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
- Case rates, █████████████ positivity and testing

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 NHS Summary Care Record**. 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**.*

- █████████
- Prevalence
- Hospitalisation
- NHS 111 potential COVID-19
- Outbreak reports
    - █████████

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

Overall case numbers remained high in week 45. Overall positivity in both Pillars 1 and 2 have decreased slightly. The highest case rates were seen in the 20 to 29 year olds in Pillars 1 and 2. The highest positivity rates were noted in the 80+ year olds in Pillar 1 and in the 10 to 19 year olds in Pillar 2. Cases rates and positivity continue to be highest in the North of England.

As of 09:00 on 10 November 2020, a total of 1,053,330 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 data was previously deduplicated across the course of the pandemic to prevent persistent infections being counted as new cases. Since week 40, positivity is calculated as the number of individuals testing positive during the week divided by the number of individuals tested during the week. This approach accounts for the increasing number of individuals who will have been tested multiple times as the pandemic progresses.

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 (%)
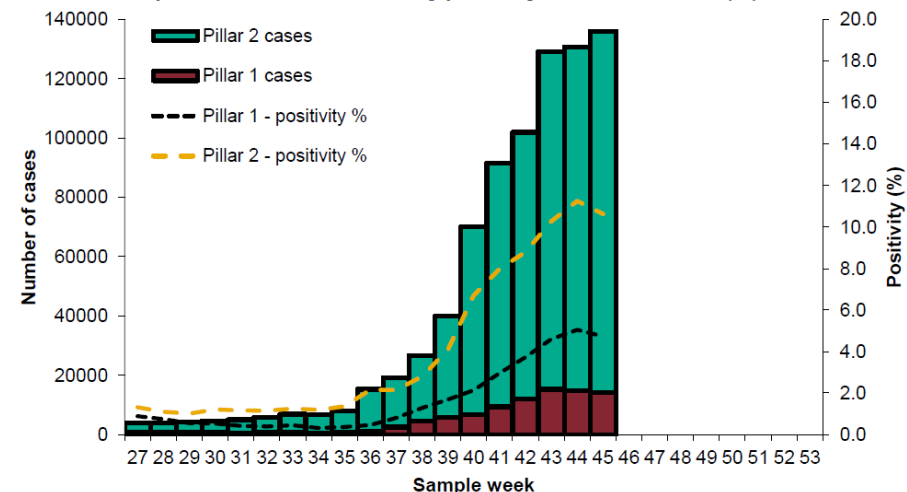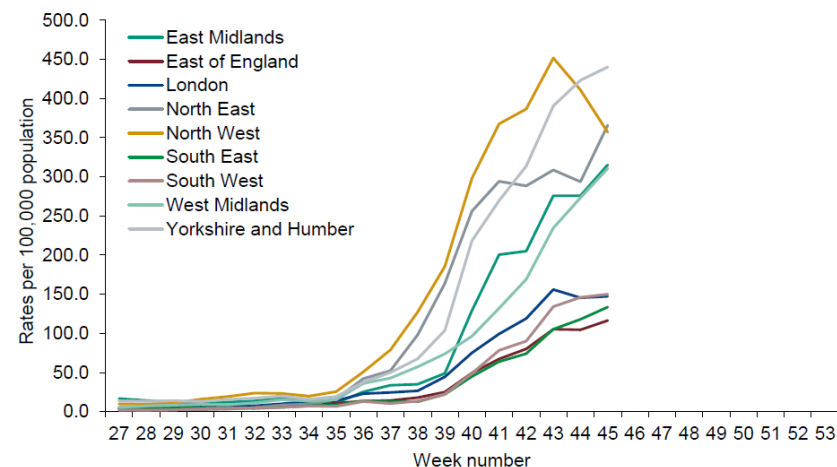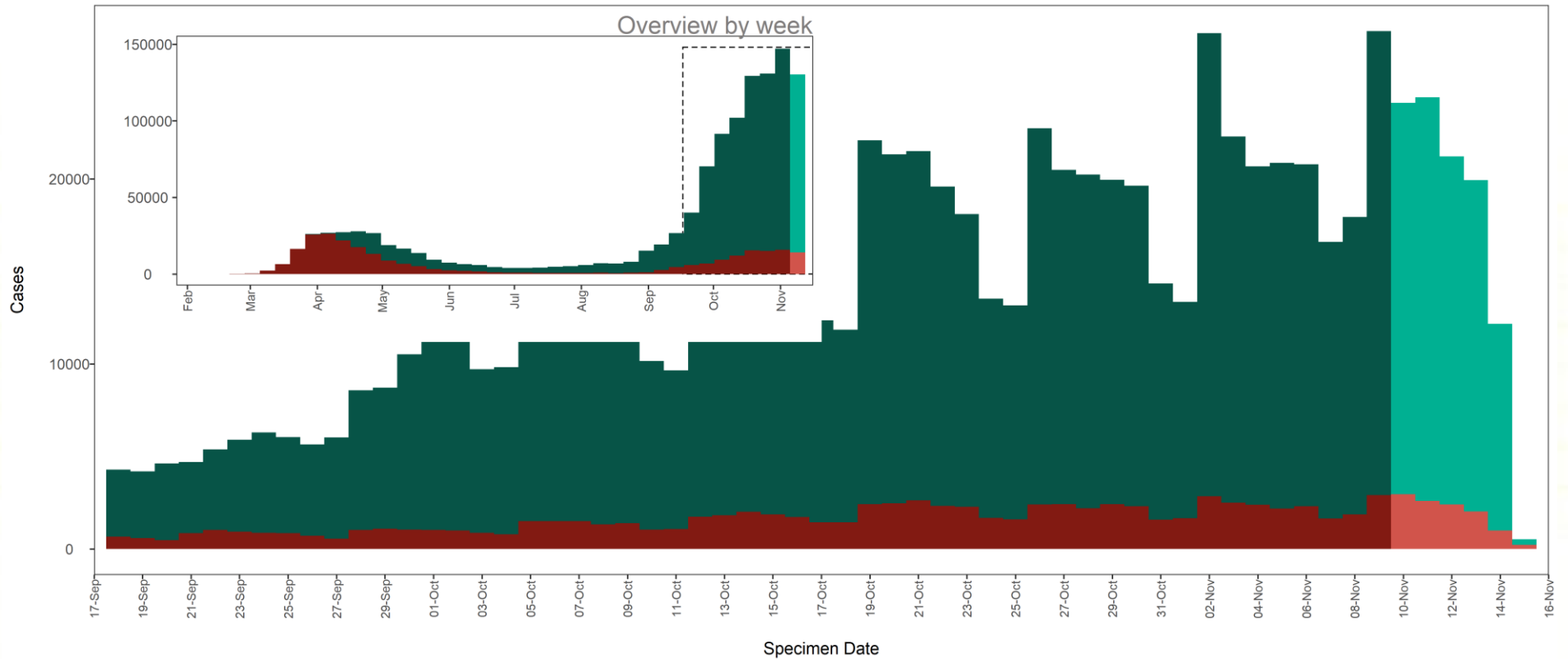

Figure 7: Weekly laboratory confirmed COVID-19 case rates per 100,000 population tested under Pillar 1 and Pillar 2, by PHE Centres and sample week

National context

England confirmed cases - epidemic curve*

Previous two months by day

Overview by week

Cases

Specimen Date

*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.

	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Number of LTLAs by RAG status of percentage of individuals test positive (weekly)			Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Case rate per 100,000 population (weekly)	Number of LTLAs by RAG status of case rate per 100,000 population (weekly)			Case rate per 100,000 population aged 60 years and over (weekly)	Case rate per 100,000 population aged 17-21 year olds (weekly)	Community outbreaks (Last 7 days)	Confirmed cases in previous 7 days
			Red	Amber	Green			Purple	Dark Red	Red				
East Midlands	431.3 ↑	12.2% ↑	37	3	0		341.6 ↑	29	9	2	259.1 ↑	519.3 ↑		16521
East of England	373.7 ↑	6.1% ↑	11	29	6		146.6 ↑	1	19	26	96.2 ↑	282.0 ↑		9538
London	323.3 ↓	8.9% ↑	22	11	0		180.9 ↑	4	17	12	136.2 ↑	280.3 ↑		16208
North East	461.0 ↑	13.9% ↑	12	0	0		421.1 ↑	12	0	0	333.0 ↑	491.3 ↑		11244
North West	617.5 ↑	9.3% ↓	32	6	1		354.9 ↓	29	9	1	273.0 ↓	402.2 ↓		26055
South East	403.8 ↑	6.6% ↑	15	41	10		172.0 ↑	9	26	31	119.2 ↑	321.9 ↑		15324
South West	417.9 ↑	7.0% ↑	7	16	7		190.1 ↑	3	12	14	118.8 ↑	470.0 ↑		10695
West Midlands	443.7 ↑	12.5% ↑	26	4	0		358.9 ↑	26	3	1	280.8 ↑	479.4 ↑		21297
Yorkshire and Humber	461.7 ↑	15.1% ↓	21	0	0		451.2 ↑	16	5	0	345.6 ↓	552.5 ↑		24827
England	**442.3 ↑**	**9.6% ↓**	**183**	**110**	**24**		**271.2 ↑**	**129**	**100**	**87**	**203.3 ↑**	**409.1 ↑**		**152661**

Data for positive cases with specimen dates between **5 November and 11 November 2020**

Arrows demonstrate how figures compare to the equivalent figure as of **4 November 2020**

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

All Cases: 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: Purple >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

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

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 – lower tier local authorities
Local authority areas of interest

This table contains the areas with the highest weekly case rates

Data for specimens taken/outbreaks reported between **5 November and 11 November 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of **4 November 2020**.

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

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

All Cases: 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: Purple >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

Local COVID Alert Level
Medium - areas where national restrictions continue to be in place.
High - areas with a higher level of infections where some additional restrictions are in place.
Very High - areas with a very high level of infections and where tighter restrictions are in place.
The restrictions placed on areas can vary, and are based on discussions between central and local government.

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)	Case rate per 100,000 population (weekly)		Case rate per 100,000 population aged 60 years and over (weekly)		Case rate per 100,000 population aged 17 - 21 years olds (weekly)		Community outbreaks (Last 7 days)	Local COVID Alert Level
Kingston upon Hull, City of	653.3	↑	18.1%	↑		782.6	↑	713.6	↑	950.8	↑		High
Oldham	543.2	↓	19.3%	↓		634.7	↓	545.9	↓	815.3	↓		Very High
Blackburn with Darwen	514.0	↓	18.5%	↓		606.6	↓	455.7	↓	732.1	↓		Very High
Scarborough	579.5	↑	15.7%	↑		605.9	↑	407.7	↑	896.4	↑		Medium
Kirklees	468.7	↑	19.1%	↓		585.3	↑	391.2	↑	820.0	↓		Very High
North East Lincolnshire	524.9	↓	16.5%	↓		568.4	↓	525.3	↓	570.2	↓		High
Bradford	515.7	↑	17.0%	↓		551.3	↓	452.7	↑	645.7	↓		Very High
Rochdale	469.3	↓	19.3%	↓		549.9	↓	471.4	↓	740.4	↑		Very High
Stoke-on-Trent	564.9	↑	14.7%	↑		541.4	↑	502.6	↑	518.9	↓		High
Dudley	507.2	↑	15.9%	↑		535.5	↑	452.9	↑	683.8	↑		High
Hartlepool	456.0	↑	17.8%	↑		530.6	↑	472.4	↑	405.9	↓		High
Leicester	516.4	↑	15.9%	↑		525.4	↑	357.6	↑	678.8	↑		High
Bury	457.7	↓	18.0%	↓		525.2	↓	396.6	↓	699.4	↓		Very High
Wakefield	460.3	↑	16.7%	↓		517.1	↑	352.4	↑	790.9	↑		Very High
East Lindsey	559.1	↑	14.1%	↑		515.8	↑	492.5	↑	722.6	↑		Medium
Oadby and Wigston	645.7	↑	12.2%	↑		508.6	↑	230.3	↓	932.5	↑		High
Wigan	471.7	↓	16.6%	↓		495.6	↓	444.8	↓	626.4	↓		Very High
Redcar and Cleveland	500.6	↑	15.3%	↑		489.2	↑	287.0	↓	698.7	↑		High
Calderdale	441.1	↑	16.6%	↑		489.0	↑	312.0	↓	546.8	↑		Very High
Sandwell	462.3	↑	16.8%	↑		489.0	↑	462.4	↑	651.3	↑		High
Middlesbrough	539.9	↑	13.9%	↑		488.7	↑	339.7	↑	656.3	↑		High
East Riding of Yorkshire	548.1	↑	13.3%	↑		485.7	↑	335.2	↑	806.1	↑		High
Bristol, City of	541.8	↑	13.8%	↑		482.5	↑	326.6	↑	897.7	↑		Medium
Bolsover	481.3	↓	15.3%	↑		480.4	↑	409.9	↓	722.0	↑		High
Salford	426.8	↓	17.7%	↓		476.8	↓	336.5	↓	538.1	↓		Very High
Preston	517.7	↓	14.1%	↑		470.2	↓	358.6	↓	472.6	↑		Very High
Gateshead	490.1	↑	14.8%	↑		468.2	↑	391.3	↑	430.1	↓		High
South Staffordshire	475.1	↓	14.9%	↑		460.7	↓	289.4	↓	755.9	↓		High
Bolton	400.0	↓	17.7%	↓		460.1	↓	330.4	↓	482.0	↓		Very High
Thanet	623.8	↑	10.9%	↑		458.7	↑	329.2	↑	582.7	↑		Medium
England	**442.3**	↑	**9.6%**	↓		**271.2**	↓	**203.3**	↑	**409.1**	↑		

High level summary 3 – lower tier local authorities
Local authority areas of interest

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

Data for specimens taken/outbreaks reported between 5 **November and 11 November 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of 4 **November 2020**.

