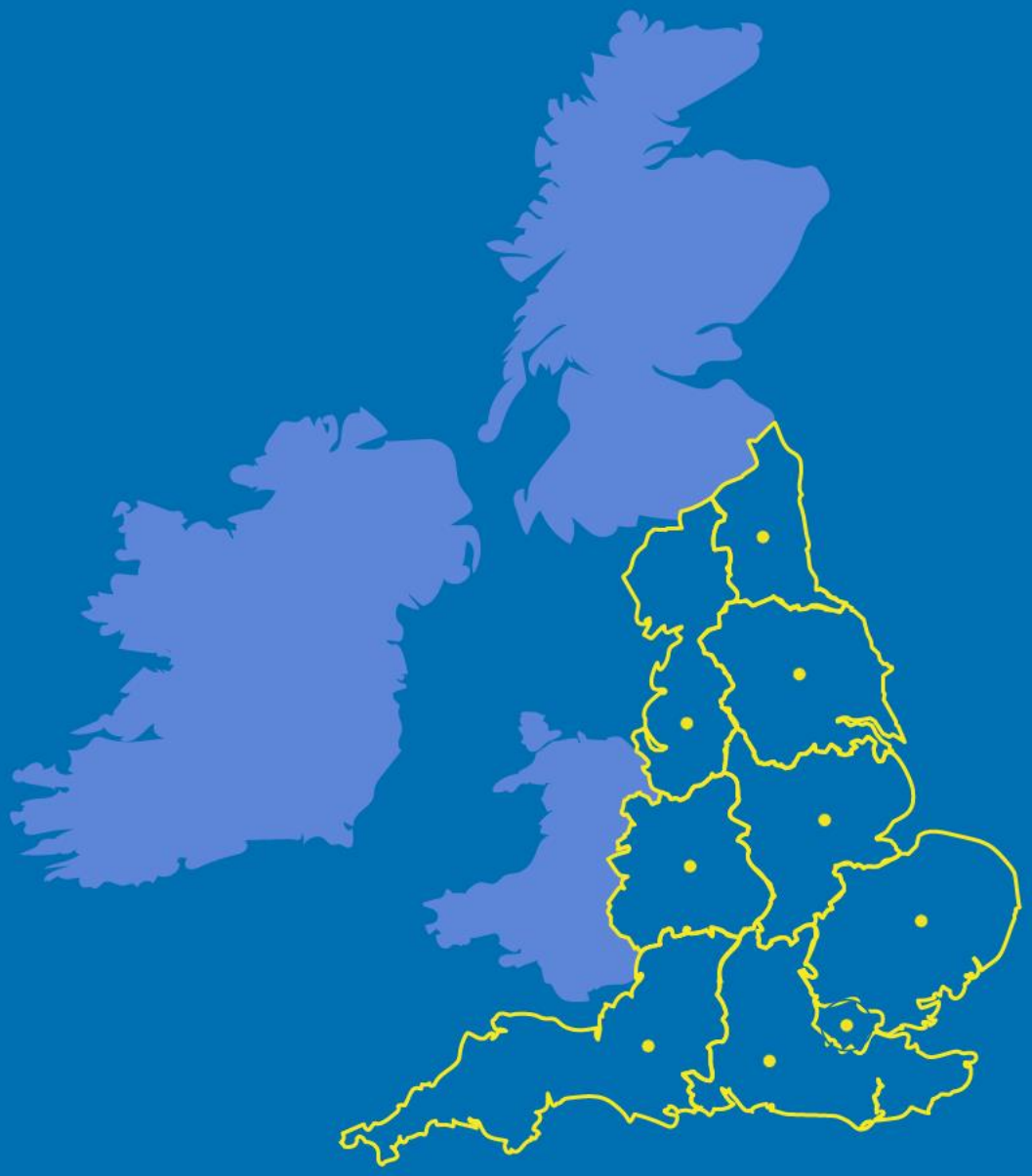
Public Health England

Joint Biosecurity Centre

CORONAVIRUS SITUATIONAL AWARENESS

Summary

date: 16 December 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, [redacted], 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 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.

- [redacted]
- Prevalence
- Hospitalisation
- NHS 111 potential COVID-19
- Outbreak reports
  - [redacted]
- 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 10 December 2020 Week 50 Report)

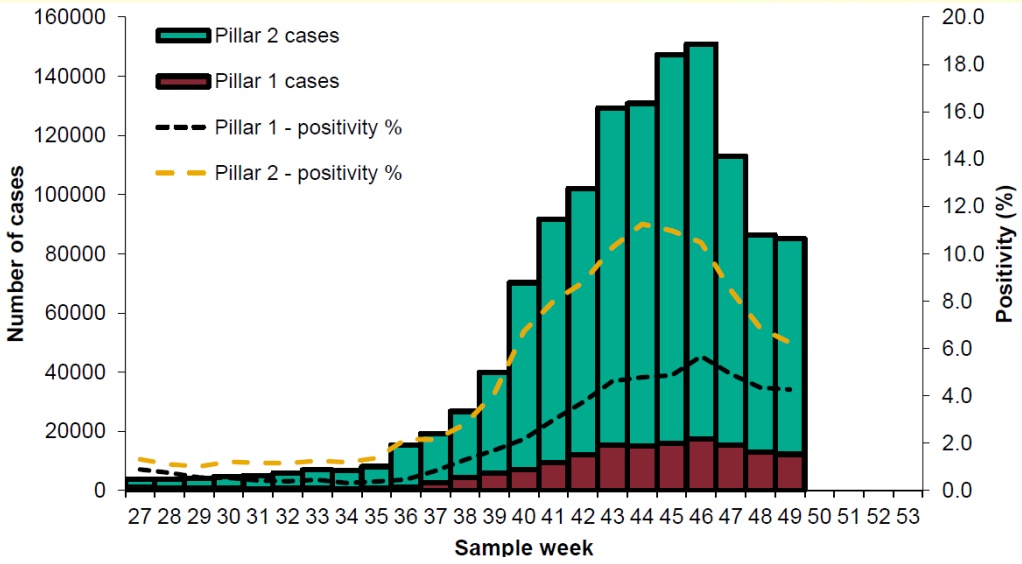
Overall case numbers remained stable in week 49. Overall positivity remained stable in both Pillar 1 and Pillar 2. The highest case rates were seen in the 40 to 49 year olds in Pillars 1 and 2. The highest positivity rates were noted in the 80+ year olds in Pillar 1. In Pillar 2 there were decreases in positivity in the 10 to 19 and the 20 to 29 year age groups. Cases rates were highest in London.

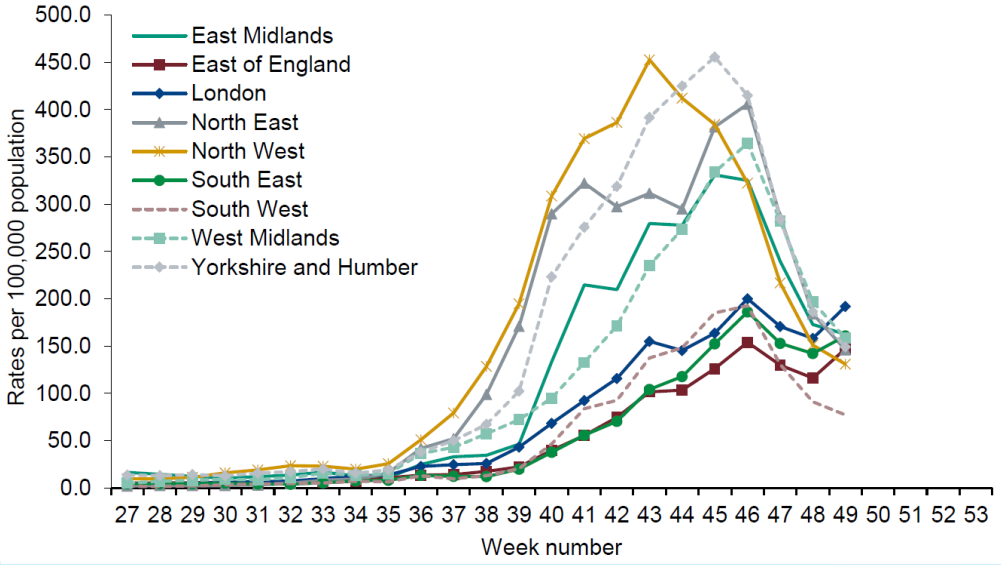
As of 09:00 on 8 December 2020, a total of 1,501,179 have been confirmed positive for COVID-19 in England under Pillars 1 and 2.

- 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

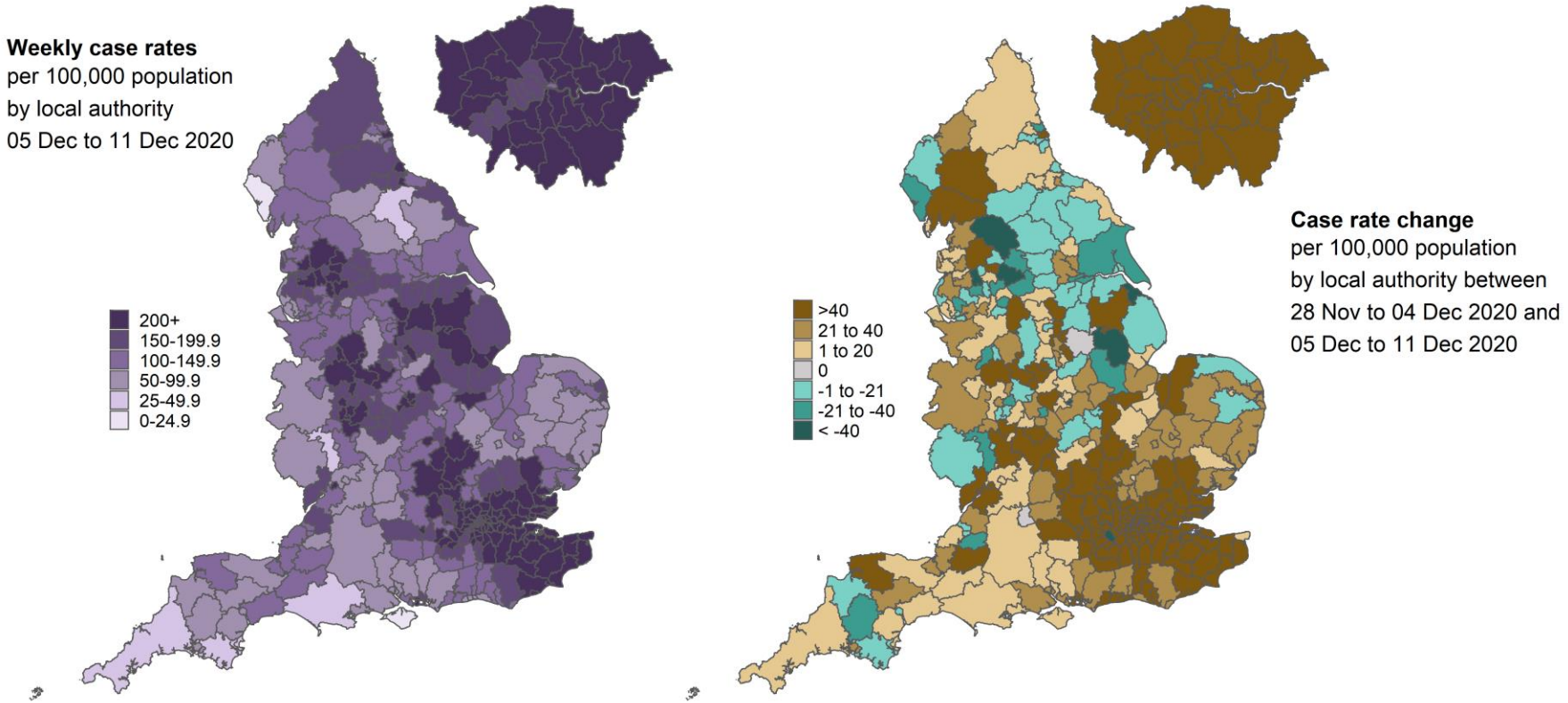
Case rates have been calculated using mid-2019 ONS population estimates





Case Rates - Geographical spread of COVID-19 in England

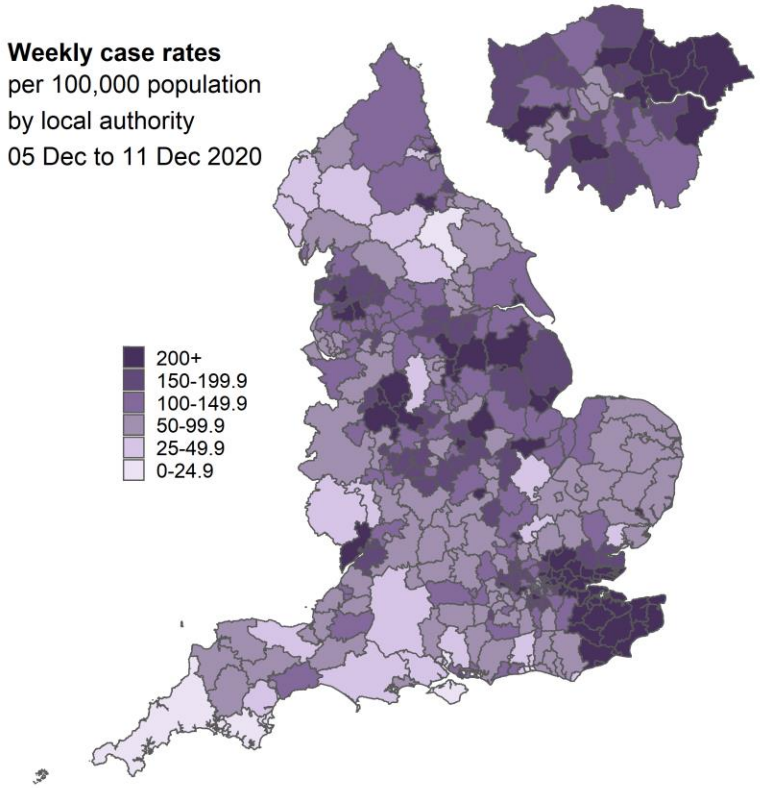
Geographical spread of COVID-19 in England

