Public Health Scotland

Public Health Scotland COVID-19 Statistical Report

As at 1 March 2021

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A Management Information release for Scotland

Contents

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 Scottish Government and health and care colleagues in supporting the surveillance and monitoring of COVID-19 amongst the population.

The Public Health Scotland COVID-19 Daily Dashboard 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:

- Positive Cases
- Acute Hospital Admissions
- ICU Admissions
- NHS 24 Contacts
- Community Hubs and Assessment Centres
- Scottish Ambulance Service
- COVID-19 in children and young people
- Contact Tracing
- Health Care Workers
- COVID-19 Settings
- Admissions by Ethnic Group

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

- In the week ending 28 February 2021, 3,698 individuals were recorded in the contact tracing software, from which 6,520 unique contacts have been traced.
- As at 28 February 2021, there have been 202,470 confirmed COVID-19 cases, with 3,798 in the week ending 28 February.
- In the week ending 23 February, there were 488 admissions to hospital with a laboratory confirmed test of COVID-19.
- In the week ending 27 February there were 42 new admissions to Intensive Care Units (ICUs) for confirmed COVID-19 patients.
- In the week ending 28 February there were 2,977 people who arrived in Scotland from outside the UK, of which 2,103 were required to quarantine (of which 409 were quarantined in a hotel) and 2,102 were contacted by the National Contact Tracing Centre.
- In the week ending 25 February, 0.2% of key healthcare workers who were tested for COVID-19 tested positive.
- During the week ending 28 February, there were active confirmed cases of COVID-19 in 91 out of 1052 care homes that returned data (1,065 care homes in total).
- During the week ending 21 February, there have been 25 cases of COVID-19 confirmed by PCR testing under the school LFT testing programme, all amongst school staff.
- While rates of hospitalisation or death were higher during the second wave across the population, those of South Asian ethnicity appear to have been at proportionally greater risk compared to the White group during this period.

Results and Commentary

COVID-19 Vaccine

On the 8 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 4 January 2021. These vaccines have met strict standards of safety, quality and effectiveness set out by the independent Medicines and Healthcare Products Regulatory Agency (MHRA).

Information on uptake across the vaccine programme was until last week published in this weekly report. This information will now be made available on a daily basis via the PHS COVID-19 Daily Dashboard. The updated dashboard containing a new vaccination page was released on Friday 26 February and will be updated 7 days a week at 2pm. This will provide a much timelier cumulative picture of the position nationally and locally.

The dashboard provides total uptake nationally with breakdowns by Joint Committee on Vaccination and Immunisation (JCVI) age based cohorts and breakdowns of uptake geographically. Initially the Scottish Government will continue to report the non-age based JCVI cohorts, whilst further work is undertaken to refine the accuracy of these cohorts for use in the dashboard. The plan is to continue to expand the coverage of the dashboard as more cohorts start to be vaccinated, whilst also further developing the granularity of reporting.

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). Going forward the Scottish Government will continue to publish limited information regarding overall uptake on its COVID-19: daily data for Scotland page, this will reflect that shown on the PHS COVID-19 Daily Dashboard.

Incidence of Variants of Concern and Variants Under Investigation

The variant of the COVID-19 virus originally reported from the South of England - designated VOC-202012/01 (Variant of Concern-year month/variant number) - is circulating widely in Scotland and is now the dominant strain. Interest now is focused on other potential new Variants of Concern (VOC) or Variants Under Investigation (VUI). The last information on the number of such variants detected by genomic analyses across the UK are published by PHE at:
https://www.gov.uk/government/publications/covid-19-variants-genomically-confirmed-case-numbers/variants-distribution-of-cases-data

COVID-19 Daily Data

The Public Health Scotland COVID-19 Daily Dashboard 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 202,470 people in Scotland who have tested positive, at any site in Scotland (NHS and UK Government Regional Testing centres), for COVID-19 up to 28 February 2021.
- In the week ending 28 February there were 3,798 confirmed COVID-19 cases*.

*Correct as at 28 February, may differ from more recently published data on the COVID-19 Daily Dashboard.

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

- In the week ending 23 February, there were 488 admissions to hospital with a laboratory confirmed test of COVID-19*.
- In the week ending 27 February, there were 42 new admissions to ICUs for confirmed COVID-19 patients.

*Please note that data is complete to 23 February 2021 only. Due to technical issues, NHS Lanarkshire were unable to submit data past 23 February affecting completeness of data.

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

Data is also monitored and published daily on the Scottish Government Coronavirus website.

COVID-19 testing and cases among children and young people

In the week commencing August 10th 2020, early years' settings and schools re-opened across Scotland. Data on the number of COVID-19 confirmed cases and the volume of testing in the age groups who attend these educational settings are being monitored and are presented within the Interactive Dashboard.

