COVID-19 SITUATIONAL AWARENESS

SUMMARY

MAIN REPORT
16 February 2021

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
- Case Rate and Case rate change maps
- High level summary
- Case rates, ███████████████, positivity and testing

>   **Please note:**
>
>   **13/10/20 -** 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.
>
>   **20/12/20** - due to the increasing use of asymptomatic mass testing with lateral flow devices (LFD), positivity and testing rates reported in the national situational awareness reports are now only presented for PCR tests. This change has been made retrospectively, and rates reported here for earlier time periods will differ from those reported previously. Case rates are unaffected, and will include cases confirmed by PCR and/or LFD test. Data flows are being developed to enable reporting of testing and positivity by test type in early 2021.

- ███████
- Prevalence
- Hospitalisation
- NHS 111 potential COVID-19
- Outbreak reports
  - Care homes
- Mortality

A separate Appendix contains Local Authority maps for case rates, positivity, testing, mortality and contact tracing.

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

National context
(From 11 February 2021 Week 6 Report)

Overall case numbers and Pillar 1 and 2 positivity continued to decrease in week 5. Decreases were seen in all age groups for case rates and positivity in week 5. Decreases were noted in case rates and positivity in all PHE Centres.

As of 09:00 on 9 February 2021, a total of 3,480,147 have been confirmed positive for COVID-19 in England under Pillars 1 and 2.

- 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, however, for the most recent week results for more samples are expected therefore this should be interpreted with caution.

- Positivity is calculated as the number of individuals testing positive during the week divided by the number of individuals tested during the week based on PCR testing.

- As of 16 November 2020, the methodology for allocating geographies for cases has been updated to include alternate postcodes where applicable. This change has been applied for cases reported since 1 September 2020. Cases reported prior to 1 September 2020 will not be allocated alternate postcode geographies.

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

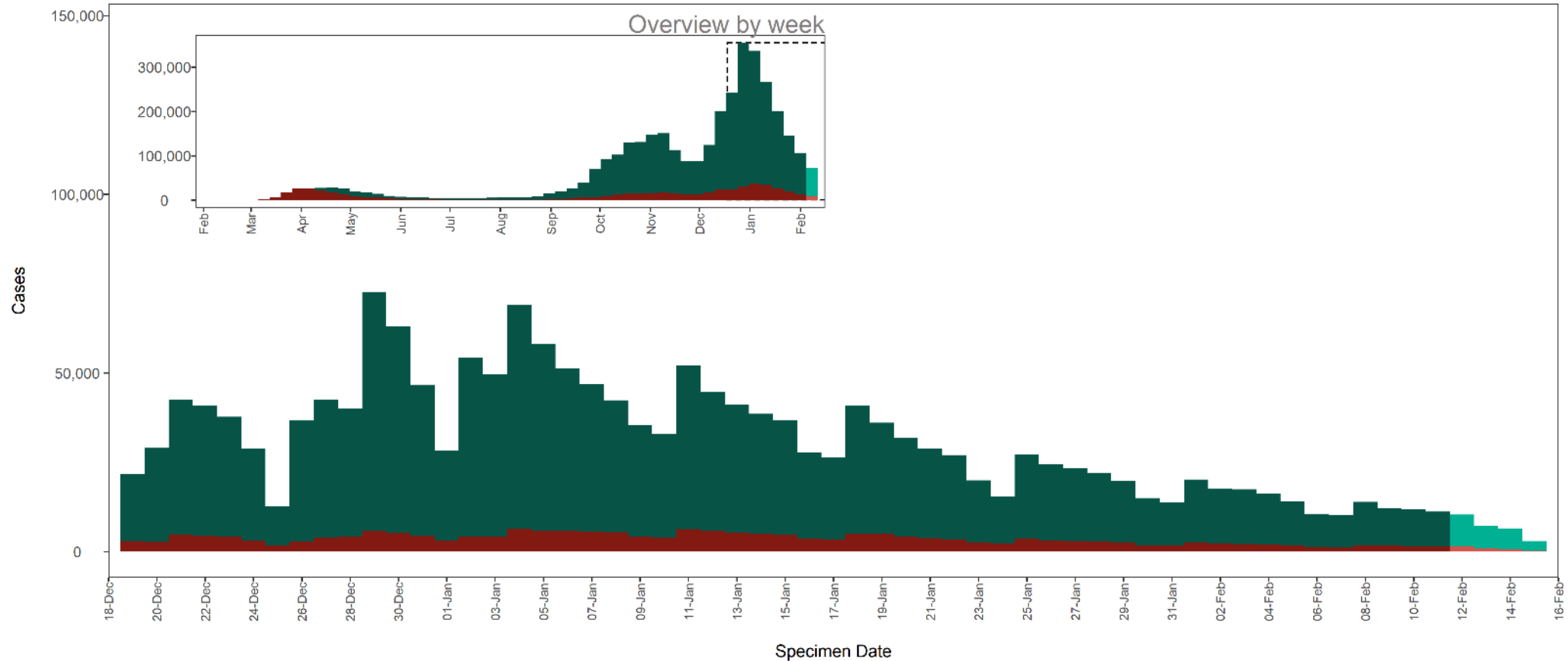Case rates have been calculated using mid-2019 ONS population estimates

Figure 1: Laboratory confirmed COVID-19 cases tested under Pillar 1 and Pillar 2, based on sample week with overall weekly positivity for Pillars 1 and 2 (%)
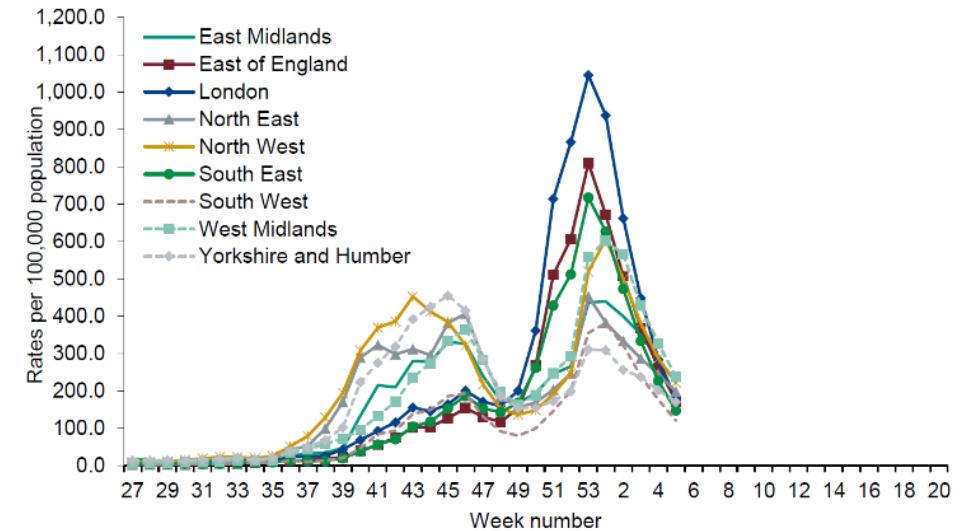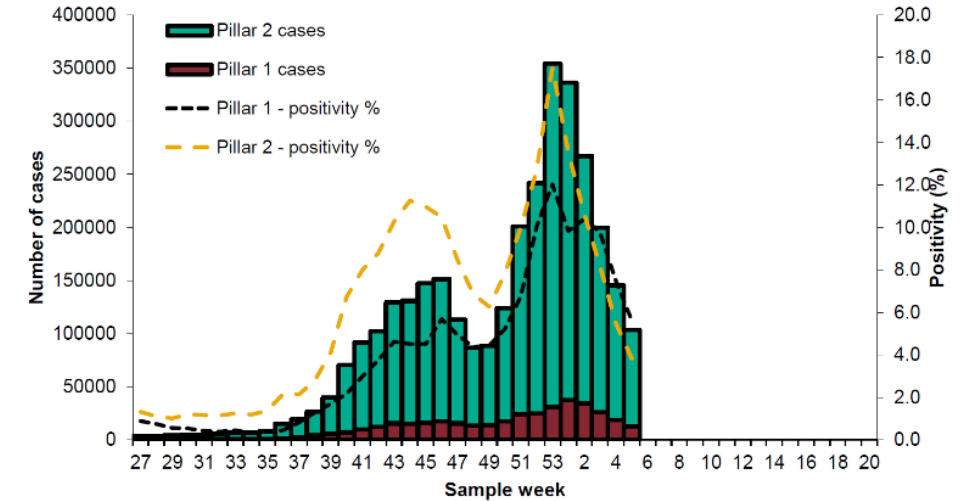
National context

England confirmed cases - epidemic curve*

Previous two months by day

*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.
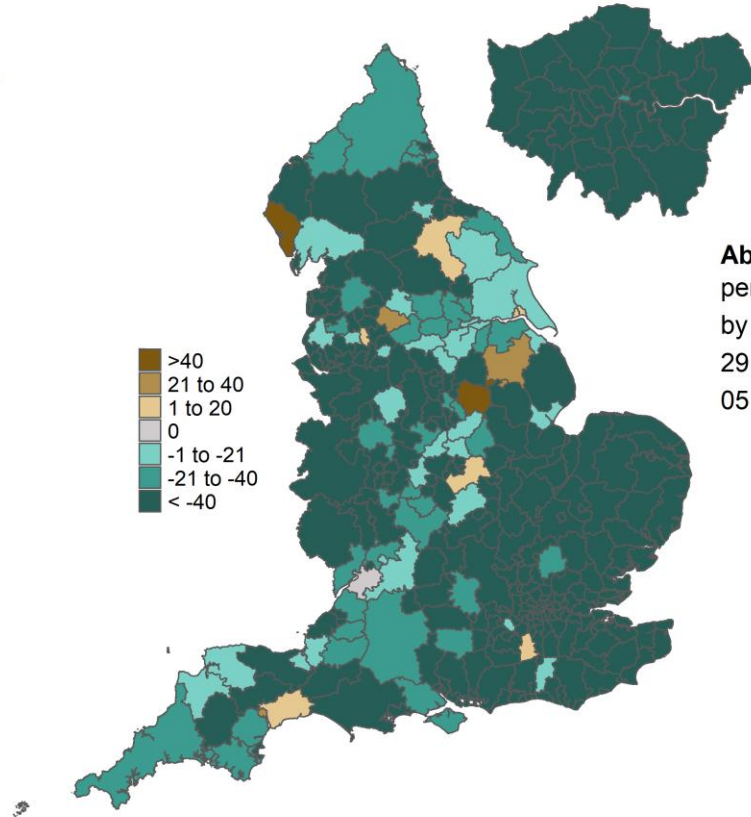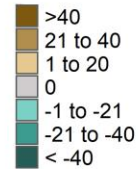Value labels are for combined pillar 1 and pillar 2 cases.

Produced by the Outbreak Surveillance Team, Public Health England.

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Case Rates - Geographical spread of COVID-19 in England

Geographical spread of COVID-19 in England

Weekly case rates per 100,000 population by local authority 05 Feb to 11 Feb 2021
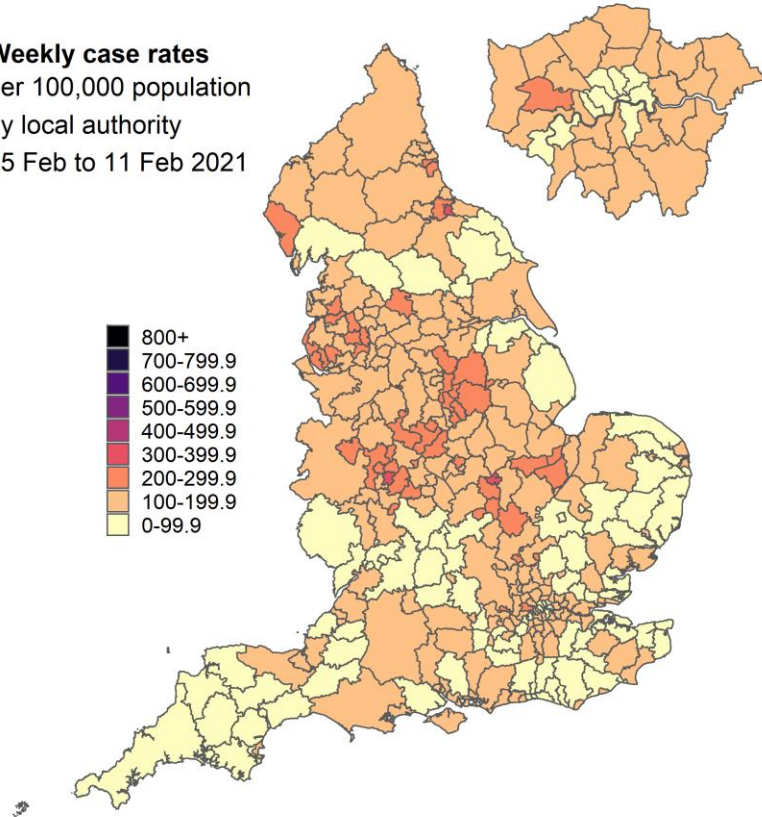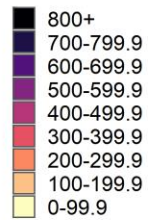
Legend:
- 800+
- 700-799.9
- 600-699.9
- 500-599.9
- 400-499.9
- 300-399.9
- 200-299.9
- 100-199.9
- 0-99.9

Absolute case rate change per 100,000 population by local authority between 29 Jan to 04 Feb 2021 and 05 Feb to 11 Feb 2021

Legend:
- >40
- 21 to 40
- 1 to 20
- 0
- -1 to -21
- -21 to -40
- < -40

Data from SGSS; Pillar 1 and 2 testing. Figure by Outbreak Surveillance Team, Public Health England.

Contains National Statistics data including 2019 population estimates. Crown copyright and database right 2020

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Case Rates - Geographical spread of COVID-19 in England (aged 60+ years)

Geographical spread of COVID-19 in England (aged 60+ years)

Weekly case rates per 100,000 population by local authority 05 Feb to 11 Feb 2021

800+
700-799.9
600-699.9
500-599.9
400-499.9
300-399.9
200-299.9
100-199.9
0-99.9

Absolute case rate change per 100,000 population by local authority between 29 Jan to 04 Feb 2021 and 05 Feb to 11 Feb 2021

>40
21 to 40
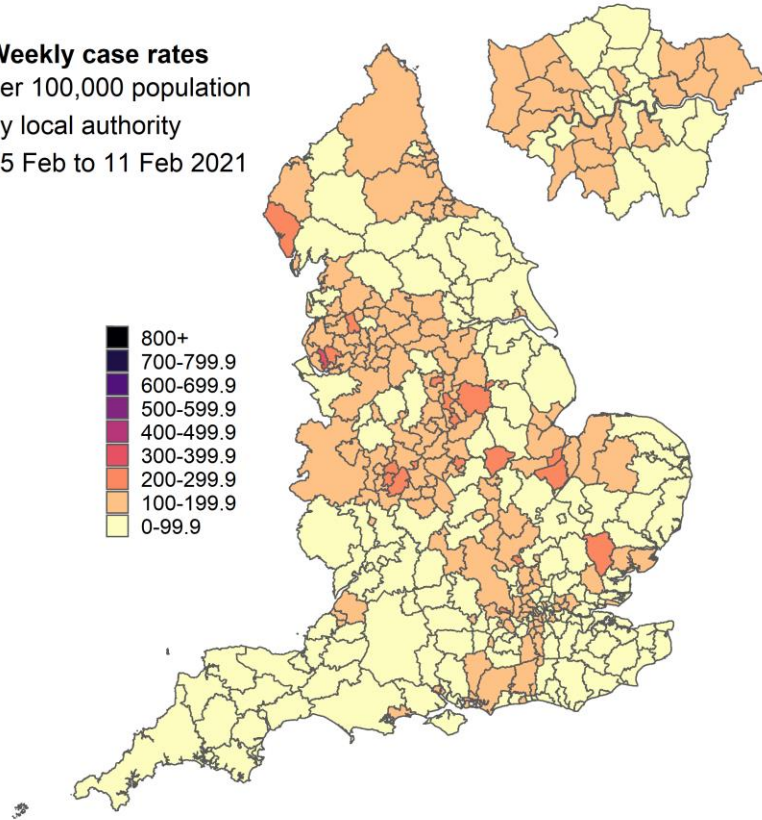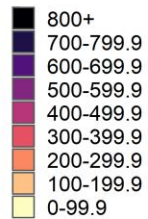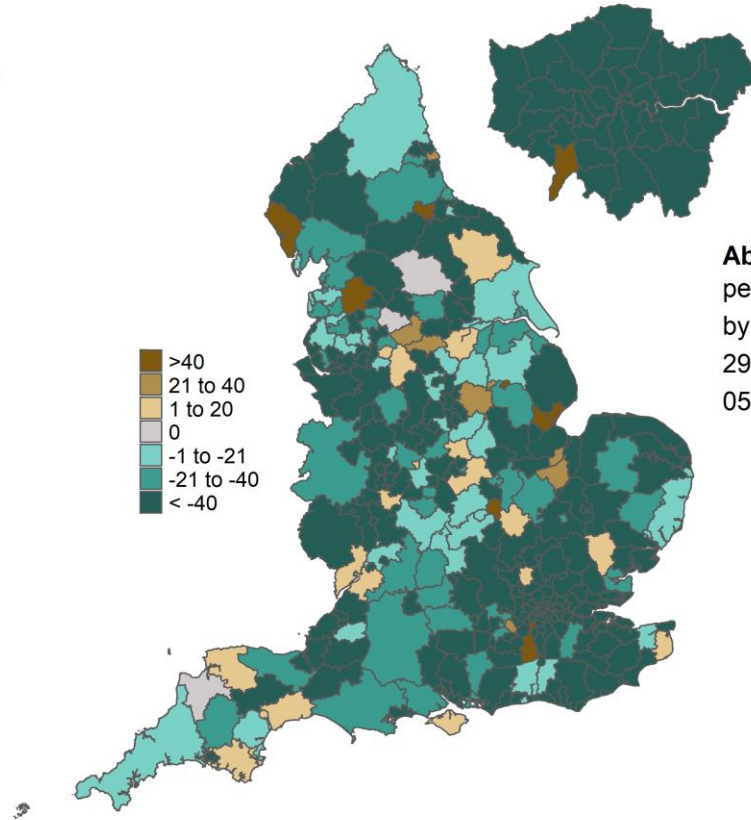1 to 20
0
-1 to -21
-21 to -40
< -40

Data from SGSS; Pillar 1 and 2 testing. Figure by Outbreak Surveillance Team, Public Health England.

Contains National Statistics data including 2019 population estimates. Crown copyright and database right 2020
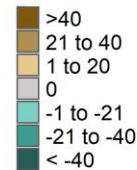
High level summary 1 – PHE Centres
Case rates in 7 days (5 February 2021 to 11 February 2021)

Region	Individuals tested per day per 100,000 population		Percentage individuals test positive		Number of LTLAs by percentage individuals test positive RAG status			Percentage individual cases reporting symptoms		Case rate per 100,000 population, all ages		Number of LTLAs by case rate per 100,000 RAG status			Case rate per 100,000 population aged 60 years and over		Case rate per 100,000 population aged 17-21yrs		Community outbreaks	Newly confirmed cases	Specimens tested with TaqPath assay	Cases with SGTF
	7-day moving average	7-day change, %	Weekly	7-day change, %	Red	Amber	Green	Weekly, Pillar 2 only	7-day change, %	Weekly	7-day change, %	Maroon	Dark red	Red	Weekly	7-day change, %	Weekly	7-day change, %	Last 7 days	Last 7 days	Last 7 days, %	
East Midlands	373.8	-7.7%	8.1%	-16.5%	22	17	1			192.5	-22.9%	7	23	10	137.6	-23.7%	196.5	-23.7%		9,309	34.4%	96.4%
East of England	382.4	-13.1%	5.7%	-26.0%	6	28	12			131.0	-36.6%	2	9	35	103.0	-39.1%	143.8	-41.4%		8,525	16.2%	98.4%
London	316.0	-12.7%	7.1%	-31.7%	9	24	0			126.8	-42.1%	0	8	25	112.4	-44.5%	139.2	-36.2%		11,366	17.5%	97.5%
North East	388.7	-7.3%	7.0%	-14.6%	6	6	0			173.3	-21.1%	1	8	3	124.3	-21.1%	156.0	-27.7%		4,628	67.6%	95.9%
North West	408.3	-3.1%	7.4%	-22.1%	18	20	1			187.8	-24.7%	4	23	12	136.0	-28.7%	197.2	-22.8%		13,790	53.3%	96.0%
South East	393.5	-11.5%	4.6%	-29.2%	2	40	21			107.6	-38.8%	0	7	54	89.7	-39.7%	114.3	-39.4%		9,592	23.4%	97.4%
South West	475.3	+7.6%	3.4%	-33.3%	0	7	23			99.8	-28.8%	0	3	21	73.0	-31.3%	114.1	-22.8%		5,612	29.6%	96.5%
West Midlands	426.4	-1.3%	7.4%	-27.5%	10	17	3			195.5	-28.2%	3	18	9	143.9	-30.3%	200.6	-32.3%		11,602	31.2%	96.2%
Yorkshire and Humber	365.9	-2.1%	6.9%	-11.5%	7	10	4			159.2	-12.7%	0	9	11	107.8	-19.1%	159.0	-16.7%		8,761	57.7%	94.5%
England	399.0	-6.1%	6.2%	-24.4%	80	169	65			148.8	-30.2%	17	108	180	112.3	-32.6%	157.1	-30.3%		83,769	33.4%	96.2%

Data for positive cases with specimen dates between
5 February 2021 to 11 February 2021

Arrows demonstrate how figures compare to the equivalent figure as of
**4 February 2021**

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

All Cases / 17-21 year olds: Weekly case rate: Purple >250 cases per week, Dark Red > 150 cases per week, Red >50 cases per 100,000 per week, Amber >25 per 100,000 per week

Age 60+ Cases: Weekly case rate: Maroon >150 cases per week, Dark Red > 100 cases per week, Red >50 cases per 100,000 per week, Amber >25 per 100,000 per week

Data definitions (see next slide for additional data)	
Weekly case rate	Total number of confirmed cases in the most recent 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 most recent 7-days period who were positive for SARS-CoV-2
Community outbreaks	Number of outbreaks reported to PHE during the 7 day period, excluding those reported from secondary healthcare and care home settings.
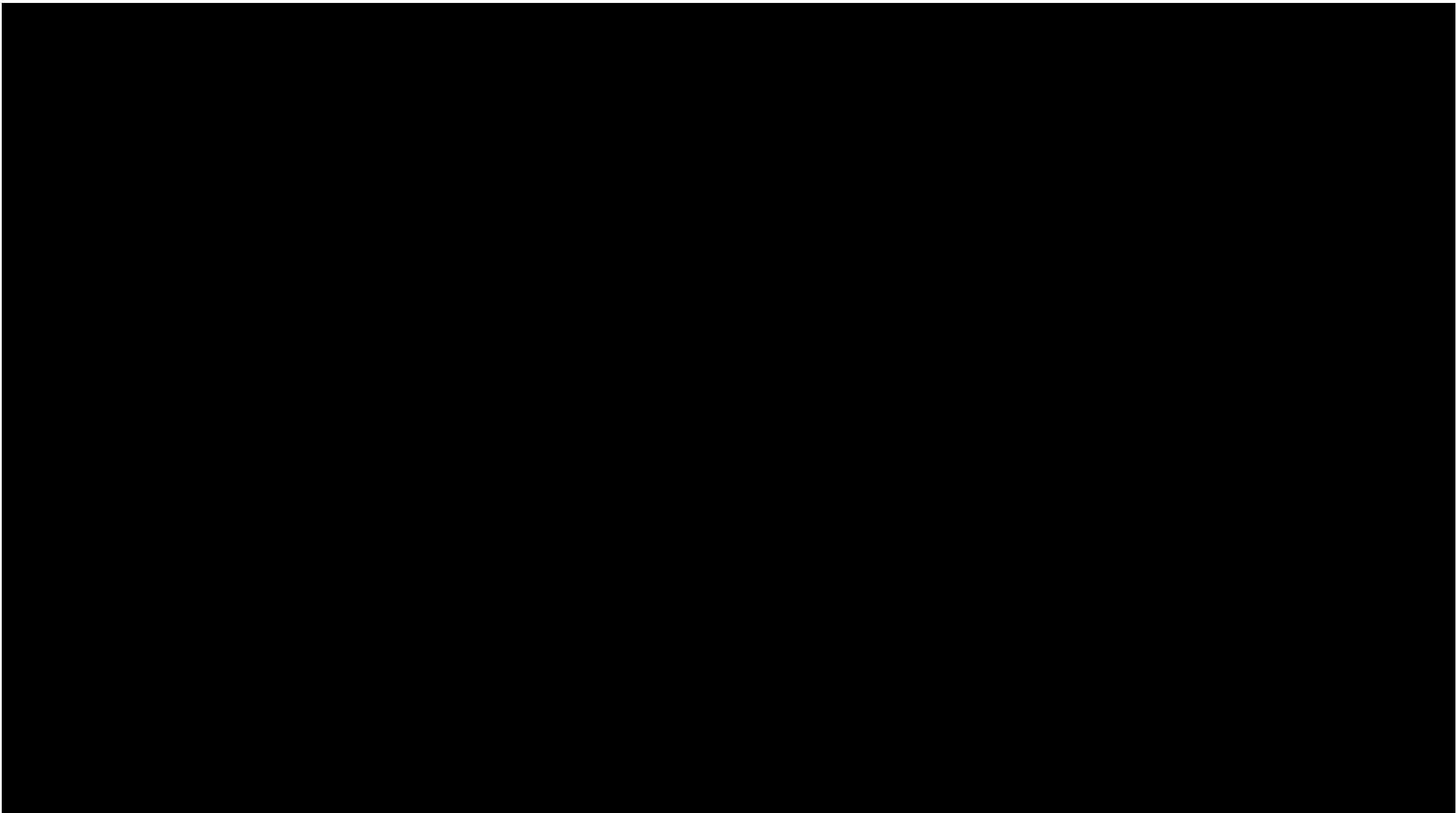
High level summary 2
Highest 20 lower tier local authorities by case rate