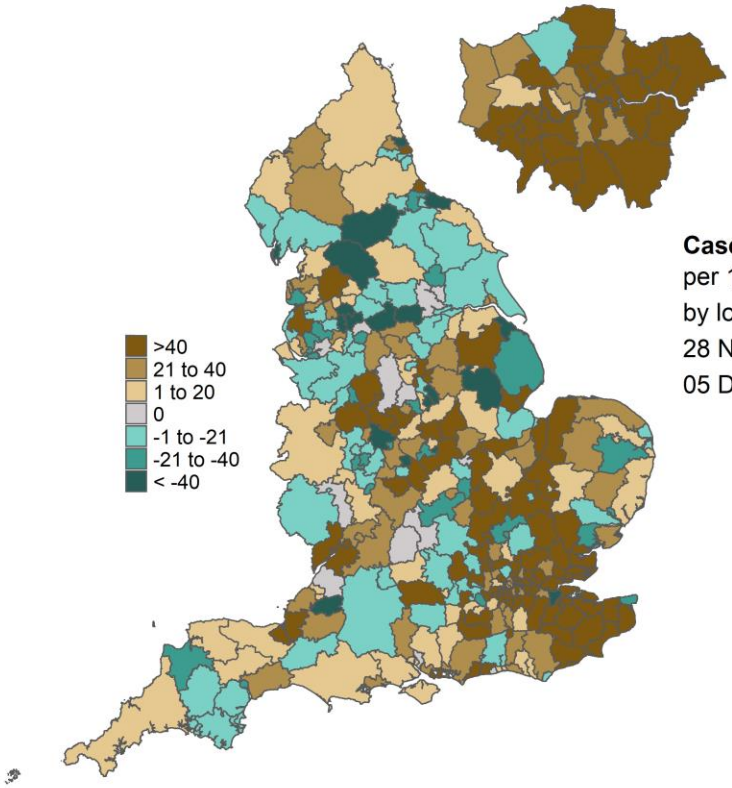


Data from SGSS; Pillar 1 and 2 testing. Figure by Outbreak Surveillance Team, Public Health England.

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

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





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

High level summary 1 – PHE Centres

PHE Centres with highest case rates in 7 days (5 December 2020 to 11 December 2020)

	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)	Newly confirmed cases in previous 7 days
			Red	Amber	Green			Purple	Dark Red	Red				
East Midlands	414.8 ↓	7.1% ↑	11	28	1	[redacted]	186.5 ↑	5	19	16	156.8 ↑	187.2 ↑	[redacted]	9,017
East of England	477.3 ↑	7.4% ↑	19	16	11		227.1 ↑	16	9	21	131.0 ↑	293.7 ↑		14,772
London	440.9 ↑	10.4% ↑	26	7	0		298.8 ↑	17	15	1	183.5 ↑	393.8 ↑		26,782
North East	382.9 ↓	6.6% ↑	5	7	0		162.0 ↑	1	6	5	129.5 ↑	141.2 ↑		4,324
North West	464.5 ↑	5.0% ↓	9	23	7		141.2 ↑	2	14	22	119.2 ↓	144.6 ↑		10,369
South East	504.6 ↑	7.0% ↑	22	30	14		227.9 ↑	16	22	27	140.0 ↑	273.1 ↑		20,306
South West	433.0 ↑	3.4% ↑	0	12	18		90.7 ↑	0	3	22	69.3 ↑	128.1 ↑		5,104
West Midlands	440.1 ↑	6.6% ↑	7	18	5		180.3 ↑	3	17	9	139.5 ↑	182.1 ↑		10,697
Yorkshire and Humber	396.8 ↓	6.1% ↓	2	14	5		149.9 ↓	0	9	11	129.5 ↓	142.6 ↑		8,250
England	**460.8 ↑**	**6.7% ↑**	**101**	**155**	**61**		**196.3 ↑**	**60**	**114**	**134**	**133.0 ↑**	**224.3 ↑**		**110,468**

Data for positive cases with specimen dates between **5 December 2020 to 11 December 2020**

Arrows demonstrate how figures compare to the equivalent figure as of **4 December 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 December 2020 to 11 December 2020** (7 day)

Arrows demonstrate how figures compare to the equivalent figure as of **4 December 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 restriction tiers reflect those announced on 26 November 2020

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 restriction tiers
Swale	663.4 ↑	17.1% ↑		725.6 ↑	393.7 ↑	1103.4 ↑		Very High
Medway	948.6 ↑	11.8% ↓		701.1 ↑	618.4 ↑	779.6 ↑		Very High
Basildon	831.4 ↑	12.7% ↑		699.3 ↑	324.7 ↑	622.2 ↑		High
Havering	537.5 ↑	17.0% ↑		596.0 ↑	360.0 ↑	636.6 ↑		High
Dover	722.6 ↑	11.9% ↑		557.9 ↑	324.7 ↑	745.0 ↑		Very High
Maidstone	655.0 ↑	12.9% ↑		552.3 ↑	286.8 ↑	765.5 ↓		Very High
Ashford	591.5 ↑	14.2% ↑		549.9 ↑	290.1 ↑	441.2 ↑		Very High
Canterbury	689.1 ↑	11.5% ↑		517.6 ↑	312.6 ↑	418.6 ↑		Very High
Broxbourne	495.5 ↑	15.5% ↑		517.1 ↑	208.0 ↑	581.2 ↑		High
Barking and Dagenham	472.5 ↑	16.9% ↑		512.0 ↑	385.7 ↑	525.5 ↑		High
Thurrock	512.0 ↑	14.9% ↑		510.5 ↑	274.6 ↑	706.6 ↑		High
Epping Forest	566.2 ↑	13.5% ↑		504.2 ↑	268.8 ↑	409.4 ↑		High
Gravesham	529.3 ↑	14.8% ↓		496.5 ↑	271.7 ↓	446.6 ↑		Very High
Redbridge	449.2 ↑	16.6% ↑		480.3 ↑	286.2 ↑	517.4 ↑		High
Lincoln	691.1 ↓	10.8% ↑		479.4 ↑	413.4 ↑	264.5 ↑		Very High
Hastings	690.2 ↑	10.0% ↑		455.4 ↑	415.5 ↑	387.2 ↑		High
Brentwood	662.0 ↑	10.6% ↑		454.4 ↑	244.5 ↑	757.6 ↑		High
Thanet	622.7 ↑	11.4% ↑		447.4 ↑	228.8 ↓	426.4 ↓		Very High
Boston	527.5 ↓	12.9% ↑		441.8 ↑	416.6 ↑	463.0 ↑		Very High
Folkestone and Hythe	609.3 ↑	10.9% ↑		438.1 ↑	350.2 ↑	487.1 ↑		Very High
Tonbridge and Malling	518.1 ↑	12.7% ↑		435.1 ↑	241.5 ↑	698.4 ↑		Very High
Waltham Forest	450.3 ↑	14.7% ↑		431.1 ↑	255.5 ↑	544.4 ↑		High
Enfield	462.8 ↑	13.9% ↑		430.2 ↑	185.0 ↑	595.3 ↑		High
Dartford	470.8 ↑	14.2% ↑		422.7 ↑	208.6 ↑	468.3 ↑		Very High
Newham	386.5 ↑	16.1% ↑		406.4 ↑	296.6 ↑	500.0 ↑		High
Bexley	506.5 ↑	12.4% ↑		406.4 ↑	245.4 ↑	635.6 ↑		High
Tower Hamlets	417.0 ↑	14.1% ↑		372.9 ↑	258.0 ↑	511.3 ↑		High
Castle Point	466.9 ↑	12.2% ↑		364.0 ↑	307.8 ↑	495.5 ↑		High
Braintree	515.6 ↑	10.1% ↑		355.2 ↑	122.0 ↑	388.0 ↑		High
Slough	461.7 ↓	12.3% ↑		353.1 ↑	218.8 ↓	433.8 ↑		Very High
England	**460.8** ↑	**6.7%** ↑		**196.3** ↑	**133.0** ↑	**224.3** ↑		

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 December 2020 to 11 December 2020** (7 day)

Arrows demonstrate how figures compare to the equivalent figure as of **4 December 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 restriction tiers reflect those announced on 26 November 2020

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 restriction tiers
Southend-on-Sea	587.7 ↑	9.5% ↑		350.6 ↑	288.0 ↑	648.4 ↑		High
Rochford	454.2 ↑	11.2% ↑		337.7 ↑	214.1 ↑	610.2 ↑		High
Chelmsford	485.2 ↑	10.0% ↑		327.4 ↑	165.3 ↑	492.5 ↑		High
Bromley	431.3 ↑	11.1% ↑		320.2 ↑	132.9 ↑	583.8 ↑		High
Luton	596.4 ↑	8.5% ↓		314.5 ↑	248.6 ↑	370.6 ↑		High
Kingston upon Thames	480.8 ↑	10.1% ↑		313.2 ↑	188.6 ↑	401.3 ↑		High
Burnley	451.0 ↑	10.9% ↑		309.3 ↑	191.9 ↑	243.6 ↑		Very High
South Tyneside	382.1 ↑	12.0% ↑		308.7 ↑	355.6 ↑	227.8 ↑		Very High
Merton	430.6 ↑	10.9% ↑		307.4 ↑	276.9 ↑	471.1 ↑		High
Milton Keynes	467.1 ↑	10.0% ↑		306.5 ↑	167.4 ↑	370.1 ↑		High
Watford	520.2 ↑	9.3% ↑		305.5 ↑	186.4 ↑	390.3 ↓		High
West Lindsey	465.5 ↑	10.3% ↑		305.2 ↑	275.8 ↑	358.5 ↑		Very High
Harrow	444.8 ↑	10.7% ↑		302.6 ↑	156.9 ↑	470.4 ↑		High
Harlow	478.3 ↑	9.8% ↑		302.1 ↑	221.9 ↑	305.5 ↑		High
East Staffordshire	496.5 ↑	9.3% ↑		298.9 ↑	248.4 ↑	172.7 →		Very High
Rother	580.9 ↑	8.2% ↑		298.7 ↑	244.9 ↑	511.5 ↑		High
Sutton	464.3 ↑	9.8% ↑		294.6 ↑	165.3 ↑	431.3 ↑		High
Greenwich	455.4 ↑	9.7% ↑		291.4 ↑	197.3 ↑	476.9 ↑		High
Hackney	411.4 ↑	10.6% ↑		290.3 ↑	182.5 ↑	370.6 ↑		High
Tunbridge Wells	507.9 ↑	8.6% ↑		288.9 ↑	218.9 ↑	596.1 ↑		Very High
Haringey	420.8 ↑	10.3% ↑		287.7 ↑	217.5 ↑	333.6 ↑		High
Hertsmere	532.0 ↓	7.8% ↑		279.3 ↑	108.2 ↑	496.8 ↑		High
Peterborough	414.6 ↑	10.5% ↑		278.9 ↑	203.8 ↑	380.5 ↑		High
Woking	497.1 ↑	8.9% ↑		277.8 ↑	139.8 ↑	444.5 ↑		High
Wolverhampton	454.9 ↑	9.4% ↑		277.6 ↑	176.8 ↓	331.6 ↑		Very High
Croydon	434.5 ↑	9.6% ↑		273.1 ↑	179.6 ↑	352.2 ↑		High
Leicester	510.5 ↓	8.0% ↑		255.8 ↑	225.4 ↑	255.6 ↑		Very High
South Derbyshire	429.9 ↑	9.0% ↑		252.7 ↑	185.4 ↑	316.7 ↑		Very High
Hounslow	414.8 ↑	9.4% ↑		249.7 ↑	200.2 ↑	243.0 ↑		High
Spelthorne	496.1 ↑	7.9% ↑		247.4 ↑	103.7 ↑	201.8 ↑		High
England	**460.8** ↑	**6.7%** ↑		**196.3** ↑	**133.0** ↑	**224.3** ↑		

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 December 2020 to 11 December 2020** (7 day)

