Public Health England

NHS Test and Trace

COVID-19 SITUATIONAL AWARENESS

SUMMARY

APPENDIX
7 September 2021

Contents

This situational awareness summary report appendix:

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 2 September 2021 Week 35 report)

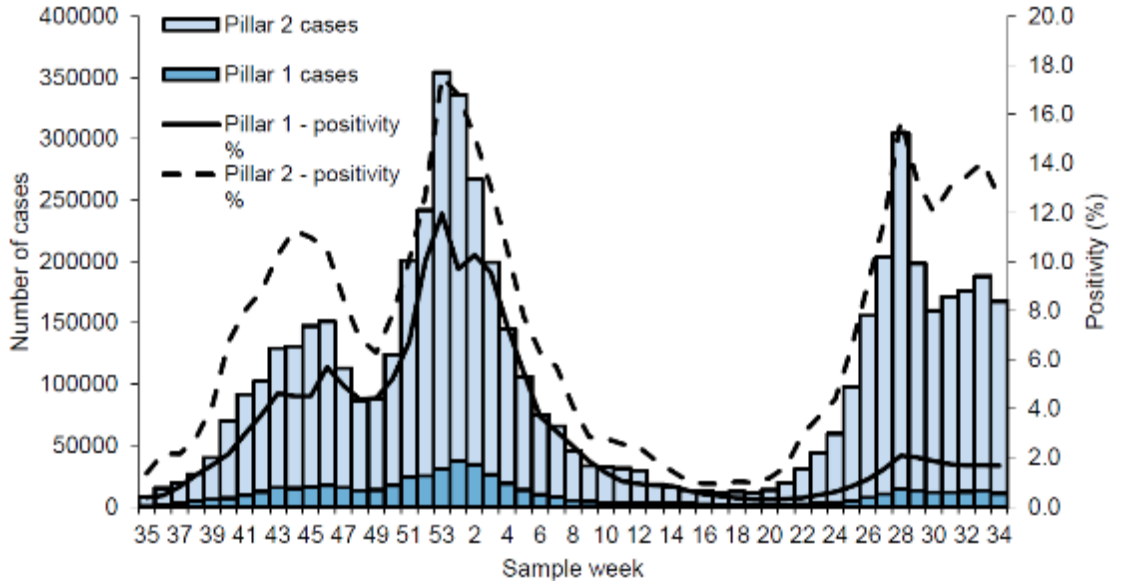
Overall case rates decreased slightly in week 34. Case rates decreased in most regions and all ethnic groups. Case rates decreased in 10 to 39-year olds but increased slightly or remained stable in other age groups. Overall Pillar 1 and Pillar 2 positivity remained stable compared to the previous week.

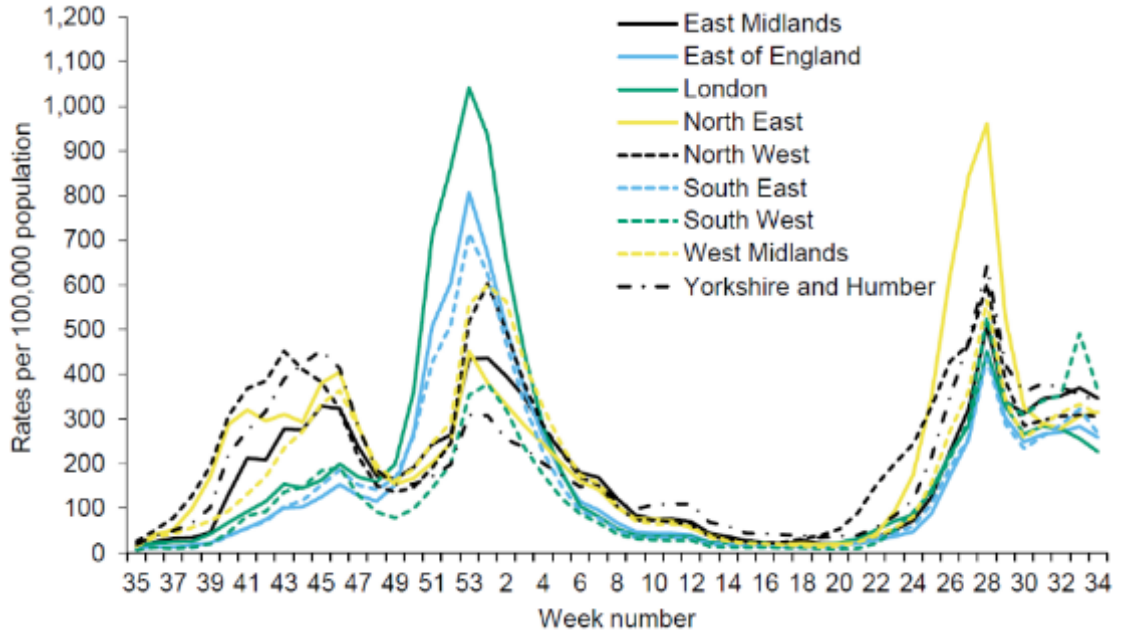
As of 9am on 31 August 2021, a total of 5,880,134 first positive cases have been confirmed for COVID-19 in England under Pillars 1 and 2, since the beginning of the pandemic.

- 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 through Polymerase Chain Reaction (PCR) testing.
- Please note for reports published from 15th July onwards, positivity will be presented as positivity by Polymerase Chain Reaction (PCR) testing only. This differs to in previous weeks where positivity by PCR and Lateral Flow Device (LFD) testing was presented. This change was introduced to improve comparability across population groups that may have different rates of asymptomatic LFD testing.

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-2020 ONS population estimates

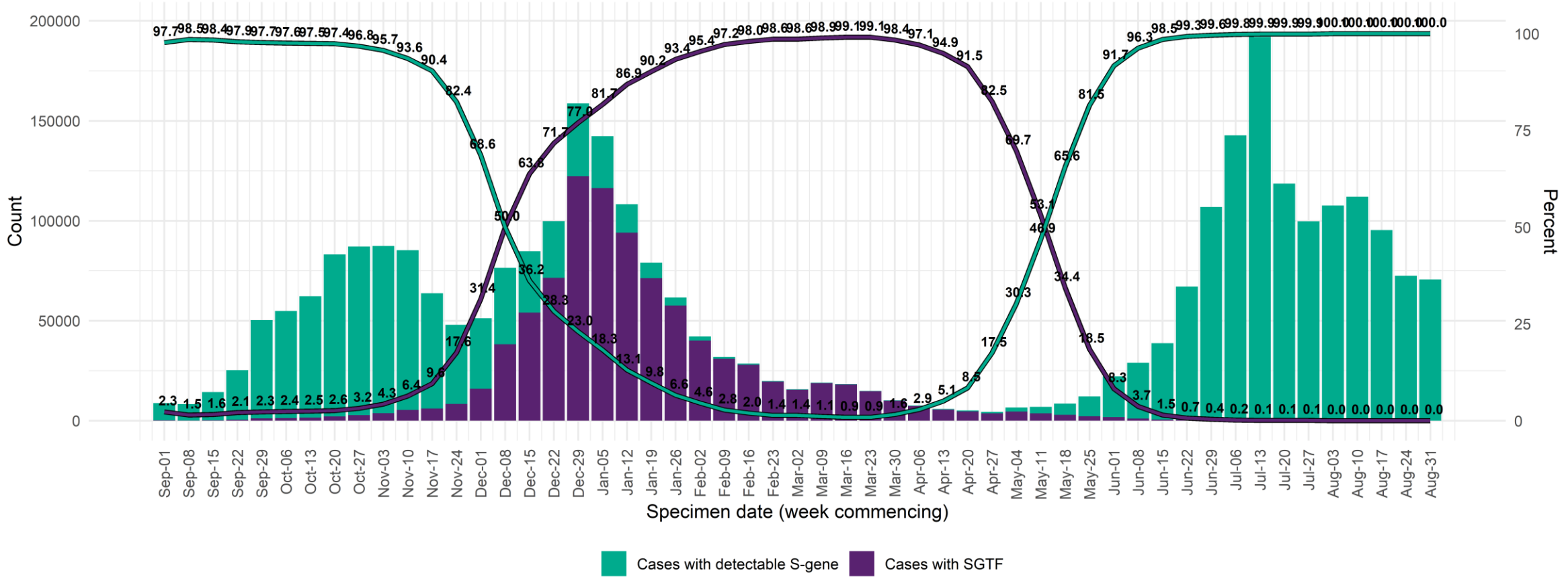




Tracking SARS-COV-2 S-Gene Target Failure – Weekly SGTF case numbers over time

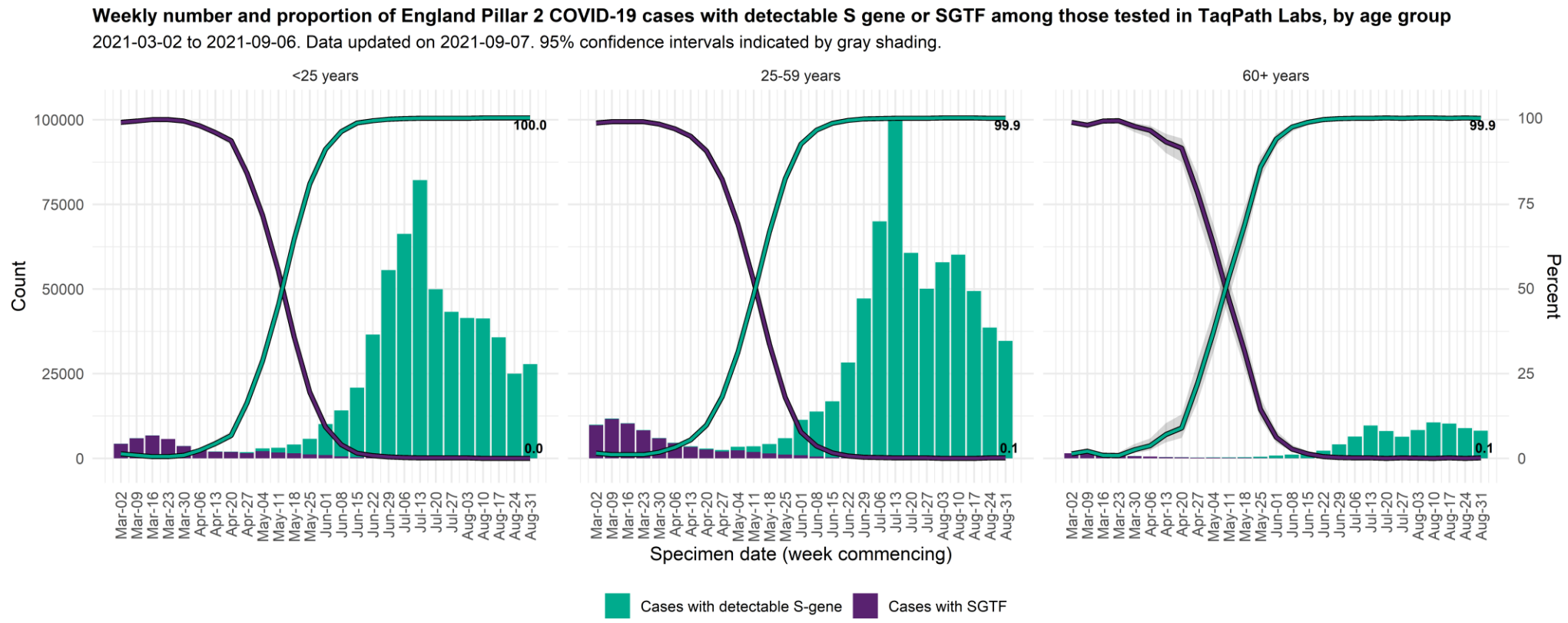
Weekly number and proportion of England Pillar 2 COVID-19 cases with detectable S gene or SGTF among those tested in TaqPath Labs

2020-09-01 to 2021-09-06. Data updated on 2021-09-07.



