contact interview for high risk settings/contacts and those completed via SMS

Please note a data quality issue was identified in week ending 18 July 2021. Some closure dates were not feeding through, thus creating a higher number of unknowns. This issue is yet to be resolved.

#### Travel outside of Scotland cases

Since 28 September 2020 fields have been available to record information about whether a case has travelled outside of Scotland. In the week ending 25 July 2021, 9,049 index cases were newly created on CMS, of which 7,539 had a fully completed index case interview. Of those interviewed, **1,429** travelled to the UK (excluding Scotland), **154** travelled to Europe and **18** to the rest of the world.

This information is collected on the contact tracing interview and is where outside of Scotland travel information is recorded. Please note we are aware of an undercount for those travelled outside Scotland. This is a data quality issue due to recording of the travel information, Public Health Scotland is working closely with contact tracing leads to improve this recording.

#### **Protect Scotland App**

The Protect Scotland App from NHS Scotland's Test and Protect was launched on 10 September 2020 and is a free, mobile phone app designed to protect individuals and reduce the spread of coronavirus. The app alerts individuals if they have been in close contact with another app user who tests positive for coronavirus. If they test positive, it can help in determining contacts that may have otherwise been missed while keeping individual's information private and anonymous. As of 26 July 2021 the total number of people who have downloaded the app is **2,111,178** with the number of contact notifications at **60,794**.

#### **Event and Settings cases**

Public Health Scotland has been able to present a table of settings and events that index cases have attended over the previous 7 days. This is based on interviews conducted with cases identified in the CMS and involves cases recalling where they have been in the 7 days prior to symptom onset (or date of test if asymptomatic).

These figures are now updated in Settings tab of the <u>interactive dashboard</u> accompanying this report. Please note that Public Health Scotland cannot infer from the figures whether a specific setting or an event indicates where the COVID-19 transmission took place. This is because cases may have attended multiple settings or events within a short space of time. In addition, it is possible that even though a case visited a few settings and events, transmission may have taken place elsewhere.

More information on event groupings can be found in the <u>accompanying metadata document</u>.

# **Quarantining Statistics**

These statistics provide a summary of the number of people entering Scotland from outside the UK, those required to quarantine, and the numbers contacted by the National Contact Tracing Centre. Passenger arrivals into Scotland are provided by the Home Office to PHS. PHS take a sample of those who are required to quarantine and pass the data to NHS National Services Scotland, which runs the National Centre on PHS's behalf.

Those arriving into Scotland who have been in a country on the red list (high risk) at any point in the 10 days before arriving in Scotland are required to quarantine in a hotel for a minimum of 10 days (further information available on the Scotlish Government website). Those arriving in Scotland who have been in a country on the amber list (non-high risk) are required to quarantine at home.

Up to 23 June 2021, a sample of those individuals quarantining at home were contacted by the National Contact Centre (NCC). These calls were paused in order to prioritise contact tracing. Since 13 July 2021, these call have resumed. All travellers (except those exempt) will receive an email, providing them with appropriate public health information on self-isolation and testing. Unvaccinated travellers arriving from an Amber country are also called by the NCC. Fully vaccinated travellers arriving from an Amber country, or travellers arriving from a Green country, receive a SMS and email. Arrivals from a Red country receive an email and continue to be managed via quarantine. Travellers under the age of 18 are not contacted.

Table 9 - Quarantine Statistics by date (22 June 2020 to 25 July 2021) 9

	Week Ending 25 July 2021	Cumulative
Number of people arriving in Scotland	21,419	746,774
Number of people requiring to quarantine in a hotel (anywhere in the UK)	613	16,127
Number of people requiring to quarantine at home	17,241	361,851
Number of people contacted by National Centre	3,044	104,499

Of the total number of people contacted by the National Centre, the below table shows the breakdown of these contacts.

Table 10: Number of people contacted by National Centre by status (22 June 2020 to 25 July 2021)  $^9$ 

	Week Ending 25 July 2021	Cumulative
Successful contacts made	2,413	95,642
Unable to contact individual	65	8,291
In progress	566	566

<sup>9</sup> For further information and additional notes on Contact Tracing, please see Appendix 7 - Quarantine Statistics.

# **Lateral Flow Device Testing**

Across Scotland, there are numerous testing pathways being rolled out using Lateral Flow Devices (LFD) - a clinically validated swab antigen test taken that does not require a laboratory for processing. This test can produce rapid results within 45 minutes at the location of the test.

Some of the areas using LFD tests are: schools, health and social care workers, care homes and more. Public Health Scotland has collected the information on the number of LFD tests carried out across Scotland and will now publish this information weekly. This section is the totality of LFD across Scotland and across strategies. Sections focussing in on specific topics such as Schools, Higher Education and Community testing can be found later in the report.

Since 19 November 2020, there have been 7,914,972 LFD tests carried out in Scotland, of which 27,512 were positive (0.3%). Table 11 shows the number of LFD tests carried out in Scotland by testing group, and Table 12 shows the number of LFD tests by Health Board of residence of the individual taking the test.

Any individual who receives a positive test result using a Lateral Flow Device is advised to self-isolate and arrange for a confirmatory PCR test. The PCR result will determine the number of cases of COVID-19 in Scotland.

For additional details on Lateral Flow Device Tests, please see - <u>Appendix 8 – Lateral Flow Device Testing</u>

Table 11: Number of LFD $^{10}$  tests by Test group 19 November 2020 – 25 July 2021

Test Group	Number of tests	Number of positive tests	% LFT positive
Care Home - Visiting Professional	34,209	32	0.1%
Care Home - Visitor	276,908	100	0%
Care Home Staff	1,024,796	685	0.1%
Community Testing	66,127	515	0.8%
Emergency Control Room Staff	27,181	34	0.1%
Food Processing	5,655	5	0.1%
Healthcare Worker	1,915,649	2,196	0.1%
Primary Care And Independent Contractors	111,115	81	0.1%
Quarantine Hotel Staff/Security Personnel	2,376	11	0.5%
School	2,027,374	2,904	0.1%
Social Care	417,133	332	0.1%
UK Gov Other	1,612,636	19,191	1.2%
University Testing	96,000	380	0.4%
Other	297,813	1,046	0.4%
Total	7,914,972	27,512	0.3%

Data extracted: 26 July 2021

Please note some of the data is suppressed due to disclosure methodology being applied to protect staff confidentiality.