LTLA	Individuals tested per day per 100,000 population		Percentage individuals test positive		Percentage individual cases reporting symptoms		Case rate per 100,000 population, all ages			Case rate per 100,000 population aged 60 years and over		Case rate per 100,000 population aged 17-21yrs		Community outbreaks	Specimens tested with TaqPath assay	Cases with SGTF
	7-day moving average	7-day change, %	Weekly	7-day change, %	Weekly, Pillar 2 only	7-day change, %	Weekly	3 week trend	7-day change, %	Weekly	7-day change, %	Weekly	7-day change, %	Last 7 days	Last 7 days, %	
Corby	438.2	-5.3%	11.5%	-19.0%			347.6		-21.8%	141.8	-20.0%	349.7	-36.8%		39.3%	100.0%
Middlesbrough	458.5	-7.3%	10.9%	-12.8%			314.2		-14.0%	195.5	-1.6%	381.1	+ 12.5%		69.0%	98.7%
Sandwell	421.9	-6.6%	12.7%	-23.5%			309.3		-27.6%	274.1	-13.9%	432.4	0.0%		23.4%	98.8%
Walsall	683.7	-1.2%	7.1%	-31.7%			296.0		-33.2%	224.1	-33.5%	354.0	-32.1%		35.0%	98.3%
Ashfield	419.0	-9.7%	10.7%	-1.8%			295.5		-10.6%	252.5	-13.8%	324.4	-8.7%		43.5%	95.7%
Knowsley	432.3	-13.1%	10.3%	-8.0%			293.0		-20.1%	307.0	-7.6%	243.6	-39.4%		58.7%	96.0%
St. Helens	444.1	-4.9%	9.9%	-22.7%			284.6		-25.7%	237.3	-37.7%	362.8	-27.3%		53.2%	94.8%
Peterborough	446.2	-4.8%	9.8%	-12.5%			276.4		-14.0%	135.9	-40.0%	267.4	-25.7%		0.9%	NaN%
Luton	414.5	-3.2%	10.5%	-8.7%			275.5		-13.4%	226.5	-20.4%	312.9	-30.9%		36.0%	99.4%
Bolton	374.4	+ 2.6%	11.5%	-2.5%			269.5		-3.4%	187.5	-8.9%	269.2	0.0%		55.0%	95.7%
Mansfield	416.9	-9.9%	9.8%	-11.7%			263.5		-23.2%	164.0	-33.4%	360.0	+ 28.6%		38.2%	93.3%
Kettering	469.0	+ 0.4%	9.2%	-17.1%			259.4		-19.0%	143.1	-31.4%	599.6	+ 21.7%		41.7%	97.8%
Newark and Sherwood	382.4	-2.7%	10.4%	+31.6%			257.3		+28.1%	202.4	+20.3%	288.7	+ 70.0%		35.8%	100.0%
Preston	485.7	+ 2.0%	8.5%	-26.1%			254.3		-27.1%	138.5	-22.0%	250.2	-15.6%		57.0%	97.4%
Leicester	372.3	-13.2%	10.9%	-13.5%			253.5		-22.9%	206.8	-37.7%	190.3	-25.5%		24.1%	98.2%
East Staffordshire	428.5	-4.1%	9.0%	-23.7%			253.0		-26.1%	195.4	-45.4%	362.8	+ 23.5%		21.7%	98.2%
Nottingham	338.8	-11.4%	11.9%	-12.5%			250.5		-24.1%	239.4	-26.5%	147.9	+ 1.5%		36.6%	95.9%
Fenland	467.6	-10.0%	8.0%	-5.9%			244.5		-15.0%	261.7	+13.0%	188.5	-18.2%		2.0%	NaN%
Blackburn with Darwen	400.2	-4.3%	10.0%	-24.2%			241.2		-29.5%	204.1	-30.2%	327.8	+ 3.4%		57.9%	98.3%
Copeland	511.2	+13.5%	7.4%	+19.4%			240.5		+34.4%	244.4	+25.0%	327.9	+100.1%		42.3%	100.0%
England	**399.0**	**-6.1%**	**6.2%**	**-24.4%**			**148.8**		**-30.2%**	**112.3**	**-32.6%**	**157.1**	**-30.3%**	**365**	**33.4%**	**96.2%**

High level summary 3

Local authority areas not included in the High level summary 2 where the weekly case rate has risen >10% from the previous week

LTLA	Individuals tested per day per 100,000 population		Percentage individuals test positive		Percentage individual cases reporting symptoms		Case rate per 100,000 population, all ages			Case rate per 100,000 population aged 60 years and over		Case rate per 100,000 population aged 17-21yrs		Community outbreaks	Specimens tested with TaqPath assay	Cases with SGTF
	7-day moving average	7-day change, %	Weekly	7-day change, %	Weekly, Pillar 2 only	7-day change, %	Weekly	3 week trend	7-day change, %	Weekly	7-day change, %	Weekly	7-day change, %	Last 7 days	Last 7 days	Last 7 days, %
Exeter	358.8	-5.4%	2.8%	+64.7%			67.7		+89.1%	22.3	+100.9%	79.8	+116.8%		15.6%	100.0%
Lincoln	371.5	-1.8%	5.0%	+25.0%			120.8		+36.3%	105.9	+ 75.0%	100.1	+ 40.0%		55.3%	100.0%
West Lindsey	344.3	-6.9%	5.4%	+35.0%			115.0		+25.0%	49.3	-16.6%	167.3	+250.0%		57.3%	97.8%
East Devon	440.6	+1.2%	2.3%	+ 9.5%			67.0		+24.1%	40.2	+ 83.6%	167.6	+ 25.0%		15.4%	70.8%
Calderdale	373.9	+6.7%	8.3%	+ 3.8%			195.8		+12.2%	127.5	0.0%	179.1	-5.0%		53.6%	96.7%
England	**399.0**	**-6.1%**	**6.2%**	**-24.4%**			**148.8**		**-30.2%**	**112.3**	**-32.6%**	**157.1**	**-30.3%**		**33.4%**	**96.2%**

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High level summary 4
Lower tier local authorities, highest weekly case rates for individuals aged 60 years and over. Local authority areas of interest

| LTLA	Individuals tested per day per 100,000 population		Percentage individuals test positive		Percentage individual cases reporting symptoms		Case rate per 100,000 population, all ages			Case rate per 100,000 population aged 60 years and over		Case rate per 100,000 population aged 17-21yrs		Community outbreaks	Specimens tested with TaqPath assay	Cases with SGTF
	7-day moving average	7-day change, %	Weekly	7-day change, %	Weekly, Pillar 2 only	7-day change, %	Weekly	3 week trend	7-day change, %	Weekly	7-day change, %	Weekly	7-day change, %	Last 7 days	Last 7 days, %	
Knowsley	432.3	-13.1%	10.3%	-8.0%			293.0		-20.1%	307.0	-7.6%	243.6	-39.4%		58.7%	96.0%
Sandwell	421.9	-6.6%	12.7%	-23.5%			309.3		-27.6%	274.1	-13.9%	432.4	0.0%		23.4%	98.8%
Fenland	467.6	-10.0%	8.0%	-5.9%			244.5		-15.0%	261.7	+13.0%	188.5	-18.2%		2.0%	NaN%
Ashfield	419.0	-9.7%	10.7%	-1.8%			295.5		-10.6%	252.5	-13.8%	324.4	-8.7%		43.5%	95.7%
Copeland	511.2	+13.5%	7.4%	+19.4%			240.5		+34.4%	244.4	+25.0%	327.9	+100.1%		42.3%	100.0%
Nottingham	338.8	-11.4%	11.9%	-12.5%			250.5		-24.1%	239.4	-26.5%	147.9	+ 1.5%		36.6%	95.9%
St. Helens	444.1	-4.9%	9.9%	-22.7%			284.6		-25.7%	237.3	-37.7%	362.8	-27.3%		53.2%	94.8%
Rutland	387.5	-28.7%	8.0%	-42.9%			182.8		-63.3%	228.0	-17.2%	58.7	-80.0%		30.8%	95.8%
Luton	414.5	-3.2%	10.5%	-8.7%			275.5		-13.4%	226.5	-20.4%	312.9	-30.9%		36.0%	99.4%
Walsall	683.7	-1.2%	7.1%	-31.7%			296.0		-33.2%	224.1	-33.5%	354.0	-32.1%		35.0%	98.3%
Braintree	342.2	-14.0%	6.8%	-21.8%			143.5		-33.0%	214.0	+ 3.6%	180.1	-38.1%		4.0%	100.0%
Slough	362.2	-13.3%	10.4%	-27.3%			209.3		-39.9%	209.4	-46.4%	223.4	-34.6%		24.8%	100.0%
Birmingham	443.8	+ 8.5%	9.1%	-31.1%			234.4		-27.0%	209.2	-30.7%	179.6	-39.4%		31.7%	98.0%
Leicester	372.3	-13.2%	10.9%	-13.5%			253.5		-22.9%	206.8	-37.7%	190.3	-25.5%		24.1%	98.2%
Blackburn with Darwen	400.2	-4.3%	10.0%	-24.2%			241.2		-29.5%	204.1	-30.2%	327.8	+ 3.4%		57.9%	98.3%
Tamworth	346.1	-12.2%	9.5%	-16.7%			202.1		-32.3%	204.1	+ 8.3%	228.3	-59.1%		30.8%	100.0%
Newark and Sherwood	382.4	-2.7%	10.4%	+31.6%			257.3		+28.1%	202.4	+20.3%	288.7	+ 70.0%		35.8%	100.0%
Chesterfield	465.5	+ 0.9%	6.0%	-23.1%			180.2		-22.2%	200.4	-29.3%	222.6	-35.3%		63.5%	91.8%
Bolsover	422.7	-5.2%	7.4%	-32.1%			214.7		-35.5%	197.9	-50.0%	232.1	-25.0%		53.7%	88.7%
Bedford	529.2	-5.4%	7.9%	-26.9%			222.7		-30.0%	197.0	+ 9.6%	329.7	0.0%		29.3%	99.4%
England	**399.0**	**-6.1%**	**6.2%**	**-24.4%**			**148.8**		**-30.2%**	**112.3**	**-32.6%**	**157.1**	**-30.3%**	**365**	**33.4%**	**96.2%**
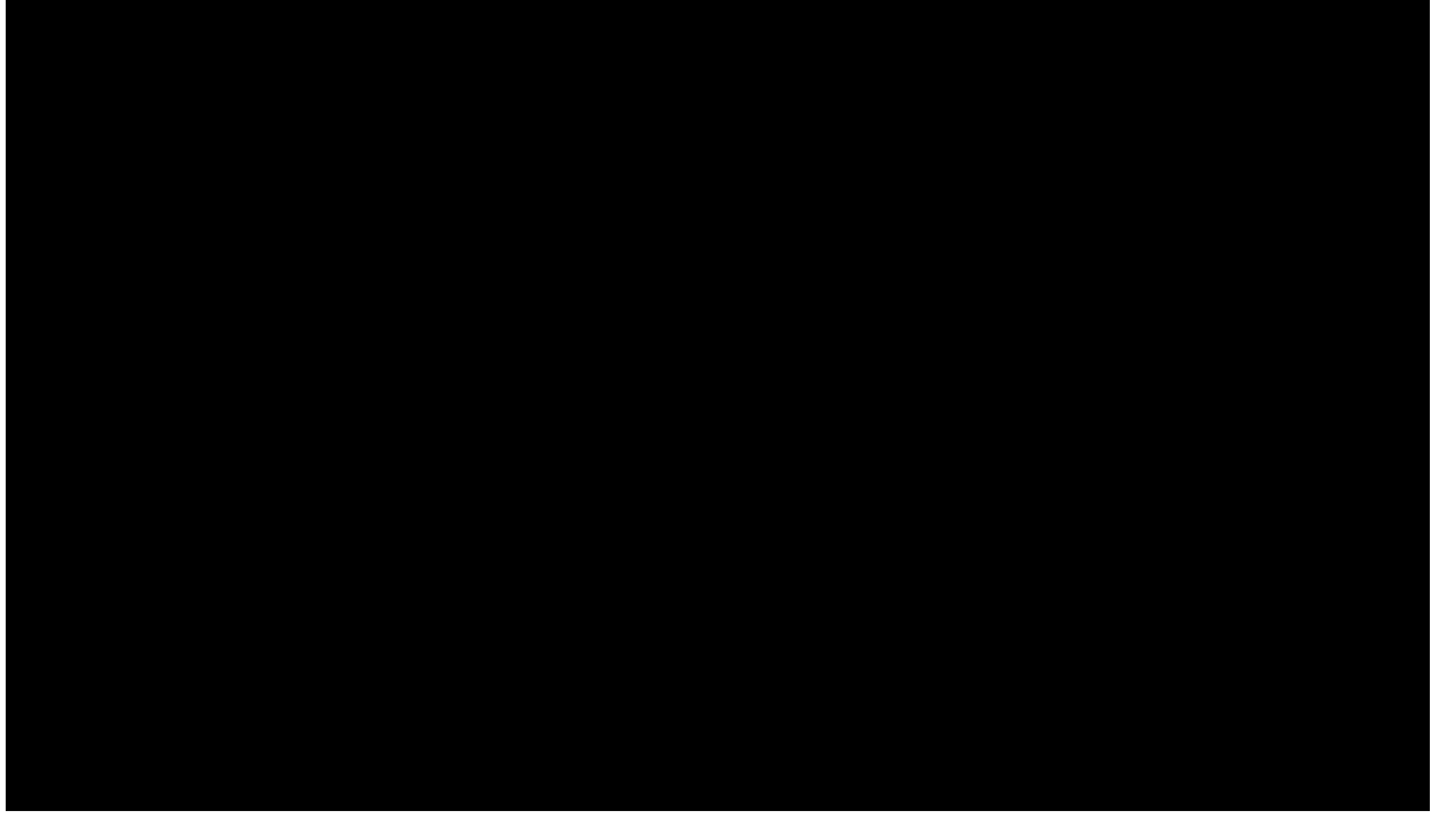
Tracking SARS-COV-2 S-Gene Target Failure - Taqpath lab coverage since 1st September 2020

Proportion of England specimens tested in TaqPath Labs by week, 01 Sep 2020 to 15 Feb 2021
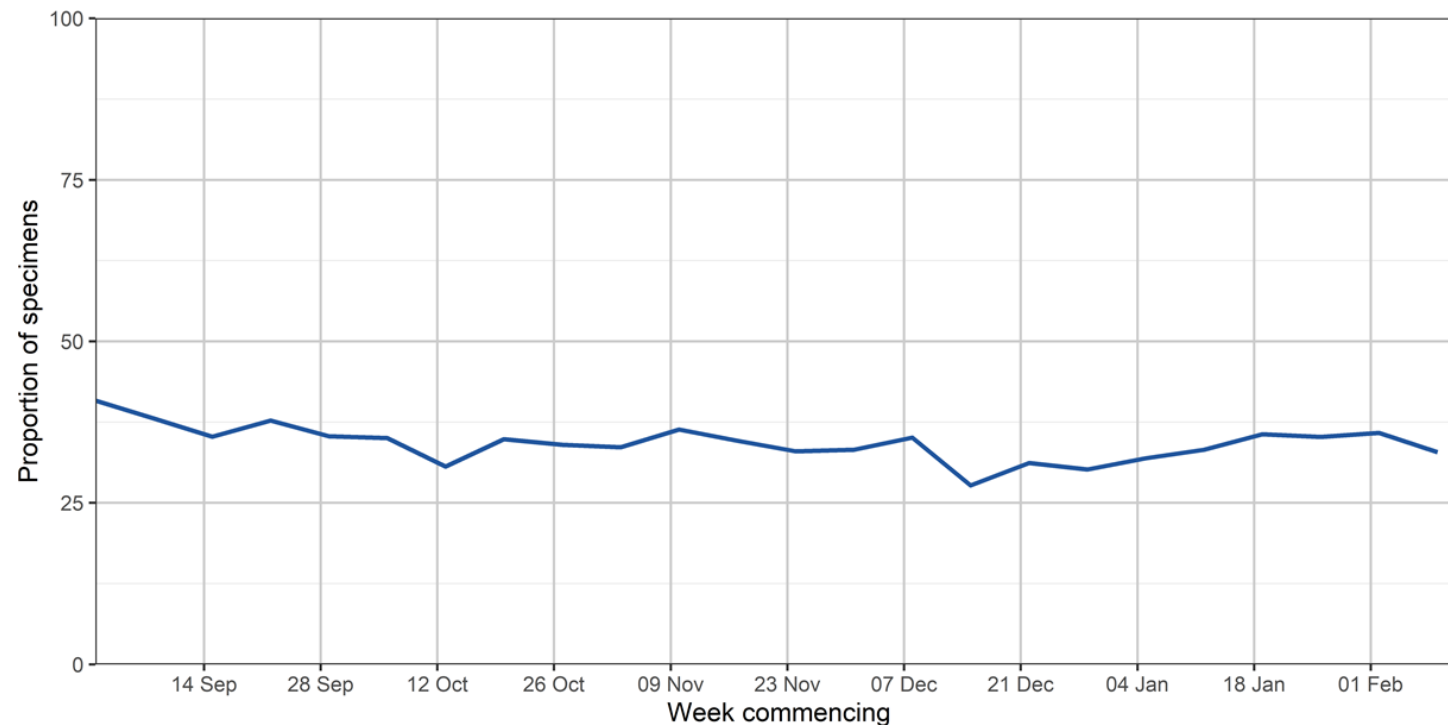
TaqPath Labs = Alderley Park, Milton Keynes and Glasgow Lighthouse Labs
Includes both positive and negative SARS-CoV specimens from Pillar 1 and 2.
Excludes lateral flow device tests. Data source: USD

Proportion of England specimens tested in TaqPath Labs, by Local Authority 01 Sep to 15 Feb 2021
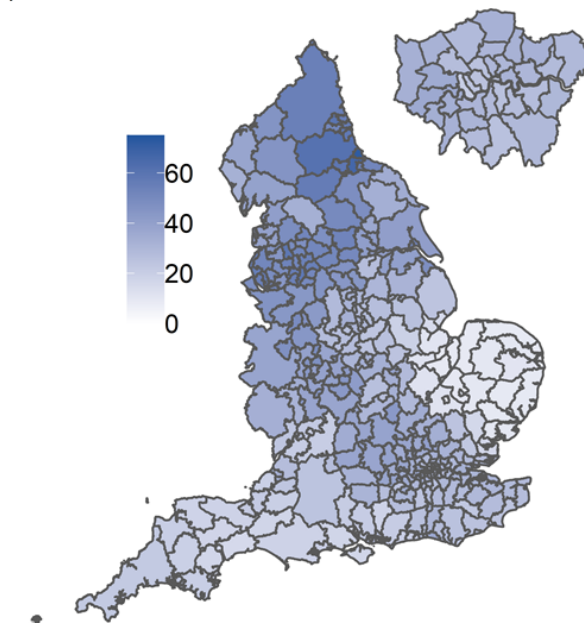
Note: LA coverage by TaqPath laboratories is relatively stable over time, although areas of EoE notably under-represented in recent data (see Appendix)

Tracking SARS-COV-2 S-Gene Target Failure - Weekly SGTF case numbers over time

Weekly number and proportion of England Pillar 2 COVID-19 cases with SGTF among those tested in TaqPath Labs

2020-09-01 to 2021-02-15. Isolates considered classifiable in terms of S gene detection if CT values <=30 for N and ORF1ab gene targets. Percent for most recent 7 days annotated.
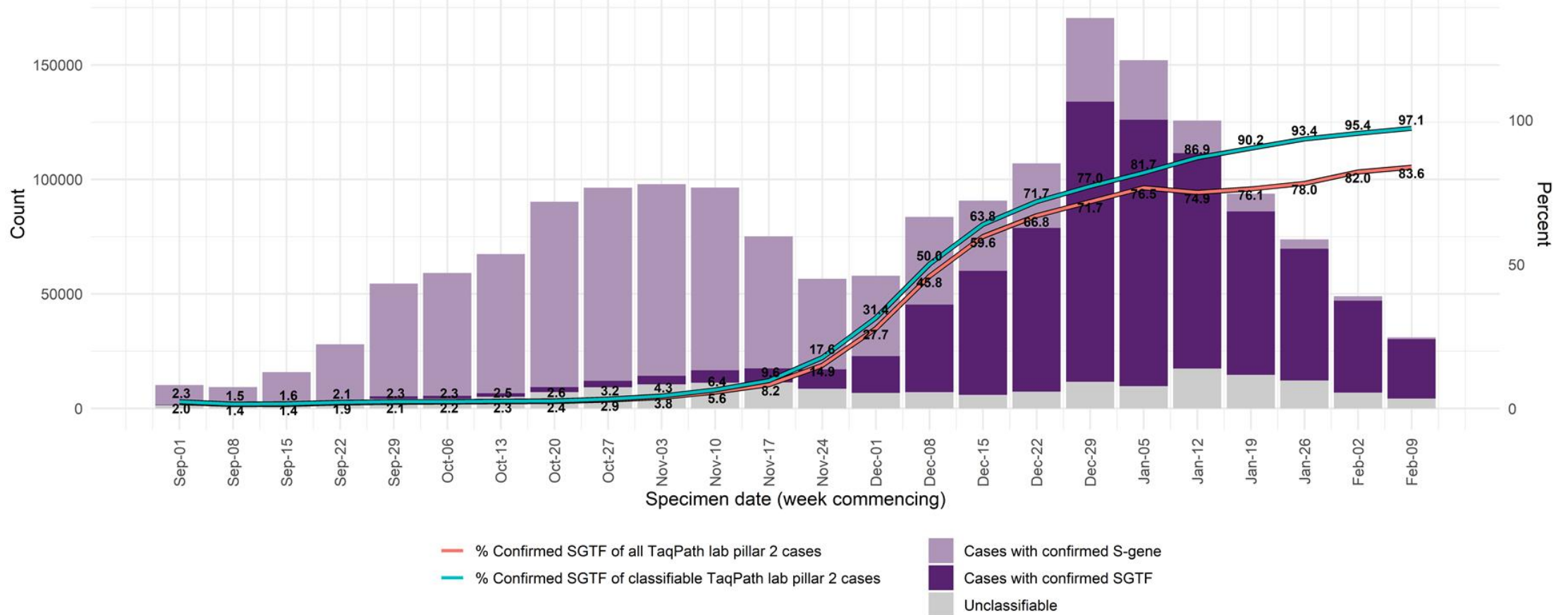
SGTF is a surveillance proxy for VOC-202012/01 and may include other variants.
Confirmed SGTF: Non-detectable S gene and <=30 CT values for N and ORF1ab genes. Confirmed S-gene: <=30 CT values for S, N, and ORF1ab genes.
TaqPath labs: Alderley Park, Milton Keynes and Glasgow Lighthouse Labs, which use TaqPath COVID-19 RT-PCR.
Data source: SGSS.Cases deduplicated to one positive test per person per week, prioritising SGTF tests.

