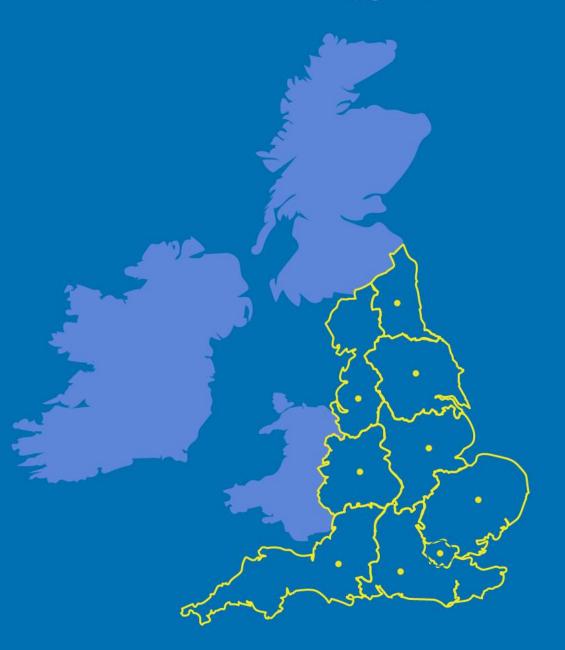


bint Biosecurity Centre

CORONAVIRUS SITUATIONAL SUBARENESS Summary

date: 23 November 2020

Appendix





This situational awareness summary report appendix:

- Local authority information
 - Map Case rates
 - Map of Positivity in testing
 - Map Testing rates
- Charts of case rate, Positivity and testing across selected age groups

į	Hospitalisation Mortality
:	Hospitalisation Contact tracing
:	Outbreak reports Overall by geography

- Care homes
- Education
- Other settings Acute respiratory infections
- Weekly positivity for other respiratory viruses

Please note:

13/10/2020 - denominator data for case and testing rates have been updated to 2019 mid-year population estimates.

20/10/20 - PHE has adjusted its approach to test positivity and testing rate metrics. Previously, any repeat tests for individuals since pandemic onset had been deduplicated. As the likelihood of individuals being tested multiple times has increased over time, test positivity and testing rate data are now deduplicated within each 7-day window. This change has been made in all OST outputs as of 20/10/2020 and applied retrospectively.

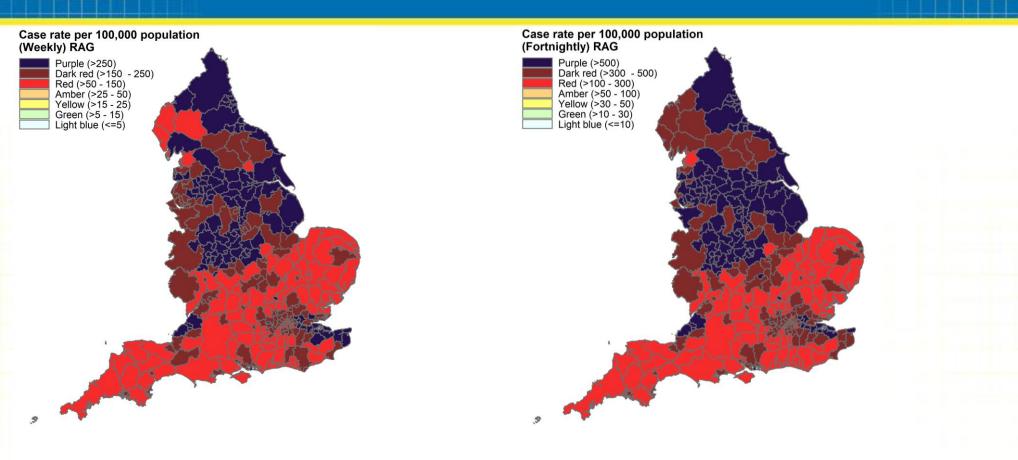
16/11/20-PHE has updated the way it records the location of people who test positive or negative for COVID-19. It now prioritises addresses given at the point of testing over the details registered on a patient's record in the NHS Digital Patient Demographic Service. This better reflects the distribution of cases and testing. However, it may give rise to differences in previously reported numbers of cases and rates in some areas. The change has been retrospectively applied to tests carried out from 1 September 2020, and data reports were updated to reflect this change on 16 November 2020.

Throughout the SAR:

Lower tier local authorities is used to represent local authority districts, unitary authorities, metropolitan district and London boroughs. Upper tier local authorities is used to represent counties, metropolitan counties, London boroughs and unitary authorities

Average weekly case rates per 100,000 population by LA

Data for specimens taken between 12 November and 18 November (7 day) and 5 November and 18 November (14 day)

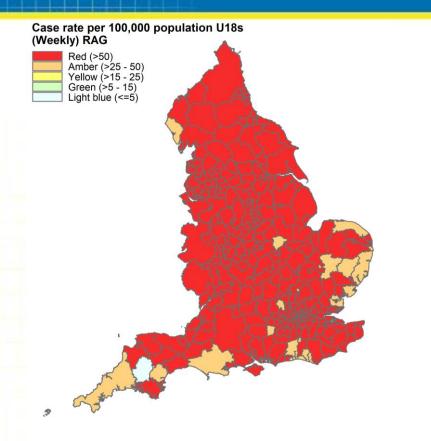


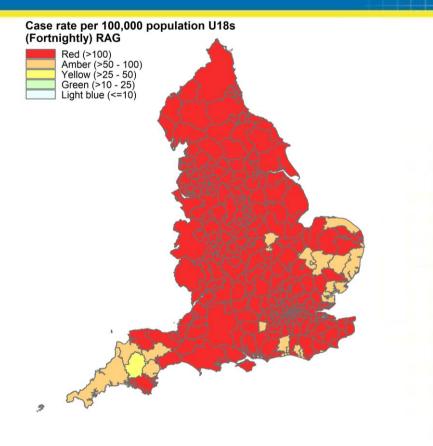
Local Authorities with the highest rate			
	Rate		Rate
Swale	645.6	Dudley	506.5
Kingston upon Hull, City of	615.9	Stoke-on-Trent	491.1
East Lindsey	518.6	Hyndburn	489.9
Hartlepool	516.7	Kirklees	478.2
Thanet	515.8	Sandwell	470.4