The data on cases relates to individuals and a person will only ever be counted once. The number of tests is slightly higher than the number of cases as some individuals will be tested more than once.

The below table shows the number of individuals in age groups from 2 to 19 years who have tested positive (a) in the latest week and (b) cumulatively since the start of the outbreak:

Table 1: Positive cases by age group

Age Group (years)	Week ending 28 Feb	Cumulative (to 28 Feb)
2-4	94	1,731
5-11	227	5,672
12-13	49	2,316
14-15	65	2,688
16-17	95	3,979
18-19	114	8,137

Additional detail and charts are available to view in the interactive dashboard accompanying this report.

COVID-19 in Adult Care Home in Scotland

As of 20 January 2021, Public Health Scotland took over reporting of weekly data on COVID-19 in adult Care Homes in Scotland – data prior to 11 January 2021 can be found on the Scottish 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 28 February 2021

NHS Board	Care Home with confirmed COVID-19		Care Homes with no confirmed COVID-19
	Staff tested	Residents tested	Staff tested
NHS Ayrshire and Arran	407	93	2,962
NHS Borders	44	*	761
NHS Dumfries and Galloway	47	*	1,092
NHS Fife	551	108	2,794
NHS Forth Valley	649	470	1,896
NHS Grampian	351	8	4,251
NHS Greater Glasgow and Clyde	1,046	514	7,464
NHS Highland	126	65	2,626
NHS Lanarkshire	445	116	3,658
NHS Lothian	886	535	5,664
NHS Orkney	0	0	166
NHS Shetland	0	0	324
NHS Tayside	350	145	3,245
NHS Western Isles	277	48	369
Scotland	**5,179**	**2,109**	**37,272**

Please note: There were an additional 45 staff tested at homes where the COVID status was not specified.

During the week ending 28 February, there were 91 homes with active confirmed cases.
Based on return of 1,052 of Scotland's 1,065 adult care homes.

Healthcare workers – COVID-19 Testing

In July 2020, the Scottish Government expanded COVID-19 testing 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 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 staff within Specialist Cancer Wards and Treatment Areas for week ending 25 February

NHS Board	Total Eligible Staff	Total Staff tested	Number of positive tests	Number of Staff not tested - declined to test^	Number of Staff not tested for operational reasons^	Number of staff not tested for other reasons^
Ayrshire and Arran	75	75	0	0	0	0
Borders	36	*	0	0	0	*
Dumfries & Galloway	31	31	0	0	0	0
Fife	61	45	0	*	*	0
Forth Valley	39	*	0	*	0	*
Grampian	286	264	0	7	6	9
Greater Glasgow and Clyde	1,091	1,035	0	*	0	*
Highland	68	68	0	0	0	0
Lanarkshire	287	254	0	18	15	0
Lothian	609	599	*	0	0	10
Tayside	299	293	0	*	*	*
Island Boards	12	12	0	0	0	0
Special Health Boards[1]	17	17	0	0	0	0
Scotland	**2,911**	**2,762**	*	**44**	**27**	**78**

[1] – Includes data from Scottish National Blood Transfusion Service (SNBTS)

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

Table 4: Number of COVID-19 tests and positive results for staff within Long Stay Care of the Elderly[1] for week ending 25 February

NHS Board	Total Eligible Staff	Total Staff tested	Number of positive tests	Number of Staff not tested - declined to test^	Number of Staff not tested for operational reasons^	Number of staff not tested for other reasons^
Ayrshire and Arran	64	64	*	0	0	0
Borders	0	0	0	0	0	0
Dumfries & Galloway	0	0	0	0	0	0
Fife	0	0	0	0	0	0
Forth Valley	0	0	0	0	0	0
Grampian	208	186	0	9	6	7
Greater Glasgow and Clyde	46	46	0	0	0	0
Highland	0	0	0	0	0	0
Lanarkshire	31	23	0	0	8	0
Lothian	327	299	*	7	0	21
Tayside	0	0	0	0	0	0
Island Boards	0	0	0	0	0	0
Special Health Boards[1]	0	0	0	0	0	0
Scotland	**676**	**618**	*	**16**	**14**	**28**

Please note NHS Borders and NHS Fife advised they do not have any Long Stay Care of the Elderly units that meet the 3 month criteria. NHS Highland, NHS Tayside, NHS Orkney, NHS Shetland, and NHS Western Isles advised they do not have any long stay care of the elderly wards. NHS Glasgow advised that over recent years they have significantly reduced the number of long stay beds for older people and invested in care at home and care homes hence the low number of wards affected compared to other NHS Boards. NHS Lanarkshire include one of the Care of the Elderly Units for reporting purposes. NHS Lanarkshire confirmed this does not represent a full week of testing since some was done after the reporting period.