Table 12: Number of LFD<sup>10</sup> tests, up until 25 July 2021, by NHS Board of Residence (based on the postcode provided by the individual taking the test)

Board of Residence	Number of tests	Number of positive tests	% LFD positive
NHS Ayrshire & Arran	602,313	1,896	0.3%
NHS Borders	164,986	448	0.3%
NHS Dumfries & Galloway	224,132	383	0.2%
NHS Fife	487,119	1,992	0.4%
NHS Forth Valley	438,367	1,262	0.3%
NHS Grampian	972,397	2,091	0.2%
NHS Greater Glasgow & Clyde	1,444,618	6,512	0.5%
NHS Highland	524,942	1,112	0.2%
NHS Lanarkshire	819,538	2,941	0.4%
NHS Lothian	1,219,895	5,582	0.5%
NHS Orkney	32,090	18	0.1%
NHS Shetland	45,816	70	0.2%
NHS Tayside	680,089	2,533	0.4%
NHS Western Isles	58,305	59	0.1%
Unknown	200,365	613	0.3%
Total	7,914,972	27,512	0.3%

Data extracted: 26 July 2021

<sup>10</sup> For additional details on Lateral Flow Device Tests, please see - Appendix 8 - Lateral Flow Device Testing.

# **Targeted Community Testing**

The Community Testing Programme is ongoing across Scotland. This programme is a mixture of LFD and PCR tests. This is targeted at areas where there are concerns around community transmission levels, and offer testing to any member of that community. Further information is available within the <u>interactive dashboard</u>.

Table 13: Targeted Community Testing (18 January 2021 to 25 July 2021)

Symptomo	Week Ending 25 July 2021			Cumulative		
Symptoms	Number of Tests	Number Positive	% positive	Number of Tests	Number Positive	% positive
Asymptomatic	7,487	552	7.4	211,605	12,193	5.8
Symptomatic <sup>11</sup>	4,451	1,266	28.4	147,613	25,039	17.0
All <sup>12</sup>	12,385	1,928	15.6	367,026	38,600	10.5

<sup>11</sup> Symptomatic - the individual has selected on the booking website they have symptoms.

Table 14: Targeted Community Testing by Health Board (Week to 25 July 2021)

Health Board (of site)	Number of Tests	Number of Positive Test Results	% positive
NHS Ayrshire and Arran	259	34	13.1
NHS Borders	267	44	16.5
NHS Dumfries and Galloway	272	31	11.4
NHS Fife	661	90	13.6
NHS Forth Valley	1,280	172	13.4
NHS Grampian	589	29	4.9
NHS Greater Glasgow and Clyde	1,187	193	16.3
NHS Highland	49	0	0.0
NHS Lanarkshire	4,297	803	18.7
NHS Lothian	2,872	443	15.4
NHS Tayside	643	89	13.8
Unknown Health Board	9	0	0.0
Total	12,385	1,928	15.6

Please note some of the data is suppressed due to disclosure methodology being applied to protect staff confidentiality.

<sup>12</sup> In week ending 25 July 2021, 447 tests were of unknown symptomatic status of which 110 were positive.

#### **COVID-19 Vaccine**

On 08 December 2020, a COVID-19 vaccine developed by Pfizer BioNTech was first used in the UK as part of national immunisation programmes. The AstraZeneca vaccine was also approved for use in the national programme, and rollout of this vaccine began on 04 January 2021. Moderna vaccine was approved for use on 08 January 2021 and rollout of this vaccine began on 07 April 2021. These vaccines have met strict standards of safety, quality and effectiveness set out by the independent Medicines and Healthcare Products Regulatory Agency (MHRA).

A 2-dose schedule is advised for the vaccines. For the Pfizer BioNTech vaccine, the second vaccine dose can be offered between 3 to 12 weeks after the first dose. For the AstraZeneca and Moderna vaccine, the second dose can be offered 4 to 12 weeks after the first dose.

Information on uptake across the vaccine programme is available on a daily basis via the PHS <u>COVID-19 Daily Dashboard</u>, 7 days a week at 2pm. This provides a cumulative picture of the position nationally and locally.

The dashboard provides total uptake nationally with breakdowns by <u>Joint Committee on Vaccination and Immunisation (JCVI)</u> age based cohorts and non age based cohorts for priority groups 1-9.

The vaccination content of this weekly publication will be kept under continual review with future editions likely to contain more in-depth analyses of uptake by particular groups or characteristics (e.g. ethnicity and deprivation category) building on the information published in this report on 23 March 2021. Going forward the Scottish Government will continue to publish limited information regarding overall uptake on its <a href="COVID-19">COVID-19</a>: daily data for Scotland page, this will reflect that shown on the PHS <a href="COVID-19 Daily Dashboard">COVID-19 Daily Dashboard</a>.

# **COVID-19** cases and hospitalisations by vaccination status: key results and methods

#### Vaccine Surveillance

Public Health Scotland has a COVID-19 vaccine surveillance strategy to monitor the effectiveness, safety and impact of all approved COVID-19 vaccines in Scotland. The key measure of the success of the vaccination programme in preventing infection, hospitalisations and deaths is vaccine effectiveness.

The summary data presented in this chapter record the total number of COVID-19 cases, COVID-19 related acute hospital admissions and confirmed COVID-19 deaths by their vaccination status and does not assess the effectiveness of the vaccine or whether the vaccine has worked in these individuals. The latter requires a careful examination of each case to explore possible reasons, which could be related to the test, virus or the person (e.g. pre-existing conditions).