A detectable S gene may indicate a VOC case since April 2021; this continues to be monitored. SGTF is a surveillance proxy for VOC-20DEC-01 and may include other variants.
Local trends in these data may be affected by decisions to direct the processing of samples via a TaqPath laboratory.
Only tests carried out with the TaqPath PCR assay and with confirmed SGTF or S gene results included, from Newcastle, Alderley Park, Milton Keynes and Glasgow Lighthouse Labs.
SGTF refers to non-detectable S gene and <=30 CT values for N and ORF1ab genes. Detectable S-gene refers to <=30 CT values for S, N, and ORF1ab genes.
Data source: SGSS. Cases deduplicated to one positive test per person per week, prioritising SGTF tests.
Produced by Outbreak Surveillance Team, PHE.

Weekly trends in proportion of cases with S-Gene Target Failure, by age group



A detectable S gene may indicate a VOC case since April 2021; this continues to be monitored. SGTF is a surveillance proxy for VOC-20DEC-01 and may include other variants.
Local trends in these data may be affected by decisions to direct the processing of samples via a TaqPath laboratory.
Only tests carried out with the TaqPath PCR assay and with confirmed SGTF or S gene results included, from Newcastle, Alderley Park, Milton Keynes and Glasgow Lighthouse Labs.
Confirmed SGTF: Non-detectable S gene and <=30 CT values for N and ORF1ab genes. Confirmed S-gene: <=30 CT values for S, N, and ORF1ab genes.
Data source: SGSS. Age missing for 52 persons. Cases deduplicated to one positive test per person per week, prioritising SGTF tests.
Produced by Outbreak Surveillance Team, PHE

Note: Daily reporting of samples through the Pillar 2 laboratory network is complex and largely driven by geographical proximity and daily capacity to maximise turn-around time. There is no known systematic bias in the settings from which SGTF lab samples are sent but important to note that bulk testing from satellite channels (such as care homes) have less pressure on turn-around windows and are routinely processed outside of the SGTF lab network, meaning there may be some under-representation of SGTF in care home residents. NHS-hosted testing (e.g. of staff) is not represented in this data as processed through Pillar 1

Number of confirmed (sequencing) and probable (genotyping) cases by variant

Data last updated 06 September 2021 (compared to 30 August 2021 counts)

Variant	Lineage	Date of first sequencing	Total cases (change)*	
			England	UK
Beta	B.1.351	December 2020	[redacted]	
Zeta	P.2	November 2020		
Gamma	P.1	January 2021		
VUI-21FEB-01	A.23.1 with E484K	TBC		
VOC-21FEB-02	B.1.1.7 with E484K	TBC		
Eta	B.1.525	December 2020		
VUI-21FEB-04	B.1.1.318	TBC		
VUI-21MAR-01	B.1.324.1 with E484K	TBC		
Theta	P.3	TBC		
Kappa	B.1.617.1	TBC		
Delta	B.1.617.2	TBC		
VUI-21APR-03	B.1.617.3	TBC		
VUI-21MAY-01	AV.1	May 2021		
VUI-21MAY-02	C.36.3	May 2021		
Lambda	C.37	TBC		
Mu	B.1.621	TBC		

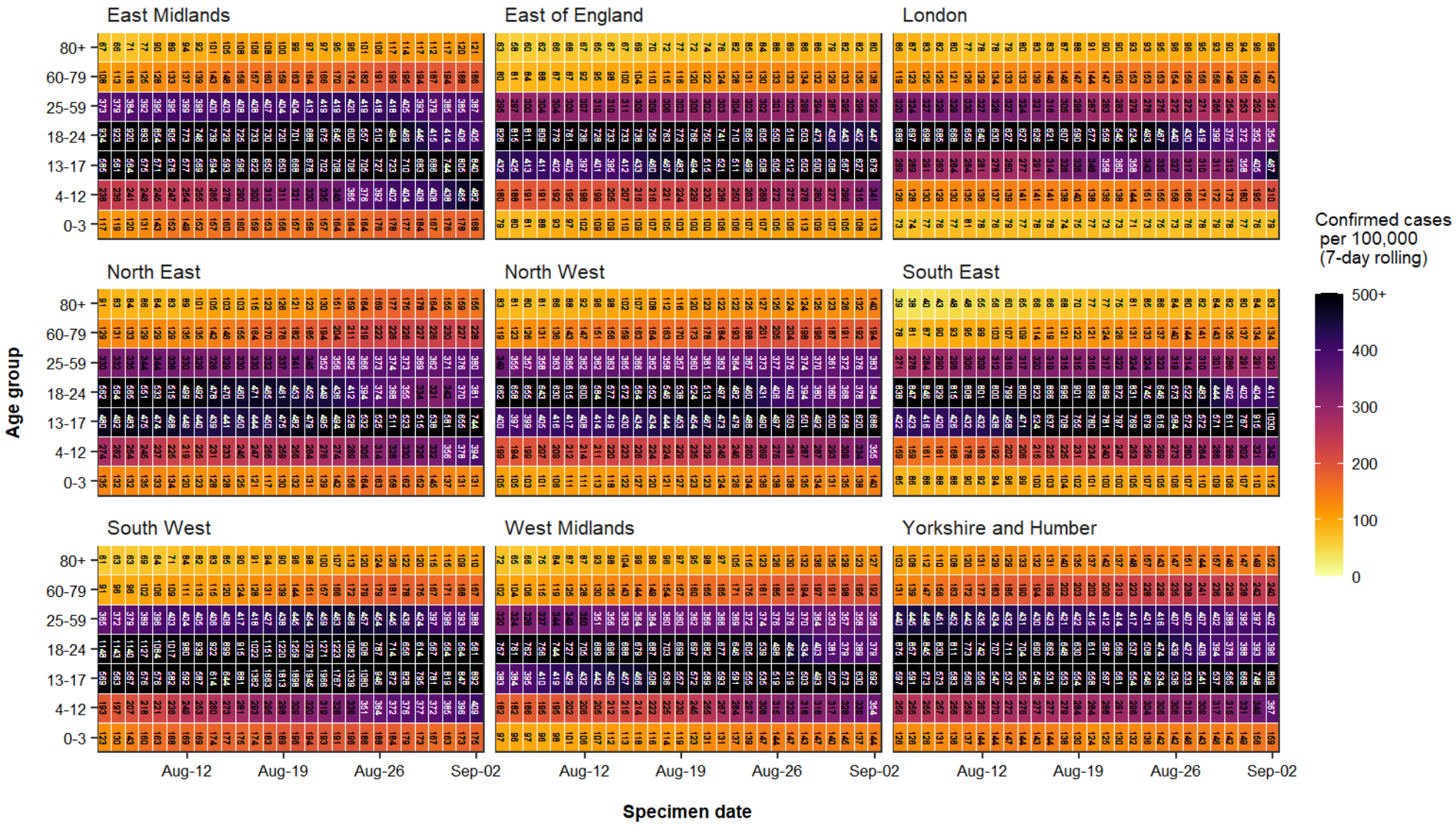
*Footnote: Values in parentheses show change in reported numbers since 30 August 2021. VOC = variant of concern; VUI = variant under investigation.

As of 17/6/2021, UK totals included confirmed (sequencing) and probable (genotyping) results. Since 10/6/2021 probable (genotyping) have been included in England totals. Confirmed (sequencing) cases are those identified through whole genome sequencing, where lineage defining positions can be assessed. Probable (genotyping) cases are those identified using the reflex PCR test, whereby combinations of mutations are indicative of a probable variant (available for for VOC-20DEC-02, VOC-21APR-02, and VOC-21JAN-02).