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

All Cases: 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: Purple >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

Local COVID Alert Level
Medium - areas where national restrictions continue to be in place.
High - areas with a higher level of infections where some additional restrictions are in place.
Very High - areas with a very high level of infections and where tighter restrictions are in place.
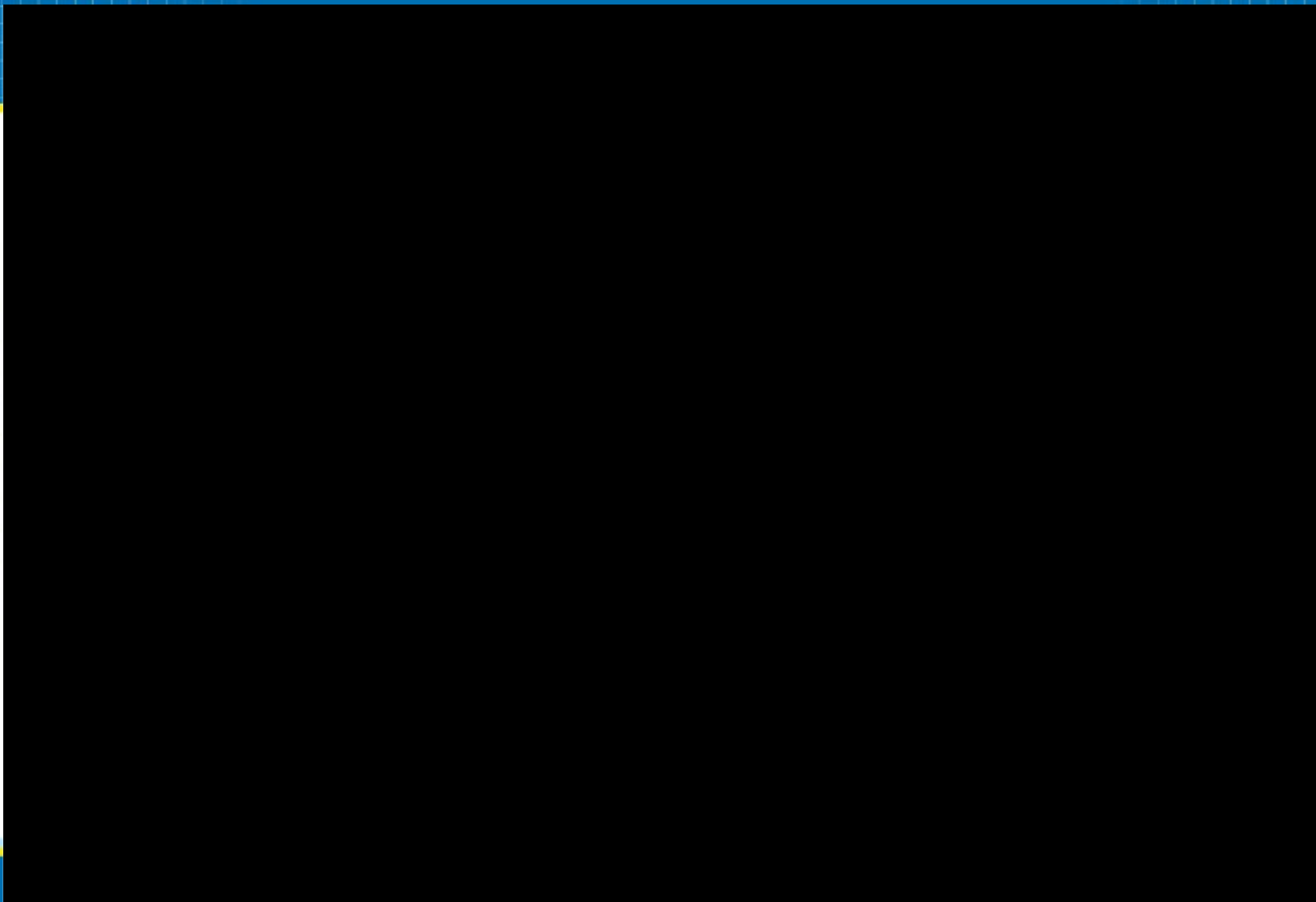The restrictions placed on areas can vary, and are based on discussions between central and local government.

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*
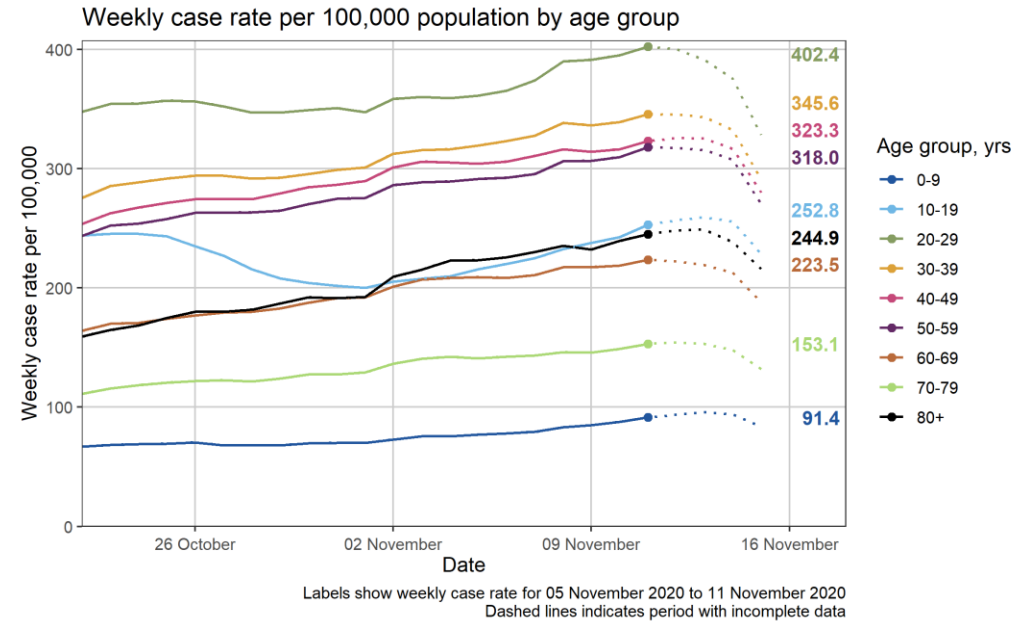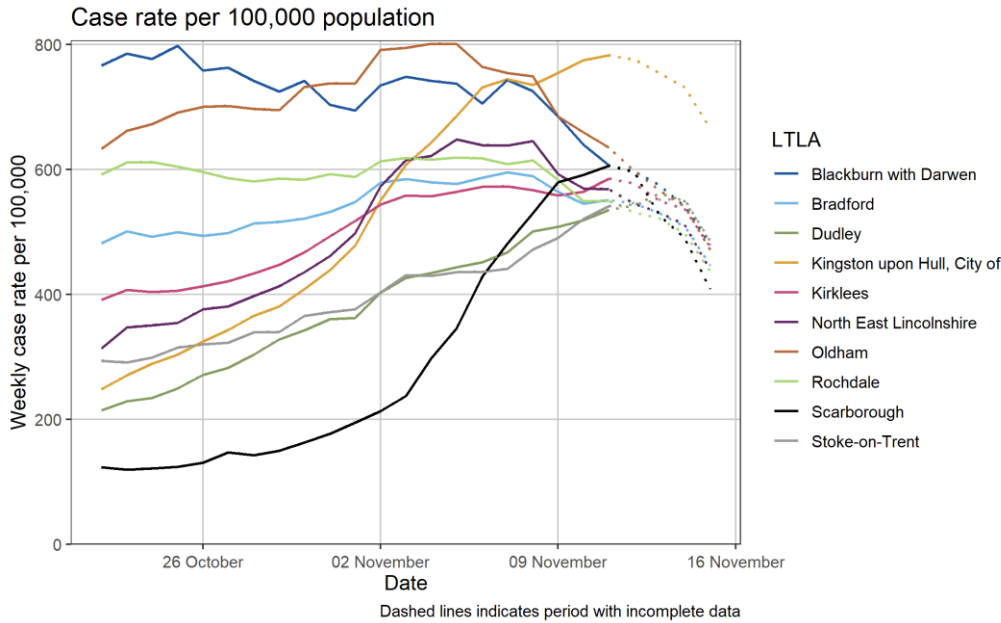
	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Case rate per 100,000 population (weekly)	Case rate per 100,000 population aged 60 years and over (weekly)	Case rate per 100,000 population aged 17 - 21 years olds (weekly)	Community outbreaks (Last 7 days)	Local COVID Alert Level
Boston	441.8 ↑	15.4% ↑		451.7 ↑	411.4 ↑	463.0 ↑		Medium
Leeds	431.9 ↑	16.2% ↓		451.2 ↑	420.5 ↑	526.9 ↑		Very High
Newcastle upon Tyne	463.9 ↑	14.8% ↑		450.1 ↑	465.9 ↑	407.3 ↑		High
Stockton-on-Tees	382.1 ↑	18.2% ↑		446.9 ↑	353.4 ↑	672.8 ↑		High
Derby	457.4 ↑	14.9% ↓		446.2 ↑	335.1 ↑	592.3 ↑		High
Lincoln	539.4 ↑	12.8% ↑		445.1 ↑	226.8 ↑	1143.9 ↑		Medium
Amber Valley	458.2 ↑	14.9% ↑		444.8 ↑	345.3 ↓	763.9 ↑		High
Newcastle-under-Lyme	515.5 ↑	13.0% ↓		442.7 ↑	352.7 ↑	562.1 ↑		High
Burnley	460.8 ↑	14.9% ↑		439.7 ↑	411.2 ↑	287.9 ↓		Very High
Sunderland	461.3 ↑	14.3% ↑		430.3 ↑	317.4 ↓	589.5 ↑		High
Blaby	453.2 ↑	14.6% ↑		429.4 ↑	270.8 ↑	473.7 ↑		Medium
Swale	440.7 ↑	14.9% ↑		425.8 ↑	343.2 ↑	456.6 ↑		Medium
East Staffordshire	512.4 ↓	12.6% ↑		424.2 ↑	367.6 ↑	656.4 ↑		High
North Tyneside	462.8 ↑	13.5% ↑		413.6 ↑	274.6 ↑	414.7 ↑		High
County Durham	457.8 ↑	13.6% ↑		412.2 ↑	365.9 ↑	423.8 ↓		High
South Tyneside	454.8 ↑	13.7% ↑		412.0 ↑	350.7 ↑	589.6 ↑		High
North Lincolnshire	472.1 ↑	13.5% ↑		411.5 ↑	312.9 ↑	567.8 ↑		High
Lichfield	483.3 ↑	13.2% ↑		410.5 ↑	328.9 ↑	568.9 ↑		High
Melton	433.0 ↑	14.7% ↑		410.1 ↑	328.0 ↑	735.6 ↑		Medium
Tamworth	446.5 ↑	14.0% ↓		409.4 ↑	408.2 ↑	380.4 ↓		High
Stafford	489.3 ↑	12.6% →		407.2 ↑	323.3 ↑	572.4 ↑		High
Walsall	427.8 ↑	15.2% ↑		406.0 ↑	333.9 ↑	478.2 ↓		High
Staffordshire Moorlands	481.5 ↑	12.4% ↑		405.3 ↑	333.4 ↑	456.4 ↑		High
Charnwood	434.2 ↑	14.3% ↑		401.4 ↑	245.0 ↓	874.8 ↓		High
North West Leicestershire	444.0 ↑	13.4% ↑		400.5 ↑	296.8 ↑	640.9 ↑		Medium
Telford and Wrekin	462.2 ↑	12.2% ↑		374.7 ↑	288.8 ↑	568.9 ↑		High
Birmingham	402.7 ↑	14.6% ↑		373.6 ↑	307.8 ↑	501.5 ↑		High
North Warwickshire	519.9 ↑	10.7% ↓		358.5 ↑	184.2 ↓	461.0 ↓		Medium
Hinckley and Bosworth	433.7 ↑	12.5% ↑		357.1 ↑	219.2 ↓	431.5 ↑		Medium
Wolverhampton	439.1 ↑	12.3% ↑		356.6 ↑	288.9 ↑	409.2 ↓		High
England	**442.3** ↑	**9.6%** ↓		**271.2** ↑	**203.3** ↑	**409.1** ↑		

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

This table contains the areas with the highest weekly case rates for individuals aged 60 years and over

Data for specimens taken/outbreaks reported between **5 November and 11 November 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of **4 November 2020**.