#### Summary of key results

- In the last four weeks from 26 June 2021 to 23 July 2021, 57.0% of COVID-19 positive PCR cases were in unvaccinated individuals.
- In the last week from 17 July 2021 to 23 July 2021, the seven-day rolling average of COVID-19 related acute hospital admissions decreased from 73.29 to 57.29 admissions per day.
- In the last week, 6 out of every 100,000 vaccinated individuals were admitted to hospital and had a COVID-19 positive PCR test 14 days prior, on admission, or during their stay in hospital, compared to 18 out of every 100,000 unvaccinated individuals.
- In the last four weeks, 48.1% of COVID-19 related acute hospital admissions were in unvaccinated individuals, of which 63.8% were in the under 40s age group.
- From 29 December 2020 to 15 July 2021, 89.3% of confirmed COVID-19 deaths were in unvaccinated individuals, 7.9% had received one dose of the vaccine and 2.8% had received two doses.
- From 29 December 2020 to 15 July 2021, 92 individuals tested positive for SARS-CoV-2 by PCR more than 14 days after receiving their second dose of COVID-19 vaccine and subsequently died with COVID-19 recorded as a primary or contributing cause of death. This equates to 0.003% of those who have received two doses of COVID-19 vaccines.

#### **Data Sources and Limitations**

13 For further infromation, please see - Appendix 9 - Data Sources and Limitations

#### **COVID-19 PCR test results**

All positive COVID-19 PCR test results and associated demographics of an individual are extracted from the Test and Protect database (Corporate data warehouse) which contains test results from ECOSS at 16:00 on Monday 26 July 2021. Data included in this analysis is reported up until the Friday of the previous week. Non-Scottish residents are excluded from the dataset.

**COVID-19 cases** are identified as the following: An individual that has tested positive for COVID-19 by PCR. If an individual tests positive more than once, the repeat positive PCR test is only counted if the positive PCR test is at least 90 days or more apart. Records with missing CHI numbers are excluded as these data cannot be linked to vaccination status.

#### Vaccination status:

Vaccination status for all individuals who test positive for COVID-19 by PCR is extracted from the data used to produce the PHS vaccine uptake/daily dashboard. Vaccine records include the number of doses and date of vaccination. Individuals are listed as unvaccinated if there is no vaccination record linked to their unique CHI identifier at the time of analysis. Vaccination status is taken at date of specimen for COVID-19 cases, acute hospital admissions, or death and assigned to number of doses according to the case definitions described below.

COVID-19 vaccination status is defined as per the following:

- Unvaccinated: An individual that has had no doses of COVID-19 vaccine and has tested positive for COVID-19 by PCR or has had one dose of COVID-19 vaccine and has tested positive less than or equal to 21 days after their 1st dose of COVID-19 vaccine.
- **Dose 1:** An individual that has had one dose of COVID-19 vaccine and has tested positive for COVID-19 by PCR more than 21 days after their 1st dose of COVID-19 vaccine or less than or equal to 14 days after their second dose of COVID-19 vaccine.
- Dose 2: An individual that has had two doses of COVID-19 vaccine and has tested positive for COVID-19 by PCR more than 14 days after their 2nd dose of COVID-19 vaccine.

#### Acute hospital admissions

Hospital admission data is extracted from the RAPID dataset at 16:00 on Monday 26 July 2021. RAPID is a daily submission of people who have been admitted and discharged to hospital. Figures are subject to change as hospital records are updated. Data included in this analysis is reported up until the Friday of the previous week.

In the data presented here, an admission is defined as a period of stay in a single hospital. If the patient has been transferred to another hospital during treatment, each transfer will create a new admission record. Therefore, there may be multiple admissions for a single patient if they have moved between locations during a continuous inpatient stay (CIS), or if they have been admitted to hospital on separate occasions.

**COVID-19 related acute hospital admissions** have been identified as the following: An individual that has tested positive for COVID-19 by PCR:

- Up to 14 days prior to hospital admission
- On the day of, or day following admission (if no discharge date is available)
- In between hospital admission and discharge (if there is a valid discharge date available).

Where an individual has more than one PCR positive test, positive results are only included for the first PCR positive test associated with a hospitalisation, or if the positive PCR test is more than 90 days after the previous PCR positive test that was eligible for inclusion. Using these criterion, all records of hospitalisation occurring within 90 days of a previous positive test are excluded. Therefore, if a positive PCR test result for an individual meets these criteria for multiple hospital stays, for example, an individual is admitted twice within a week, only the earliest hospital admission is included in the analysis.

If a patient tested positive after their date of discharge from hospital, they are not included in the analysis unless they are readmitted to hospital and meet the criteria described above.

The number of reported acute hospitalisations does not take into account the reason for hospitalisation, Therefore, people that were admitted for a non-COVID-19 related reason (and tested positive upon admission) may be included and result in an overestimation of COVID-19 related acute hospitalisations.

#### **Confirmed COVID-19 deaths**

Death data were extracted from the SMRA dataset at 16:00 on Wednesday 21 July 2021. Data included in this analysis is reported up until the Thursday of the previous week.

A confirmed COVID-19 related death is defined as an individual who has tested positive by PCR for SARS-CoV-2 at any time point and has COVID-19 listed as a primary or secondary cause of death on the death certificate. Vaccine status is determined at time of most recent specimen date.

# Overall results of COVID-19 cases and hospitalisations, and deaths by vaccination status

**COVID-19** cases by vaccination status

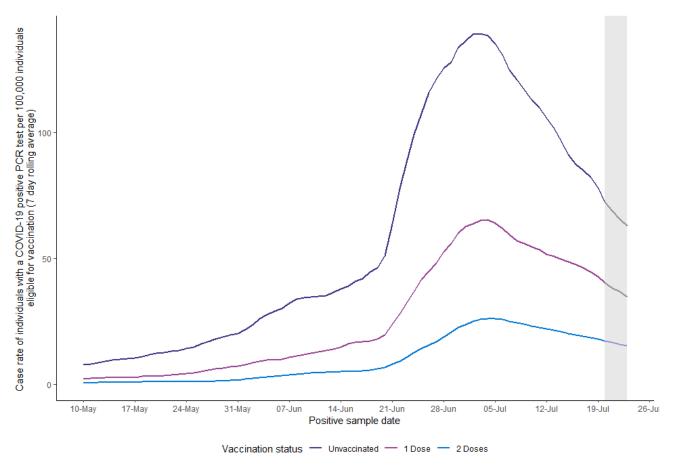
Table 15: Number of COVID-19 positive cases individuals by week and vaccination status, 26 June 2021 to 23 July 2021

