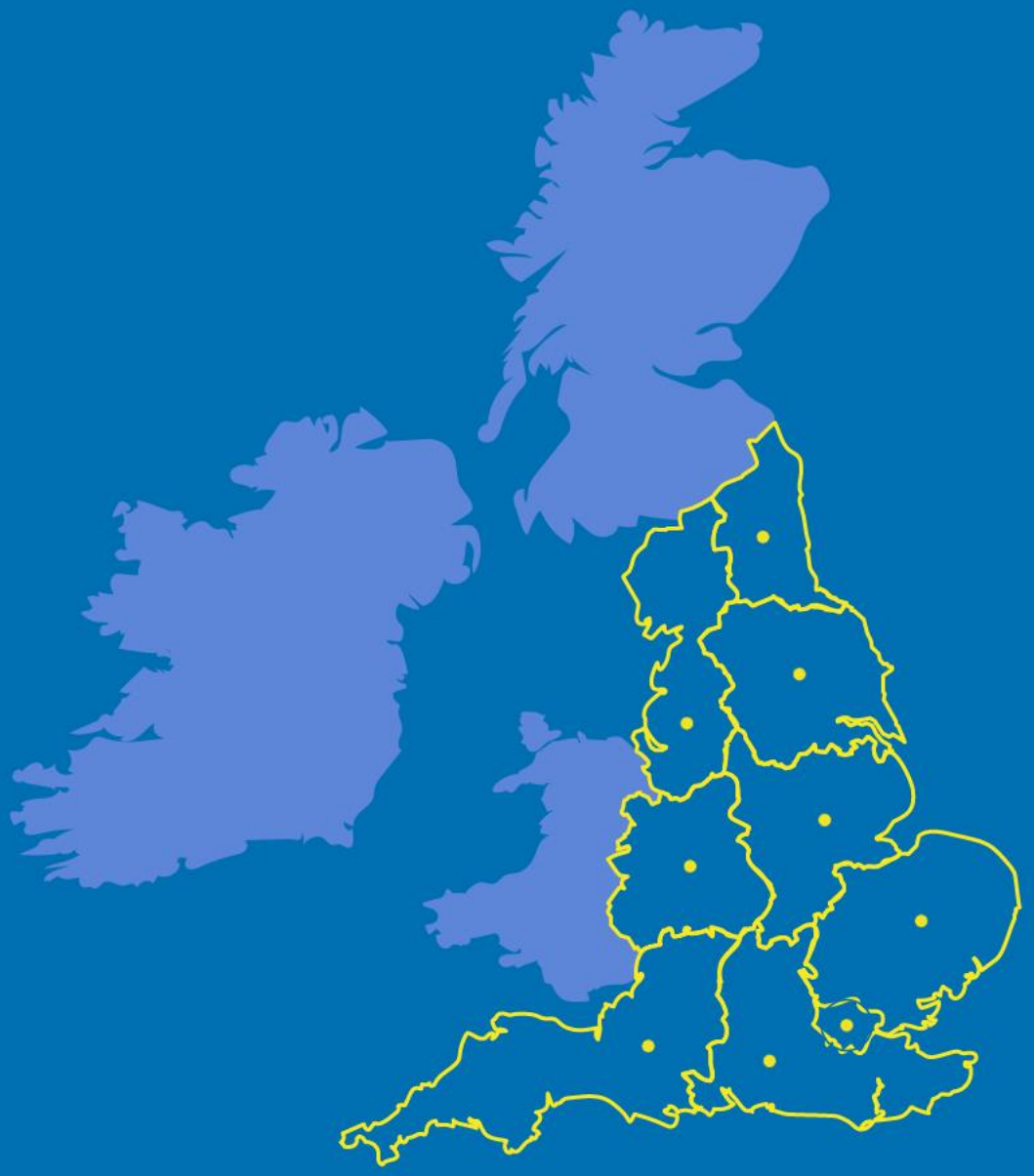
Public Health England

Joint Biosecurity Centre

CORONAVIRUS SITUATIONAL AWARENESS

Summary

date: 29 September 2020



Contents

This situational awareness summary report collates information and intelligence from various sources. The summary will be provided daily and the content will continue to be developed.

- National context
- High level summary
- Incidence, [redacted]s, positivity and testing
- [redacted]
- Prevalence
- [redacted]
- NHS 111 potential COVID-19
- Outbreak reports
  - Overall by geography
  - [redacted]

A separate Appendix contains Local Authority maps for incidence, positivity, testing, [redacted] and contact tracing.

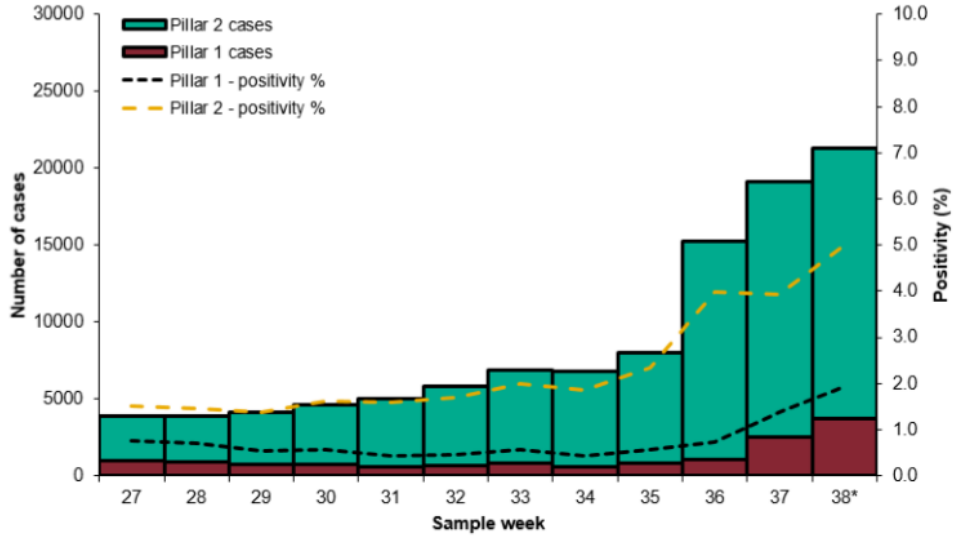
National context
(From 25 September 2020 Week 39 Report)

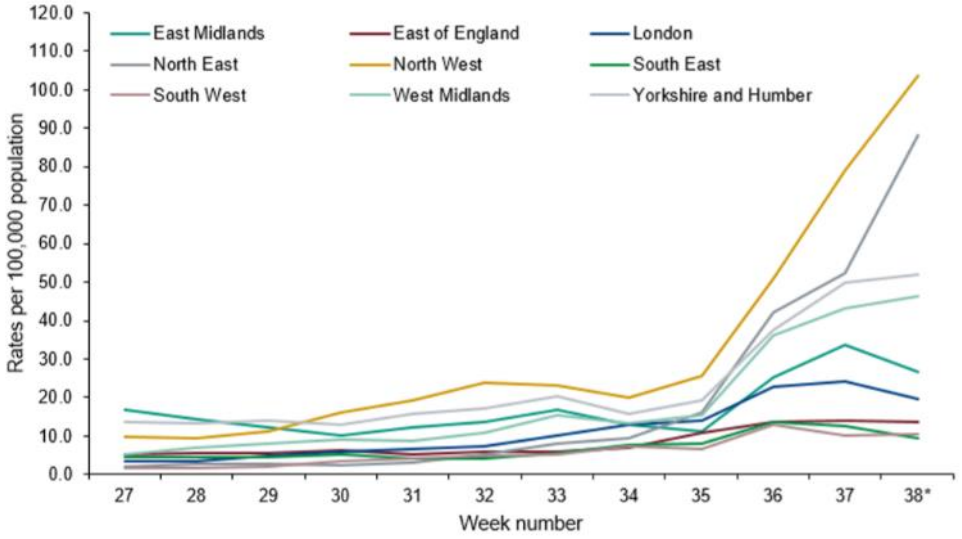
Overall case numbers and positivity continued to increase in both Pillar 1 and 2, in week 38, with the majority of cases reported from Pillar 2. The highest case rates continued to be seen in the 20-29 year olds. Positivity was highest in 20-29 year olds in Pillar 1 and in 80+ year olds in Pillar 2. Cases rates and positivity continue to be highest in the North of England.

As of 09:00 on 22 September 2020, a total of 347,843 have been confirmed positive for COVID19 in England under Pillar 1 and 2.

* For the most recent week, more samples are expected therefore this graph should be interpreted with caution. The data are shown by the week the specimen was taken from the person being tested. This gives the most accurate analysis of this time progression, but it does mean that the latest days' figures may be incomplete.

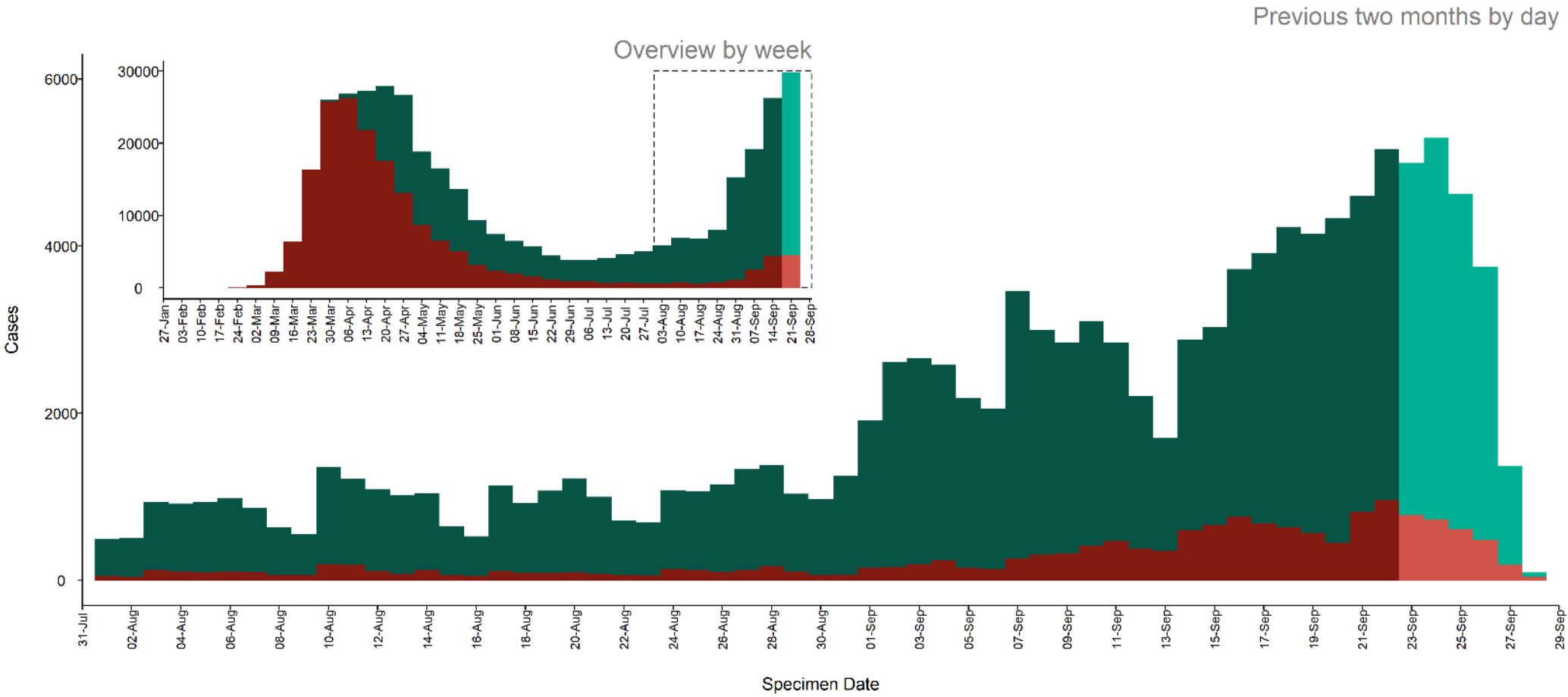
Weekly laboratory confirmed COVID-19 case rates per 100,000 population tested under Pillar 1 and Pillar 2, by PHE Centres and sample week





National context

England confirmed cases - epidemic curve*



*Bars shaded in **light red** and **light green** are provisional.
Figures are expected to rise as results are received for additional samples tested during this period.
Inset epi curve is based on weekly reports from date of first case diagnosed.
Main epi curve shows daily cases truncated to show the previous two months.
Value labels are for combined **pillar 1** and **pillar 2** cases.

Produced by the Outbreak Surveillance Team, Public Health England.

High level summary

Upper Tier Local Authorities with highest incidence rates in 7 days (18 September 2020 to 24 September 2020)

	Weekly incidence rate from 11 September to 17 September	Weekly incidence rate from 18 September to 24 September	Difference in weekly incidence rate from previous week	Daily incidence rate from 11 September to 17 September (7 day moving average)	Daily incidence rate from 18 September to 24 September (7 day moving average)	Difference in daily incidence rate from previous week
Knowsley	138.4	281.5	143.1 ↑	19.8	40.2	20.4 ↑
Liverpool	147.5	268.6	121.1 ↑	21.1	38.4	17.3 ↑
Newcastle upon Tyne	90.3	249.5	159.2 ↑	12.9	35.6	22.7 ↑
Bolton	197.6	243.9	46.3 ↑	28.2	34.8	6.6 ↑
Halton	144	226.6	82.6 ↑	20.6	32.4	11.8 ↑
South Tyneside	137.8	217.6	79.8 ↑	19.7	31.1	11.4 ↑
Manchester	128.6	205.6	77 ↑	18.4	29.4	11 ↑
Sunderland	88.3	196.5	108.2 ↑	12.6	28.1	15.5 ↑
Bury	149.4	196.2	46.8 ↑	21.3	28	6.7 ↑
Blackburn with Darwen	144.4	194.7	50.3 ↑	20.6	27.8	7.2 ↑
England	**36.3**	**58.5**	**22.2** ↑	**5.2**	**8.4**	**3.2** ↑

The colours on the arrows are there to emphasise the direction of travel only.

