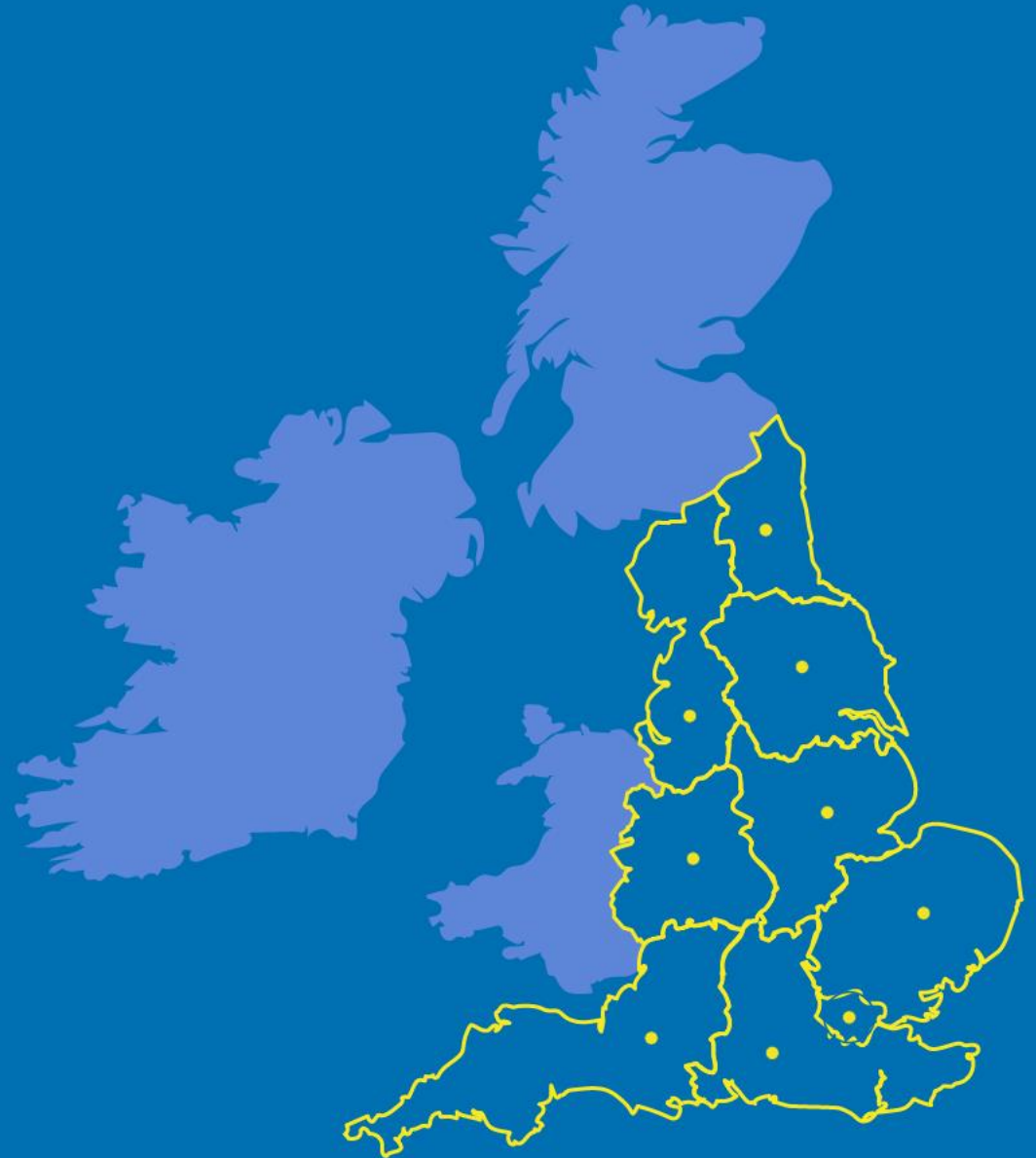# CORONAVIRUS
SITUATIONAL AWARENESS
Summary

date: 4 November 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
- Case rates, symptomatic cases, positivity and testing

Please note: 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.

Please note: As of 13/10/2020, denominator data for case and testing rates have been updated to 2019 mid-year population estimates.

- ███████
- 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 and positivity remained high in both Pillar 1 and 2, in week 43, with the majority of cases reported from Pillar 2. The highest case rates and positivity were seen in the 20 to 29 year olds in Pillar 1 and 2. A decline in case rates is noted in the 10 to 19 year olds. Cases rates and positivity continue to be highest in the North of England.

As of 09:00 on 27 October 2020, a total of 777,774 have been confirmed positive for COVID-19 in England under Pillar 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
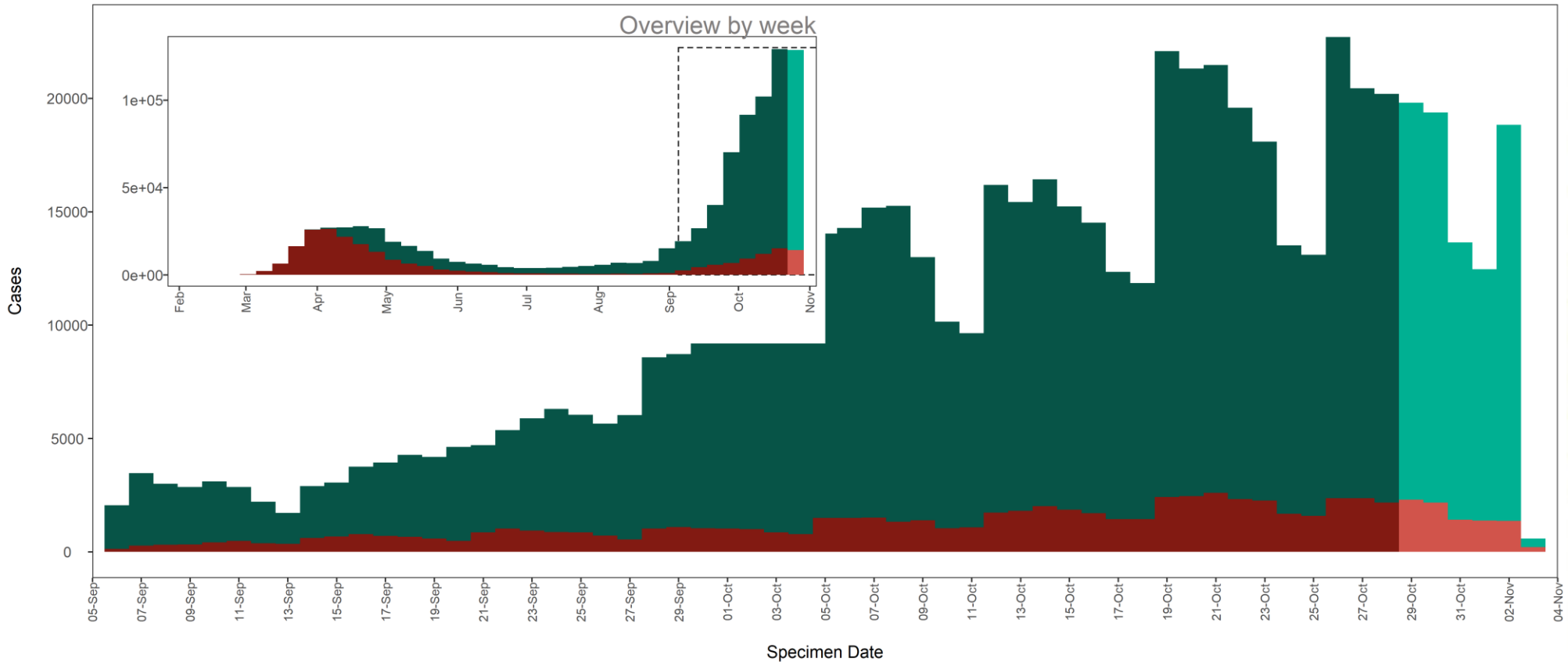
Case rates have been calculated using mid-2019 ONS population estimates
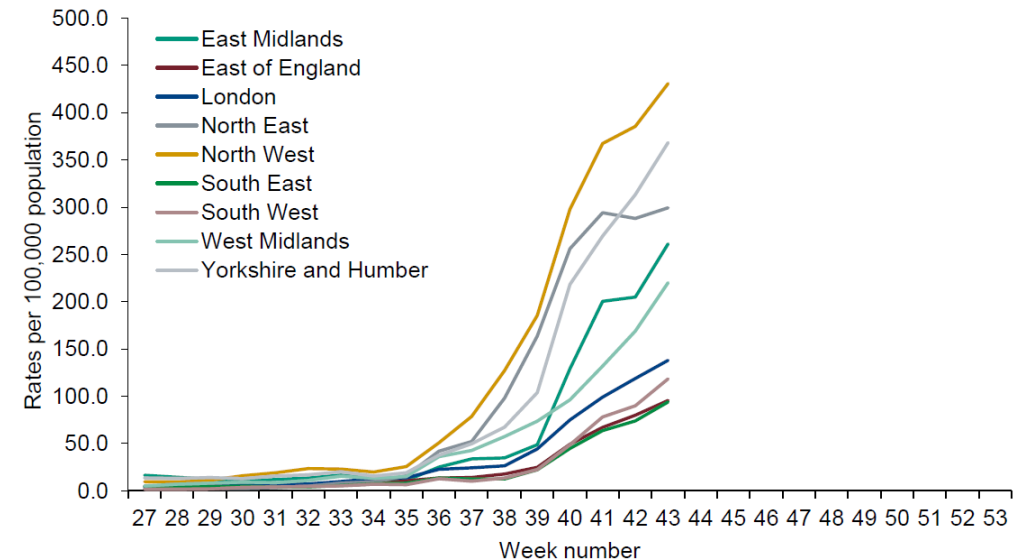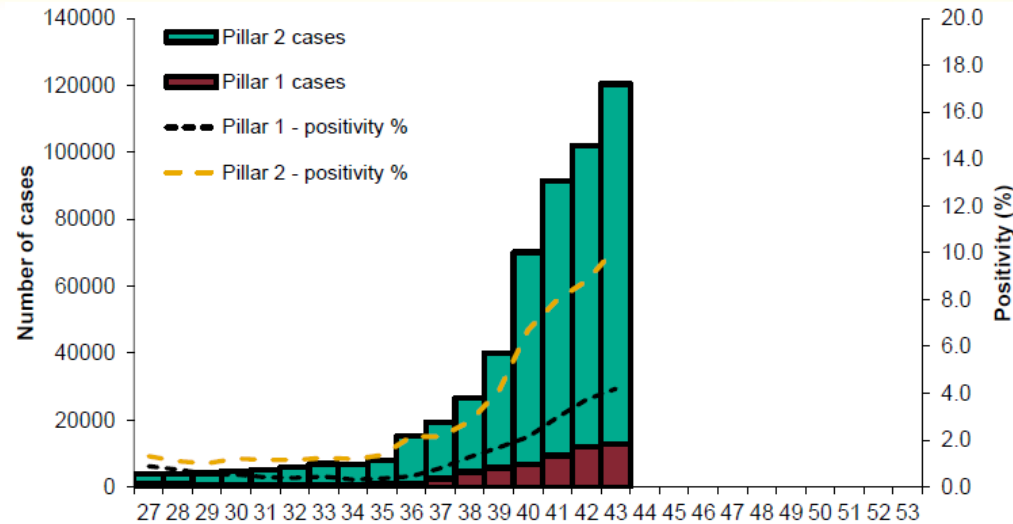
National context

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.

	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			Red	Amber	Green				
East Midlands	382.5 ⬇	11.1% ⬆	28	11	1		278.7 ⬆	40	0	0	197.9 ⬆	459.1 ⬇		13477
East of England	323.9 ⬇	4.9% ⬆	5	25	16		101.7 ⬇	42	4	0	65.3 ⬆	215.5 ⬇		6614
London	296.3 ⬇	7.7% ⬆	16	17	0		146.2 ⬇	33	0	0	98.9 ⬆	239.5 ⬇		13103
North East	374.3 ⬇	11.6% ⬇	12	0	0		284.9 ⬇	12	0	0	222.9 ⬆	378.5 ⬇		7606
North West	456.7 ⬇	14.1% ⬆	38	1	0		417.0 ⬇	39	0	0	319.8 ⬇	459.5 ⬇		30616
South East	337.4 ⬇	5.2% ⬆	5	46	15		115.1 ⬆	62	4	0	68.6 ⬆	281.0 ⬇		10260
South West	358.3 ⬇	6.2% ⬆	4	16	10		147.6 ⬆	28	1	1	79.5 ⬆	441.3 ⬇		8300
West Midlands	374.5 ⬇	10.8% ⬆	24	5	1		265.2 ⬆	30	0	0	196.9 ⬆	371.5 ⬇		15738
Yorkshire and Humber	408.3 ⬇	15.1% ⬆	19	2	0		403.5 ⬆	21	0	0	323.8 ⬆	493.3 ⬇		22203
England	**374.2 ⬇**	**9.5% ⬆**	**151**	**123**	**43**		**229.4 ⬆**	**307**	**9**	**1**	**166.2 ⬆**	**371.2 ⬇**		**129137**

Data for positive cases with specimen dates between **24 October and 30 October 2020**

Arrows demonstrate how figures compare to the equivalent figure as of **23 October 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 **24 October 2020 and 30 October 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of **23 October 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
Blackburn with Darwen	542.1 ↓	20.9% ↑		744.8 ↓	591.8 ↑	906.9 ↓		Very High
Oldham	551.0 ↓	20.6% ↑		738.1 ↑	756.3 ↑	801.1 ↑		Very High
Wigan	538.2 ↑	19.4% ↑		682.2 ↑	524.5 ↓	912.2 ↑		Very High
Salford	522.6 ↓	18.1% ↑		623.6 ↓	539.6 ↓	580.4 ↓		Very High
Rochdale	508.1 ↓	17.7% ↑		582.7 ↓	608.7 ↑	518.3 ↓		Very High
Bury	462.0 ↓	19.1% ↑		566.5 ↑	427.4 ↓	626.4 ↓		Very High
Bolton	431.3 ↓	19.4% ↑		548.1 ↓	382.6 ↑	669.8 ↓		Very High
Tameside	520.7 ↓	16.0% ↑		538.6 ↑	377.3 ↓	653.5 ↑		Very High
Rotherham	487.2 ↓	16.7% ↑		538.0 ↑	424.9 ↑	548.2 ↓		Very High
Doncaster	448.0 ↓	18.2% ↑		531.9 →	518.7 ↑	663.1 ↓		Very High
Bradford	452.3 ↓	17.8% ↑		521.1 ↑	409.4 ↑	732.0 ↑		Very High
Barnsley	474.5 ↓	16.4% ↑		507.6 ↓	501.5 ↑	586.0 ↑		Very High
Hyndburn	465.4 ↓	16.1% ↑		493.6 ↓	283.0 ↓	501.1 ↓		Very High
Manchester	502.5 ↑	14.8% ↓		476.6 ↓	428.6 ↑	392.9 ↓		Very High
Warrington	480.5 ↑	14.7% ↑		463.3 ↑	334.6 ↑	676.3 ↑		Very High
Kirklees	393.8 ↓	17.9% ↑		463.2 ↑	286.6 ↓	541.5 ↑		Very High
Stockport	459.3 ↓	15.0% ↑		454.6 ↑	353.1 ↓	514.2 ↑		Very High
Wakefield	402.3 ↓	16.8% ↑		453.6 ↑	299.6 ↓	630.2 ↑		Very High
Rossendale	436.3 ↓	15.5% ↓		447.7 ↓	367.6 ↓	496.5 ↓		Very High
Preston	532.8 ↓	12.4% ↓		436.7 ↓	344.4 ↑	454.1 ↓		Very High
Leeds	391.7 ↓	16.9% ↑		429.2 ↑	418.7 ↑	431.7 ↑		Very High
Pendle	425.1 ↓	15.6% ↓		427.7 ↓	336.1 ↓	470.6 ↓		Very High
Sheffield	421.9 ↓	15.4% ↑		423.7 ↓	421.7 ↓	431.2 ↓		Very High
North East Lincolnshire	448.6 ↑	14.1% ↑		423.7 ↑	389.3 ↑	609.1 ↑		High
Charnwood	438.3 ↑	14.7% ↓		418.6 ↓	226.7 ↑	1254.7 ↓		High
Bolsover	470.6 ↓	13.2% ↑		410.9 ↑	301.5 ↑	489.9 ↑		High
South Derbyshire	423.8 ↓	14.0% ↑		404.6 ↑	278.1 ↑	894.2 ↑		High
Bristol, City of	482.9 ↑	12.8% ↑		404.6 ↑	216.9 ↑	910.7 ↓		Medium
Knowsley	507.1 ↓	13.4% ↓		404.3 ↓	357.2 ↓	401.9 ↓		Very High
Newcastle-under-Lyme	462.2 ↑	13.1% ↑		403.3 ↑	268.2 ↑	707.8 ↑		High
England	374.2 ↓	**9.5%** ↑		**229.4** ↑	**166.2** ↑	**371.2** ↓		