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

All Cases: 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: Purple >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

Local COVID Alert Level
Medium - areas where national restrictions continue to be in place.
High - areas with a higher level of infections where some additional restrictions are in place.
Very High - areas with a very high level of infections and where tighter restrictions are in place.
The restrictions placed on areas can vary, and are based on discussions between central and local government.

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)	Case rate per 100,000 population (weekly)	Case rate per 100,000 population aged 60 years and over (weekly)	Case rate per 100,000 population aged 17 - 21 years olds (weekly)	Community outbreaks (Last 7 days)	Local COVID Alert Level
Kingston upon Hull, City of	653.3 ↑	18.1% ↑		782.6 ↑	713.6 ↑	950.8 ↑		High
Oldham	543.2 ↓	19.3% ↓		634.7 ↓	545.9 ↓	815.3 ↓		Very High
North East Lincolnshire	524.9 ↓	16.5% ↓		568.4 ↓	525.3 ↓	570.2 ↓		High
Stoke-on-Trent	564.9 ↑	14.7% ↑		541.4 ↑	502.6 ↑	518.9 ↓		High
East Lindsey	559.1 ↑	14.1% ↑		515.8 ↑	492.5 ↑	722.6 ↑		Medium
Hartlepool	456.0 ↑	17.8% ↑		530.6 ↑	472.4 ↑	405.9 ↓		High
Rochdale	469.3 ↓	19.3% ↓		549.9 ↓	471.4 ↓	740.4 ↑		Very High
Newcastle upon Tyne	463.9 ↑	14.8% ↑		450.1 ↑	465.9 ↑	407.3 ↑		High
Sandwell	462.3 ↑	16.8% ↑		489.0 ↑	462.4 ↑	651.3 ↑		High
Blackburn with Darwen	514.0 ↓	18.5% ↓		606.6 ↓	455.7 ↓	732.1 ↓		Very High
Dudley	507.2 ↑	15.9% ↑		535.5 ↑	452.9 ↑	683.8 ↑		High
Bradford	515.7 ↑	17.0% ↓		551.3 ↓	452.7 ↑	645.7 ↓		Very High
Wigan	471.7 ↓	16.6% ↓		495.6 ↓	444.8 ↓	626.4 ↓		Very High
Leeds	431.9 ↑	16.2% ↓		451.2 ↑	420.5 ↑	526.9 ↑		Very High
Boston	441.8 ↑	15.4% ↑		451.7 ↑	411.4 ↑	463.0 ↑		Medium
Burnley	460.8 ↑	14.9% ↑		439.7 ↑	411.2 ↑	287.9 ↓		Very High
Bolsover	481.3 ↓	15.3% ↑		480.4 ↑	409.9 ↓	722.0 ↑		High
Tamworth	446.5 ↑	14.0% ↓		409.4 ↑	408.2 ↑	380.4 ↓		High
Scarborough	579.5 ↑	15.7% ↑		605.9 ↑	407.7 ↑	896.4 ↑		Medium
Barnsley	461.3 ↓	14.6% ↓		428.6 ↓	399.4 ↓	467.1 ↓		Very High
Bury	457.7 ↓	18.0% ↓		525.2 ↓	396.6 ↓	699.4 ↓		Very High
Gateshead	490.1 ↑	14.8% ↑		468.2 ↑	391.3 ↑	430.1 ↓		High
Kirklees	468.7 ↑	19.1% ↓		585.3 ↑	391.2 ↑	820.0 ↓		Very High
Manchester	426.6 ↓	15.1% ↓		393.0 ↓	380.8 ↓	369.6 ↓		Very High
Pendle	446.7 ↑	15.3% ↓		414.7 ↓	380.3 ↑	663.1 ↑		Very High
East Staffordshire	512.4 ↓	12.6% ↑		424.2 ↑	367.6 ↑	656.4 ↑		High
County Durham	457.8 ↑	13.6% ↑		412.2 ↑	365.9 ↑	423.8 ↓		High
Preston	517.7 ↓	14.1% ↓		470.2 ↓	358.6 ↓	472.6 ↓		Very High
Leicester	516.4 ↑	15.9% ↑		525.4 ↑	357.6 ↑	678.8 ↑		High
Cannock Chase	477.6 ↑	11.8% ↓		356.3 ↑	356.1 ↑	244.2 ↓		High
England	**442.3 ↑**	**9.6% ↓**		**271.2 ↑**	**203.3 ↑**	**409.1 ↑**		

Case rate per 100,000 population

Weekly case rate per 100,000 population by age group

Dashed lines indicates period with incomplete data

Labels show weekly case rate for 05 November 2020 to 11 November 2020
Dashed lines indicates period with incomplete data