Reflecting data up 09:30 06 September 2021

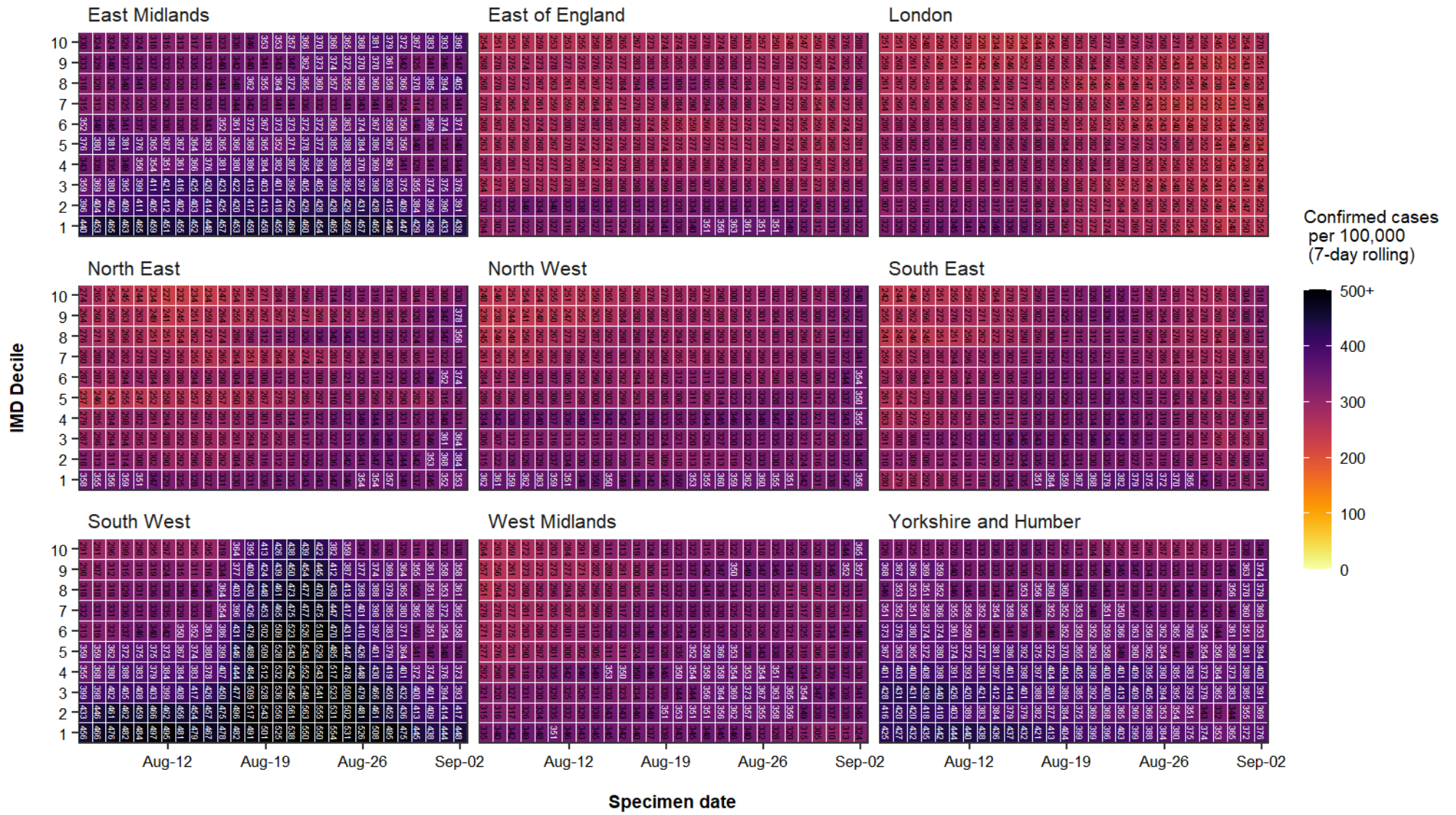
Case rate by age group and region

Data from 06 August to 02 September



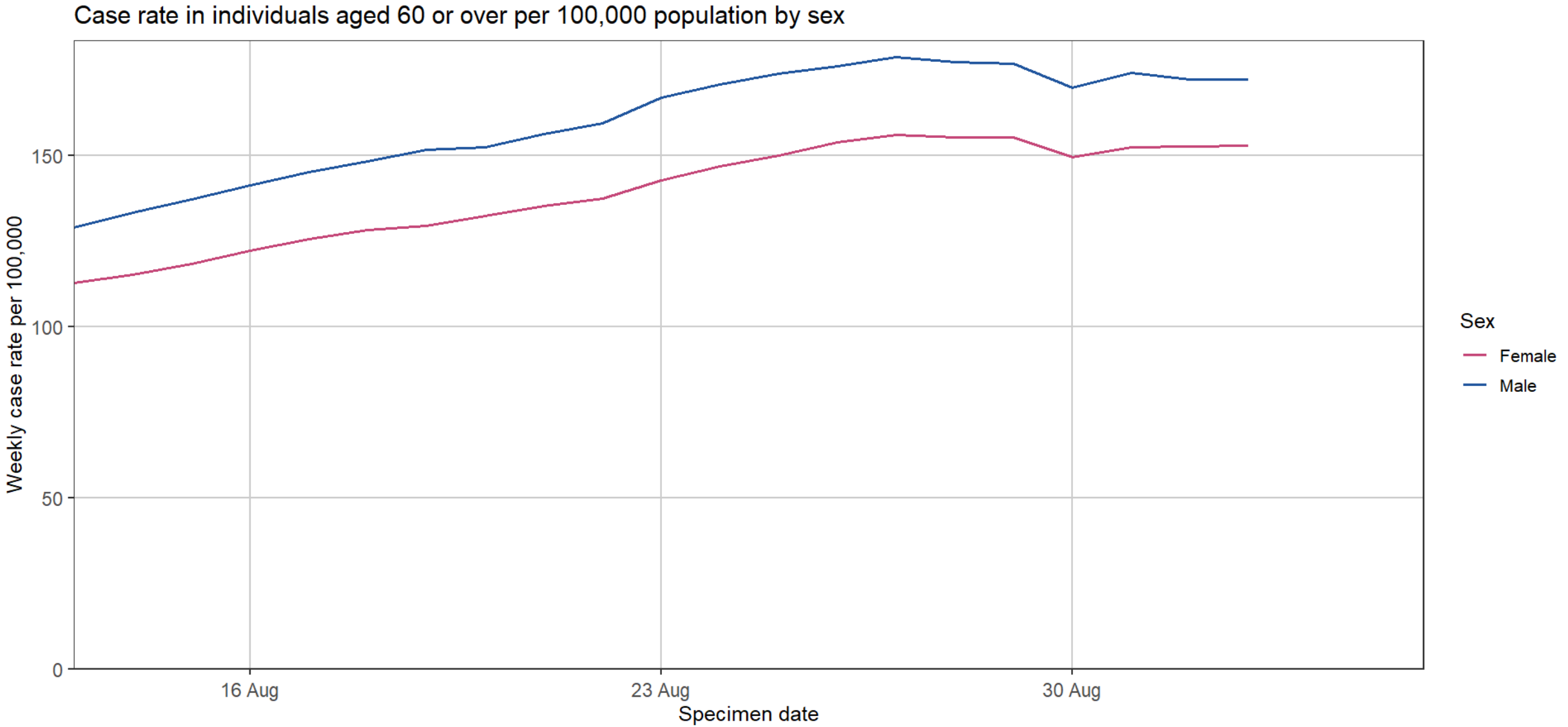
Case rate by IMD decile and region

Data from 06 August to 02 September - (1 = most deprived, 10 = least deprived)



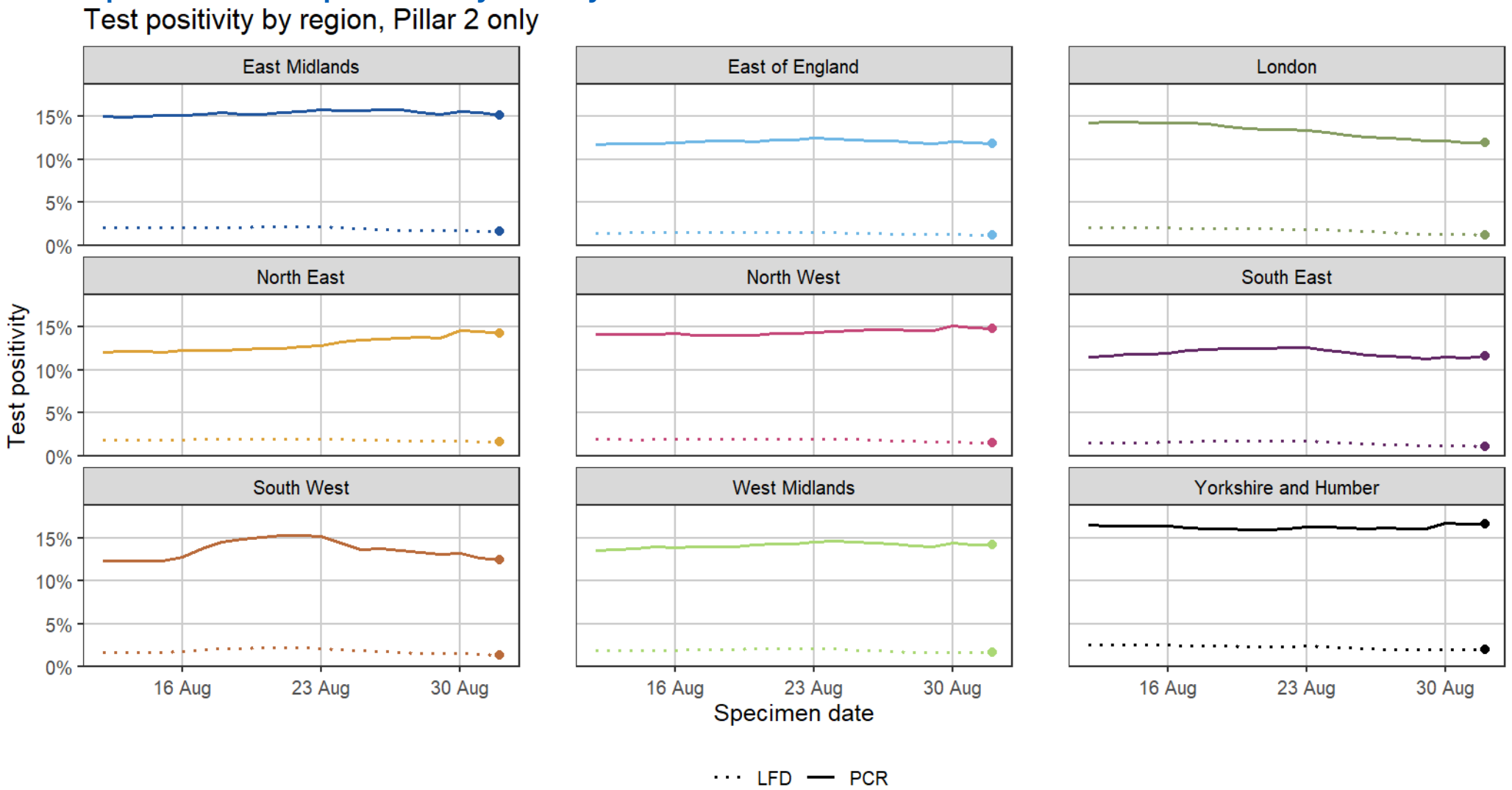
Case rate in England across both pillars 1 and 2 (weekly) aged 60 or over

Data up to 02 September 2021



Percentage of individuals testing positive in England across pillar 2 (weekly) by test type and region

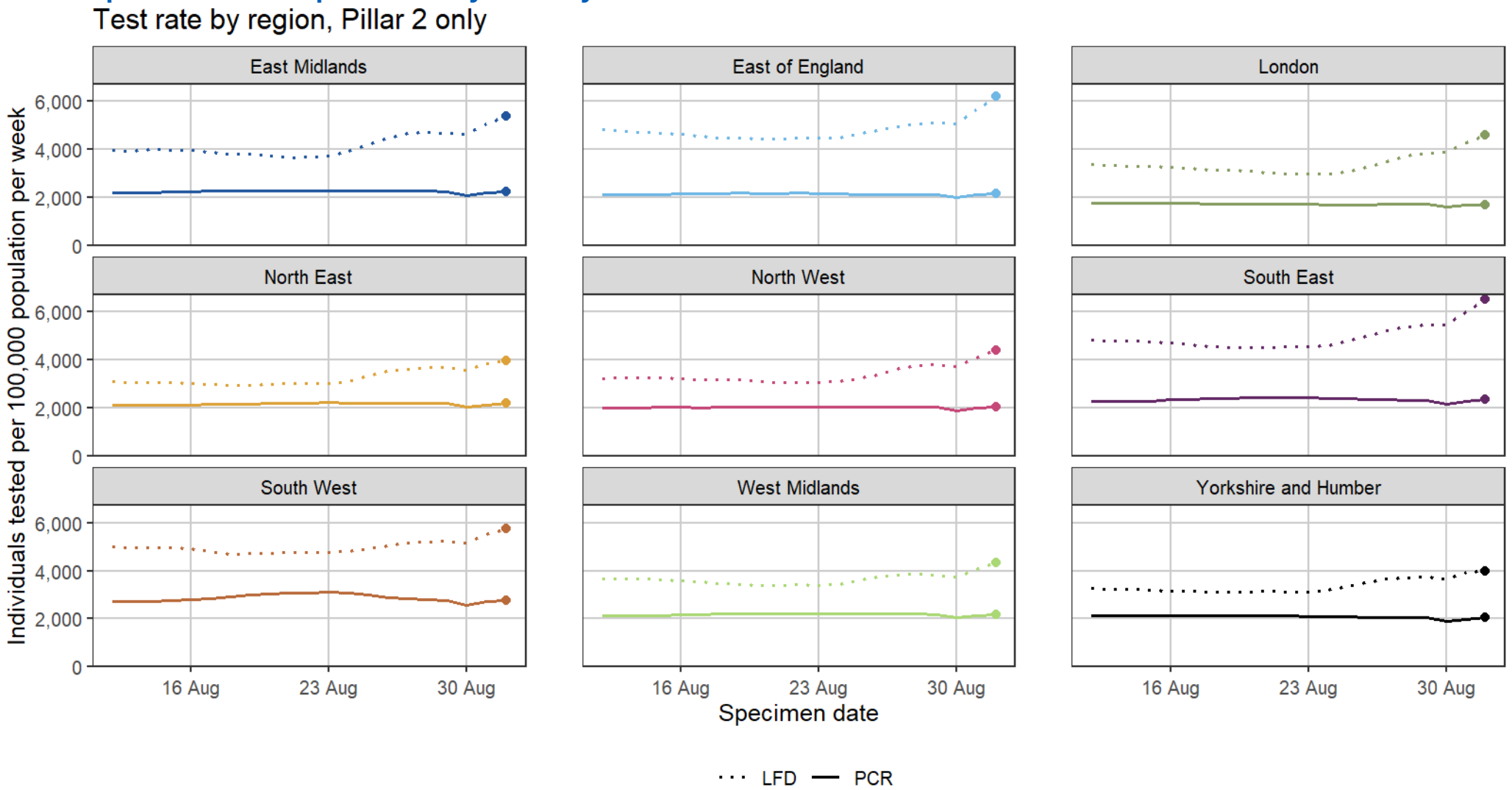
Data up to 01 September 2021 - updated every Monday