Local Authorities with the hig	hest rate		
	Rate		Rate
Kingston upon Hull, City of	1401.2	Dudley	1045.7
Oldham	1083	Blackburn with Darwen	1044.1
Swale	1071.4	East Lindsey	1036.5
Kirklees	1064.8	Stoke-on-Trent	1034.4
Hartlepool	1048.4	North East Lincolnshire	1021.5

Average weekly case rates under 18s per 100,000 population by LA

Data for specimens taken between 12 November and 18 November (7 day) and 5 November and 18 November (14 day)

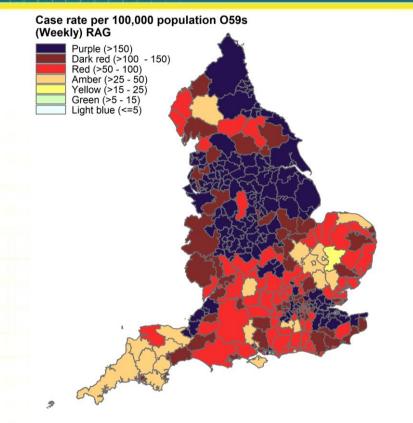




Local Authorities with the	highest rate		
	Rate		Rate
South Lakeland	744.3	Blaby	405
Oadby and Wigston	560.8	Thanet	378
Carlisle	465	Kirklees	369.7
Swale	458.3	Medway	340.1
Hartlepool	453.8	Calderdale	338.3

Local Authorities with the	highest rate		
	Rate		Rate
South Lakeland	895.4	Oldham	683
Oadby and Wigston	849.8	Kingston upon Hull, City of	665.9
Hartlepool	777.9	Carlisle	651
Kirklees	730.3	Blaby	647
Swale	697.8	Blackburn with Darwen	637.6

Average weekly case rates for individuals aged 59 and over per 100,000 population by LA Data for specimens taken between 12 November and 18 November (7 day)



Local Authorities with the hig	hest rate		
	Rate		Rate
East Lindsey	617	Newcastle-under-Lyme	428.5
Kingston upon Hull, City of	514.8	Stoke-on-Trent	425.2
Swale	462.9	Sandwell	416.5
Newcastle upon Tyne	445.5	Leicester	410.1
North East Lincolnshire	431.5	Bradford	404.8

Testing: Individuals testing positive per 100 tests

Data for specimens taken between 12 November and 18 November (7 day) and 5 November and 18 November (14 day)

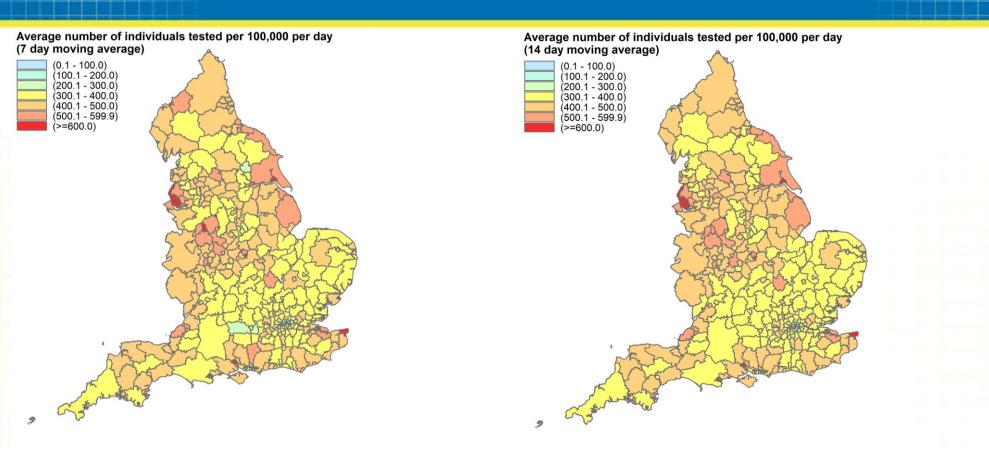
Percentage of individuals testing positive (weekly) RAG Percentage of individuals testing positive (Fortnightly) RAG Red (>7.5) Amber (4.1 - 7.5) Yellow (1.0 - 4.0) Green (0.51 - 0.99) Dark green (<= 0.5) Red (>7.5) Amber (4.1 - 7.5) Yellow (1.0 - 4.0) Green (0.51 - 0.99) Dark green (<= 0.5) and the startes Charter .

Local Authorities with th	e highest percenta	iges	
	%		%
Swale	17.3	Dudley	15.3
Kirklees	16.8	Oldham	15.2
Stockton-on-Tees	16.1	Bolton	15
Sandwell	16	Kingston upon Hull, City of	15
Hartlepool	16	Rochdale	14.9

Local Authorities with the h	nighest percen	tages	
	%		%
Kirklees	18	Hartlepool	16.7
Oldham	17.4	Bolton	16.5
Stockton-on-Tees	17.1	Sandwell	16.5
Rochdale	17.1	Kingston upon Hull, City of	16.5
Blackburn with Darwen	16.8	Swale	16.2

Testing: Individuals tested per 100,000 population per day

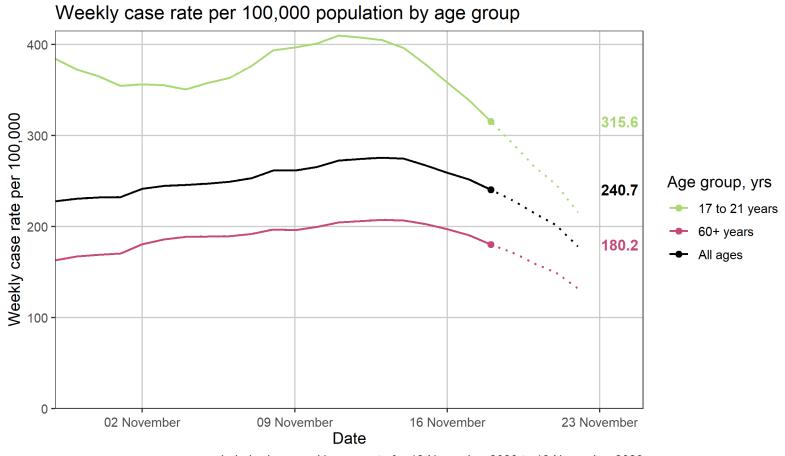
Data for specimens taken between 12 November and 18 November (7 day) and 5 November and 18 November (14 day)



Local Authorities with the high	nest rate		
	Rate		Rate
Liverpool	2053	Kingston upon Hull, City of	626.7
Knowsley	900.5	Oadby and Wigston	619.9
Sefton	892.9	Stoke-on-Trent	602.1
Southampton	802.5	Newcastle-under-Lyme	592.2
Thanet	687.4	Swale	576.2