	No. of COVID-19 cases / No. of people eligible for COVID-19 vaccination or vaccinated (%)			
Week	Unvaccinated	1 Dose	2 Doses	
26 June 2021 - 02	14,457 / 1,436,957	4,082 / 908,273	4,360 / 2,553,943	
July 2021	(1.006%)	(0.449%)	(0.171%)	
03 July 2021 - 09	11,128 / 1,303,773	3,601 / 933,904	4,386 / 2,661,496	
July 2021	(0.854%)	(0.386%)	(0.165%)	
10 July 2021 - 16	7,554 / 1,185,784	3,180 / 970,834	3,716 / 2,742,555	
July 2021	(0.637%)	(0.328%)	(0.135%)	
17 July 2021 - 23	4,937 / 1,072,563	2,373 / 973,507	3,023 / 2,853,103	
July 2021	(0.460%)	(0.244%)	(0.106%)	

Vaccination status is determined as at the date of PCR specimen date according to the definitions described above. The data displayed within the greyed-out section (3 days) are considered preliminary and are subject to change as more data is updated.

57% of COVID-19 cases from 26 June 2021 to 23 July 2021 were in unvaccinated individuals.

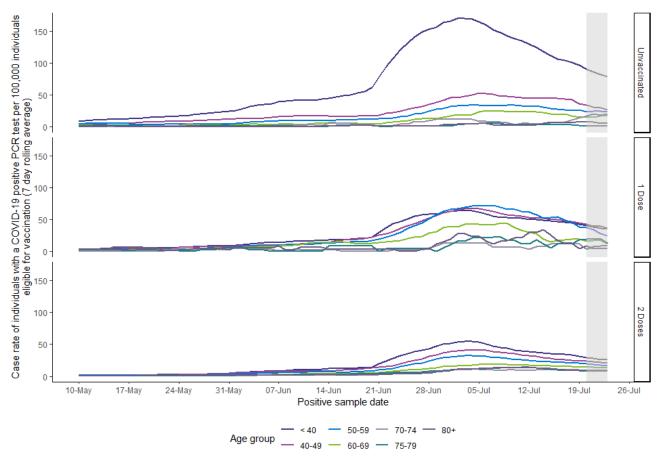
Figure 7: COVID-19 rate per 100,000 individuals eligible for vaccination by vaccination status, 7-day rolling average from 10 May 2021 to 23 July 2021



Vaccination status is determined as at the date of PCR specimen date according to the definitions described above. The data displayed within the greyed-out section (3 days) are considered preliminary and are subject to change as more data is updated.

There are a lower number of cases in vaccinated individuals compared to unvaccinated individuals.

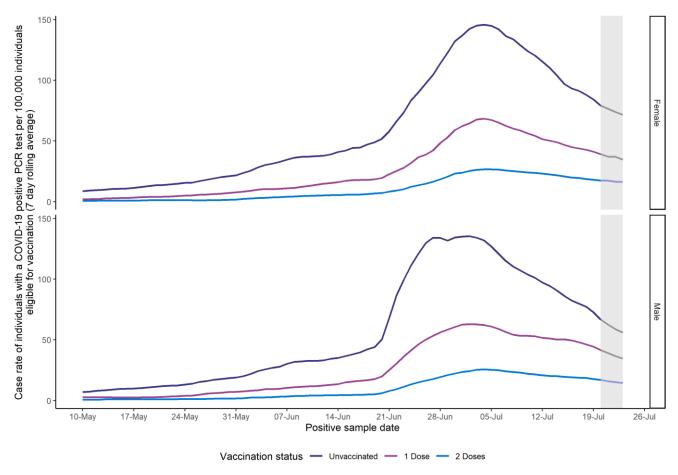
Figure 8: COVID-19 rate per 100,000 individuals eligible for vaccination by vaccination status and age group, 7-day rolling average from 10 May 2021 to 23 July 2021



Vaccination status is determined as at the date of PCR specimen date according to the definitions described above. Patient age is determined as their age the date of admission. The data displayed within the greyed-out section (3 days) are considered preliminary and are subject to change as more data is updated.

Since 10 May 2021, a higher proportion of COVID-19 positive PCR cases have been in unvaccinated individuals under the age of 40.

Figure 9: COVID-19 case rate per 100,000 individuals eligible for vaccination by sex and vaccine status, 7-day rolling average from 10 May 2021 to 23 July 2021



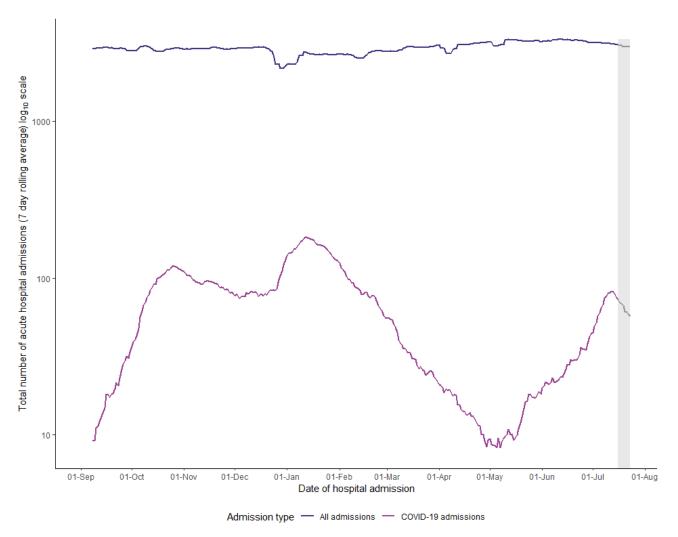
There is no difference in the overall trend between male and females in the last four weeks.

# COVID-19 related acute hospital admissions by vaccine status

The <u>latest analysis by PHE</u> indicates that vaccine effectiveness against hospitalisation after 2 doses of COVID-19 vaccine is high, with a 93% protective effect against the Alpha variant and 96% for the Delta variant.