Tracking SARS-COV-2 S-Gene Target Failure - Most recent 7 days by local authority

Proportion of England Pillar 2 COVID-19 cases with SGTF among those tested in TaqPath Labs and with S gene detection results, by Local Authority (09 Feb to 15 Feb 2021)

LAs with >=2% tests in TaqPath labs and >=20 cases with S gene detection results shown; others in gray

Only samples processed in TaqPath labs can be tested for SGTF. As some (or in some areas, most) samples are processed in other labs, the proportion of cases from TaqPath labs with SGTF can only provide an estimate of the overall proportion.

Denominator is restricted to TaqPath lab Pillar 2 positive tests with CT values <=30 for non S gene targets. This restriction to CT values removes potential cor around variable target performance at lower viral loads

For LTLAs where TaqPath lab coverage is low (<2%) or total classifiable cases processed in a TaqPath lab is low (<20) in current reporting period, SGTF proportion is a less reliable indication of incidence and data are not shown. These LTLAs are greyed out.
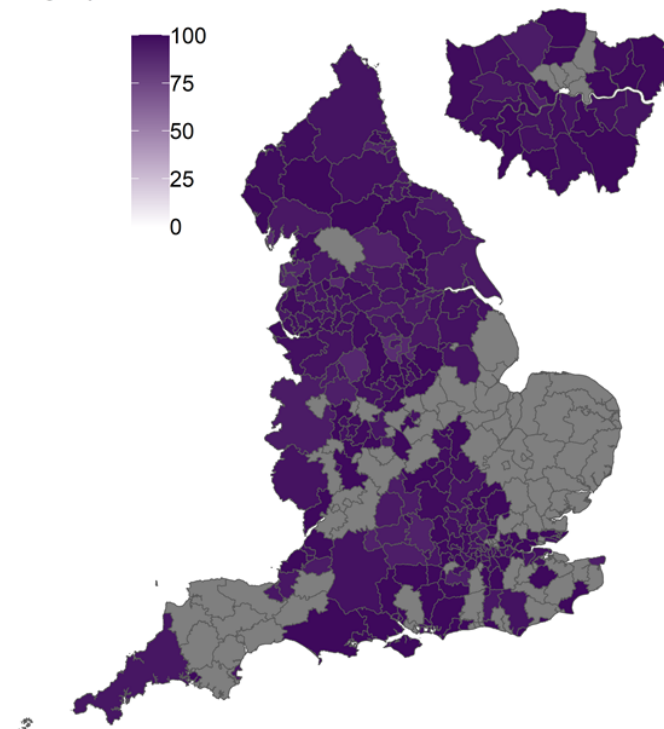
SGTF is a surveillance proxy for VOC-202012/01 and may include other variants.
SGTF: Non-detectable S gene and <=30 CT values for N and ORF1ab genes. S-gene positive: <=30 CT values for S, N, and ORF1ab genes.
TaqPath labs: Alderley Park, Milton Keynes and Glasgow Lighthouse Labs, which use TaqPath COVID-19 RT-PCR.
Cases deduplicated to one positive test per person per week, prioritising SGTF tests.
Data source: SGSS. 39 persons with missing LA of residence excluded.
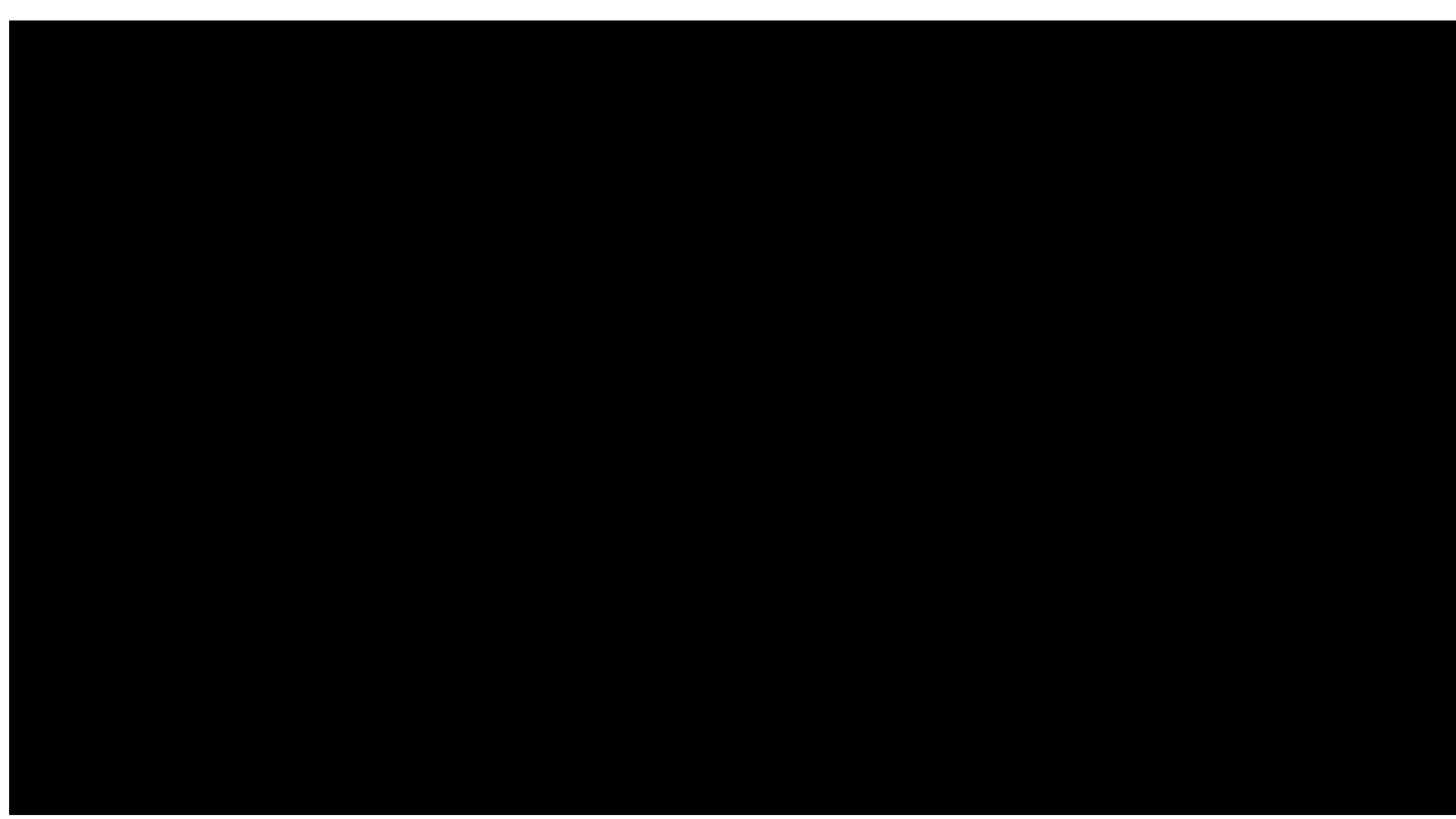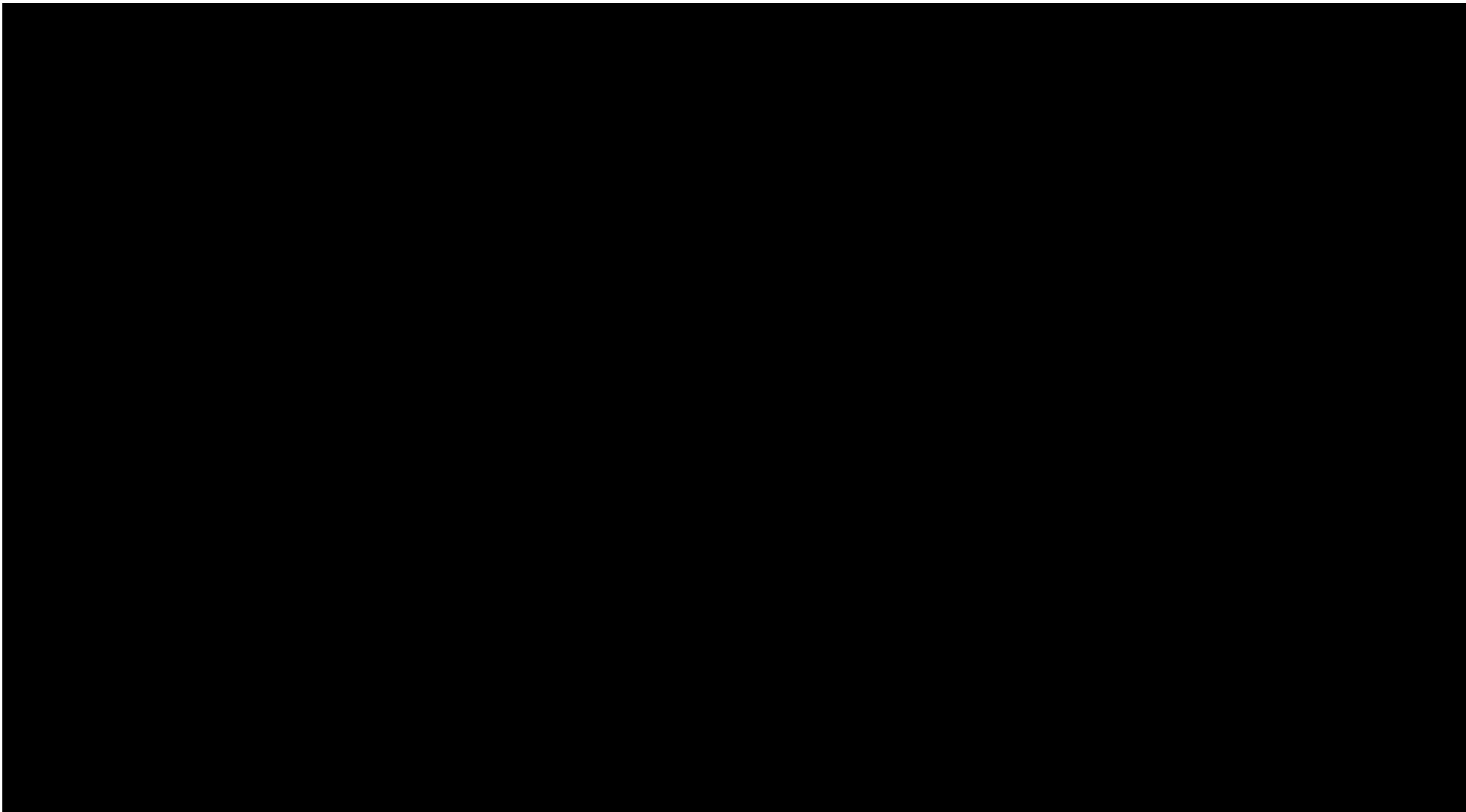
Case number by type of first positive test
Data reporting 14 December 2020 to 11 February 2021

England confirmed cases - epidemic curve by test type
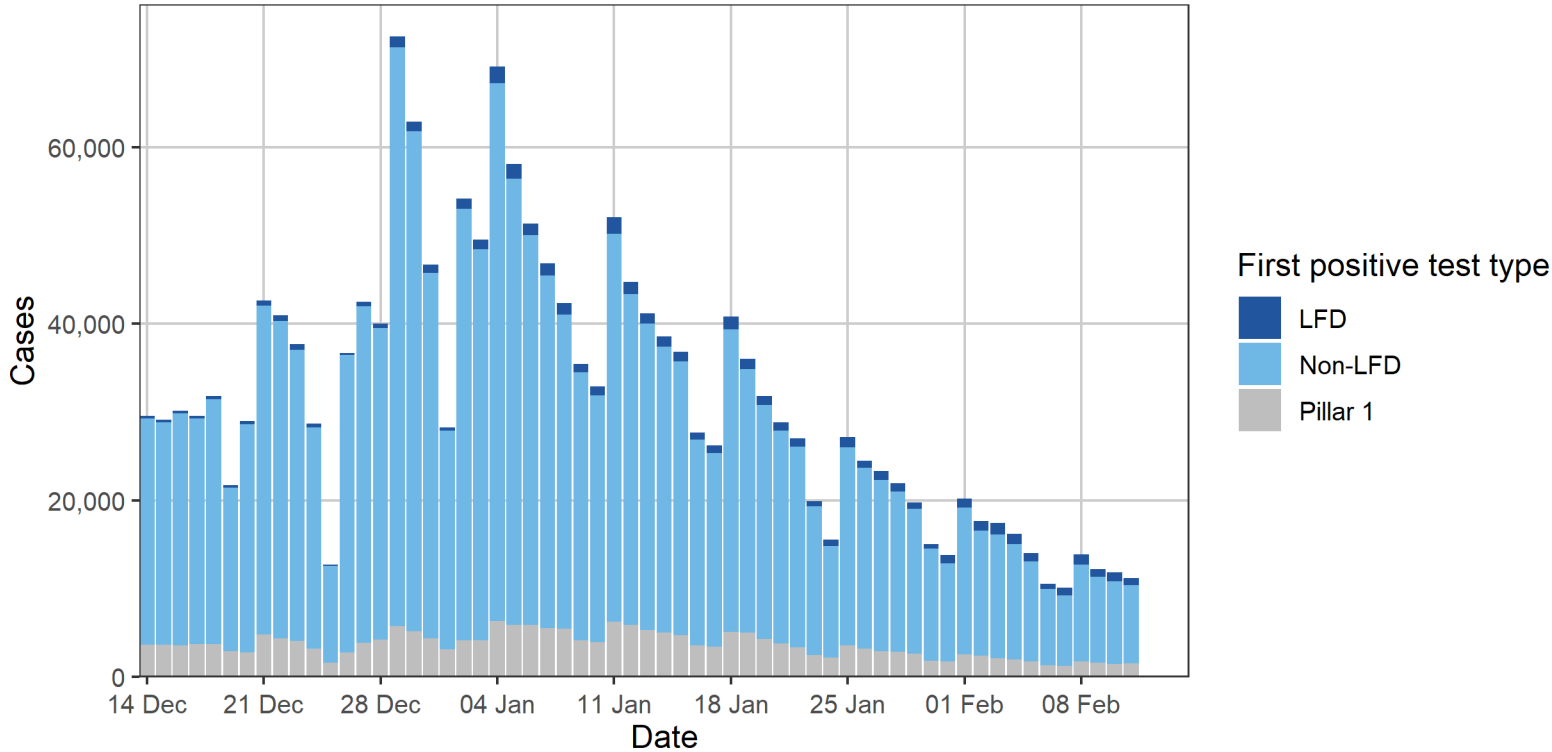
Contribution of LFD positives to overall case series, where LFD is the first test through which a case is identified (in the absence of same day PCR)

First positive test type
- LFD
- Non-LFD
- Pillar 1

Breakdown of test type not available for Pillar 1.
Cases where the test type is unknown are assumed Non-LFD.
Most recent 4 days excluded due to data delays.
LFD cases includes all individuals whose first positive result was from an LFD,
this includes individuals who had a subsequent PCR positive result and those who did not.

Case rate across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Case rate per 100,000 population
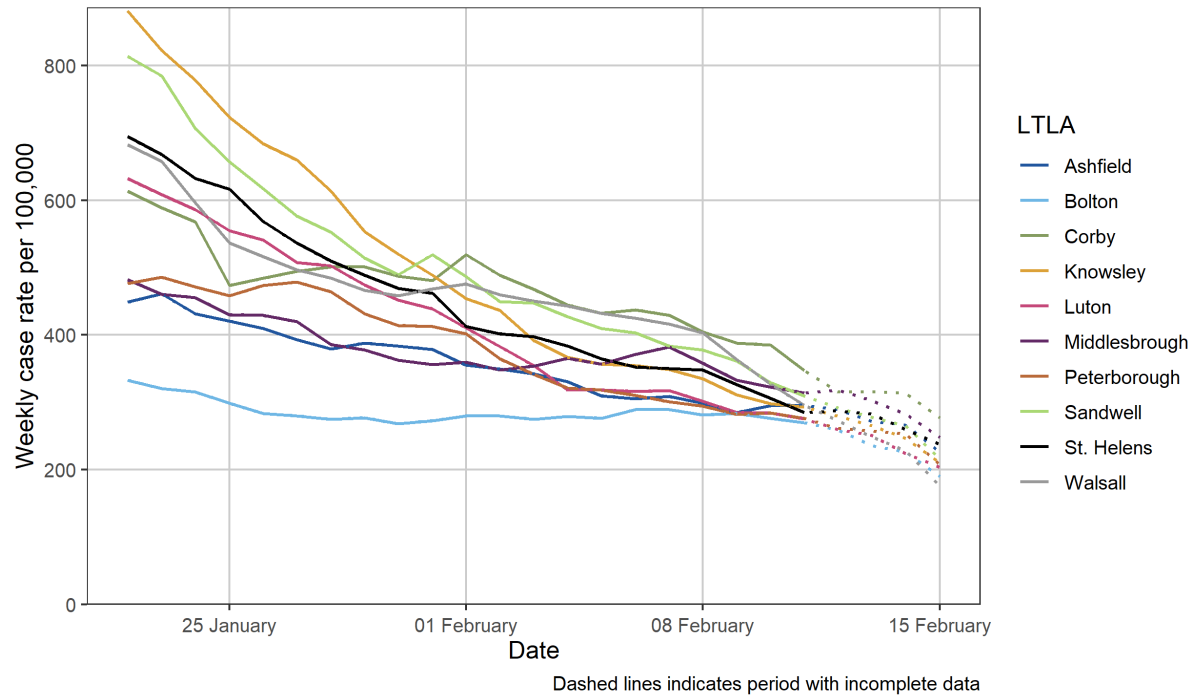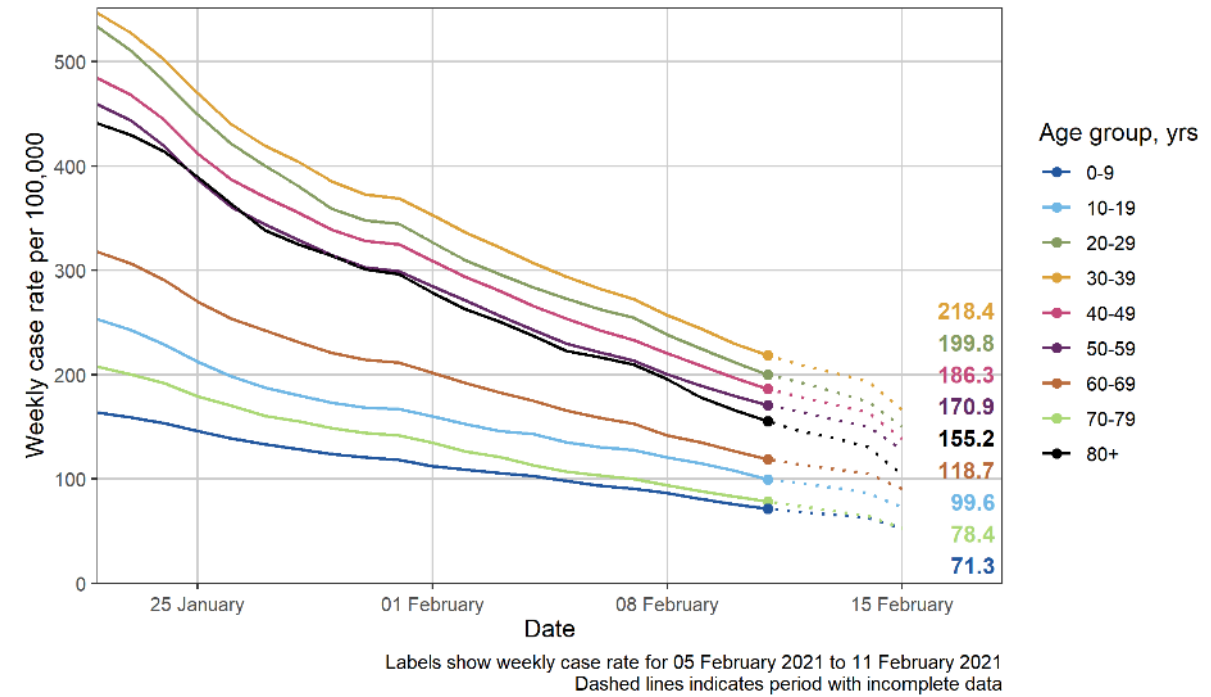
Dashed lines indicates period with incomplete data

Weekly case rate per 100,000 population by age group

Labels show weekly case rate for 05 February 2021 to 11 February 2021
Dashed lines indicates period with incomplete data

Case rate across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Weekly case rate per 100,000 population by age group
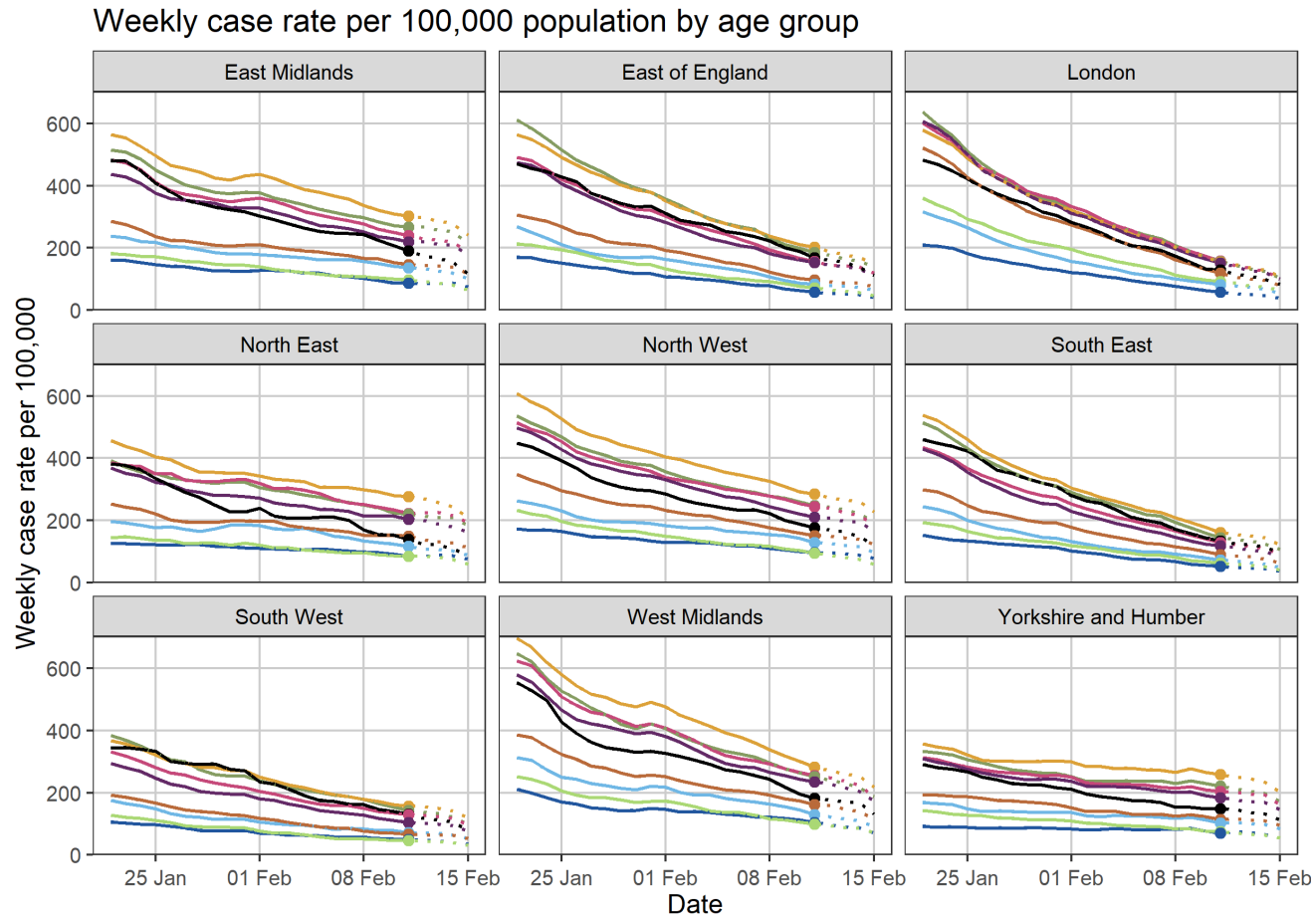
Dashed lines indicates period with incomplete data

Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Test positivity, %

Weekly individual test positivity, %, by age group

Labels show positivity rate for 05 February 2021 to 11 February 2021.
Excludes LFD tests

Excludes LFD tests

Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Weekly individual test positivity, %, by age group