+Indicates Local Authorities with small populations whose data are frequently combined with another Local authority area

Data for positive cases with specimen dates between **11 September and 24 September 2020**

Data definitions (see next slide for additional data):

Weekly incidence rate = total confirmed cases in the most recent 7 day period per 100,000 population

Daily incidence rate, 7 day moving average (7-DMA) = average number of confirmed cases per day for the 7 day period per 100,000 population

Individuals tested per day per 100,000 (7-DMA) = Number of individuals tested per 100,000 population

Percentage individuals test positive (7-DMA) = Percentage of individuals tested with specimen dates in the seven day period who have been positive for SARS-CoV2

Community outbreaks = Number of outbreaks reported to PHE during the 7 day period, excluding those reported from secondary healthcare and care home settings.

High level summary 1
Local authority areas of interest

This table contains the areas with the highest weekly incidence rates

Data for specimens taken/outbreaks reported between **18 September 2020 and 24 September 2020** (7 day) and **11 September and 24 September 2020** (14 day).

Arrows demonstrate how figures compare to the equivalent figure as of **17 September 2020**.

The issue with symptomatic cases has been corrected. Previous data before the 22 September should not be used.

Percentage positive: Red >7.5%, Amber >4 to 7.5%

Weekly incidence rate: Red >50 cases per 100,000 per week, Amber >25 per 100,000 per week

Exceedances RAG: refer to slide 44

These areas are currently under investigation by local public health protection teams and DsPH. Testing access is being increased in these areas. These areas are also associated with workplace outbreaks which have contributed to the increase in infection rates.

Some Local Authority areas have been included as part of wider geographical interventions.
+ local Authorities with small populations whose data are frequently combined with another Local authority area

	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Incidence per 100,000 population (weekly)	Incidence per 100,000 population (fortnightly)	Daily exceedance score	Community outbreaks (Last 7 days)	National Response Level
Knowsley	284.7 ↑	14.1% ↑	[redacted]	281.5 ↑	419.9	R	[redacted]	Intervention
Burnley	306.4 ↑	12.8% ↑		275.6 ↑	414.6	R		Intervention
Liverpool	238.0 ↑	16.1% ↑		268.6 ↑	416.1	R		Intervention
Newcastle upon Tyne	271.1 ↑	13.1% ↑		249.5 ↑	339.8	R		Intervention
Bolton	282.7 ↑	12.3% ↑		243.9 ↑	441.5	G		Intervention
Halton	279.6 ↑	11.6% ↑		226.6 ↑	370.6	R		Intervention
Pendle	288.7 ↓	11.0% ↑		222.1 ↑	334.8	R		Intervention
South Tyneside	236.4 ↑	13.1% ↑		217.6 ↑	355.4	A		Intervention
Manchester	263.6 ↑	11.1% ↑		205.6 ↑	334.2	R		Intervention
Hyndburn	280.0 ↓	10.4% ↑		202.9 ↑	367.5	A		Intervention
Sunderland	208.7 ↑	13.5% ↑		196.5 ↑	284.8	R		Intervention
Bury	221.3 ↓	12.7% ↑		196.2 ↑	345.6	R		Intervention
Blackburn with Darwen	276.6 ↓	10.1% ↑		194.7 ↑	339.1	R		Intervention
Preston	277.6 ↓	10.0% ↑		193.9 ↑	346.9	R		Intervention
Oldham	280.4 ↓	9.5% ↑		185.5 ↑	325.5	R		Intervention
Rochdale	270.1 ↑	9.7% ↑		183.2 ↑	303.6	R		Intervention
Warrington	230.8 ↑	11.3% ↑		182.3 ↑	285.9	G		Intervention
St. Helens	235.8 ↓	10.7% ↑		177.2 ↑	293.3	G		Intervention
Sefton	211.8 ↑	11.4% ↑		169.6 ↑	261.4	R		Intervention
Wirral	231.2 ↓	10.2% ↑		165.8 ↑	294.8	G		Intervention
Bradford	225.1 ↑	10.4% ↑		163.8 ↑	281.8	G		Intervention
Salford	238.3 ↑	9.7% ↑		161.6 ↑	280.3	G		Intervention
Tameside	214.3 ↓	10.5% ↑		158.1 ↑	274.4	G		Intervention
Birmingham	241.1 ↑	9.3% ↑		157.0 ↑	244.3	A		Intervention
Gateshead	211.8 ↑	10.0% ↑		148.6 ↑	243.4	G		Intervention
Wigan	200.8 ↑	10.3% ↑		144.4 ↑	236.7	R		Intervention
Northumberland	216.5 ↑	9.2% ↑		139.9 ↑	190.1	R		Intervention
North Tyneside	205.4 ↑	9.1% ↑		130.6 ↑	195.2	A		Intervention
Leeds	207.0 ↑	8.9% ↑		129.6 ↑	220.4	G		Intervention
Rossendale	237.6 ↓	7.4% ↓		122.7 ↓	287.7	A		Intervention
England	**152.3** ↑	**5.5%** ↑		**58.5** ↑	**94.8**			

High level summary 2
Local authority areas of interest

Local authority areas not included in the High level summary 1 where the weekly incidence rate has risen from the previous week

Data for specimens taken/outbreaks reported between **18 September 2020 and 24 September 2020** (7 day) and **11 September and 24 September 2020** (14 day).

Arrows demonstrate how figures compare to the equivalent figure as of **17 September 2020**.

The issue with symptomatic cases has been corrected. Previous data before the 22 September should not be used.

Percentage positive:
Red >7.5%, Amber >4 to 7.5%

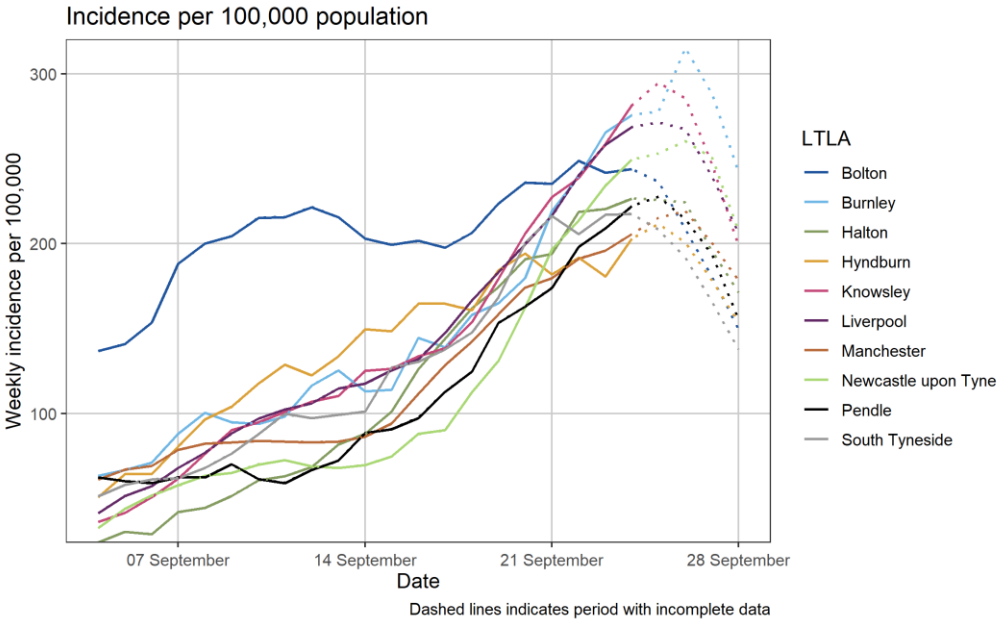
Weekly incidence rate:
Red >50 cases per 100,000 per week, Amber >25 per 100,000 per week

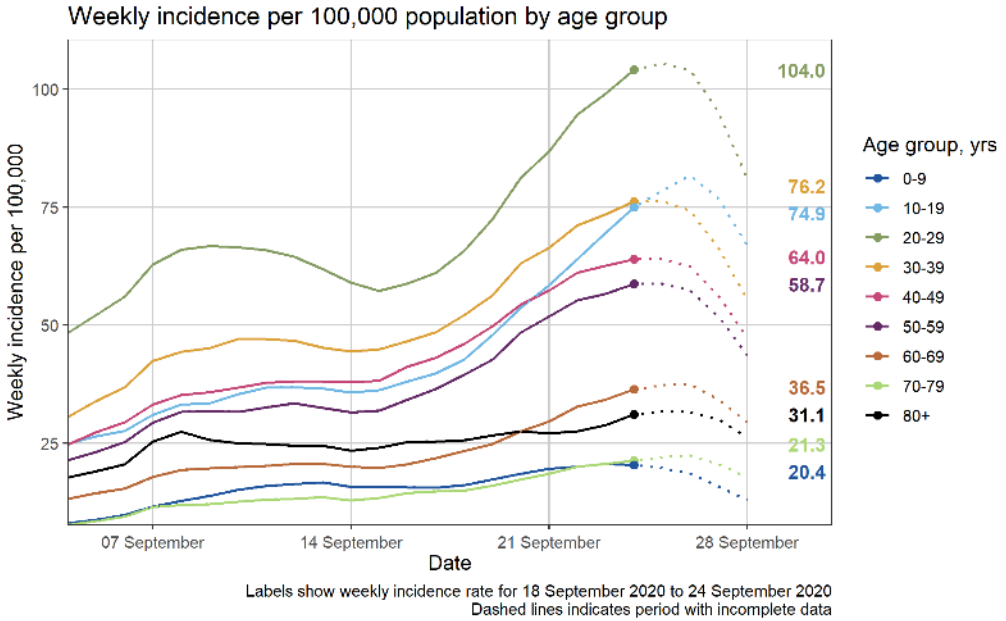
Exceedances RAG: refer to slide 44

Some Local Authority areas have been included as part of wider geographical interventions.
+ local Authorities with small populations whose data are frequently combined with another Local authority area

	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Incidence per 100,000 population (weekly)	Incidence per 100,000 population (fortnightly)	Daily exceedance score	Community outbreaks (Last 7 days)	National Response Level
Hartlepool	176.2 ↑	9.8% ↑		121.2 ↑	165.2	R		Enhanced Support
Sandwell	219.7 ↑	7.7% ↑		117.9 ↑	181.1	A		Intervention
Leicester	168.5 ↓	9.7% ↑		114.0 ↑	207.2	R		Intervention
Fylde	158.0 ↑	9.4% ↑		104.0 ↑	152.9	A		Intervention
Middlesbrough	178.9 ↑	8.2% ↑		102.5 ↑	140.2	R		Enhanced Support
Trafford	197.2 ↓	7.4% ↑		102.0 ↑	157.8	R		Intervention
Kirklees	190.1 ↑	7.7% ↓		101.9 ↑	183.3	R		Intervention
Craven	180.7 ↑	7.9% ↑		100.3 ↑	170.7	A		
West Lancashire	156.8 ↑	9.1% ↑		100.0 ↑	152.7	R		Intervention
Calderdale	167.8 ↑	8.2% ↑		96.2 ↑	146.6	A		Intervention
County Durham	177.6 ↑	7.6% ↑		94.1 ↑	137.2	R		Intervention
Isles of Scilly +	70.1 ↓	18.2% ↑		89.2 ↑	89.2	#N/A		
Stockport	184.0 ↓	6.7% ↑		86.4 ↑	147.4	R		Intervention
Sheffield	151.0 ↓	8.1% ↑		85.5 ↑	133.9	R		Concern
Walsall	209.3 ↑	5.7% ↑		84.0 ↑	129.9	A		
Ribble Valley	168.6 ↓	7.1% ↑		83.3 ↑	109.9	R		Intervention
Solihull	172.5 ↓	6.8% ↑		81.9 ↑	148.9	G		Intervention
Rotherham	141.8 ↓	8.2% ↑		81.2 ↑	123.9	R		
Wolverhampton	202.0 ↑	5.7% ↑		80.2 ↑	130.9	G		Intervention
Barrow-in-Furness	168.7 ↓	6.7% ↑		78.9 ↑	134.1	A		
South Ribble	180.3 ↓	6.2% ↑		77.8 ↑	124.0	G		Intervention
Stockton-on-Tees	147.1 ↑	7.5% ↑		77.1 ↑	105.5	A		Enhanced Support
Coventry	156.7 ↑	6.9% ↑		76.1 ↑	114.5	R		
Blackpool	147.7 ↓	7.3% ↑		75.4 ↑	137.8	R		Intervention
Darlington	149.3 ↑	7.1% ↑		74.1 ↑	97.6	R		Enhanced Support
Chorley	174.5 ↓	6.0% ↑		73.6 ↑	119.0	R		Intervention
Redbridge	166.9 ↑	6.1% ↑		70.8 ↑	116.5	A		Concern
Wakefield	167.4 ↑	5.9% ↑		69.3 ↑	106.7	R		
Wyre	127.9 ↓	7.3% ↑		65.6 ↑	120.5	G		Intervention
Luton	161.8 ↑	5.5% ↑		62.6 ↑	95.7	A		
England	**152.3** ↑	**5.5%** ↑		**58.5** ↑	**94.8**			

Incidence rate across both pillars 1 and 2 (weekly)
Data up to the 24 September 2020