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

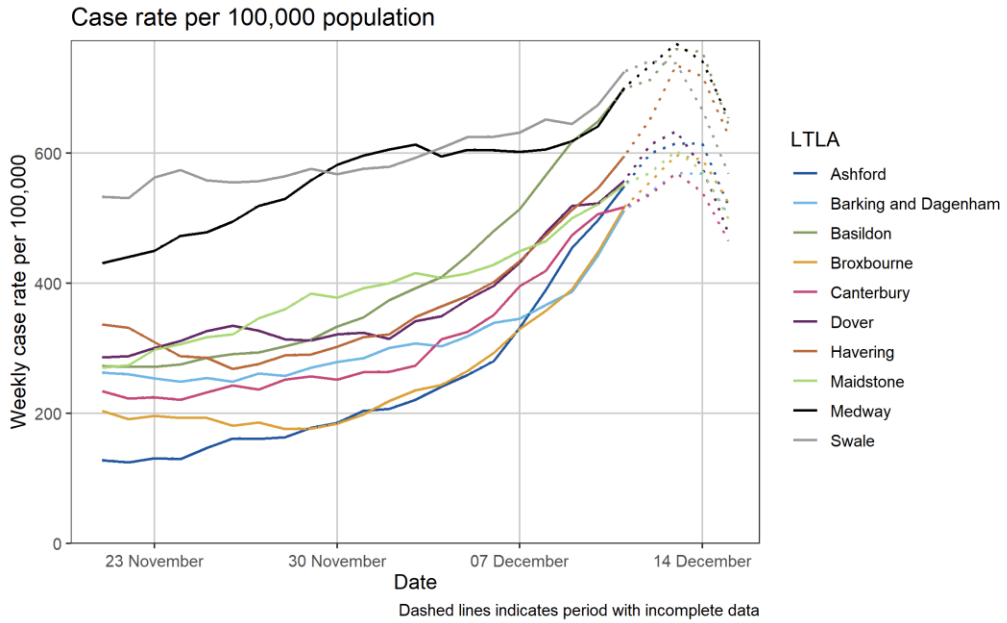
Local restriction tiers reflect those announced on 26 November 2020

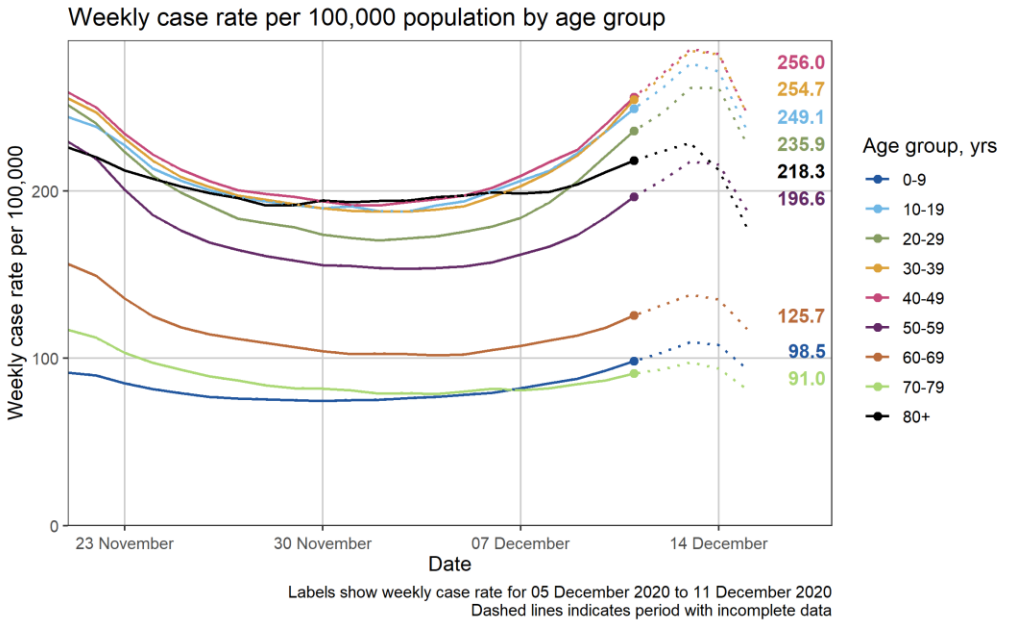
Some Local Authority areas have been included as part of wider geographical interventions.

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

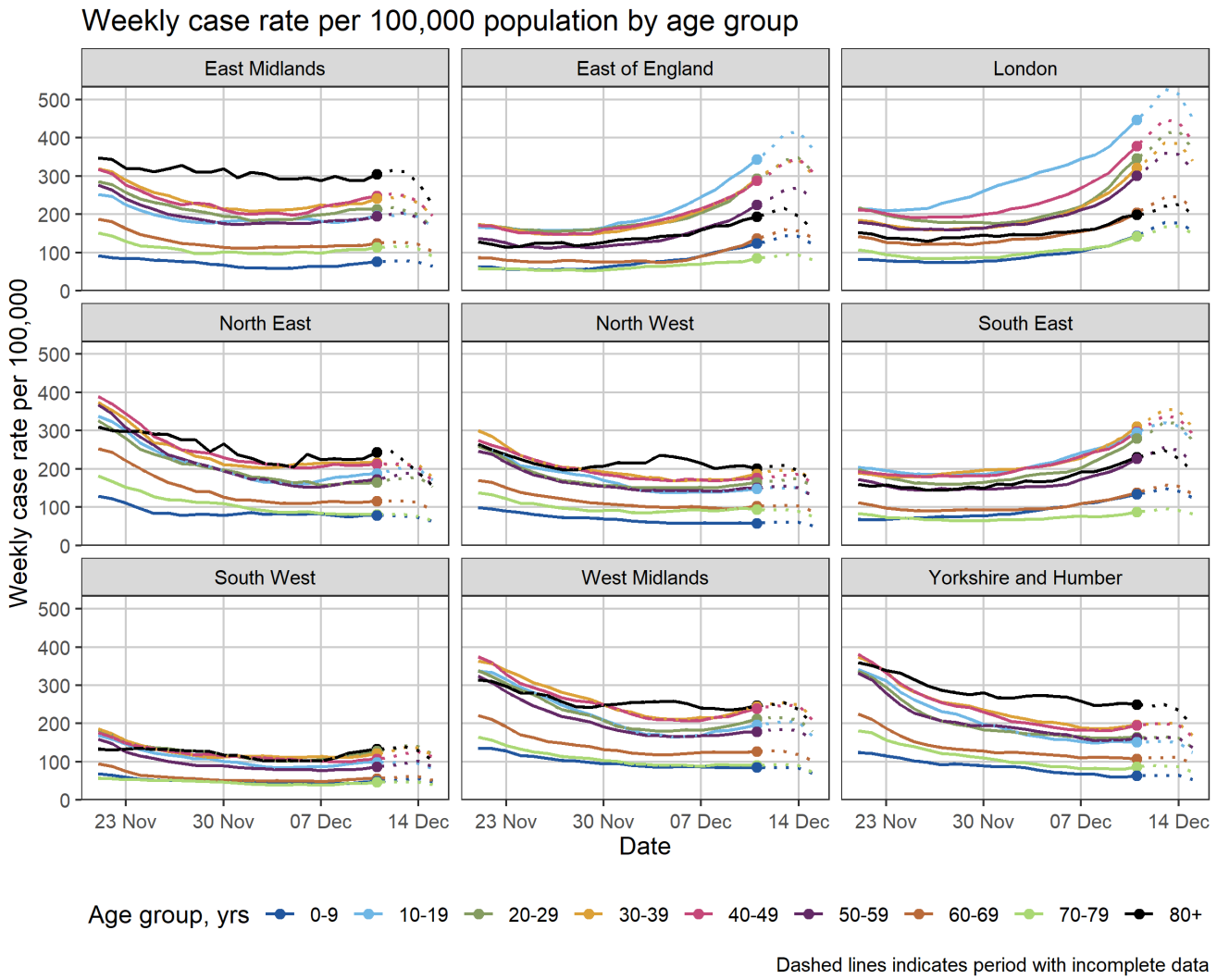
	Individuals tested per day per 100,000 population (7 day moving average)	Percentage individuals test positive (weekly)	Percentage individual cases reporting symptoms (weekly, Pillar 2 only)	Case rate per 100,000 population (weekly)	Case rate per 100,000 population aged 60 years and over (weekly)	Case rate per 100,000 population aged 17 - 21 years olds (weekly)	Community outbreaks (Last 7 days)	Local restriction tiers
Medway	948.6 ↑	11.8% ↓		701.1 ↑	618.4 ↑	779.6 ↑		Very High
Boston	527.5 ↓	12.9% ↑		441.8 ↑	416.6 ↑	463.0 ↑		Very High
Hastings	690.2 ↑	10.0% ↑		455.4 ↑	415.5 ↑	387.2 ↑		High
Lincoln	691.1 ↓	10.8% ↑		479.4 ↑	413.4 ↑	264.5 ↑		Very High
Swale	663.4 ↑	17.1% ↑		725.6 ↑	393.7 ↑	1103.4 ↑		Very High
Barking and Dagenham	472.5 ↑	16.9% ↑		512.0 ↑	385.7 ↑	525.5 ↑		High
Havering	537.5 ↑	17.0% ↑		596.0 ↑	360.0 ↑	636.6 ↑		High
South Tyneside	382.1 ↑	12.0% ↑		308.7 ↑	355.6 ↑	227.8 ↑		Very High
Folkestone and Hythe	609.3 ↑	10.9% ↑		438.1 ↑	350.2 ↑	487.1 ↑		Very High
Stoke-on-Trent	595.2 ↑	8.5% ↓		317.9 ↓	340.8 ↓	303.7 ↑		Very High
Dover	722.6 ↑	11.9% ↑		557.9 ↑	324.7 ↑	745.0 ↑		Very High
Basildon	831.4 ↑	12.7% ↑		699.3 ↑	324.7 ↑	622.2 ↑		High
Canterbury	689.1 ↑	11.5% ↑		517.6 ↑	312.6 ↑	418.6 ↑		Very High
Castle Point	466.9 ↑	12.2% ↑		364.0 ↑	307.8 ↑	495.5 ↑		High
Newham	386.5 ↑	16.1% ↑		406.4 ↑	296.6 ↑	500.0 ↑		High
Staffordshire Moorlands	509.3 ↓	7.2% ↑		226.5 ↑	292.1 ↑	326.0 ↑		Very High
Ashford	591.5 ↑	14.2% ↑		549.9 ↑	290.1 ↑	441.2 ↑		Very High
Southend-on-Sea	587.7 ↑	9.5% ↑		350.6 ↑	288.0 ↑	648.4 ↑		High
Maidstone	655.0 ↑	12.9% ↑		552.3 ↑	286.8 ↑	765.5 ↓		Very High
Redbridge	449.2 ↑	16.6% ↑		480.3 ↑	286.2 ↑	517.4 ↑		High
Merton	430.6 ↑	10.9% ↑		307.4 ↑	276.9 ↑	471.1 ↑		High
West Lindsey	465.5 ↑	10.3% ↑		305.2 ↑	275.8 ↑	358.5 ↑		Very High
Thurrock	512.0 ↑	14.9% ↑		510.5 ↑	274.6 ↑	706.6 ↑		High
Gravesham	529.3 ↑	14.8% ↓		496.5 ↑	271.7 ↓	446.6 ↑		Very High
Epping Forest	566.2 ↑	13.5% ↑		504.2 ↑	268.8 ↑	409.4 ↑		High
Mansfield	440.8 ↑	6.7% ↑		194.9 ↑	260.3 ↑	160.0 ↑		Very High
Tower Hamlets	417.0 ↑	14.1% ↑		372.9 ↑	258.0 ↑	511.3 ↑		High
Waltham Forest	450.3 ↑	14.7% ↑		431.1 ↑	255.5 ↑	544.4 ↑		High
Bassetlaw	372.2 ↓	10.2% ↑		234.1 ↓	249.2 ↑	235.5 ↓		Very High
Luton	596.4 ↑	8.5% ↓		314.5 ↑	248.6 ↑	370.6 ↑		High
England	**460.8** ↑	**6.7%** ↑		**196.3** ↑	**133.0** ↑	**224.3** ↑		