Excludes LFD tests

Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 11 February 2021

Individuals tested per 100,000 population

Excludes LFD tests
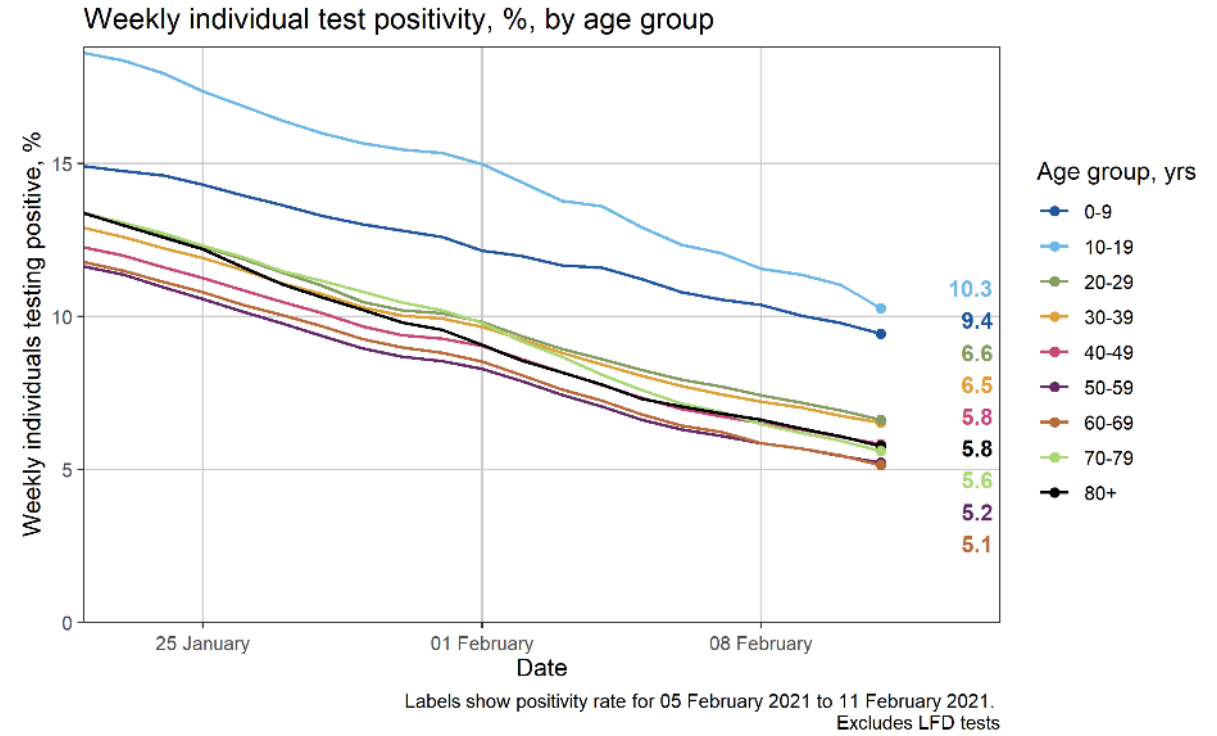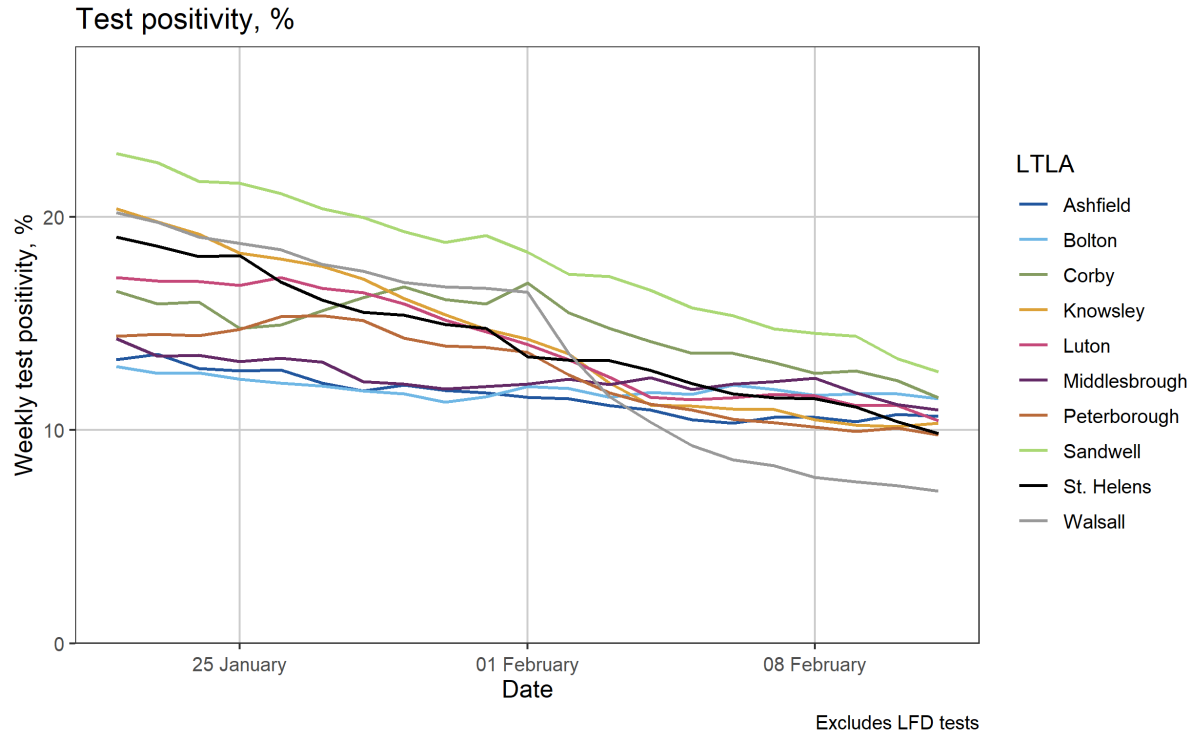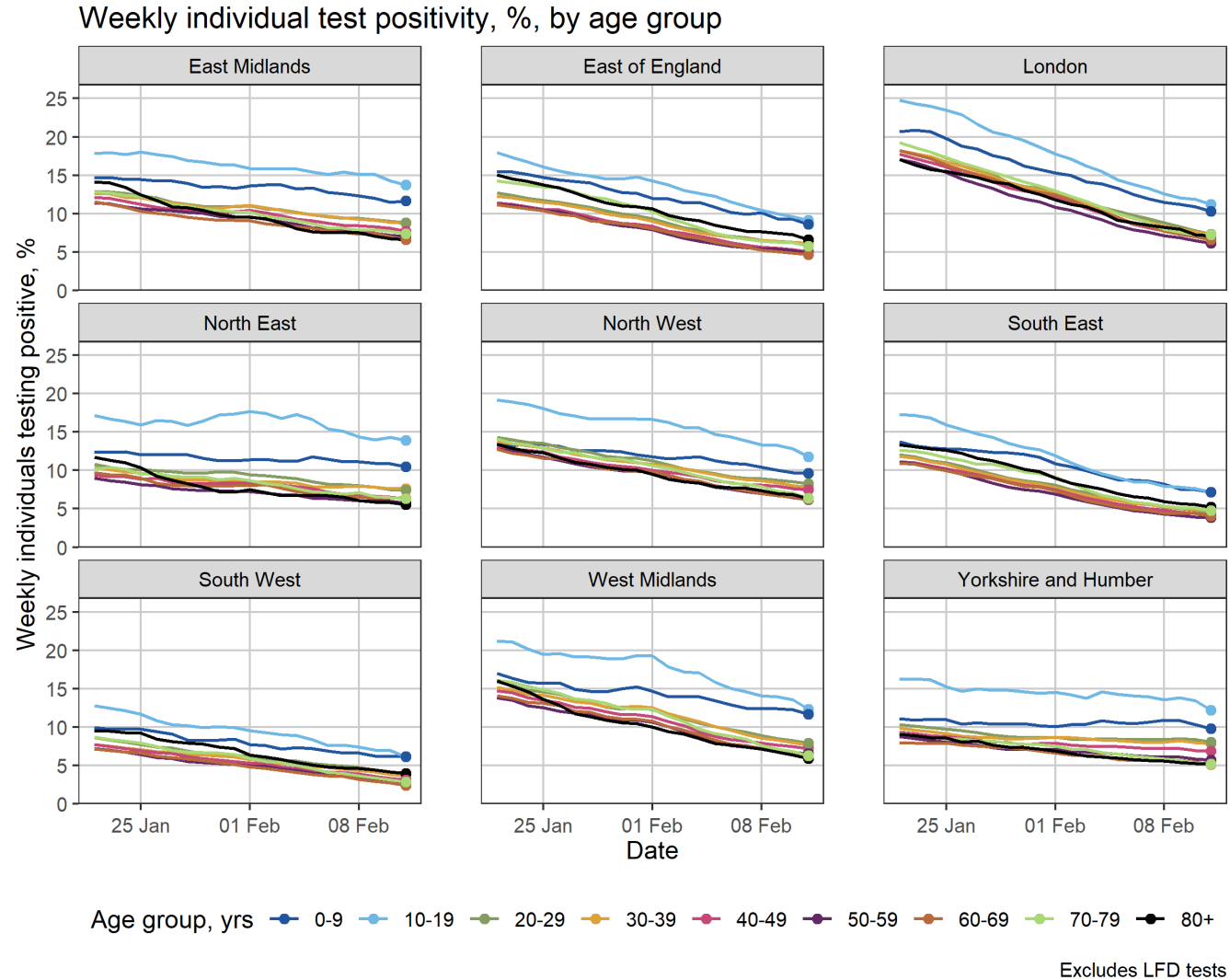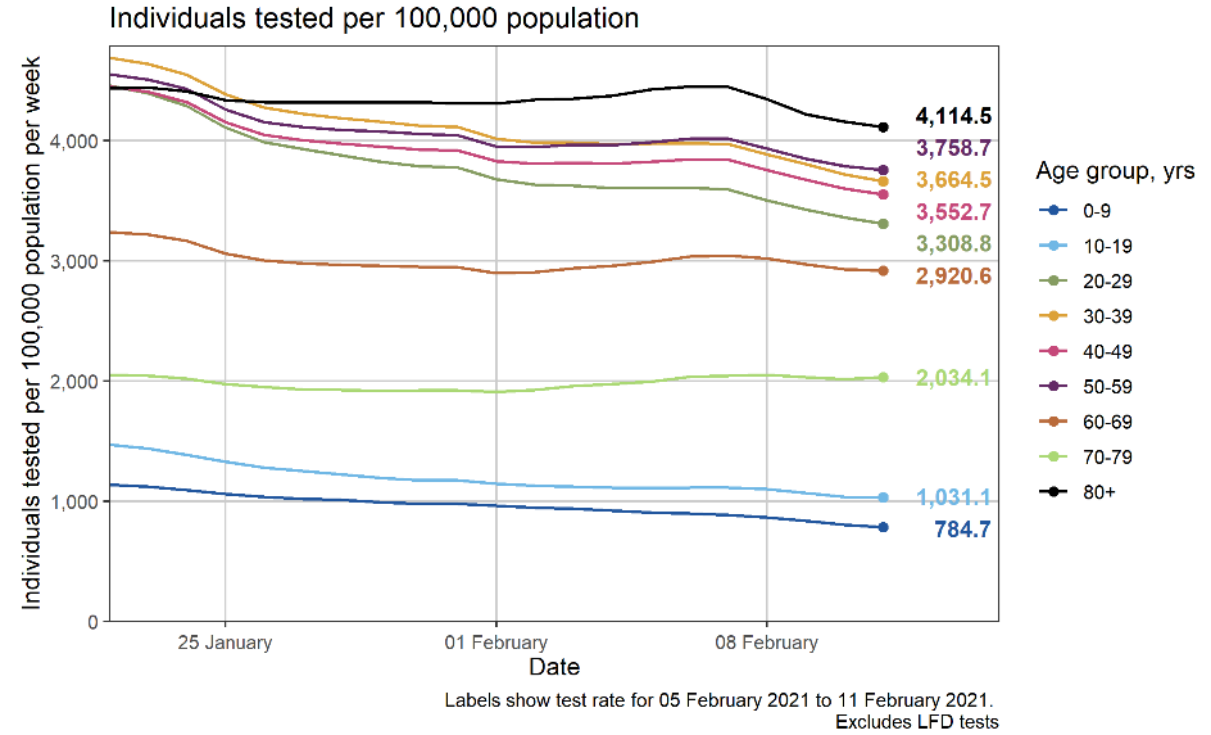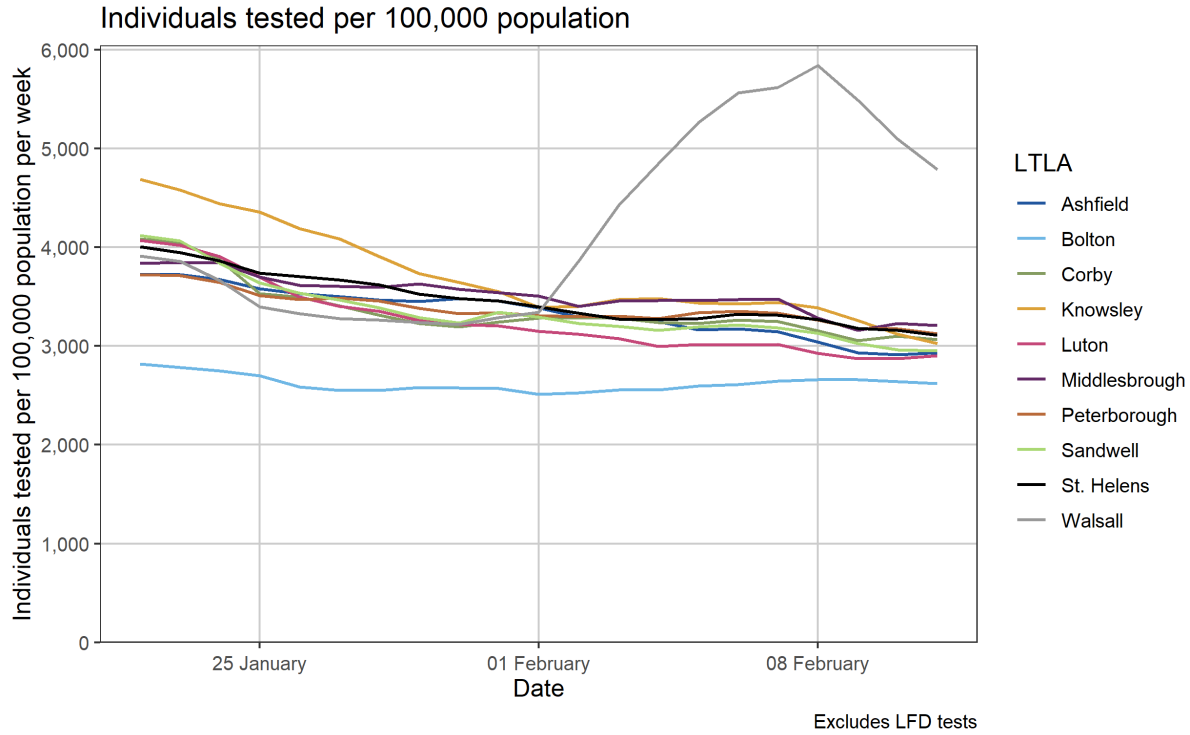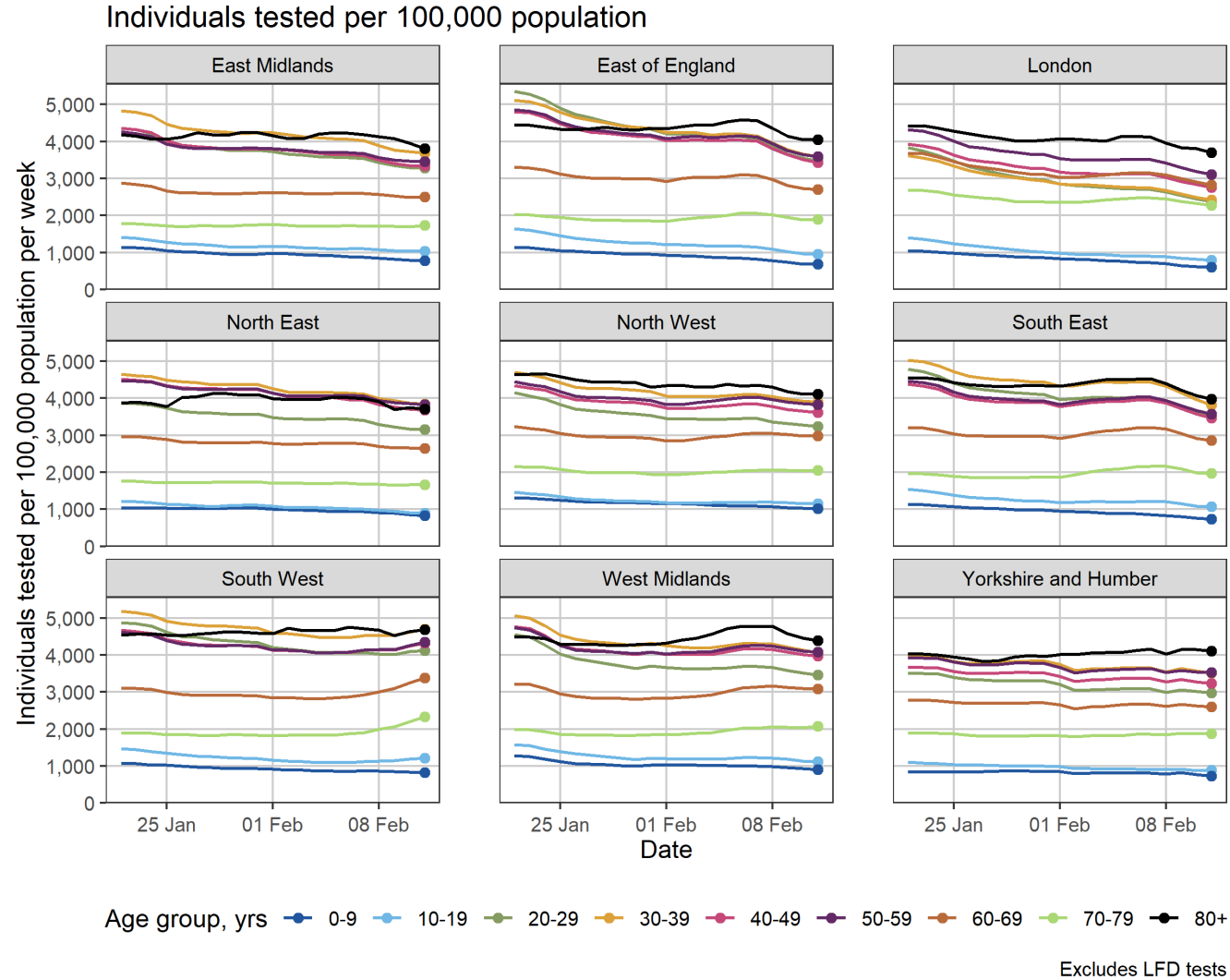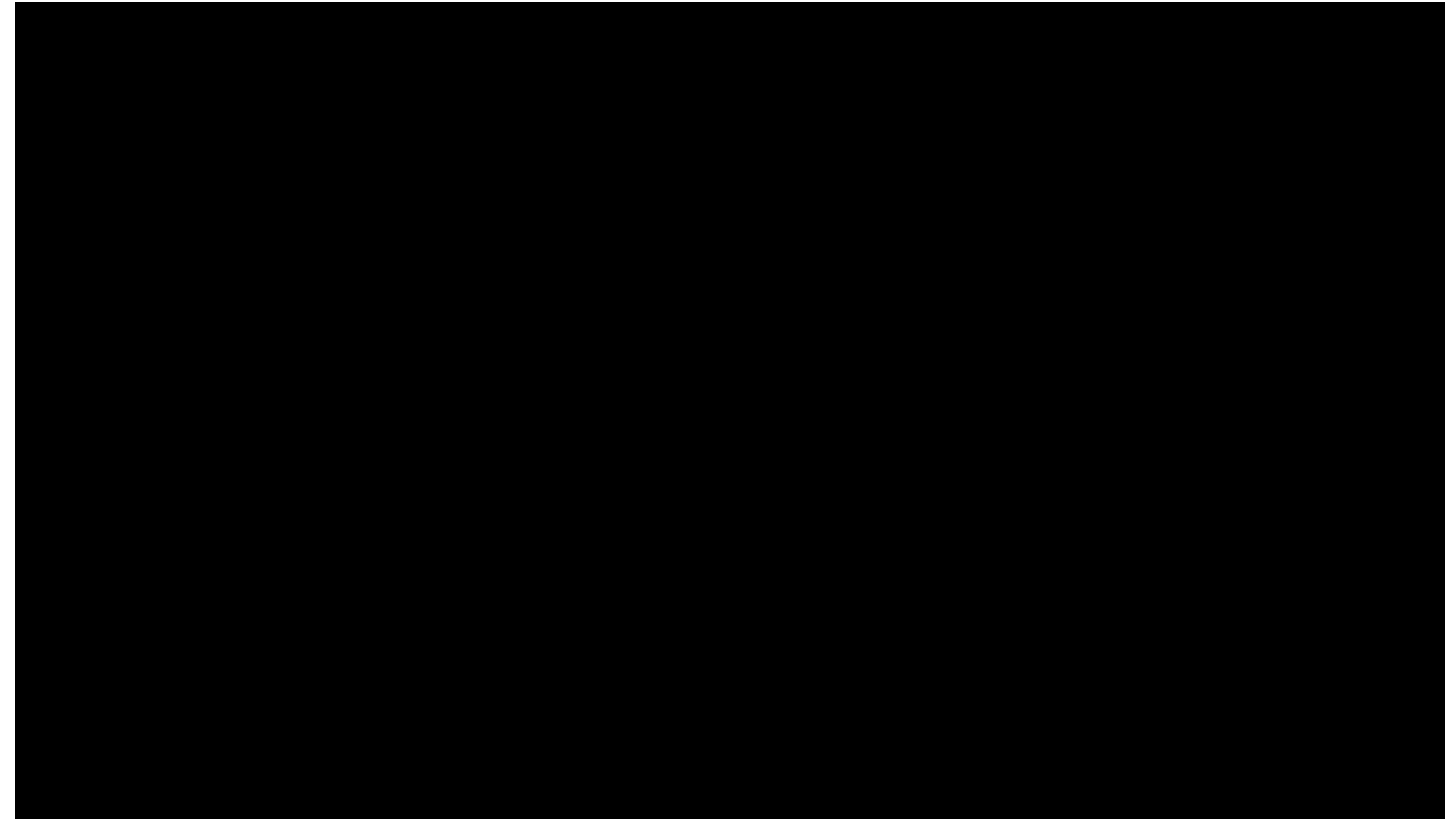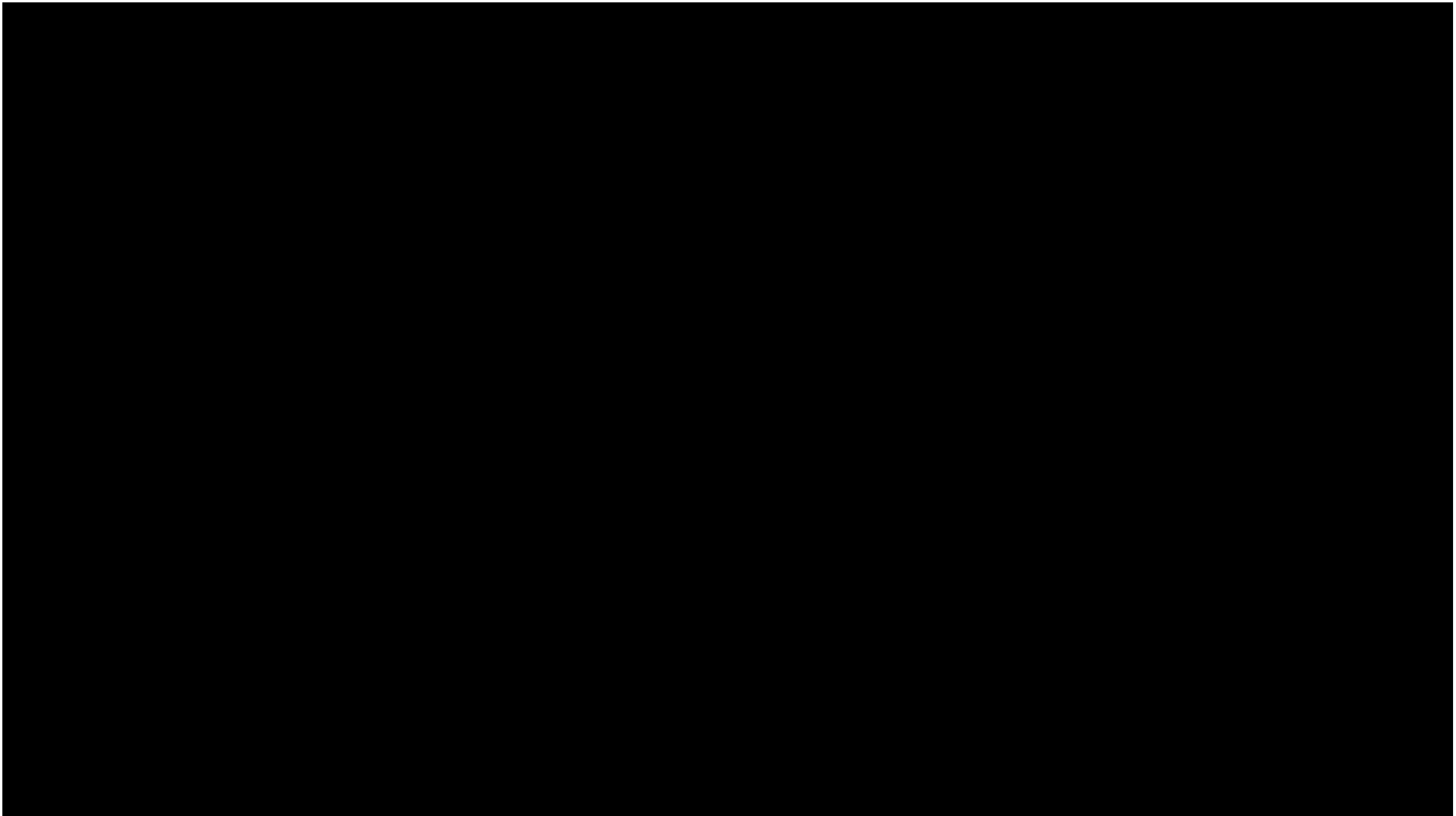
Percentage prevalence of COVID-19 across England and Government Office regions - table
Data generated 9 February 2021 by PHE Joint Modelling Cell

Methodology

Prevalence estimates were generated by the Cambridge real-time model on **2 February 2021** using data up to **27 January 2021**.