Weekly case rate per 100,000 population by age group

Dashed lines indicates period with incomplete data

Test positivity, %

Weekly individual test positivity, %, by age group

Labels show positivity rate for 05 November 2020 to 11 November 2020

Weekly individual test positivity, %, by age group

Individuals tested per 100,000 population

Individuals tested per 100,000 population

Labels show test rate for 05 November 2020 to 11 November 2020

Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 11 November 2020

Individuals tested per 100,000 population
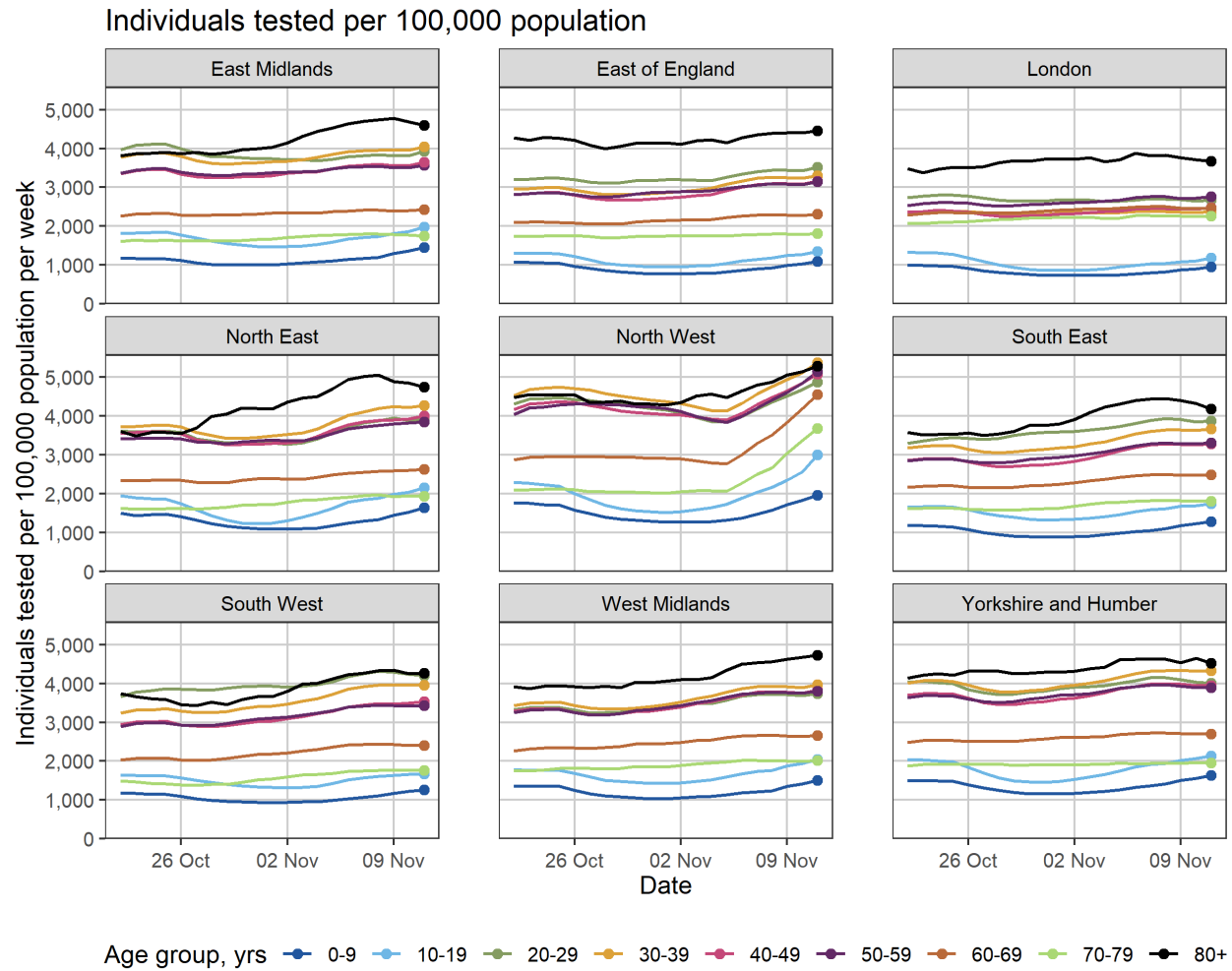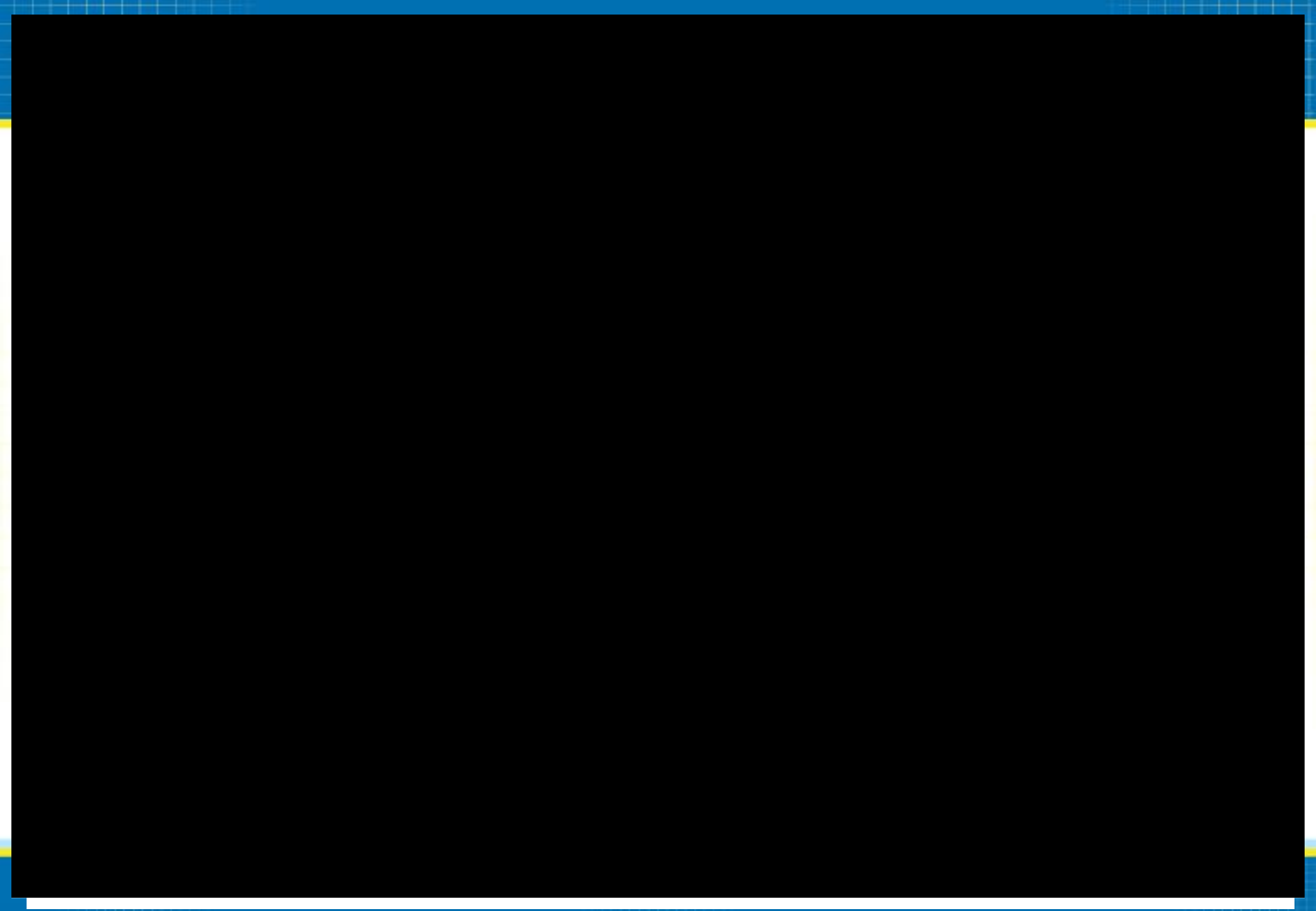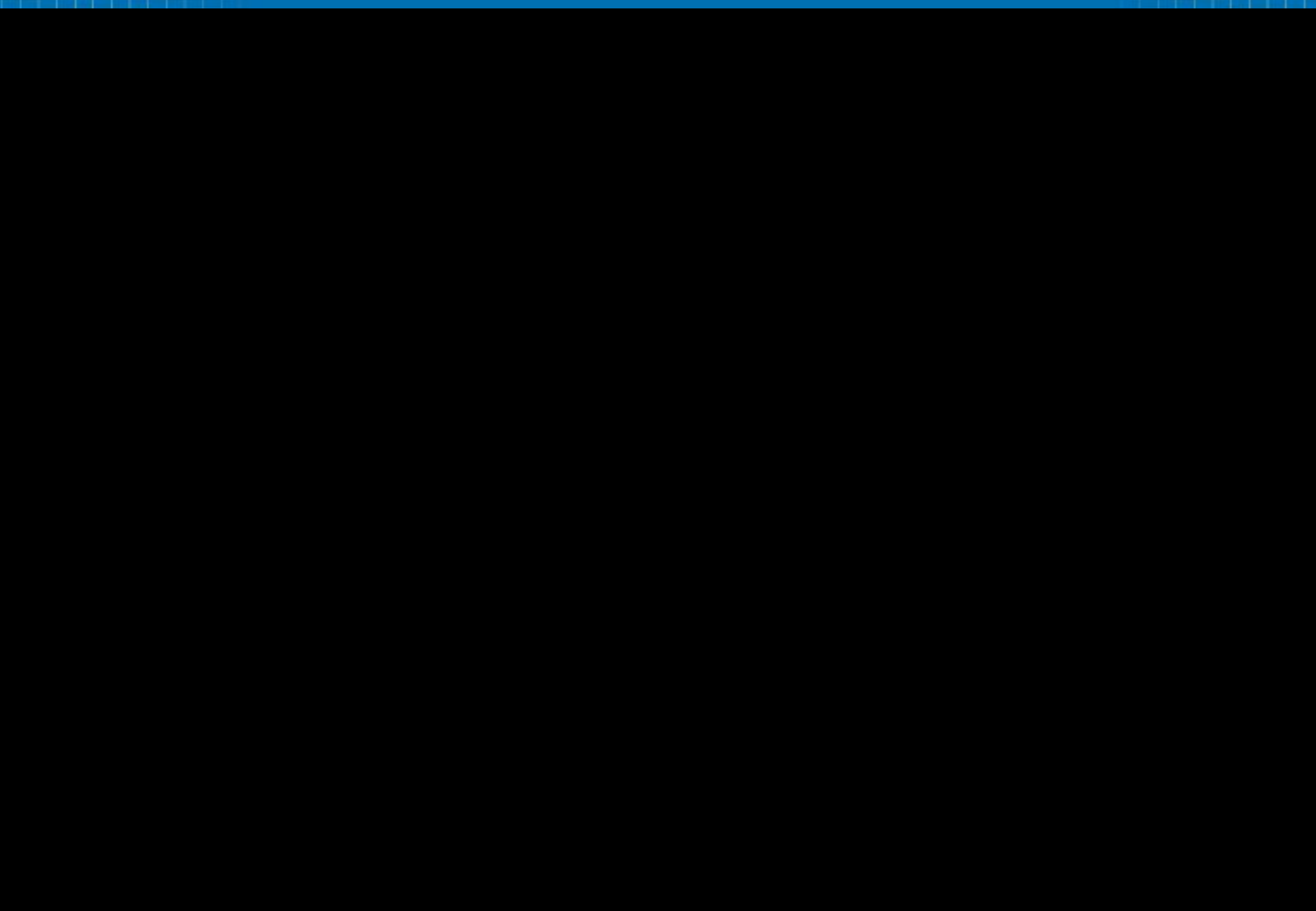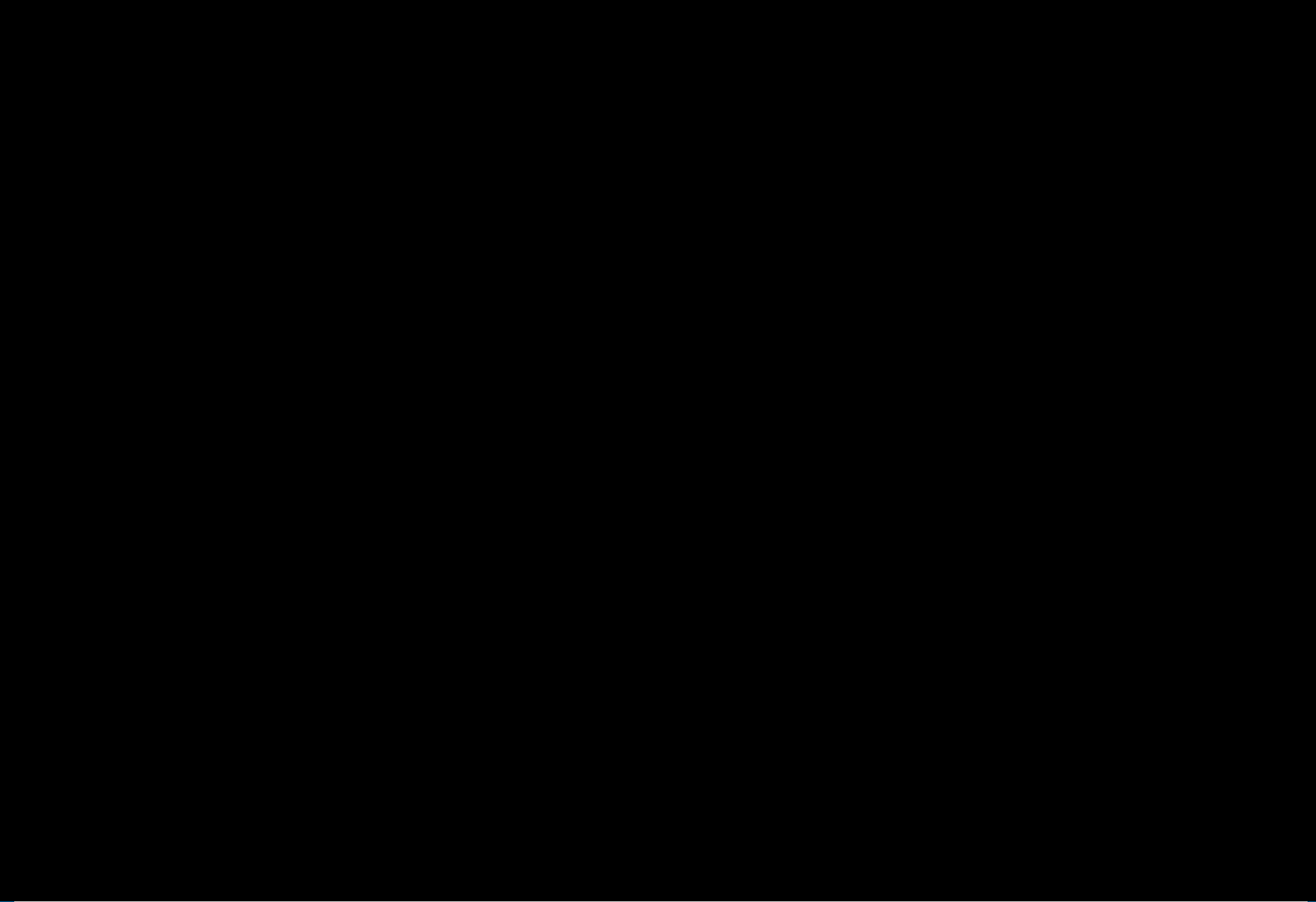
Percentage prevalence of COVID-19 across England and Government Office regions - table
Data generated 13 November 2020 by PHE Joint Modelling Cell

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.

Case rate estimates have been generated by the Cambridge real-time model on **6 November 2020**, using data up to **31 October 2020**. The previous 10 days of case rates 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.

Please note that it is as yet too early to detect the impacts of the national restrictions that came into force on 05/11/2020. As such, the projected prevalence after 05/11/2020 will be subject to significant revision over the coming weeks.

	06/11/2020	13/11/2020	20/11/2020
England	0.808 (0.627, 1.035)	1.164 (0.865, 1.552)	1.861 (1.327, 2.588)
North East	0.523 (0.261, 0.97)	0.547 (0.218, 1.226)	0.625 (0.2, 1.685)
Yorkshire and The Humber	1.084 (0.662, 1.711)	1.352 (0.702, 2.42)	1.832 (0.818, 3.644)
North West	1.631 (1.084, 2.354)	1.991 (1.177, 3.159)	2.599 (1.38, 4.446)
East Midlands	1.073 (0.626, 1.764)	1.58 (0.781, 3.01)	2.51 (1.068, 5.383)
West Midlands	1.133 (0.651, 1.837)	1.809 (0.869, 3.373)	3.102 (1.273, 6.425)
East of England	0.534 (0.284, 0.96)	0.858 (0.371, 1.856)	1.526 (0.54, 3.889)
London	0.483 (0.241, 0.912)	0.643 (0.256, 1.485)	0.937 (0.298, 2.592)
South East	0.292 (0.148, 0.538)	0.456 (0.184, 1.026)	0.795 (0.255, 2.165)
South West	0.432 (0.217, 0.829)	0.771 (0.308, 1.806)	1.507 (0.482, 4.203)

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/

Case rate estimates have been generated by the Cambridge real-time model on **6 November 2020**, using data up to **31 October 2020**. The previous 10 days of case rates have been summed to provide an estimate for prevalence.

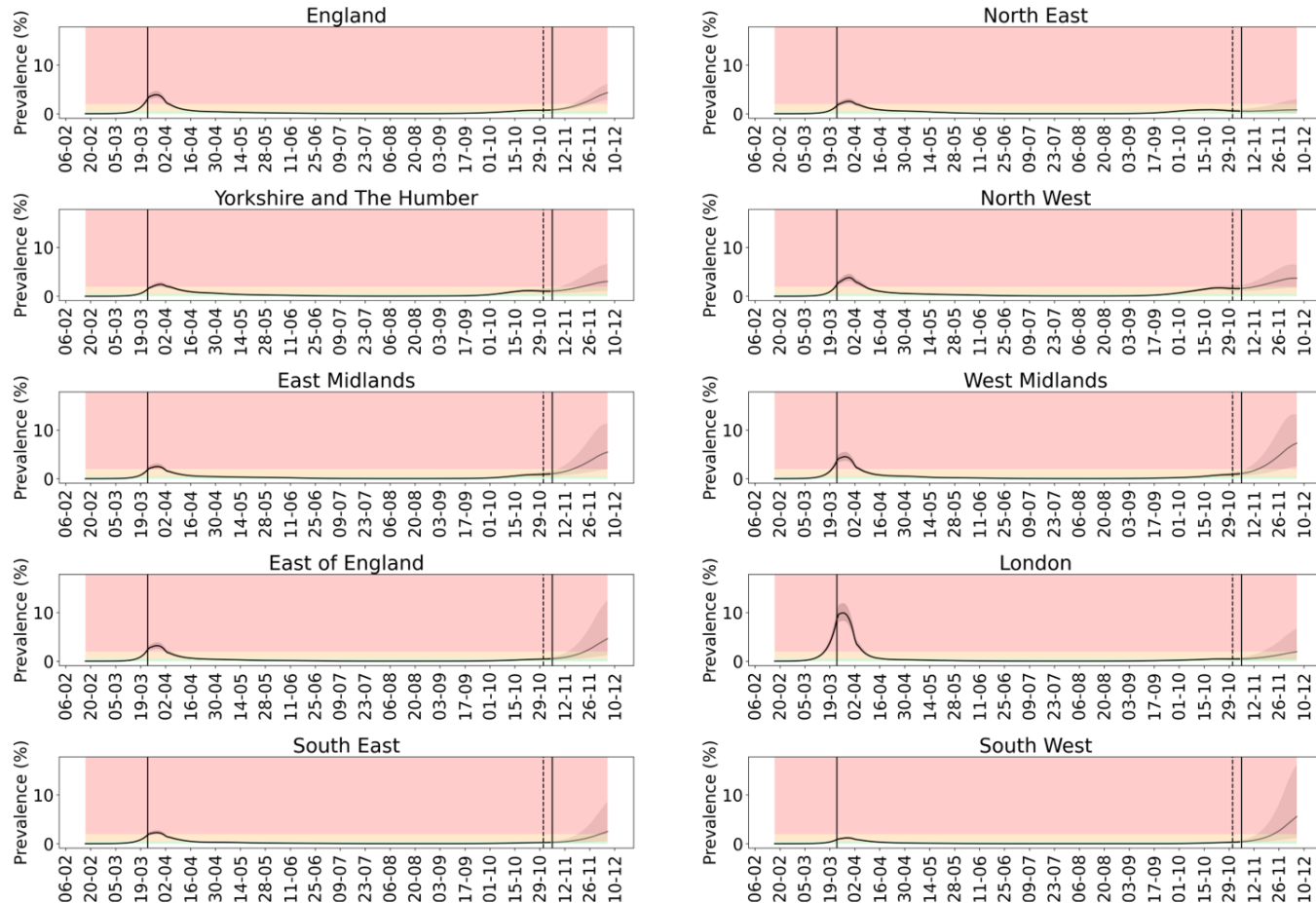Prevalence estimates set against the prevalence boundaries.