Table 5: Number of COVID-19 tests and positive results for staff within Long Stay Old Age Psychiatry and Learning Disability Wards for week ending 25 February

NHS Board	Total Eligible Staff	Total Staff tested	Number of positive tests	Number of Staff not tested - declined to test^	Number of Staff not tested for operational reasons^	Number of staff not tested for other reasons^
Ayrshire and Arran	94	94	*	0	0	0
Borders	88	79	0	0	*	*
Dumfries & Galloway	166	158	0	*	0	0
Fife	229	133	0	*	88	0
Forth Valley	0	0	0	0	0	0
Grampian	196	173	0	13	*	*
Greater Glasgow and Clyde	1,146	1,111	*	0	0	35
Highland	0	0	0	0	0	0
Lanarkshire	77	50	*	19	8	0
Lothian	415	374	*	25	0	16
Tayside	325	320	0	*	*	*
Island Boards	0	0	0	0	0	0
Special Health Boards[1]	0	0	0	0	0	0
Scotland	**2,736**	**2,492**	**7**	**76**	**106**	**62**

^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.

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 COVID-19 Confirmed Cases section of this report, which reports on new positive cases.

Since 2 February, as a result of increased capacity in the Test and Protect system and the recent reduction in case numbers during lockdown, contact tracers have reverted to, by default, calling close contacts. Please note PHS has moved to weekly reporting of this data and cumulative data is available in the interactive dashboard.

In the week ending 28 February (based on test date), the test and protect figures are:

Index Cases* – 3,744 (of which 3,089 have completed contact tracing)
Individuals** - 3,698
Contacts traced*** –11,468 (of which 6,520 were unique contacts)

*An index case is generated for each positive result with a test date on or after 28 May. 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.

The below table provides a recent time trend, a longer time trend is available on the interactive dashboard.

Table 6: Contact Tracing Scotland

	Week ending							
	10 Jan	17 Jan	24 Jan	31 Jan	7 Feb	14 Feb	21 Feb	28 Feb [P]
Cases	14,912	11,296	9,187	7,340	6,345	5,527	5,800	3,744
Complete Cases*	14,197	10,727	8,830	7,096	6,088	5,342	5,564	3,089
Individuals	14,799	11,171	9,074	7,226	6,256	5,452	5,719	3,698
Total Contacts	41,043	29,595	24,415	20,111	17,844	15,002	16,927	11,468
Unique Contacts	25,689	18,556	15,875	12,809	10,827	9,114	9,688	6,520
Average number of contacts per case	3	3	3	3	3	3	3	3

[P] – Please treat as provisional as data is still being collected for that week and index/contact being traced,

*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.

There are a small proportion of contacts who were successfully contacted but then advised that they do not need to isolate. 2,271 contacts were not advised to self-isolate, 1.4% of all contacts for which this information is known. Some of these 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. 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 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 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 contacts who had not had their tracing completed by the time the analysis was undertaken.

Table 7: Number of individuals and the number of contacts by NHS Board

	Week of first positive result			
	Week ending 28 Feb		Week ending 21 Feb	
NHS Board	Individual	Unique Contacts within Health Board	Individual	Unique Contacts within Health Board
Ayrshire & Arran	216	716	469	945
Borders	15	21	41	73
Dumfries & Galloway	41	57	87	202
Fife	190	317	249	495
Forth Valley	406	761	572	1,001
Grampian	123	231	222	319
Greater Glasgow & Clyde	1,089	1,549	1,557	2,452
Highland	78	109	153	272
Lanarkshire	638	960	1,024	1,750
Lothian	614	1,228	1,016	1,609
Orkney	0	0	0	0
Shetland	0	0	0	0
Tayside	214	500	233	487
Western Isles	7	3	12	28
Unknown Health Board**	67	86	84	84

* Denotes data which has been suppressed due to risk of disclosure.
** Please note this 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 28 February at 8pm. Data relate to tests up to 19 February. 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.

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

- 8,483 individuals* with a positive test were unable to be contacted since the CMS went live (4.7% of all individuals).
- 13,988 contacts* were unable to be contacted since the CMS went live (2.2% of all contacts).

In some circumstance contacts go on to become a positive case and therefore an index case. The number of contacts which have become an index case – 95,201 (17.5%), represents the number of close contacts which have subsequently had a positive result.

Where an SMS message is sent, contacts will be considered successfully contacted. Thus the statistics above will be impacted by the SMS service.

This information is only available for index cases that have been recorded on the Case Management System (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 (STT) 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. Contact since the 12 October, with a valid mobile number, will receive an SMS message only. This will impact on the number of contacts that were unable to be contacted. Please note the methodology has changed as of 1st November 2020, a refined method has now been applied to identify unique indexes.

Completed Index cases

Since 3 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.

Table 8: Time (hours) between date test sample taken (specimen date) and the positive individual being interviewed by a contact tracer.