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.

Geography	05/02/2021	12/02/2021	19/02/2021
England	1.22 (1.14, 1.30)	1.09 (0.97, 1.23)	1.05 (0.88, 1.25)
North East	0.69 (0.53, 0.91)	0.47 (0.30, 0.74)	0.32 (0.17, 0.62)
Yorkshire and The Humber	0.93 (0.75, 1.16)	0.83 (0.58, 1.19)	0.76 (0.45, 1.25)
North West	1.10 (0.95, 1.29)	0.76 (0.58, 0.99)	0.52 (0.35, 0.77)
East Midlands	1.44 (1.17, 1.77)	1.41 (1.00, 1.98)	1.40 (0.86, 2.23)
West Midlands	2.00 (1.64, 2.40)	2.14 (1.54, 2.88)	2.27 (1.46, 3.37)
East of England	2.28 (1.92, 2.69)	2.73 (2.05, 3.56)	3.22 (2.20, 4.55)
London	1.33 (1.18, 1.51)	0.92 (0.75, 1.14)	0.65 (0.47, 0.88)
South East	0.54 (0.45, 0.64)	0.28 (0.21, 0.39)	0.15 (0.10, 0.24)
South West	0.57 (0.46, 0.71)	0.36 (0.25, 0.54)	0.24 (0.14, 0.42)

These estimates are subject to, sometime significant, revision on a weekly basis. The underpinning model relies on death data which is subject to a reporting lag. In the weeks surrounding the implementation and relaxation of restrictions, it often takes a while for the system to settle, to account for the data lag and changes in mobility patterns. All prevalence estimates are reported as percentages, the values in parentheses represent the 5th and 95th percentiles respectively.

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 Government Office regions - charts

Data generated 9 February 2021 by PHE Joint Modelling Cell

Prevalence estimates were generated by the Cambridge real-time model on **2 February 2021** using data up to **27 January 2021**.

These estimates are subject to, sometime significant, revision on a weekly basis. The underpinning model relies on death data which is subject to a reporting lag. In the weeks surrounding the implementation and relaxation of restrictions, it often takes a while for the system to settle, to account for the data lag and changes in mobility patterns. Further details on the real-time model can be found here.

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.

The solid vertical line indicates the cut off date for data that are used in the real-time model.

The point prevalence and range are faded after this date, indicating that the results are then projections.

The dashed vertical lines indicate the time at which national measures were implemented.

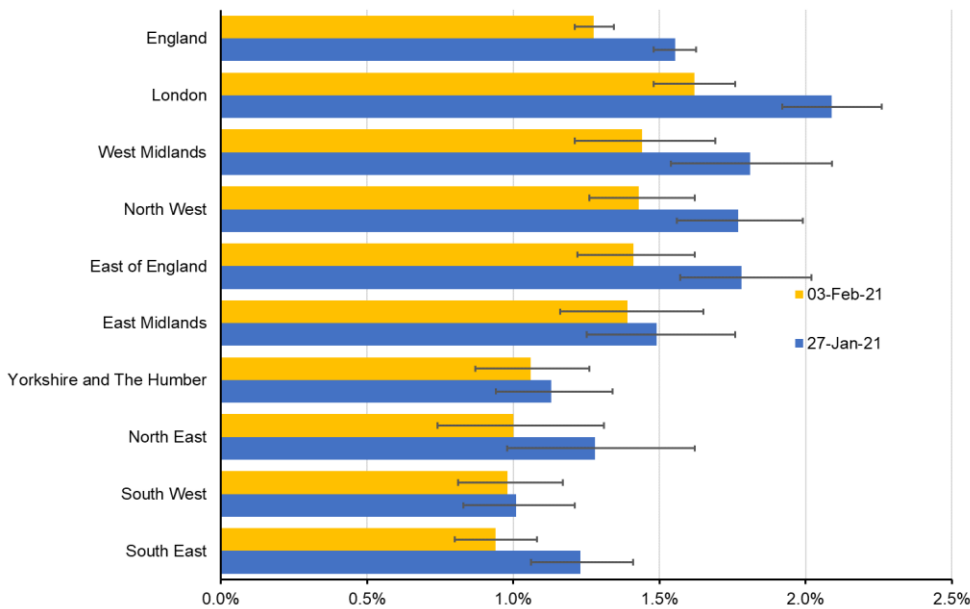Please note that weekly estimates are subject to revision.

Regional prevalence
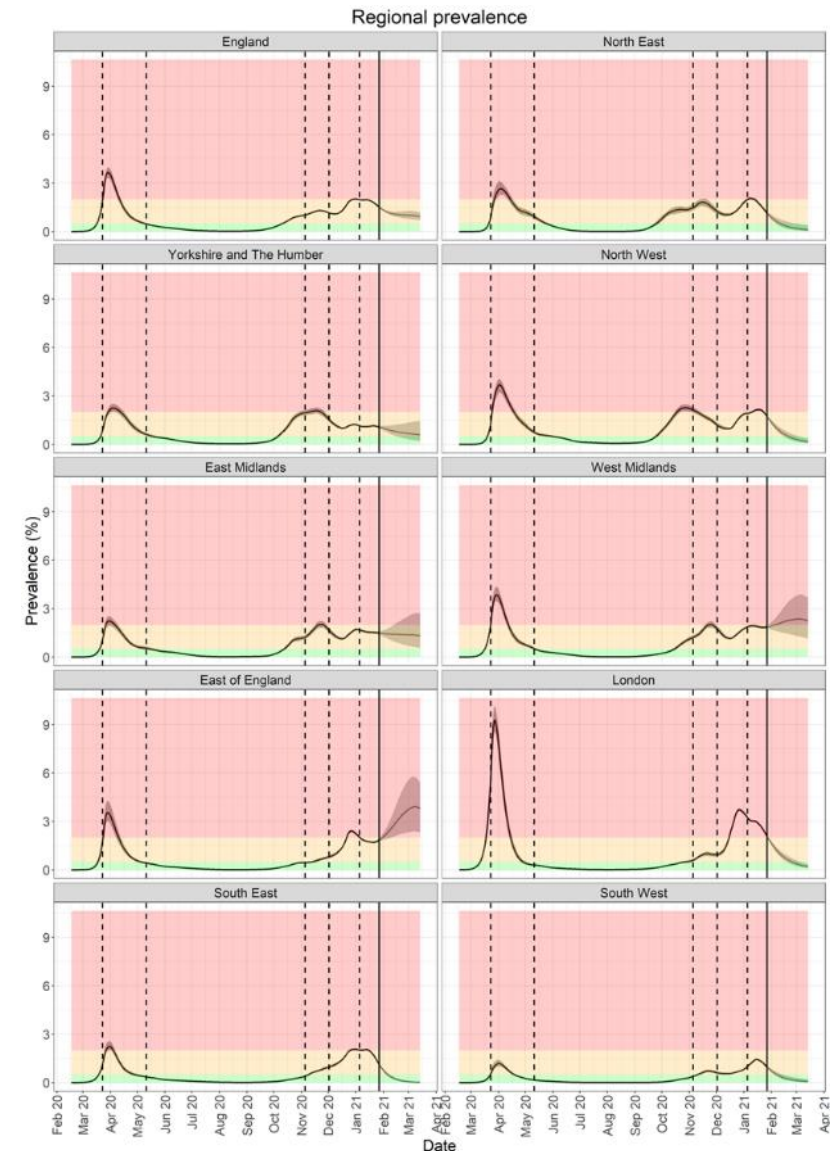
Estimated Prevalence by Region

ONS Coronavirus (COVID-19) Infection Survey (12 February)

In England, the percentage of people testing positive for the coronavirus (COVID-19) decreased in the week ending 6 February 2021; we estimate that 695,400 people within the community population in England had COVID-19 (95% credible interval: 660,200 to 732,200), equating to around 1 in 80 people. The percentage of people testing positive has decreased in all regions except for the South West where the rate appeared to have levelled off in the week ending 6 February 2021. Caution should be taken in over-interpreting any small movements in the latest trend.

In England the percentage of people testing positive with all variants of the virus continued to decrease in the week ending 6 February 2021.

REACT-1 round 8report (22 January)

In this large study of SARS-CoV-2 prevalence in the community in England, we show that prevalence in January 2021 nationally was at extremely high levels. This is being reflected in high levels of hospital admissions, intensive care admission and deaths. While there was indication of a possible decline in prevalence toward the end of our study period (up to 22nd January), the levels of infection remain much higher than those seen during lockdown in May 2020 [14], with a shallower downward trajectory.

Regional patterns of prevalence estimated for this round of REACT-1 share key features with regional patterns of PCR-positivity from routine surveillance data. Both data streams appear to be declining in North West, South West, London and South East. Both appear to be either level or increasing in the remaining regions.

ONS (COVID-19) Infection Survey - Prevalence by region

Coronavirus (COVID-19) Infection Survey, UK: 5 February 2021


REACT-1 study - Prevalence by region
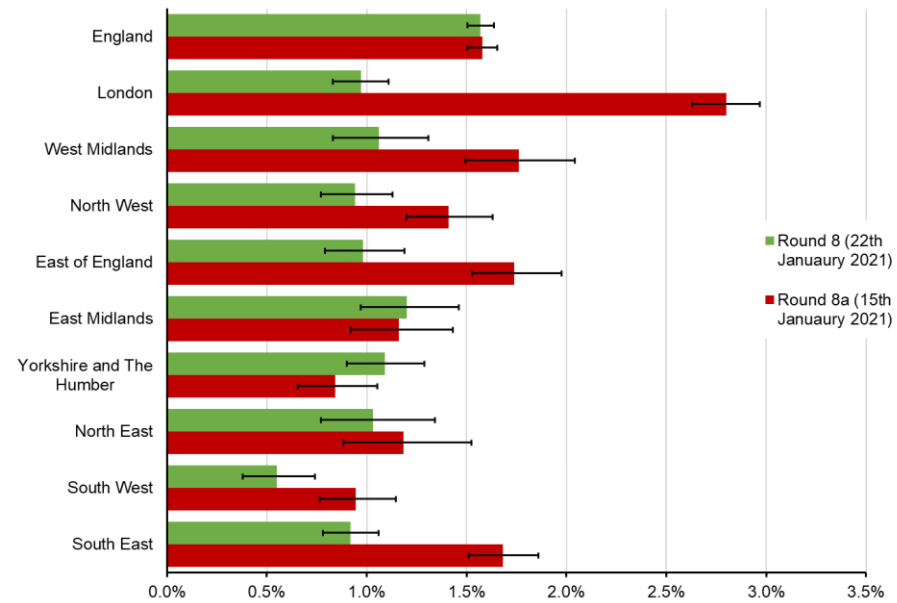
REACT-1 round 8 report from 28/01/21 includes some swab tests from the 30th December 2020 onwards. The report also includes some dates up to the 15/01/21 and a small number of samples from subsequent days
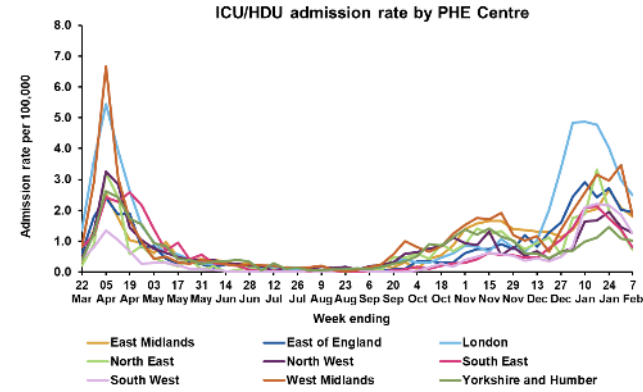
Hospitalisations national trends
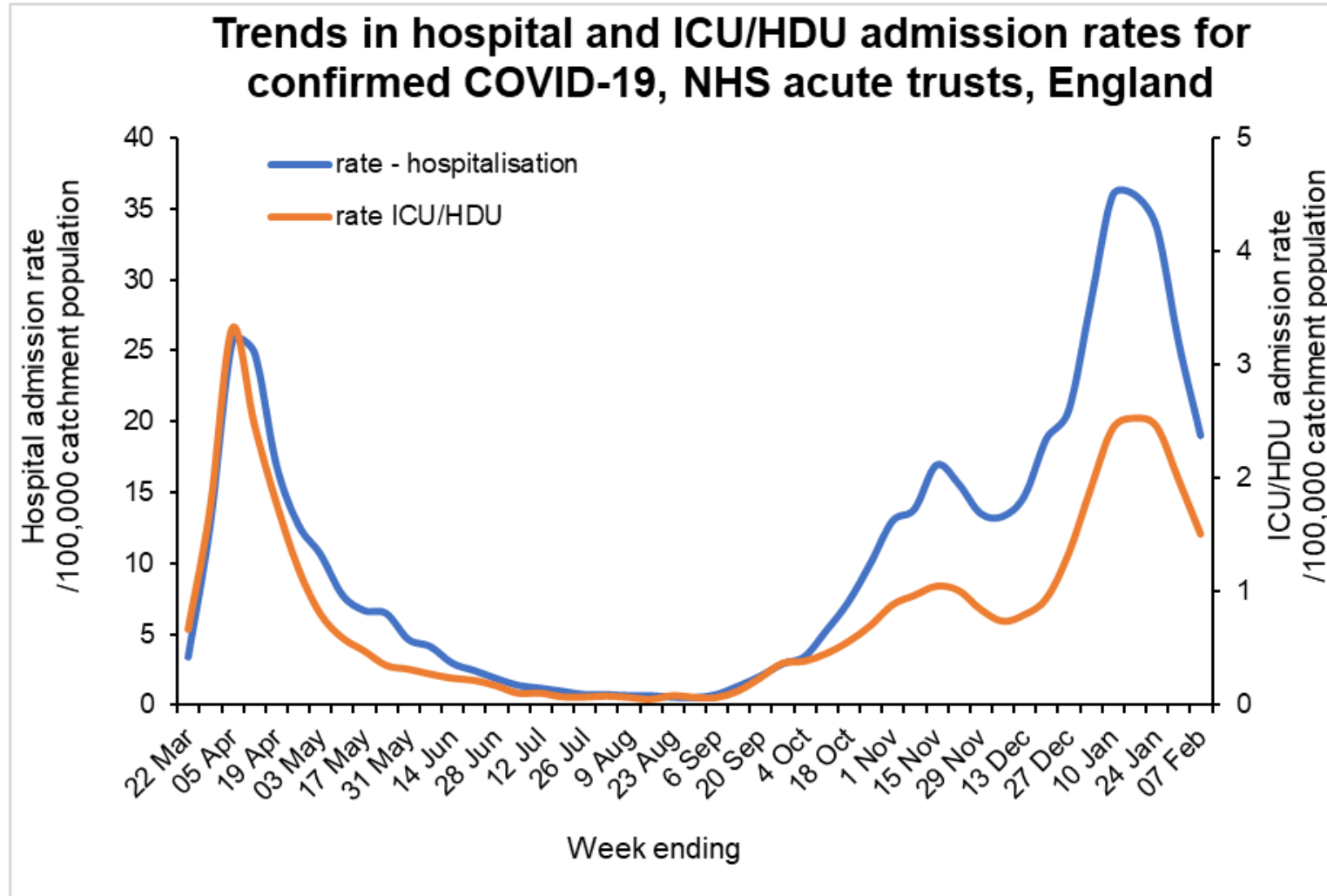
Trends in hospital and ICU/HDU admission rates for confirmed COVID-19, NHS acute trusts, England

Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions
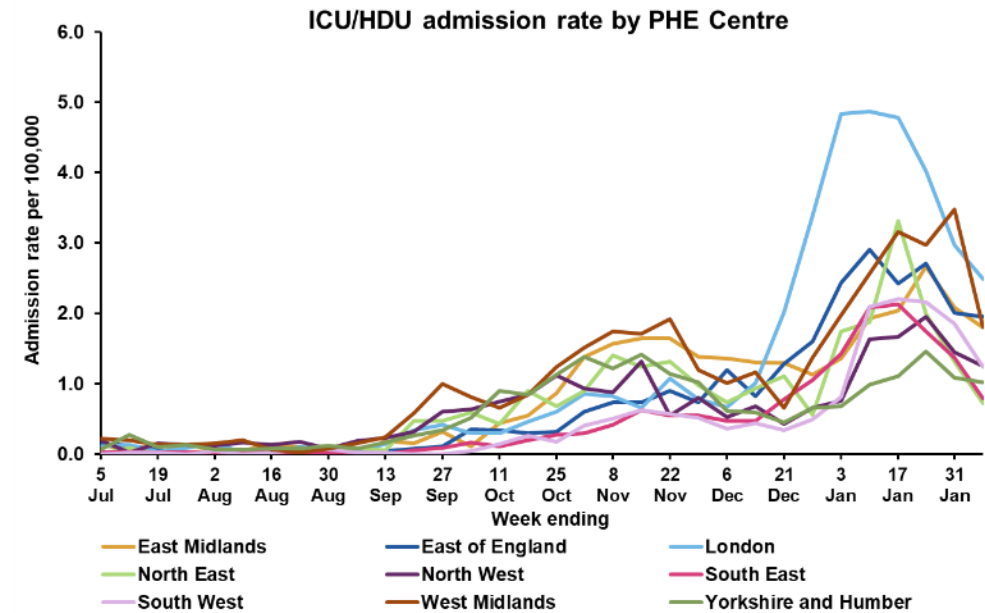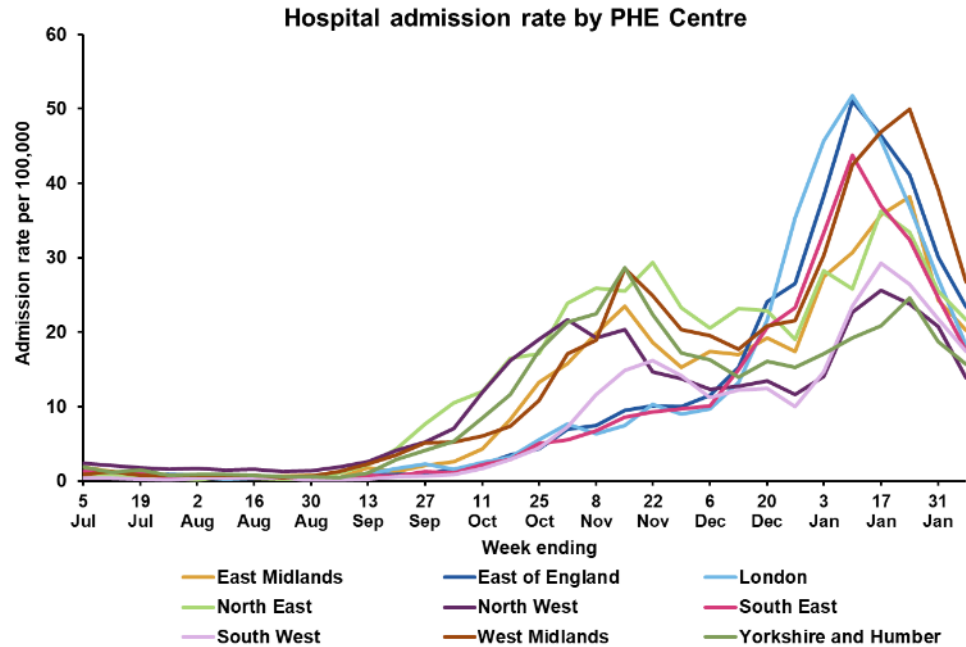
Hospitalisations by PHE Centre
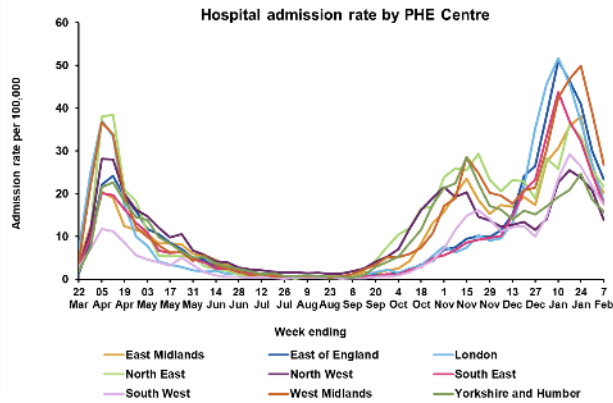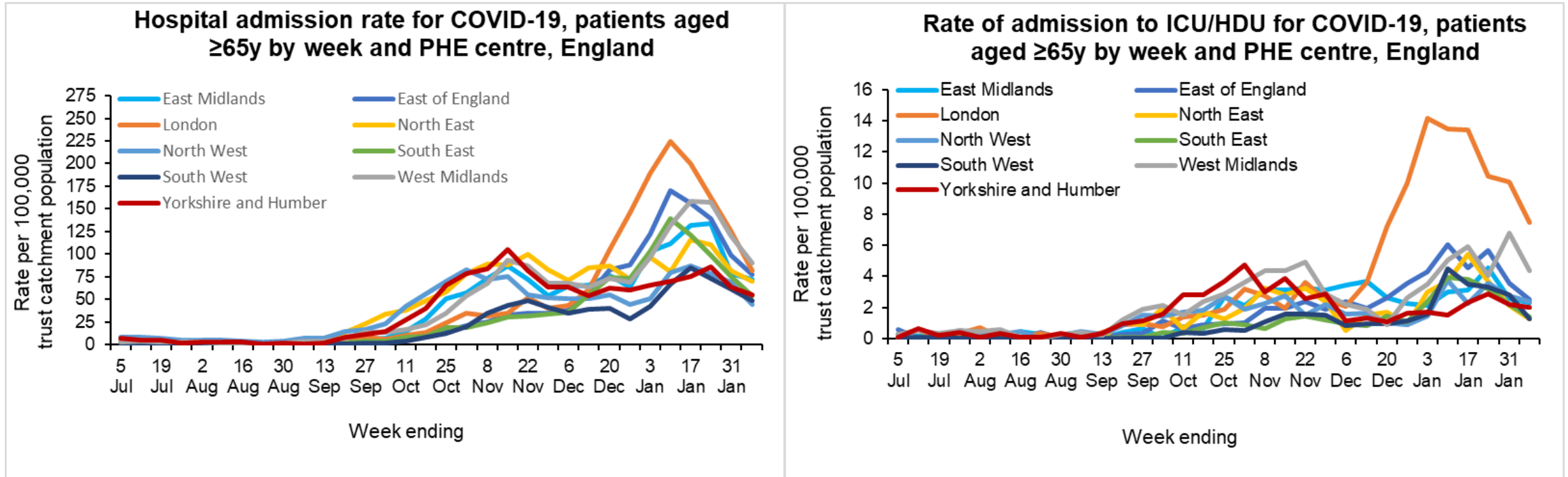

Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions
Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

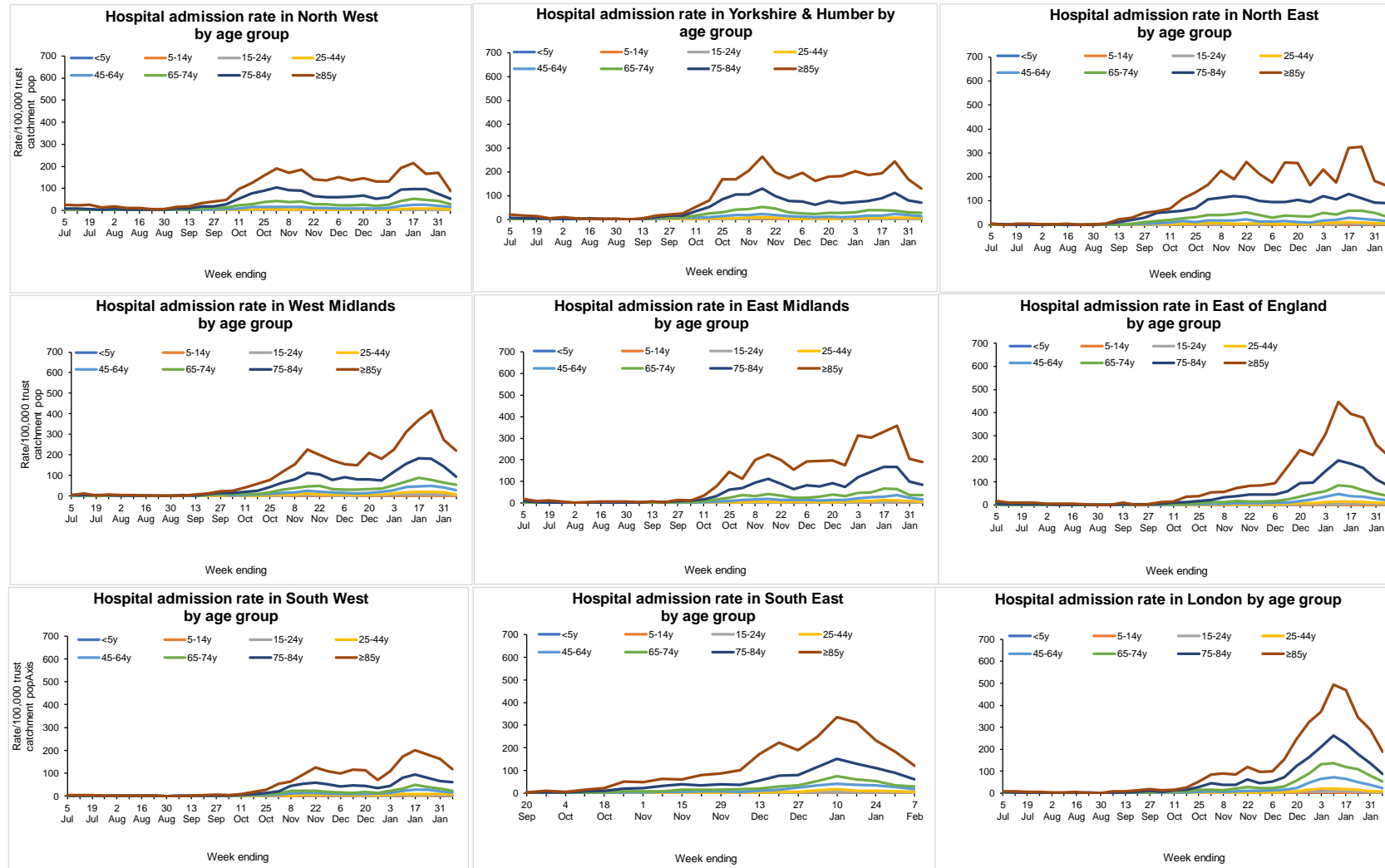# Hospitalisations by PHE Centre and age 65 years and over

Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions
Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch
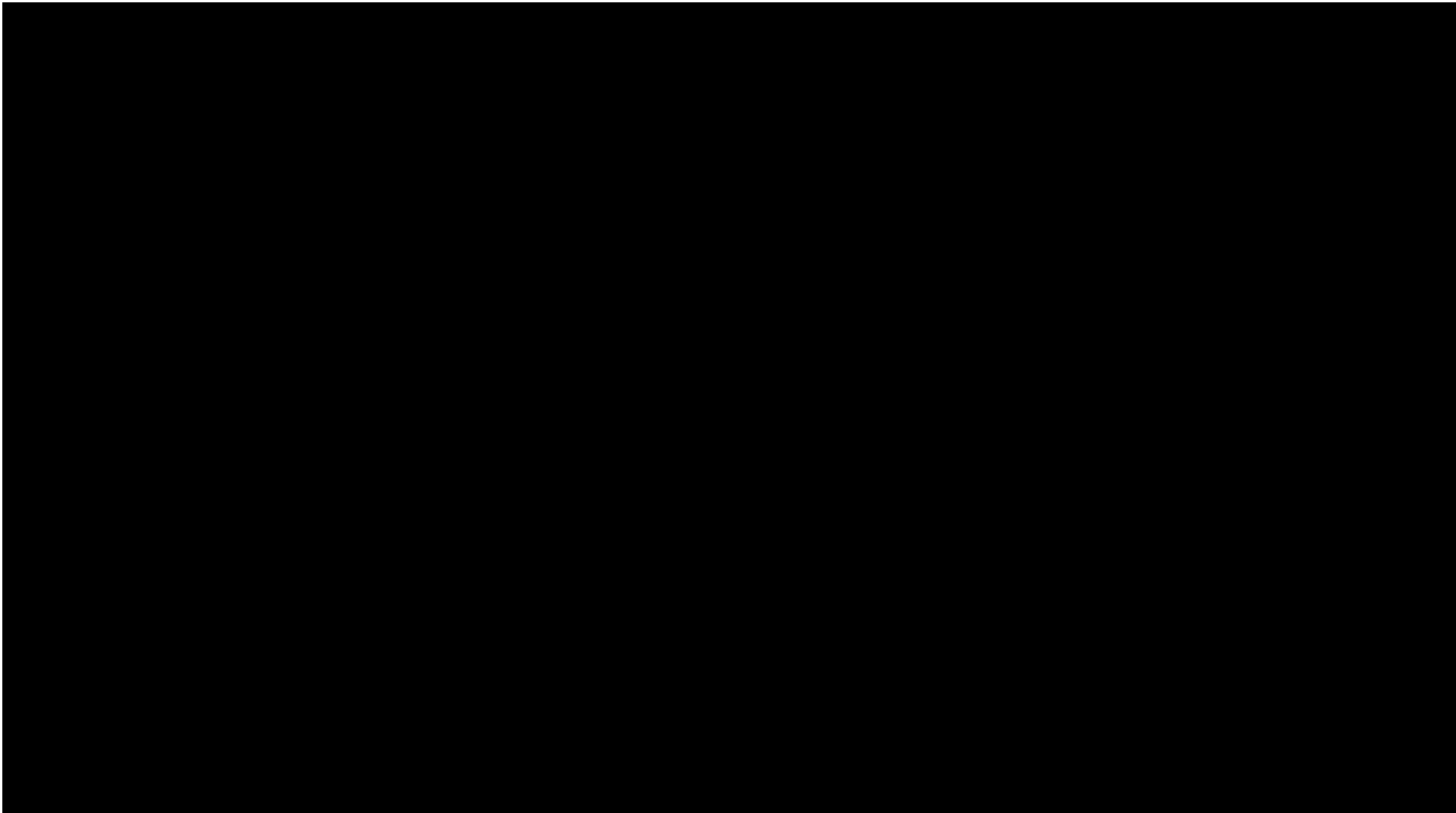
Hospitalisations by PHE Centre and age
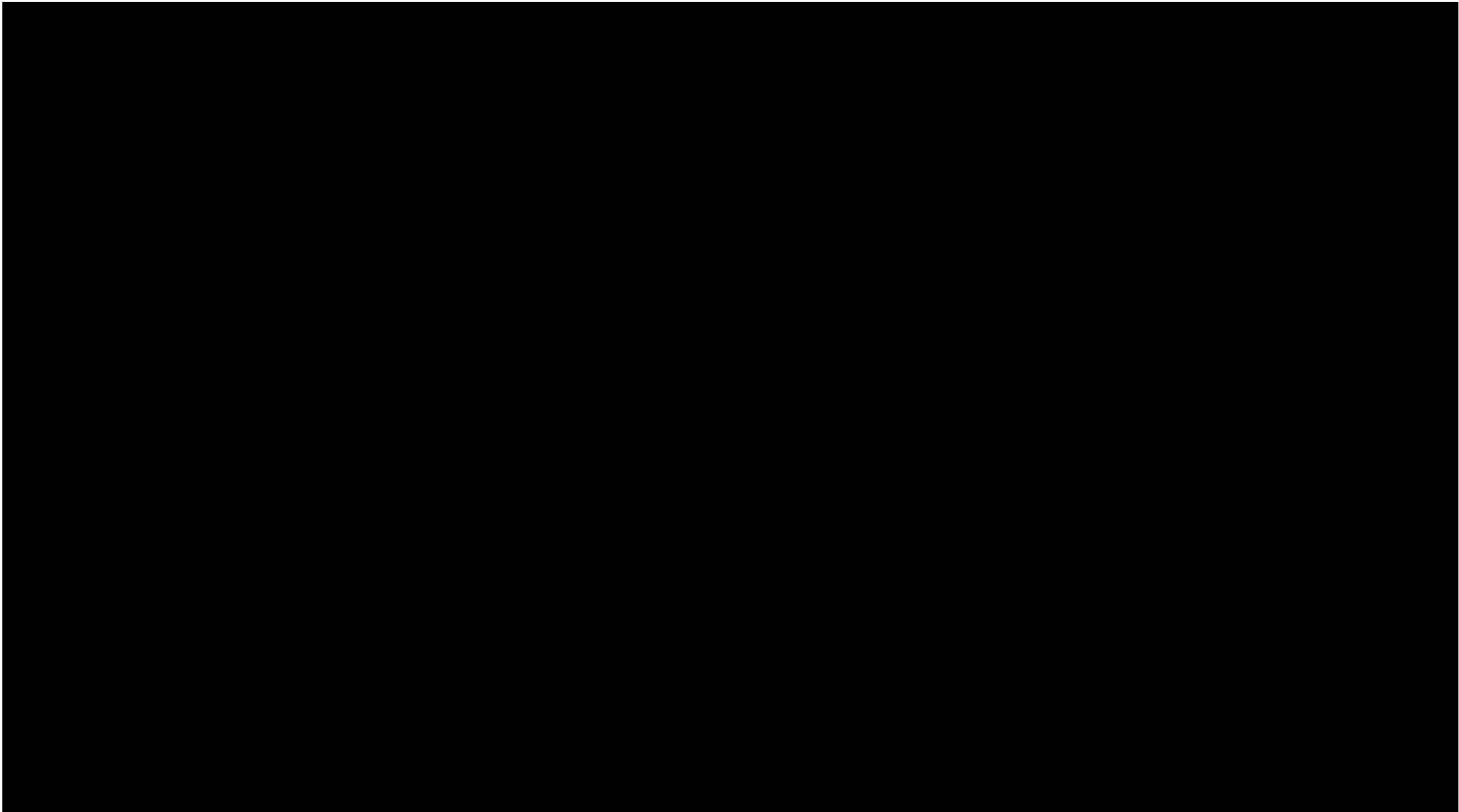

Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions
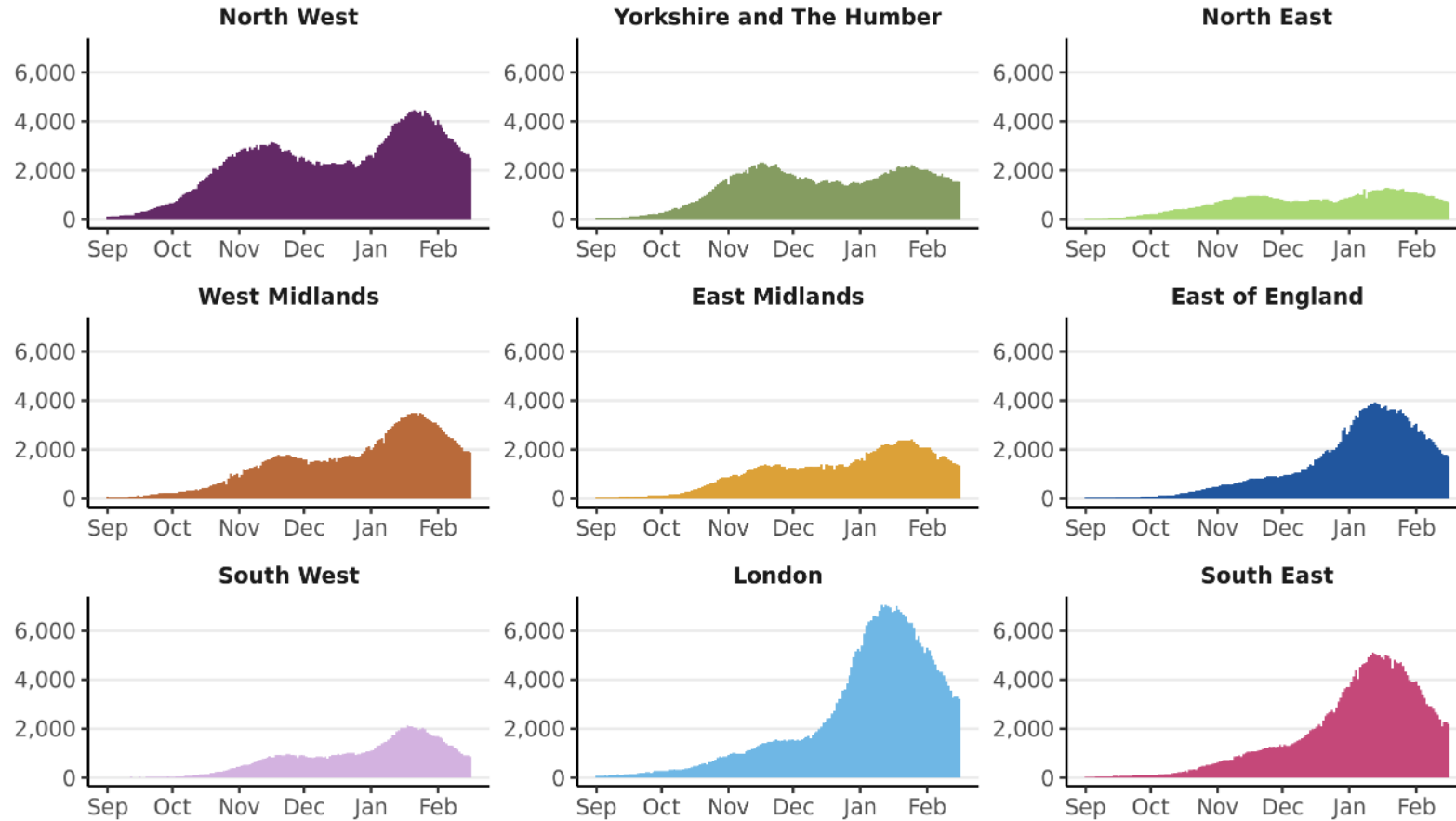Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

Patients in hospital by region

Daily count of confirmed COVID-19 patients in hospital at 8am by region

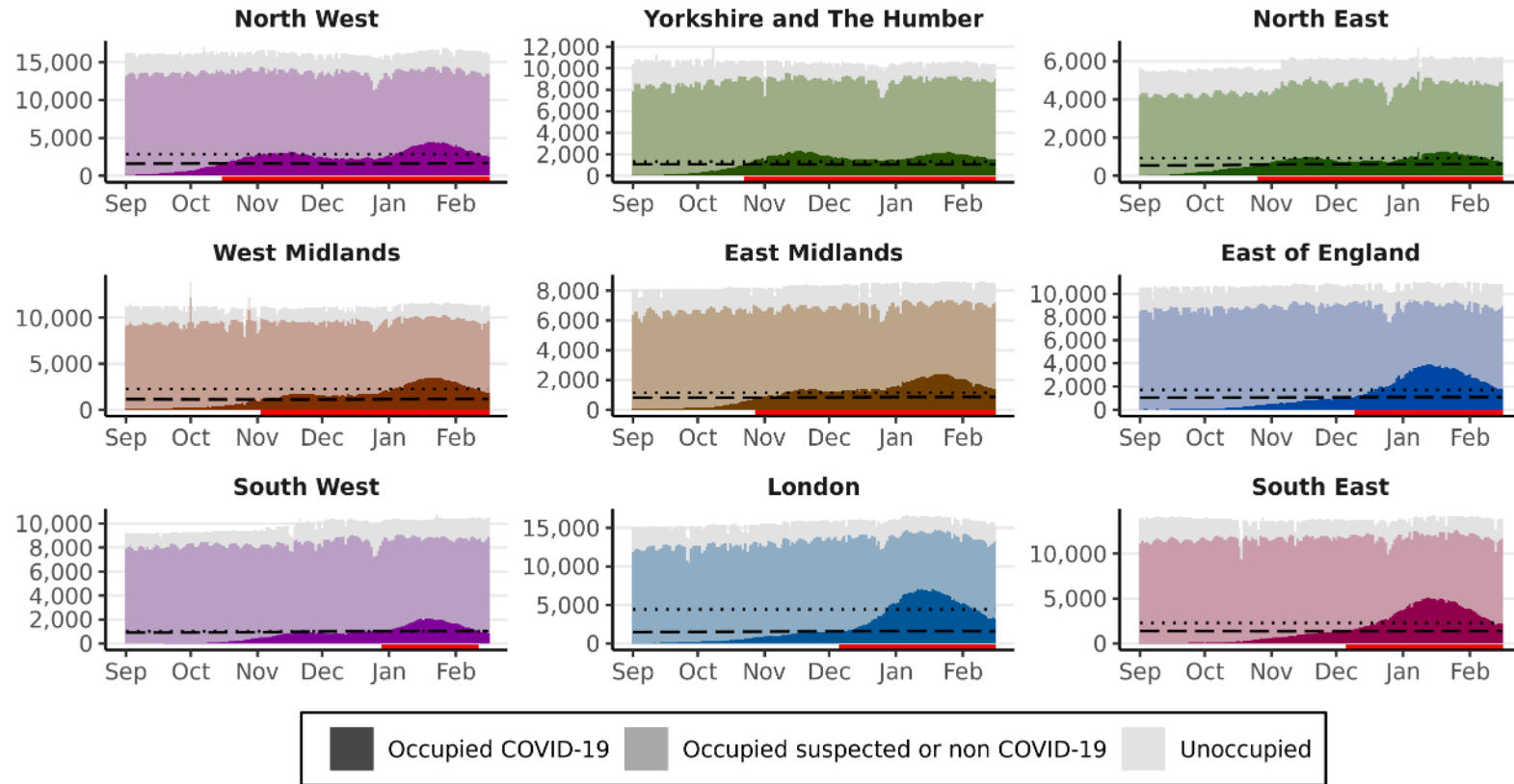NOTE: slide shows bed occupancy, not new admissions.

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 01 September 2020 to 16 February 2021. Produced by Joint Biosecurity Centre.

Bed occupancy and capacity by region - general and acute beds

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.

Legend: Occupied COVID-19 — Occupied suspected or non COVID-19 — Unoccupied

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 02 April 2020 to 16 February 2021. Produced by Joint Biosecurity Centre.

Bed occupancy and capacity by region - general and acute beds
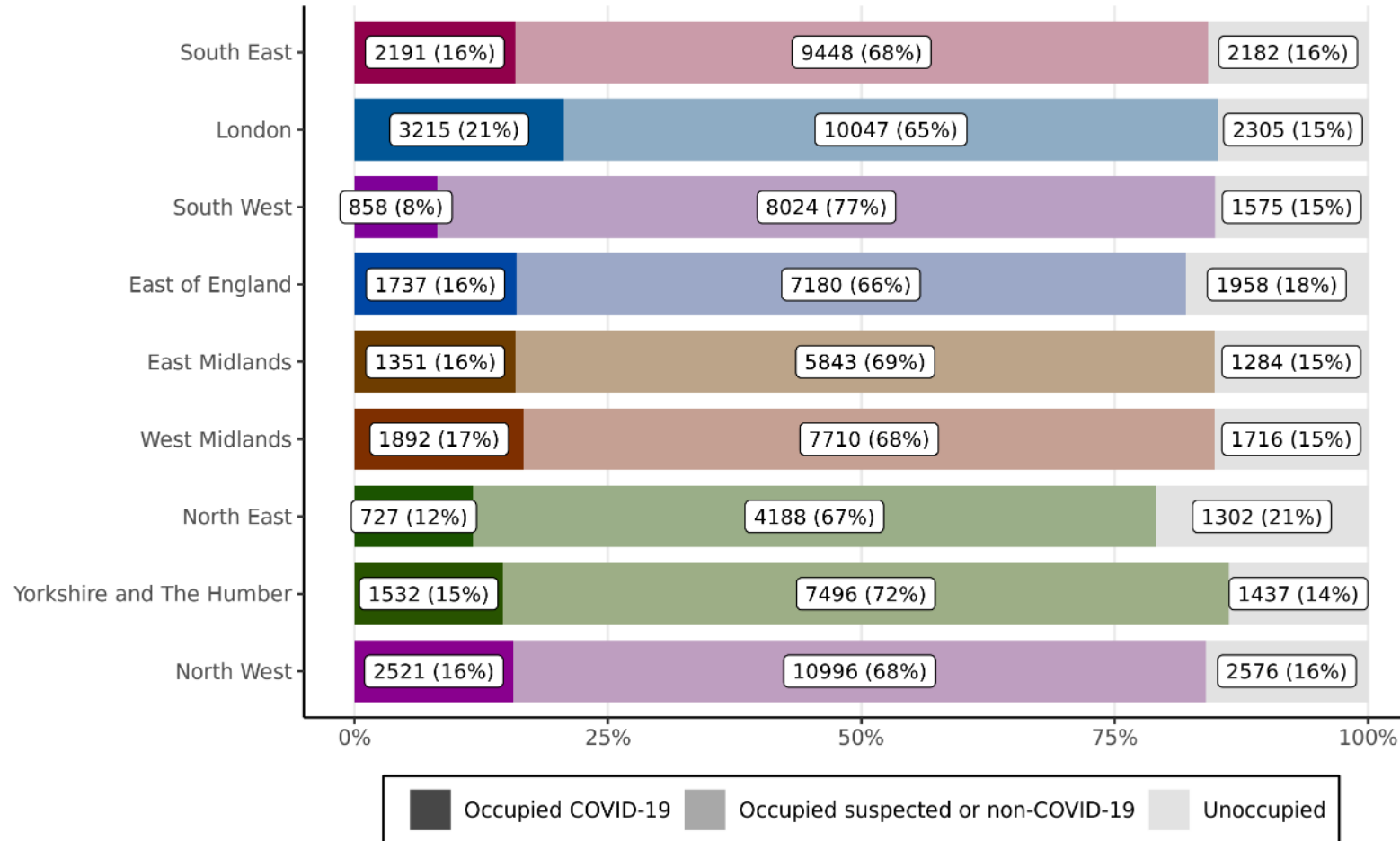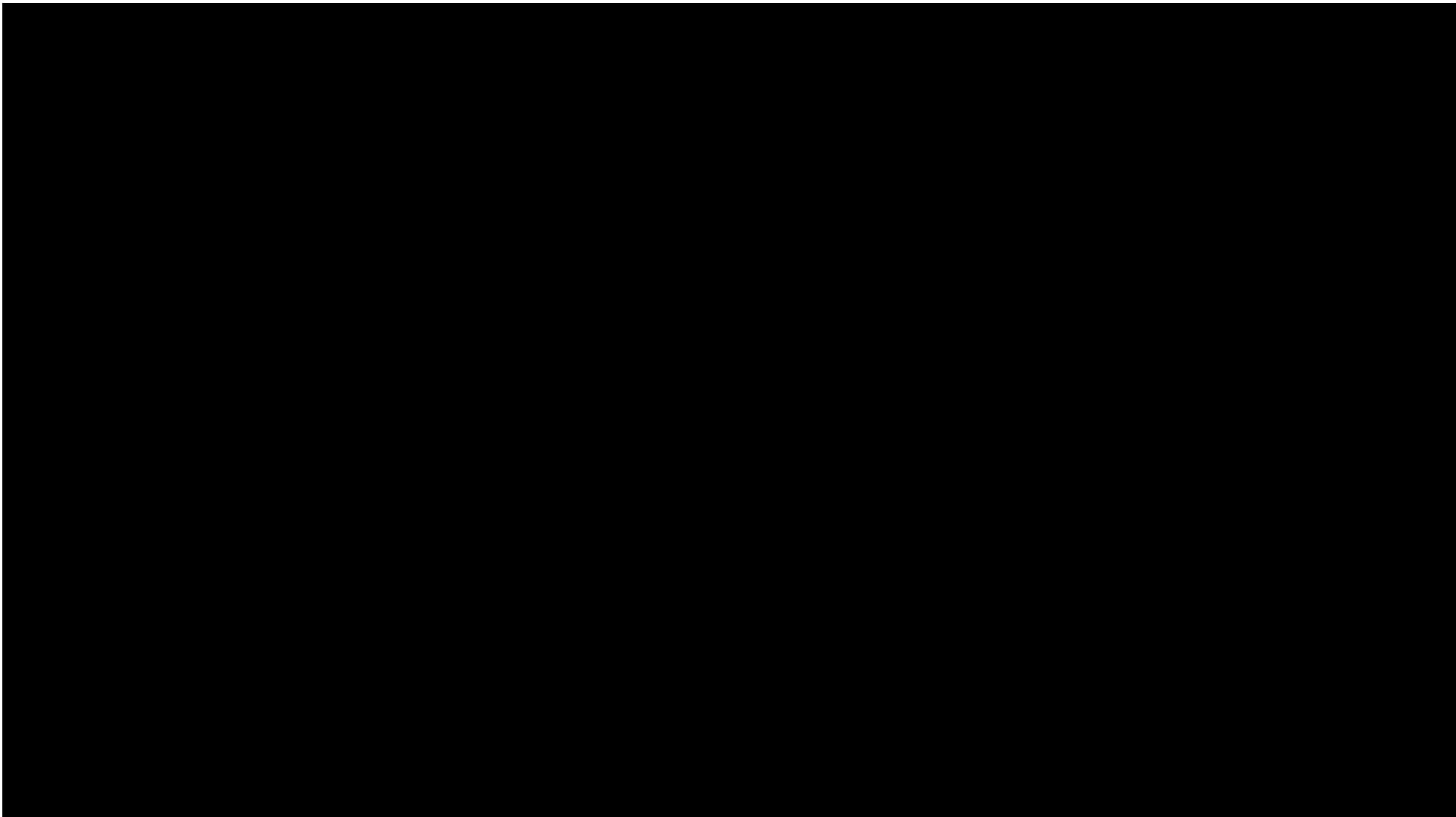
Total bed occupancy and capacity by region on 16 February 2021