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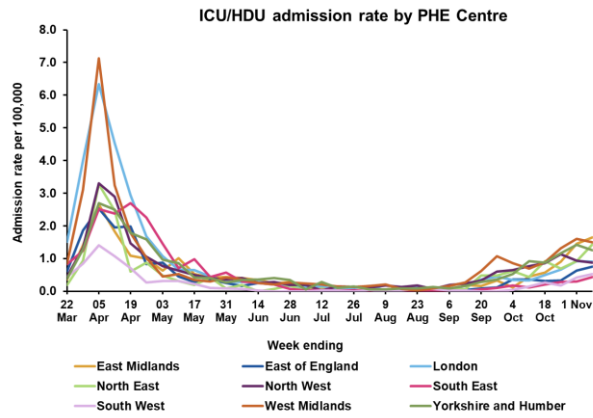
Solid vertical line shows the time of lockdown.

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

Prevalence plots

Please note, The prevalence estimates have been faded after 05/11/2020 to indicate that these estimates are subject to significant revision due to the national measures.
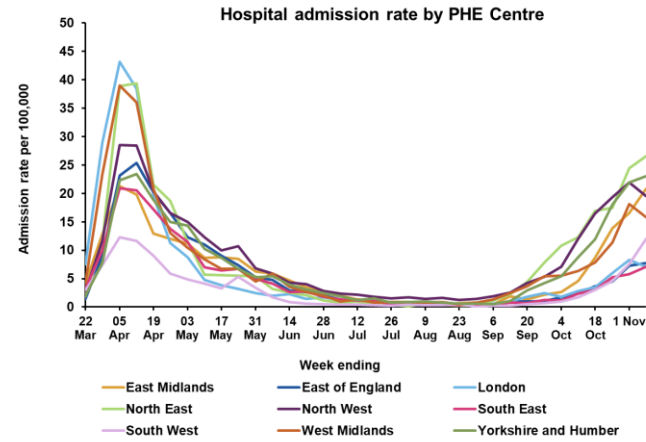
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Hospitalisations by PHE Centre

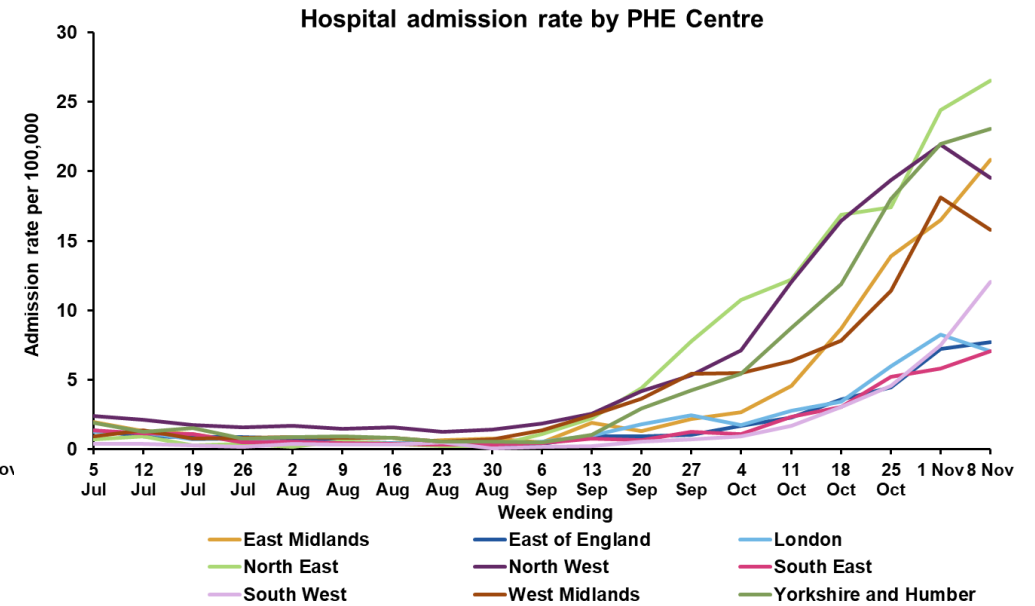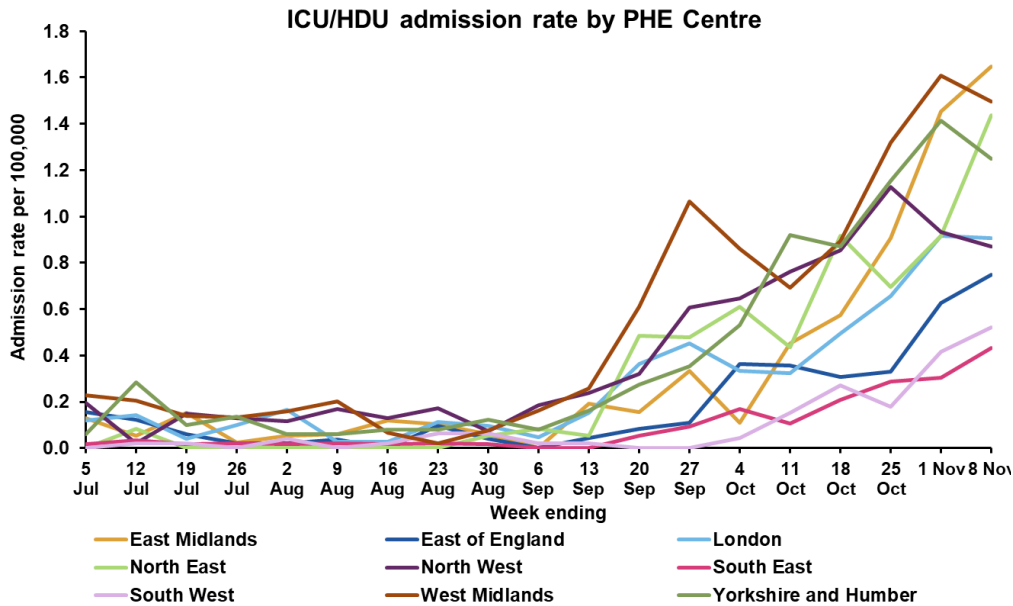ICU/HDU admission rate by PHE Centre