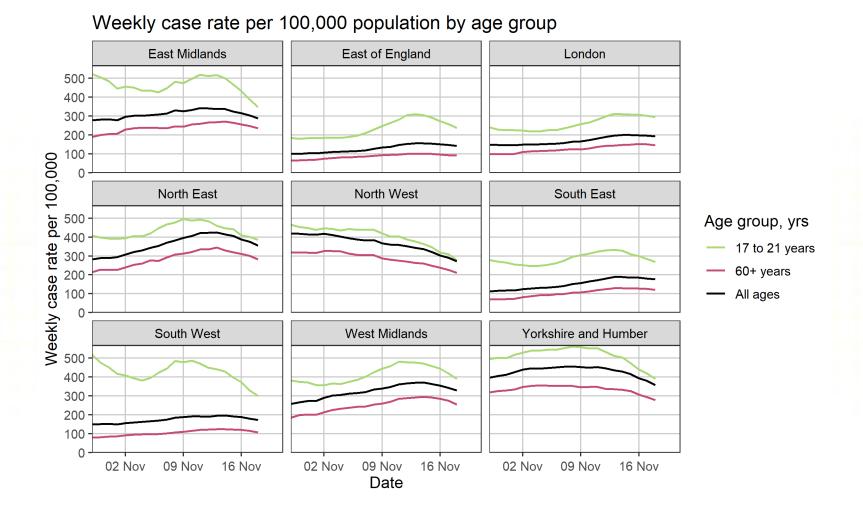
Local Authorities with the	highest rate		
	Rate		Rate
Liverpool	2273.6	Kingston upon Hull, City of	644.3
Knowsley	964.3	Oadby and Wigston	633.5
Sefton	951.1	Stoke-on-Trent	585.1
Southampton	796.5	Scarborough	577.7
Thanet	656.3	Torbay	574.4

Case rate across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020

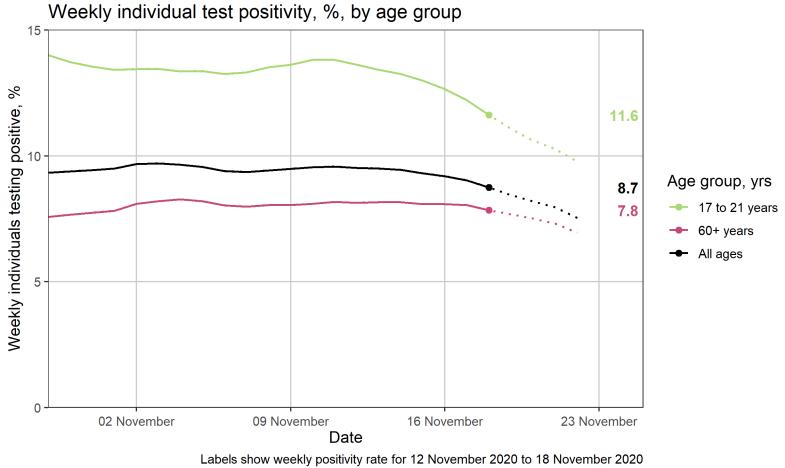


Labels show weekly case rate for 12 November 2020 to 18 November 2020 Dashed lines indicates period with incomplete data

Case rate across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020



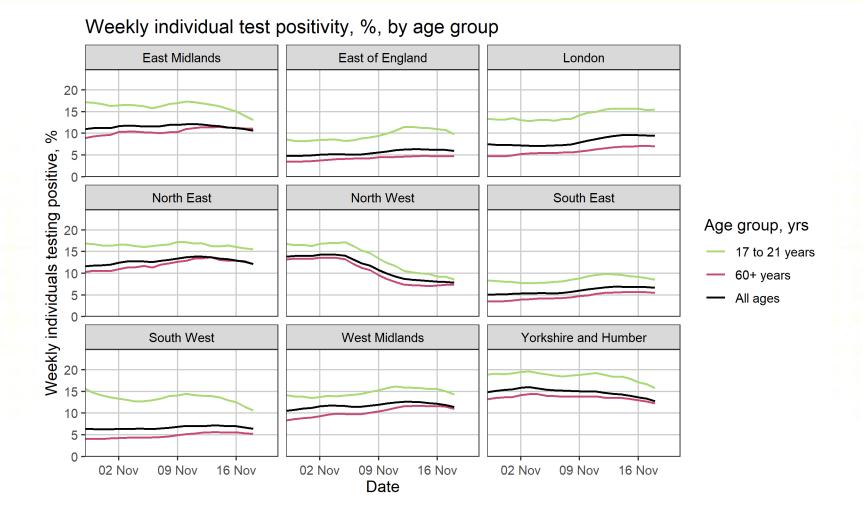
Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020



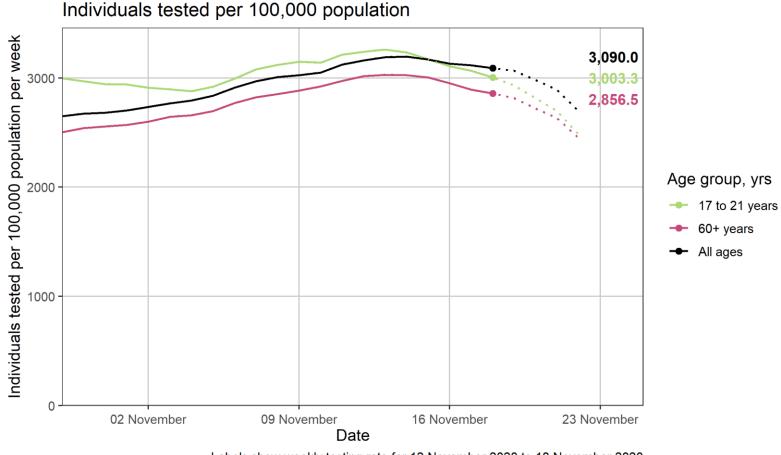
Dashed lines indicates period with incomplete data

Test positivity and testing rate metrics based on updated methodology from 20th October

Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020

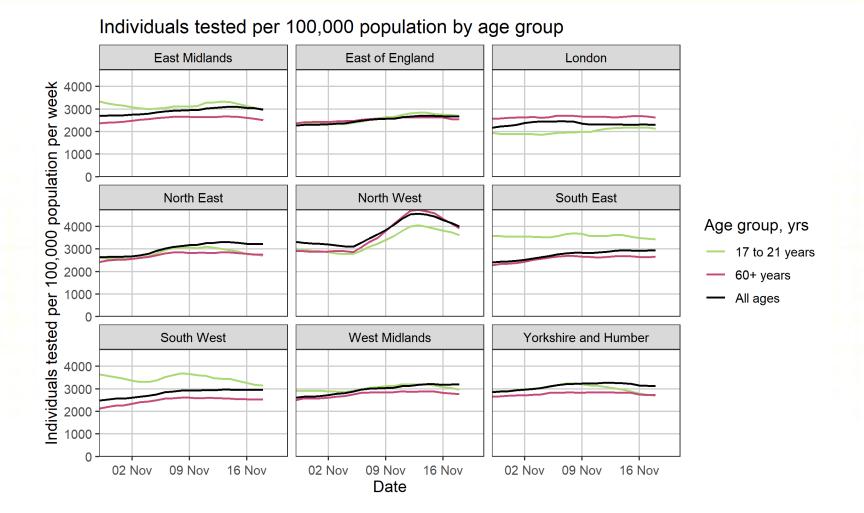


Individuals tested across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020

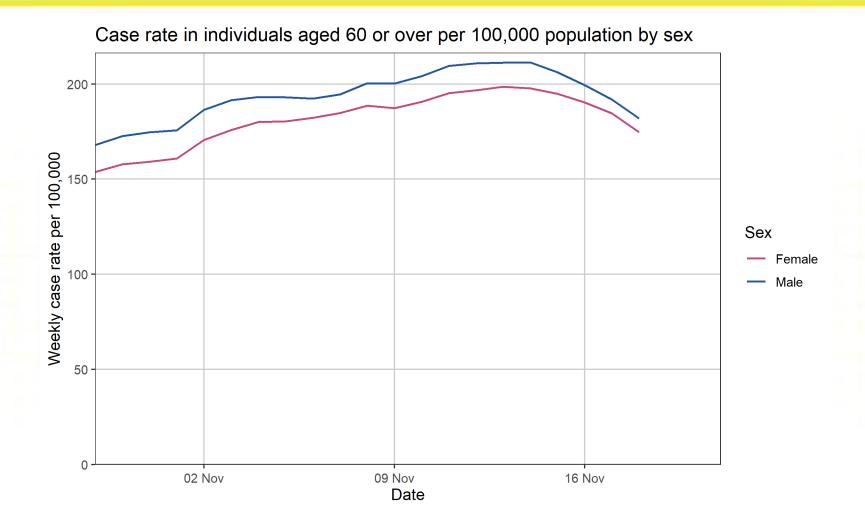


Labels show weekly testing rate for 12 November 2020 to 18 November 2020 Dashed lines indicates period with incomplete data

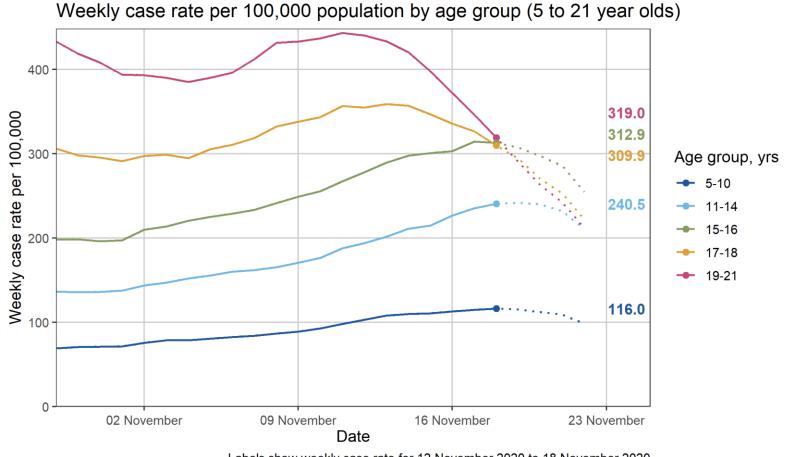
Individuals tested across both pillars 1 and 2 (weekly) – selected ages Data up to the 18 November 2020



Case rate across both pillars 1 and 2 (weekly) – aged 60 or over Data up to the 18 November 2020

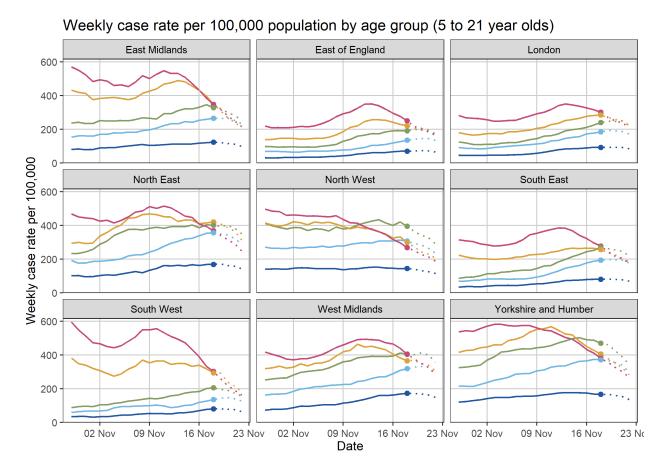


Case rate across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020



Labels show weekly case rate for 12 November 2020 to 18 November 2020 Dashed lines indicates period with incomplete data

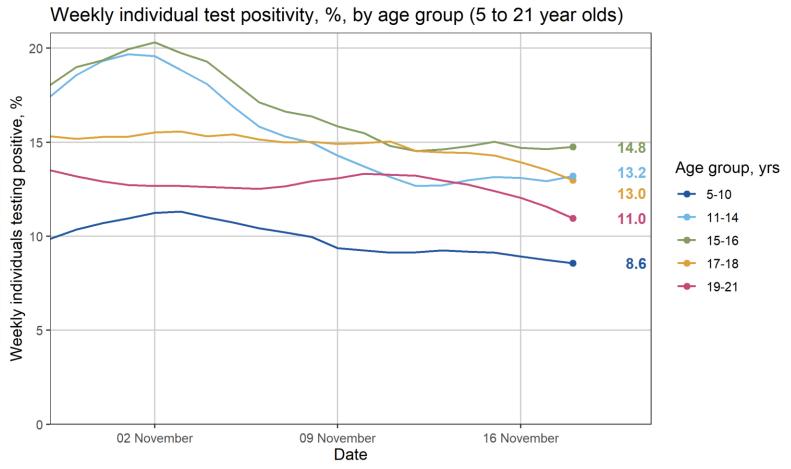
Case rate across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020