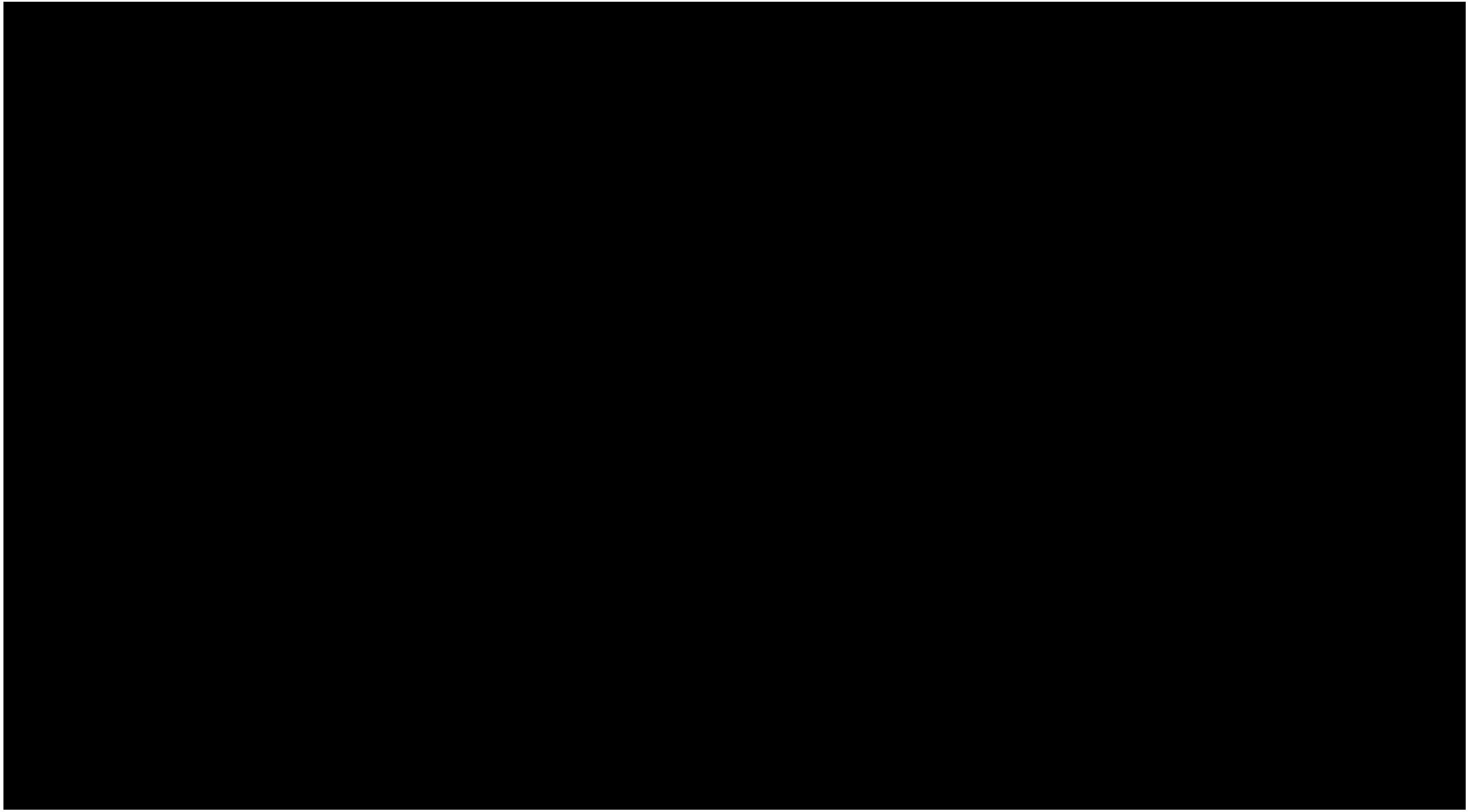
Data deduplicated by calendar week, PCR positivity rates will differ to those produced using a rolling 7 day deduplication.
Test type deduplicated separately, therefore rates for LFD and PCR cannot be summed to give PCR or LFD total.

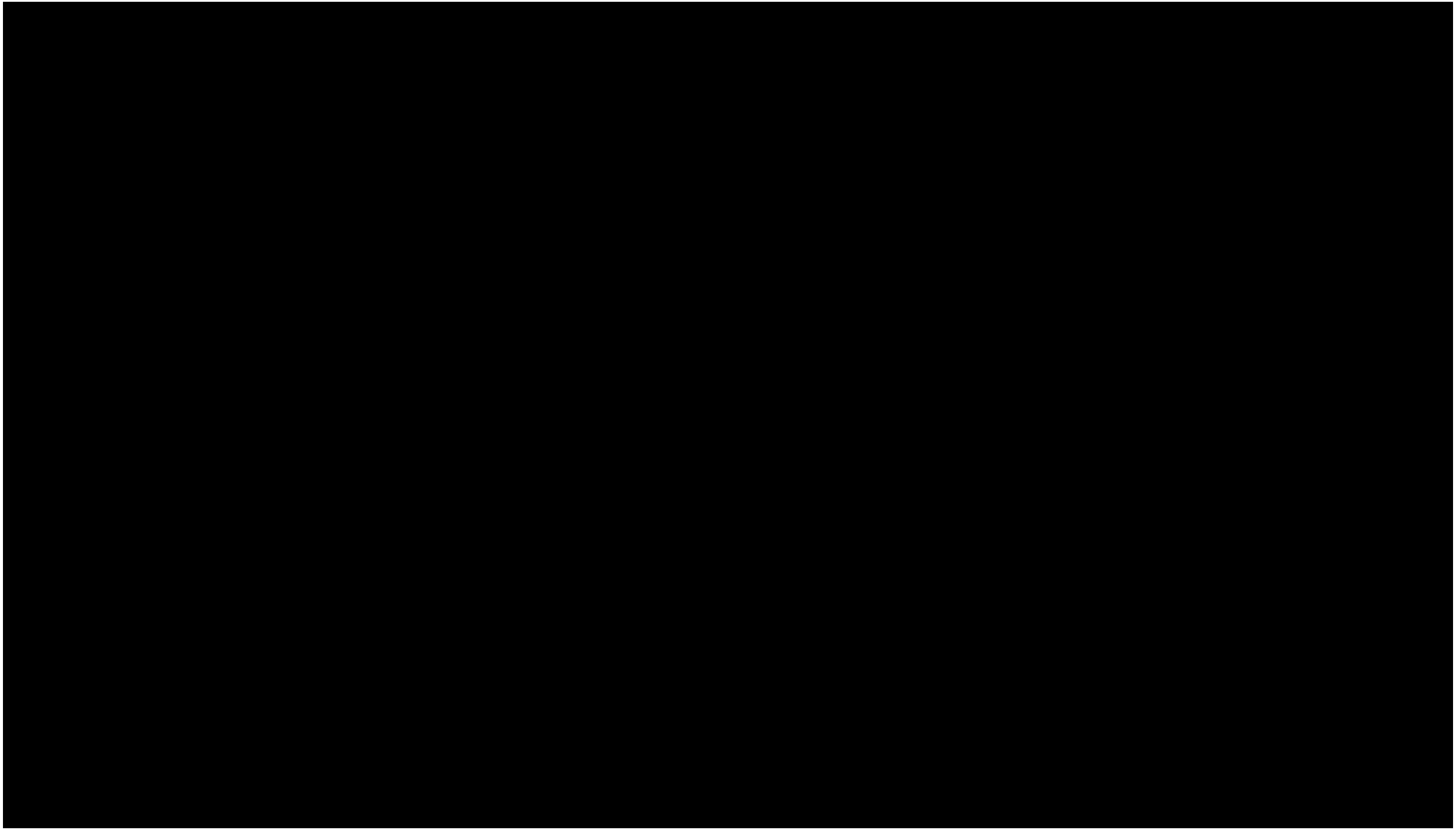
Individuals tested in England across pillar 2 (weekly) by test type and region

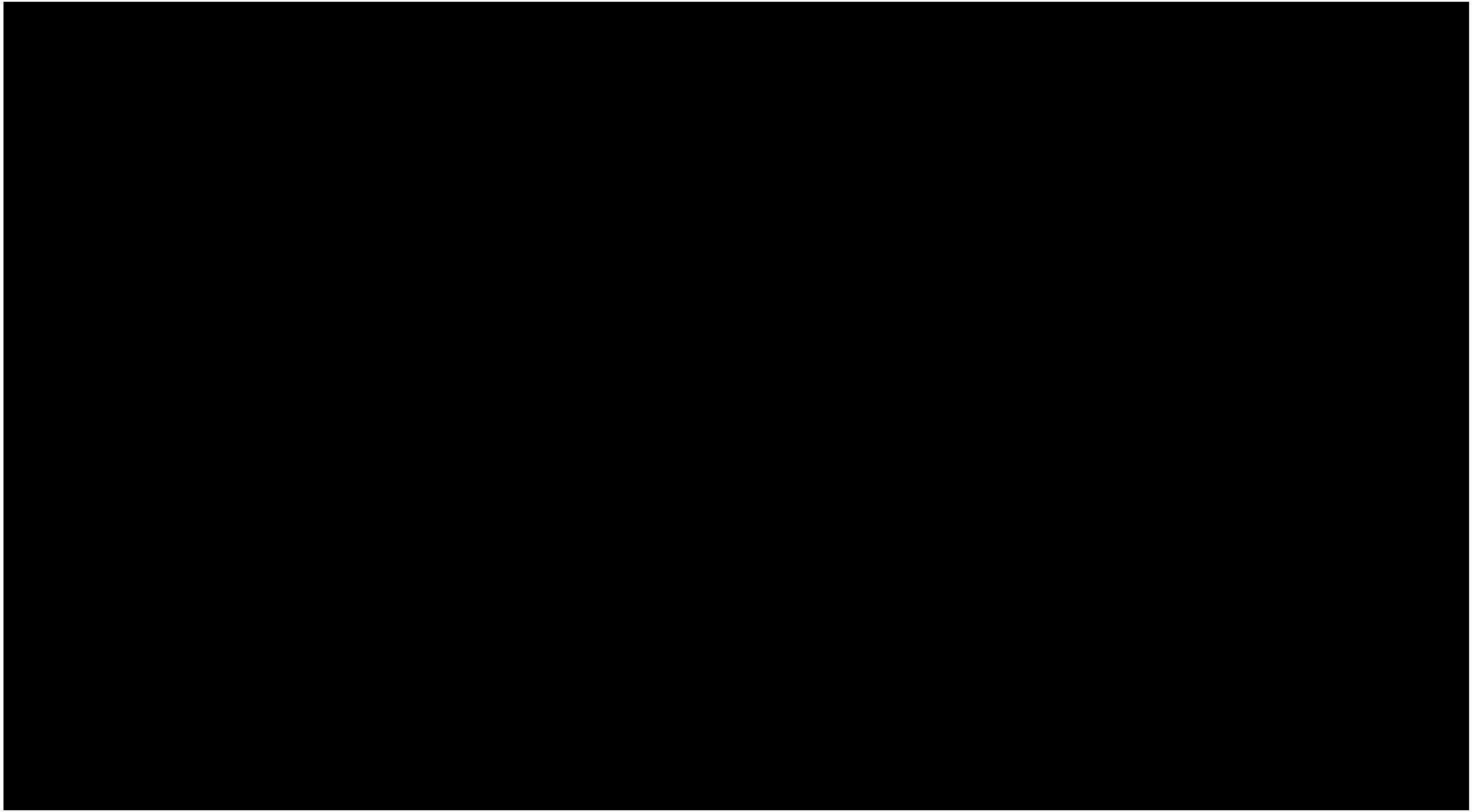
Data up to 01 September 2021- updated every Monday