Weeks 12 to 45

Weeks 27 to 45

Hospital admission rate by PHE Centre

Weeks 12 to 45

Weeks 27 to 45

ICU/HDU admission rate by PHE Centre

Hospital admission rate by PHE Centre

Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch
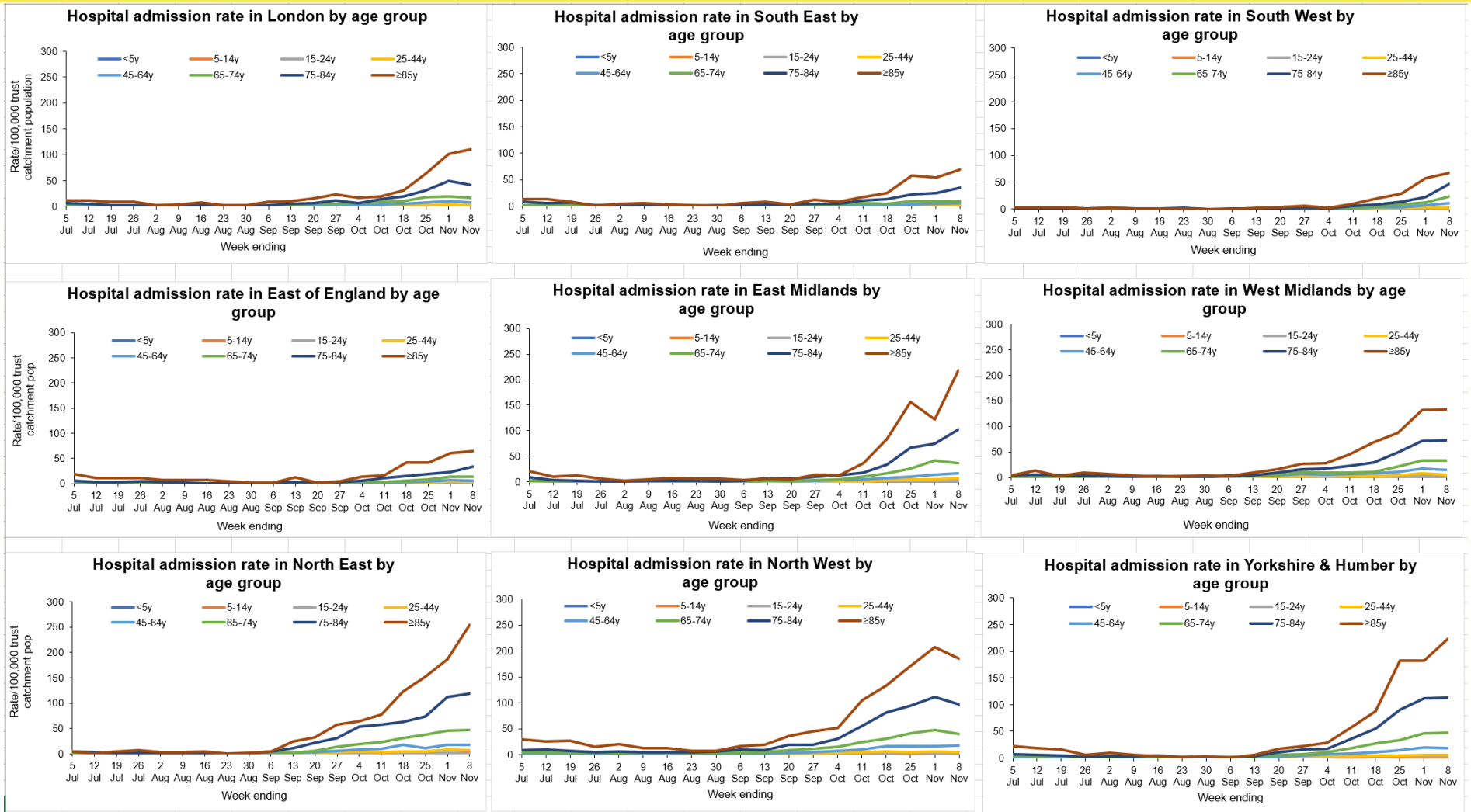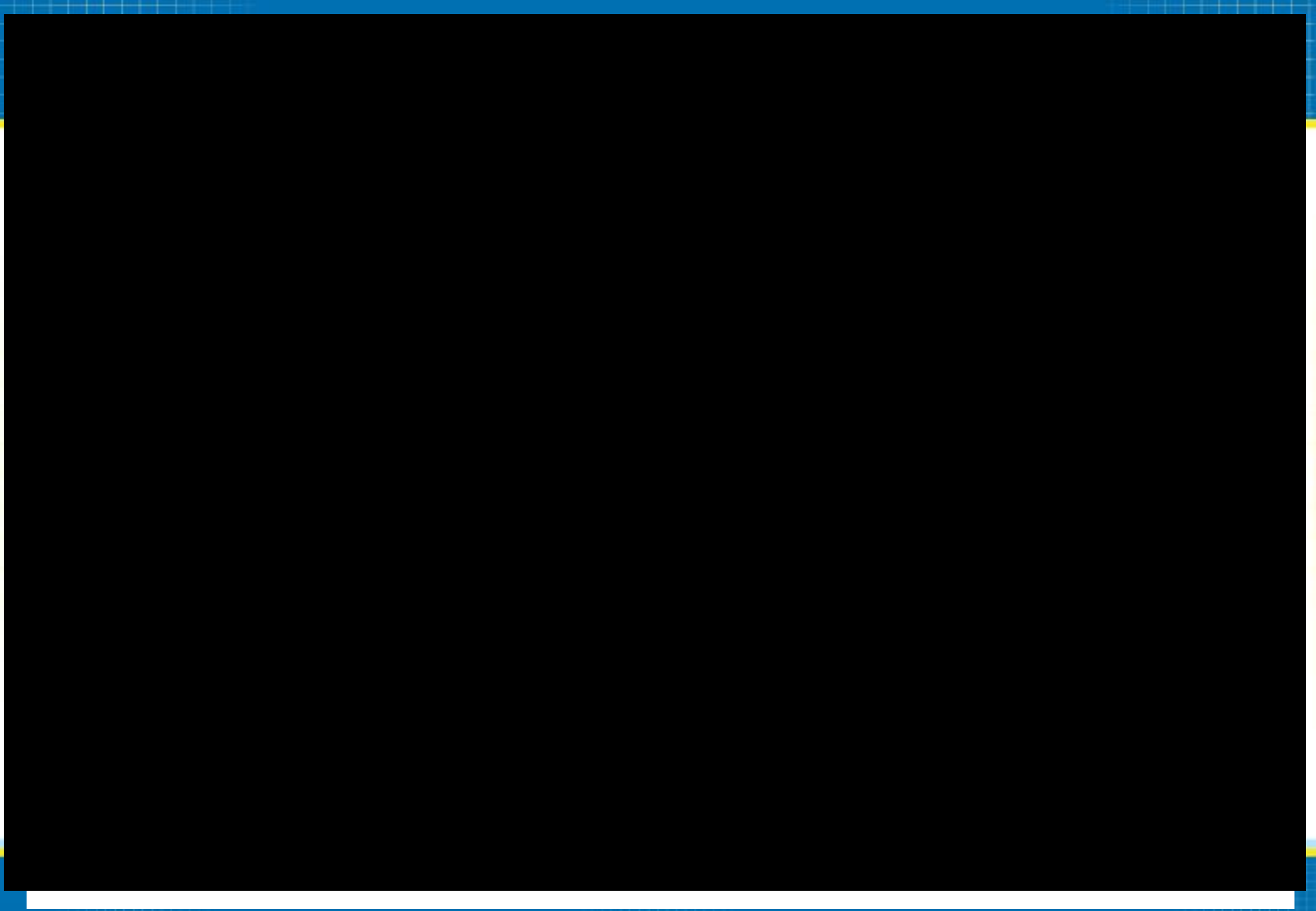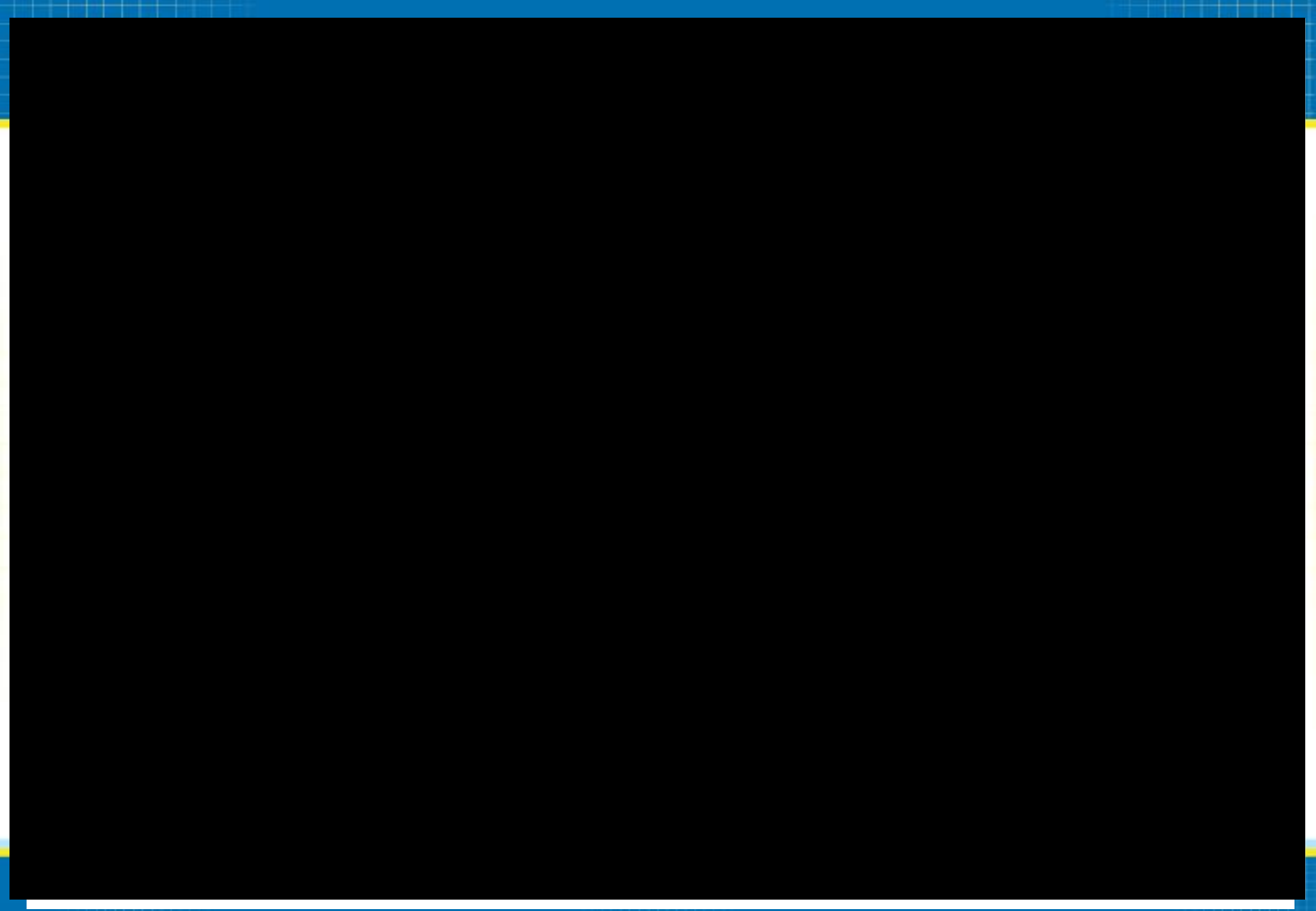
Hospitalisations by PHE Centre and age

Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch
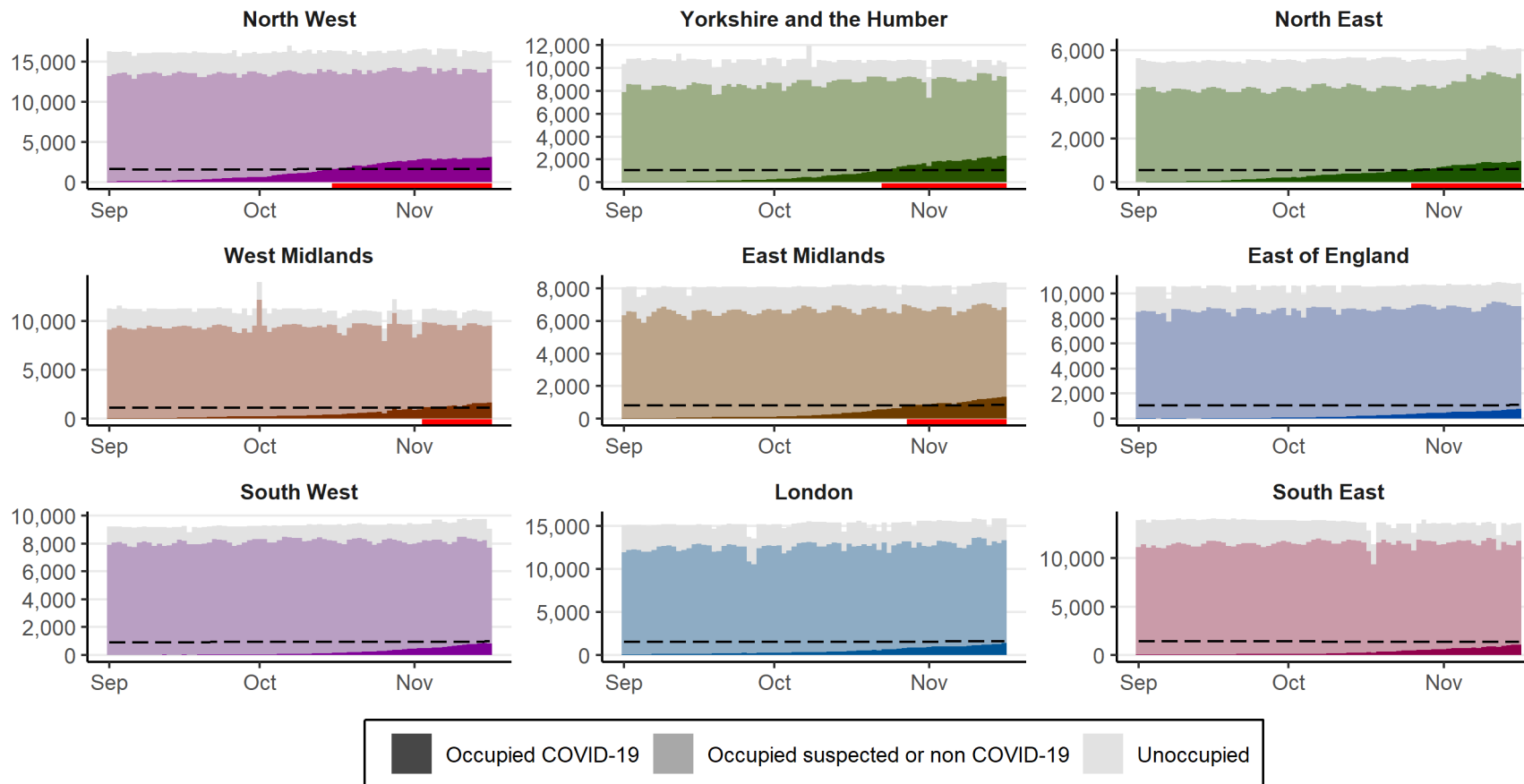
Bed occupancy and capacity by region - general and acute beds

Total bed occupancy and capacity by region

Solid bar above axis indicates when recorded COVID-19 bed occupancy is above 10% of available capacity

Occupied COVID-19   Occupied suspected or non COVID-19   Unoccupied

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

Bed occupancy and capacity by region - general and acute beds

Total bed occupancy and capacity by region on 16 November 2020

Region	Occupied COVID-19	Occupied suspected or non-COVID19	Unoccupied
Yorkshire and the Humber	2333 (22%)	6919 (66%)	1259 (12%)
North West	3165 (19%)	10914 (67%)	2211 (14%)
East Midlands	1345 (16%)	5513 (66%)	1513 (18%)
North East	975 (16%)	3974 (65%)	1150 (19%)
West Midlands	1656 (15%)	7822 (71%)	1521 (14%)
South West	837 (9%)	6880 (76%)	1322 (15%)
London	1366 (9%)	11959 (76%)	2494 (16%)
South East	1046 (8%)	10773 (79%)	1818 (13%)
East of England	790 (7%)	8225 (76%)	1842 (17%)