Age group, yrs - 5-10 - 11-14 - 15-16 - 17-18 - 19-21

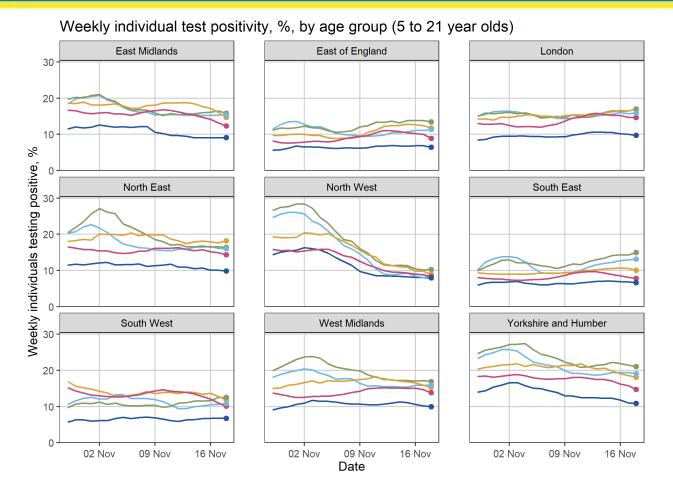
Dashed lines indicates period with incomplete data

Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020



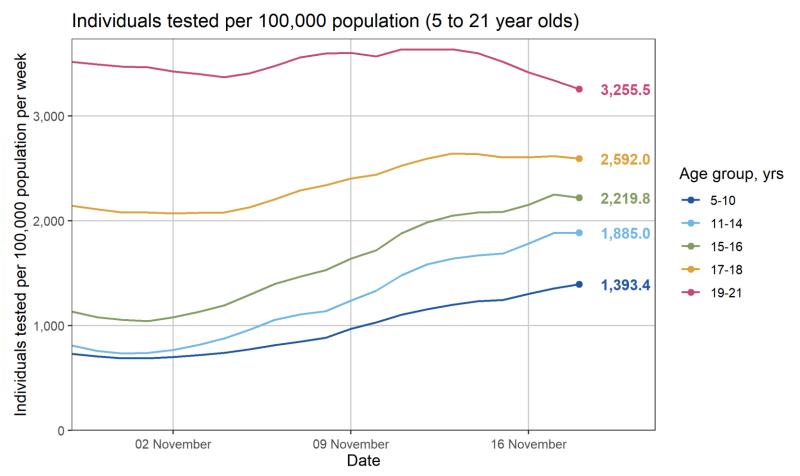
Labels show positivity rate for 12 November 2020 to 18 November 2020

Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020



Age group, yrs 🔶 5-10 🔶 11-14 🔶 15-16 🔶 17-18 🔶 19-21

Individuals tested across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020



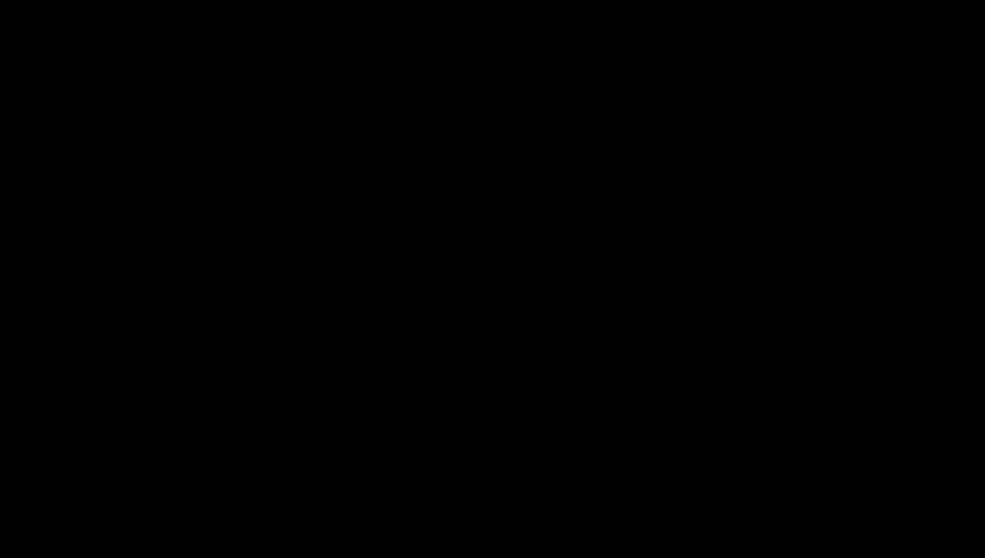
Labels show weekly testing rate for 12 November 2020 to 18 November 2020

Individuals tested across both pillars 1 and 2 (weekly) – young people Data up to the 18 November 2020

East of England East Midlands London 4,000 -3,000 North East North West South East South West West Midlands Yorkshire and Humber 2,000 1,000 0 02 Nov 09 Nov 16 Nov 02 Nov 09 Nov 16 Nov 02 Nov 09 Nov 16 Nov Date

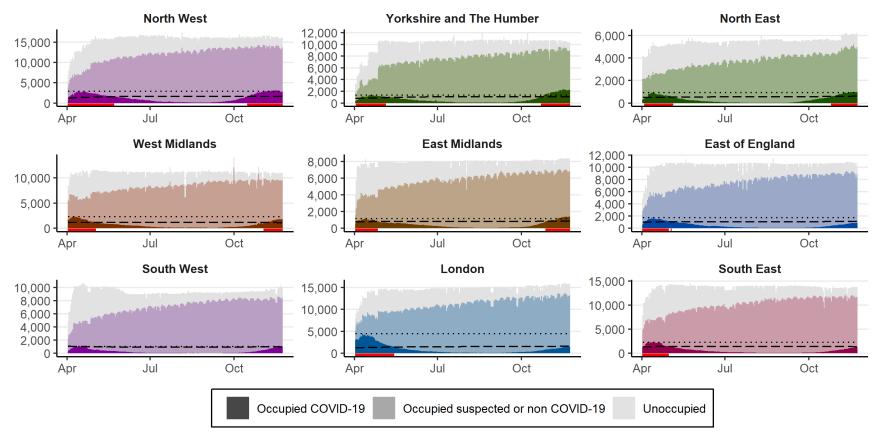
Individuals tested per 100,000 population (5 to 21 year olds)