From 01 September 2020 to 23 July 2021, there were a total of 948,781 acute hospital admissions for any cause, of which 20,425 were associated with a COVID-19 PCR positive test 14 days prior, on admission, the day after admission or during their stay. Using the 90-day exclusion criteria between positive COVID-19 PCR tests associated with an acute hospital admission, 20,351 individuals were admitted to hospital, of which 60 were readmitted more than 90 days after their first admission.

Figure 10: Seven-day rolling average on a log comparing COVID-19 related acute hospital admissions to all acute hospital admissions, 01 September 2020 to 23 July 2021



Data displayed are on a log scale. The data displayed within the greyed-out section (1 week) are considered preliminary and are subject to change as more data is updated.

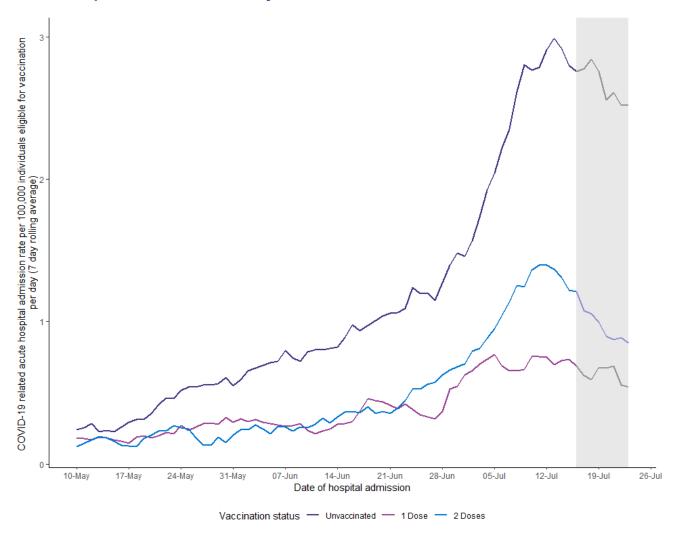
Table 16: Number of COVID-19 related acute hospital admissions by week and vaccination status, 26 June 2021 to 23 July 2021

	No. of COVID-19 related acute hospitalisations / No. of people eligible for COVID-19 vaccination or vaccinated (%)			
Week	Unvaccinated	1 Dose	2 Doses	
26 June 2021 - 02 July 2021	163 / 1,436,957 (0.011%)	42 / 908,273 (0.005%)	139 / 2,553,943 (0.005%)	
03 July 2021 - 09 July 2021	266 / 1,303,773 (0.020%)	43 / 933,904 (0.005%)	228 / 2,661,496 (0.009%)	
10 July 2021 - 16 July 2021	238 / 1,185,784 (0.020%)	46 / 970,834 (0.005%)	229 / 2,742,555 (0.008%)	
17 July 2021 - 23 July 2021	197 / 1,072,563 (0.018%)	37 / 973,507 (0.004%)	167 / 2,853,103 (0.006%)	

Vaccination status is determined as at the date of positive PCR test according to the definitions described above. The data displayed within the greyed-out section (1 week) are considered preliminary and are subject to change as more data is updated.

In the last two weeks, there has been a decrease in the number COVID-19 related acute hospital admissions.

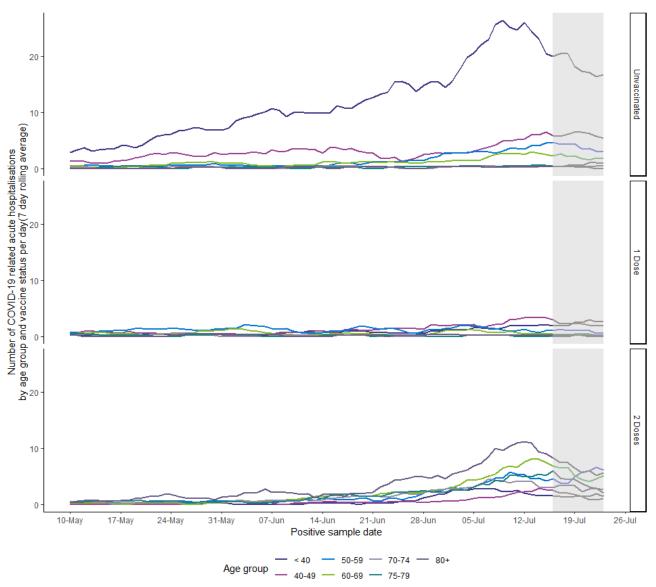
Figure 11: Rate of COVID-19 related acute hospital admissions per 100,000 individuals eligible for COVID-19 vaccination by vaccination status, seven-day rolling average from 01 September 2020 to 23 July 2021



Vaccination status is determined as at the date of positive PCR test according to the definitions described above. The data displayed within the greyed-out section (1 week) are considered preliminary and are subject to change as more data is updated.

Since 10 May 2021, a higher proportion of COVID-19 related acute hospital admissions have occurred in unvaccinated populations, in comparison to populations with one or two doses of the COVID-19 vaccine.

Figure 12: Seven-day rolling average COVID-19 related acute hospital admissions by vaccination status and by age group, 10 May 2021 to 23 July 2021



Vaccination status is determined as at the date of positive PCR test according to the definitions described above. Patient age is determined as their age the date of admission. The data displayed within the greyed-out section (1 week) are considered preliminary and are subject to change as more data is updated.

From 26 June 2021 to 23 July 2021, 48.1% of COVID-19 related acute hospital admissions were in unvaccinated individuals, of which 63.8% were in the under 40s age group.

# **Confirmed COVID-19 deaths by vaccination status**

COVID-19 vaccines are estimated to significantly reduce the risk of mortality for COVID-19, however a small number of COVID-19 deaths are still expected in vaccinated people, especially in vulnerable individuals where the vaccine or the immune response may not have been effective. Evidence has shown that vaccination is highly effective in protecting against death from coronavirus (COVID-19). Data published by Public Health England (PHE) has shown that individuals who receive a single dose of the AstraZeneca vaccine have approximately 70 to 85% lower risk of death with COVID-19 compared with unvaccinated individuals, and for the Pfizer-BioNTech vaccine this rises from approximately 80% after one dose to 95-99% after two doses. Modelling analysis from PHE and Cambridge University's MRC Biostatistics Unit estimates that 36,900 deaths have been prevented in England as a result of the COVID-19 vaccination programme, up to 09 July 2021.