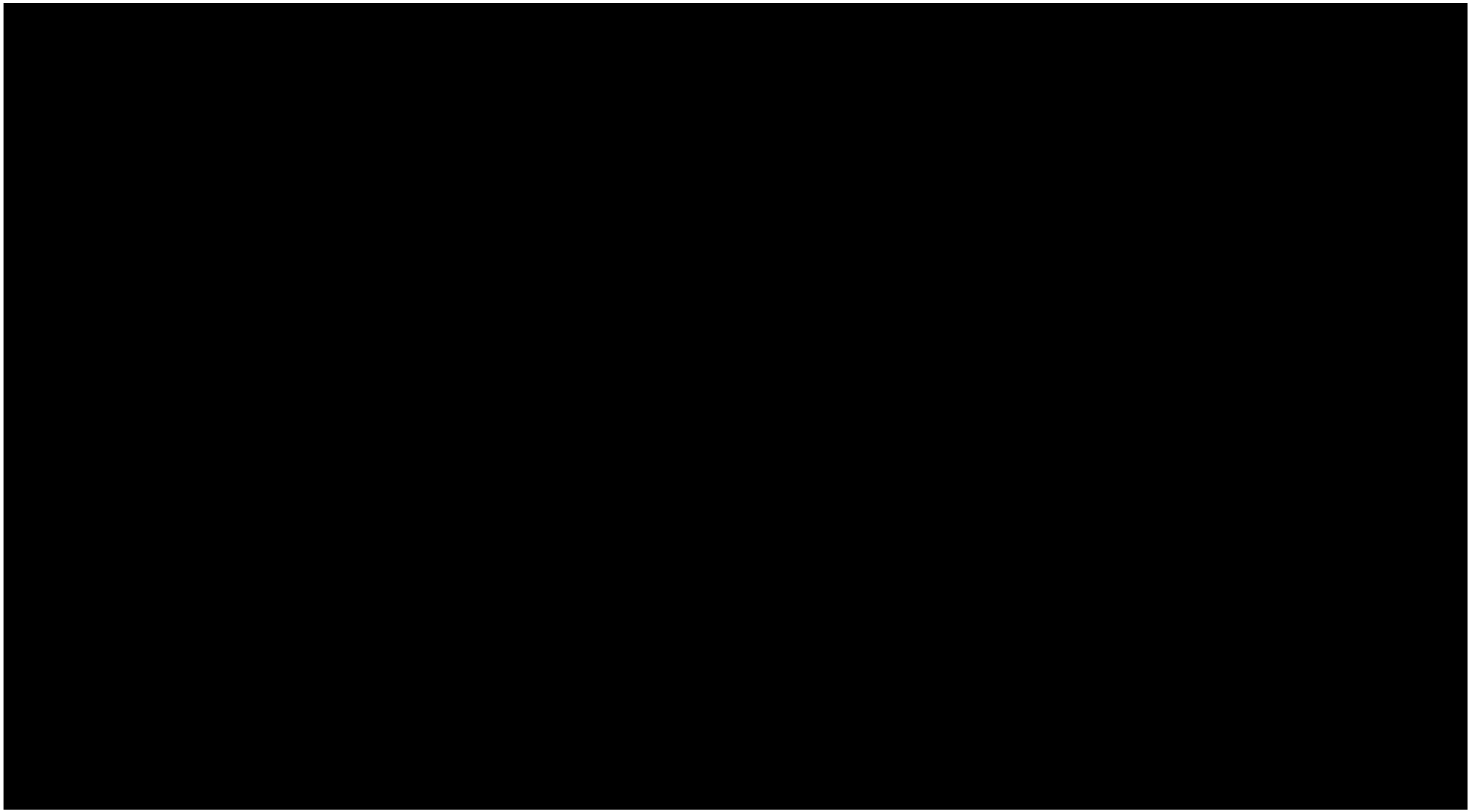


Data deduplicated by calendar week, PCR rates will differ to those produced using a rolling 7 day deduplication.
Test type deduplicated separately, therefore rates for LFD and PCR cannot be summed to give PCR or LFD total.









Percentage prevalence of COVID-19 across England and Government Office regions – age breakdown

Date of report 03 September 2021 by PHE Joint Modelling Cell

Methodology

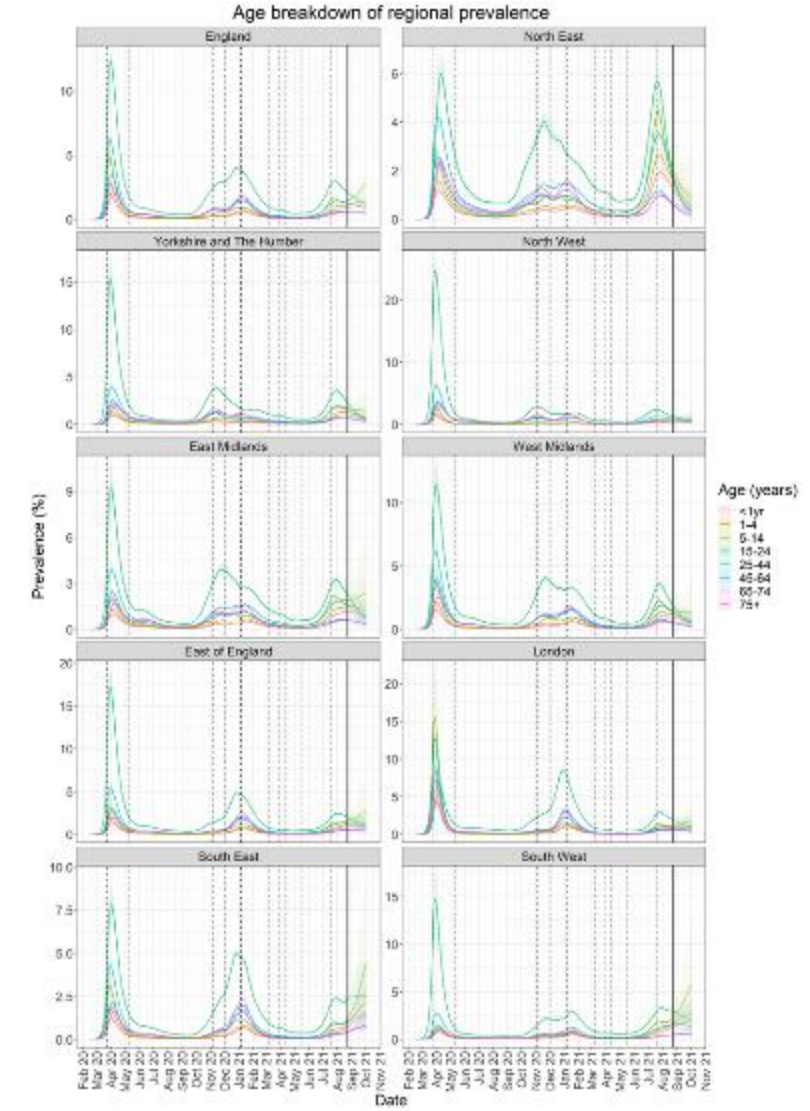
Prevalence estimates were generated by the Cambridge real-time model on **27 August 2021** using data up to **23 August 2021**.

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

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

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 here



ONS Regional Positivity in England 17 July – 27 August 2021

Estimated percentage of the population testing positive for SARS-CoV-2 on nose and throat swabs by region since 17 July– 27 August 2021.

Narrative

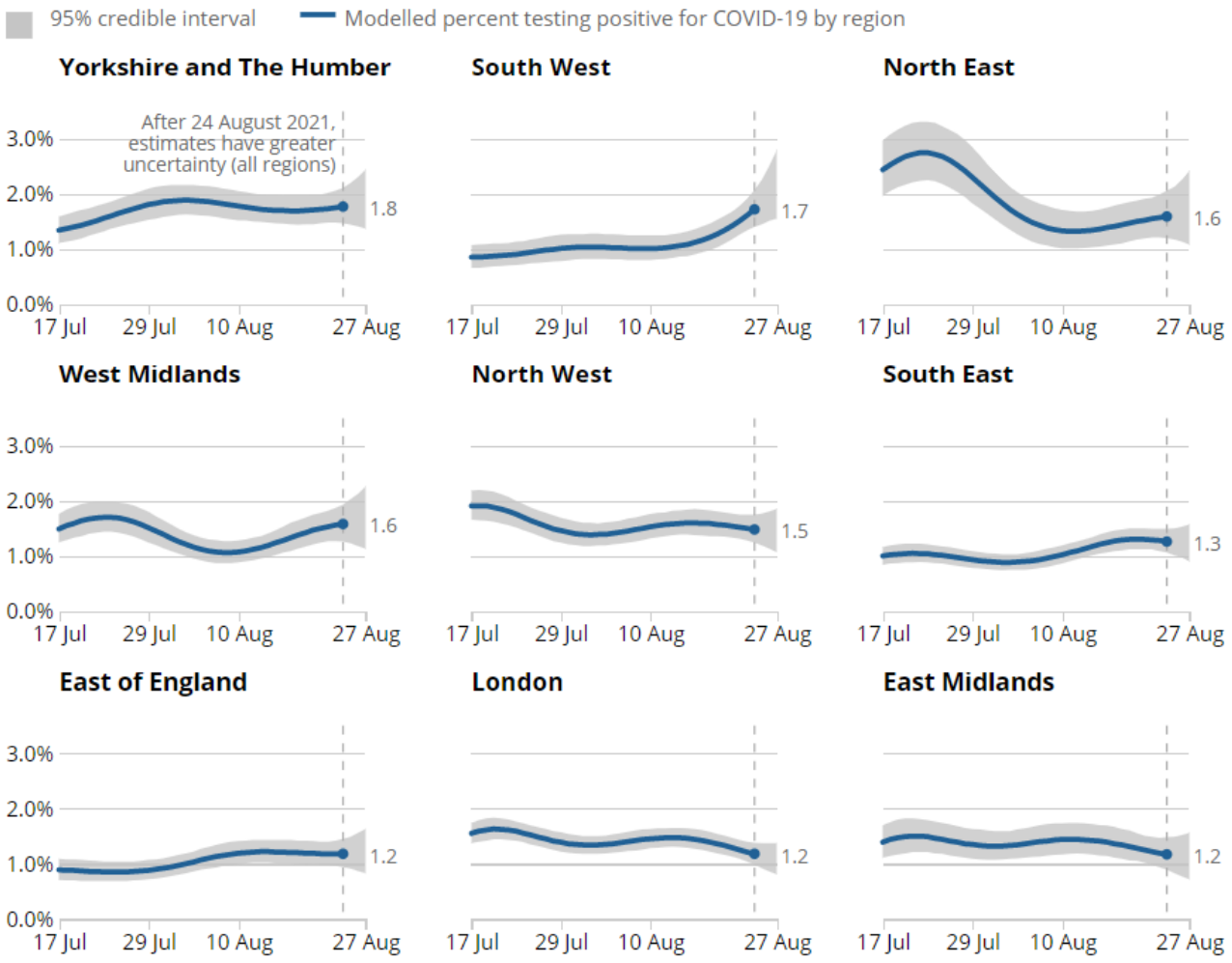
In the week ending 27 August 2021:

The percentage of people testing positive increased in the South West and the West Midlands.

The percentage of people testing positive increased in the North East and the South East over the two weeks up to 27 August 2021, but the trend was uncertain in the most recent week.

The percentage testing positive decreased in London and the East Midlands.

The trend was uncertain in Yorkshire and The Humber, North West and East of England.



Volatility in trends are likely in regions with low positivity. Caution should be taken in interpreting small changes in trends.

ONS Age Positivity in England 17 July – 27 August 2021

Narrative

In the week ending 27 August 2021:

The percentage of people testing positive increased for those aged 70 years and over, although rates remain lowest in this age group.