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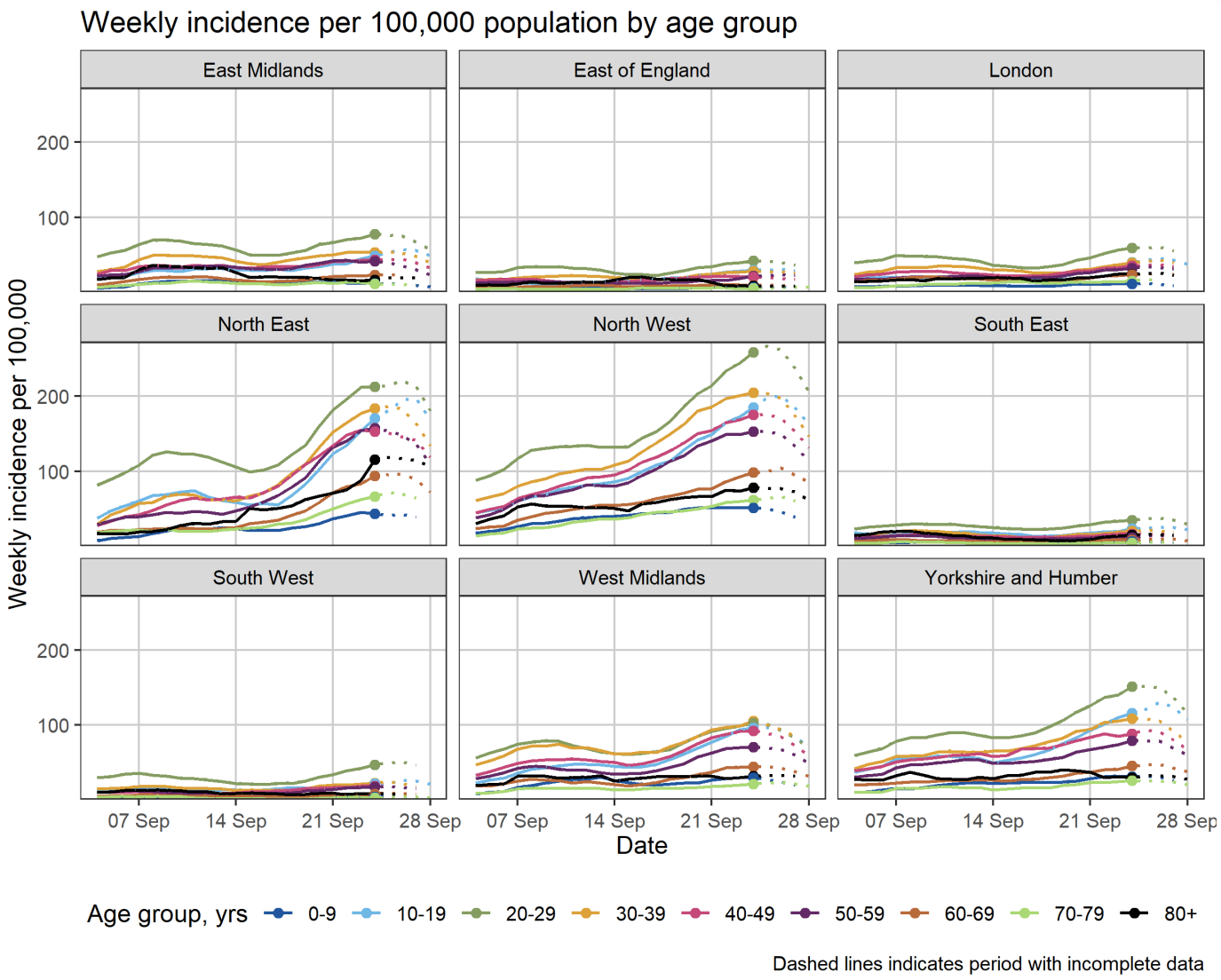
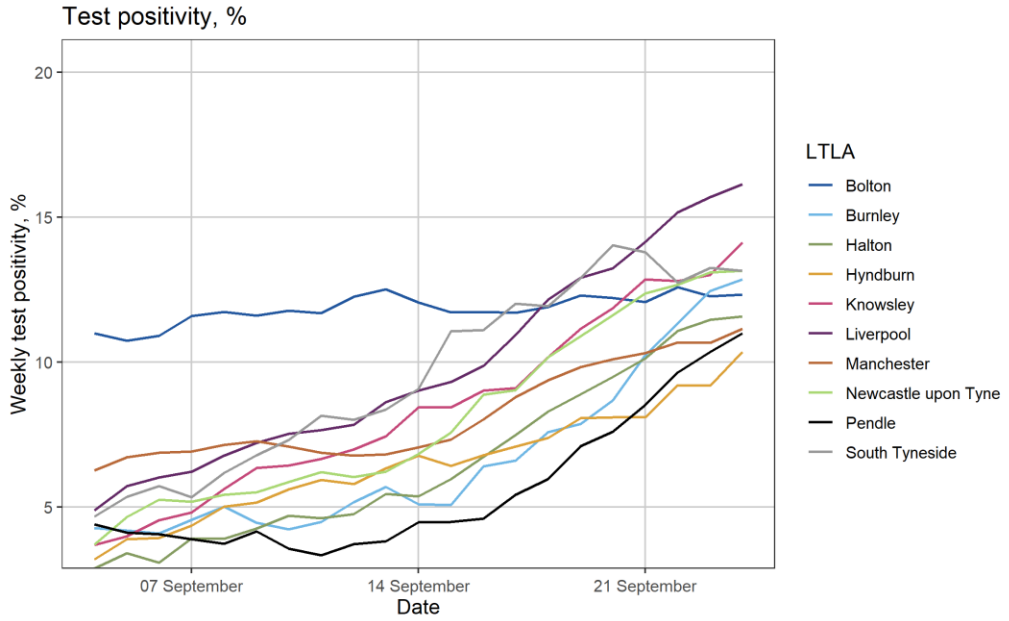
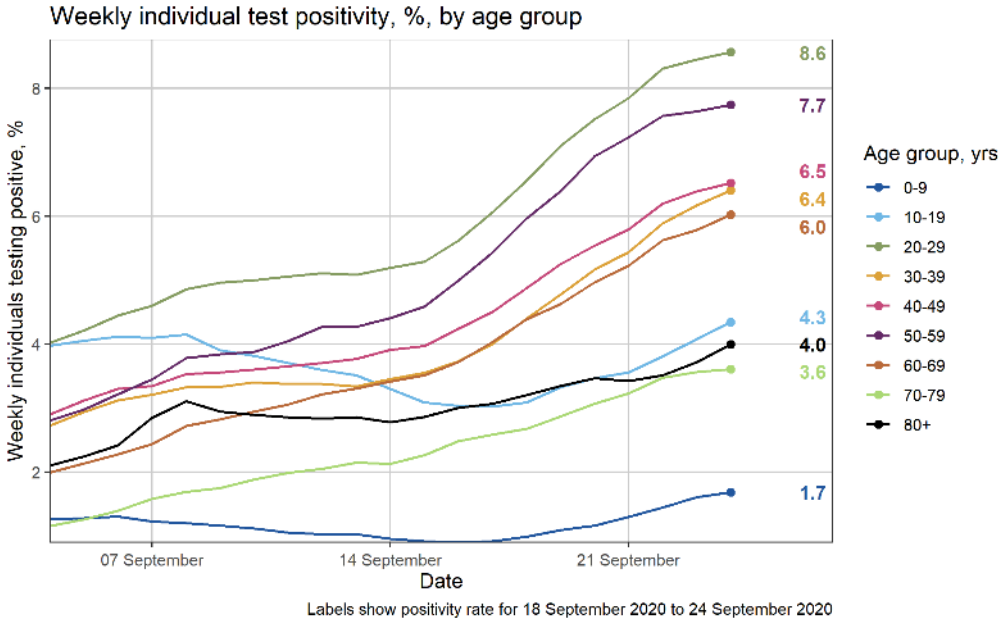
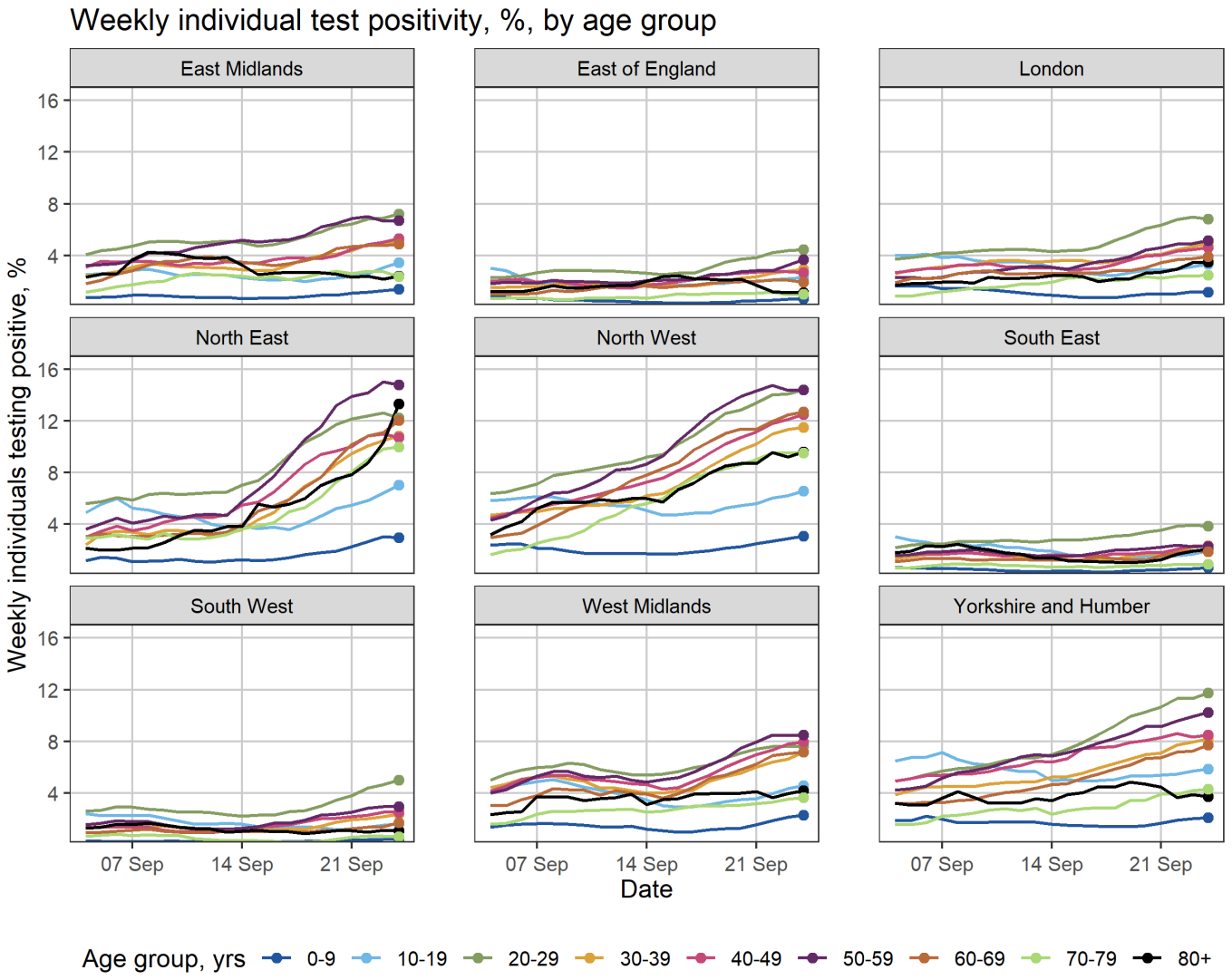


Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 24 September 2020

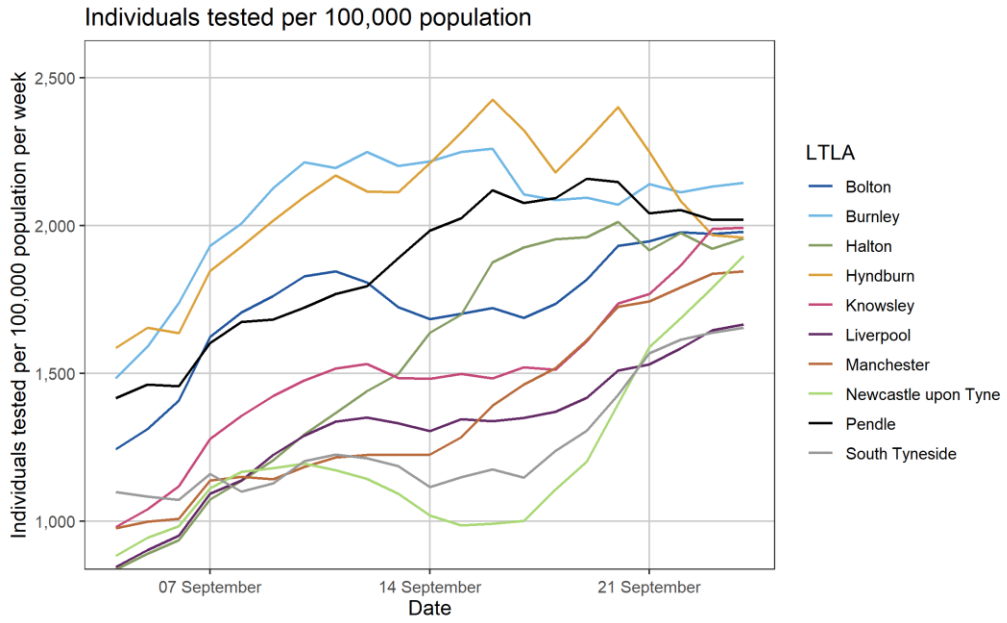


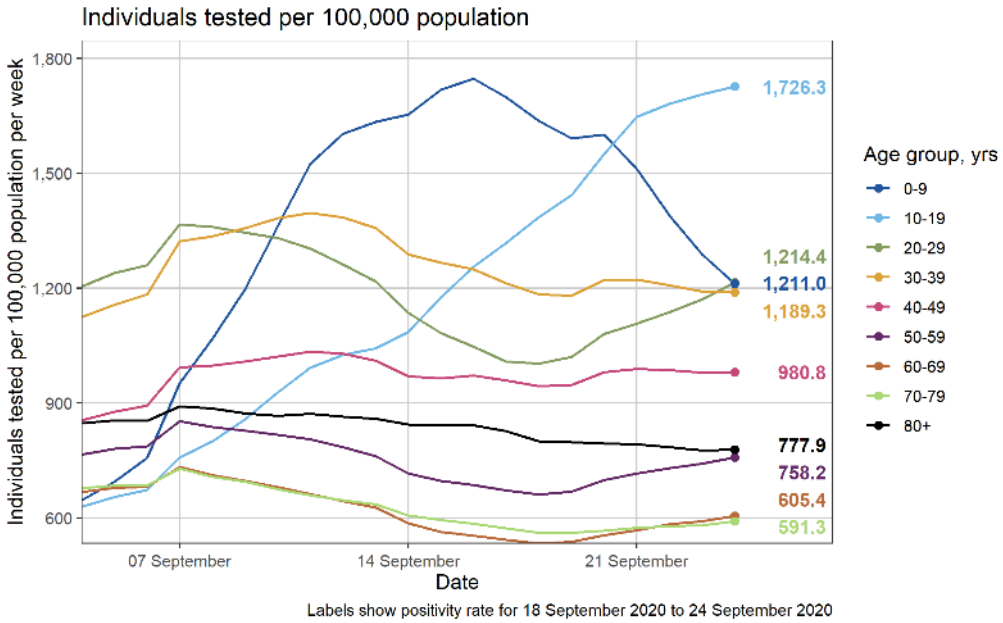


Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 24 September 2020

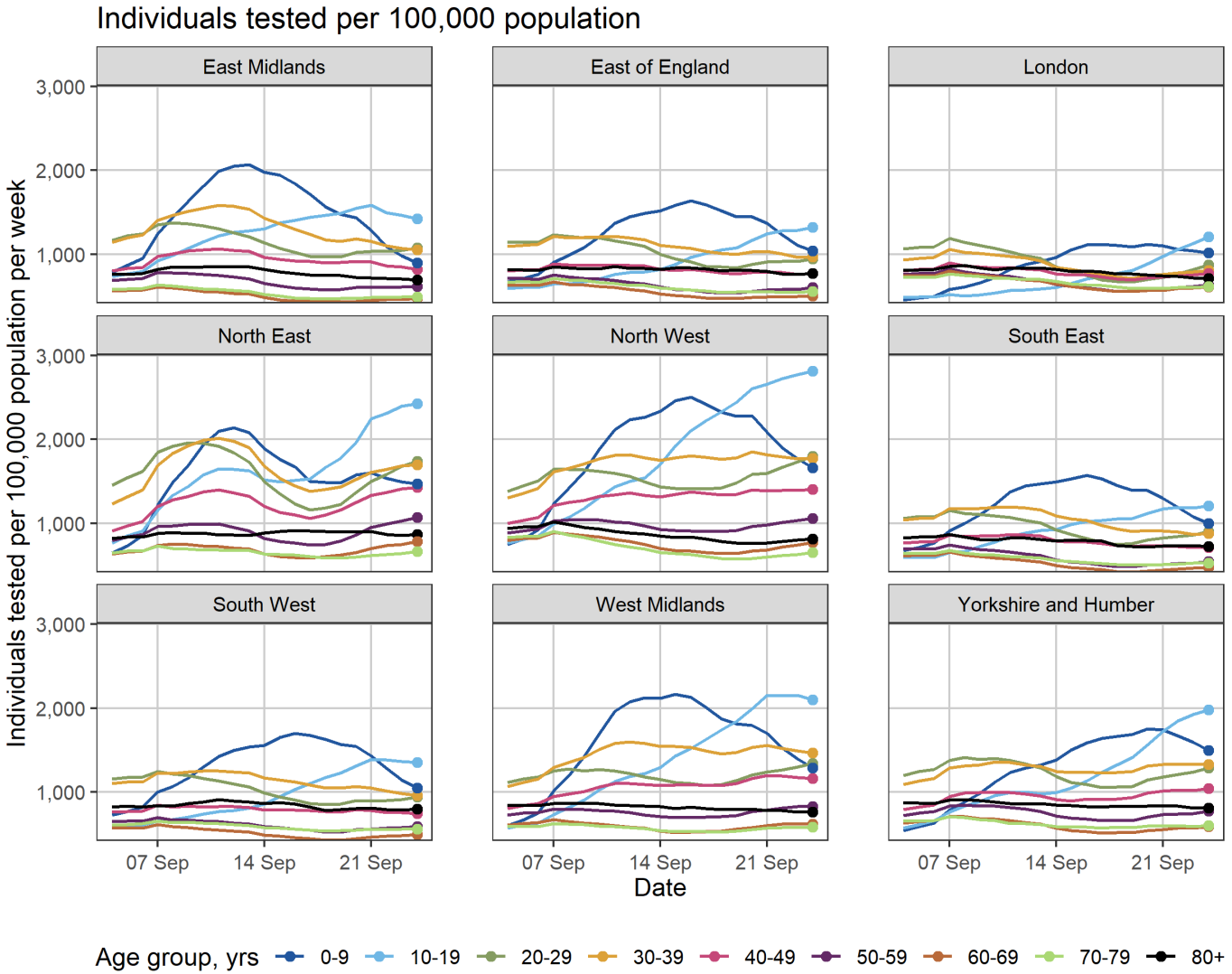


Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 24 September 2020

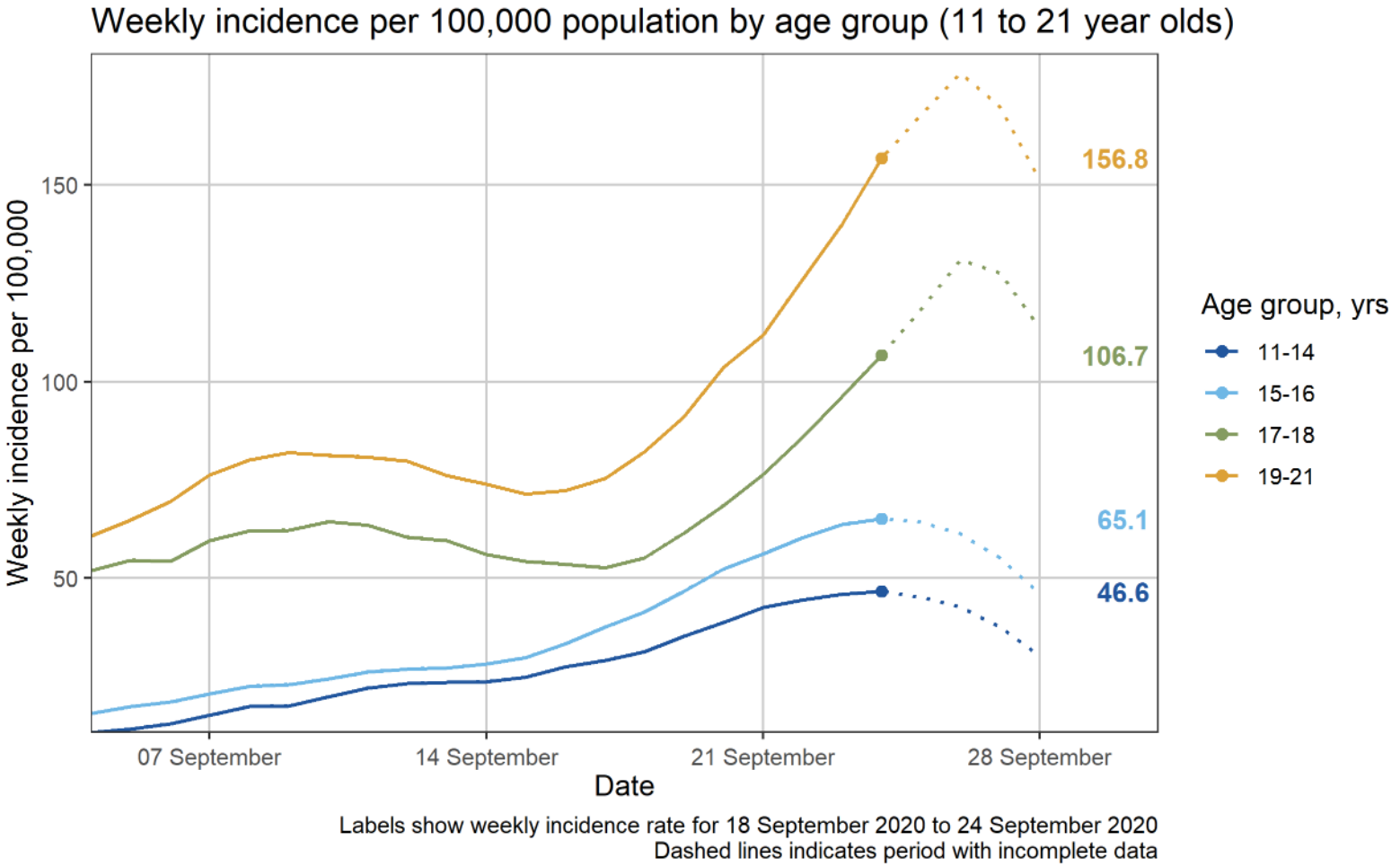




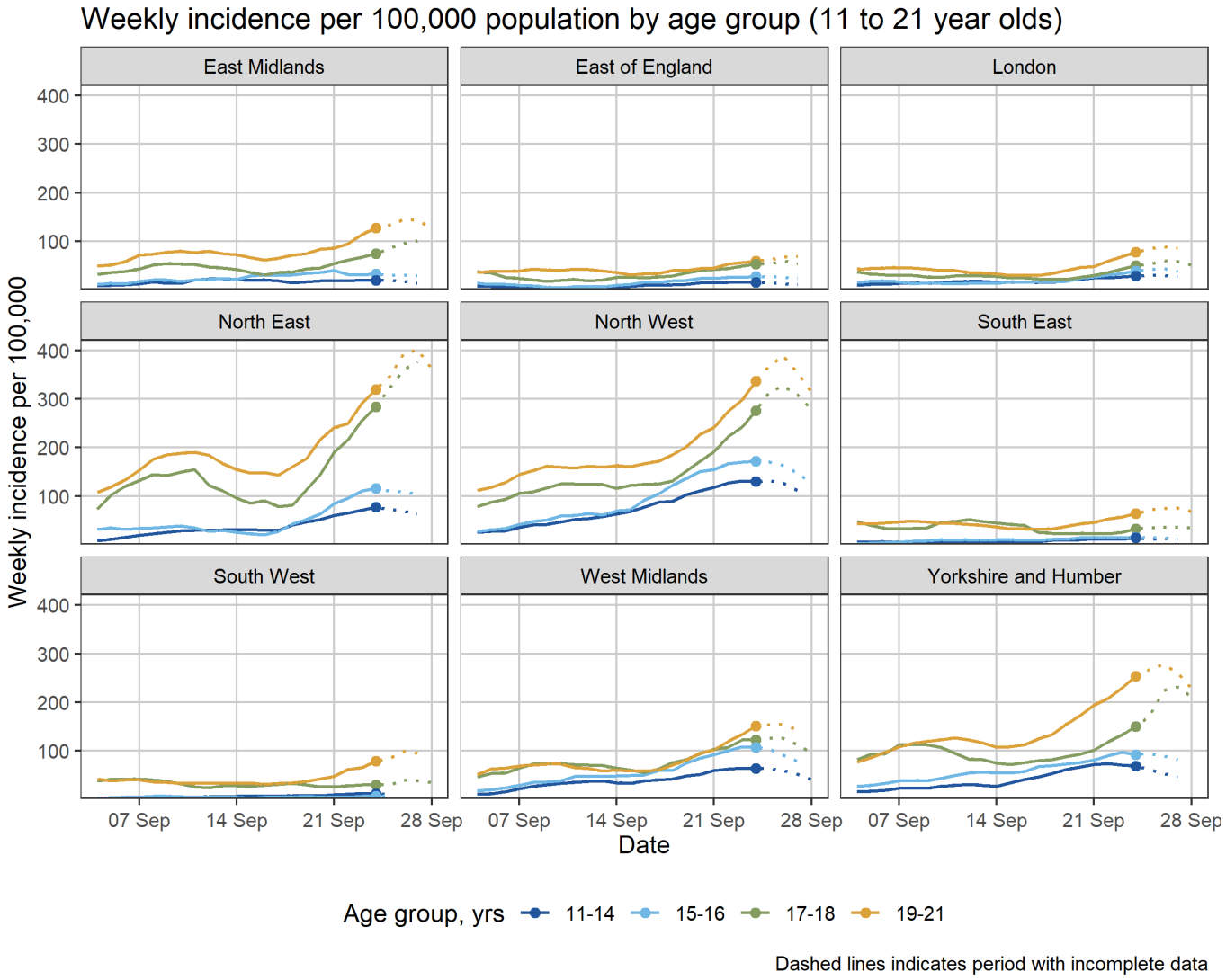
Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 24 September 2020