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 **24 October 2020 and 30 October 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of **23 October 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*
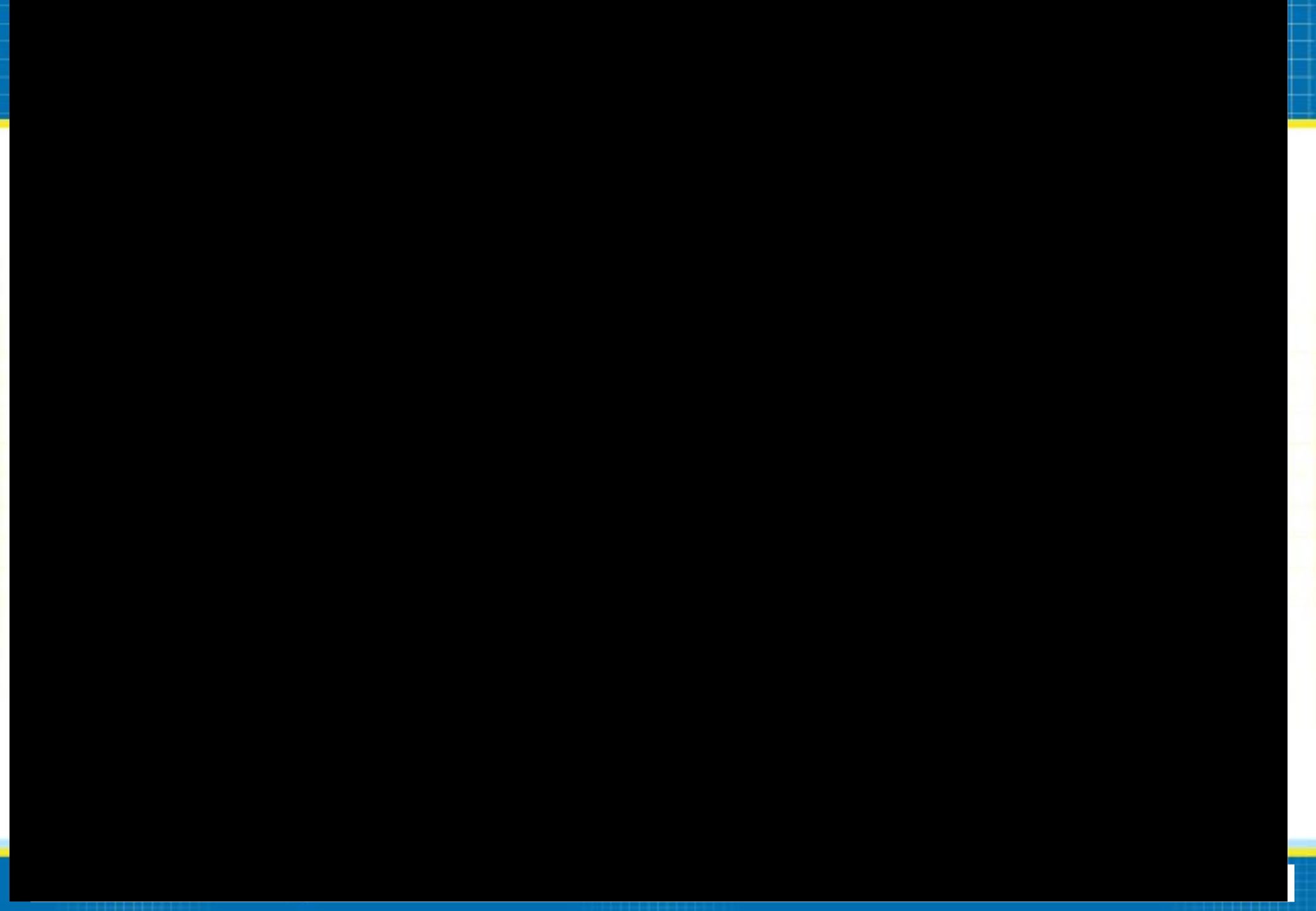
	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Case rate per 100,000 population (weekly)	Case rate per 100,000 population aged 60 years and over (weekly)	Case 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	463.1 ⬆	13.0% ⬆		401.5 ⬆	384.2 ⬆	378.0 ⬆		High
South Staffordshire	439.0 ⬇	14.0% ⬆		400.2 ⬆	312.1 ⬆	516.2 ⬆		High
Bassetlaw	401.8 ⬇	15.0% ⬆		395.0 ⬆	290.7 ⬆	525.5 ⬇		Very High
Derby	426.5 ⬇	13.6% ⬆		386.3 ⬆	298.6 ⬆	518.2 ⬆		High
Mansfield	407.5 ⬇	13.7% ⬆		381.5 ⬆	324.5 ⬇	480.0 ⬇		Very High
Leicester	419.7 ⬆	13.8% ⬆		374.3 ⬆	276.3 ⬆	448.7 ⬇		High
Stoke-on-Trent	463.7 ⬇	11.8% ⬆		361.6 ⬆	268.5 ⬆	379.7 ⬆		High
Sandwell	389.5 ⬇	14.4% ⬆		361.4 ⬆	370.6 ⬆	383.1 ⬇		High
North East Derbyshire	392.5 ⬇	13.5% ⬆		360.7 ⬆	214.7 ⬇	587.7 ⬆		High
Oadby and Wigston	484.1 ⬆	10.7% ⬆		342.0 ⬆	217.5 ⬆	579.6 ⬇		High
Dudley	388.3 ⬆	13.0% ⬆		340.5 ⬆	266.0 ⬆	472.0 ⬆		High
Walsall	380.9 ⬇	13.8% ⬆		340.1 ⬆	236.5 ⬇	459.6 ⬇		High
Erewash	407.0 ⬇	12.5% ⬆		338.9 ⬆	265.8 ⬆	441.8 ⬇		High
Cannock Chase	442.3 ⬇	11.6% ⬆		334.5 ⬆	253.2 ⬆	468.1 ⬆		High
Chesterfield	437.7 ⬇	11.3% ⬆		333.7 ⬆	162.4 ⬇	344.0 ➡		High
Tamworth	343.8 ⬇	14.5% ⬆		332.5 ⬆	198.9 ⬆	558.0 ⬇		High
Stafford	415.8 ⬆	11.7% ⬆		332.2 ⬆	257.1 ⬆	490.6 ⬆		High
Ashfield	424.7 ⬇	12.1% ⬆		332.2 ⬆	271.2 ⬆	339.8 ⬇		Very High
Staffordshire Moorlands	390.3 ⬇	12.5% ⬆		329.2 ⬆	206.4 ⬆	347.8 ⬇		High
High Peak	407.8 ⬇	11.5% ⬆		315.1 ⬆	184.1 ⬇	527.2 ⬆		High
East Staffordshire	531.0 ⬆	8.8% ⬆		313.1 ⬆	278.2 ⬆	639.1 ⬆		High
North Warwickshire	407.8 ⬇	10.6% ⬆		301.9 ⬆	216.7 ⬆	658.5 ⬆		Medium
East Riding of Yorkshire	394.7 ⬇	11.1% ⬆		294.0 ⬆	217.3 ⬆	436.1 ⬇		High
Amber Valley	404.4 ⬇	11.1% ⬆		289.5 ⬆	271.9 ⬆	441.4 ⬇		High
North Tyneside	387.6 ⬇	11.3% ⬆		288.1 ⬆	220.4 ⬆	297.7 ⬇		High
Birmingham	352.0 ⬇	12.5% ⬆		283.0 ⬆	244.1 ⬆	286.9 ⬇		High
Wolverhampton	383.1 ⬇	11.1% ⬆		282.1 ⬆	199.6 ⬆	310.4 ⬇		High
Lichfield	378.8 ⬇	11.1% ⬆		278.7 ⬆	215.1 ⬆	426.7 ⬇		High
Lincoln	437.9 ⬇	9.9% ⬆		272.9 ⬆	65.5 ⬆	786.4 ⬇		Medium
South Gloucestershire	384.3 ⬆	10.6% ⬆		272.9 ⬆	154.2 ⬆	914.6 ➡		Medium
England	**374.2** ⬇	**9.5%** ⬆		**229.4** ⬆	**166.2** ⬆	**371.2** ⬇		

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 **24 October 2020 and 30 October 2020** (7 day).

Arrows demonstrate how figures compare to the equivalent figure as of **23 October 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

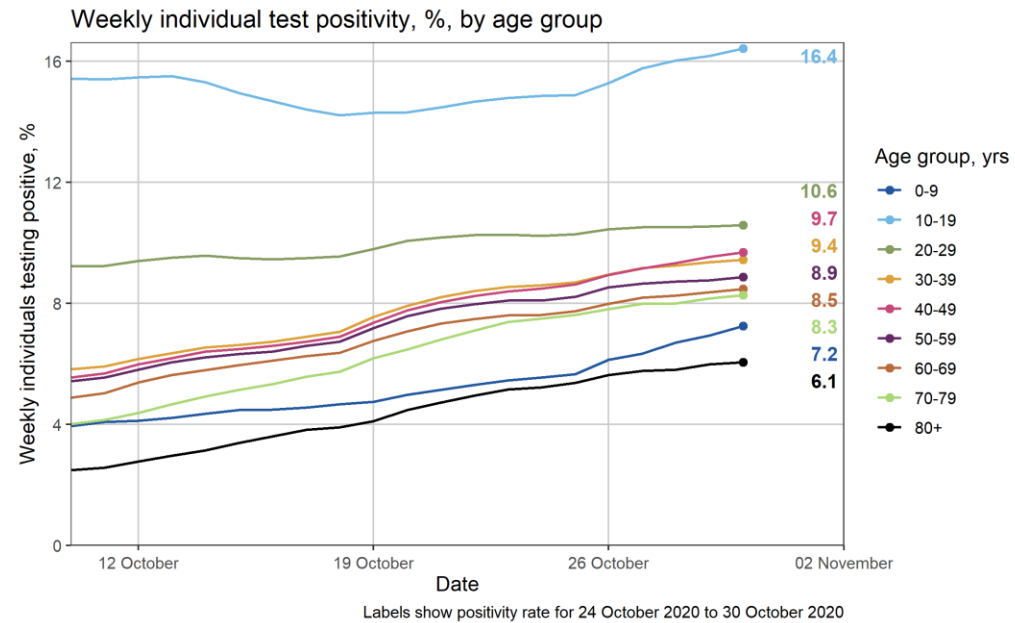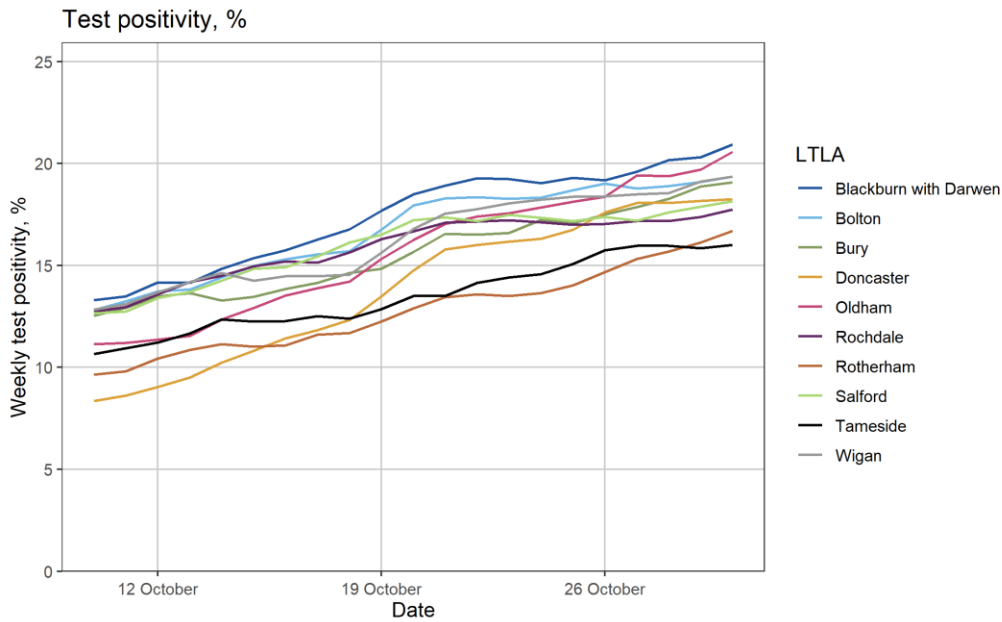|	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Case rate per 100,000 population (weekly)	Case rate per 100,000 population aged 60 years and over (weekly)	Case rate per 100,000 population aged 17 - 21 years olds (weekly)	Community outbreaks (Last 7 days)	Local COVID Alert Level
Oldham	551.0 ↓	20.6% ↑		738.1 ↑	756.3 ↑	801.1 ↑		Very High
Rochdale	508.1 ↓	17.7% ↑		582.7 ↓	608.7 ↑	518.3 ↓		Very High
Blackburn with Darwen	542.1 ↓	20.9% ↑		744.8 ↓	591.8 ↑	906.9 ↑		Very High
Salford	522.6 ↓	18.1% ↑		623.6 ↓	539.6 ↓	580.4 ↓		Very High
Wigan	538.2 ↑	19.4% ↑		682.2 ↑	524.5 ↓	912.2 ↑		Very High
Doncaster	448.0 ↓	18.2% ↑		531.9 →	518.7 ↑	663.1 ↑		Very High
Barnsley	474.5 ↓	16.4% ↑		507.6 ↓	501.5 ↑	586.0 ↑		Very High
Manchester	502.5 ↑	14.8% ↓		476.6 ↓	428.6 ↑	392.9 ↓		Very High
Bury	462.0 ↓	19.1% ↑		566.5 ↑	427.4 ↓	626.4 ↓		Very High
Rotherham	487.2 ↓	16.7% ↑		538.0 ↑	424.9 ↑	548.2 ↓		Very High
Sheffield	421.9 ↓	15.4% ↑		423.7 ↓	421.7 ↑	431.2 ↓		Very High
Nottingham	368.5 ↓	16.6% ↑		391.7 ↓	421.4 ↑	361.0 ↓		Very High
Leeds	391.7 ↓	16.9% ↑		429.2 ↑	418.7 ↑	431.7 ↑		Very High
Bradford	452.3 ↓	17.8% ↑		521.1 ↑	409.4 ↑	732.0 ↑		Very High
North East Lincolnshire	448.6 ↑	14.1% ↑		423.7 ↑	389.3 ↑	609.1 ↑		High
Kingston upon Hull, City of	463.1 ↑	13.0% ↑		401.5 ↑	384.2 ↑	378.0 ↓		High
Bolton	431.3 ↓	19.4% ↑		548.1 ↑	382.6 ↓	669.8 ↓		Very High
Blackpool	546.8 ↓	11.0% ↓		377.2 ↓	380.9 ↓	207.8 ↓		Very High
Tameside	520.7 ↓	16.0% ↑		538.6 ↑	377.3 ↓	653.5 ↑		Very High
Liverpool	427.1 ↓	13.7% ↓		357.2 ↓	376.3 ↓	301.2 ↓		Very High
Sandwell	389.5 ↓	14.4% ↑		361.4 ↑	370.6 ↑	383.1 ↑		High
Rossendale	436.3 ↓	15.5% ↓		447.7 ↓	367.6 ↓	496.5 ↓		Very High
Knowsley	507.1 ↓	13.4% ↓		404.3 ↓	357.2 ↓	401.9 ↓		Very High
Stockport	459.3 ↓	15.0% ↑		454.6 ↑	353.1 ↑	514.2 ↓		Very High
Ribble Valley	408.7 ↓	15.0% ↑		392.5 ↓	352.8 ↑	505.2 ↓		Very High
Preston	532.8 ↓	12.4% ↓		436.7 ↑	344.4 ↑	454.1 ↓		Very High
Pendle	425.1 ↓	15.6% ↑		427.7 ↓	336.1 ↓	470.6 ↑		Very High
Warrington	480.5 ↑	14.7% ↑		463.3 ↑	334.6 ↑	676.3 ↑		Very High
Mansfield	407.5 ↓	13.7% ↓		381.5 ↑	324.5 ↑	480.0 ↓		Very High
St. Helens	500.4 ↓	12.5% ↓		403.1 ↓	318.5 ↓	532.8 ↑		Very High
England	374.2 ↓	9.5% ↑		229.4 ↑	166.2 ↑	371.2 ↓		