Legend: Occupied COVID-19, Occupied suspected or non-COVID19, Unoccupied

Bed occupancy and capacity by region - HDU/ITU beds
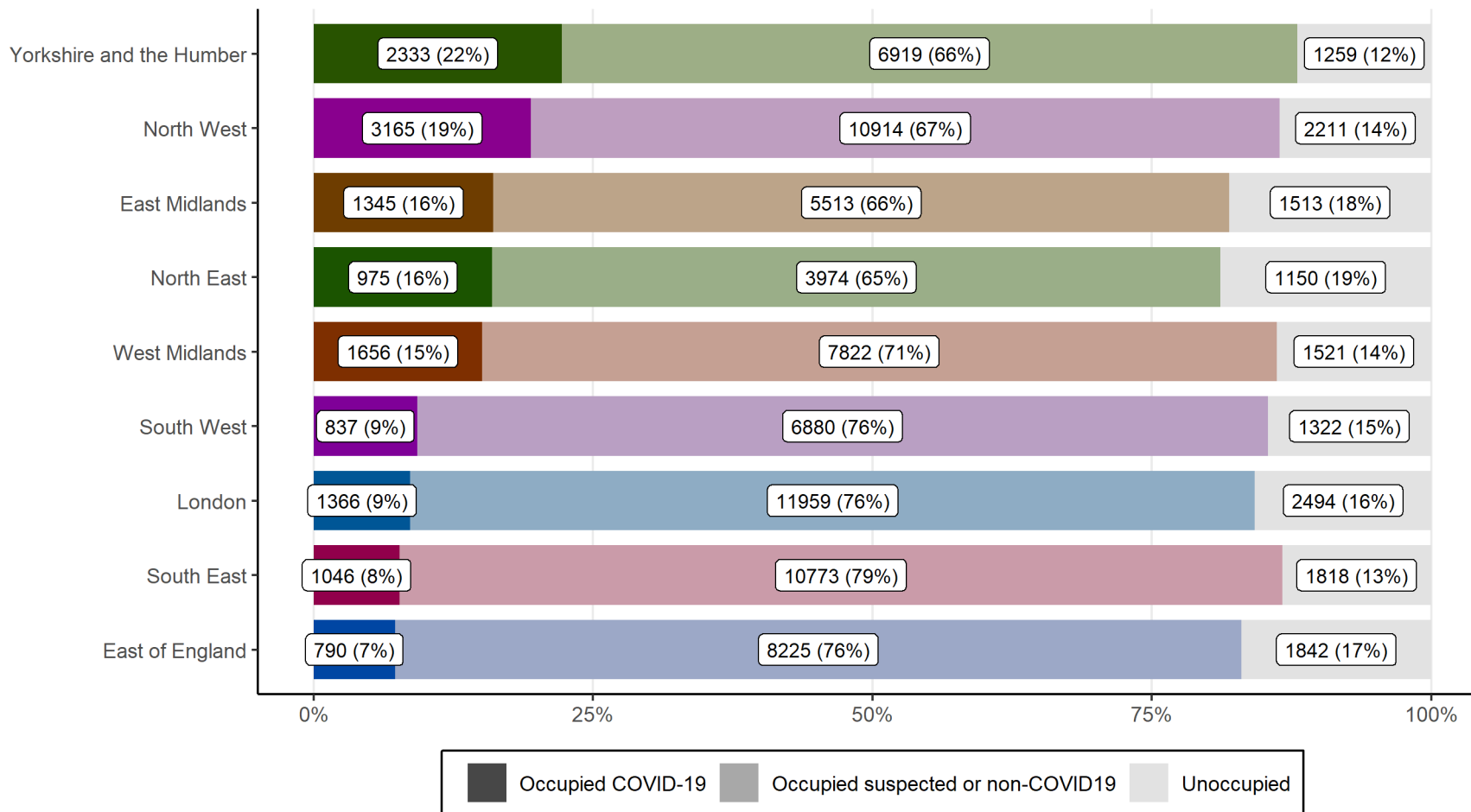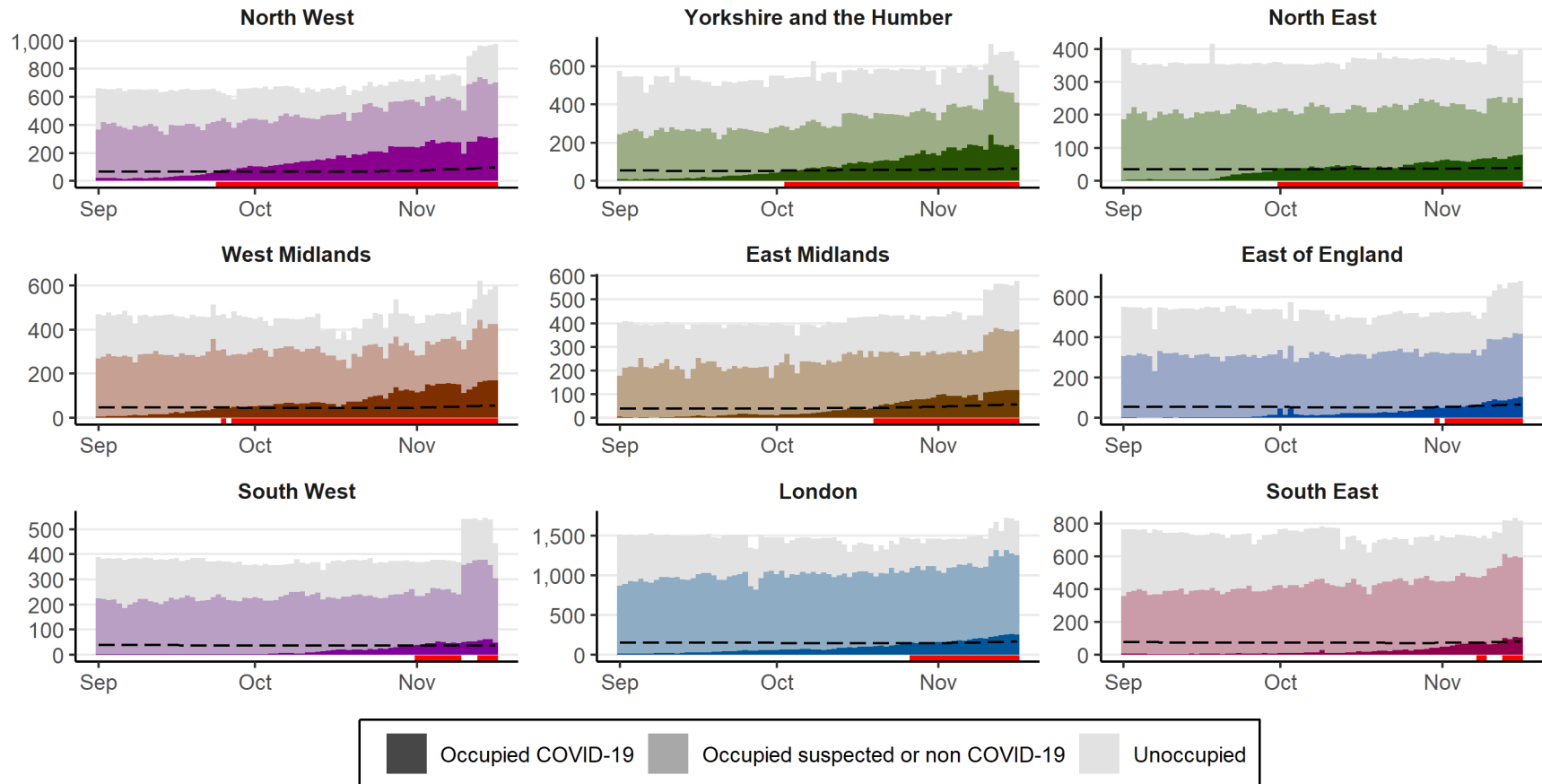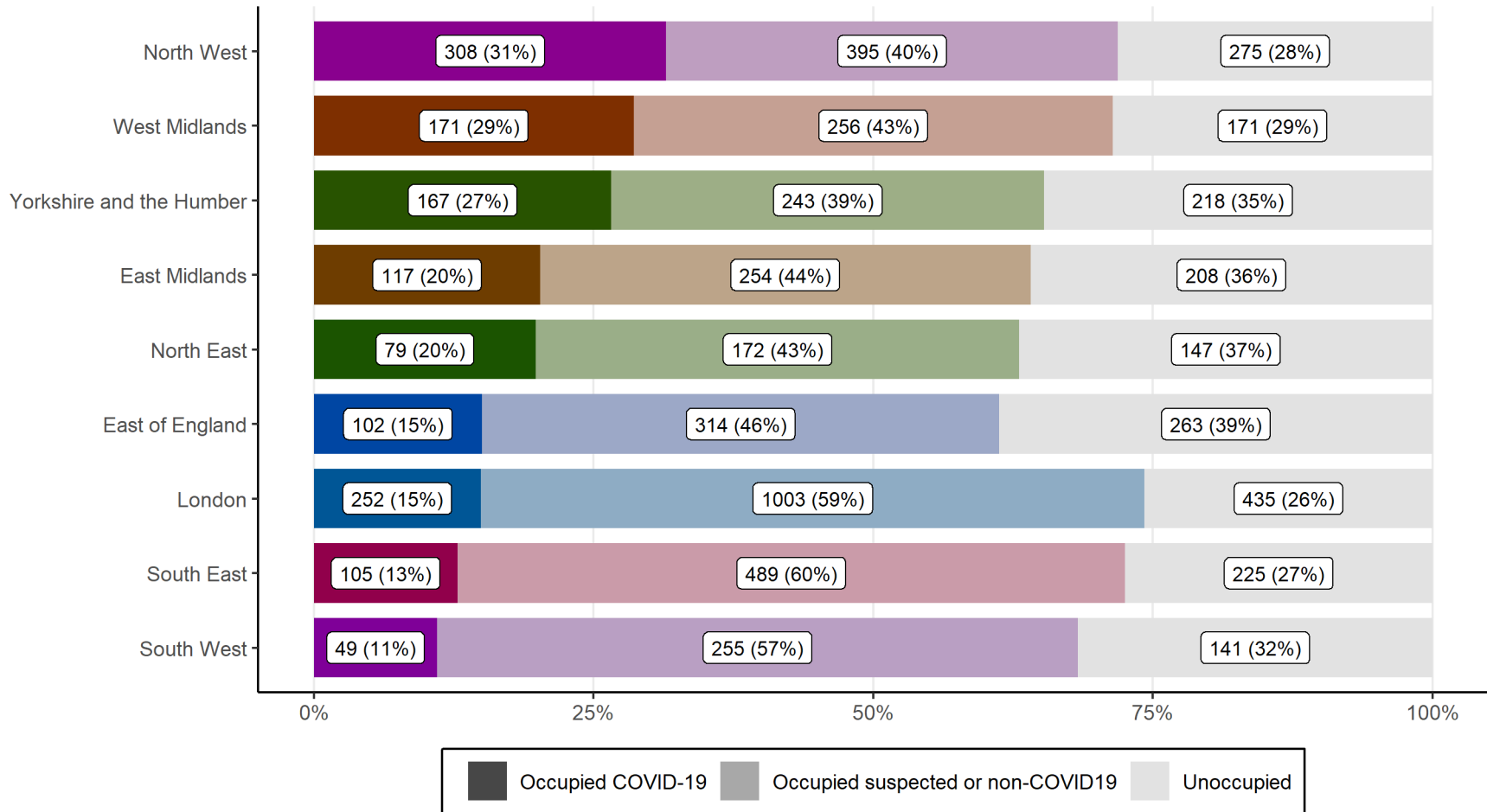
HDU/ITU bed occupancy and capacity by region

Solid bar above axis indicates when recorded COVID-19 bed occupancy is above 10% of available capacity

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

Bed occupancy and capacity by region - HDU/ITU beds

HDU/ITU bed occupancy and capacity by region on 16 November 2020

Region	Occupied COVID-19	Occupied suspected or non-COVID19	Unoccupied
North West	308 (31%)	395 (40%)	275 (28%)
West Midlands	171 (29%)	256 (43%)	171 (29%)
Yorkshire and the Humber	167 (27%)	243 (39%)	218 (35%)
East Midlands	117 (20%)	254 (44%)	208 (36%)
North East	79 (20%)	172 (43%)	147 (37%)
East of England	102 (15%)	314 (46%)	263 (39%)
London	252 (15%)	1003 (59%)	435 (26%)
South East	105 (13%)	489 (60%)	225 (27%)
South West	49 (11%)	255 (57%)	141 (32%)

Legend: Occupied COVID-19 · Occupied suspected or non-COVID19 · Unoccupied

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
Bradford		Alarms yesterday and during past week
Kingston upon Hull, City of		Alarms yesterday and during past week
Leicestershire, including Rutland		Alarms yesterday and during past week
Sandwell		Alarms yesterday and during past week
Nottinghamshire		Alarms yesterday and during past week
Wakefield		Alarms yesterday and during past week
Derbyshire		Alarms yesterday and during past week
Milton Keynes		Alarms yesterday and during past week
Portsmouth		Alarms yesterday and during past week
Barking and Dagenham		Alarms yesterday and during past week
Blackburn with Darwen		Alarm yesterday only
North Yorkshire		Alarm yesterday only
Sunderland		Alarm yesterday only
Warwickshire		Alarm yesterday only
Derby		Alarm(s) during past week but not yesterday
Barnsley		Alarm(s) during past week but not yesterday
Doncaster		Alarm(s) during past week but not yesterday
Rotherham		Alarm(s) during past week but not yesterday
Birmingham		Alarm(s) during past week but not yesterday
Lincolnshire		Alarm(s) during past week but not yesterday
Northamptonshire		Alarm(s) during past week but not yesterday
South Gloucestershire		Alarm(s) during past week but not yesterday
Telford and Wrekin		Alarm(s) during past week but not yesterday
West Berkshire		Alarm(s) during past week but not yesterday
Brent		Alarm(s) during past week but not yesterday
Buckinghamshire		Alarm(s) during past week but not yesterday
Calderdale		Alarm(s) during past week but not yesterday
Coventry		Alarm(s) during past week but not yesterday
Dudley		Alarm(s) during past week but not yesterday
East Riding of Yorkshire		Alarm(s) during past week but not yesterday
Gateshead		Alarm(s) during past week but not yesterday
Hartlepool		Alarm(s) during past week but not yesterday
Kirklees		Alarm(s) during past week but not yesterday
Leeds		Alarm(s) during past week but not yesterday
North East Lincolnshire		Alarm(s) during past week but not yesterday
North Lincolnshire		Alarm(s) during past week but not yesterday
Northumberland		Alarm(s) during past week but not yesterday
Rochdale		Alarm(s) during past week but not yesterday
Southampton		Alarm(s) during past week but not yesterday
Walsall		Alarm(s) during past week but not yesterday

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.