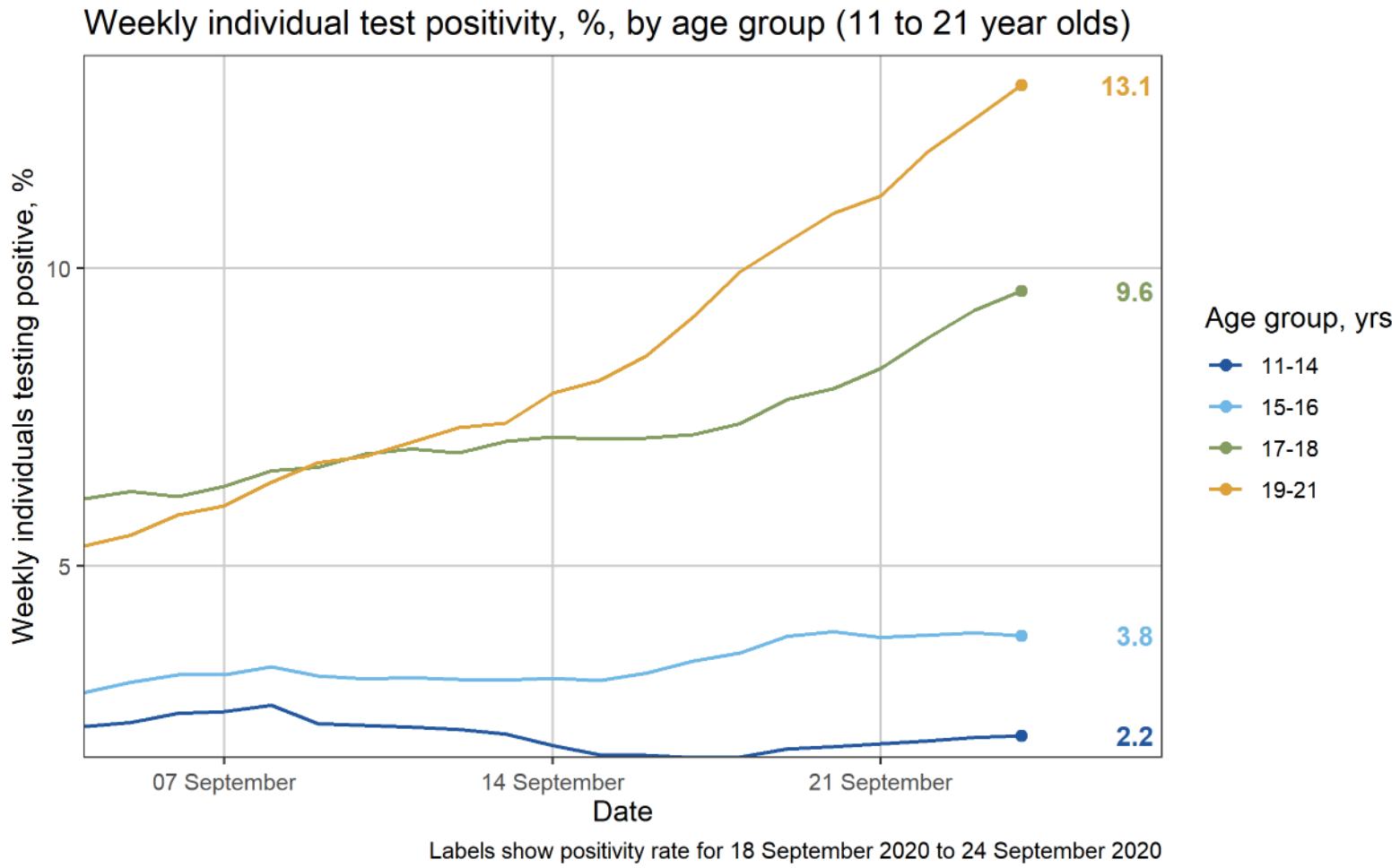
Incidence rate across both pillars 1 and 2 (weekly) – young people
Data up to the 24 September 2020



Incidence rate across both pillars 1 and 2 (weekly) – young people
Data up to the 24 September 2020



Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – young people
Data up to the 24 September 2020



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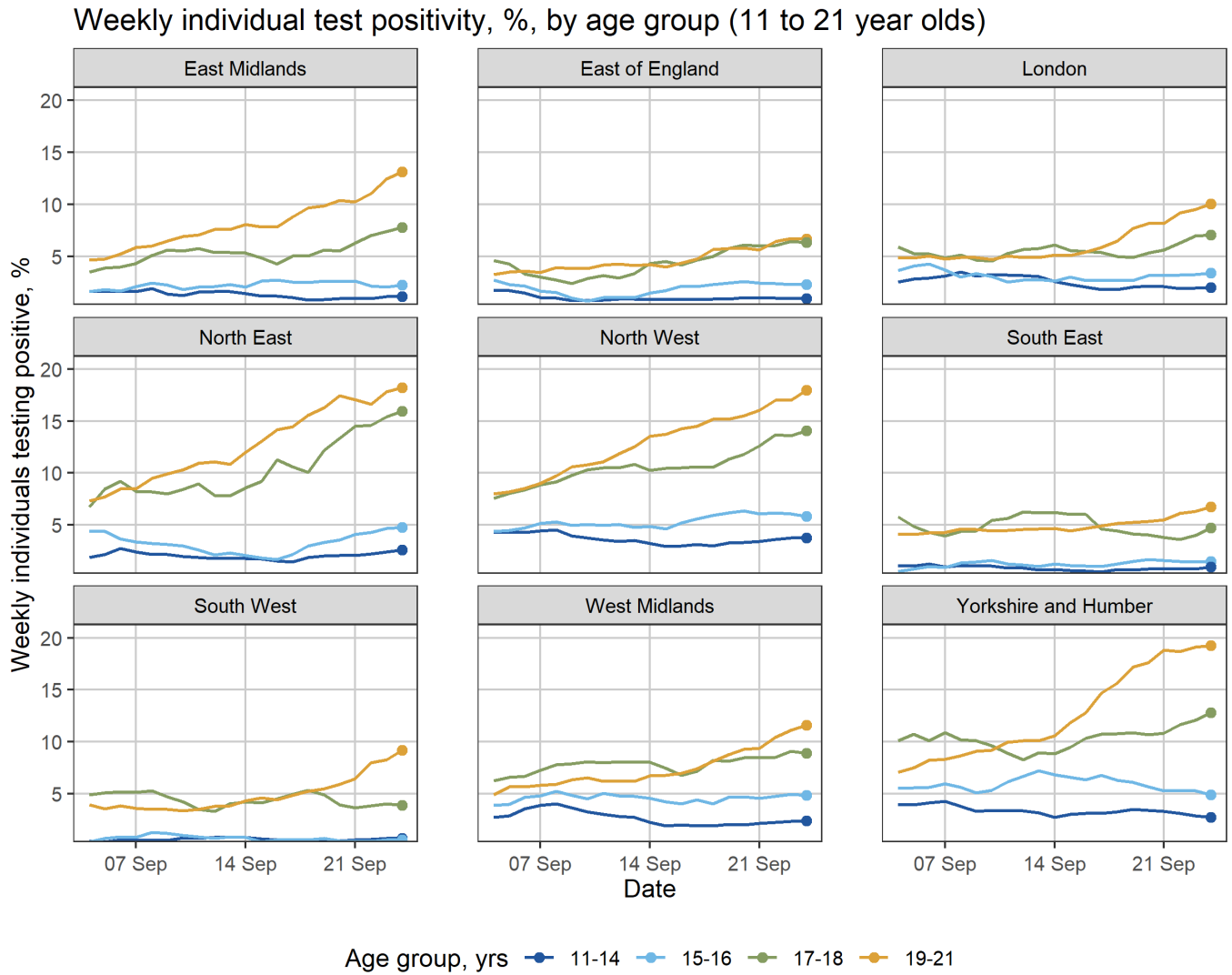
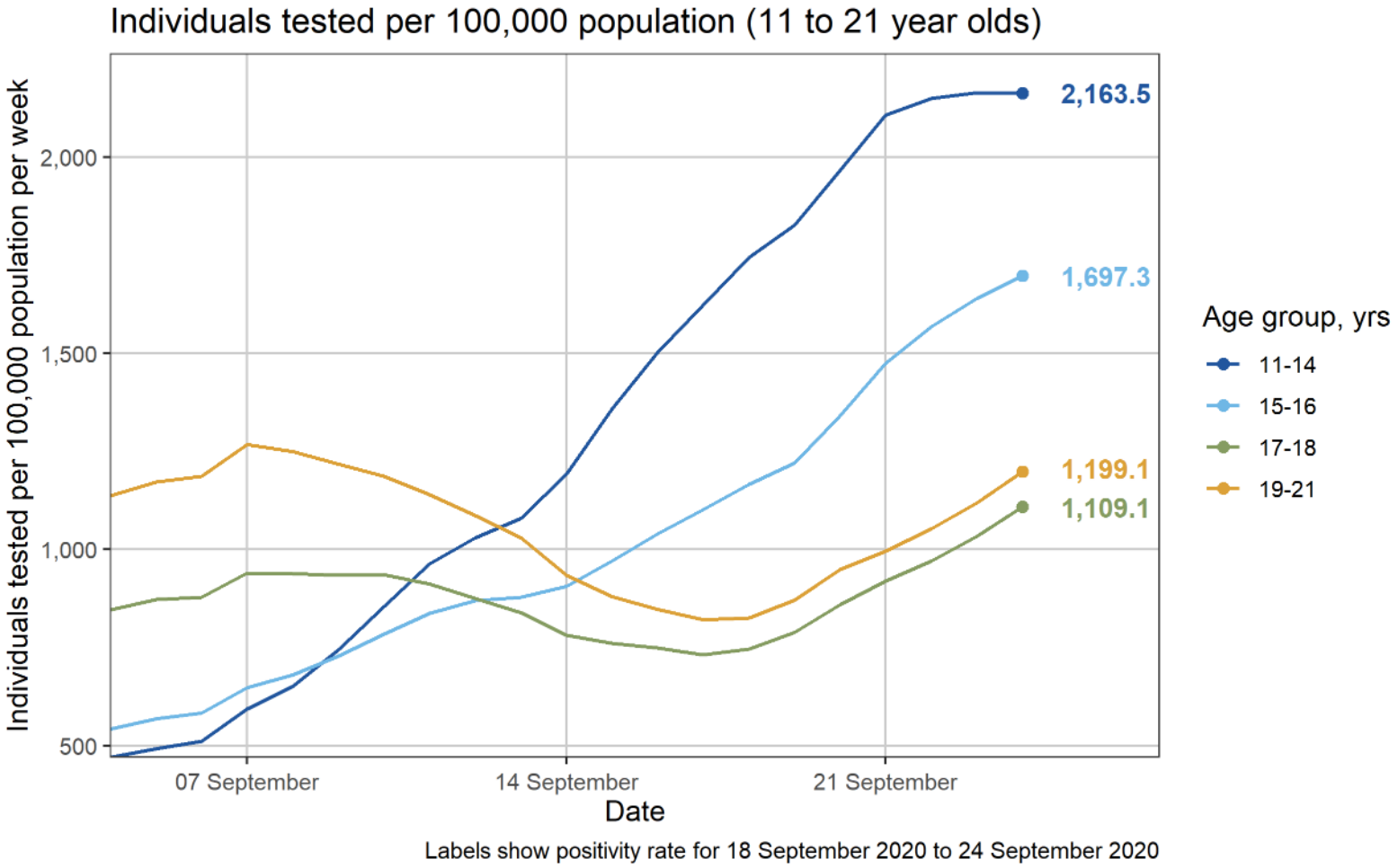
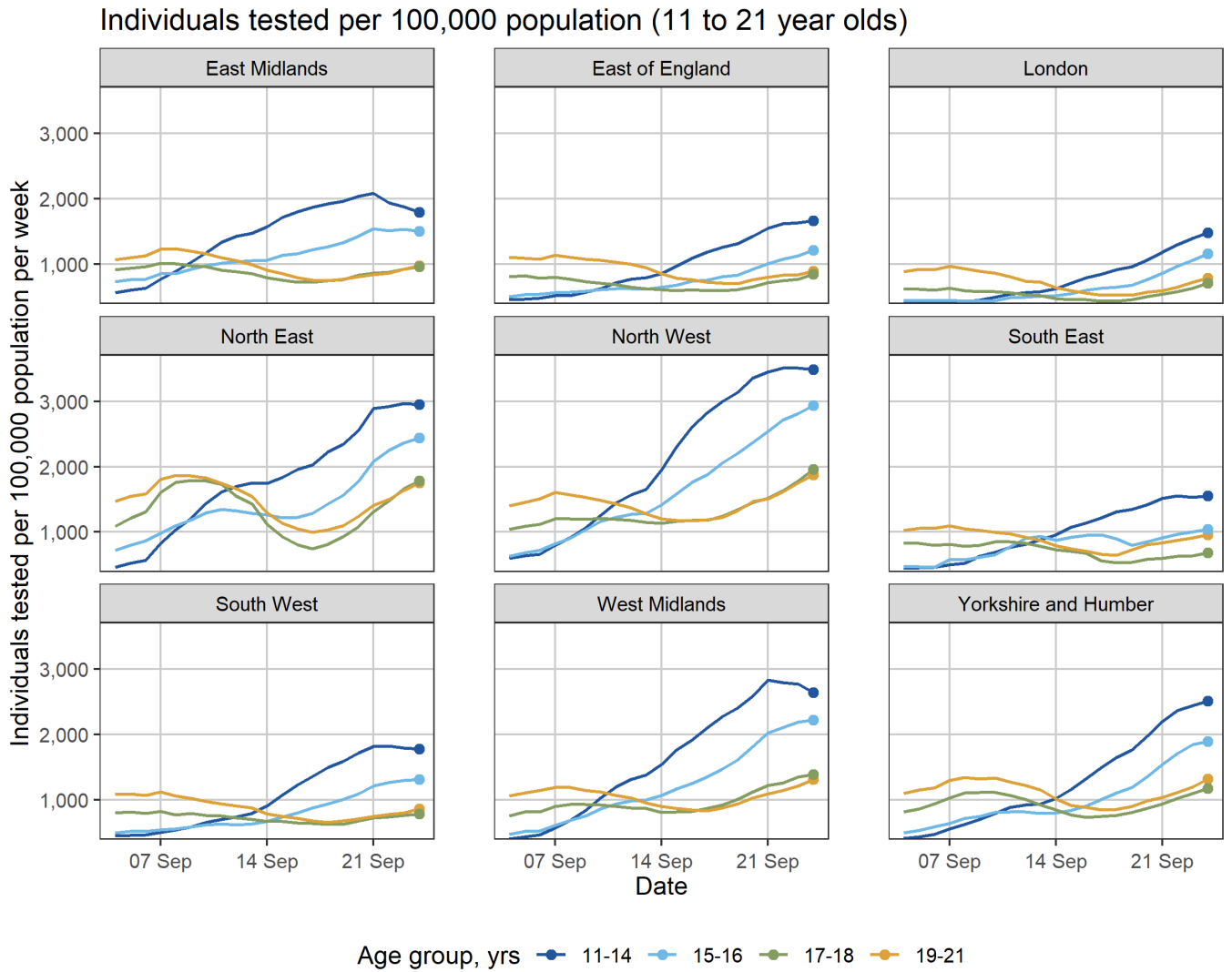