Age group, yrs 🔶 5-10 🔶 11-14 🔶 15-16 🔶 17-18 🔶 19-21



Total bed occupancy and capacity by region

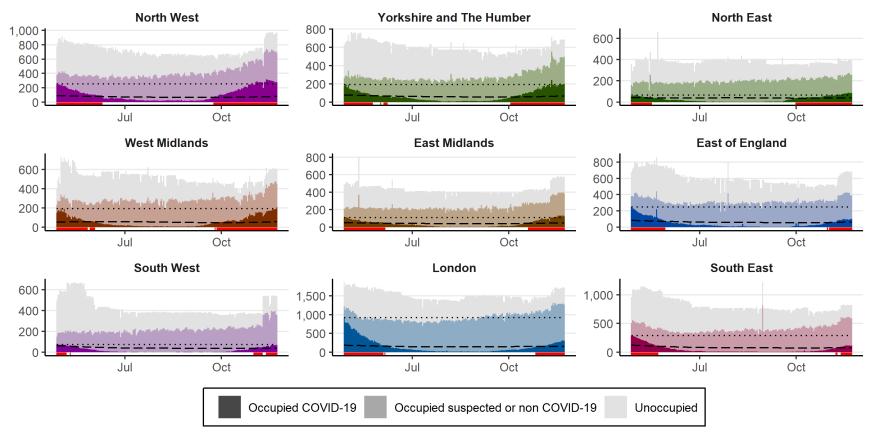
Dotted line shows 'spring peak value', i.e. highest daily COVID-19 bed occupancy recorded between 02 April 2020 and 01 June 2020. Solid bar above axis indicates when daily recorded COVID-19 bed occupancy is above 10% of daily available capacity, which is approximately shown by the dashed line.



Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 02 April 2020 to 23 November 2020. Produced by Joint Biosecurity Centre.

HDU/ITU bed occupancy and capacity by region

Dotted line shows 'spring peak value', i.e. highest daily COVID-19 bed occupancy recorded between 27 April 2020 and 01 June 2020. Solid bar above axis indicates when daily recorded COVID-19 bed occupancy is above 10% of daily available capacity, which is approximately shown by the dashed line.

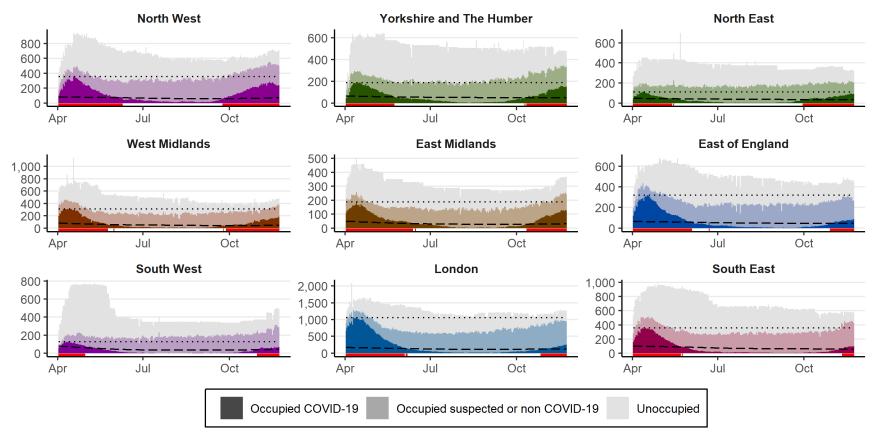


Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 27 April 2020 to 23 November 2020. Produced by Joint Biosecurity Centre.

Bed occupancy and capacity by region - mechanical ventilation beds

Mechanical ventilation bed occupancy and capacity by region

Dotted line shows 'spring peak value', i.e. highest daily COVID-19 bed occupancy recorded between 02 April 2020 and 01 June 2020. Solid bar above axis indicates when daily recorded COVID-19 bed occupancy is above 10% of daily available capacity, which is approximately shown by the dashed line.



Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 02 April 2020 to 23 November 2020. Produced by Joint Biosecurity Centre.

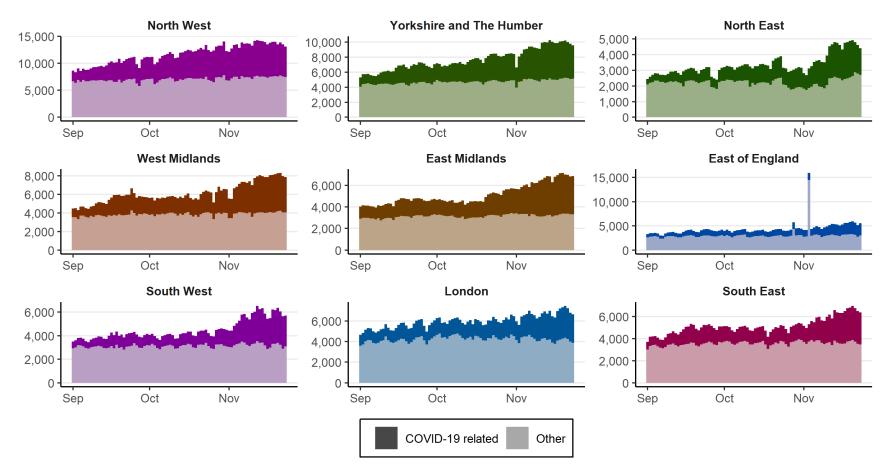
COVID-19 diagnoses in hospitals by region

North West Yorkshire and The Humber North East 2,000 800 2,000 1,500 600 1,500 1,000 400 1,000 500 500 200 0 0 0 Oct Jul Oct Apr Jul Apr Jul Oct Apr West Midlands East Midlands East of England 1,500 -1,000 · 600 800 1,000 400 . 600 500 400 200 200 -0 0 0 Oct Apr Jul Oct Oct Apr Jul Apr Jul South West London South East 1,000 1,000 800 · 800 800 600 600 · 600 400 400 · 400 200 200 200 0 0 0 Jul Oct Oct Jul Oct Apr Apr Jul Apr Patient swabbed: 0-2 days On admission 3-7 days 8-14 days 15+ days

COVID-19 diagnoses in hospitals in previous week by region

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 07 April 2020 to 23 November 2020. Produced by Joint Biosecurity Centre.