Weekly percentage of cases symptomatic %

Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 30 October 2020

Test positivity, %

Weekly individual test positivity, %, by age group
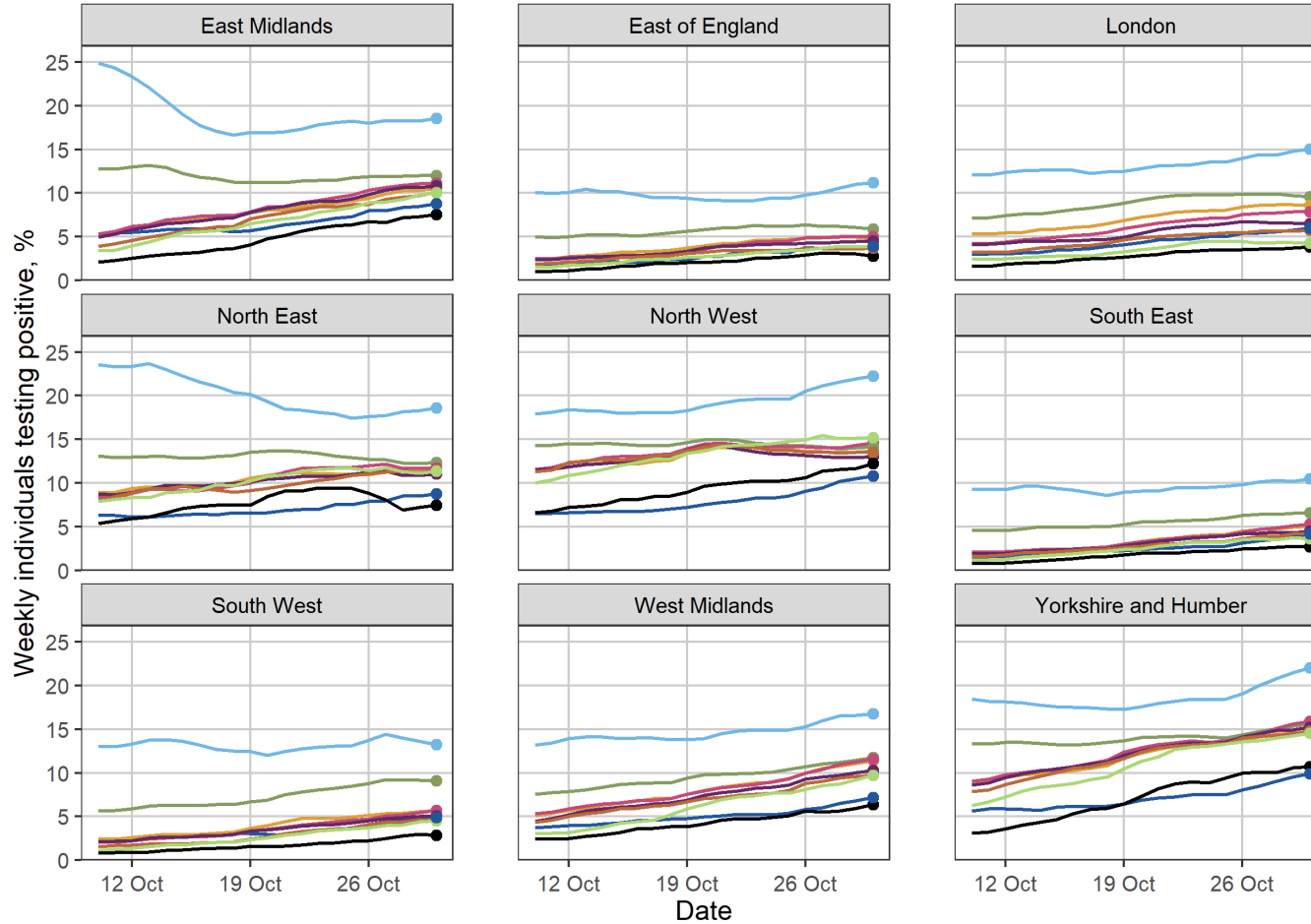
Labels show positivity rate for 24 October 2020 to 30 October 2020

Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 30 October 2020
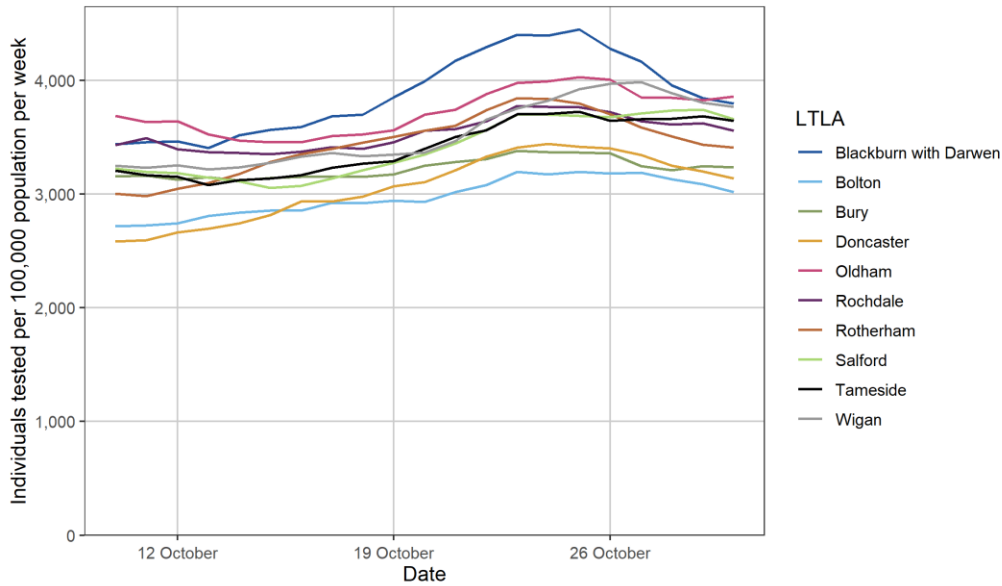
Weekly individual test positivity, %, by age group

Individuals tested per 100,000 population

LTLA
- Blackburn with Darwen
- Bolton
- Bury
- Doncaster
- Oldham
- Rochdale
- Rotherham
- Salford
- Tameside
- Wigan

Individuals tested per 100,000 population

3,930.6
3,530.5
3,304.2
3,254.0
3,090.1
2,396.7
1,773.8
1,307.7
983.9

Age group, yrs
- 0-9
- 10-19
- 20-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+

Labels show test rate for 24 October 2020 to 30 October 2020

Individuals tested per 100,000 population

Individuals tested per 100,000 population per week
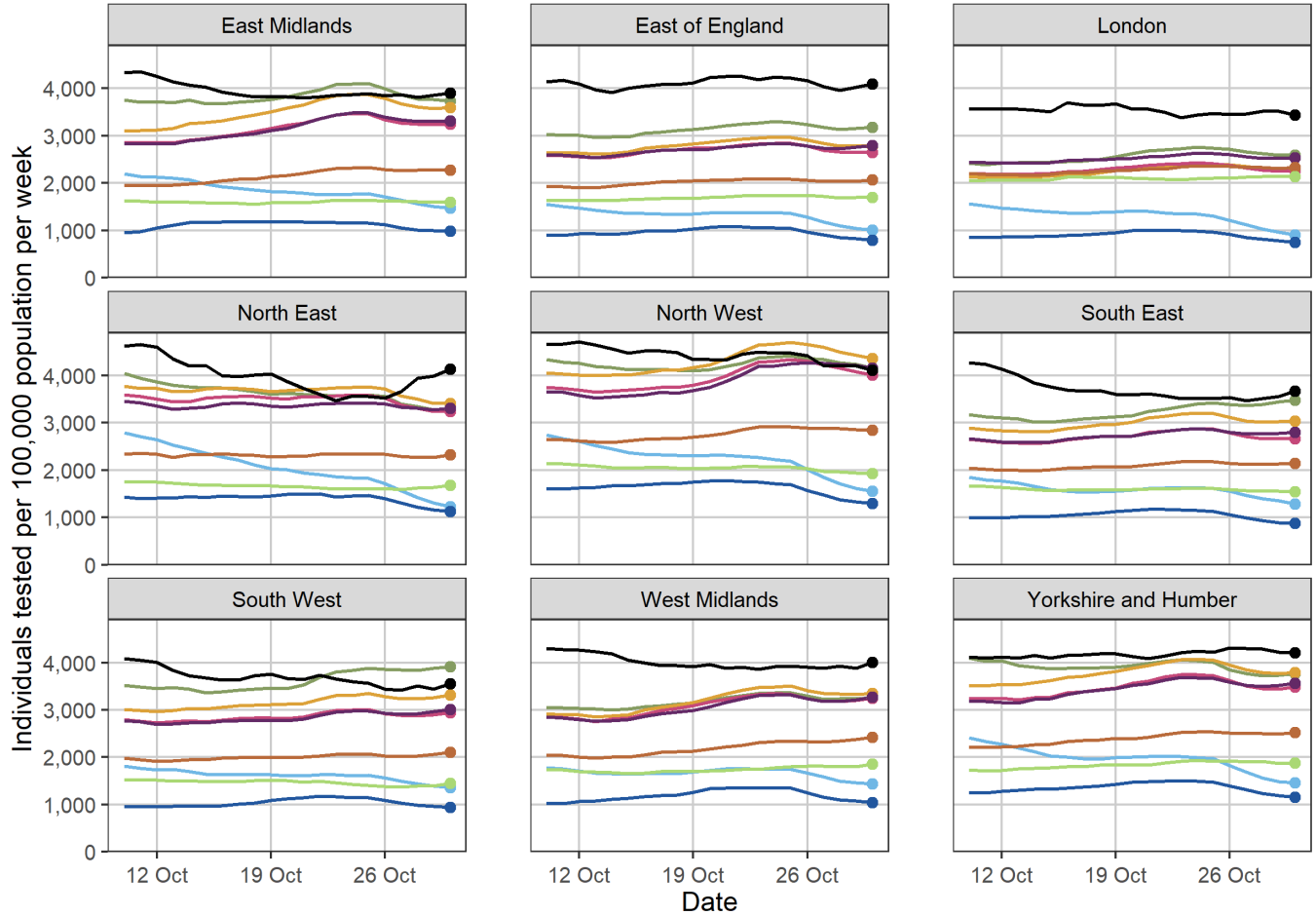
Age group, yrs — 0-9 — 10-19 — 20-29 — 30-39 — 40-49 — 50-59 — 60-69 — 70-79 — 80+
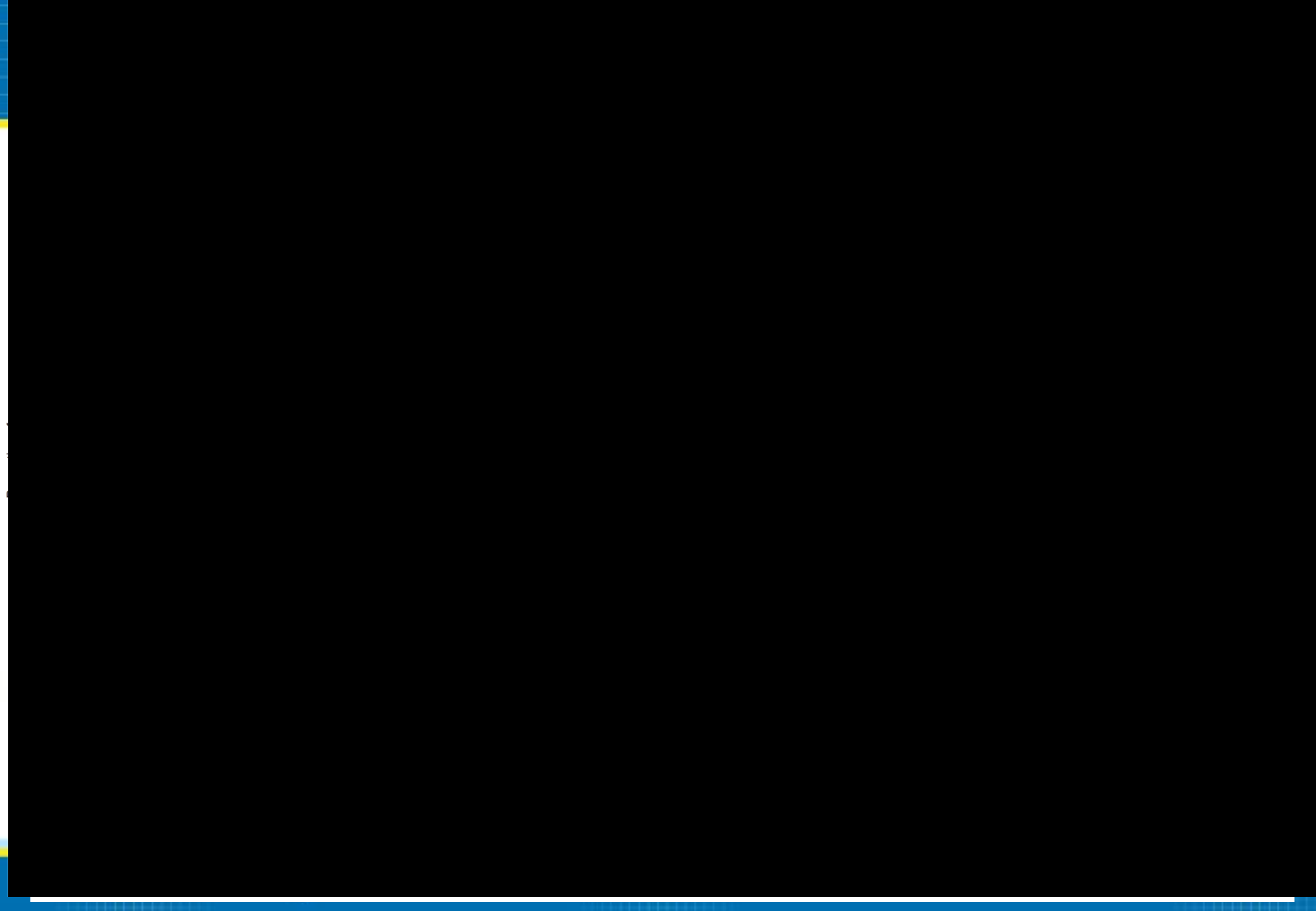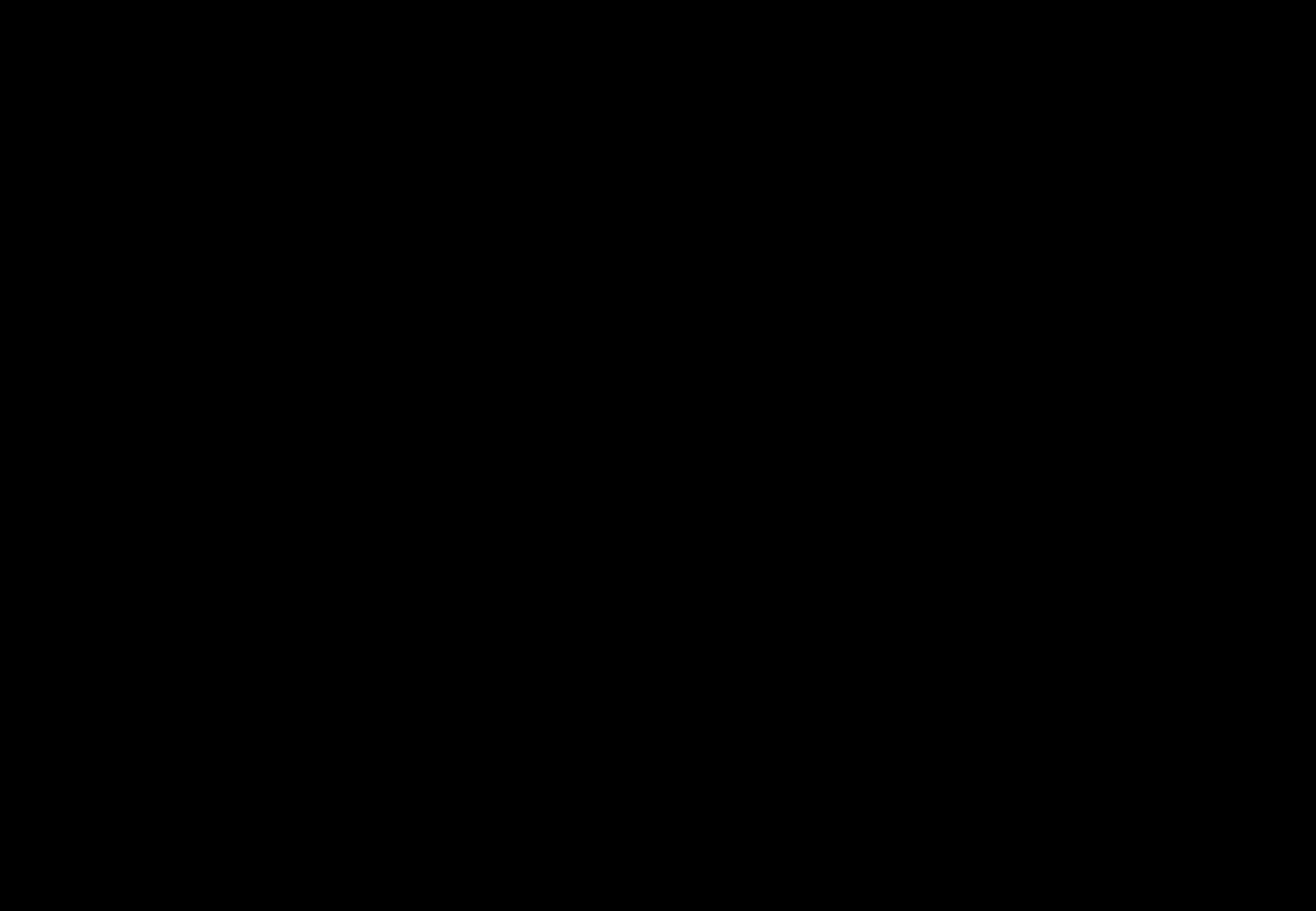
Percentage prevalence of COVID-19 across England and Government Office regions - table
Data generated 30 October 2020 by PHE Joint Modelling Cell