Table 17: Number of confirmed COVID-19 related deaths by vaccination status at time of test, 29 December 2020 to 15 July 2021

Age group	Unvaccinated	1 Dose	2 Doses	Total
< 40	22	1	0	23
40-49	55	1	1	57
50-59	185	6	2	193
60-69	414	15	8	437
70-79	766	43	32	841
80+	1,525	196	49	1,770
Total	2,967	262	92	3,321

Vaccination status is determined as at the date of positive PCR test according to the definitions described above.

From 29 December 2020 (21 days after the start of the vaccination programme in Scotland to account for protection to develop after the first dose) to 23 July 2021, there have been 3,321 confirmed COVID-19 related deaths with a positive PCR result and where COVID-19 was recorded as a primary or secondary cause on the death certificate. Of these 89.3% were in unvaccinated individuals, 7.9% had received one dose of COVID-19 vaccine and 2.8% had received two doses. The risk of death from COVID-19 is strongly linked to age, with the most vulnerable being in the over 70s age group.

In Scotland, from the beginning of the COVID-19 vaccination programme over 2.9 million individuals had been fully vaccinated with two doses of COVID-19 vaccine. Of these, 92 individuals (0.003%) tested positive by PCR for SARS-CoV-2 more than fourteen days after receiving their second dose of COVID-19 vaccine and subsequently died with COVID-19 recorded as a primary or contributing cause of death. These individuals had several comorbidities which contributed to their deaths. Of the confirmed COVID-19 related deaths, in individuals that have received two doses of COVID-19 vaccine, 88.0% were in the 70 and over age group.

# Overall deaths that have occurred within 28 days of a COVID-19 vaccination

Information previously published on the number of deaths that have occurred within 28 days of Covid-19 vaccination can be found  $\underline{\text{here}}$ .

# **COVID-19 Vaccination uptake in School Teachers**

## **Background**

This section updates previously reported figures for the uptake of the COVID-19 vaccination amongst school teachers in Scotland<sup>14</sup>. It covers vaccinations taken between 8 December 2020 and 17 July 2021.

Comparisons are provided for 18-39 and 40+ year age groups for teachers and the Scottish population. In addition, projected figures for the proportion of teachers who will have had their second dose and will have developed detectable antibodies against the Coronavirus by or after return to schools are calculated.

14 - For more information please see Covid-19-statistical-report-2-june-2021.

#### Linkage and completeness

Community Health Index (CHI) numbers were matched to data on teachers provided by the General Teaching Council for Scotland. As part of our COVID-19 education surveillance programme, PHS have worked with the General Teaching Council to be able to identify teachers in the health datasets. PHS has also explored whether other sectors of the education workforce could be identified in a similar way and are currently working with the Early learning and Childcare sector to enable this. At present, only the teacher workforce can be identified.

Vaccination status from the National Clinical Data Store (NCDS) was linked to the teacher dataset using CHI numbers. NCDS sources data from both the Vaccine Management Tool and General Practice Patient Management Systems. Data are presented for those who have had a first or second dose COVID-19 vaccination up to, and including, 17 July 2021.

Scottish population outputs are derived from daily COVID-19 Vaccination in Scotland data and are available from COVID-19 Vaccination in Scotland – Datasets – Scottish Health and Social Care Open Data (nhs.scot).

This section is restricted to those in age groups 18-39 and 40+ and represents 66,465 individual teachers. No teachers under the age of 22 years were identified; however, age group 18-39 has still been used here for consistency with Scottish population outputs.

#### Uptake of first dose

As at 17 July 2021, the first dose of vaccination uptake rates by age group for teachers and the Scottish population are shown in Table 18 below.

Table 18: Percentage uptake of first dose of COVID-19 vaccination as at 17 July 2021, teachers and the general Scottish population

Age group (years)	Teachers <sup>15</sup> (%)	Scotland (%)
18-39	89	74
40+	97	97
All 18+	94	89

15 Individuals identified as actively teaching in a Scottish school by the General Teaching Council for Scotland.

## Uptake of second dose

As at 17 July 2021, the second dose of vaccination uptake rates by age group for teachers and the Scottish population are shown in Table 19 below.

Table 19: Percentage uptake of second dose of COVID-19 vaccination as at 17 July 2021, teachers and the general Scottish population

Age group (years)	Teachers <sup>16</sup> (%)	Scotland (%)
18-39	25	25
40+	75	90
All 18+	53	67

<sup>16</sup> Individuals identified as actively teaching in a Scottish school by the General Teaching Council for Scotland.

#### Second dose projections on or after school return in August 2021

Projections for the proportion of teachers who will have been offered two doses of COVID-19 vaccinations by various dates around the start of the new school year are shown below. For the purposes of this report, 16 August 2021 was selected as the main date of teacher school return in Scotland. However, in Scotland, school return dates for teachers vary by local authority with the earliest local authorities returning on 09 August 2021 and the latest returning to school on 18 August 2021.

The projections below are based on coverage as at 17 July 2021 and take account of the JCVI advice to move from 12 to 8 weeks between the first and second dose of the COVID-19 vaccination. They assume that individuals will receive the second dose of the vaccination when offered and that almost all individuals will have developed detectable antibodies against the Coronavirus within 14 days of receiving the second dose.<sup>17</sup>

- By 02 August 2021, 85% of the teachers who have taken up their first dose will have been offered the second dose of the COVID-19 vaccine. This means that by the start of the 2021/22 school year on 16 August 2021, 85% of teachers who have taken up their first dose should have developed a second dose response, equating to 79% of the teacher population in Scotland.
- By 09 August 2021, 90% of the teachers who have taken up their first dose will have been offered their second dose. This corresponds to 90% of the teachers who have taken up their first dose developing a second dose response by 23 August 2021, equating to 85% of the teacher population in Scotland.
- By 11 September 2021, 100% of teachers who have taken up their first dose will have been offered their second dose. This means that 100% of teachers who have taken up their first dose should have developed a second dose response by 25 September 2021, equating to 94% of the teacher population in Scotland.