Hours taken	Week Ending 28 February*		Week Ending 21 February	
	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases
0-24	675	29.2	1,402	26.2
24-48	1,359	58.7	3,064	57.3
48-72	225	9.7	571	10.7
Over 72	47	2.0	292	5.5
Not known*	9	0.4	19	0.4

*Records where dates cannot be identified to calculate the difference. Data quality assurance work is taking place to improve this recording.
**Data relates to index cases recorded up to 26 February. Data are provisional and may be updated in future releases.

Table 9 - Time (hours) between case created in CMS and the positive individual being interviewed by a contact tracer.

Hours taken	Week Ending 28 February*		Week Ending 21 February	
	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases
0-24	2,114	91.3	4,802	89.8
24-48	170	7.3	412	7.7
48-72	22	1.0	89	1.7
Over 72	1	0.0	27	0.5
Not known*	8	0.4	18	0.3

*Records where dates cannot be identified to calculate the difference. Data quality assurance work is taking place to improve this recording.
**Data relates to index cases recorded up to 26 February. Data are provisional and may be updated in future releases.

Table 10 - Time between case created in CMS to its closure, measured by the time taken to complete the final contact interview.

Hours taken	Week Ending 28 February*		Week Ending 21 February	
	Number of Index Cases	% of Total Index Cases	Number of Index Cases	% of Total Index Cases
0-24	1,612	69.6	3,627	67.8
24-48	516	22.3	1,109	20.7
48-72	139	6.0	375	7.0
Over 72	48	2.1	233	4.4

*Records where dates cannot be identified to calculate the difference. Data quality assurance work is taking place to improve this recording.
**Data relates to index cases recorded up to 26 February. Data are provisional and may be updated in future releases.

Travel outside of Scotland cases

Since 28 September fields have been available to record information about whether a case has travelled outside of Scotland. In the week ending 28 February 3,744 index cases were newly created on CMS, of which 3,354 had a fully completed index case interview. Of those interviewed:

- 32 travelled to the UK (excluding Scotland).
- 12 travelled to Europe.
- 21 travelled to the rest of the world. (9 to Pakistan)

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.

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 Case Management System (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 interactive dashboard 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 accompanying metadata document.

Cases reporting an occupation in the Education and Childcare sector

Following the return of early years' settings and schools, and more recently further and higher education institutions, the proportion of positive cases reporting occupation sector as "education and childcare" has been monitored (which will include students and staff working in further and higher education sector, as well as schools, early learning and childcare settings). These data are presented below.

As the positive cases reported above can include students as well as staff, the table also presents data on those who report that they are 'employed' within that sector.

Data are continually monitored and historic data are revised at each publication. During the most recent data quality exercise some historic figures have been revised.

Table 11: Proportion of CMS cases who are 18+ years of age and report an occupation in the Education and Childcare sector (most recent 10 weeks)

Week Ending	Total CMS cases	All cases aged 18+ stating occupation sector as E&C		All *employed* cases aged 18+ stating occupation sector as E&C	
		N	%	N	%
20/12/2020	6,489	429	6.6	323	5.0
27/12/2020	8,174	563	6.9	418	5.1
03/01/2021	15,827	901	5.7	676	4.3
10/01/2021	14,912	688	4.6	498	3.3
17/01/2021	11,296	423	3.7	311	2.8
24/01/2021	9,187	377	4.1	282	3.1
31/01/2021	7,340	315	4.3	224	3.1
07/02/2021	6,345	282	4.4	201	3.2
14/02/2021	5,527	255	4.6	186	3.4
21/02/2021	5,800	266	4.6	197	3.4

Notes
1. Data completeness of the occupation sector is around 80% in CMS, as such numbers should be interpreted with caution
2. An occupation sector of "Education and Childcare" will cover a range of roles including teaching staff, non-teaching staff and pupils/students in a range of settings including schools, colleges and universities
3. Data since 9 August is available to download from the Interactive Dashboard accompanying this report.

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.

Since 15th February those arriving into Scotland directly from any country are required to quarantine in a hotel for a minimum of 10 days (further information available on the Scottish Government website). Those arriving indirectly from a non-high risk country will be required to quarantine at home. Those individuals quarantining at home will be contacted by the National centre.

Table 12 – Quarantine Statistics by date.

	Total 22 Jun to 28 Feb	Week ending 28 Feb
Number of people arriving in Scotland[1]	580,778	2,977
Number of people requiring to quarantine in a hotel (anywhere in the UK)[2]	758	409
Number of people requiring to quarantine at home[3]	246,914	1,694
Number of people contacted by National Centre[4]	59,011	2,102

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

Table 13: Number of people contacted by National Centre by status.