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 **24 October 2020**, using data up to 1**8 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.

	23/10/2020	30/10/2020	06/11/2020
England	0.852 (0.648, 1.108)	1.312 (0.981, 1.73)	1.968 (1.453, 2.623)
North East	1.404 (0.841, 2.225)	1.9 (1.023, 3.278)	2.489 (1.202, 4.542)
Yorkshire and The Humber	1.555 (0.995, 2.409)	2.564 (1.495, 4.303)	4.0 (2.153, 7.019)
North West	2.359 (1.699, 3.232)	3.311 (2.274, 4.688)	4.33 (2.899, 6.213)
East Midlands	1.175 (0.701, 1.927)	2.178 (1.159, 3.96)	3.836 (1.844, 7.531)
West Midlands	0.475 (0.261, 0.814)	0.602 (0.287, 1.157)	0.757 (0.31, 1.619)
East of England	0.439 (0.226, 0.796)	0.75 (0.324, 1.56)	1.257 (0.457, 2.951)
London	0.311 (0.149, 0.585)	0.368 (0.146, 0.803)	0.431 (0.144, 1.086)
South East	0.146 (0.067, 0.291)	0.2 (0.076, 0.477)	0.274 (0.085, 0.782)
South West	0.321 (0.146, 0.646)	0.617 (0.233, 1.489)	1.173 (0.366, 3.325)

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 **24 October 2020**, using data up to **18 October 2020**. The previous 10 days of case rates have been summed to provide an estimate for prevalence.
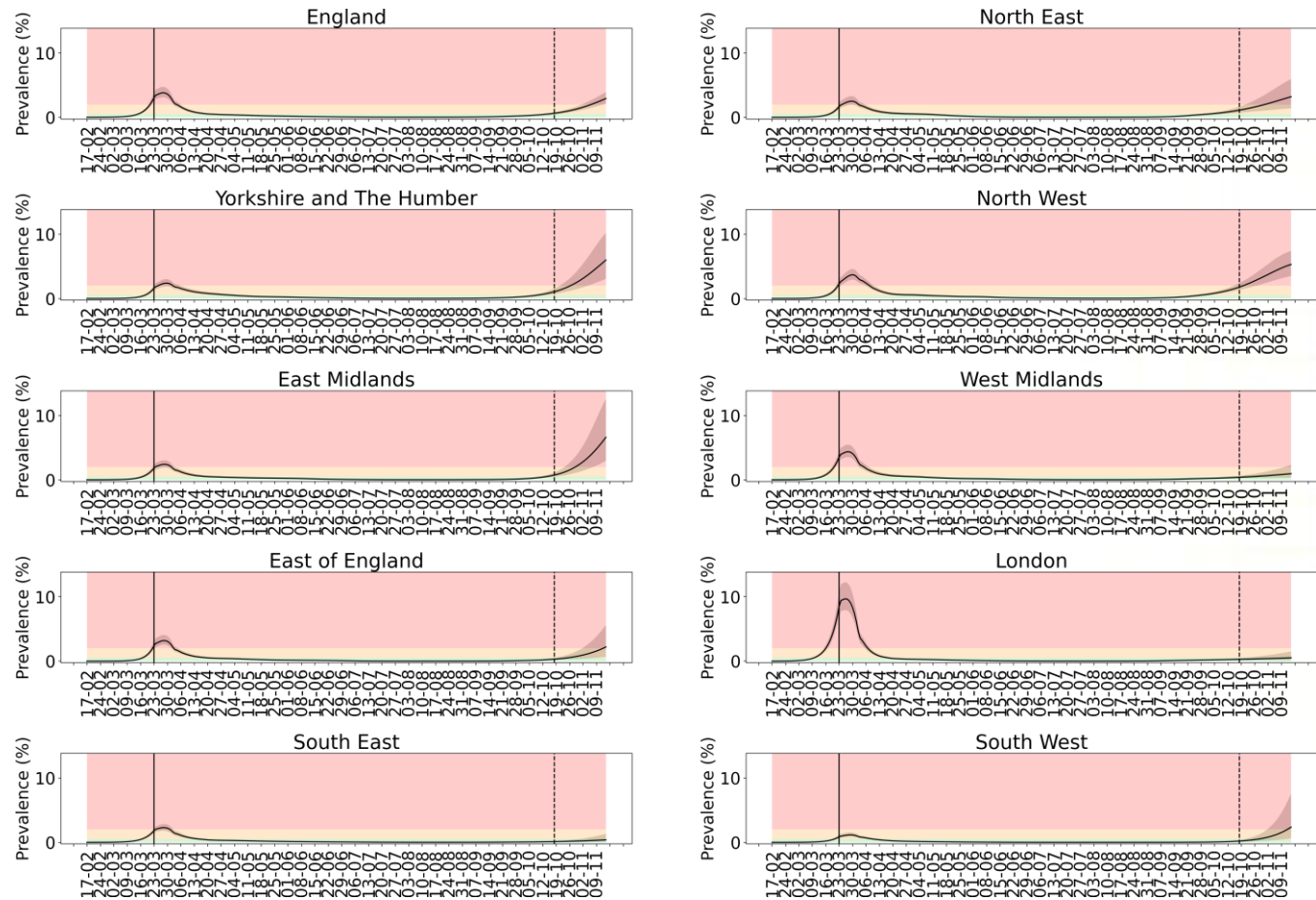
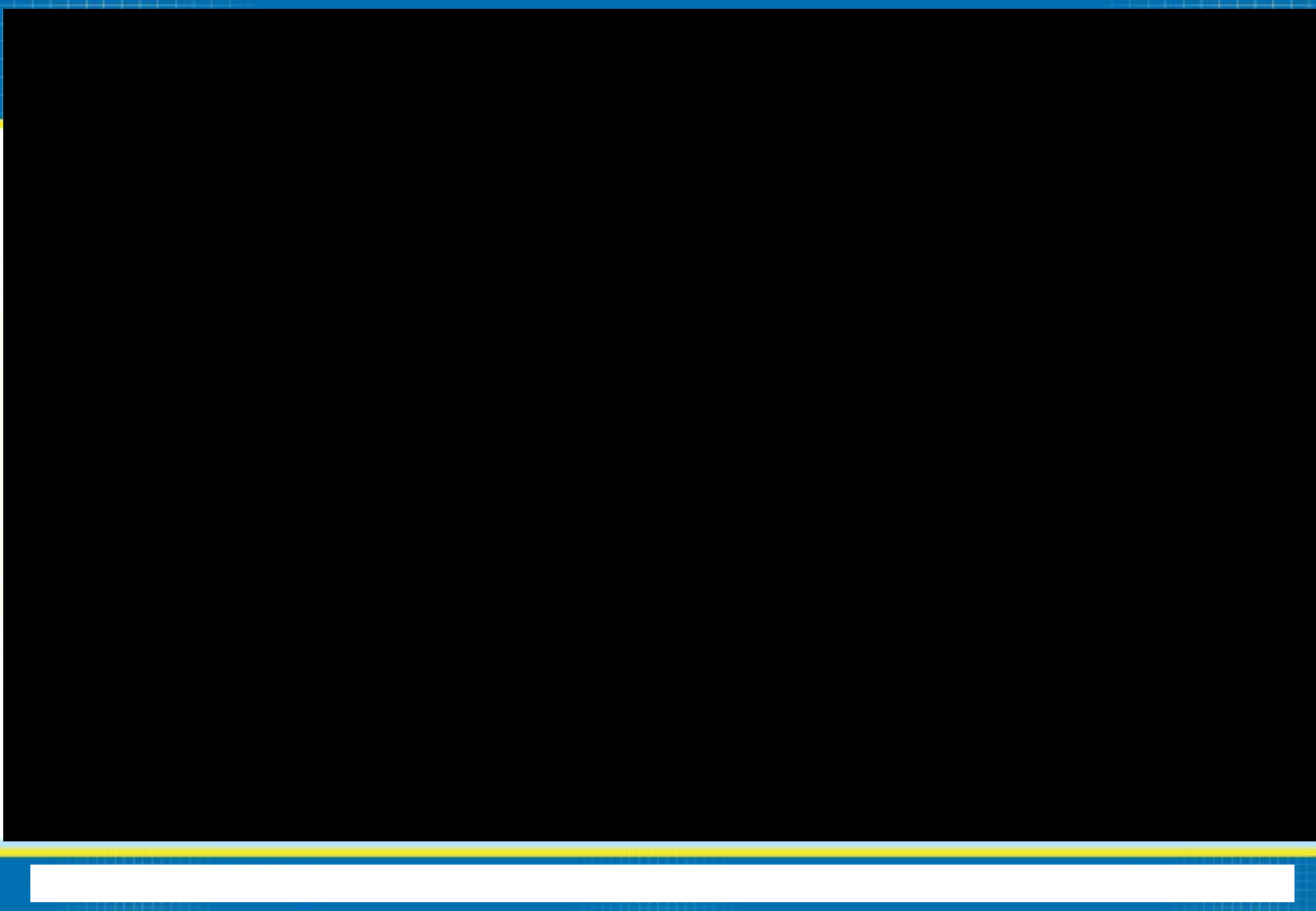Prevalence estimates set against the prevalence boundaries.