NHS 111 potential COVID-19 calls, alarms over past 7 days (09/11/20 - 15/11/20)
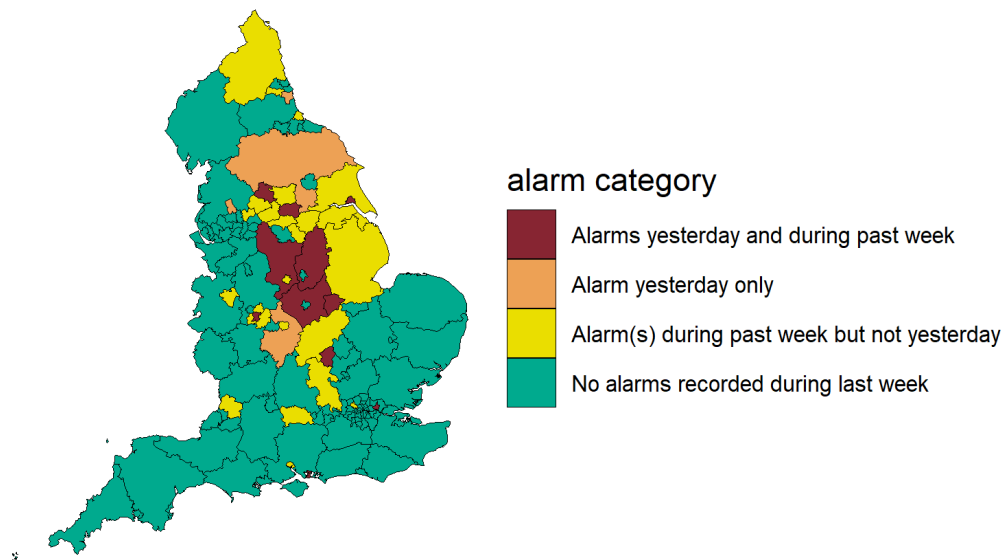
alarm category

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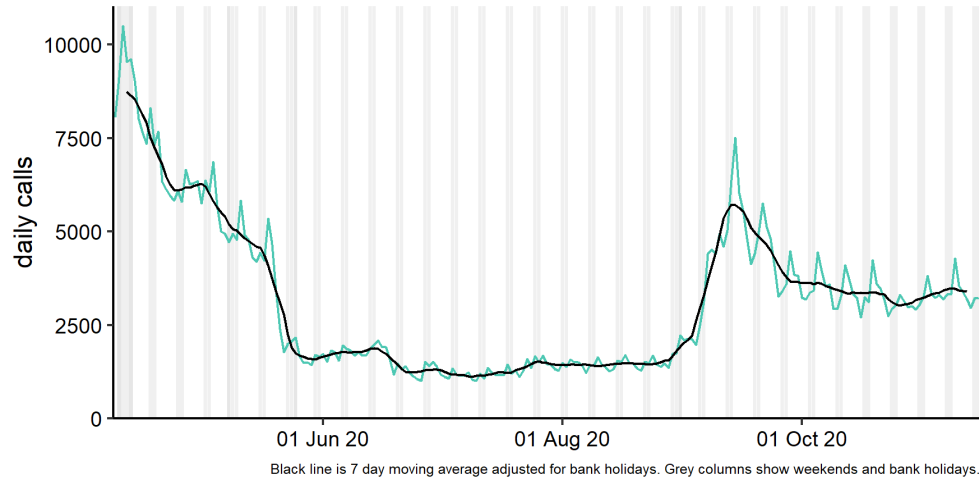
The 'expected' number of calls in a local authority is based on the average rate across England each day. The threshold is calculated as expected calls + 3 * sqrt(expected calls) i.e. assuming data follows a Poisson distribution.

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

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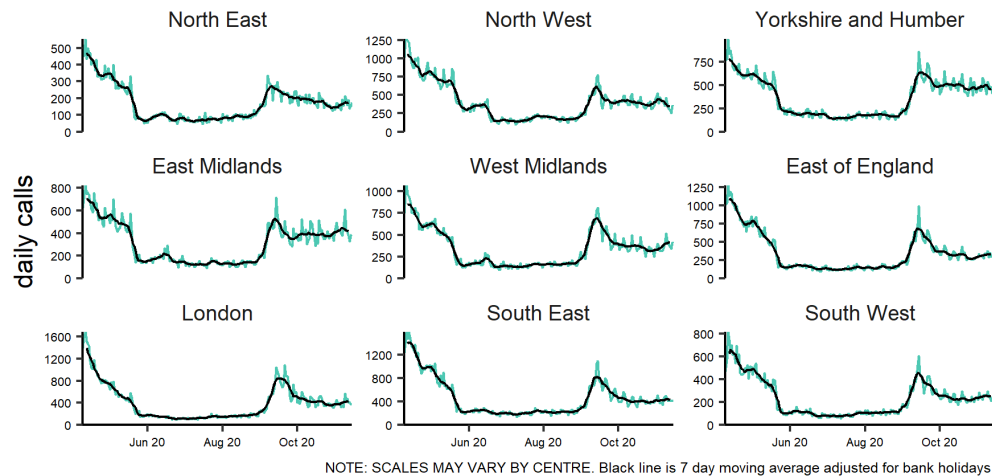## Trends in daily NHS 111 'potential COVID-19' calls, national, PHE Centre and by age (to 15 Nov)

potential covid-19 09/04/2020 - 15/11/2020

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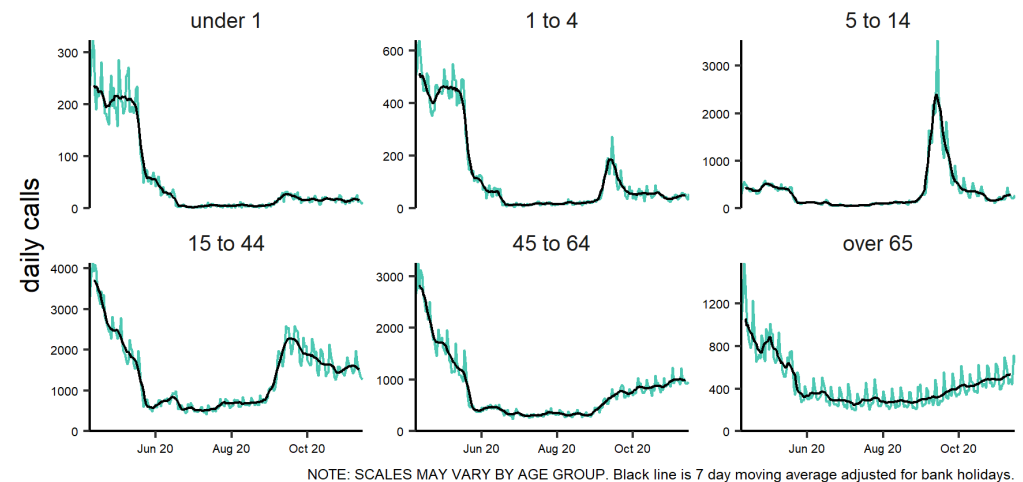
NHS 111 'potential COVID-19' calls

- 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 - 15/11/2020

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

potential covid-19 by age group (years) 09/04/2020 - 15/11/2020

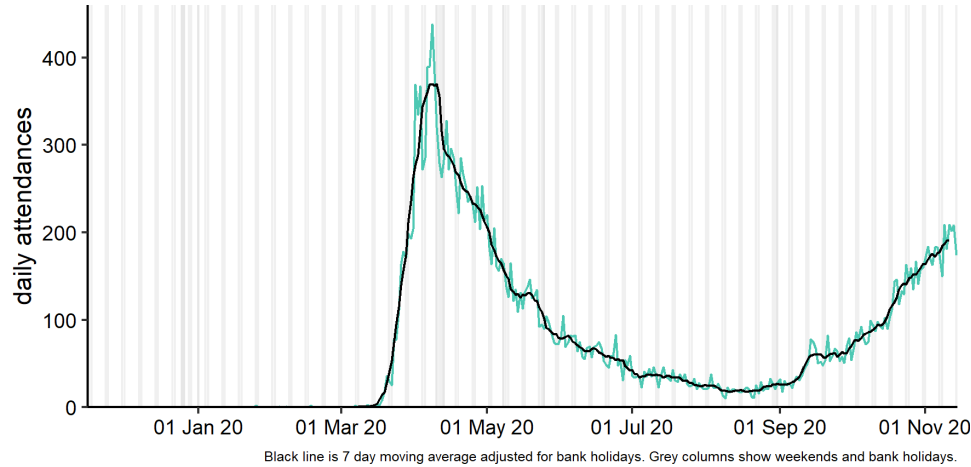NOTE: SCALES MAY VARY BY AGE GROUP. Black line is 7 day moving average adjusted for bank holidays.

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.

covid-19-like 16/11/2019 - 14/11/2020

Black line is 7 day moving average adjusted for bank holidays. Grey columns show weekends and bank holidays.

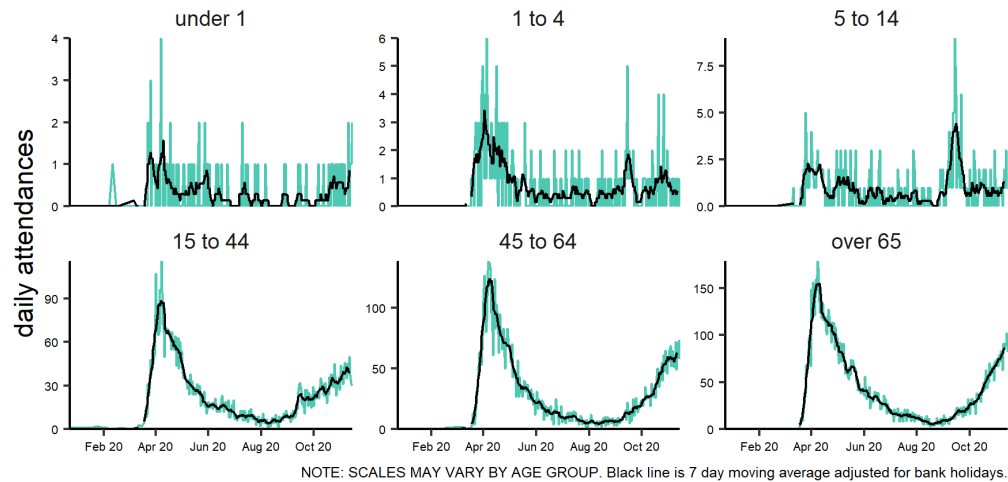**Emergency Department Syndromic Surveillance System (EDSSS) COVID-19-like attendances.**

- 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 16/11/2019 - 14/11/2020

NOTE: SCALES MAY VARY BY CENTRE. Black line is 7 day moving average adjusted for bank holidays.
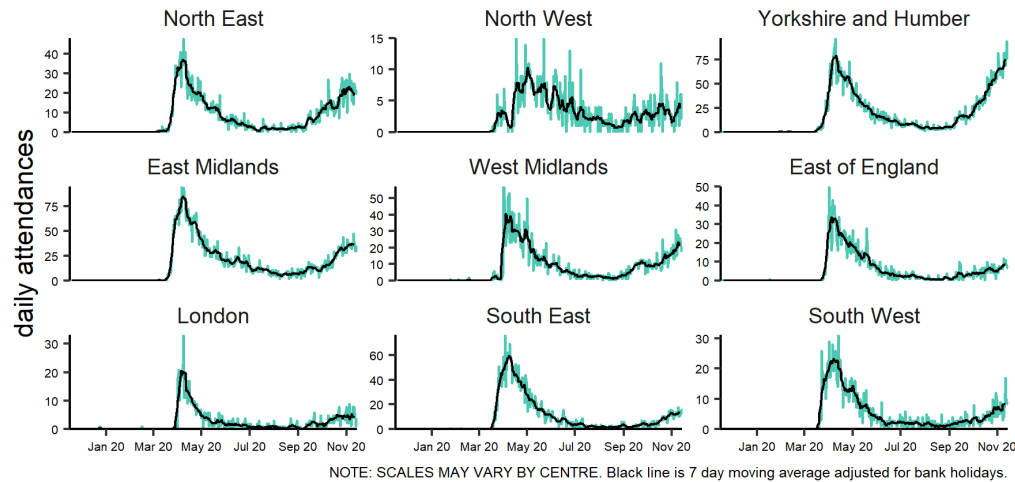
covid-19-like by age group (years) 24/12/2019 - 14/11/2020

NOTE: SCALES MAY VARY BY AGE GROUP. Black line is 7 day moving average adjusted for bank holidays.

- **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