Individuals tested across both pillars 1 and 2 (weekly) – young people
Data up to the 24 September 2020



Individuals tested across both pillars 1 and 2 (weekly) – young people
Data up to the 24 September 2020



Percentage prevalence of COVID-19 across England and NHS regions - table

Data generated 25 September 2020 by PHE Joint Modelling Cell

Methodology

The percentage prevalence of COVID-19 infections in the regional populations are rated using the following scale:

- Low prevalence: less than 0.5%
- Medium prevalence: 0.5% to, but not including, 2%
- High prevalence: 2% and above.

Incidence estimates have been generated by the Cambridge real-time model on 04 September 2020, using data up to 01 September 2020. The previous 10 days of incidence have been summed to provide an estimate for prevalence.

All prevalence estimates are reported as percentages, the values in parentheses represent the 5th and 95th percentiles respectively.

	18/09/2020	25/09/2020	02/10/2020
England	0.368 (0.319, 0.423)	0.472 (0.399, 0.559)	0.605 (0.499, 0.74)
North East and Yorkshire	0.232 (0.178, 0.301)	0.286 (0.208, 0.391)	0.352 (0.242, 0.507)
North West	0.581 (0.455, 0.742)	0.734 (0.547, 0.985)	0.927 (0.658, 1.308)
Midlands	0.131 (0.1, 0.171)	0.139 (0.1, 0.191)	0.148 (0.101, 0.213)
East of England	0.552 (0.373, 0.795)	0.8 (0.502, 1.242)	1.16 (0.675, 1.94)
London	0.549 (0.413, 0.742)	0.664 (0.473, 0.95)	0.803 (0.542, 1.217)
South East	0.401 (0.283, 0.564)	0.535 (0.351, 0.806)	0.713 (0.434, 1.152)
South West	0.147 (0.09, 0.235)	0.176 (0.098, 0.309)	0.21 (0.107, 0.407)

Further details on the Cambridge real-time model can be found https://www.mrc-bsu.cam.ac.uk/tackling-covid-19/nowcasting-and-forecasting-of-covid-19/

Percentage prevalence of COVID-19 across England and NHS regions - charts

Data generated 25 September 2020 by PHE Joint Modelling Cell

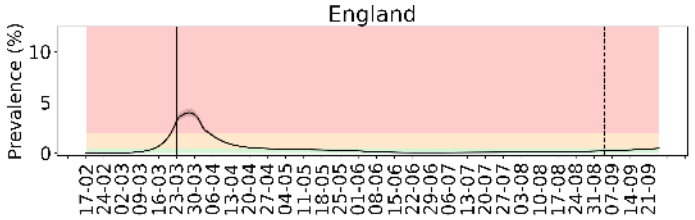
Incidence estimates have been generated by the Cambridge real-time model on 04 September 2020, using data up to 01 September 2020. The previous 10 days of incidence have been summed to provide an estimate for prevalence.

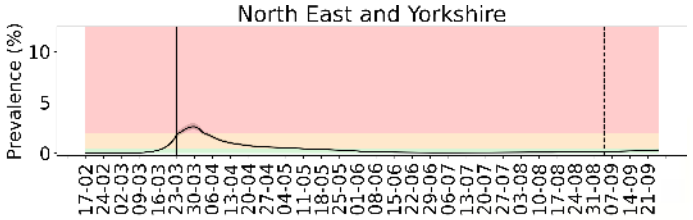
Prevalence estimates set against the prevalence boundaries.

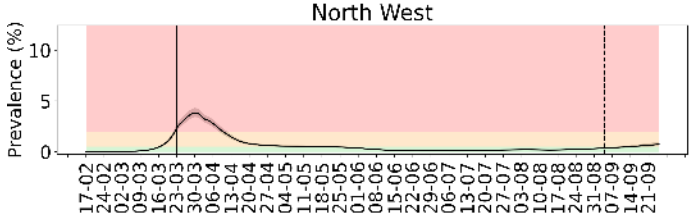
Solid line shows the point prevalence estimates, with the grey boundary covering the 5th to 95th centile range.

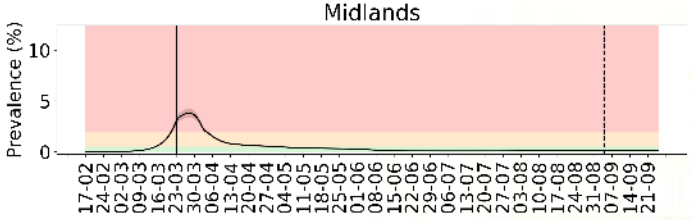
Solid vertical line shows the time of lockdown.

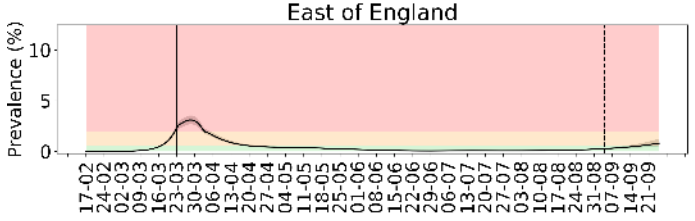
Dashed vertical line is the cutoff date for data that are used to generate the real-time model results.

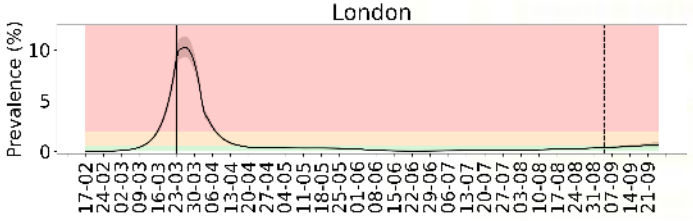


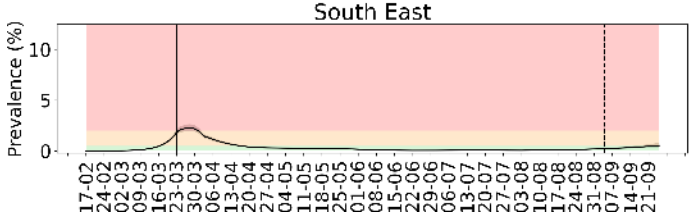


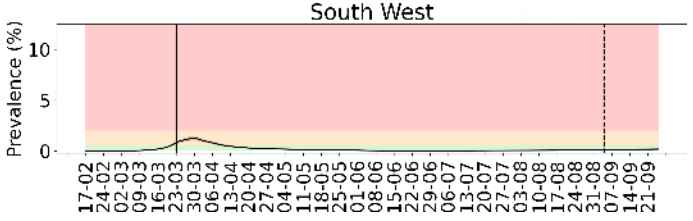








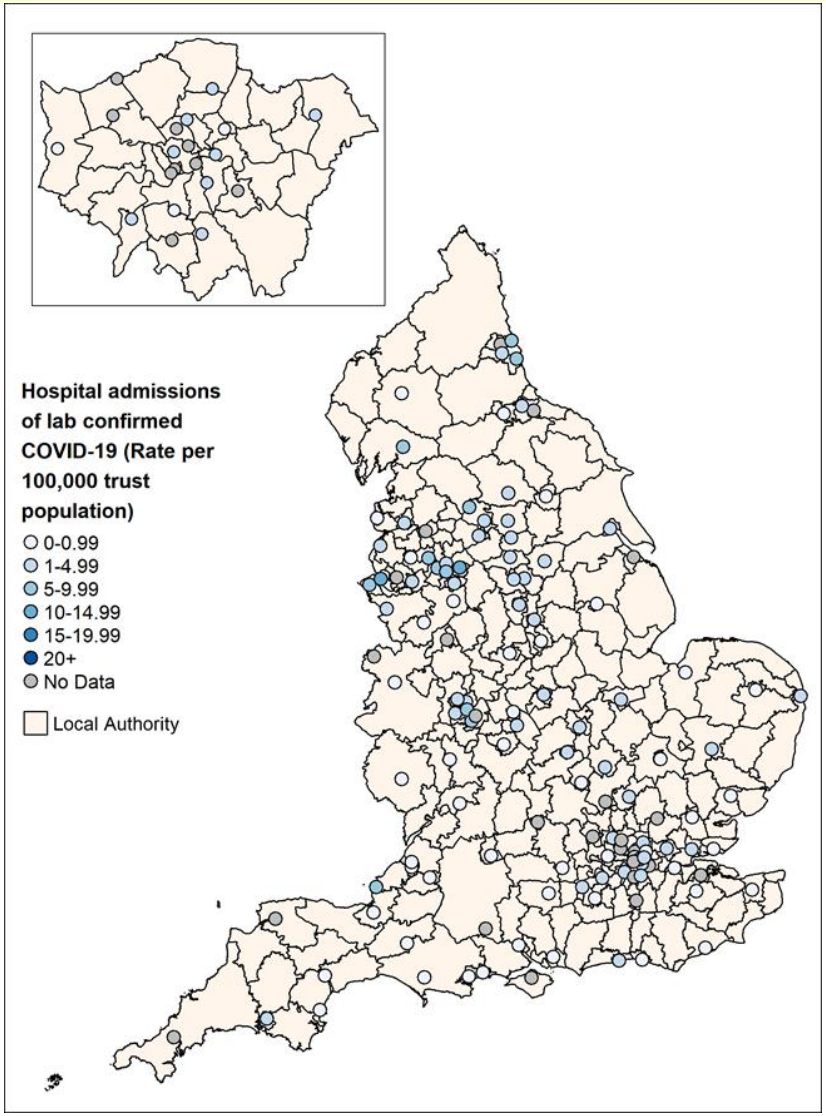


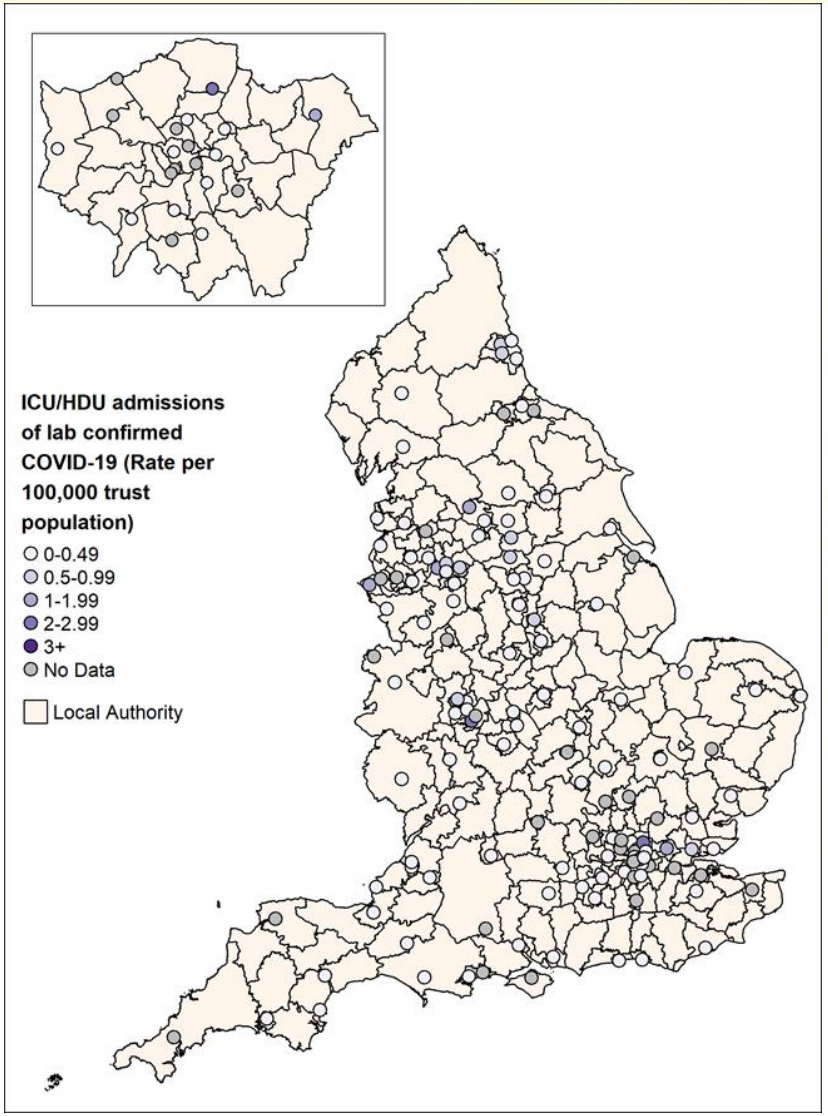


Hospitalisations (week 38)