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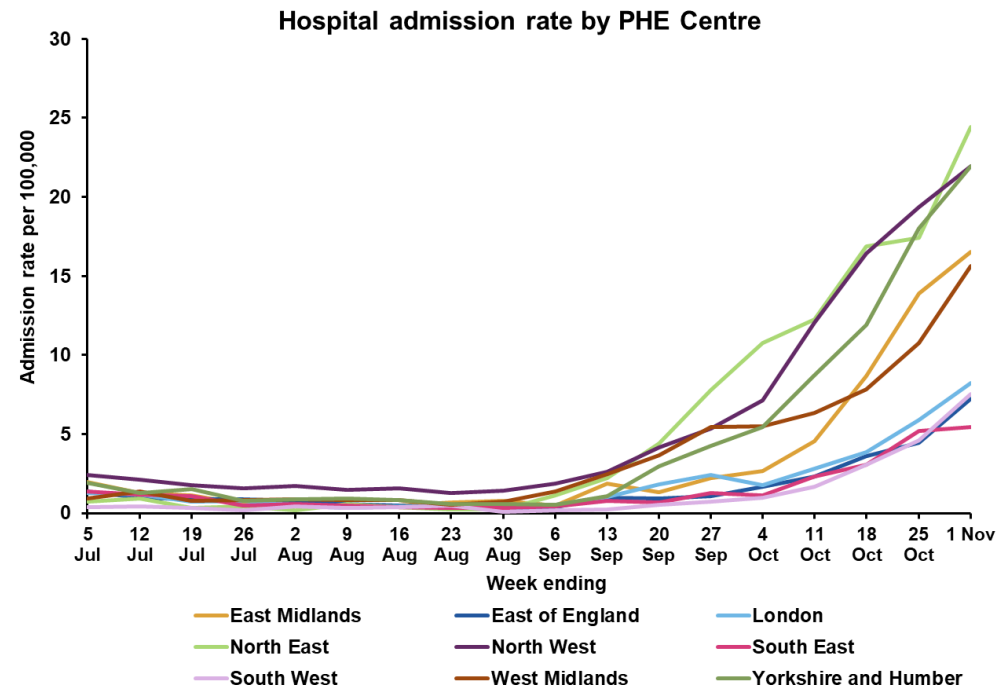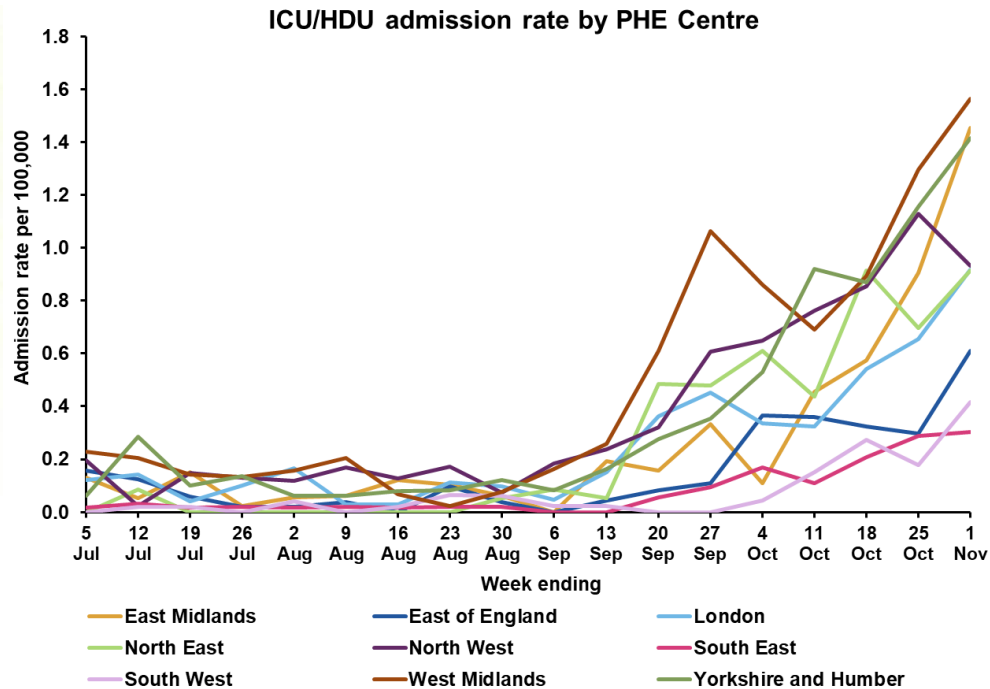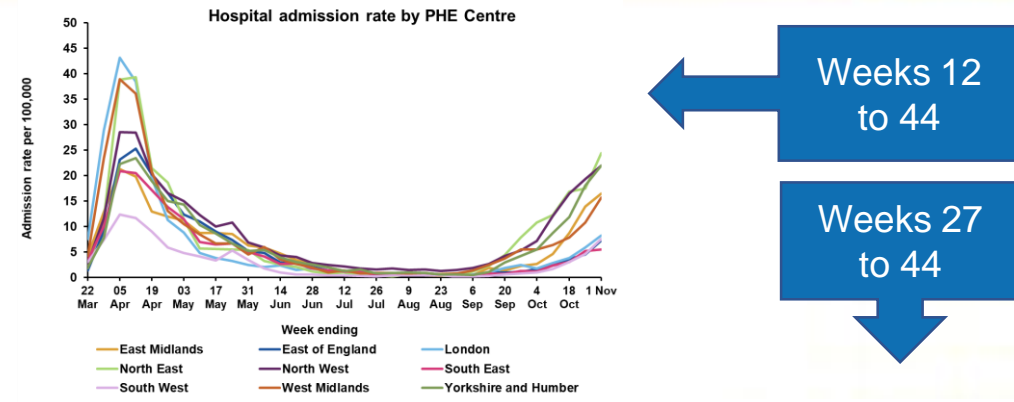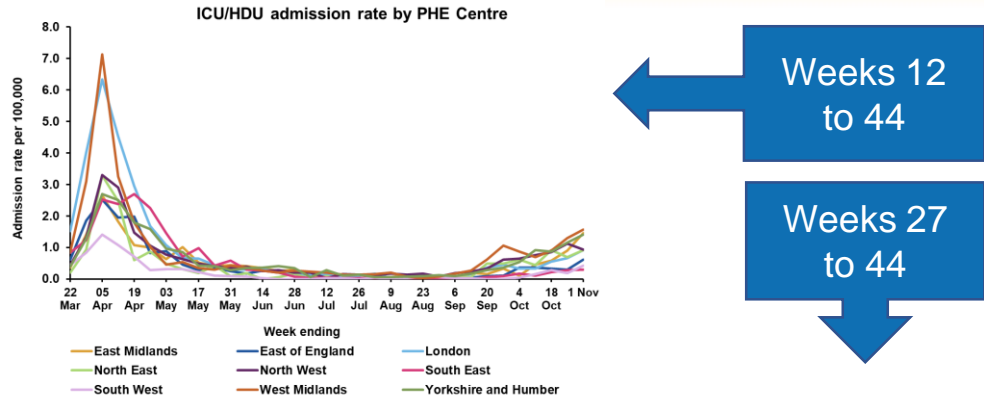
Solid vertical line shows the time of lockdown.

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

Prevalence plots

Hospitalisations by PHE Centre

ICU/HDU admission rate by PHE Centre

Weeks 12 to 44

Weeks 27 to 44

Hospital admission rate by PHE Centre

Weeks 12 to 44

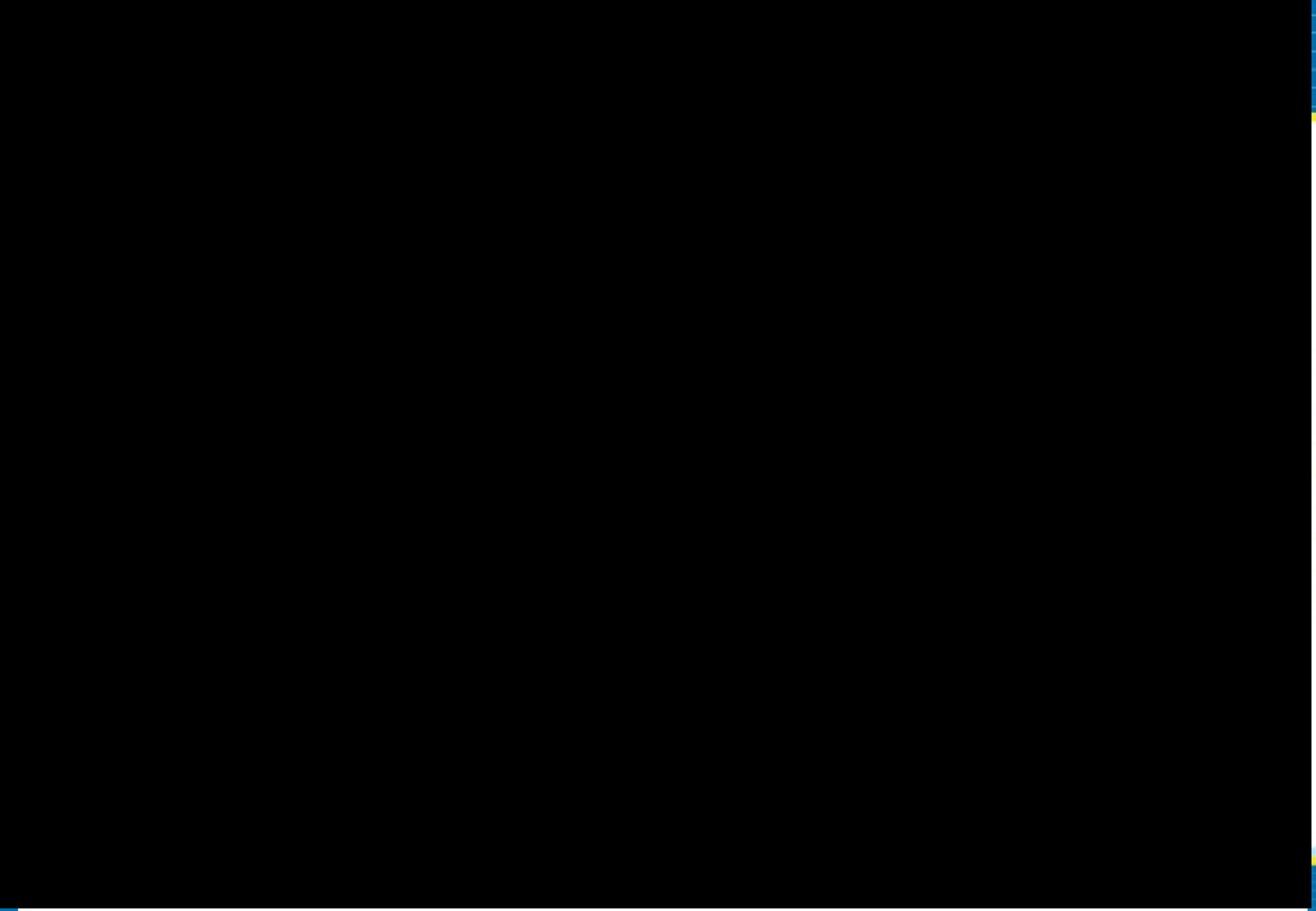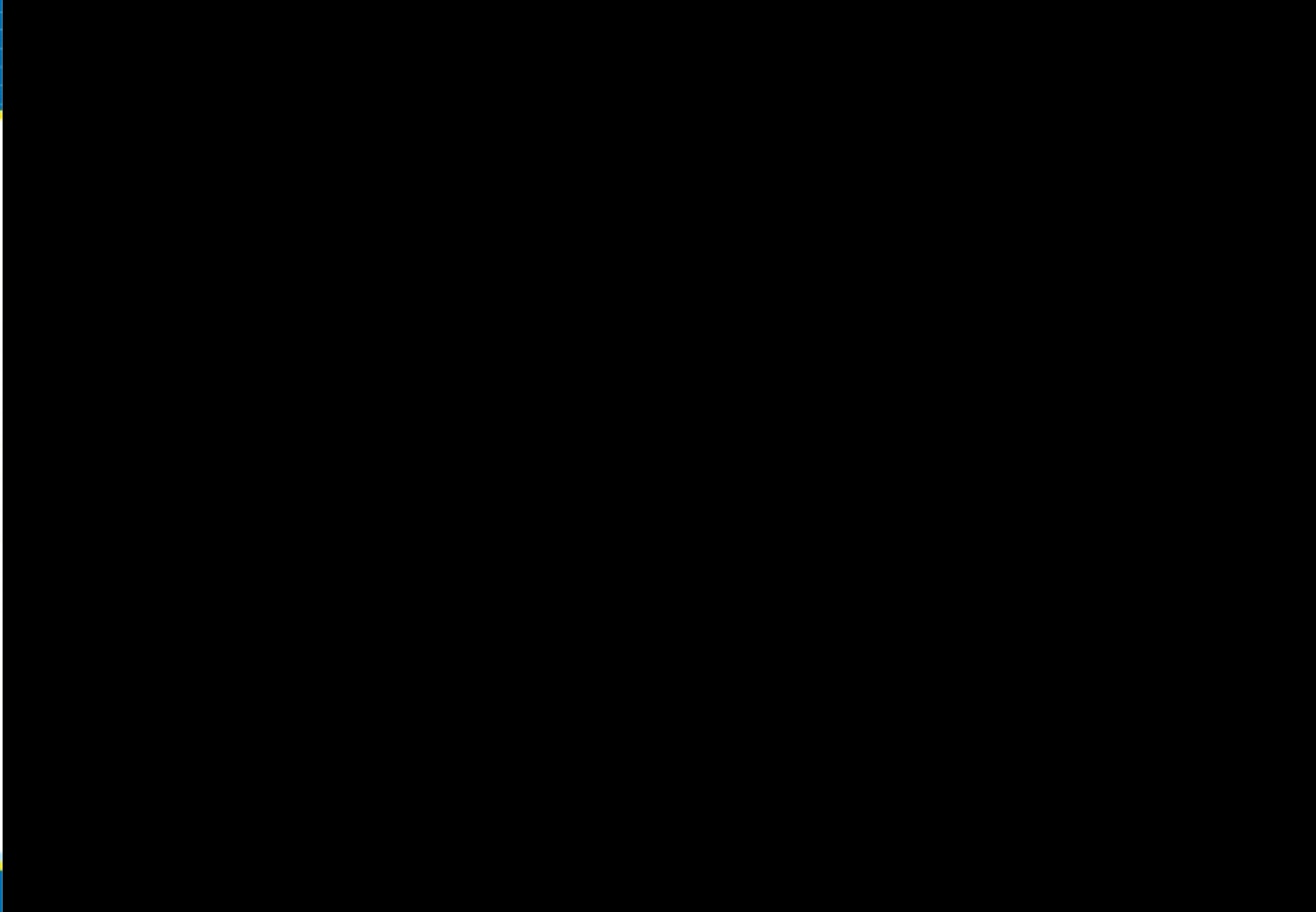Weeks 27 to 44