Case rate across both pillars 1 and 2 (weekly)
Data up to the 11 December 2020

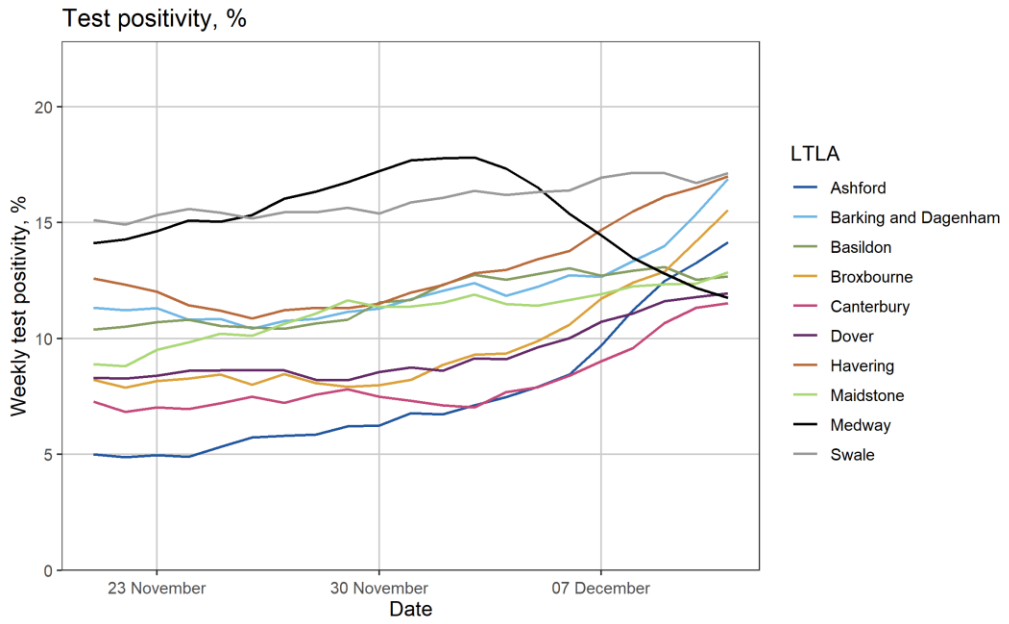


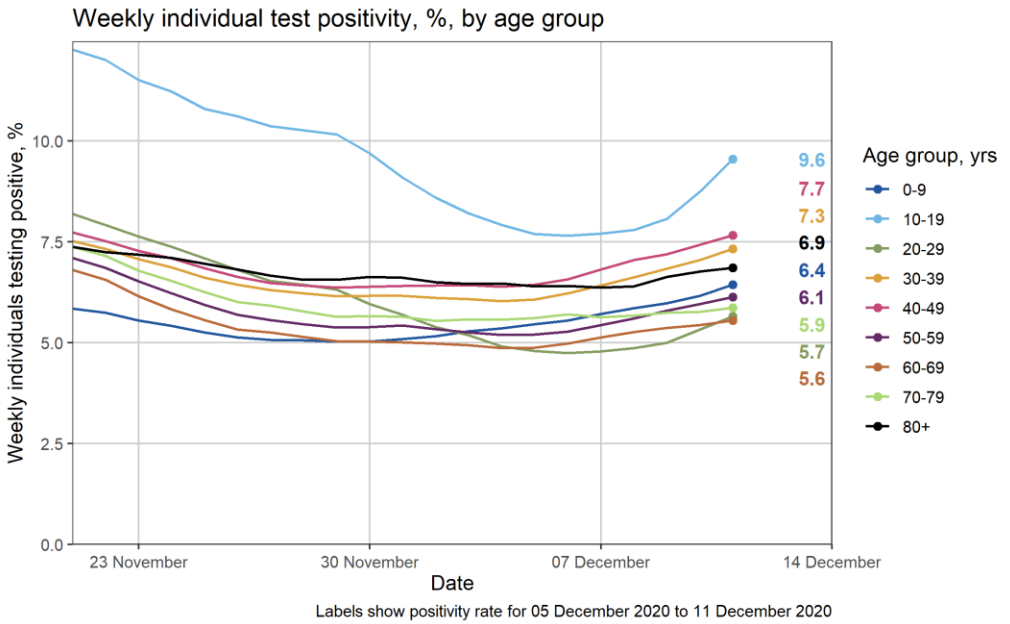


Case rate across both pillars 1 and 2 (weekly)
Data up to the 11 December 2020



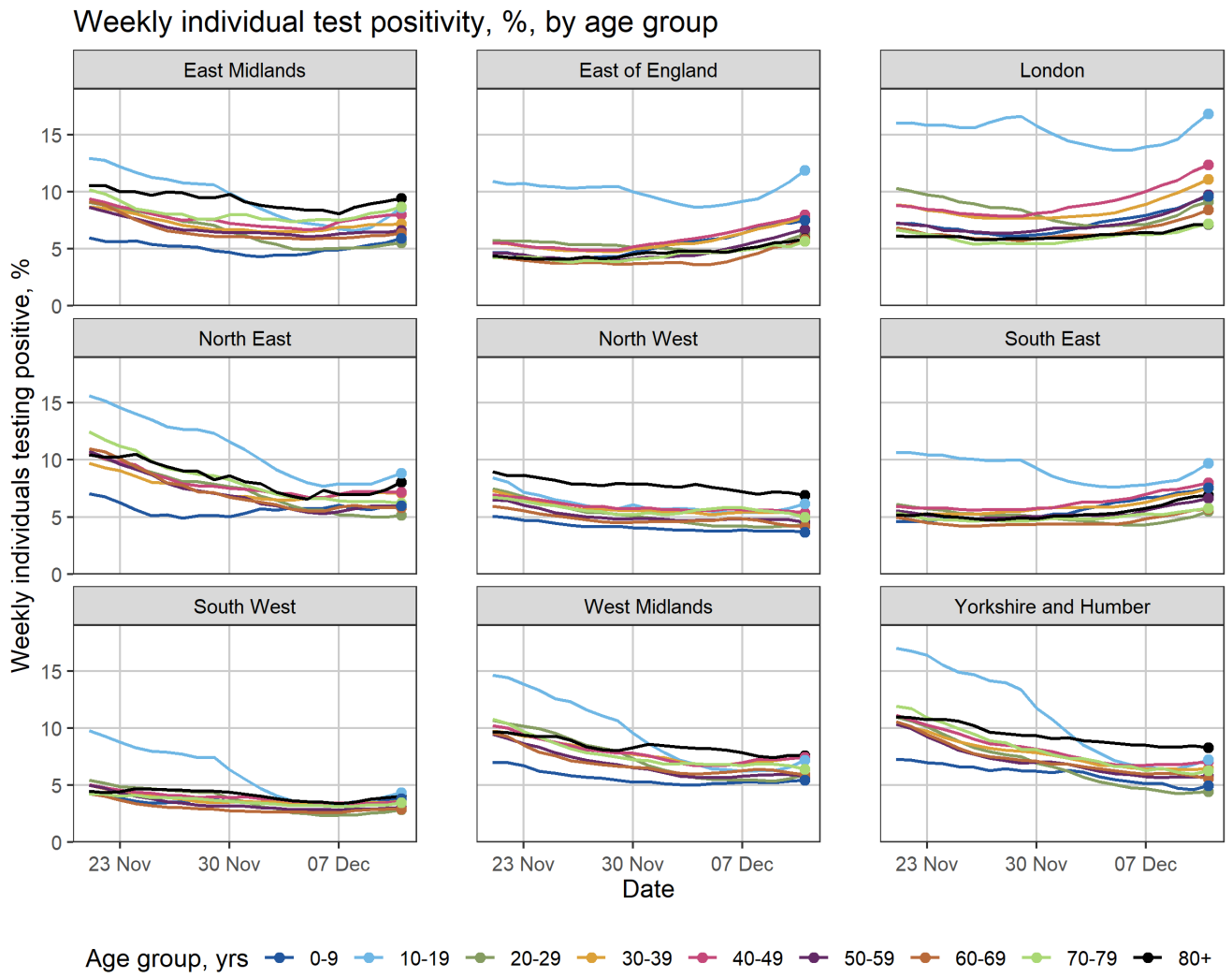
Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 11 December 2020



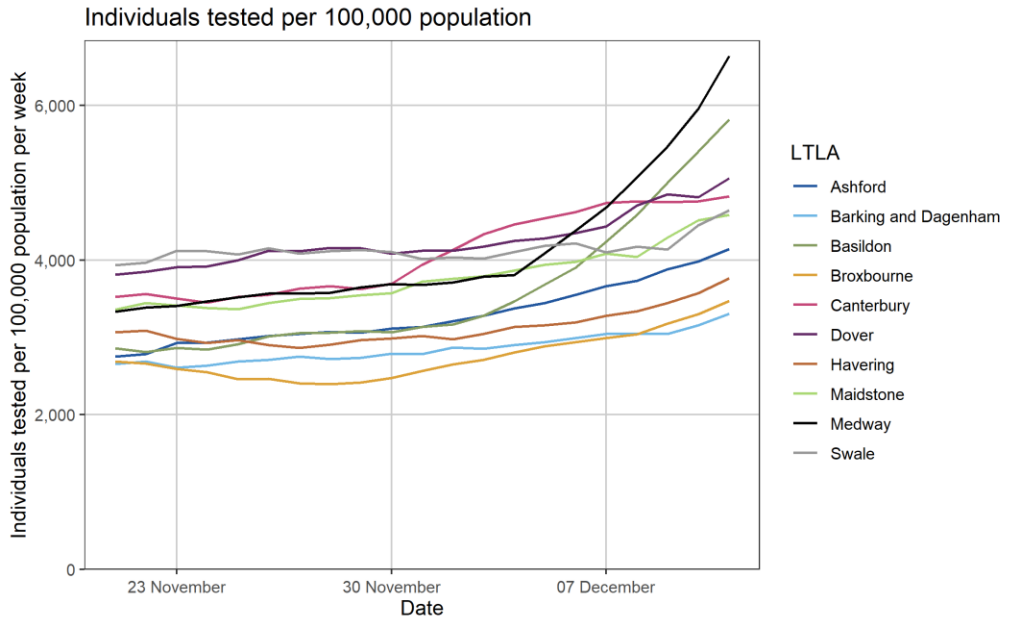


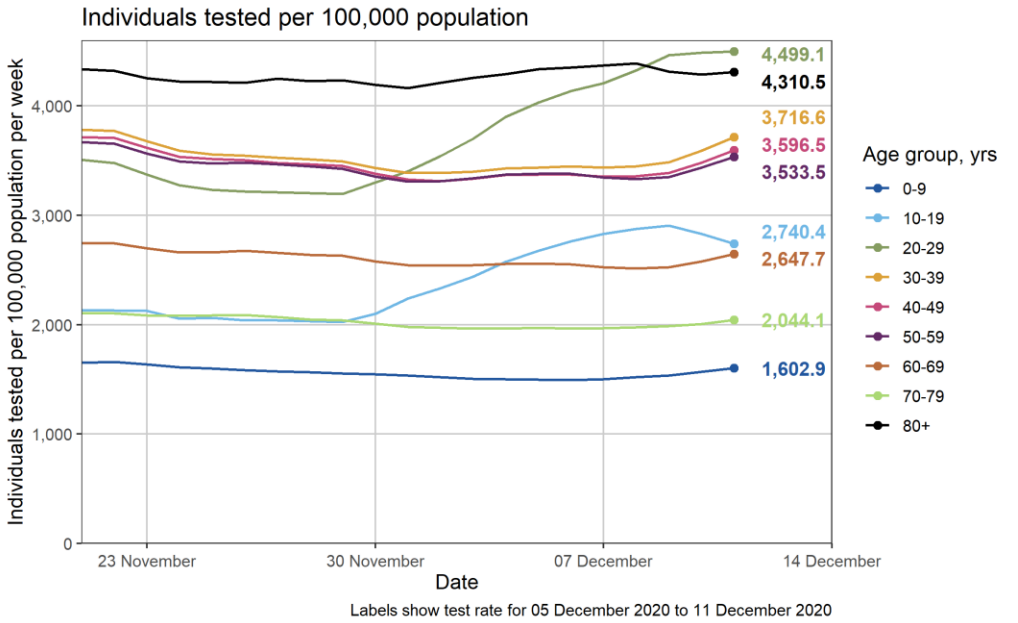
Test positivity and testing rate metrics based on updated methodology from 20th October

Percentage of individuals testing positive across both pillars 1 and 2 (weekly)
Data up to the 11 December 2020

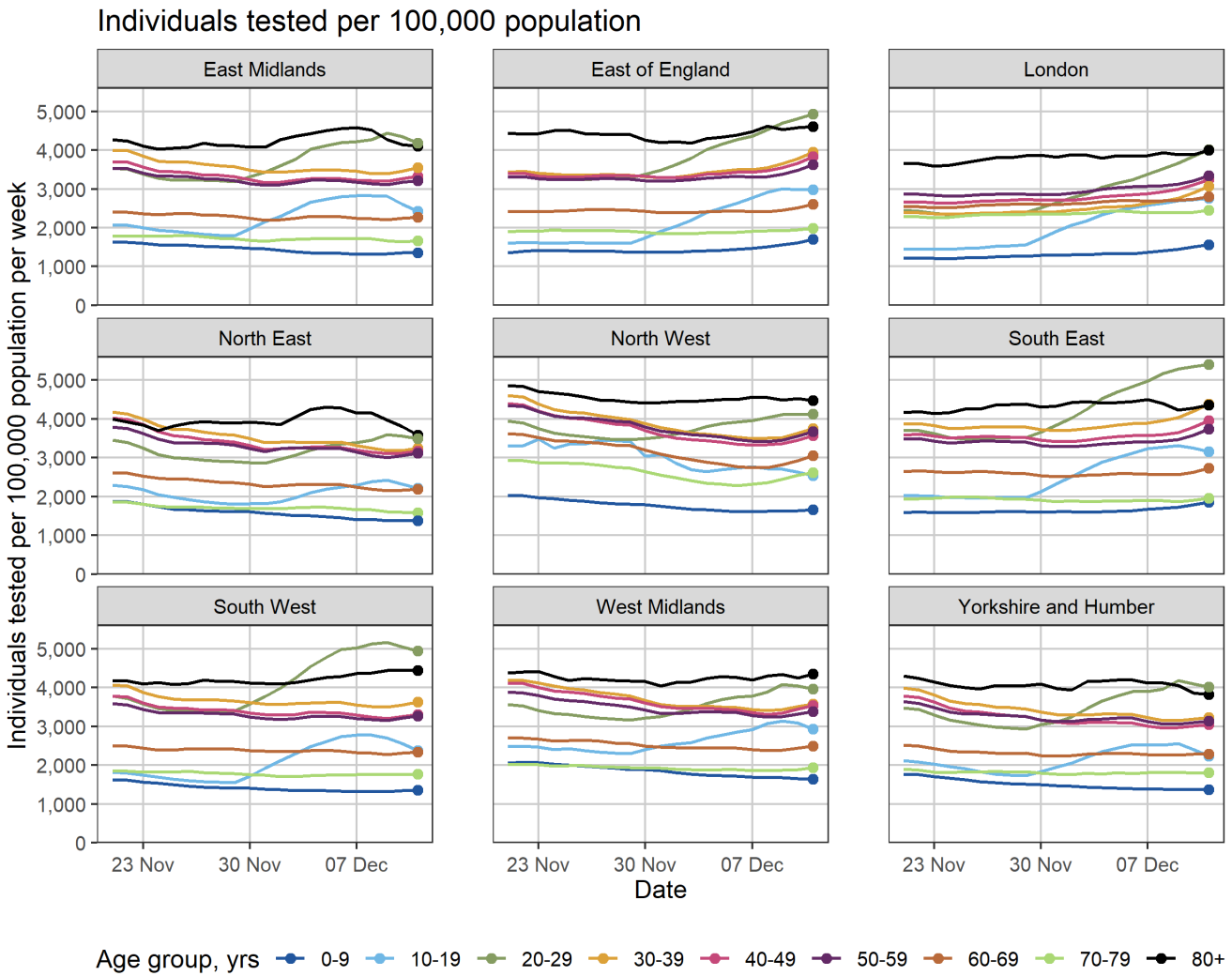


Individuals tested across both pillars 1 and 2 (weekly)
Data up to the 11 December 2020