Weekly ICU/HDU admission rates for laboratory confirmed COVID-19 cases

Weekly hospitalisation rates for laboratory confirmed COVID-19 cases

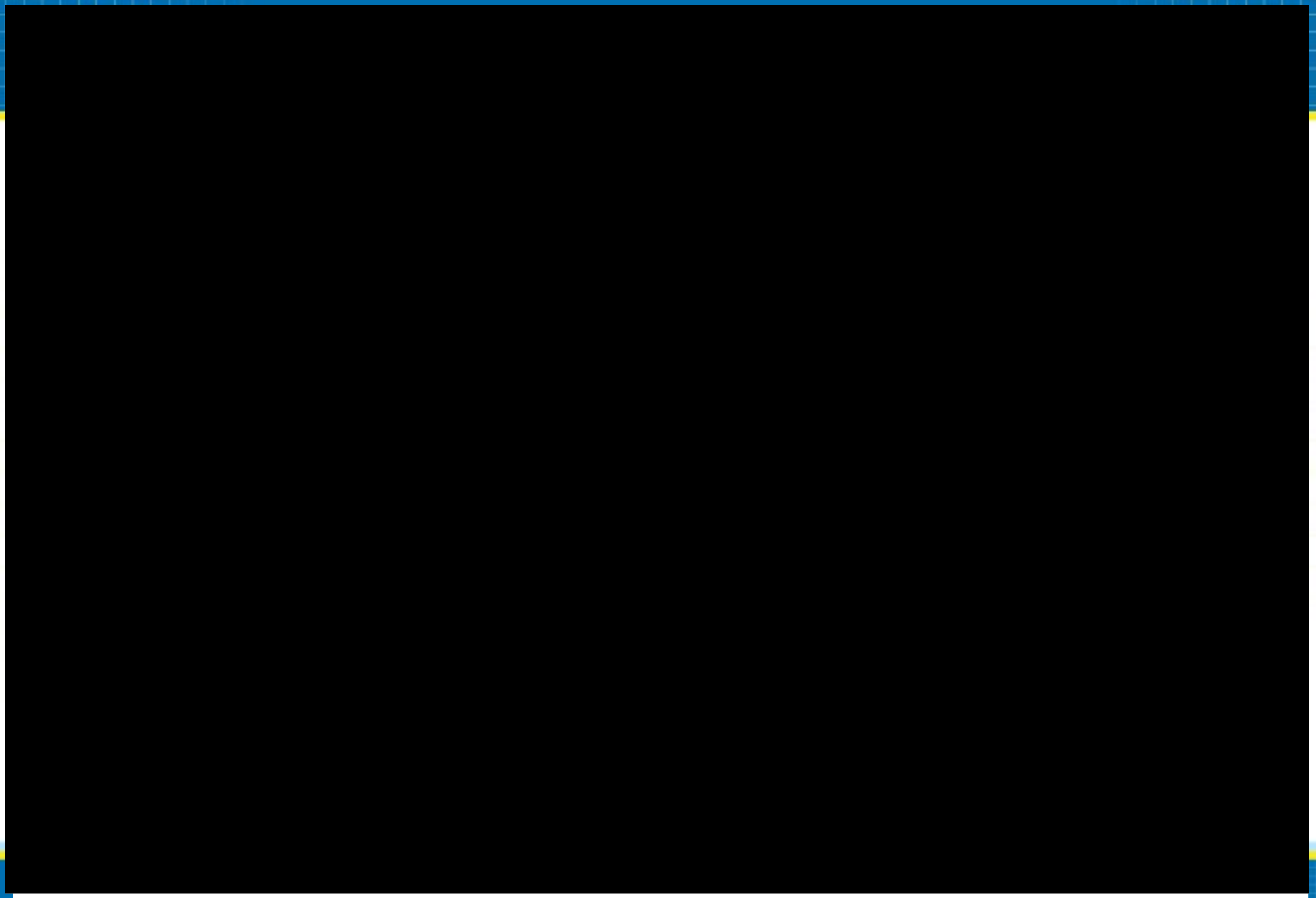




Source: PHE COVID-19 Hospitalisations in England Surveillance System (CHESS)

*Only NHS Acute trusts that have reported **≥1 days** in the past week ; excludes Specialist trusts

ICU/HDU rates must be interpreted with caution as all rates are based on **≤7 cases per Trust, with a majority of Trusts reporting 0 cases



Bed occupancy and capacity - top 15 NHS Trusts with highest number of active COVID-19 cases

Trust	Active COVID-19 Cases	Total Deaths	V Beds Used (%)	O+ Beds Used (%)	O Beds Used (%)
Uni Hosps Birmingham FT	[redacted]	-	68.4%	21.3%	80.2%
Liverpool Uni Hosps FT		-	74.6%	100.0%	90.4%
Manchester Uni FT		-	59.5%	94.9%	97.5%
South Tyneside & Sunderland FT		-	29.0%	10.5%	100.0%
Pennine Acute Hosps		-	56.0%	66.7%	88.3%
Barts Health		-	79.9%	72.7%	91.3%
Wirral Uni Teaching Hosp FT		-	50.0%	?	44.8%
The Newcastle Upon Tyne Hosps		-	64.6%	20.0%	71.7%
Mid Yorkshire Hosps		-	14.9%	32.3%	84.2%
Leeds Teaching Hosps		-	52.3%	75.0%	50.0%
Tameside & Glossop Integrated		-	60.0%	?	86.6%
Bolton FT		-	61.9%	?	90.2%
Barking, Havering & Redbridge		-	73.1%	10.0%	92.8%
Uni Hosps of Morecambe Bay FT		-	41.4%	7.7%	?
Sheffield Teaching Hosps FT		-	43.8%	?	89.0%

Key: 0 to <50% | 50% to <70% | 70% to <100% | 100%

Source: NHS Foundry – 29/09/2020

NHS 111 potential COVID-19

NHS 111 COVID-19 calls, alarms over the past 7 days (22 September 2020 to 28 September 2020)

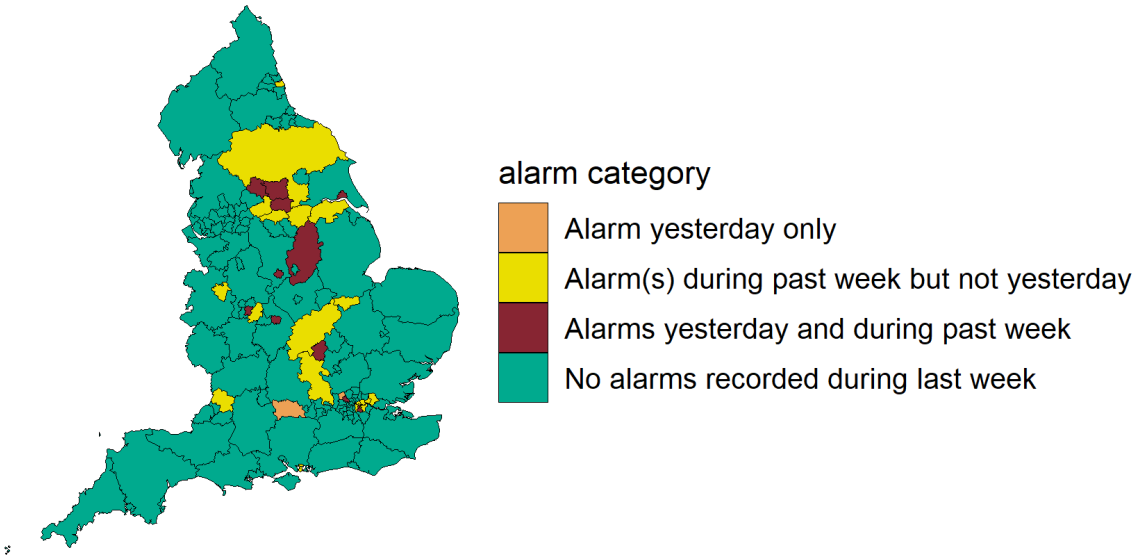
The alarms are intended to give early warning of local authorities where rates are higher than the national average. Due to a lack of historical data it is not yet possible to take into account any systematic bias which may result in one authority consistently recording above average rates independently of the underlying incidence of COVID-19.

Area	Number of alarms in past 7 days	Alarm category
Harrow	[redacted]	Alarm yesterday only
West Berkshire	[redacted]	Alarm yesterday only
Newham	[redacted]	Alarm(s) during past week but not yesterday
Barking and Dagenham	[redacted]	Alarm(s) during past week but not yesterday
Birmingham	[redacted]	Alarm(s) during past week but not yesterday
Buckinghamshire	[redacted]	Alarm(s) during past week but not yesterday
Greenwich	[redacted]	Alarm(s) during past week but not yesterday
Tower Hamlets	[redacted]	Alarm(s) during past week but not yesterday
Kirklees	[redacted]	Alarm(s) during past week but not yesterday
Peterborough	[redacted]	Alarm(s) during past week but not yesterday
Portsmouth	[redacted]	Alarm(s) during past week but not yesterday
South Tyneside	[redacted]	Alarm(s) during past week but not yesterday
Barnsley	[redacted]	Alarm(s) during past week but not yesterday
Doncaster	[redacted]	Alarm(s) during past week but not yesterday
Havering	[redacted]	Alarm(s) during past week but not yesterday
North Lincolnshire	[redacted]	Alarm(s) during past week but not yesterday
North Yorkshire	[redacted]	Alarm(s) during past week but not yesterday
Northamptonshire	[redacted]	Alarm(s) during past week but not yesterday
South Gloucestershire	[redacted]	Alarm(s) during past week but not yesterday
Southwark	[redacted]	Alarm(s) during past week but not yesterday
Telford and Wrekin	[redacted]	Alarm(s) during past week but not yesterday
Leeds	[redacted]	Alarms yesterday and during past week
Bradford	[redacted]	Alarms yesterday and during past week
Wakefield	[redacted]	Alarms yesterday and during past week
Kingston upon Hull, City of	[redacted]	Alarms yesterday and during past week
Milton Keynes	[redacted]	Alarms yesterday and during past week
Nottinghamshire	[redacted]	Alarms yesterday and during past week
Brent	[redacted]	Alarms yesterday and during past week
Coventry	[redacted]	Alarms yesterday and during past week
Derby	[redacted]	Alarms yesterday and during past week
Lewisham	[redacted]	Alarms yesterday and during past week
Sandwell	[redacted]	Alarms yesterday and during past week

NHS 111 COVID-19 calls

The NHS 111 'potential COVID-19' syndromic indicator should be used to monitor trends in calls rather than numbers. These data are based on potential COVID-19 symptoms reported by callers and are not based on outcomes of tests for coronavirus.

NHS 111 COVID-19 calls, alarms over past 7 days (22/09/20 - 28/09/

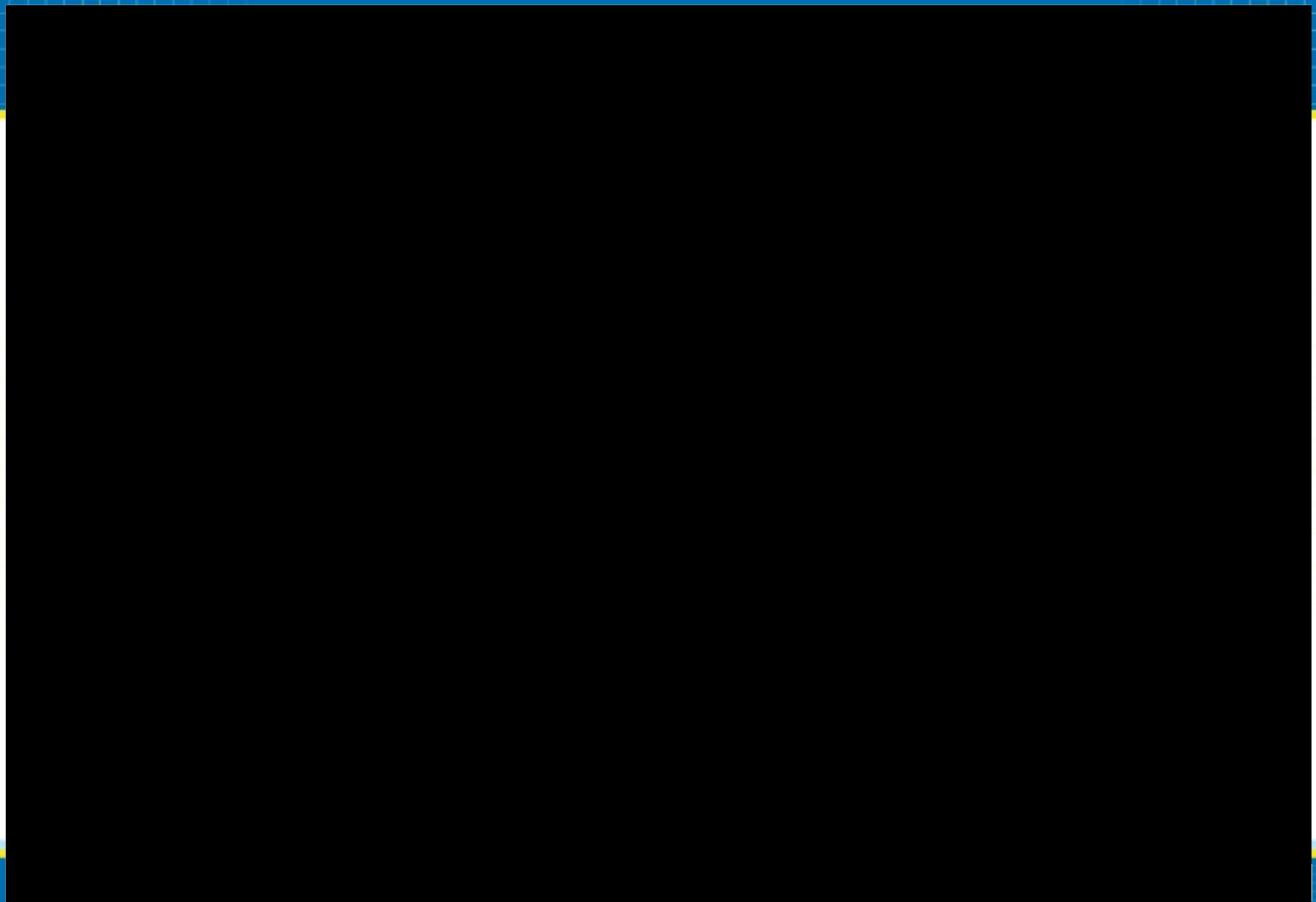


Alarm methodology

Populations are based on ONS estimates for mid-2019. Rates are number of calls per 100,000 people.