ICU/HDU admission rate by PHE Centre

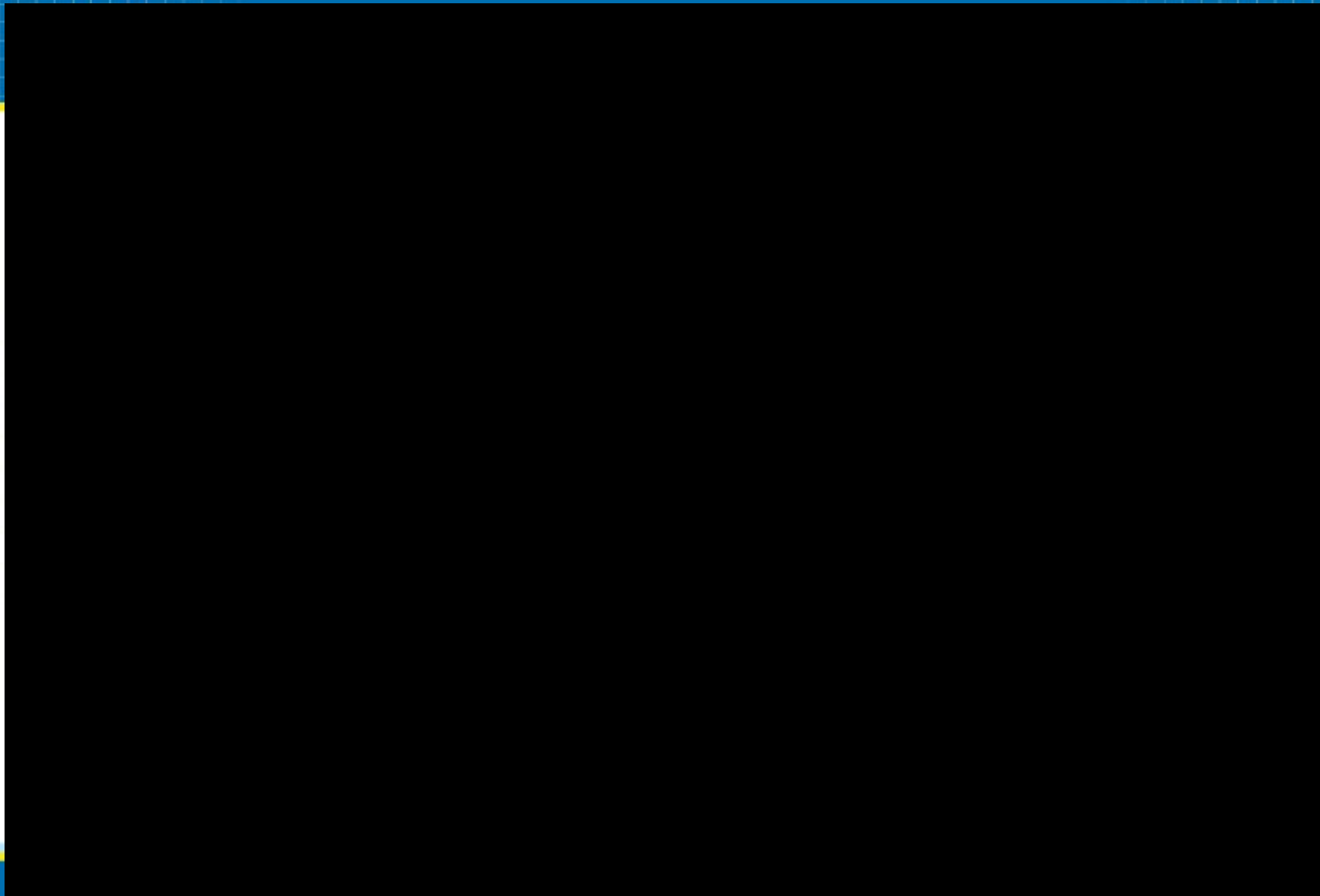Hospital admission rate by PHE Centre

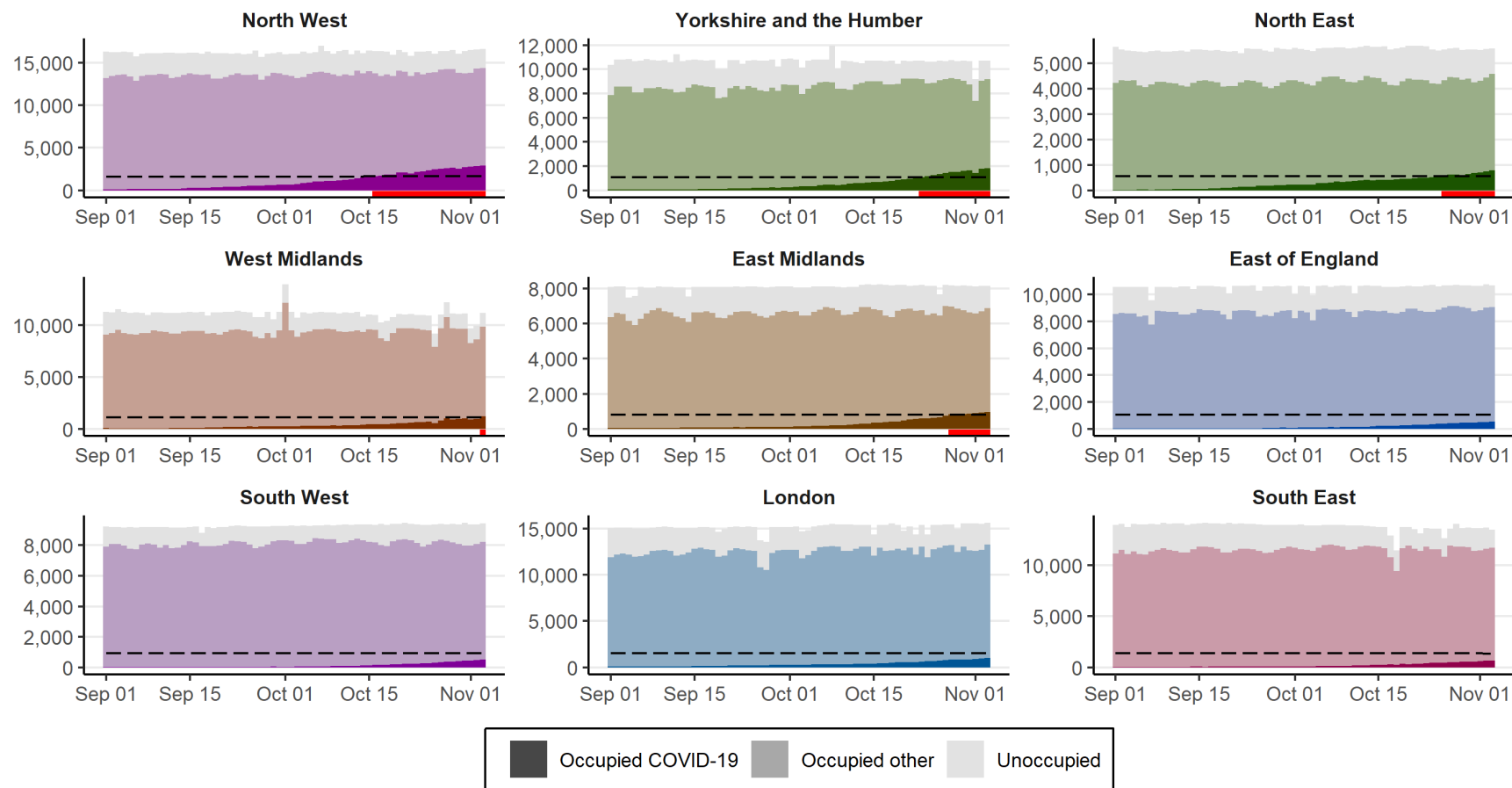Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

Bed occupancy and capacity by region – general and acute beds, Sept. onwards

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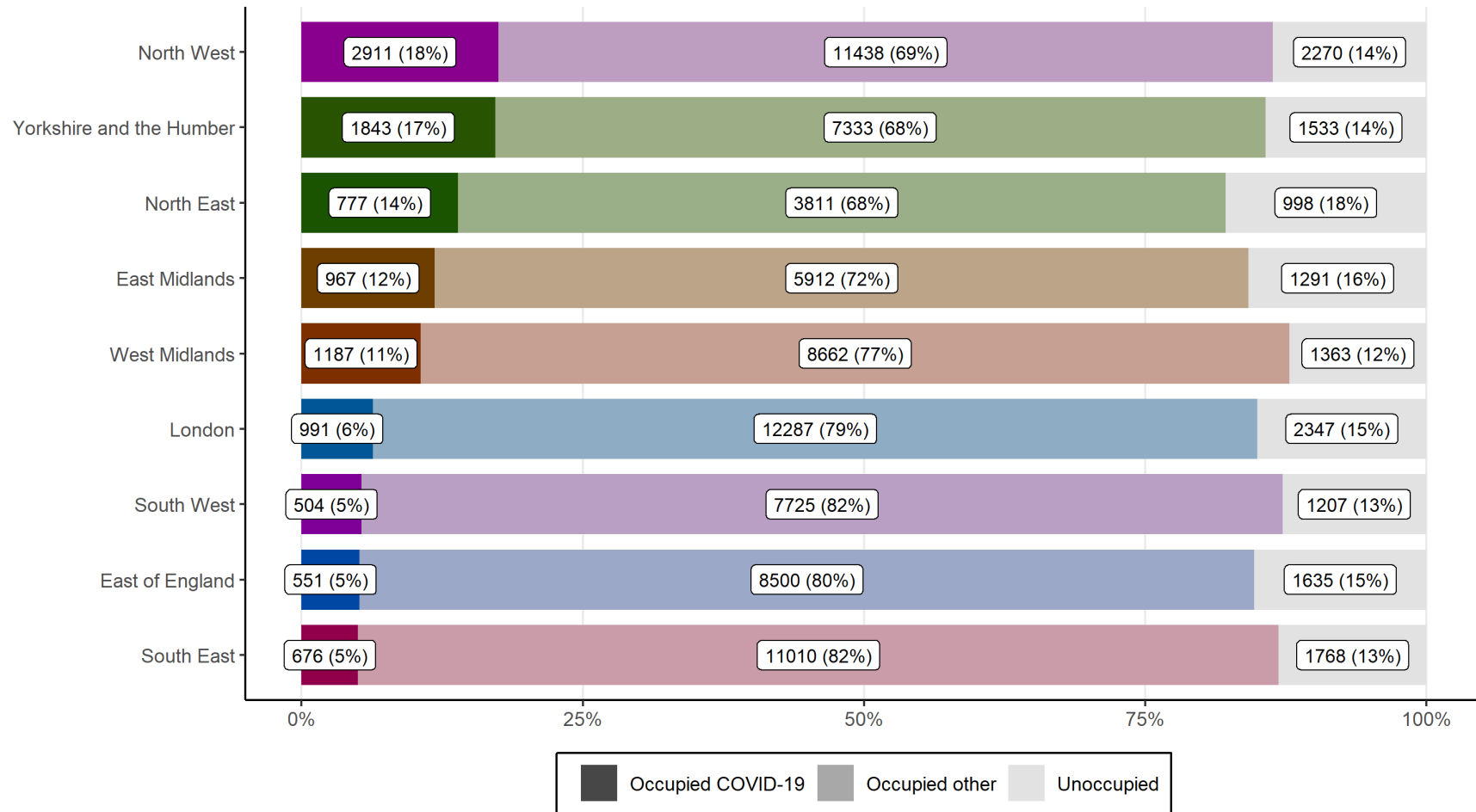

Occupied COVID-19   Occupied other   Unoccupied

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 01 September 2020 to 03 November 2020. Produced by Joint Biosecurity Centre.

NOTE: Occupied other = Occupied suspected COVID-19 and Occupied non-COVID-19

Bed occupancy and capacity by region – general and acute beds

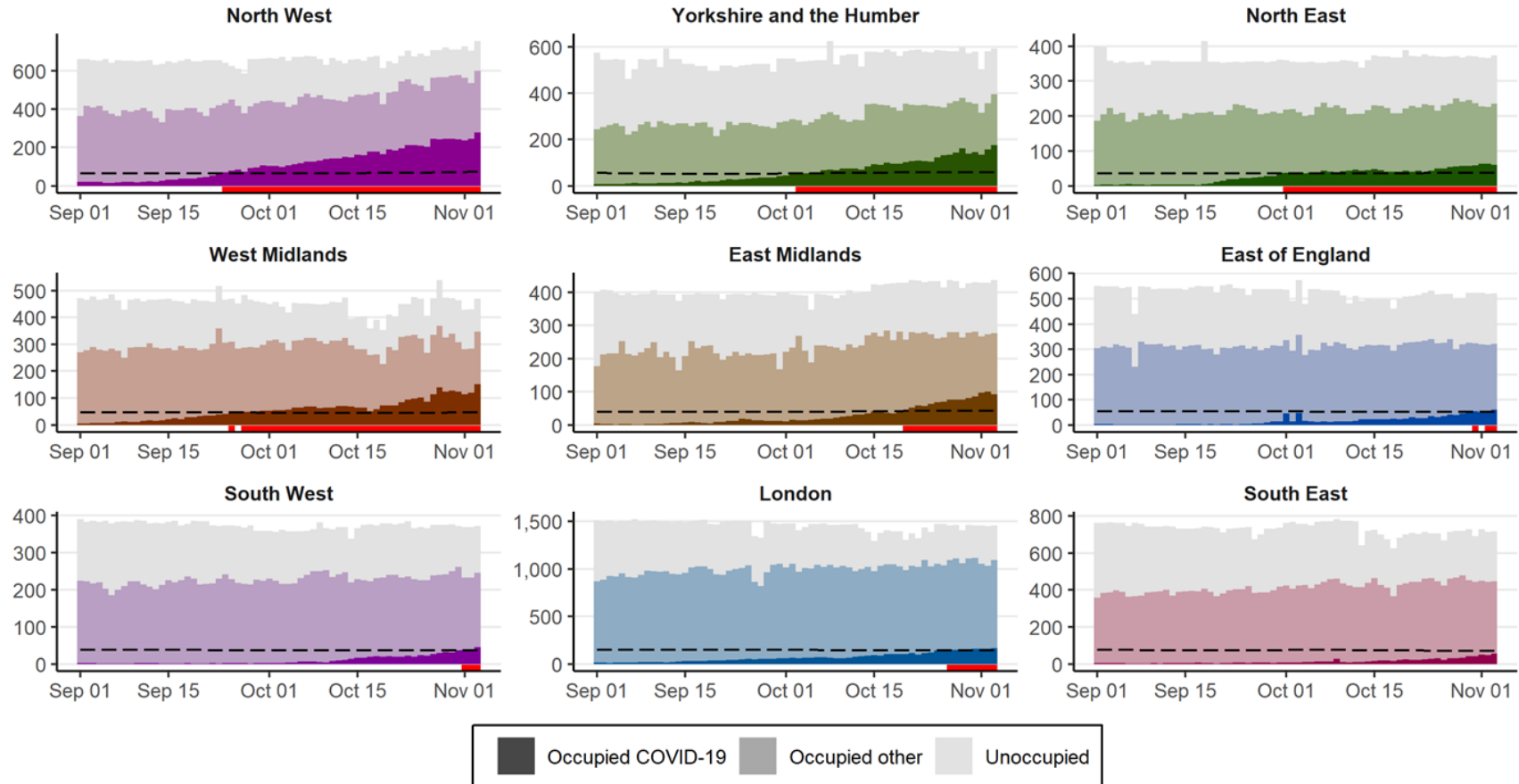### Total bed occupancy and capacity by region on 03 November 2020

Region	Occupied COVID-19	Occupied other	Unoccupied
North West	2911 (18%)	11438 (69%)	2270 (14%)
Yorkshire and the Humber	1843 (17%)	7333 (68%)	1533 (14%)
North East	777 (14%)	3811 (68%)	998 (18%)
East Midlands	967 (12%)	5912 (72%)	1291 (16%)
West Midlands	1187 (11%)	8662 (77%)	1363 (12%)
London	991 (6%)	12287 (79%)	2347 (15%)
South West	504 (5%)	7725 (82%)	1207 (13%)
East of England	551 (5%)	8500 (80%)	1635 (15%)
South East	676 (5%)	11010 (82%)	1768 (13%)