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



Percentage prevalence of COVID-19 across England and Government Office regions - table

Data generated 11 December 2020 by PHE Joint Modelling Cell

Geography	04/12/2020	11/12/2020	18/12/2020
England	1.21 (0.93, 1.56)	1.41 (1.04, 1.86)	1.61 (1.15, 2.19)
North East	1.17 (0.71, 1.91)	1.19 (0.61, 2.25)	1.18 (0.51, 2.57)
Yorkshire and The Humber	1.14 (0.73, 1.71)	1.01 (0.56, 1.73)	0.88 (0.42, 1.72)
North West	0.83 (0.54, 1.25)	0.68 (0.38, 1.19)	0.55 (0.27, 1.13)
East Midlands	1.78 (1.11, 2.75)	1.99 (1.08, 3.37)	2.13 (1.02, 3.90)
West Midlands	2.05 (1.30, 3.18)	2.24 (1.28, 3.76)	2.35 (1.21, 4.18)
East of England	0.74 (0.40, 1.34)	0.92 (0.42, 1.99)	1.14 (0.43, 2.83)
London	1.34 (0.81, 2.20)	1.65 (0.85, 3.07)	1.98 (0.88, 4.04)
South East	0.89 (0.56, 1.41)	1.14 (0.62, 2.06)	1.44 (0.67, 2.92)
South West	0.96 (0.60, 1.56)	1.35 (0.72, 2.48)	1.84 (0.85, 3.80)

Methodology

Prevalence estimates were generated by the Cambridge real-time model on **4 December 2020** using data up to **28 November 2020**.

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.

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 11 December 2020 by PHE Joint Modelling Cell

Prevalence estimates were generated by the Cambridge real-time model on **4 December 2020** using data up to **28 November 2020**.

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.

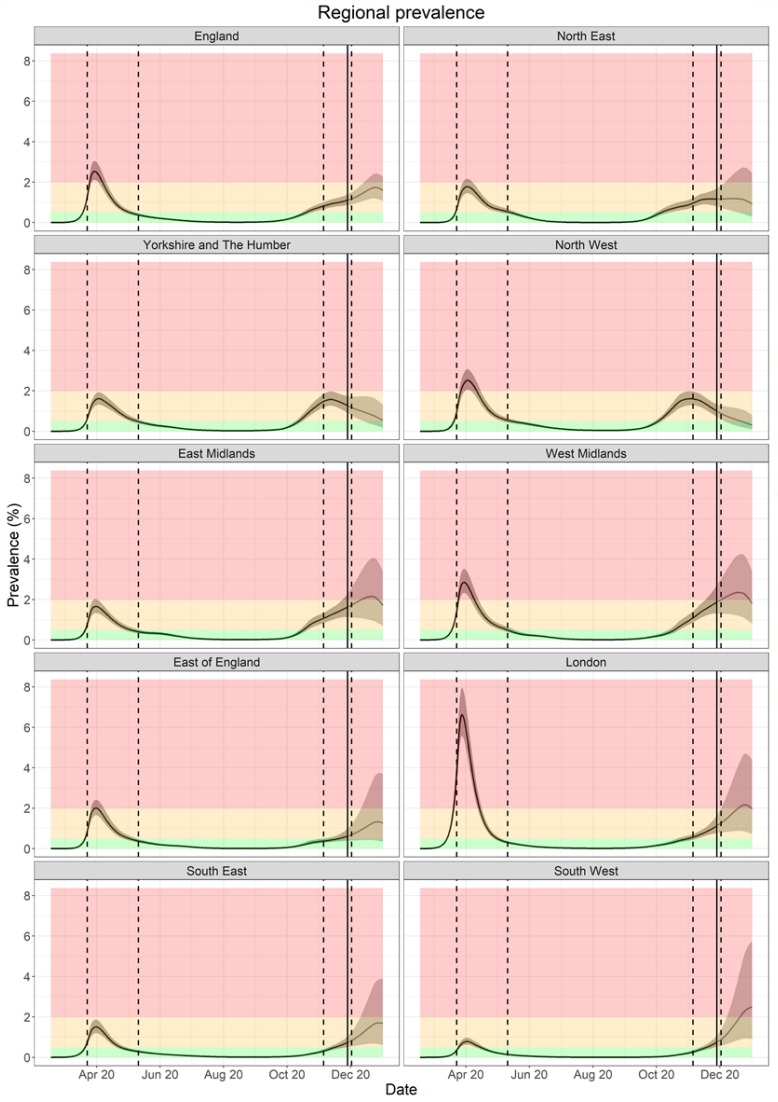
Solid line shows the point prevalence estimates, with the grey boundary covering the 5th to 95th centile range.

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.

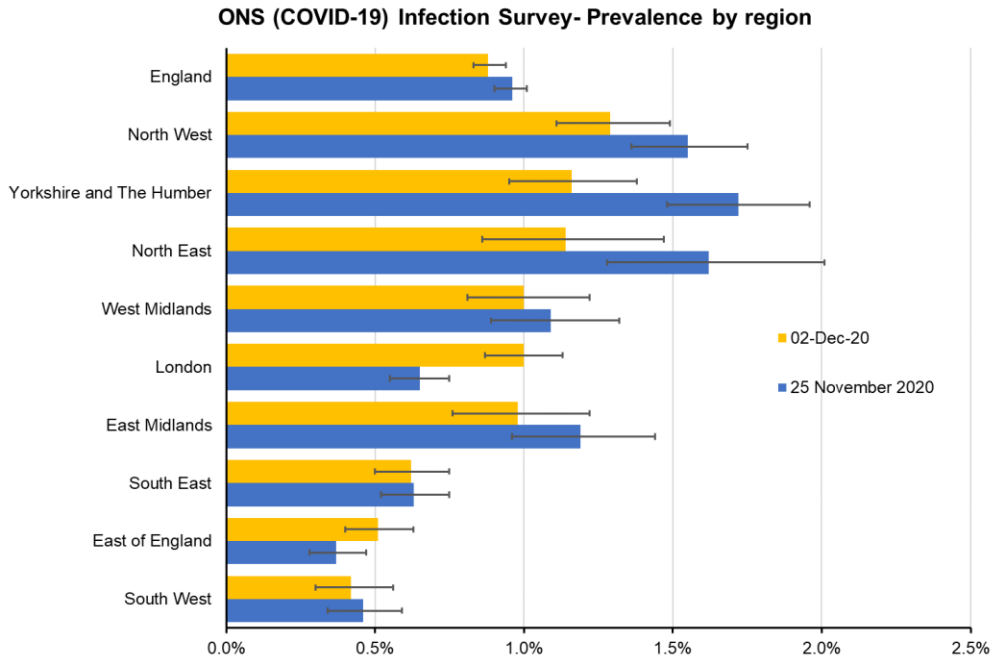
Please note that weekly estimates are subject to revision.



Estimated Prevalence by Region

ONS Coronavirus (COVID-19) Infection Survey (11 December)

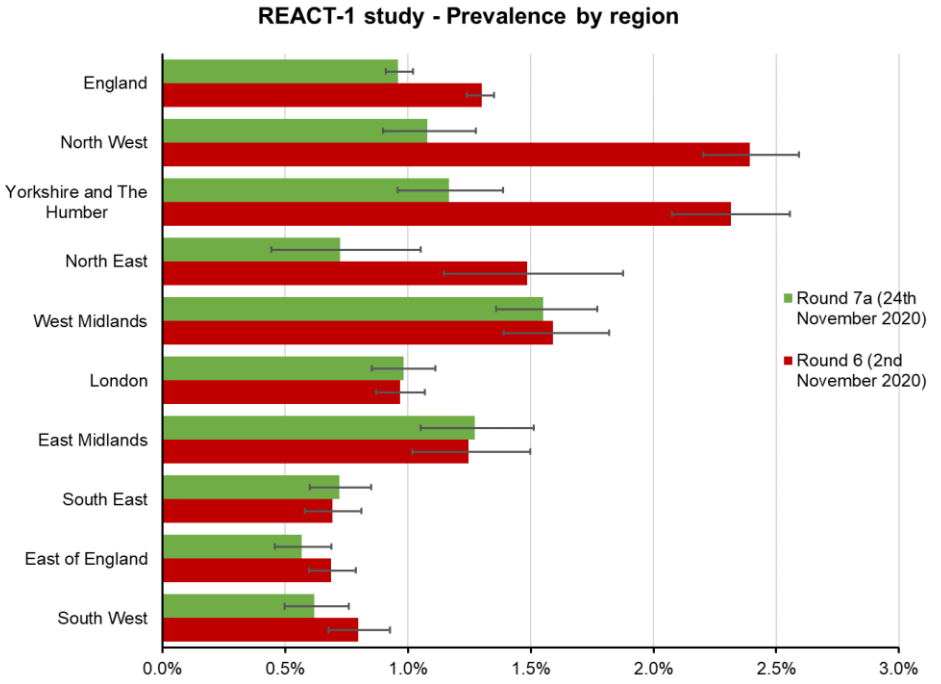
Over the most recent week, the percentage of people testing positive has decreased in all regions; rates are highest in the North East, the North West and Yorkshire and The Humber. Caution should be taken in over-interpreting any small movements, particularly if rates are already at a high level.



Coronavirus (COVID-19) Infection Survey, UK: 11 December 2020

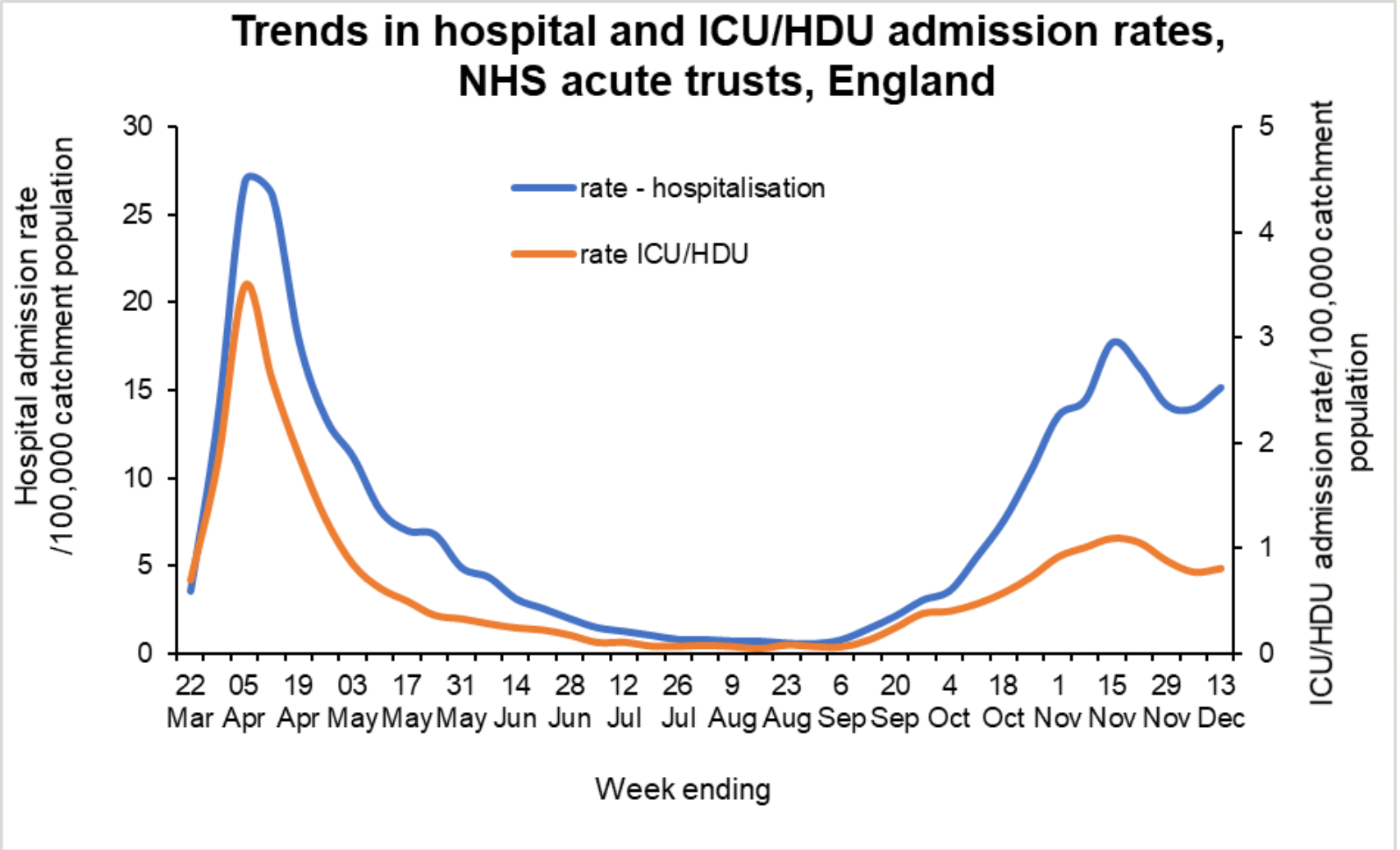
REACT-1 round 7 interim report (30 November)

The national trends were driven mainly by reductions in higher-prevalence northern regions, with prevalence approximately unchanged in the Midlands and London, and smaller reductions in southern lower-prevalence regions.