	Total 22 Jun to 28 Feb	Week ending 28 Feb
Successful contacts made[5]	52,744	1,880
Unable to contact individual[6]	6,163	118
In progress[7]	104	104

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

2 From 15th February 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.

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

4 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.

5 People who were successfully contacted by NCTC

6 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

7 Calls which are still in progress

Targeted Community Testing

The Community Testing Programme is ongoing across Scotland . 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 interactive dashboard.

Table 14: Targeted Community Testing 22nd to 28th February

Symptoms	Number of Tests	Number Positive[2]	Percentage positive
Asymptomatic	3,027	67	2.2
Symptomatic[1]	888	141	15.9
All	3,915	208	5.3

1. Symptomatic - the individual has selected on the booking website they have symptoms
2. Number of positives test results

Table 15: Targeted Community Testing 22nd to 28th February by Health Board

Health Board (of site)	Number of Tests	Number Positive[1]	Percentage positive
NHS Ayrshire and Arran	696	*	*
NHS Borders	25	*	*
NHS Dumfries and Galloway	121	10	8.3
NHS Fife	503	10	2.0
NHS Forth Valley	5	0	0
NHS Grampian	590	*	*
NHS Greater Glasgow and Clyde	769	31	4.0
NHS Lanarkshire	1,206	150	12.4
Total	3,915	208	5.3

1. Number of positives test results

NHS Dumfries & Galloway are collecting results locally for some sites. This information is not included within PHS reporting.

Asymptomatic Testing of Students in Scotland

Background

From the beginning of December 2020, Scottish universities and colleges took part in a UK wide offer to test students not experiencing COVID-19 symptoms, before they returned home for winter break, at end of Semester 1. Testing of students across university campuses, in Scotland, began on the 30th November and finished on the 19th December 2020, with the purpose of finding additional cases and thereby allowing additional containment measures to be taken.

For Semester 2, as part of a revised plan for their return in light of the spread of the new variants of coronavirus (COVID-19), most university students will mostly be taught online throughout January and February, with the vast majority not expected back on campuses until the start of March. Universities have continued to offer asymptomatic testing to students at the start of Semester 2 for those students who have remained in term time accommodation over the holiday period as well as for students whose attendance for in-person teaching is critical and whose education cannot be delivered remotely or postponed, or have essential placements or for reasons of student well-being. Updated guidance on the return of students for Semester 2 has been published by the Scottish Government.

Lateral Flow Tests for Semester 1 and Semester 2

Universities and colleges have utilised lateral flow devices (LFD) — a clinically validated swab antigen test taken under supervised conditions that does not require a laboratory for processing. This test can produce rapid results within 45 minutes at the location of the test.

At the end of Semester 1, students were offered two tests, spaced three to five days apart. Those receiving two negative results were encouraged to safely return home as soon as is practical after the second result. If either of the LFD tests returned a positive result, the student was asked to self-isolate and arrange for a confirmatory polymerase chain reaction (PCR) test. For the start of Semester 2, upon returning to university, students are also recommended to take two tests, within a week, followed by a PCR confirmatory test if either of the LFD tests return a positive result, to help mitigate the risk of asymptomatic transmission of COVID-19. Further information and guidance on student asymptomatic testing in Semester 2 has been issued by the Scottish Government.

Results

The data presented within this section are for Semester 2 university LFD testing programme.

Data on the Semester 1 LFD testing programme data are available within the Weekly Covid-19 Statistical report (publication date 27 January 2021).

For semester 2, data is presented on the cumulative number of LFD tests and the number of positive LFD test results carried out since the 5 January until 1 March 2021.

Semester 2 Lateral Flow Device Test results

Tables 20 and Table 21 below present data the Semester 2 LFD testing programme. Testing began at staggered intervals, across university test sites, starting on the 5th January 2021.

Information on the number of students taking part in the Semester 2 testing programme, and the number of confirmed PCR positive tests, from those with positive LFD tests, will be made available in subsequent publications, once all results have been validated.

Main Points

- Between 5 January and 1 March 2021, there have been approximately 19,000 LFD tests carried out across all university and college test sites.
- Of these, 70 (0.4%) have had a positive LFD test result

Table 16: Term 2 Student Asymptomatic Testing, up until 1 March 2021 (at 8am)

	Total number of positive LFD tests	Total number of negative LFD tests	Cumulative number of LFD tests	LFD test positivity
Total	70	19,083	19,153	0.4%

Table 17: Term 2 cumulative number of Lateral Flow Device tests, by university and college test site up until 1 March 2021 (at 8am)

University Test Sites[1]	Testing start date	Cumulative LFD Tests
University of Aberdeen	7/01/2021	1,415
Robert Gordon University	11/1/2021	759
University of Dundee[2]	5/01/2021	1,380
The University of Edinburgh[2]	6/01/2021	6,295
Heriot-Watt University	11/1/2021	486
Queen Margaret University	7/01/2021	459
Glasgow Caledonian University	5/01/2021	723
University of Glasgow	6/01/2021	2,972
University of Strathclyde	11/1/2021	436
The University of the West of Scotland[3]	5/01/2021	86
University of St. Andrews	11/1/2021	2,791
Stirling University	8/01/2021	1,291
University of Highlands and Islands[4]	13/1/2021	60
Total	-	19,153

[1] Each test site can be accessed by students from other universities if that test site was more accessible from their term-time address

[2] Colleges and university students from a number of institutions made use of the available test centres above, for example Napier University are joining with Edinburgh University, Abertay University are joining with Dundee University and Glasgow School of Art with Glasgow University.