Daily NHS staff absences by region

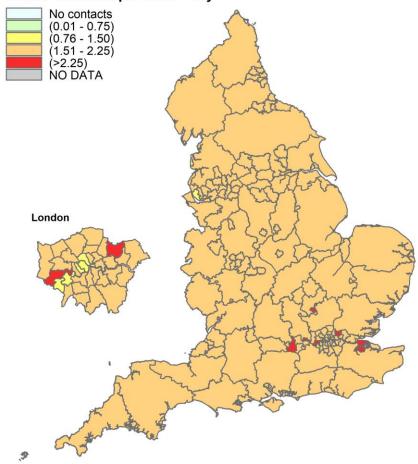


Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 01 September 2020 to 23 November 2020. Produced by Joint Biosecurity Centre.

Median number of individual contacts per case by lower-tier local authority, England, overall from **16 November** to **22 November 2020** (NHS Test and Trace).

Note this excludes contacts identified as part of complex situations managed by Level 1.

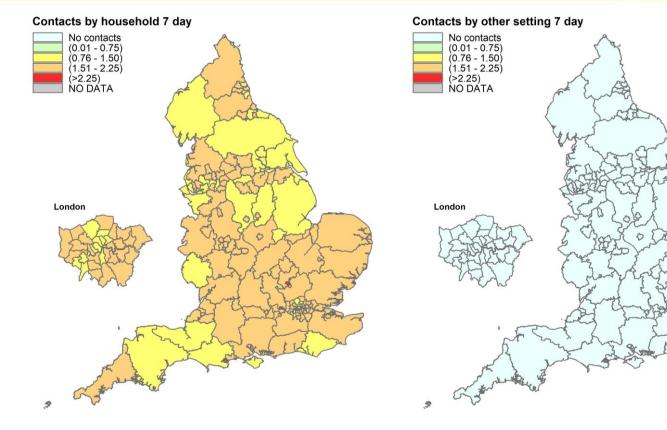
Median contacts per case 7 day



Contact tracing – 7 day Data extracted 23 November 2020 – data up to 22 November 2020

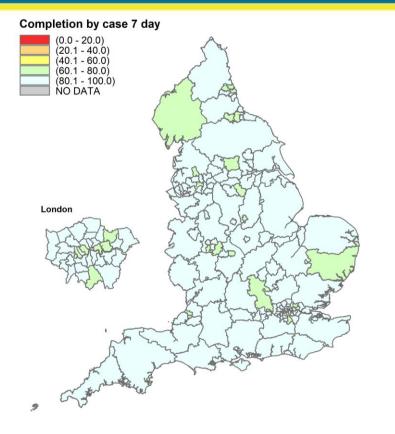
Median number of contacts per case by setting (household or other) by lower-tier local authority, England, overall from **16 November** to **22 November 2020** (NHS Test and Trace).

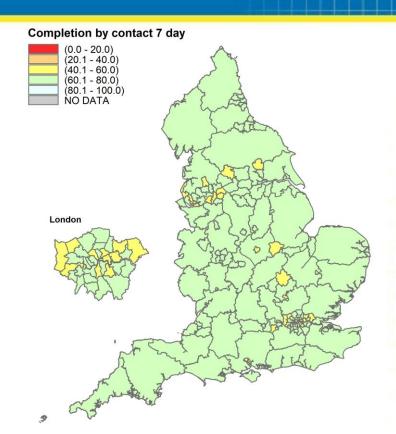
Note that contacts with unknown geography are assigned to the upper-tier local authority of the case that identified them.



Contact tracing – 7 day Data extracted 23 November 2020 – data up to 22 November 2020

Proportion of cases and contacts completing contact tracing by lower-tier local authority, England, overall from **16 November** to **22 November 2020** (NHS Test and Trace).

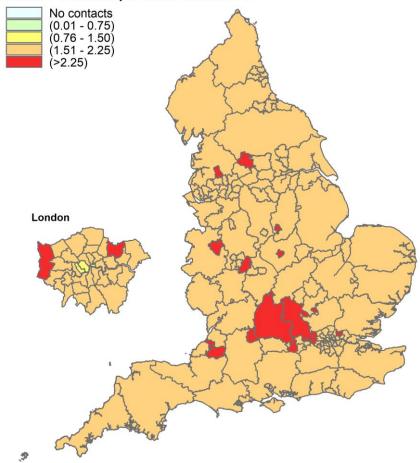




Median number of individual contacts per case by lower-tier local authority, England, overall from **28 May** to **22 November 2020** (NHS Test and Trace).

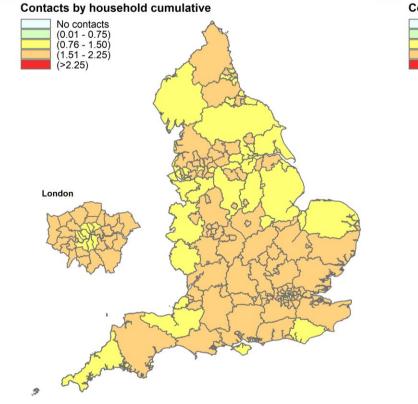
Note this excludes contacts identified as part of complex situations managed by Level 1.

Median contacts per case cumulative



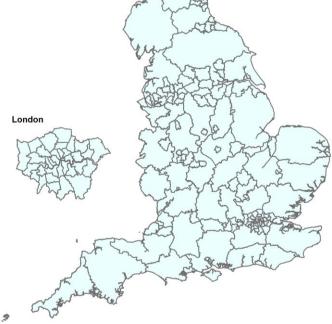
Contact tracing – cumulative Data extracted 23 November 2020 – data up to 22 November 2020

Median number of contacts per case by setting (household or other) by lower-tier local authority, England, overall from **28 May** to **22 November 2020** (NHS Test and Trace).



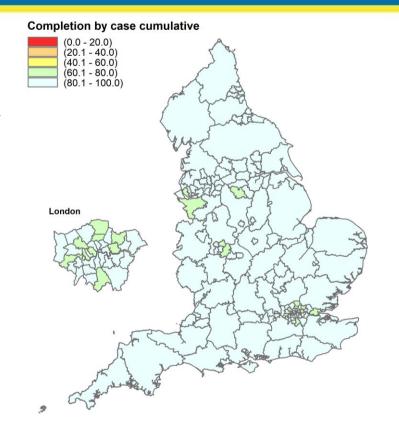


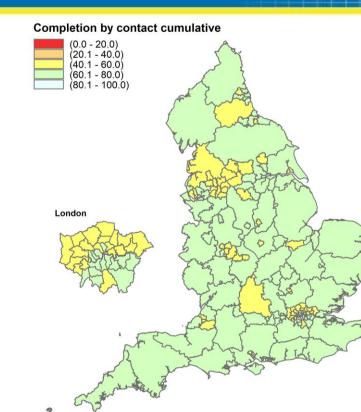
No contacts (0.01 - 0.75) (0.76 - 1.50) (1.51 - 2.25) (>2.25)



Contact tracing – cumulative Data extracted 23 November 2020 – data up to 22 November 2020

Proportion of cases and contacts completing contact tracing by lower-tier local authority, England, overall from **28 May** to **22 November 2020** (NHS Test and Trace).