<sup>17 -</sup> Please refer to Vaccine Uptake for further information.

#### **COVID-19 across the NHS**

Charts for a number of measures related to COVID-19 service use in the NHS were presented in the report up until 15 July 2020. Up to date data for these measures are available to view in our <u>interactive dashboard</u>.

#### This includes:

- Number of positive confirmed cases per day and cumulative total
- Positive cases by age, sex and SIMD
- COVID-19 admissions to hospital
- COVID-19 patients admitted to ICU
- COVID19 Hub and Assessment Consultations
- COVID-19 related contacts to NHS 24 and calls to Coronavirus helpline
- SAS (Scottish Ambulance Service) Incidents related to COVID-19

# **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, healthcare, and 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 changes to
  employment and income, changes in access to education, social isolation, family
  violence and abuse, changes in the accessibility and use of food, alcohol, drugs and
  gambling, or changes in physical activity and transport patterns.

More detailed background information on these potential impacts is provided by the Scottish Public Health Observatory in a section on Covid-19 wider impacts.

The surveillance work stream of the Public Health Scotland 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. The wider impact dashboard can be viewed online and includes the following topics:

- Hospital and unscheduled care
- Healthcare for cardiovascular disease
- Healthcare for mental health
- New cancer diagnoses
- Uptake of pre-school immunisations
- Coverage of health visitor child health reviews
- Infant feeding
- Child development
- Women booking for antenatal care
- Terminations of pregnancy
- Births and babies
- Excess deaths

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.

# **Weekly National Seasonal Respiratory Report**

Since 14 October Public Health Scotland is also publishing a weekly report on epidemiological information on seasonal influenza activity in Scotland. Due to COVID health care services are functioning differently now compared to previous flu seasons so the consultation rates are not directly comparable to historical data.

This is available to view here:

https://beta.isdscotland.org/find-publications-and-data/population-health/covid-19/weekly-national-seasonal-respiratory-report/

Surveillance of influenza infection is a key public health activity as it is associated with significant morbidity and mortality during the winter months, particularly in those at risk of complications of flu e.g. the elderly, those with chronic health problems and pregnant women.

The spectrum of influenza illness varies from asymptomatic illness to mild/moderate symptoms to severe complications including death. In light of the spectrum of influenza illness there is a need to have individual surveillance components which provide information on each aspect of the illness. There is no single flu surveillance component that can describe the onset, severity and impact of influenza or the success of its control measures each season across a community. To do so requires a number of complimentary surveillance components which are either specific to influenza or its control, or which are derived from data streams providing information of utility for other HPS specialities (corporate surveillance data). Together, the influenza surveillance components provide a comprehensive and coherent picture on a timely basis throughout the flu season. Please see the influenza page on the HPS website for more details.

# **Contact**

#### **Public Health Scotland**

phs.covid19data&analytics@phs.scot

# **Further Information**

#### **COVID** surveillance in Scotland

**Scottish Government** 

Daily Dashboard by Public Health Scotland National Records of Scotland

## **UK and international COVID reports**

<u>Public Health England</u> <u>European Centre for Disease Prevention and Control</u> <u>WHO</u>

The next release of this publication will be 04 August 2021.

# **Open data**

Data from this publication is available to download from the <u>Scottish Health and Social Care</u> Open Data Portal.

# Rate this publication

Let us know what you think about this publication via. the link at the bottom of this <u>publication</u> <u>page</u> 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.

On the 30 January 2020 the World Health Organization <u>declared that the outbreak constitutes a</u> Public Health Emergency of International Concern.

Extensive measures have been implemented across many countries to slow the spread of COVID-19.

Further information for the public on COVID-19 can be found on NHS Inform.

# Appendix 2 – World Health Organisation (WHO) Standard for Contact Tracing and Scotland Wide Performance Reporting

Details for this standard were previously published and are available within the <u>Weekly Covid-19</u> Statistical report (publication date 27 January 2021).

# **Appendix 3 – Hospital Admissions Notes**

#### **Hospital Admissions**

RAPID(Rapid and Preliminary Inpatient Data)

COVID-19 related admissions have been identified as the following: A patient's first positive PCR test for COVID up to 14 days prior to admission to hospital, on the day of their admission or during their stay in hospital. If a patient's first positive PCR test is after their date of discharge from hospital, they are not included in the analysis.

In the data presented here, an admission is defined as a period of stay in a single hospital. There may be multiple admissions for a single patient if they have moved between locations during a continuous inpatient stay (CIS), or if they have been admitted to hospital on separate occasions. RAPID is a daily submission of people who have been admitted and discharged to hospital. Figures are subject to change as hospital records are updated. It can take 6-8 weeks or longer before a record is finalised, particularly discharge details.

#### **Hospital Inpatients (Scottish Government Data)**

Number of patients in hospital with recently confirmed COVID-19

This measure (available from 11 September and first published 15 September 2020) includes patients who first tested positive in hospital or in the 14 days before admission. Patients stop being included after 28 days in hospital (or 28 days after first testing positive if this is after admission). Further background on this new approach is provided in this Scottish Government blog.

This is based on the number of patients in beds at 8am the day prior to reporting, with the data extract taken at 8am on the day of reporting to allow 24 hours for test results to become available. Where a patient has not yet received a positive test result they will not be included in this figure. Patients who have been in hospital for more than 28 days and still being treated for COVID-19 will stop being included in this figure after 28 days.

All patients in hospital, including in intensive care, and community, mental health and long stay hospitals are included in this figure.

# Appendix 4 - RAPID Hospital Admissions

Total specimen dates may not equal reported new cases due to denotifications.

These data include admissions to acute hospitals only and do not include psychiatric or maternity/obstetrics specialties.

RAPID – Please note a three-day time lag is applied to recent records being incomplete. Data are updated daily and figures are subject to change.

Total figures for COVID-19 related admissions published by PHS are updated daily and figures are subject to change, and so total figures presented here will not match data published elsewhere.

# Appendix 5 – Healthcare Worker Testing

#### Number of Staff not tested – declined a test

The number of staff who were offered a test and actively declined to take it.