[3] These are cumulative LFD test results from four University of West of Scotland test sites: the main campus and those at their Ayr, Lanarkshire and Paisley campuses

4 These are cumulative LFD test results from two UHI test sites: Scottish Association for Marine Science and Sabhal Mòr Ostaig

School LFT Testing Programme

The school LFT testing programme began in a small number of schools in Scotland in the week ending 14 February, with the first full week of data for the week ending 21 February. For the first full week, 48,367 test were undertaken (48,367 in staff and 3,172 in S4-S6 pupils). Over the two week period, 36,333 school staff had taken at least 1 LFT test, representing 27% of the estimated 135,200 school staff in Scotland. Additionally, 3,063 senior phase pupils had taken at least 1 LFT test, representing 2.4% of senior phase pupils. It is important to note that not all school staff or senior phase pupils were in schools during this period, and as such not all would have been expected to begin testing.

Overall, 25 (0.05%) cases were positive after confirmatory PCR testing, all amongst school staff.

Table 18: School testing programme – week ending 21 February 2021

Group	Tests taken 7/2/21 – 21/2/21	Individuals taking test	% of total cohort taken a test	LFT positive	Confirmed with PCR positive*
Senior phase pupils	3,184	3,063	2.4%	3 (<0.01%)	0 (0%)
Staff	51,598	36,333	27%	48 (0.1%)	25 (0.05%)

*14 Staff LFT were PCR negative and 12 (9 staff and 3 pupils) had not had a confirmatory PCR by the end of the reporting period.

Updated Analysis of COVID-19 Outcomes by Ethnic Group

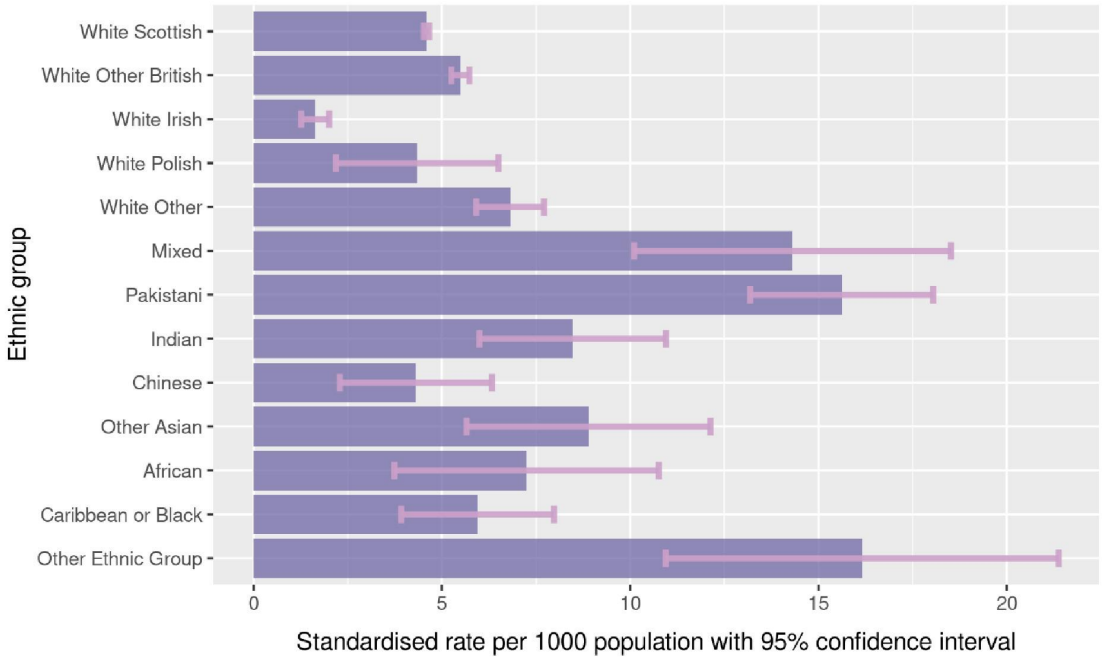
Public Health Scotland first published an analysis of the variation in outcomes by ethnic group among those who tested positive for COVID-19 on 20 May. Updates using more complete data on ethnicity were published on 15 July, 12 August and 2 December.