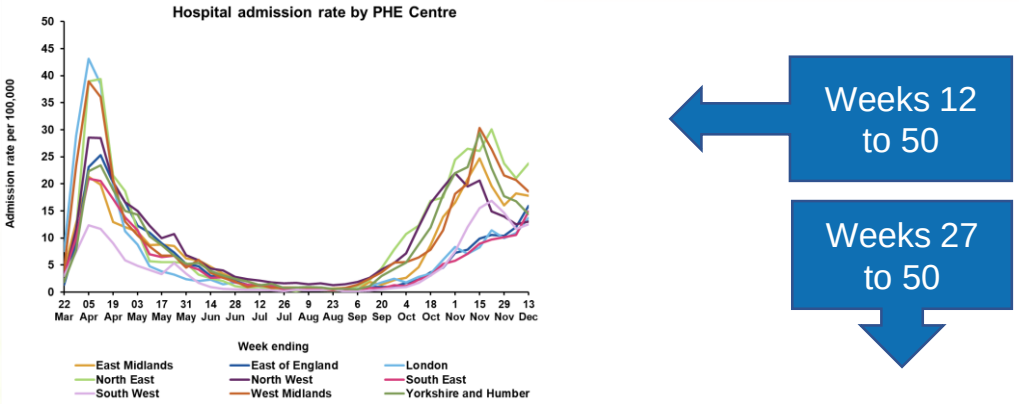
REACT-1 round 7 interim report: fall in prevalence of swab-positivity in England during national lockdown 30 November 2020

Hospitalisations national trends



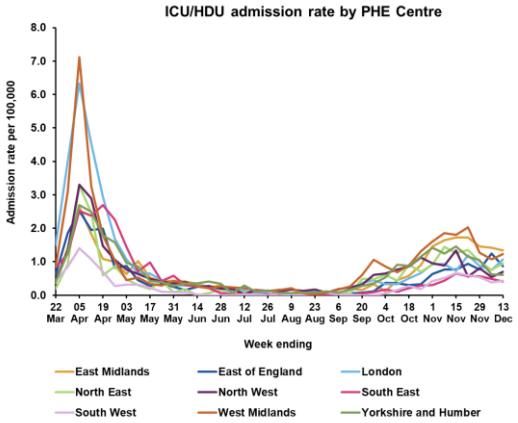
Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

Hospitalisations by PHE Centre



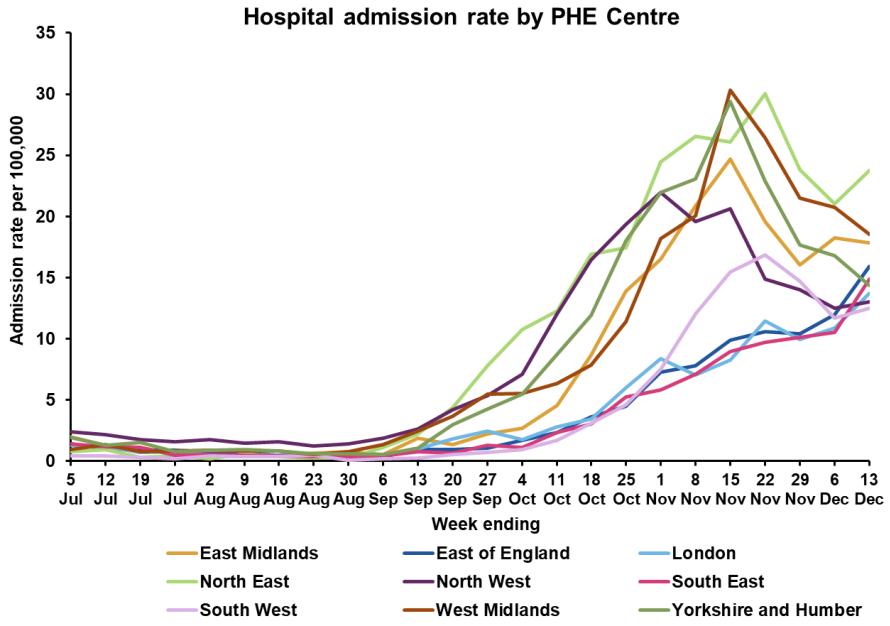
Weeks 12 to 50

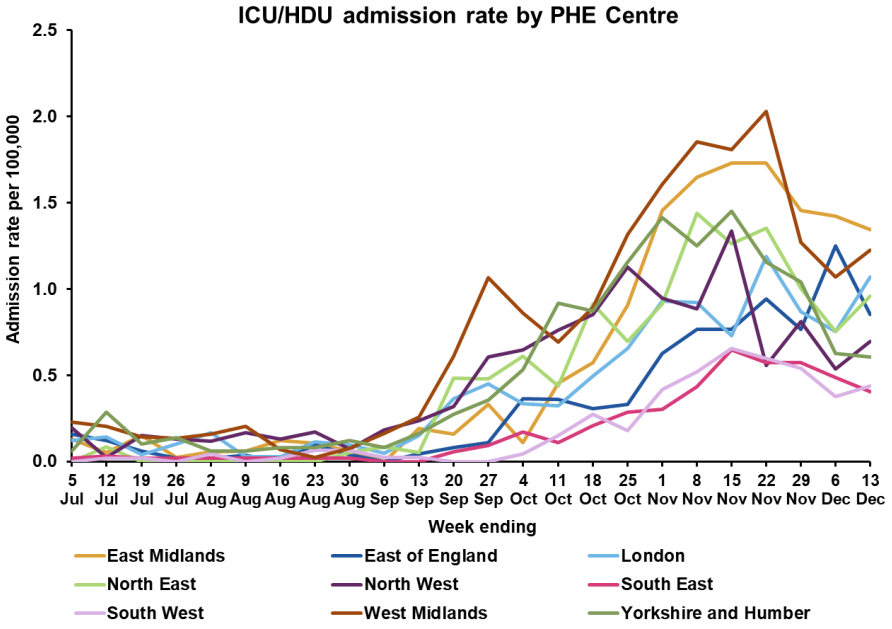
Weeks 27 to 50



Weeks 12 to 50

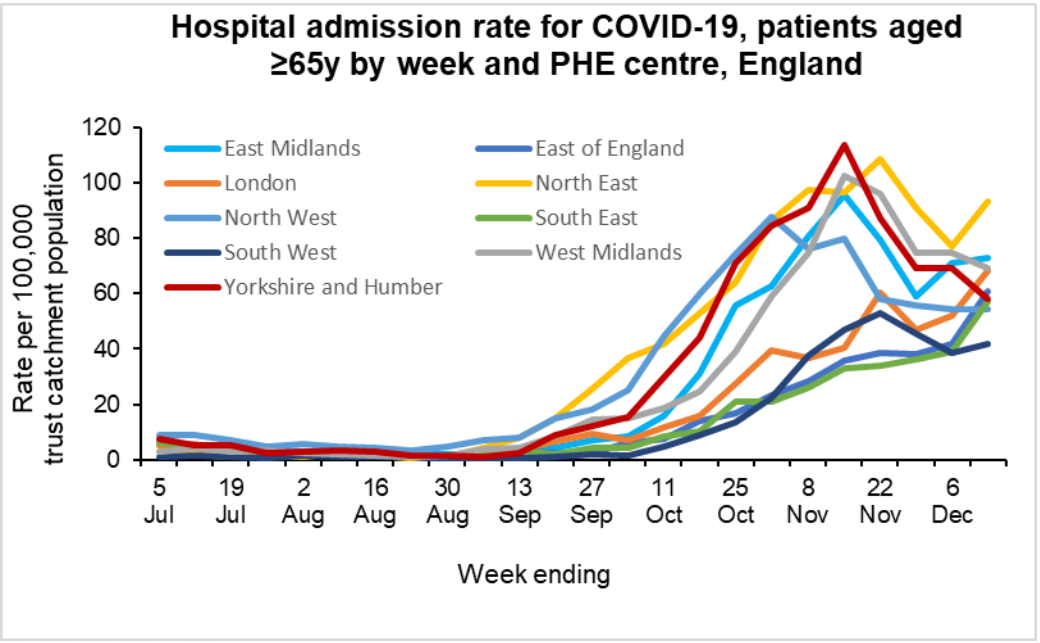
Weeks 27 to 50

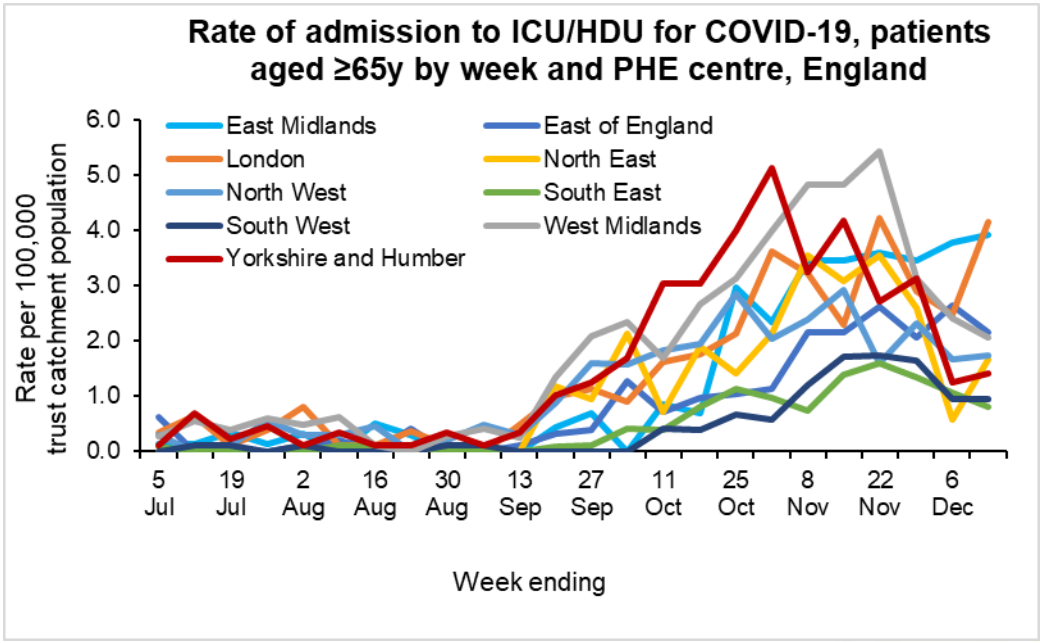




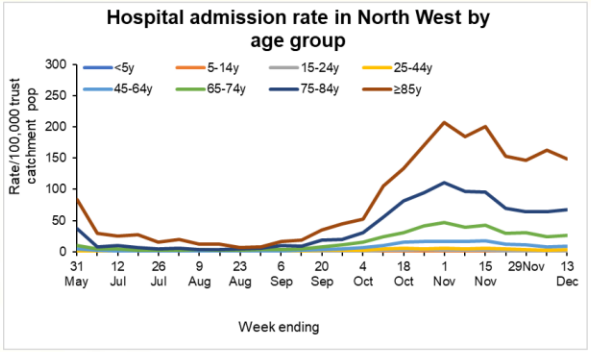
Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

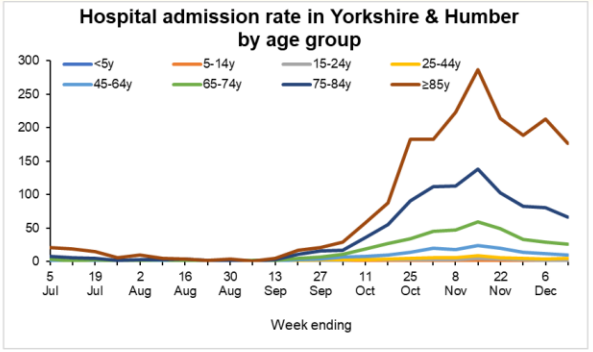
Hospitalisations by PHE Centre and age 65 years and over