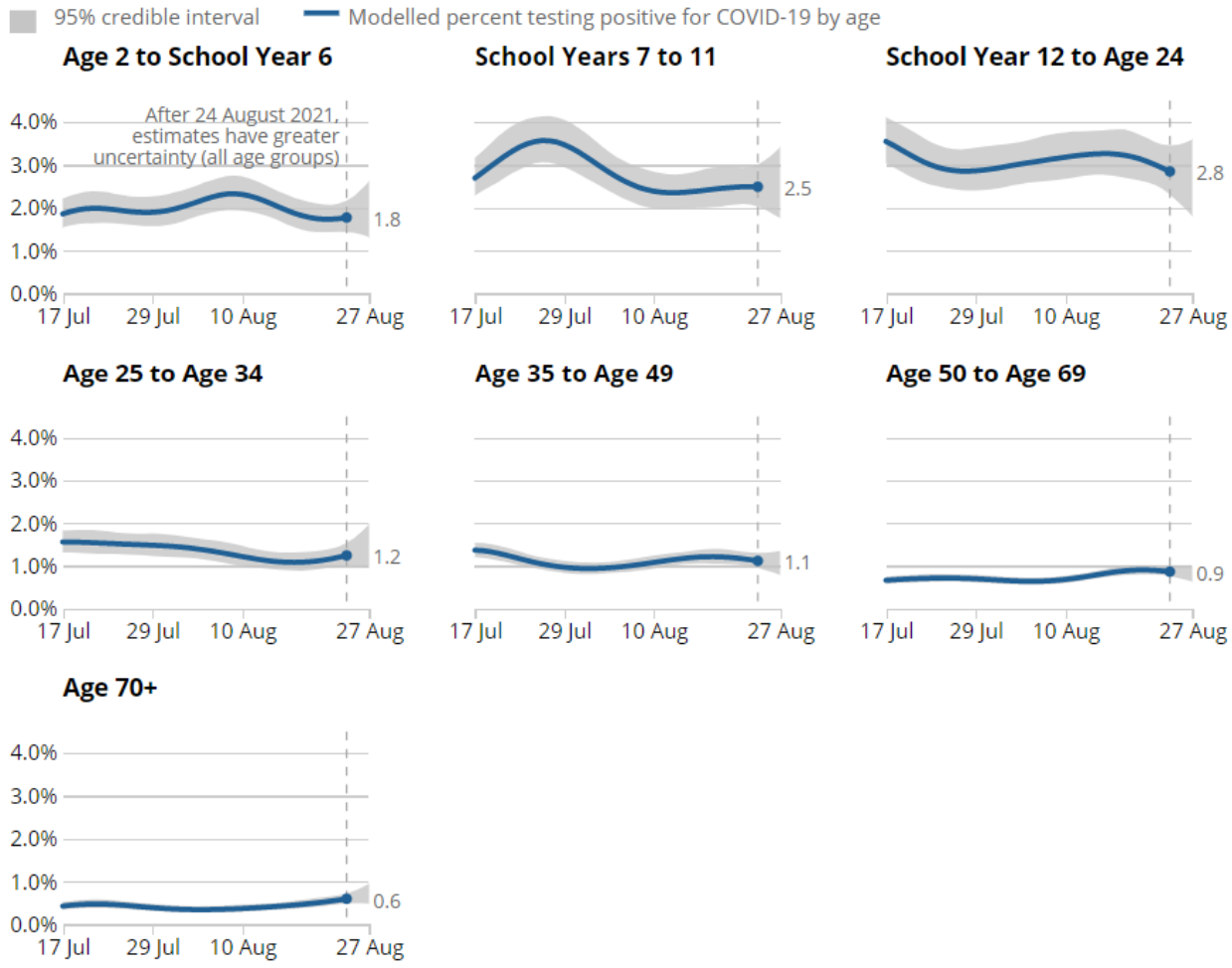
There were early signs of an increase for those aged 25 to 34 years.

The percentage of people testing positive increased for those aged 50 to 69 in the two weeks up to 27 August 2021, but the trend was uncertain in the most recent week.

There were early signs of a decrease in the percentage testing positive for those aged 16/17 (School Year 12) to 24 years.

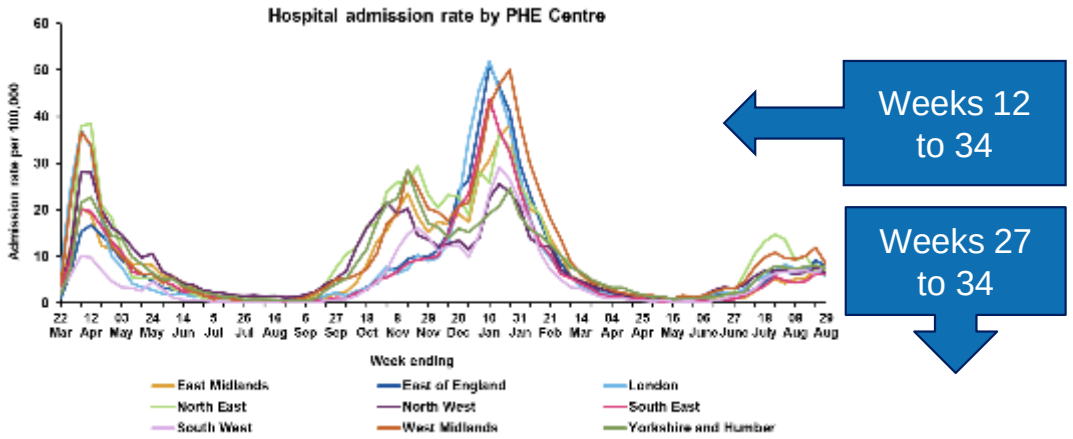
Note: School Year 6 is 10/11 year olds
School Year 7 is 11/12 year olds
School Year 11 is 15/16 year olds
School Year 12 is 16/17 year olds

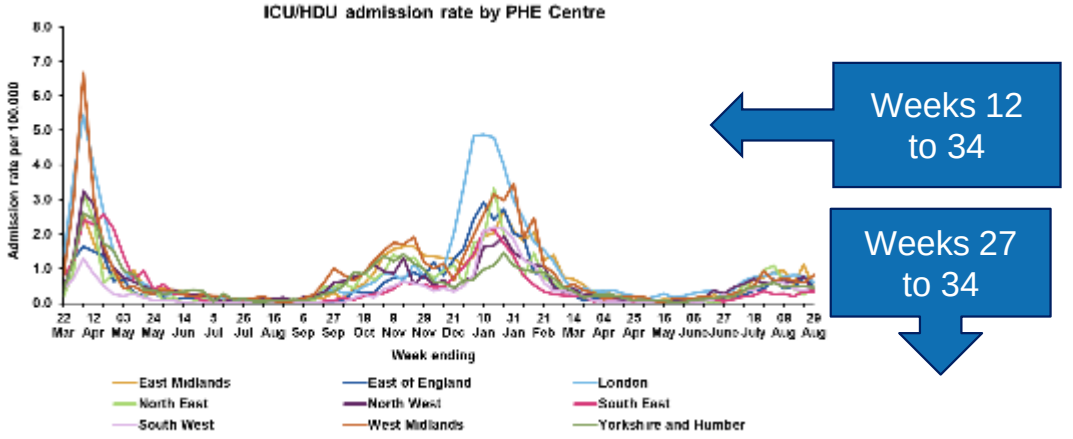
Estimated percentage of the population testing positive for SARS-CoV-2 on nose and throat swabs by age 17 July – 27 August 2021

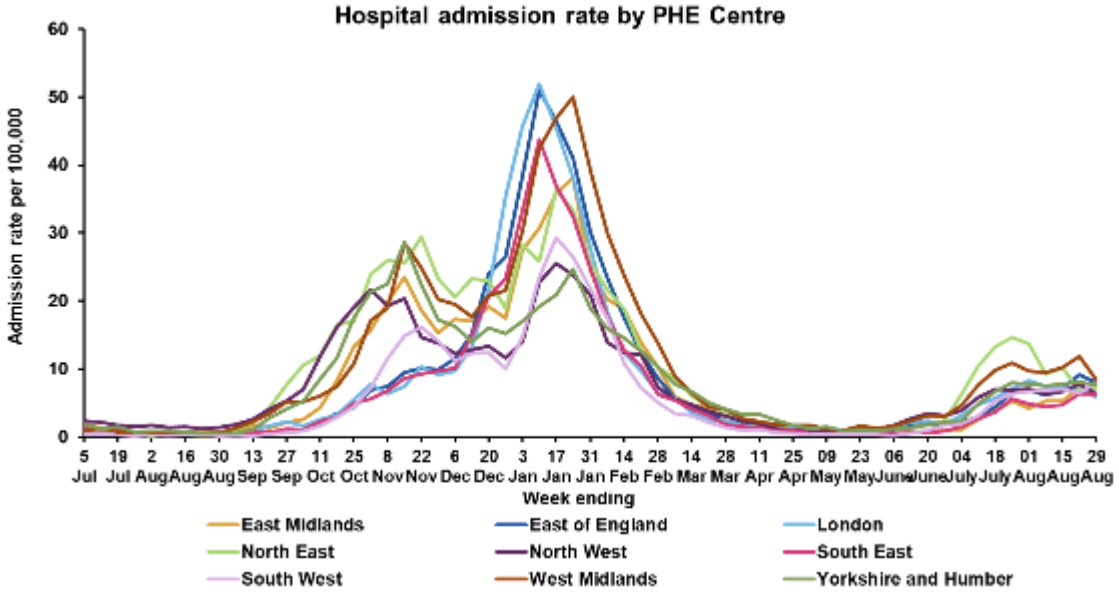


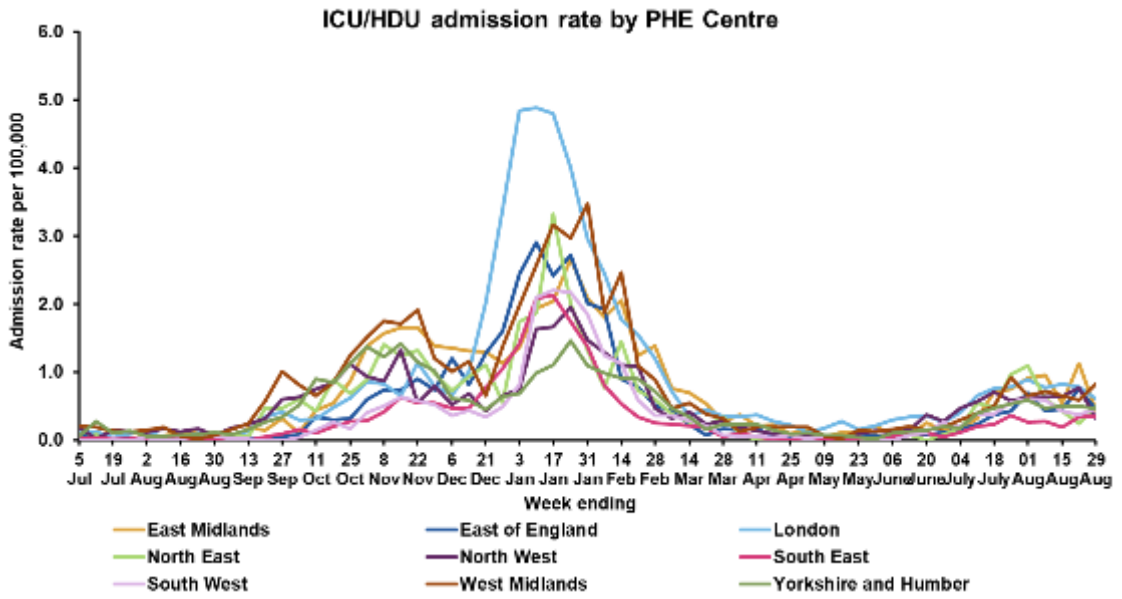
Volatility in trends are likely while in age groups with low positivity. Caution should be taken in interpreting small changes in trends.