Region	Occupied COVID-19	Occupied suspected or non-COVID-19	Unoccupied
South East	2191 (16%)	9448 (68%)	2182 (16%)
London	3215 (21%)	10047 (65%)	2305 (15%)
South West	858 (8%)	8024 (77%)	1575 (15%)
East of England	1737 (16%)	7180 (66%)	1958 (18%)
East Midlands	1351 (16%)	5843 (69%)	1284 (15%)
West Midlands	1892 (17%)	7710 (68%)	1716 (15%)
North East	727 (12%)	4188 (67%)	1302 (21%)
Yorkshire and The Humber	1532 (15%)	7496 (72%)	1437 (14%)
North West	2521 (16%)	10996 (68%)	2576 (16%)

Legend: Occupied COVID-19 | Occupied suspected or non-COVID-19 | Unoccupied
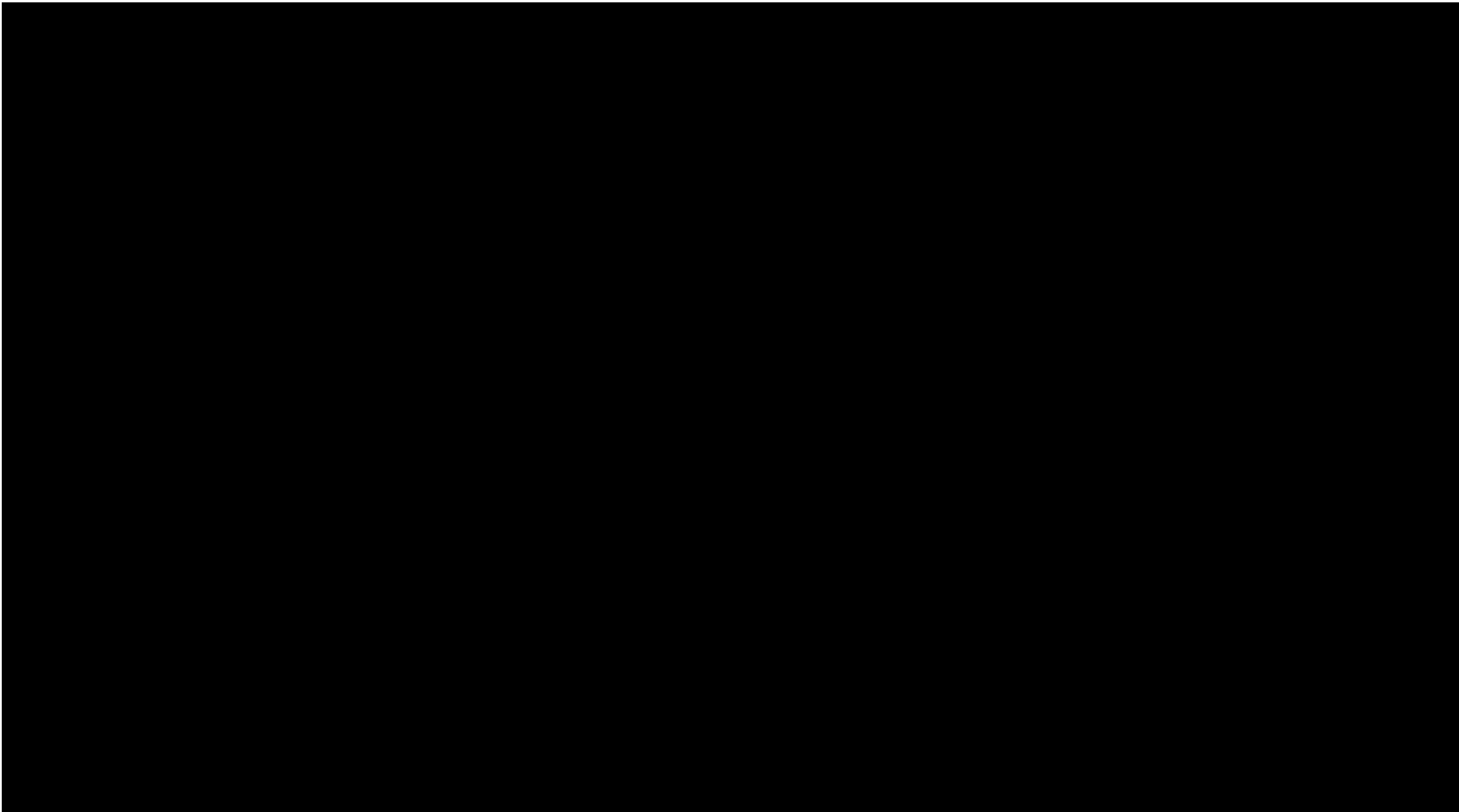
NHS 111 'potential COVID-19' calls
NHS 111 'potential COVID-19' calls, alarms over the past 7 days (9 Feb 2021 to 15 Feb 2021)

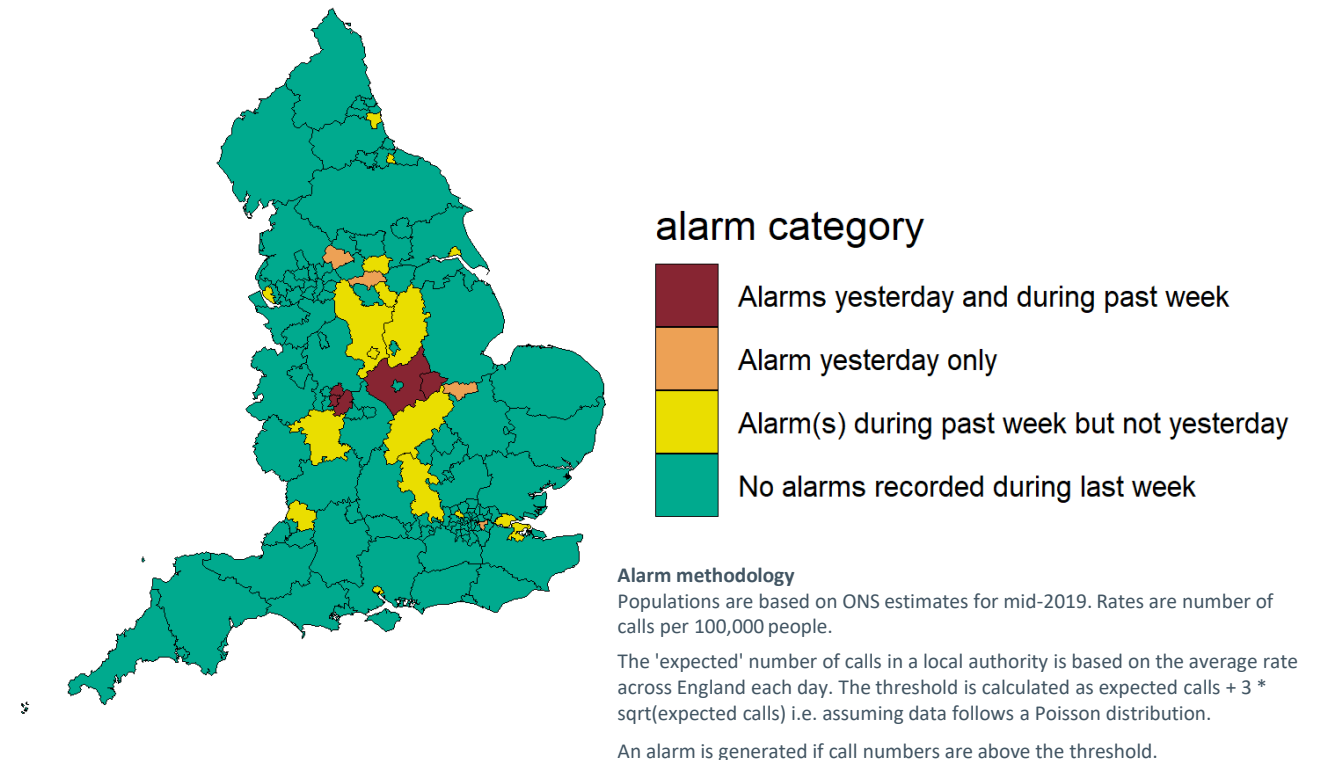The alarms are intended to give early warning of local authorities where rates are higher than the national average. Due to a lack of historical data it is not yet possible to take into account any systematic bias which may result in one authority consistently recording above average rates independently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

NHS 111 'potential 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.
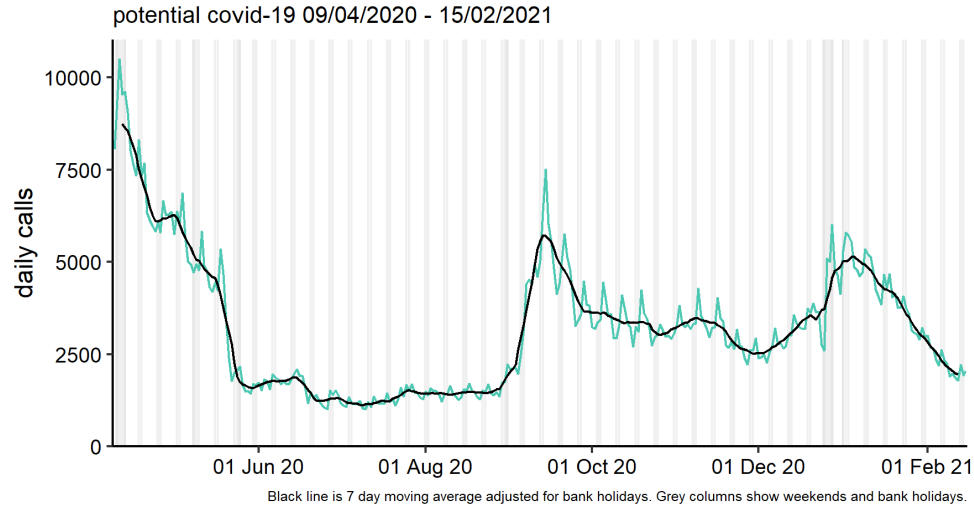
Area	Number of alarms in past 7 days	Alarm category
Sandwell		Alarms yesterday and during past week
Birmingham		Alarms yesterday and during past week
Leicestershire, including Rutland		Alarms yesterday and during past week
Walsall		Alarms yesterday and during past week
Barnsley		Alarm yesterday only
Calderdale		Alarm yesterday only
Greenwich		Alarm yesterday only
Peterborough		Alarm yesterday only
Buckinghamshire		Alarm(s) during past week but not yesterday
Northamptonshire		Alarm(s) during past week but not yesterday
Nottinghamshire		Alarm(s) during past week but not yesterday
Rotherham		Alarm(s) during past week but not yesterday
Derby		Alarm(s) during past week but not yesterday
Derbyshire		Alarm(s) during past week but not yesterday
South Gloucestershire		Alarm(s) during past week but not yesterday
Brent		Alarm(s) during past week but not yesterday
Kingston upon Hull, City of		Alarm(s) during past week but not yesterday
Liverpool		Alarm(s) during past week but not yesterday
Medway		Alarm(s) during past week but not yesterday
Middlesbrough		Alarm(s) during past week but not yesterday
Southampton		Alarm(s) during past week but not yesterday
Sunderland		Alarm(s) during past week but not yesterday
Thurrock		Alarm(s) during past week but not yesterday
Wakefield		Alarm(s) during past week but not yesterday
Worcestershire		Alarm(s) during past week but not yesterday

NHS 111 potential COVID-19 calls, alarms over past 7 days (09/02/21 - 15/02/21)

alarm category

- Alarms yesterday and during past week
- Alarm yesterday only
- Alarm(s) during past week but not yesterday
- No alarms recorded during last week

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.

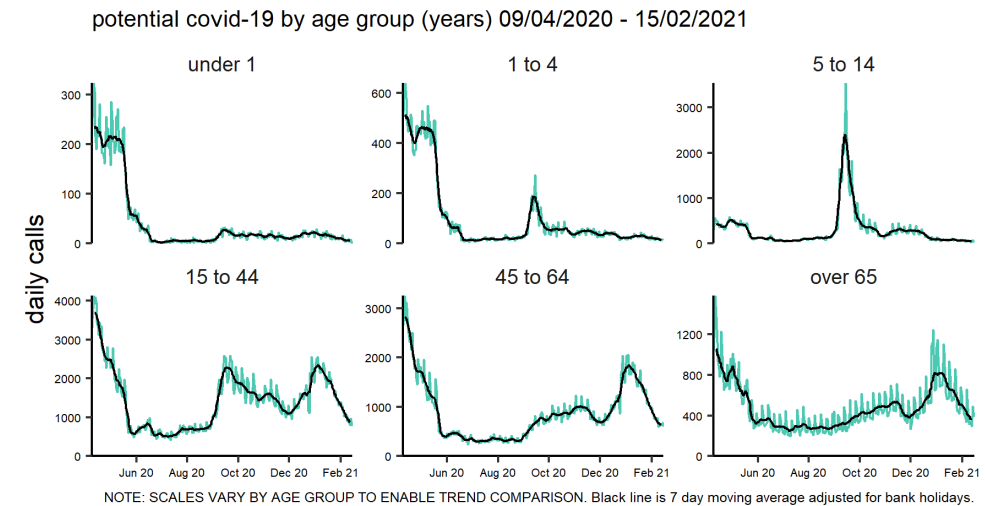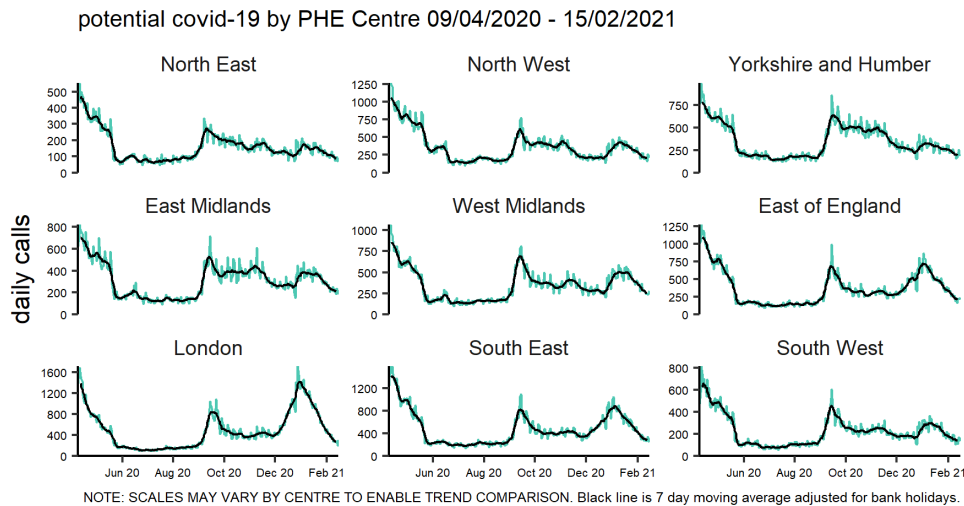An alarm is generated if call numbers are above the threshold.

NHS 111 'potential COVID-19' calls
Trends in daily NHS 111 'potential COVID-19' calls, national, PHE Centre and by age (to 15 Feb)

potential covid-19 09/04/2020 - 15/02/2021

Black line is 7 day moving average adjusted for bank holidays. Grey columns show weekends and bank holidays.
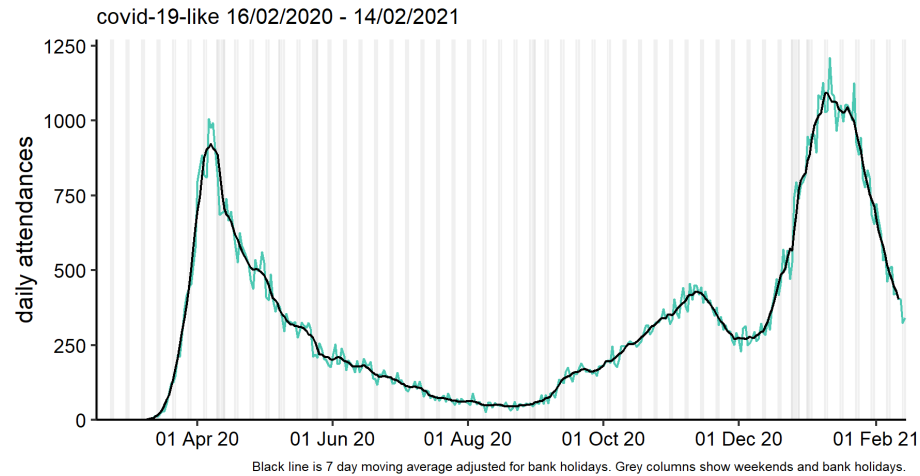
NHS 111 'potential COVID-19' calls

- These data are based on 'potential COVID-19' symptoms reported by callers
- These data are not based on outcomes of tests for coronavirus
- Charts should be used to monitor trends (not the actual number of people symptomatic in the community)
- Daily and 7-day moving averages are shown in all charts
- PHE Centre charts should only be compared for trend, not number of calls (PHE Centre population size varies). Please note the different scales on these charts.

potential covid-19 by PHE Centre 09/04/2020 - 15/02/2021

NOTE: SCALES MAY VARY BY CENTRE TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

potential covid-19 by age group (years) 09/04/2020 - 15/02/2021

NOTE: SCALES VARY BY AGE GROUP TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

Further information and weekly NHS 111 reports containing potential COVID-19 call and online assessment surveillance data is available from the PHE Remote Health Advice bulletin.
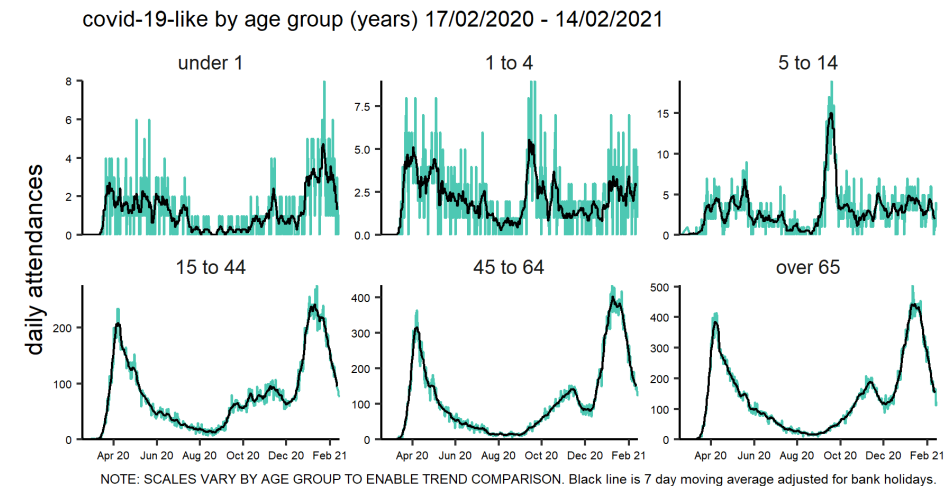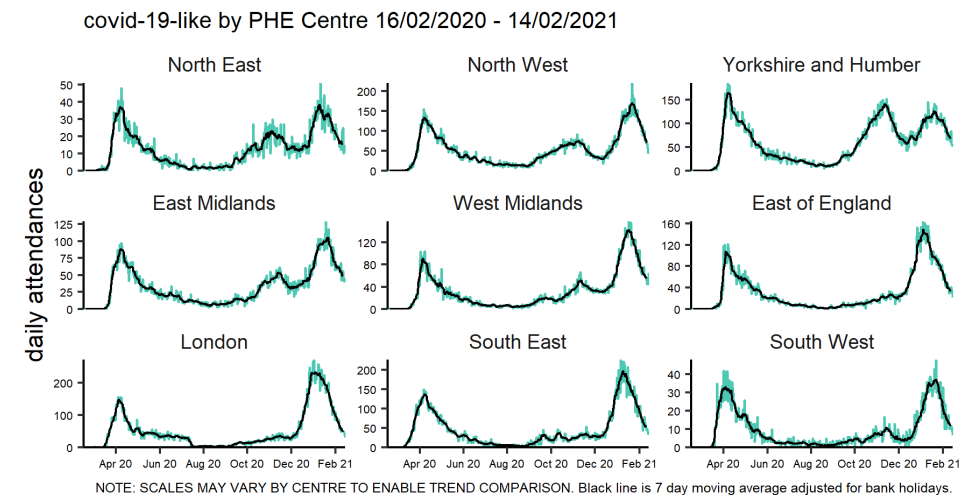
Emergency Department Syndromic Surveillance System COVID-19-like attendances
Trends in daily ED COVID-19-like attendances, national, PHE Centre and by age (to 14 Feb)