#### Staff not tested for operational reasons

The number of staff who were not able to be tested for operational/capacity reasons e.g. issues with test availability, staff unable to be tested due to work pressures etc.

#### Number of Staff not tested for other reasons

The number of the staff present on wards in the reporting week who were not tested. They were eligible for testing (excluding those who declined and those who were not tested for operation reasons). This should be the remainder of eligible staff not recorded in the other groupings.

# Appendix 6 - Contact Tracing

An **index case** is generated for each positive result with a test date on or after 28 May 2020. This includes tests derived from Scottish laboratories and from UK Government laboratories.

An **individual** is a unique person who has had a positive test. An individual can have multiple positive tests which results in multiple cases within the test and protect system. In these figures, each person is only counted once.

A contact may be contacted more than once if multiple positive cases list them as a contact.

**Completed cases** are cases which are marked as completed in the case management system, which means that all contacts have been followed up and completed. It excludes cases marked as failed, in progress or new. In the latest weeks there will be cases which are still open either because contact tracing is still underway (particularly for the latest week) or the NHS Board is still managing the case as part of an open outbreak.

Figures for **Unknown Health Board** in the *Number of individuals and the number of primary contacts by NHS Board* table includes individuals with no information on their Health Board of residence and from elsewhere in the UK.

While a close contact of multiple index cases within a Health Board is only counted once, please note that a contact may be included in more than one Health Board as the data is related to the positive case Health Board and a contact may have been in close contact with multiple index cases located in different Health Boards.

Figures for the most recent week are provisional and will be updated in next week's publication. Data are extracted Sunday 11 July 2021 at 8pm. Data relate to tests up to 09 July 2021. Weekly data presented from Monday to Sunday in order to be consistent. Figures are provisional and may change as the test and protect tool is updated by contact tracers.

#### Individuals unable to be contacted

This information is only available for index cases that have been recorded on the CMS. The CMS went live on 22 June 2020 with NHS Boards migrating on a phased approach with all Boards using CMS from 21 July 2020. Prior to a Board migrating to CMS, data was recorded in a Simple Tracing Tool which did not give the level of granularity required to report on these measures. These data are developmental and an extensive data quality assurance exercise is underway and data may be revised in subsequent publications. Please note the methodology has changed as of 1 November 2020, a refined method has now been applied to identify unique indexes.

Close contacts of people who have tested positive are telephoned by default. System capacity is monitored and automated SMS messaging of close contacts is only resorted to when case numbers are high, such as was the case during the increase in cases during Autumn 2020. This flexible approach ensures high quality calls can continue to be prioritised for index cases. Even when SMS is defaulted to, in these scenarios, a number of close contacts are still telephoned, following clinical risk assessment, particularly if they are linked to complex cases. When close contacts of index cases are contacted via SMS text message, the GOV.UK Notify Service is used which means it is known if the SMS has been received by the mobile phone, not just that it has been sent. Where the SMS is not received, a contact tracer will attempt to contact the individual through other means. The case will not be marked as complete unless someone has spoken to the individual.

#### Not known data in the following tables

- Time (hours) between date test sample taken (specimen date) and the positive individual being interviewed by a contact tracer (Table 6)
- Time (hours) between case created in CMS and the positive individual being interviewed by a contact tracer (Table 7)
- Time between case created in CMS to its closure, measured by the time taken to complete the final contact interview (Table 8)

records where dates cannot be identified to calculate the difference. Data quality assurance work is taking place to improve this recording.

Data in the above tables relate to index cases recorded up to 23 July 2021. Data relates only to Monday – Friday due to completeness for the most recent week - Data are provisional and will be updated in future releases.

# Appendix 7 – Quarantine Statistics

#### Number of people arriving in Scotland

People who arrive in the UK, as notified to Public Health Scotland by the Home Office.

#### Number of people requiring to quarantine in a hotel (anywhere in the UK)

From 15 February 2021 any person arriving directly from a high risk country into the UK with a Scottish residence or any arriving directly into Scotland from a non high-risk listed country.

#### Number of people requiring to quarantine at home

From 30 June 2020 – 14 February 2021. Any persons who are required to quarantine in Scotland (all countries prior to 30 June 2020; high risk countries from 30 June 2020), adults aged 18 and over only. From 15 February 2021 this is anyone arriving from a non-high risk country and did not arrive directly into Scotland.

#### **Number of people contacted by National Centre**

Sample of people who are passed to NCTC for follow-up to provide advice and support. Some contacts made relate to arrivals from the previous week; therefore contacts can sometimes exceed arrivals.

Up to the 23 June 2021, a sample of those individuals quarantining at home were contacted by the National Contact Centre (NCC). These calls, along with any in progress, have now been paused in order to prioritise contact tracing. Since 13 July 2021, these call have resumed.

#### Successful contacts made

People who were successfully contacted by NCTC

#### Unable to contact individual

Calls could not be completed because the individual could not be contacted (invalid phone number or no response to call). Where appropriate details of individuals are passed to Police Scotland for further follow up. Includes not completed due to quarantine ending before NCTC could contact individual.

# Appendix 8 – Lateral Flow Device Testing

In the **Number of LFD tests by Test Group** table (Table 11), those within **Other** cannot yet be grouped into a specific category. Ongoing data quality may improve this and data may change in future publications.

Please note bulk uploading functionality is not yet available so data is likely to be an undercount. Data will be update and revised in future publications.

Other is any result entered via the <u>gov.uk website</u> where "none of the above" has been selected. Please note anyone requesting a LFD test via the general population offer, will currently report their results via this category.

Those within **Unknown** in the table reporting tests by **NHS Board of Residence** (Table 12) is any test that had an invalid or missing postcode.

## **Appendix 9 – Data Sources and Limitations**

Due to delays in reporting, figures are subject to change as records are updated. A marker (greyedout block) has been applied where data is preliminary and caution should be taken in their interpretation.

The definitions described below are being used for the purposes of evaluating the impact of the COVID-19 vaccine on COVID-19 cases, COVID-19 related acute hospital admissions and confirmed COVID-19 deaths. The numbers reported in this section use test data, accounting for potential reinfections, and may differ from other sections and elsewhere which only count the number of new COVID-19 cases.