Hospitalisations by PHE Centre





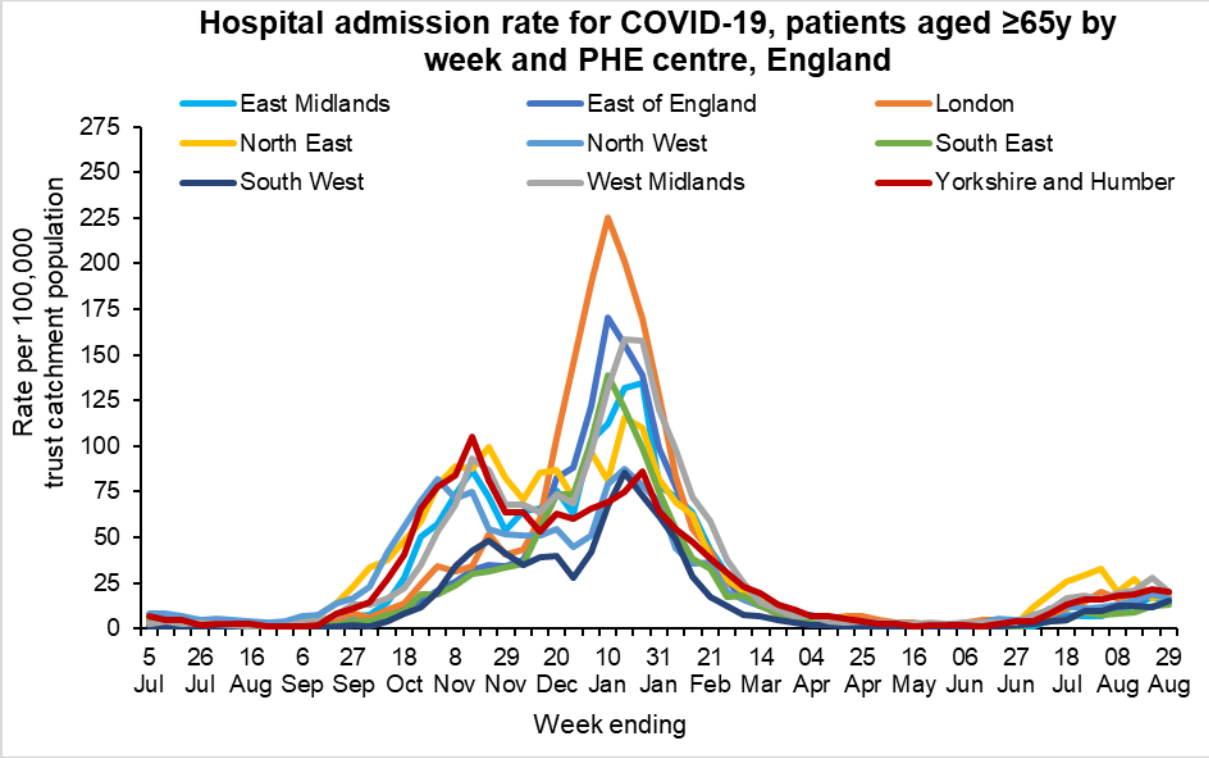


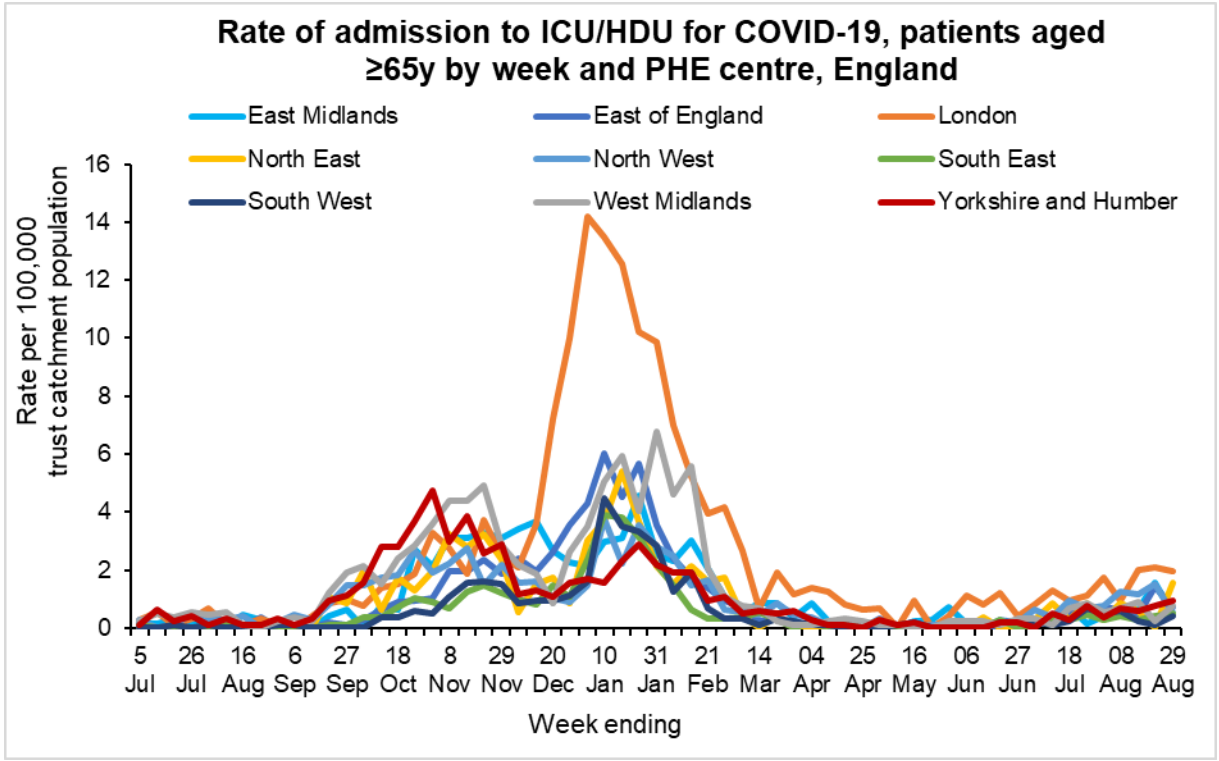


Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions

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

Hospitalisations by PHE Centre, age 65 years and over





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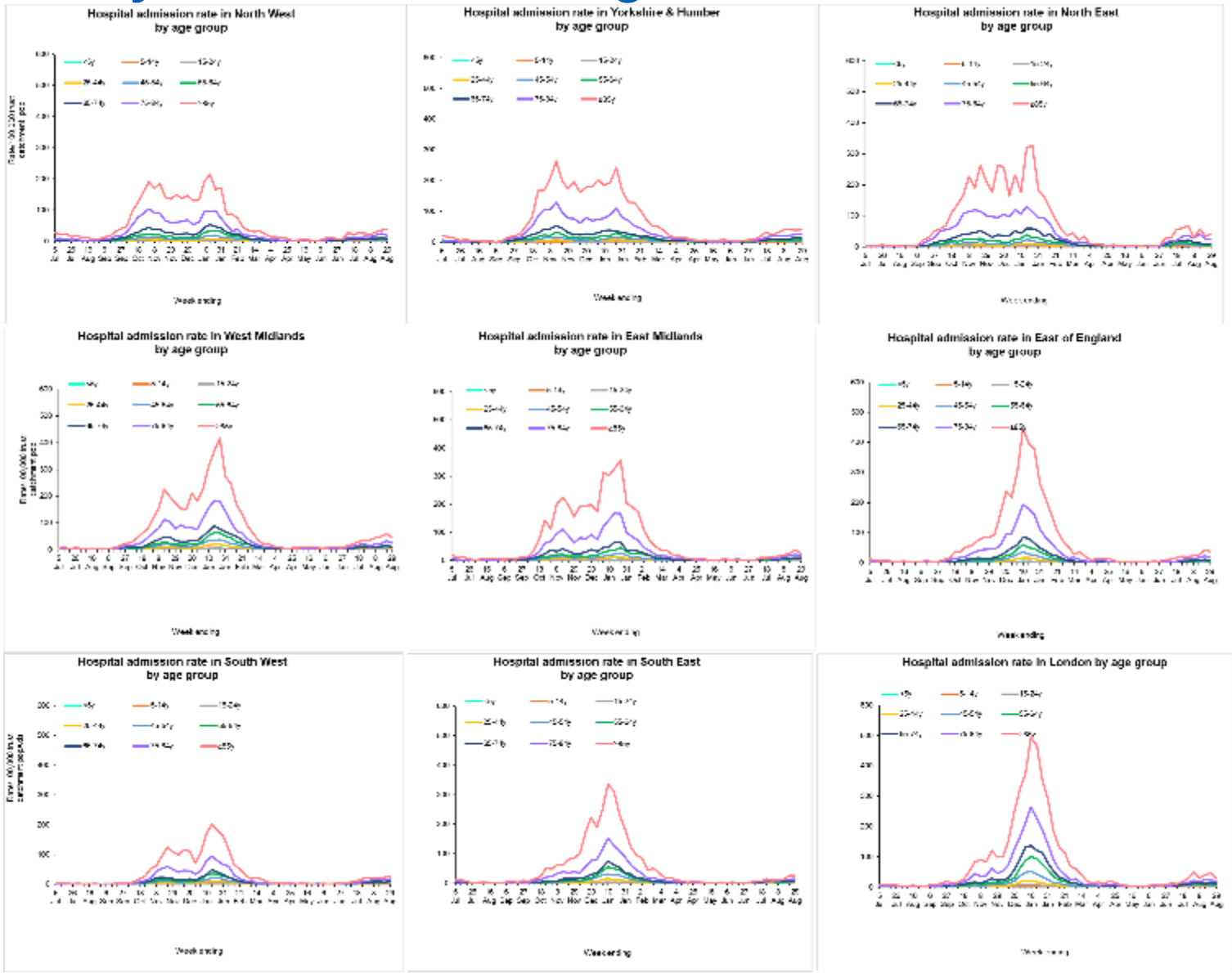
Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

Hospitalisations by PHE Centre and age

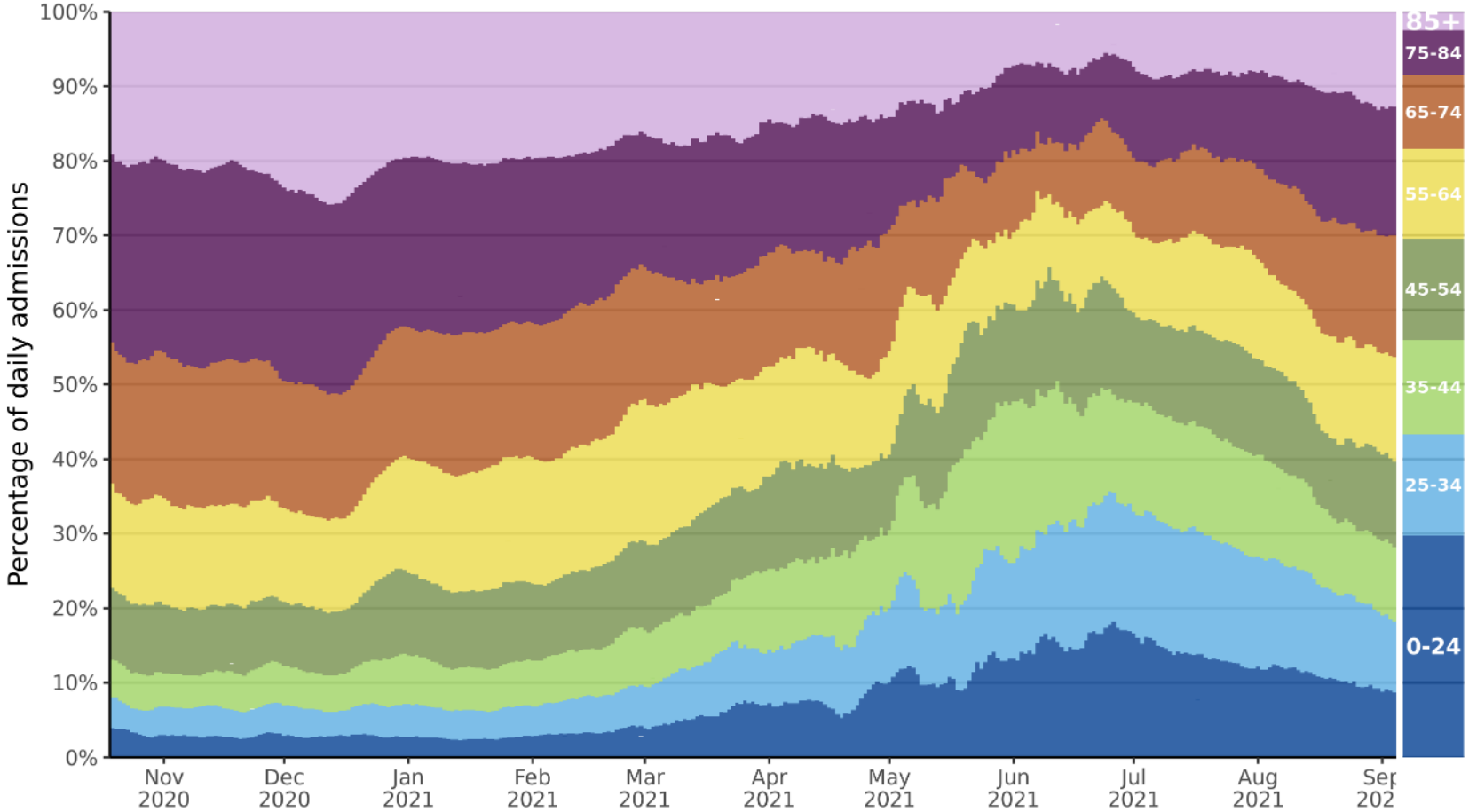


Hospital admissions refers to admissions to all levels of care inclusive of ICU/HDU admissions Source: PHE Severe Acute Respiratory Infection surveillance web tool - SARI-Watch