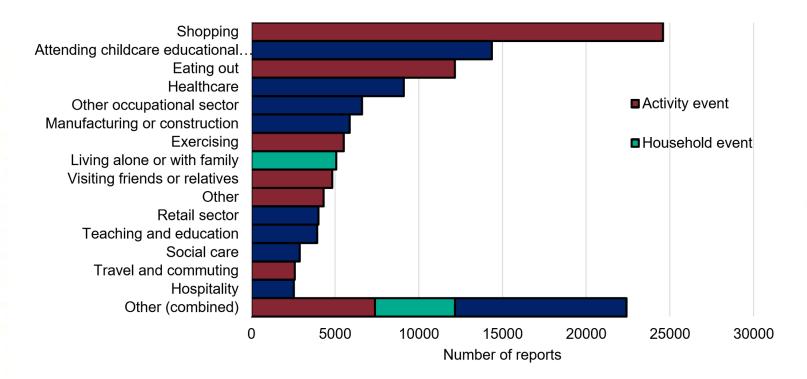


Live In implementation Engaged In discussion (to be scheduled) No activity

Locally supported contact tracing

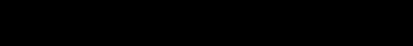
\$

Events and activities reported by people testing positive, prior to symptom onset in week 46, England



Note: 'Other' includes a wide range of different activities and settings, each of which has small numbers of individuals, as well as activities which did not fit any specific category and were added as Other by the case. This includes: (all within 'activities': Arts entertainment or recreation; Civil service or government; Close contact services; Community and charity activities; Critical national infrastructure; Emergency services; Financial services; Food production; Hospitality; Immigration border services; Information and communication; Military; Personal care; Prison; Private events and celebrations; Public events and mass gathering; event within a shared household; Sport events; Supported living; Teaching and education; Transport; 'Other (combined)' includes all exposure group types that have small counts such as "went to church", "went to the zoo" within that event type.

Data extracted 19 November 2020



Weekly report on Acute Respiratory Infection (ARI) Situations reported to PHE Methodology, data sources and limitations

- We report on new acute respiratory infection (ARI) situations reported to Health Protection Teams (HPTs) and entered on HPZone in the previous reporting week by setting and locality.
- Daily and weekly aggregated surveillance reports are extracted from HPZone to generate the line listing.
- The weekly extracts include situations reported in the previous epidemiological week (Monday to Sunday) by locality and context (setting e.g. school)
- Situations associated with Educational settings and Workplaces undergo further investigation. Individual case
 notes are reviewed by an epidemiologist and an assessment made about whether the criteria for a confirmed
 COVID-19 cluster or outbreak are met. See definitions.
- Situations associated with Educational settings, Workplaces, Other settings and Food Outlets/ Restaurants are also further classified into sub-categories by review of individual records.
- It is important to note that many of these situations remain live and so the description presented here may not
 necessarily be final.
- Of note a national school helpline started operating on 17 September 2020 and a Universities helpline started operating on 7 October. This is likely to have had an impact on the number of situations/outbreaks being reported to HPTs in these settings.
- The denominator (the overall number of settings in each category) will differ by the setting category, for example there are fewer hospitals than workplaces, as will the propensity to report incidents to PHE. Therefore these data are more useful for monitoring trends over time than making comparisons across setting categories.
- Schools in England were closed for half-term during weeks 43 or/ and 44.
- The situations captured on HPZone represent a subset of all ongoing clusters and outbreaks in England rather than an exhaustive listing. A variety of arrangements are in place with local authorities and other stakeholders supporting HPTs, however data are not routinely documented on HPZone. As a result, the number of outbreaks reported for some of the regions are underestimates.

Definitions

Cluster: two or more test-confirmed cases of COVID-19 among individuals associated with a specific non-residential setting with illness onset dates within a 14-day period (in the absence of detailed information about the type of contact between the cases).

Outbreak: two or more test-confirmed cases of COVID-19 among individuals associated with a specific non-residential setting with illness onset dates within 14 days, and one of:

Identified direct exposure between at least 2 of the test-confirmed cases in that setting (for example under one metre face to face, or spending more than 15 minutes within 2 metres) during the infectious period of one of the cases

When there is no sustained local community transmission - absence of an alternative source of infection outside the setting for the initially identified cases

Internal reports/updates

- Weekly COVID19_Epidemiological Internal Update report
- COVID-19 Exceedance Daily Review
- All regions PHE Situations of Interest daily update
- PHE NHS Test and Trace: Weekly Contact Tracing Report
- PHE Daily Care Home Report
- PHE Educational settings weekly report for NERVTAG
- <u>COVID-19: nowcast and forecast</u>

Published reports

- National flu and COVID-19 surveillance reports
- Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report
- ONS Coronavirus (COVID-19) Infection Survey, UK
- REACT-1 round 6 updated report

Second Generation Surveillance System (SGSS)

Data as of 22 November 2020 00:00hrs

Laboratory-confirmed cases reported to PHE. SGSS data is further de-duplicated and cleaned by the PHE ICC Epidemiology Cell. The dataset includes all positive COVID-19 cases reported through both Pillar 1 and Pillar 2 testing. Numbers in most recent days may rise due to potential delays to data reporting and validation. The number of confirmed cases reflects both the case rate of infection and testing rates.

PHE Unified Sample Dataset (USD)

Data as of 23 November 2020 00:00hrs

Data on individuals testing negative for SARS-CoV2 in both Pillar 1 and 2. This data is deduplicated to only include one record for any individual who has had only negative samples

HPZone case and incident management system

Data as of 23 November 2020 08:00hrs

Only outbreaks reported to PHE are included. Absolute numbers should be interpreted with caution. Reporting practice is known to vary with time and geography. Community outbreaks exclude outbreaks reported from secondary care and care home settings.