This release includes the most up to date data on hospitalisation and deaths available at 15 February. As in the earlier reports, the analysis focusses on the risk of a more serious outcome due to COVID-19, resulting in hospital admission, admission to a critical care unit or death. The previous series of releases used a case-control method (see 20 May, *McKeigue et al*, 2020 for further information). This latest release reports rates standardised by age and sex across ethnic groups and comparisons using the ratio of these rates. Age-standardisation is necessary when comparing rates among ethnic groups since many ethnic minority groups have a younger age profile compared to White groups and age is a strong predictor of the risk of COVID-19 within the general population. The rates presented are based on the ethnic group populations from the 2011 census.

At 15 February, there were 21,786 COVID-19 related admissions and deaths where ethnic group was available (89% of all COVID-19 related admissions and deaths). This is around a 3-fold increase in number of admissions and deaths since the previous release reflecting the higher impact the second wave of the pandemic has had across the population through the autumn and winter.

Figure 1 shows standardised rates of COVID-19 outcome by ethnic group populations. The width of the confidence intervals indicates the statistical precision of the estimate; rates for groups with smaller populations and case numbers have wider confidence intervals. Similar to previous releases, these latest data show increased risk of hospitalisation or deaths in several ethnic minority groups relative to the White Scottish group.

Figure 1. Rates of COVID-19 hospitalisation or death by ethnic group



Compared to White Scottish, rates were estimated to be around 3-fold higher in Pakistani and Mixed groups, and around 2-fold higher in Indian and Other Asian groups. Higher rates were also observed in White Other and Other Ethnic Group, and with less certainty in Caribbean or Black, and African groups. Lower rates were observed in patients recorded as White Irish. Some of these results could be due to ethnicity recording practices as described later.

Figure 2 shows the age-standardised rates in wave 1 (prior to 1 August 2020) compared to wave 2 (1 August 2020 onwards). Ethnic groups have been aggregated in a similar way to previous releases to take account of small numbers in many of the ethnic groups. While all rates increased in wave 2 due to an overall higher number of admissions and deaths during this period, the increase appears to have been proportionally greater for South Asian groups.

Figure 2. Rates of COVID-19 hospitalisation or death by ethnic group and pandemic wave

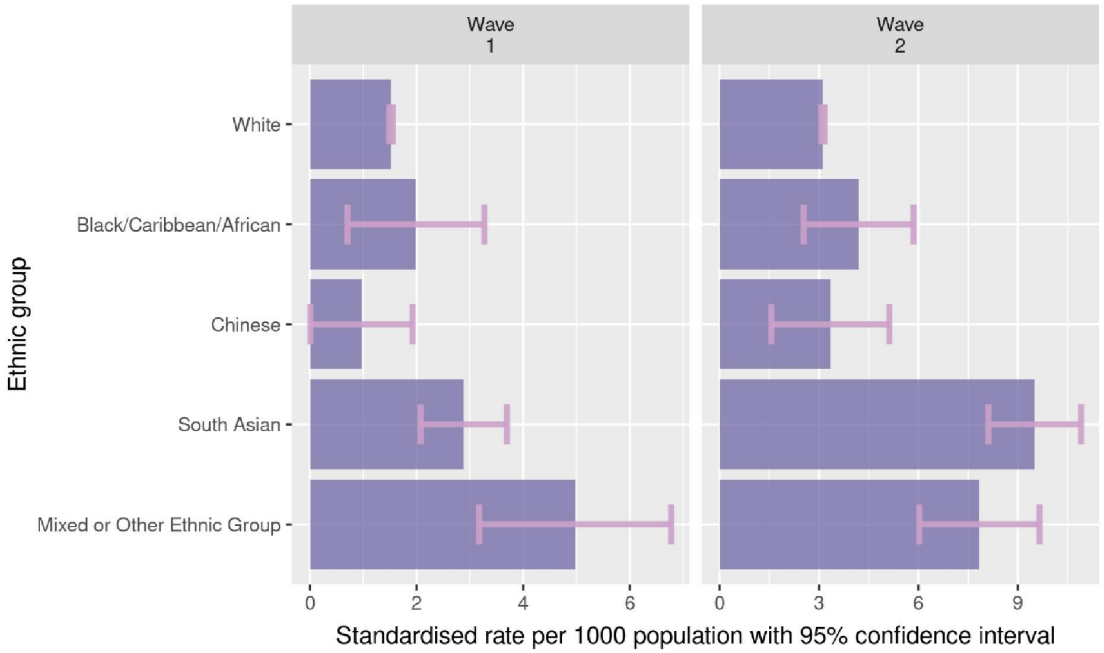


Table 19 summarises how rates by ethnic group have changed in comparison to the White group in wave 1 and wave 2. A rate ratio higher than 1 indicates a higher rate, and a value lower than 1 a lower rate, relative to the White group. Higher rates seen in some ethnic groups in wave 1 have persisted in wave 2. Among South Asians there is evidence that rates were higher in wave 2, relative to the White group, than in wave 1. In wave 1 of the pandemic, the rate of hospitalisation or death for people in the South Asian (Pakistani, Indian and Bangladeshi) group relative to that of the White group was 1.90 (95% CI 1.43 - 2.51) per 1000 population. The rate ratio for this group was higher in the second wave of the pandemic at 3.05 (95% CI 2.63 - 3.53).