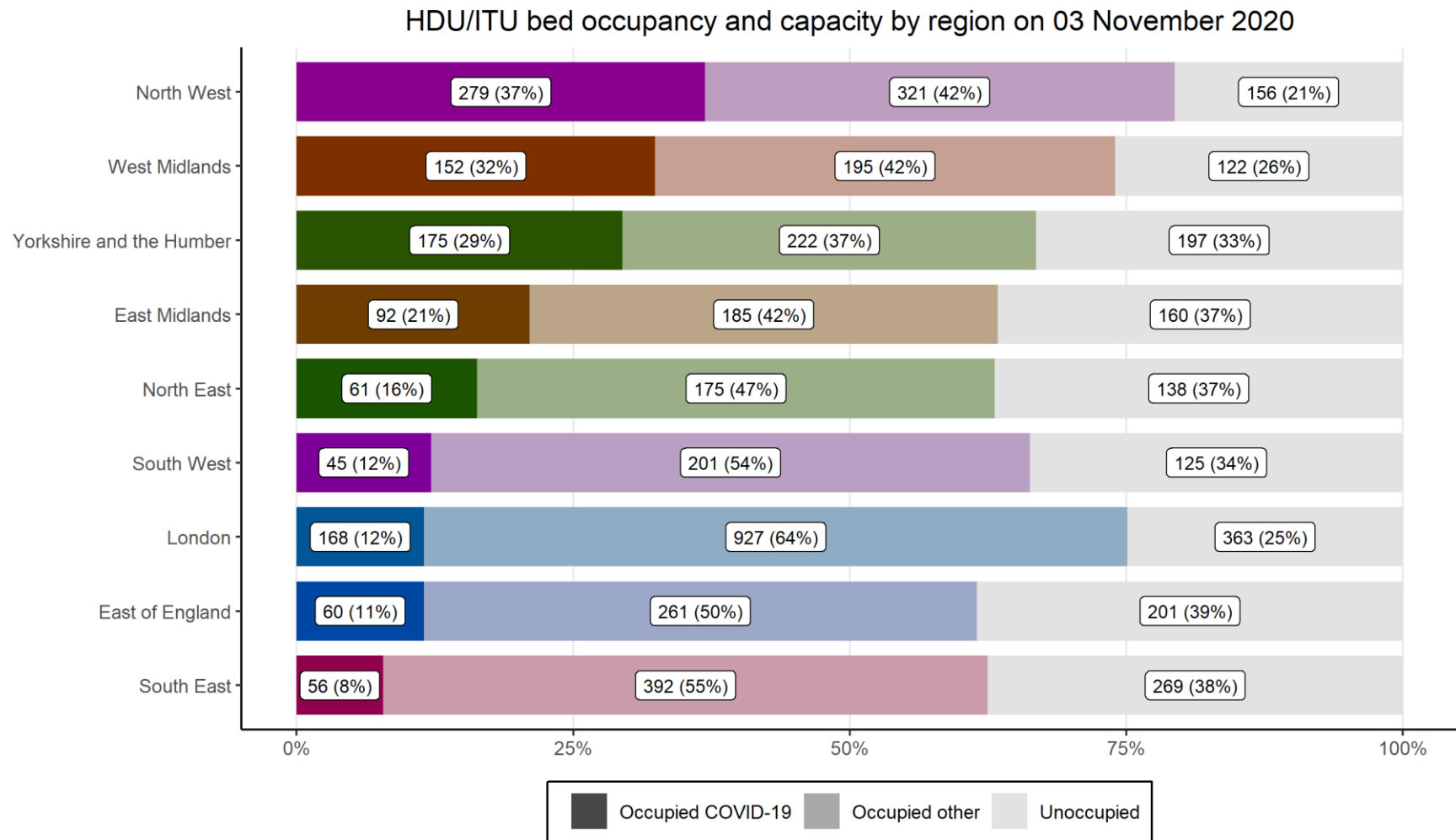**Source:** NHS England & Improvement COVID-19 Hospital Activity Data. Produced by Joint Biosecurity Centre.

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 03 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 03 November 2020

Region	Occupied COVID-19	Occupied other	Unoccupied
North West	279 (37%)	321 (42%)	156 (21%)
West Midlands	152 (32%)	195 (42%)	122 (26%)
Yorkshire and the Humber	175 (29%)	222 (37%)	197 (33%)
East Midlands	92 (21%)	185 (42%)	160 (37%)
North East	61 (16%)	175 (47%)	138 (37%)
South West	45 (12%)	201 (54%)	125 (34%)
London	168 (12%)	927 (64%)	363 (25%)
East of England	60 (11%)	261 (50%)	201 (39%)
South East	56 (8%)	392 (55%)	269 (38%)

Legend: Occupied COVID-19 | Occupied other | 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
Derbyshire		Alarms yesterday and during past week
Nottinghamshire		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
Wakefield		Alarms yesterday and during past week
Doncaster		Alarms yesterday and during past week
Portsmouth		Alarms yesterday and during past week
North East Lincolnshire		Alarms yesterday and during past week
Sandwell		Alarms yesterday and during past week
Blackburn with Darwen		Alarms yesterday and during past week
Lincolnshire		Alarms yesterday and during past week
South Gloucestershire		Alarms yesterday and during past week
Barking and Dagenham		Alarm yesterday only
Barnsley		Alarm(s) during past week but not yesterday
Bradford		Alarm(s) during past week but not yesterday
Derby		Alarm(s) during past week but not yesterday
Rotherham		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
Sheffield		Alarm(s) during past week but not yesterday
West Berkshire		Alarm(s) during past week but not yesterday
Wigan		Alarm(s) during past week but not yesterday
Bolton		Alarm(s) during past week but not yesterday
Bristol, City of		Alarm(s) during past week but not yesterday
Buckinghamshire		Alarm(s) during past week but not yesterday
Bury		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
Manchester		Alarm(s) during past week but not yesterday
North Lincolnshire		Alarm(s) during past week but not yesterday
North Yorkshire		Alarm(s) during past week but not yesterday
Oldham		Alarm(s) during past week but not yesterday
Southampton		Alarm(s) during past week but not yesterday
Stockton-on-Tees		Alarm(s) during past week but not yesterday
Telford and Wrekin		Alarm(s) during past week but not yesterday
Walsall		Alarm(s) during past week but not yesterday
Warrington		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 (28/10/20 - 03/11/20)
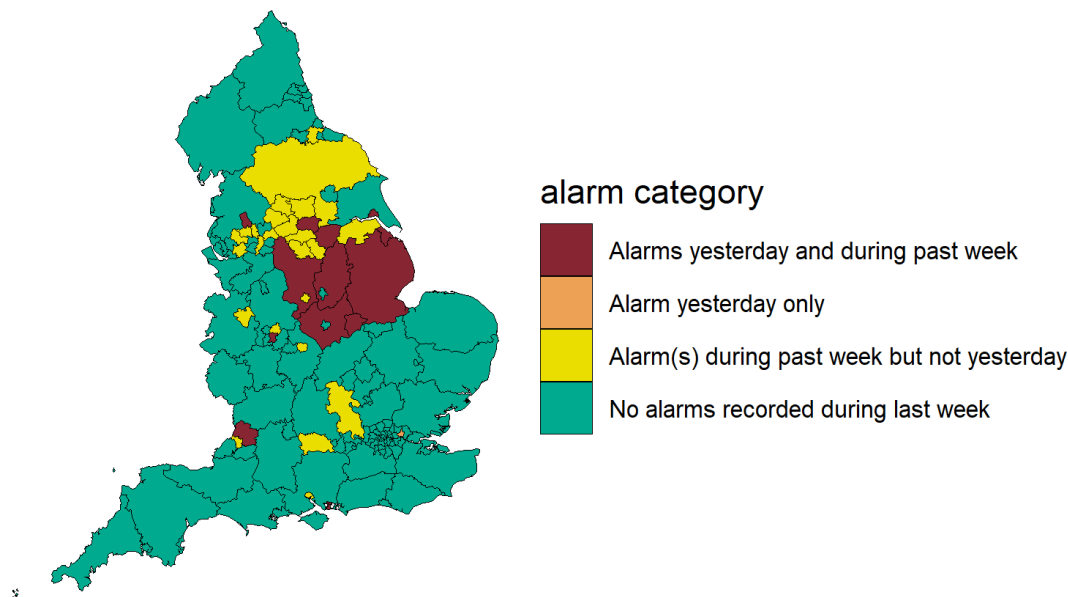
alarm category

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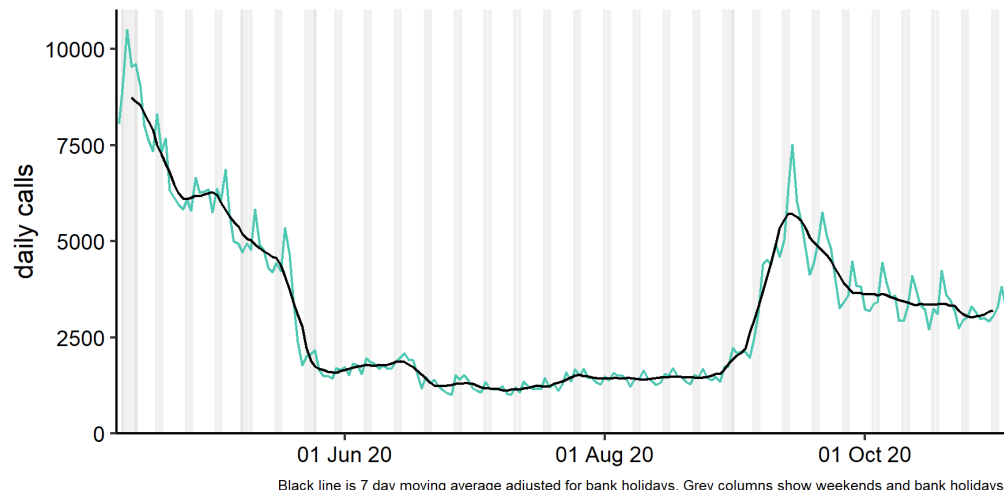Populations are based on ONS estimates for mid-2019. Rates are number of calls per 100,000 people.

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.
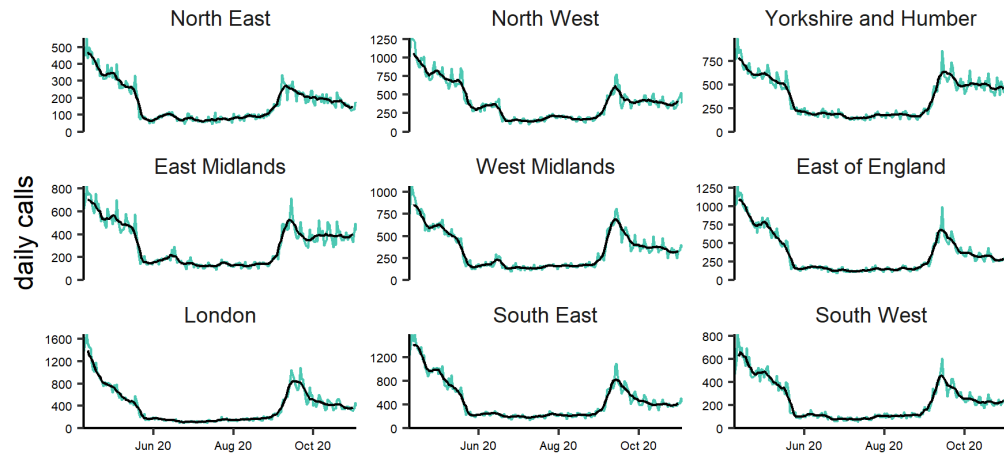
NHS 111 'potential COVID-19' calls
Trends in daily NHS 111 'potential COVID-19' calls, national, PHE Centre and by age (to 3 November)

potential covid-19 09/04/2020 - 03/11/2020

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 - 03/11/2020

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 - 03/11/2020
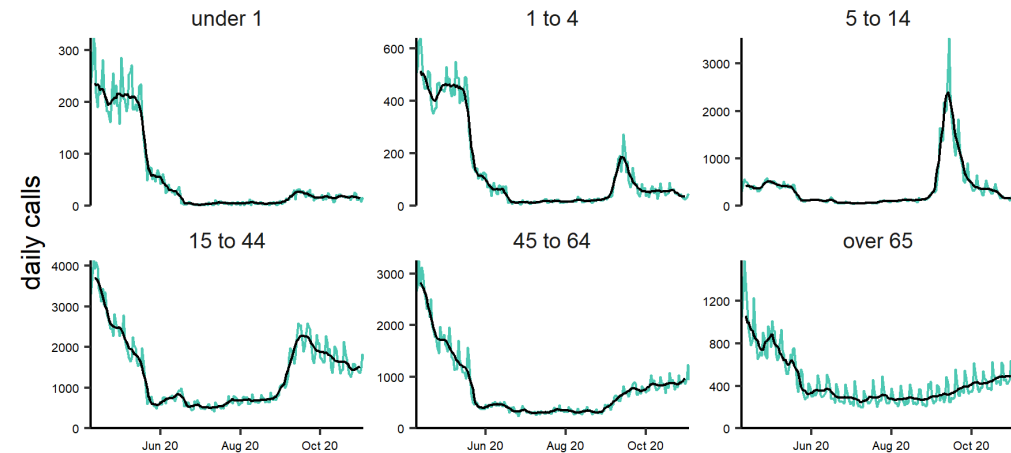
NOTE: SCALES MAY VARY BY AGE GROUP. Black line is 7 day moving average adjusted for bank holidays.

Further information and weekly NHS 111 reports containing potential COVID-19 call and online assessment surveillance data is available from the
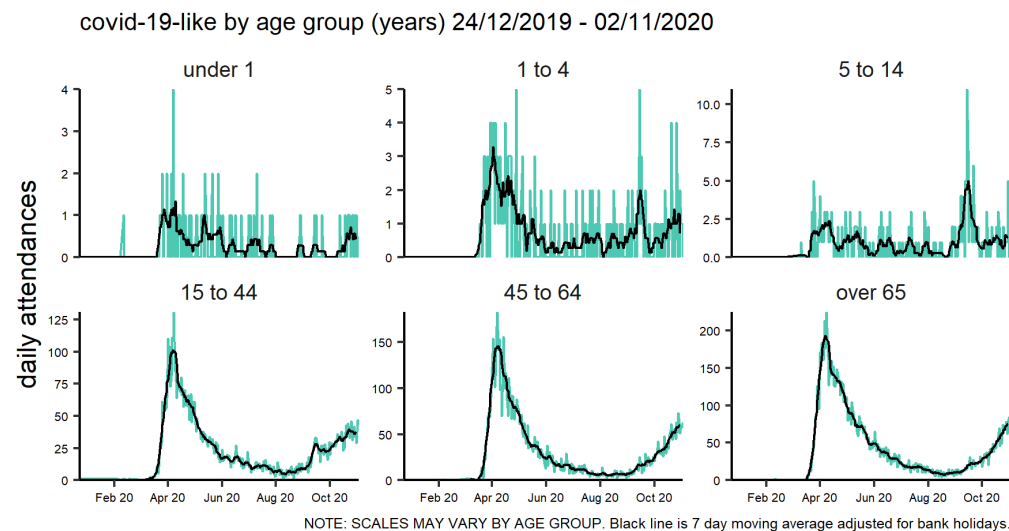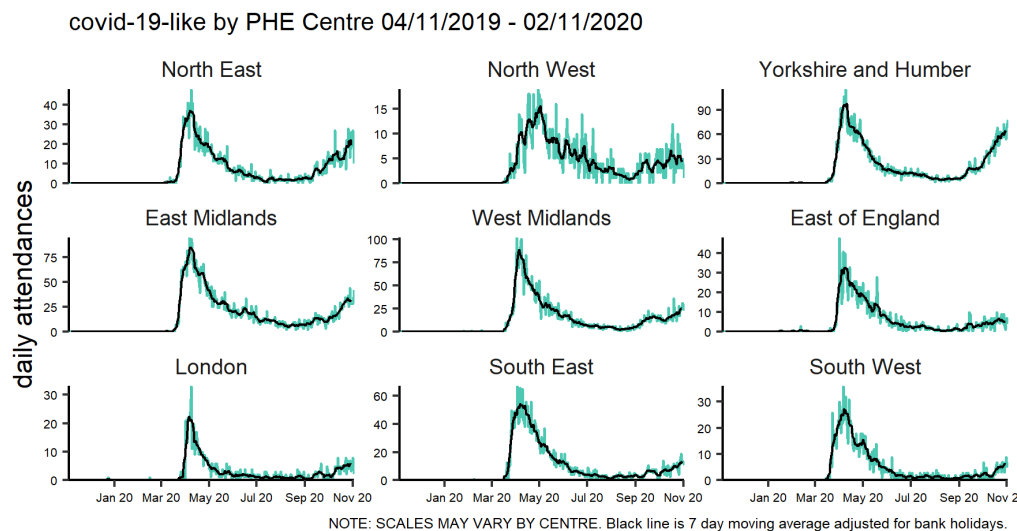PHE Remote Health Advice bulletin.