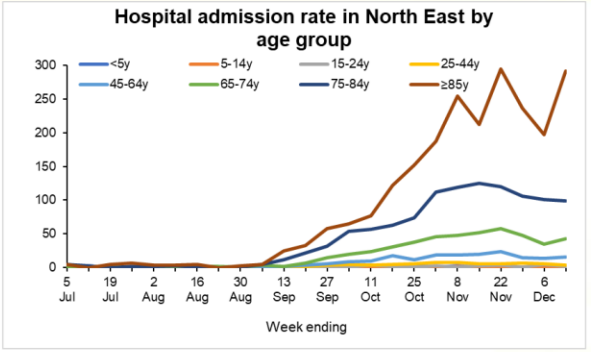


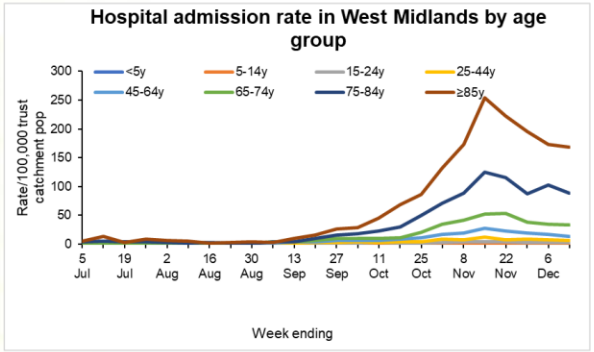


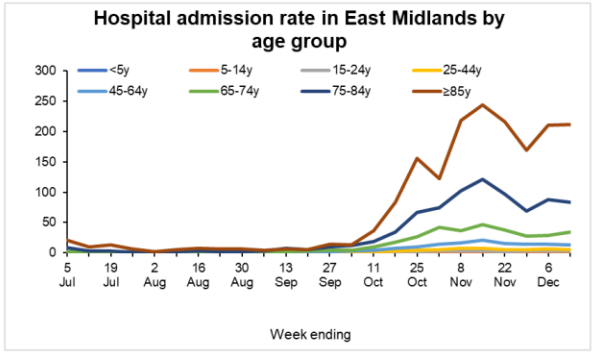
Hospitalisations by PHE Centre and age

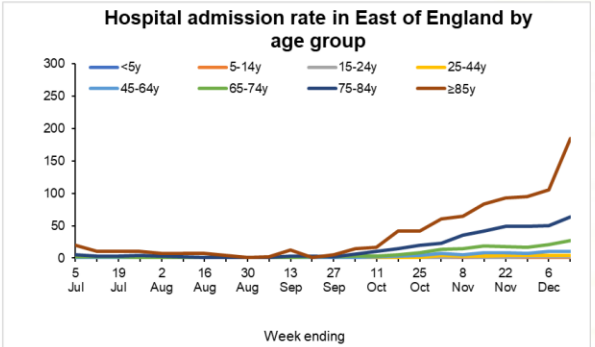


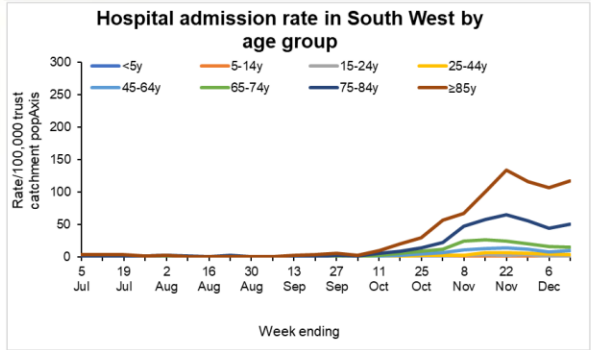


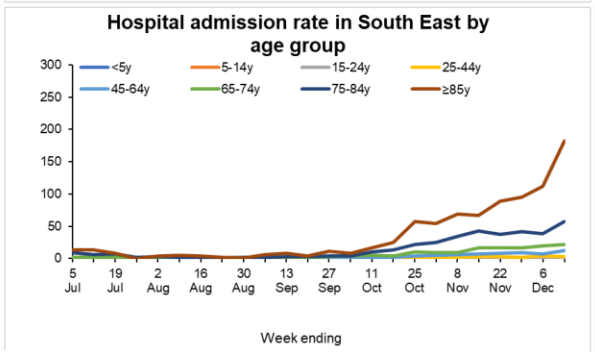


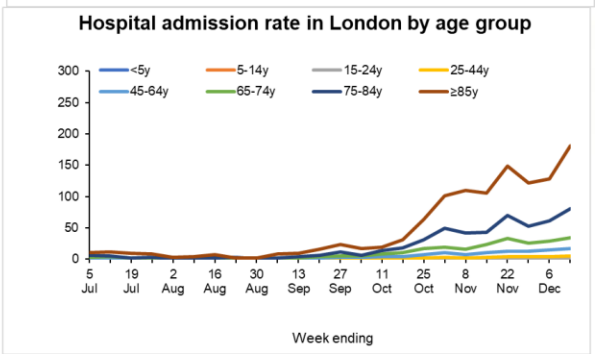








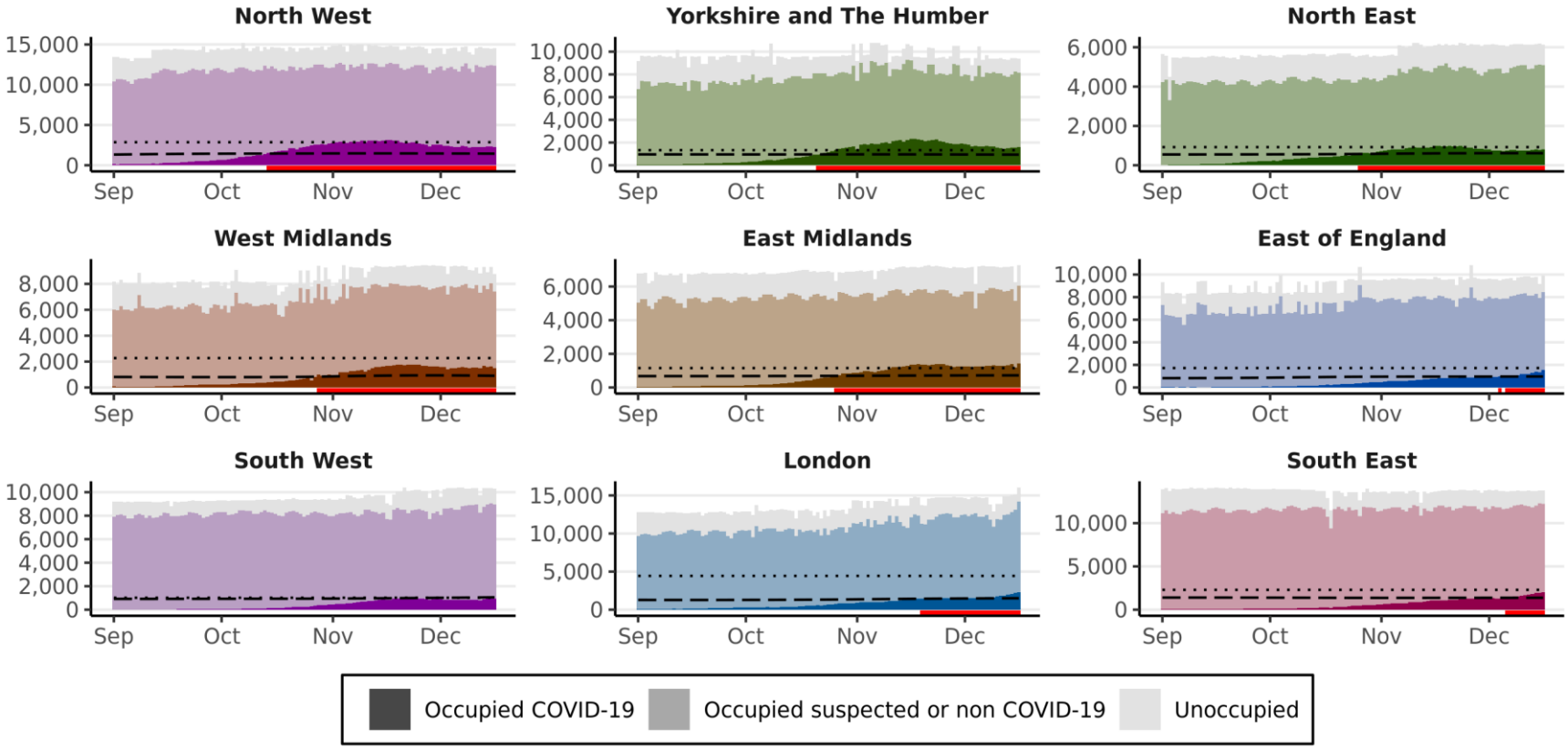




Bed occupancy and capacity by region - general and acute beds

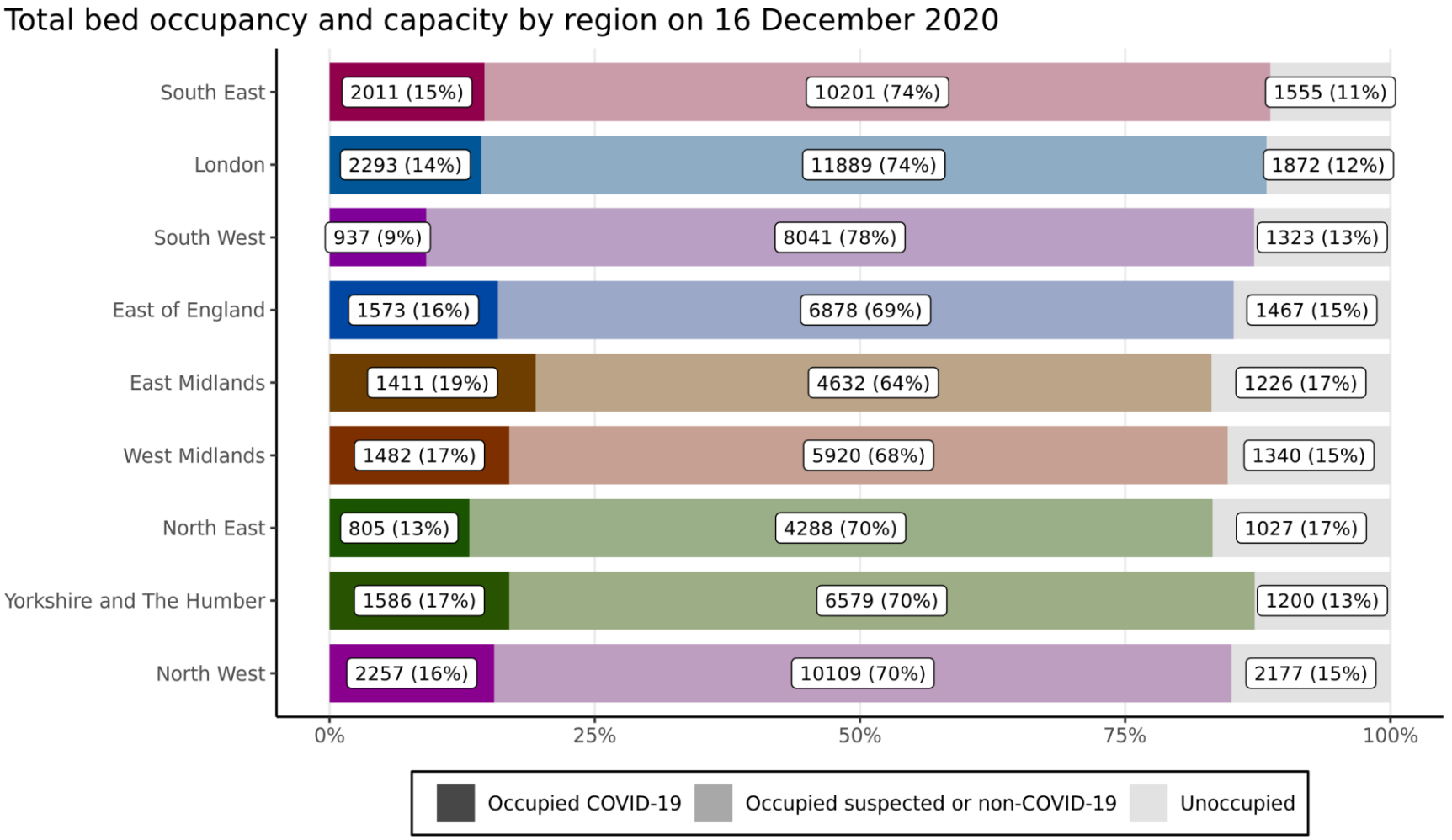
Total bed occupancy and capacity by region

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.



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

Bed occupancy and capacity by region - general and acute beds



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

NHS 111 ‘potential COVID-19’ calls

NHS 111 ‘potential COVID-19’ calls, alarms over the past 7 days (9 Dec 2020 to 15 Dec 2020)

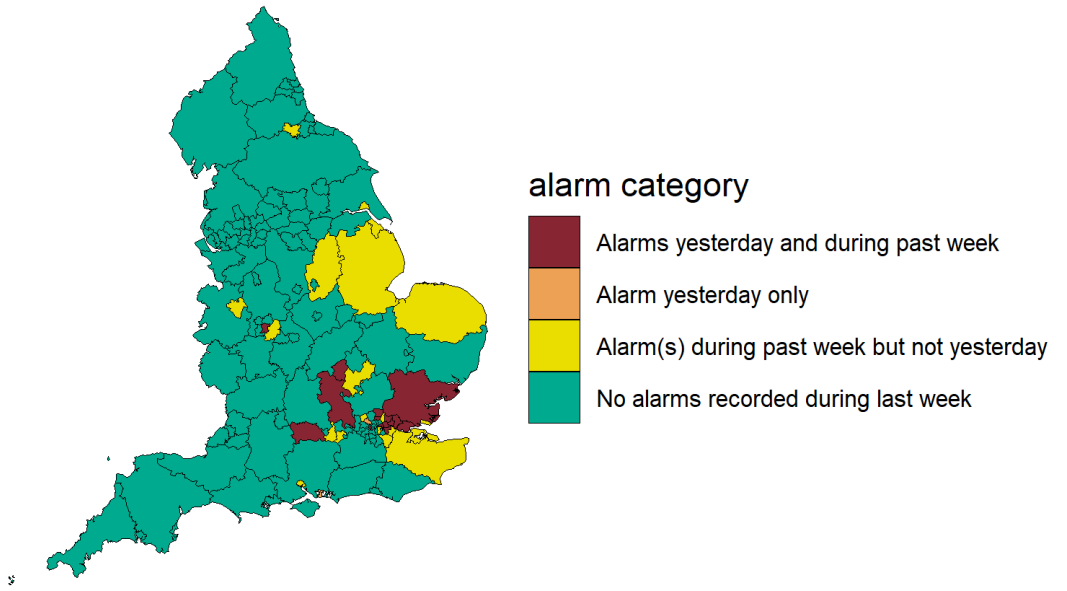
The alarms are intended to give early warning of local authorities where rates are higher than the national average. Due to a lack of historical data it is not yet possible to take into account any systematic bias which may result in one authority consistently recording above average rates independently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