Table 19: COVID-19 hospitalisation or death outcome by ethnic group and pandemic wave

	Wave 1		Wave 2	
	Rate Ratio (95% confidence interval)		Rate Ratio (95% confidence interval)	
White	1.00		1.00	
Black/Caribbean/African	1.31	(0.68 - 2.50)	1.34	(0.90 - 2.00)
Chinese	0.64	(0.24 - 1.71)	1.07	(0.63 - 1.83)
South Asian	1.90	(1.43 - 2.51)	3.05	(2.63 - 3.53)
Mixed or Other Ethnic Group	3.27	(2.28 - 4.71)	2.51	(1.99 - 3.17)

Details of the numbers of cases, rates and rate ratios by ethnic group used in the figures and tables presented here can be found in the supplementary Excel tables on the interactive dashboard. Patterns of risk were broadly similar when restricting analysis to COVID-19 patients with the most severe outcomes, i.e. admission to a critical care unit (ICU or HDU) or death as shown in the supplementary tables.

Further breakdowns by sex, wave and Scottish Index of Multiple Deprivation are included. Aggregation of ethnic groups has been required when showing further breakdown by demographic characteristic to improve precision of statistical comparisons. In general males, older people and people living in more deprived areas have a higher risk of a hospitalisation and death due to COVID-19. A higher rate of hospitalisation or death due to COVID-19 was observed for males in comparison with females across ethnic groups, but was more marked in the Chinese ethnic group.

Trends in the number and percentage of monthly hospital admissions by ethnic group are shown in the interactive dashboard that accompanies this report.

Further Information on Methods

Ethnic group categories are based on the Scottish census ethnicity categories which are used as a standard across the NHS in Scotland. Data on deaths includes, in addition to those who have died within 28 days of a positive test, those who have had COVID-19 mentioned on the death certificate to reduce any bias due to testing.

Rates have been directly standardised by age and sex using the European Standard Population.

The rates presented are based on the most recently available population by ethnic group reported in the last census (2011). A limitation to this approach is the impact of 10 years of population change on the population, which is likely to have affected ethnic groups differently. The absolute numbers of cases in some ethnic minority groups are low, particularly for more severe disease outcomes. This limits the ability to make reliable statistical comparisons between ethnic groups and has necessitated the grouping of some ethnic groups. The group labelled 'Mixed or Other Ethnic Group' for example is shown for completeness but consists of a variety of smaller ethnic groups and is therefore difficult to interpret.

Previous work however suggests that recording of some ethnic groups on hospital records may not be consistent with how these groups are recorded on the census which may have resulted in a degree of under- or over-recording due to numerator-denominator bias (Knox *et al*, 2019). This could in part explain the higher rates seen among the Other Ethnic group and relatively low rates among the White Irish.

Rate ratios published in previous releases were based on the case-control methodology which compared disease rates among patients within the same GP practice. This reflects variation among ethnic groups over and above the local levels of infection which can vary across the country. The rate ratios reported here, while broadly similar, are population wide comparisons and reflect the variation among ethnic group populations as a whole.

This analysis has focussed on the more serious outcomes due to the infection and does not explain whether different ethnic groups are more or less likely to become infected in the first place. This would require more analysis of testing data which we hope to include in future releases of these data.

Conclusions

The analysis of hospitalisations and more severe outcomes due to COVID-19 has been updated to take account of the increased impact during the second wave of the pandemic through the autumn and winter.

These results point to continued evidence of increased risks of hospitalisation or death due to COVID-19 in some ethnic minority groups, which have persisted during the second wave.

While rates of hospitalisation or death were higher during the second wave across the population, those of South Asian ethnicity appear to have been at proportionally greater risk compared to the White group during this period.

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. Up to date data for these measures are available to view in our interactive dashboard.

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:

- A&E Attendances
- Hospital admissions
- NHS 24 111 completed contacts
- Primary Care Out of Hours cases
- Scottish Ambulance Service contacts
- 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
- Stillbirths and Infant Deaths
- 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.covidweeklyreport@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
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 10 March 2021.

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.

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.

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 Weekly Covid-19 Statistical report (publication date 27 January 2021).