covid-19-like 16/02/2020 - 14/02/2021

Black line is 7 day moving average adjusted for bank holidays. Grey columns show weekends and bank holidays.
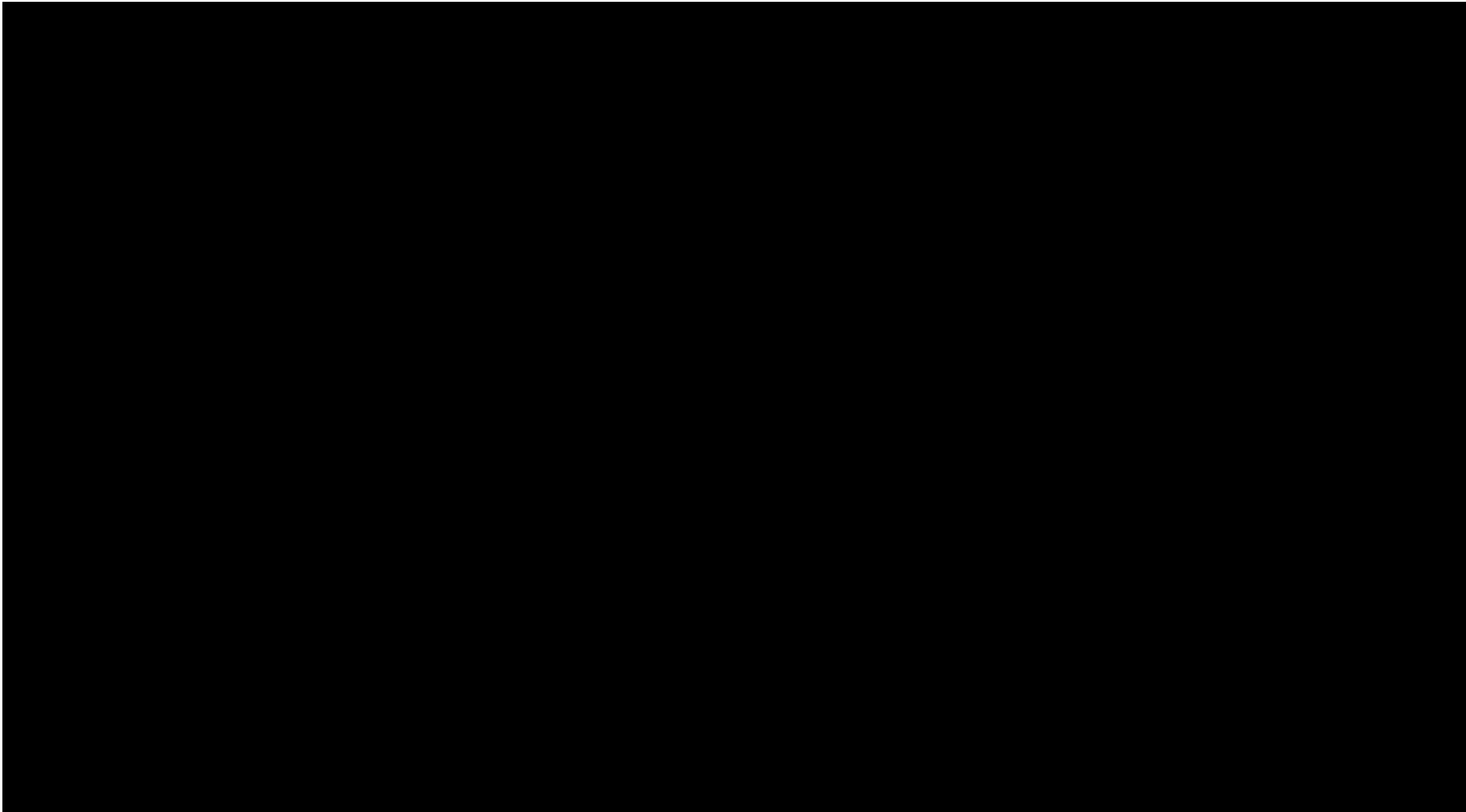
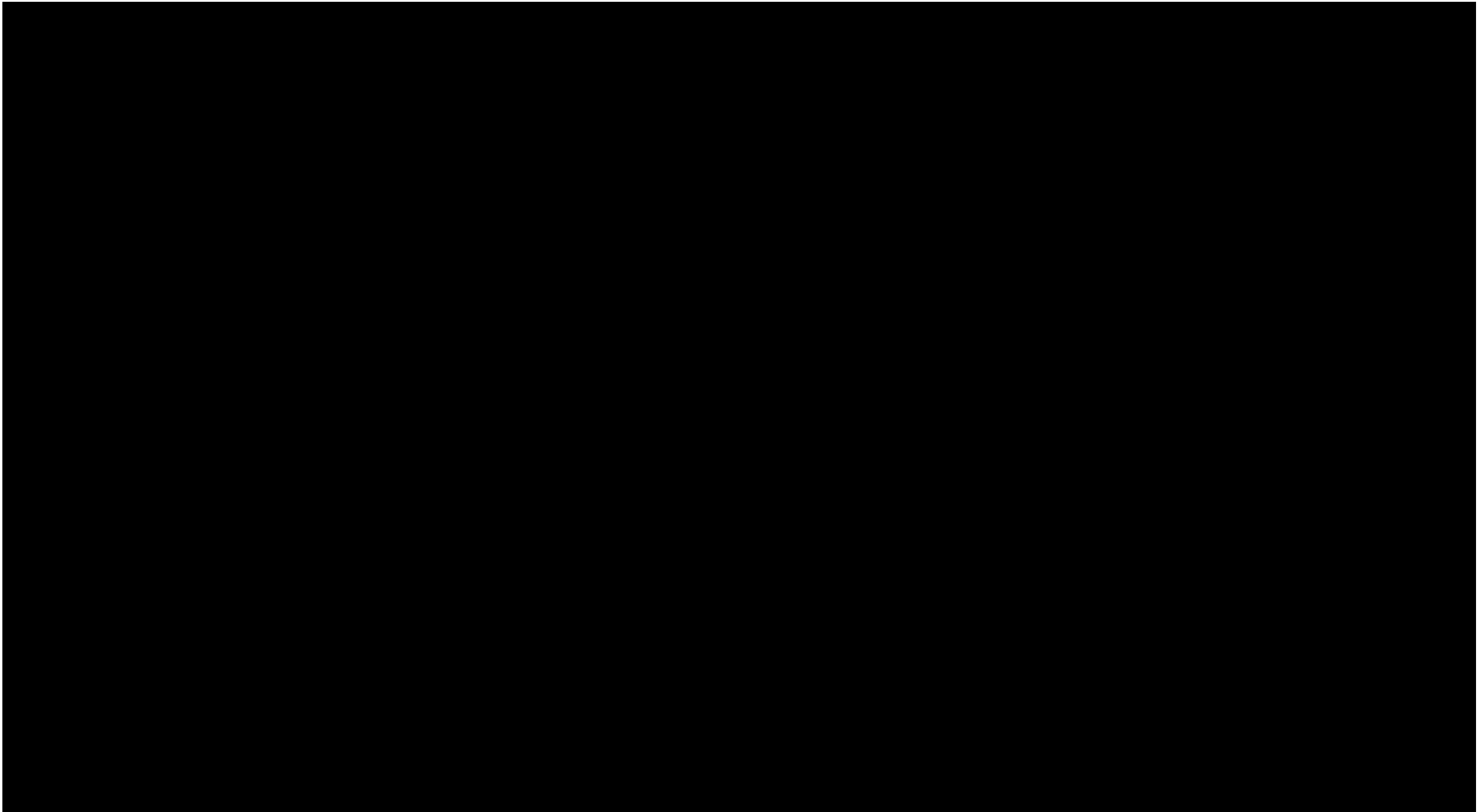Emergency Department Syndromic Surveillance System (EDSSS) COVID-19-like attendances.
- EDs are included in surveillance based on the speed and frequency of reporting in the most recent 7 days
- EDs included can change on a day by day basis
- These data are based on COVID-19-like primary diagnoses (patients may have multiple diagnoses listed)
- These data are not based on outcomes of tests for coronavirus
- Charts are an underestimation of the actual number of COVID-19-like attendances (as alternative diagnoses may have been entered)
- Charts should be used to monitor trends
- PHE Centre charts should only be compared for trend, not number of attendances (PHE Centre population size and number of EDs included varies)
    - Please note the different scales on the charts.
- Daily and 7-day moving averages are shown in all charts

covid-19-like by PHE Centre 16/02/2020 - 14/02/2021

NOTE: SCALES MAY VARY BY CENTRE TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

covid-19-like by age group (years) 17/02/2020 - 14/02/2021

NOTE: SCALES VARY BY AGE GROUP TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

Further information and weekly EDSSS reports containing COVID-19-like attendance surveillance data is available from the PHE EDSSS bulletin.

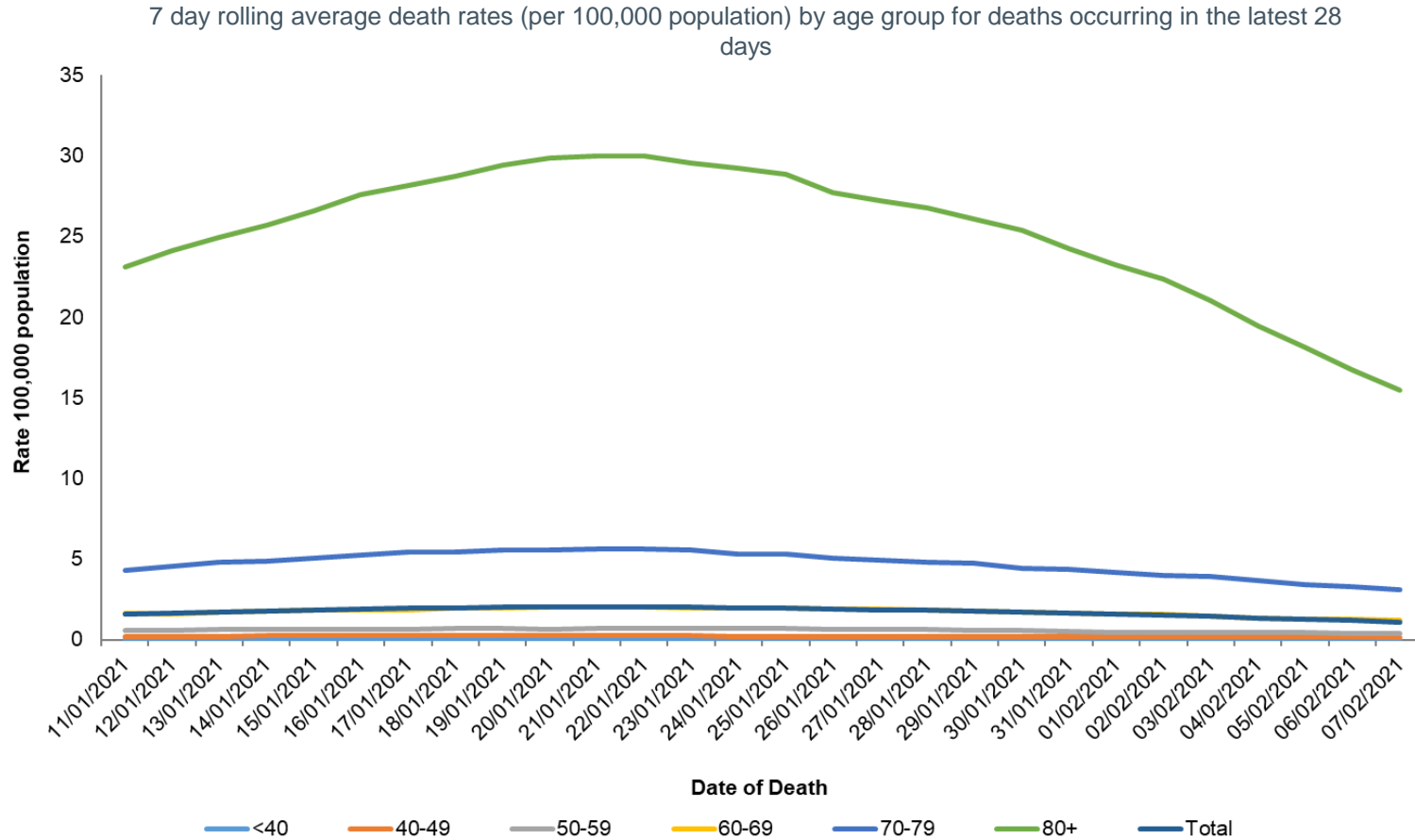# Mortality rate per 100,000 population by age group (seven day rolling average)
for deaths within 28 days of first positive specimen

7 day rolling average death rates (per 100,000 population) by age group for deaths occurring in the latest 28 days

*These data contains a 4 day delay from the day it was produced to allow time for reporting delay
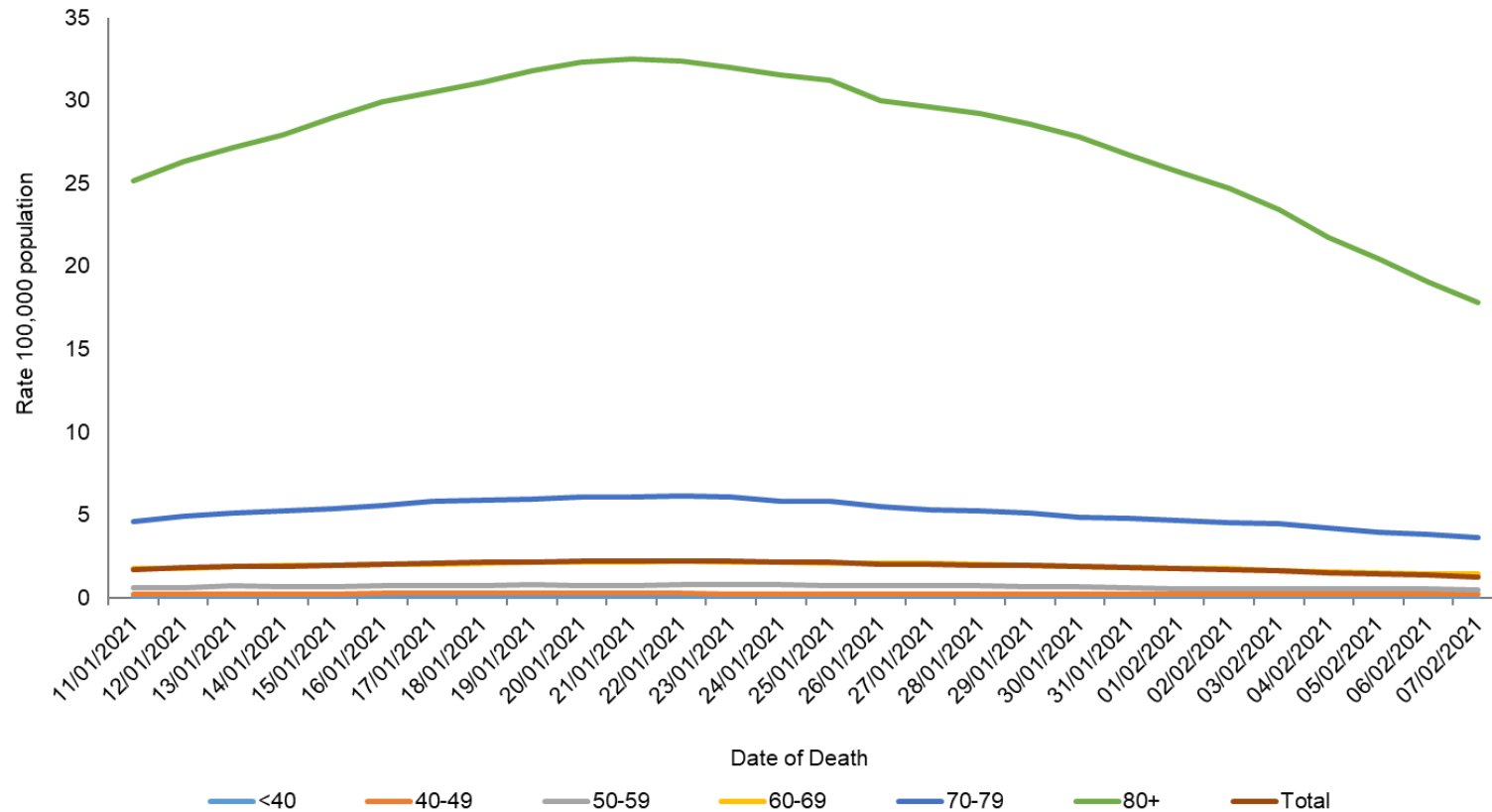
Death definition: a death within 28 days of a positive specimen

Prepared by PHE Epidemiology Cell

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Mortality rate per 100,000 population by age group (seven day rolling average)
for deaths within 60 days of first positive specimen or died more than 60 days after first positive specimen and COVID-19 is mentioned on the death certificate

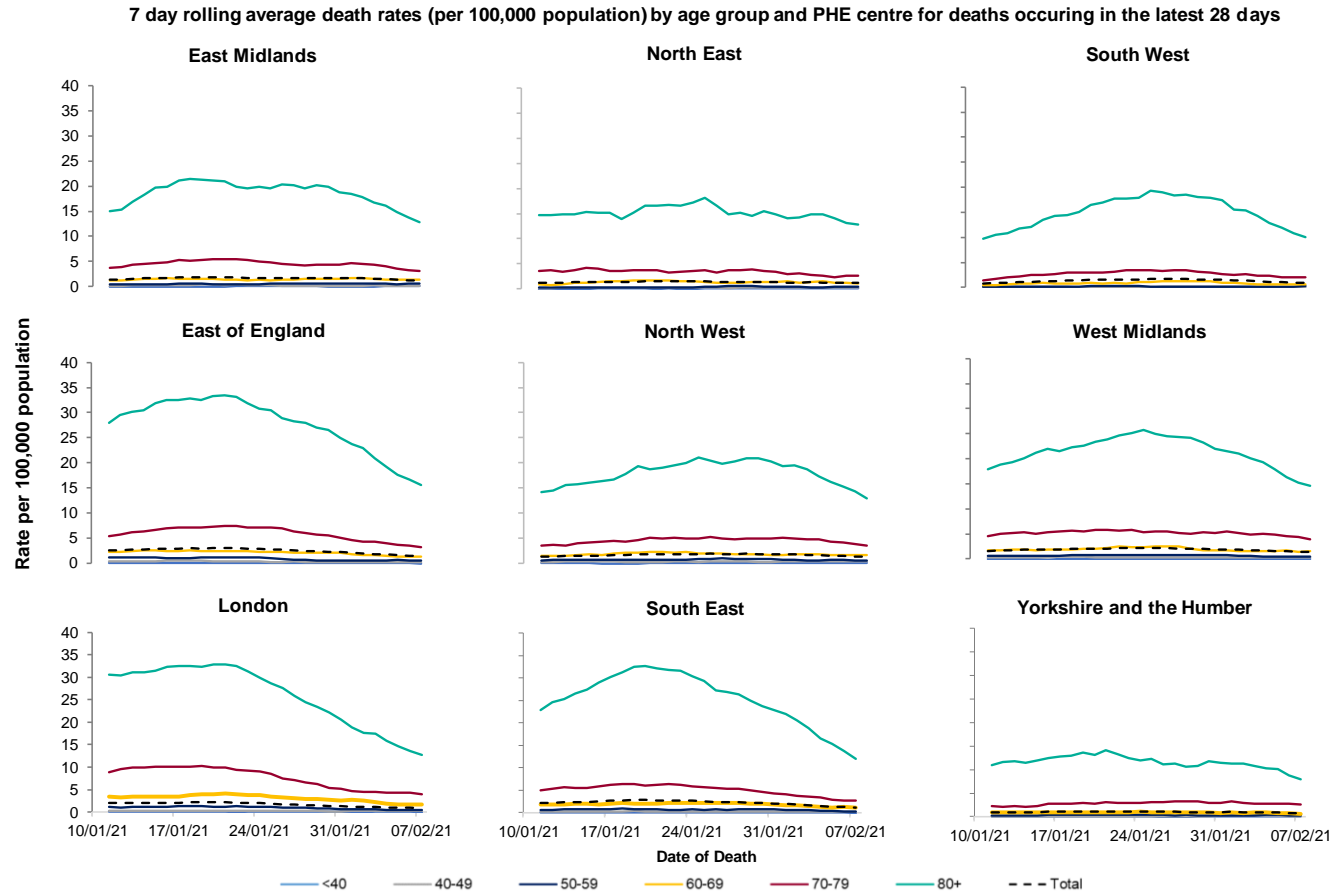7 day rolling average death rates (per 100,000 population) by age group for deaths occuring in the latest 28 days

*These data contains a 4 day delay from the day it was produced to allow time for reporting delay

Death definition: a death within 60 days of a positive specimen or on death certificate

Prepared by PHE Epidemiology Cell

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Mortality rate per 100,000 population by age group and region (seven day rolling average)
for deaths within 28 days of first positive specimen

7 day rolling average death rates (per 100,000 population) by age group and PHE centre for deaths occuring in the latest 28 days

*These data contains a 4 day delay from the day it was produced to allow time for reporting delay
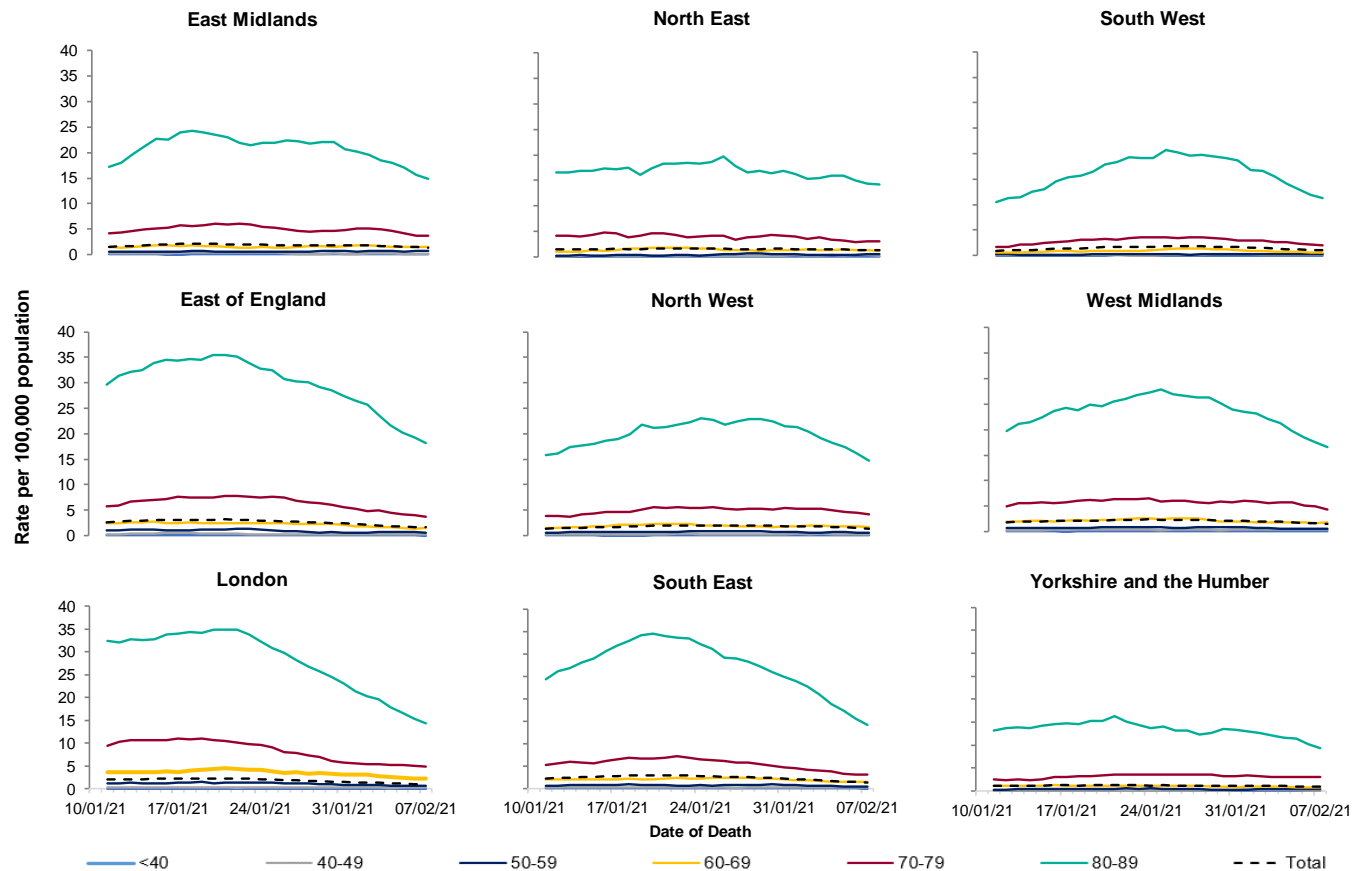
Death definition: a death within 28 days of a positive specimen

Prepared by PHE Epidemiology Cell

Mortality rate per 100,000 population by age group and region (seven day rolling average)

for deaths within 60 days of first positive specimen or died more than 60 days after first positive specimen and COVID-19 is mentioned on the death certificate

7 day rolling average death rates (per 100,000 population) by age group and PHE centre for deaths occuring in the latest 28 days

*These data contains a 4 day delay from the day it was produced to allow time for reporting delay

Death definition: a death within 60 days of a positive specimen or on death certificate

Prepared by PHE Epidemiology Cell

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