Area	Number of alarms in past 7 days	Alarm category
Essex		Alarms yesterday and during past week
Buckinghamshire		Alarms yesterday and during past week
Enfield		Alarms yesterday and during past week
Havering		Alarms yesterday and during past week
Milton Keynes		Alarms yesterday and during past week
Newham		Alarms yesterday and during past week
Redbridge		Alarms yesterday and during past week
Tower Hamlets		Alarms yesterday and during past week
Barking and Dagenham		Alarms yesterday and during past week
Thurrock		Alarms yesterday and during past week
Greenwich		Alarms yesterday and during past week
Hammersmith and Fulham		Alarms yesterday and during past week
Haringey		Alarms yesterday and during past week
Sandwell		Alarms yesterday and during past week
West Berkshire		Alarms yesterday and during past week
Brent		Alarm yesterday only
Portsmouth		Alarm yesterday only
Waltham Forest		Alarm(s) during past week but not yesterday
Bexley		Alarm(s) during past week but not yesterday
Medway		Alarm(s) during past week but not yesterday
Nottinghamshire		Alarm(s) during past week but not yesterday
Southend-on-Sea		Alarm(s) during past week but not yesterday
Southwark		Alarm(s) during past week but not yesterday
Wokingham		Alarm(s) during past week but not yesterday
Birmingham		Alarm(s) during past week but not yesterday
Bracknell Forest		Alarm(s) during past week but not yesterday
Bromley		Alarm(s) during past week but not yesterday
Central Bedfordshire		Alarm(s) during past week but not yesterday
Darlington		Alarm(s) during past week but not yesterday
Harrow		Alarm(s) during past week but not yesterday
Kent		Alarm(s) during past week but not yesterday
Kingston upon Hull, City of		Alarm(s) during past week but not yesterday
Lincolnshire		Alarm(s) during past week but not yesterday
Norfolk		Alarm(s) during past week but not yesterday
North East Lincolnshire		Alarm(s) during past week but not yesterday
Southampton		Alarm(s) during past week but not yesterday
Telford and Wrekin		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 (09/12/20 - 15/12/20)



Alarm methodology

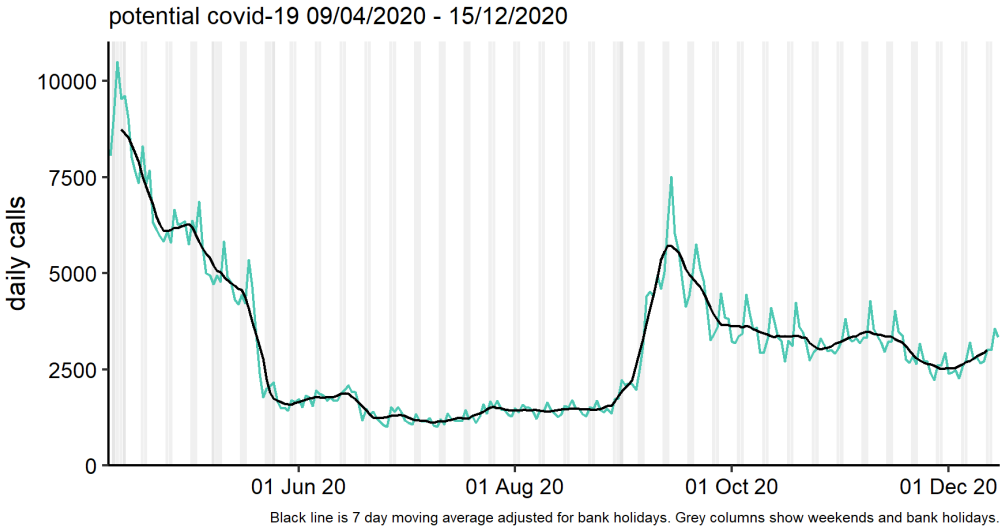
Populations are based on ONS estimates for mid-2019. Rates are number of calls per 100,000 people.

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.

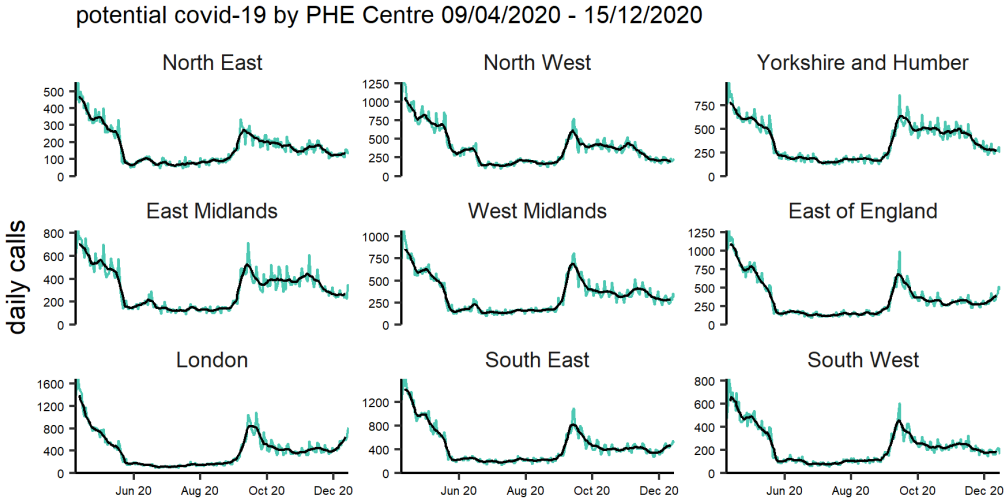
NHS 111 ‘potential COVID-19’ calls

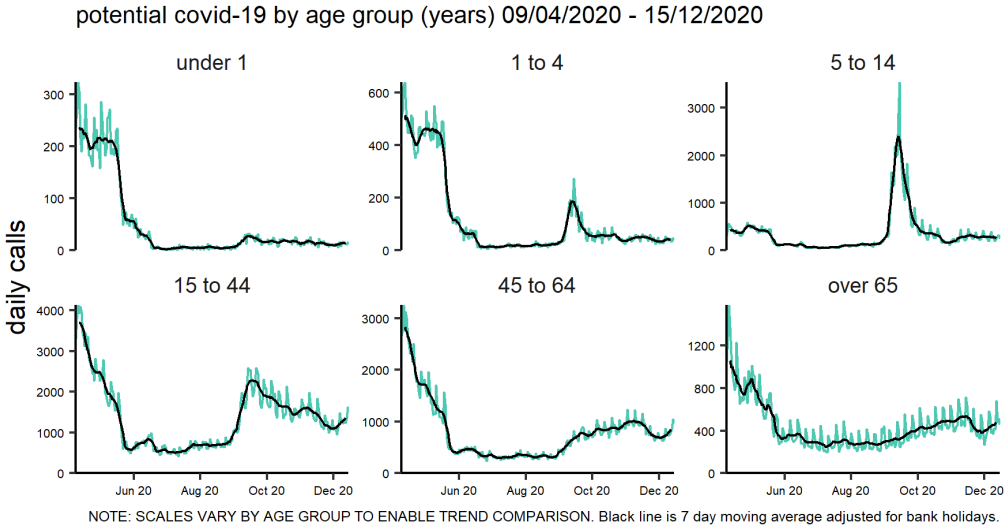
Trends in daily NHS 111 ‘potential COVID-19’ calls, national, PHE Centre and by age (to 15 Dec)



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.

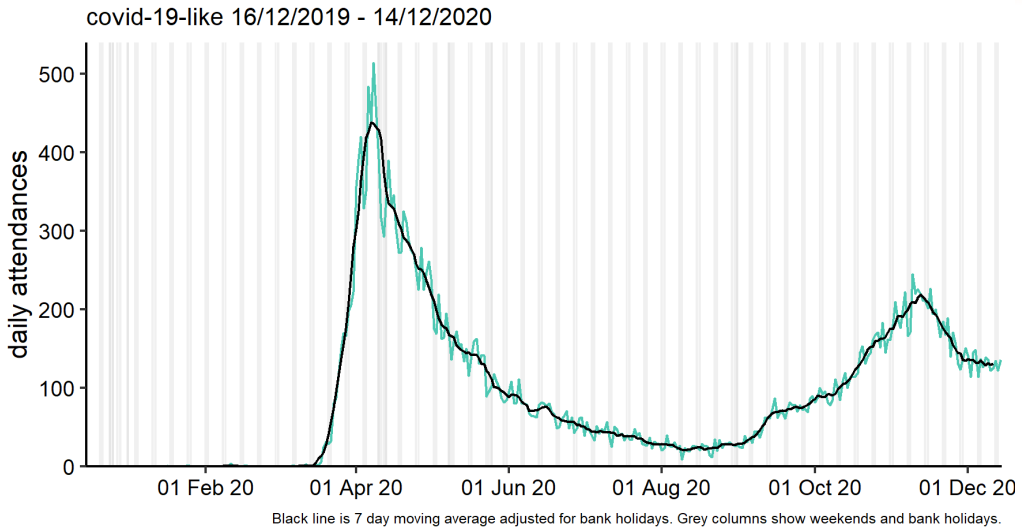




Further information and weekly NHS 111 reports containing potential COVID-19 call and online assessment surveillance data is available from the PHE Remote Health Advice bulletin.

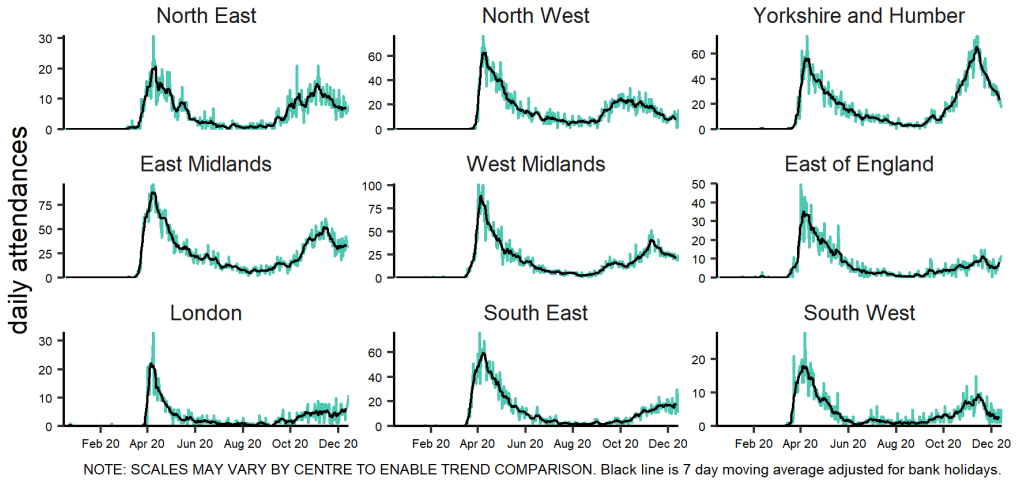
Emergency Department Syndromic Surveillance System COVID-19-like attendances

Trends in daily ED COVID-19-like attendances, national, PHE Centre and by age (to 14 Dec)

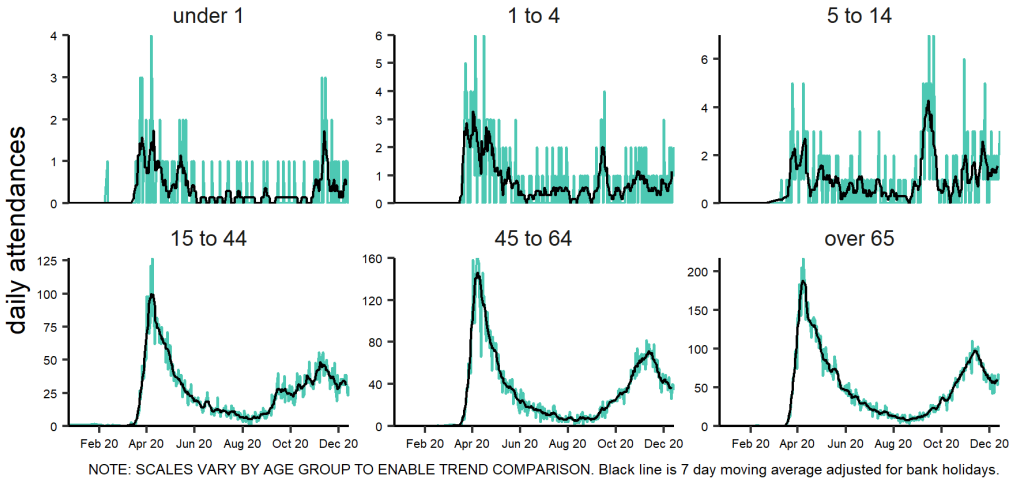


Emergency Department Syndromic Surveillance System (EDSSS) COVID-19-like attendances.

- 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



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



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.

Care homes
report changes from 17 November 2020

- **From the 17 November 2020, this report now includes all incidents** (HPZone situation types exposure and issue in addition to ‘outbreak’ and ‘cluster’) in care homes reported to PHE local teams. This is necessitated by a change in recording practice by PHE local teams. In addition the analysis now matches reported incidents to positive laboratory test results in order to show the number of incidents with confirmed COVID-19 in residents.
- 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;** this is now possible due to changes in data entry at a local level