Emergency Department Syndromic Surveillance System COVID-19-like attendances
Trends in daily ED COVID-19-like attendances, national, PHE Centre and by age (to 2 November)

covid-19-like 04/11/2019 - 02/11/2020

Black line is 7 day moving average adjusted for bank holidays. Grey columns show weekends and bank holidays.
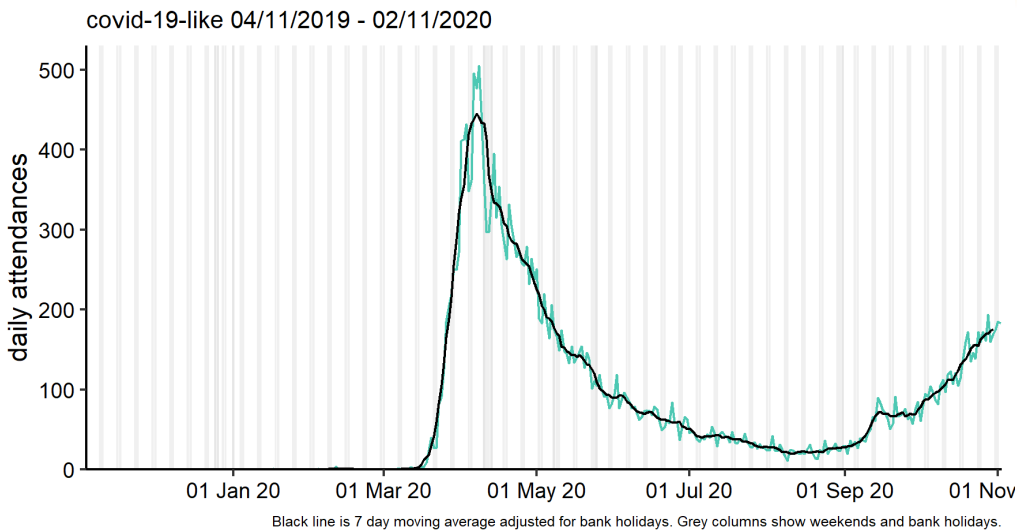
Emergency Department Syndromic Surveillance System (EDSSS) COVID-19-like attendances.

- 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 04/11/2019 - 02/11/2020

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 - 02/11/2020

NOTE: SCALES MAY VARY BY AGE GROUP. 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.

- **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
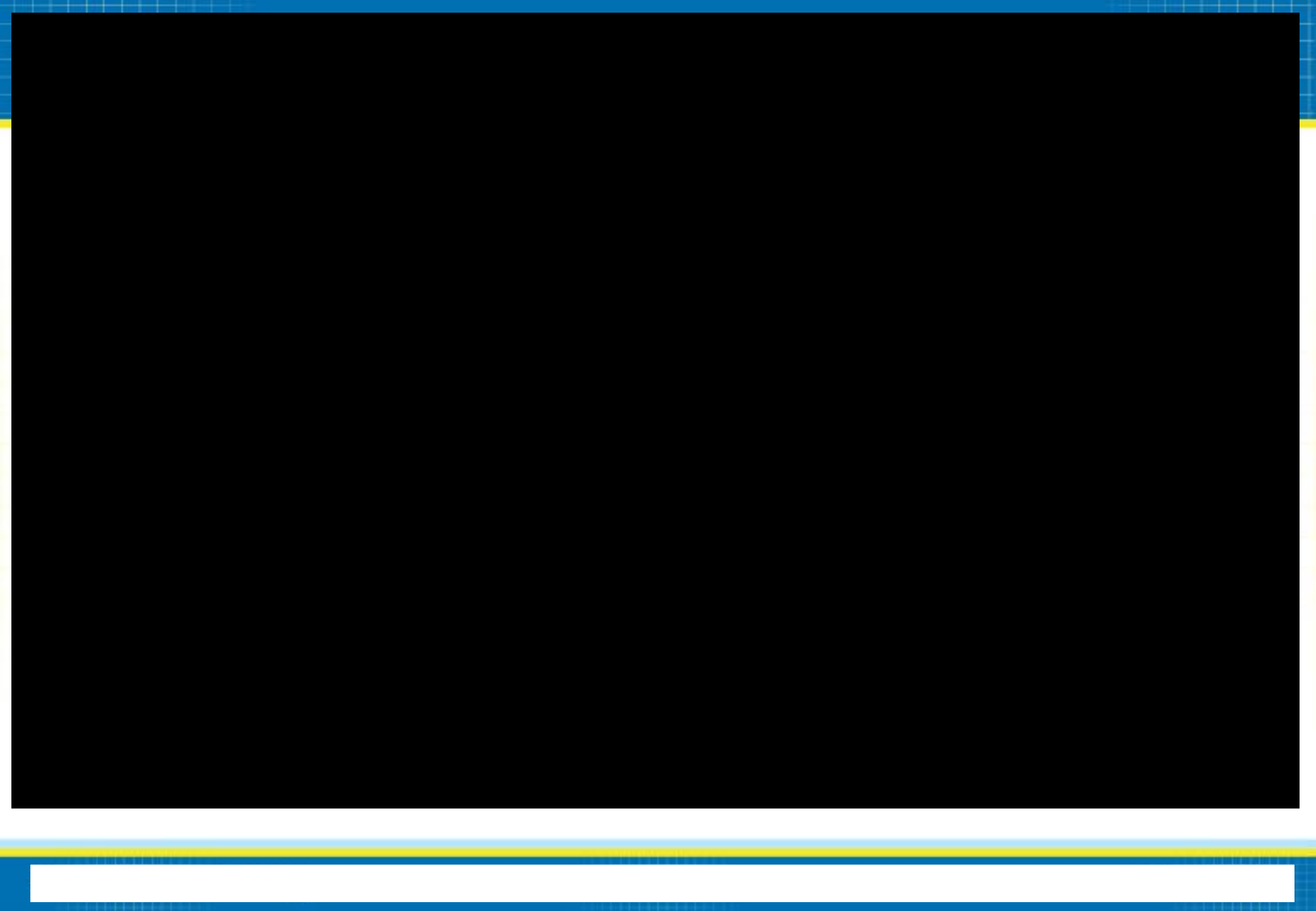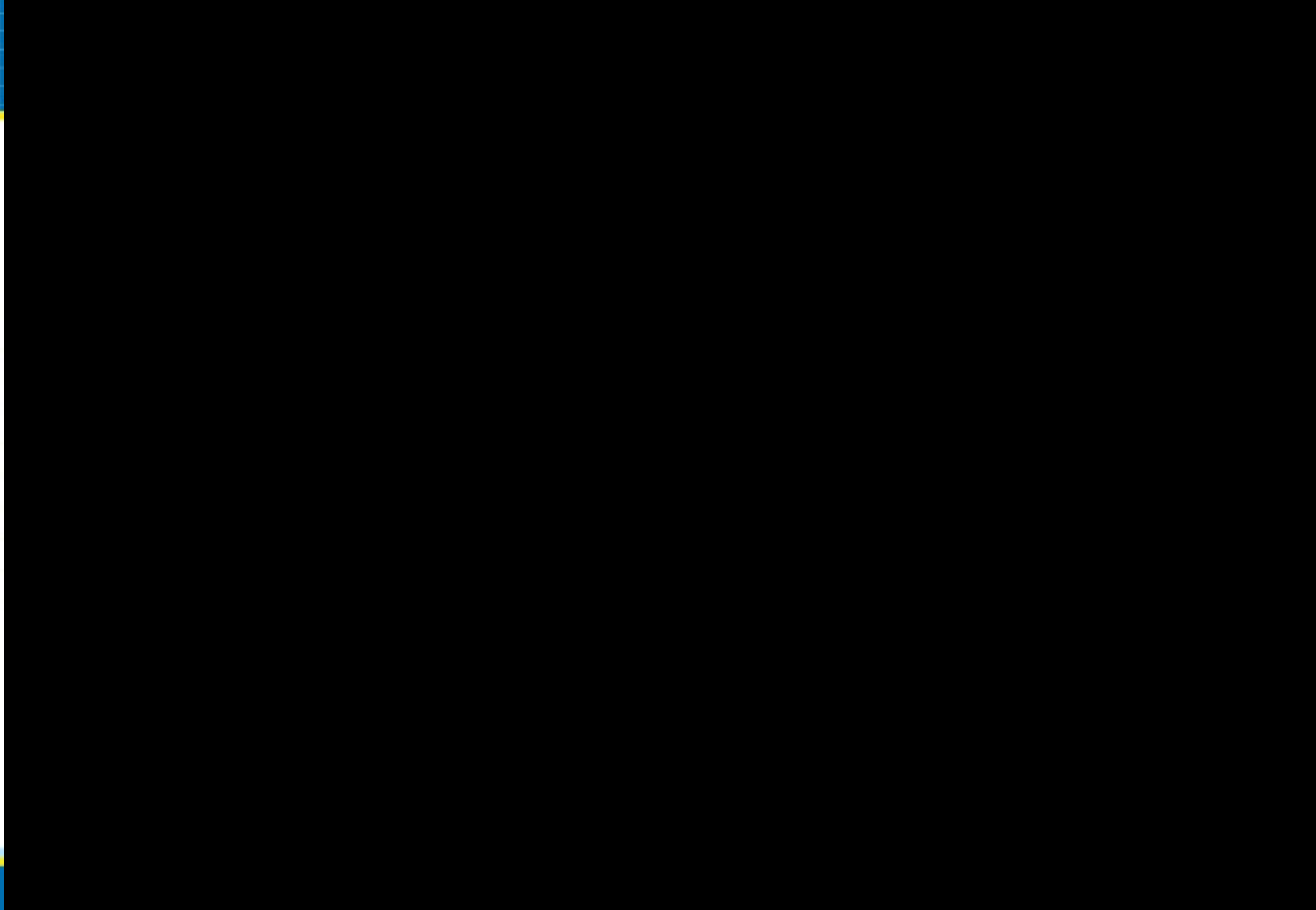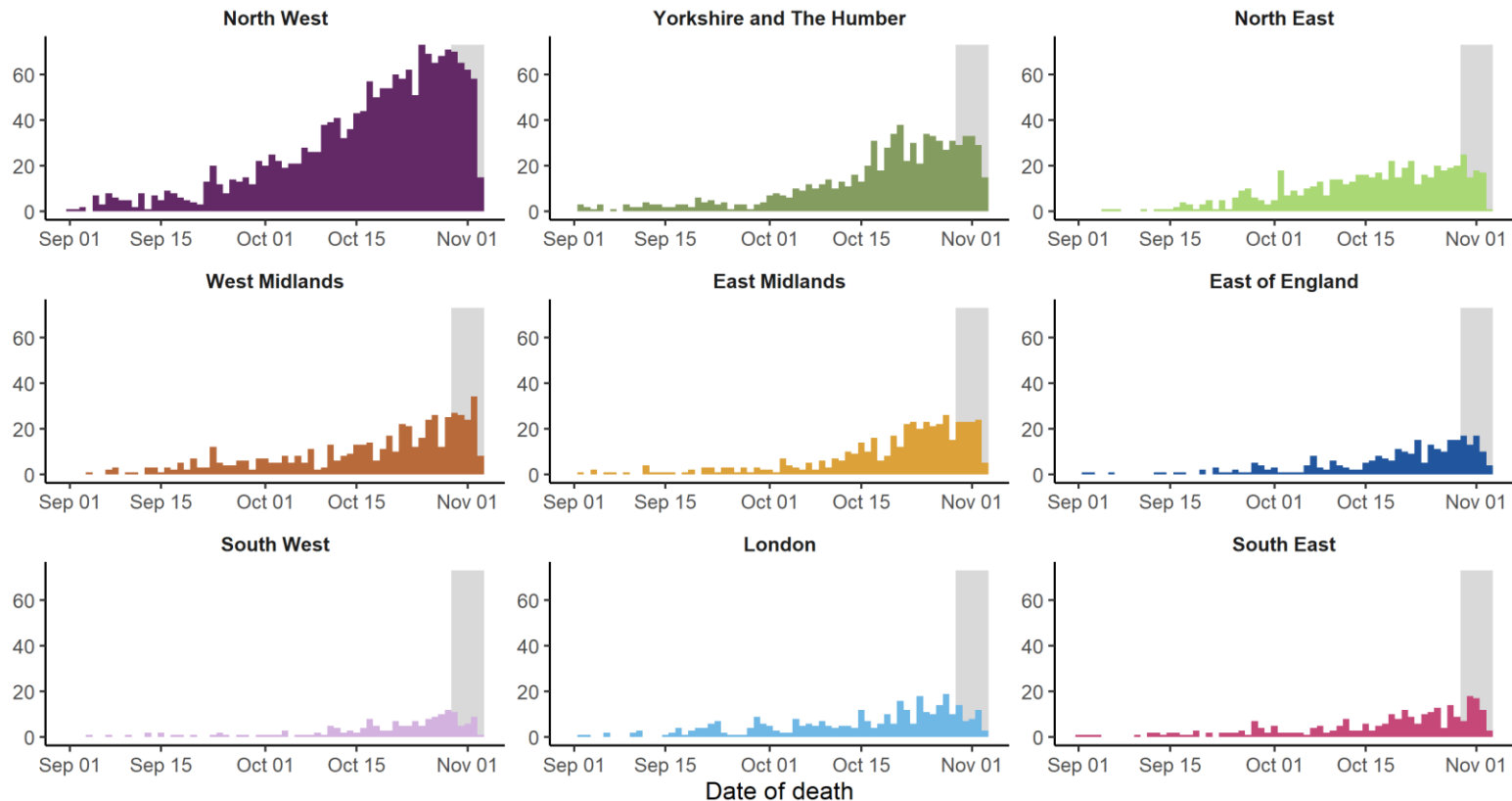
Daily deaths within 28 days of positive COVID-19 test by region
Grey region indicates where data is likely to be incomplete

Source: UK Coronavirus Dashboard, from 01 September 2020 to 03 November 2020. Produced by Joint Biosecurity Centre.

Data on COVID-19 associated deaths in England are produced by Public Health England (PHE) from multiple sources linked to confirmed case data. Deaths newly reported each day cover the 24 hours up to 5pm on the previous day.

Data Source: Coronavirus GOV.UK Dashboard, https://coronavirus.data.gov.uk/deaths