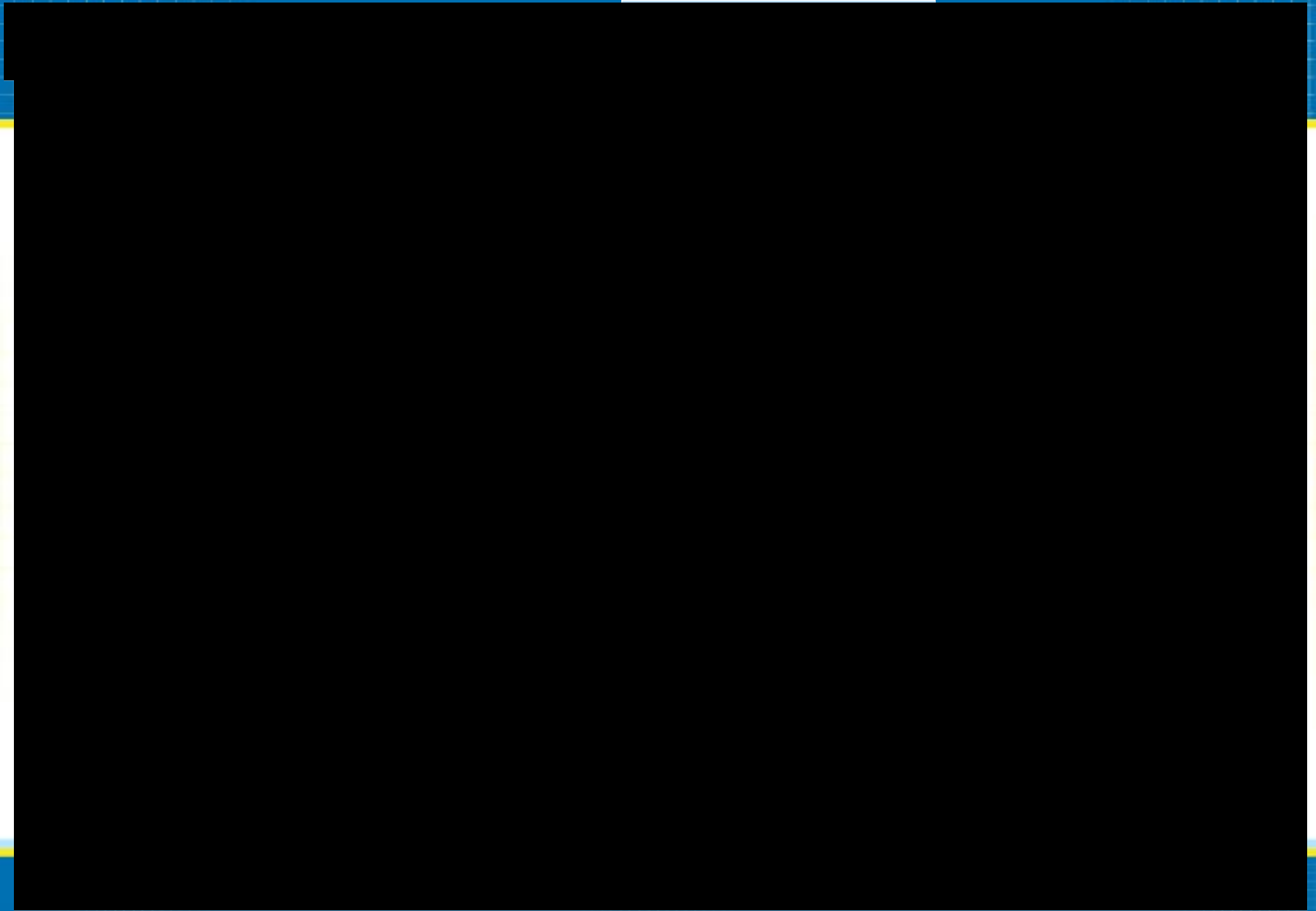
The 'expected' number of calls in a local authority is based on the average rate across England each day. The threshold is calculated as expected calls + 3 * sqrt(expected calls) i.e. assuming data follows a Poisson distribution.

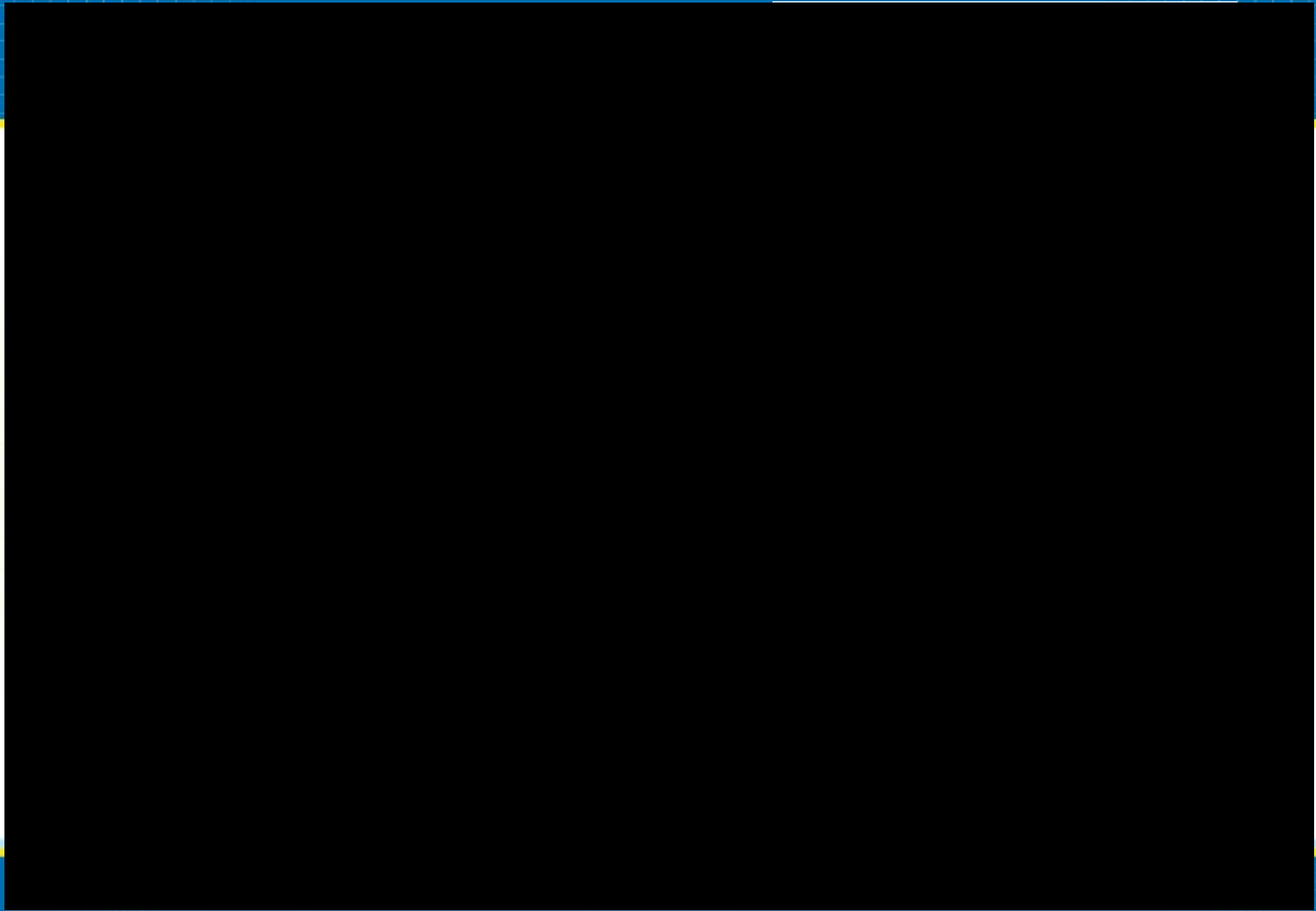
An alarm is generated if call numbers are above the threshold.



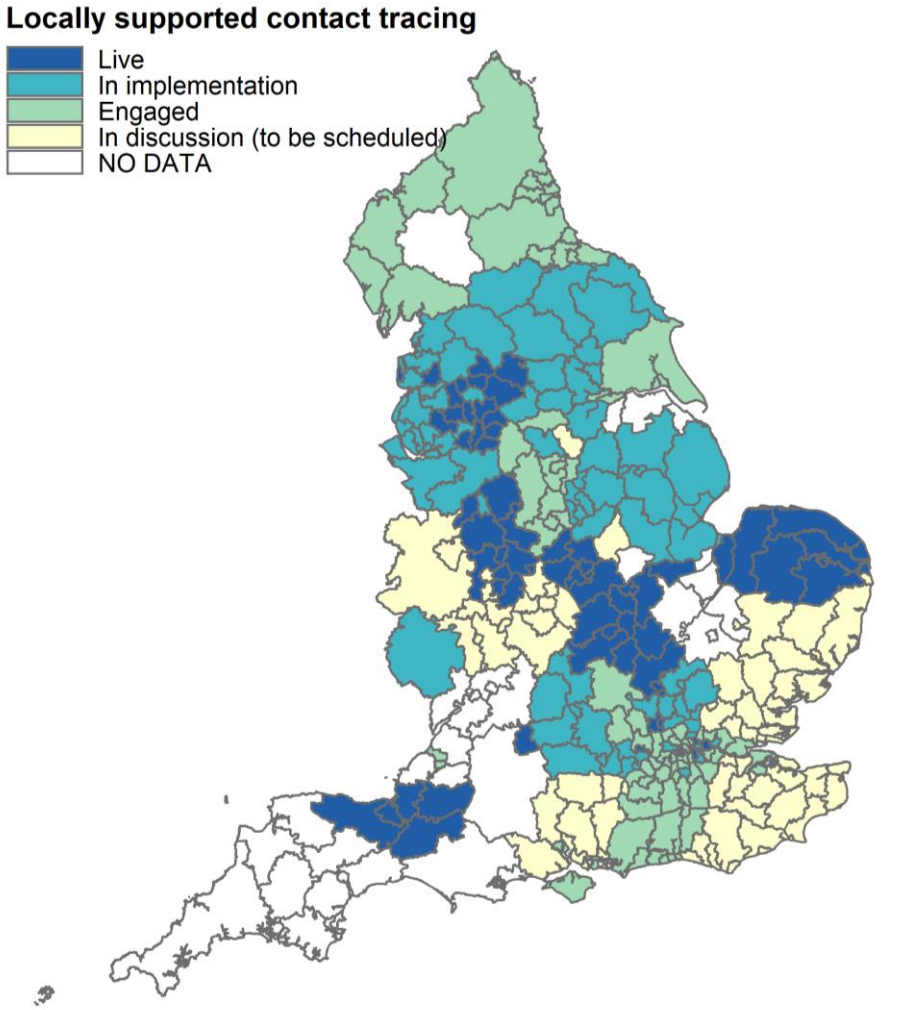
Care homes
report changes from 20 July 2020

- **From 20 July 2020**, **this report uses a revised dataset which includes all reports recorded as outbreaks or clusters and is not deduplicated**; a second outbreak in the same care home will be shown (previously these were removed). It is no longer appropriate to deduplicate care home outbreaks because this risks not showing recent repeat outbreaks in care homes
- Some outbreaks are recorded in HPZone as being in care homes when in fact they are in another similar institution. The report **now only includes those we recognise are in CQC-registered care homes** now possible due to changes in data entry at a local level
- All reports to PHE are shown because this is the earliest signal that there may be a ‘true’ outbreak, but also shown are those with at least 2 symptomatic individuals (at the time of first report) to give an indication of those more likely to be ‘true’ outbreaks. Other work is underway linking test results to outbreaks which will supplement this analysis
- There are a small number of reports of outbreaks where the number of symptomatic individuals is recorded as unknown (shown by PHE centre) – work continues to improve the data





Locally supported contact tracing
Data extracted 28 September 2020



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Contains National Statistics data © Crown copyright and database right 2020

Sources of data and signposting

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
- COVID-19: nowcast and forecast

Published reports

- Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report
- COVID-19: number of outbreaks in care homes – management information

Data sources

Second Generation Surveillance System (SGSS)

Data as of 28 September 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 incidence of infection and testing rates.

PHE Unified Sample Dataset (USD)

Data as of 29 September 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 29 September 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.