Admissions - proportional by age band, national

Percentage of daily COVID-19 admissions in England, by age band

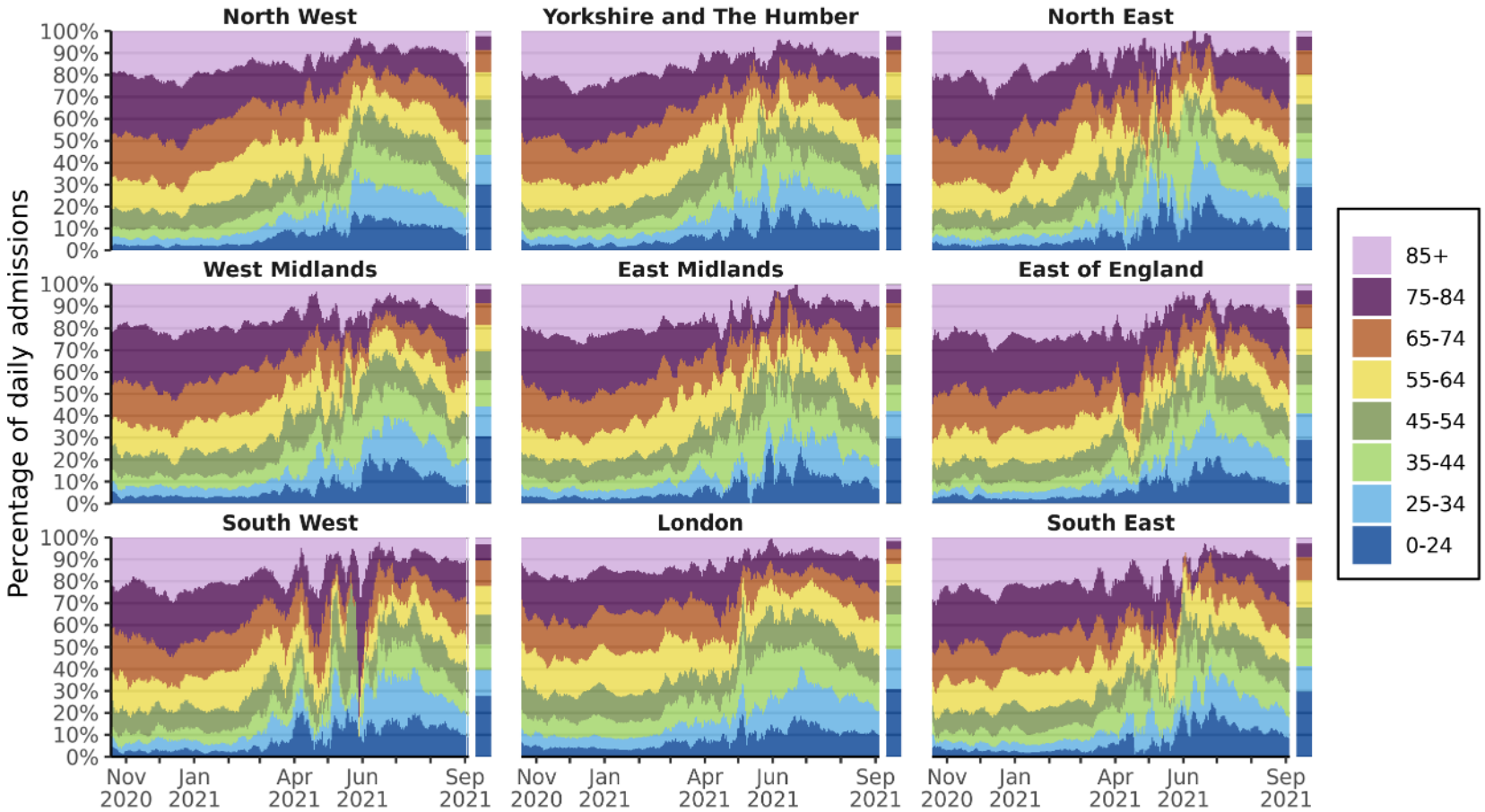
All values are 7-day moving mean averages. Vertical bar shows the percentage of the region's population which falls into each age band.



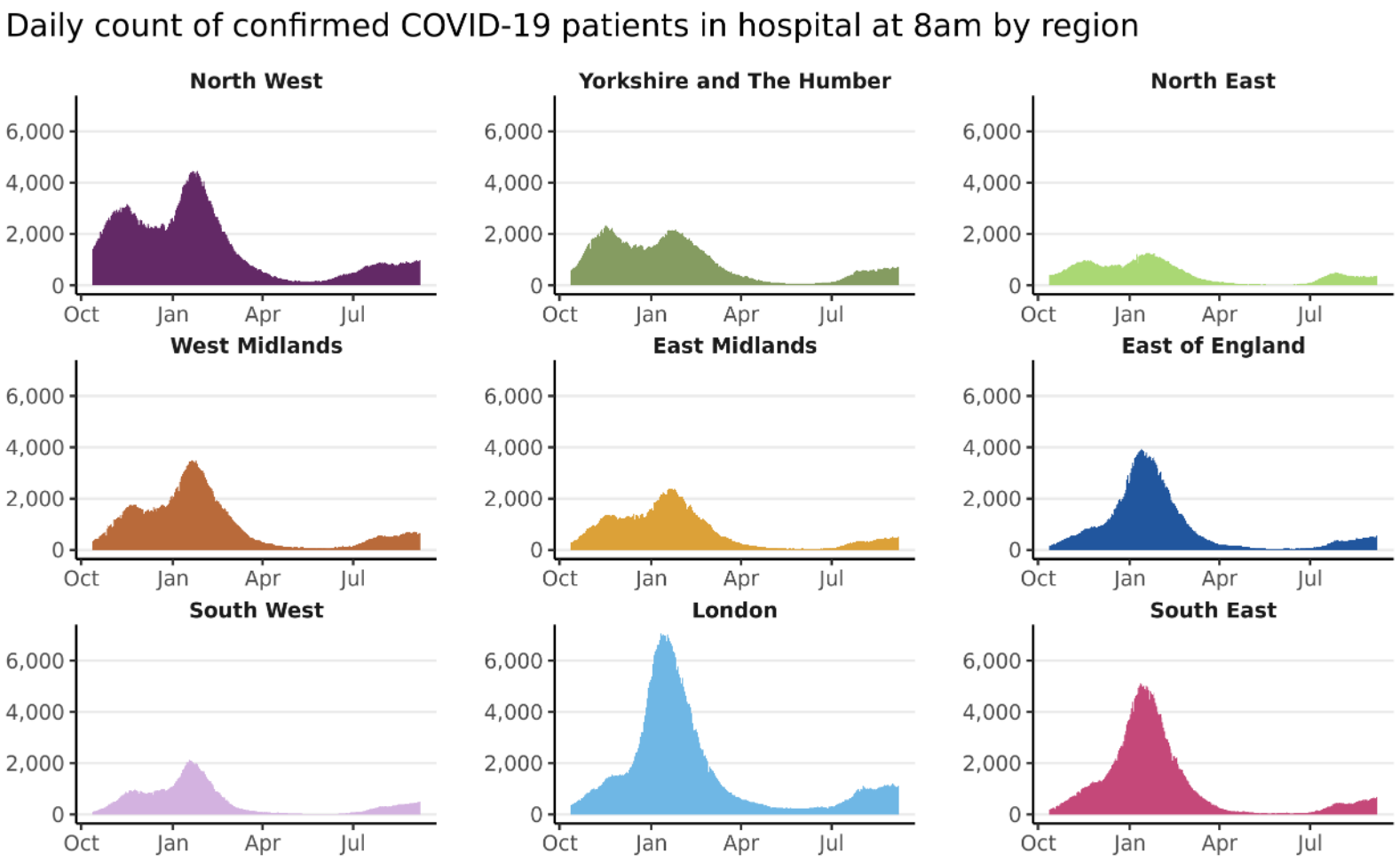
Admissions - proportional by age band, regional

Percentage of daily COVID-19 admissions, by age band

All values are 7-day moving mean averages. Vertical bar shows the percentage of the region's population which falls into each age band.



Patients in hospital by region

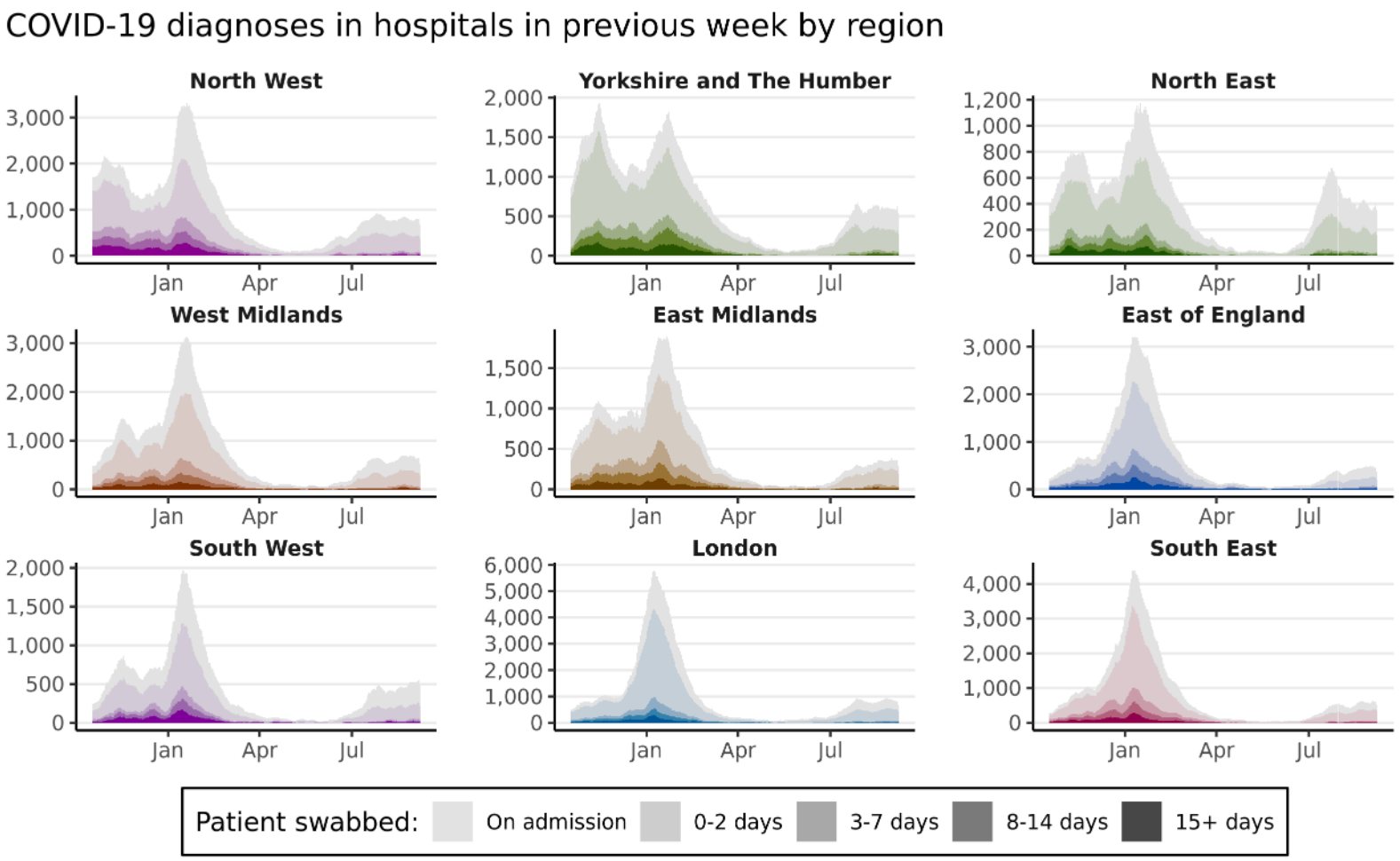


NOTE: Counts are based on bed occupancy, not new admissions.

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 13 October 2020 to 06 September 2021. Produced by Joint Biosecurity Centre.

Last updated 06/09/2021

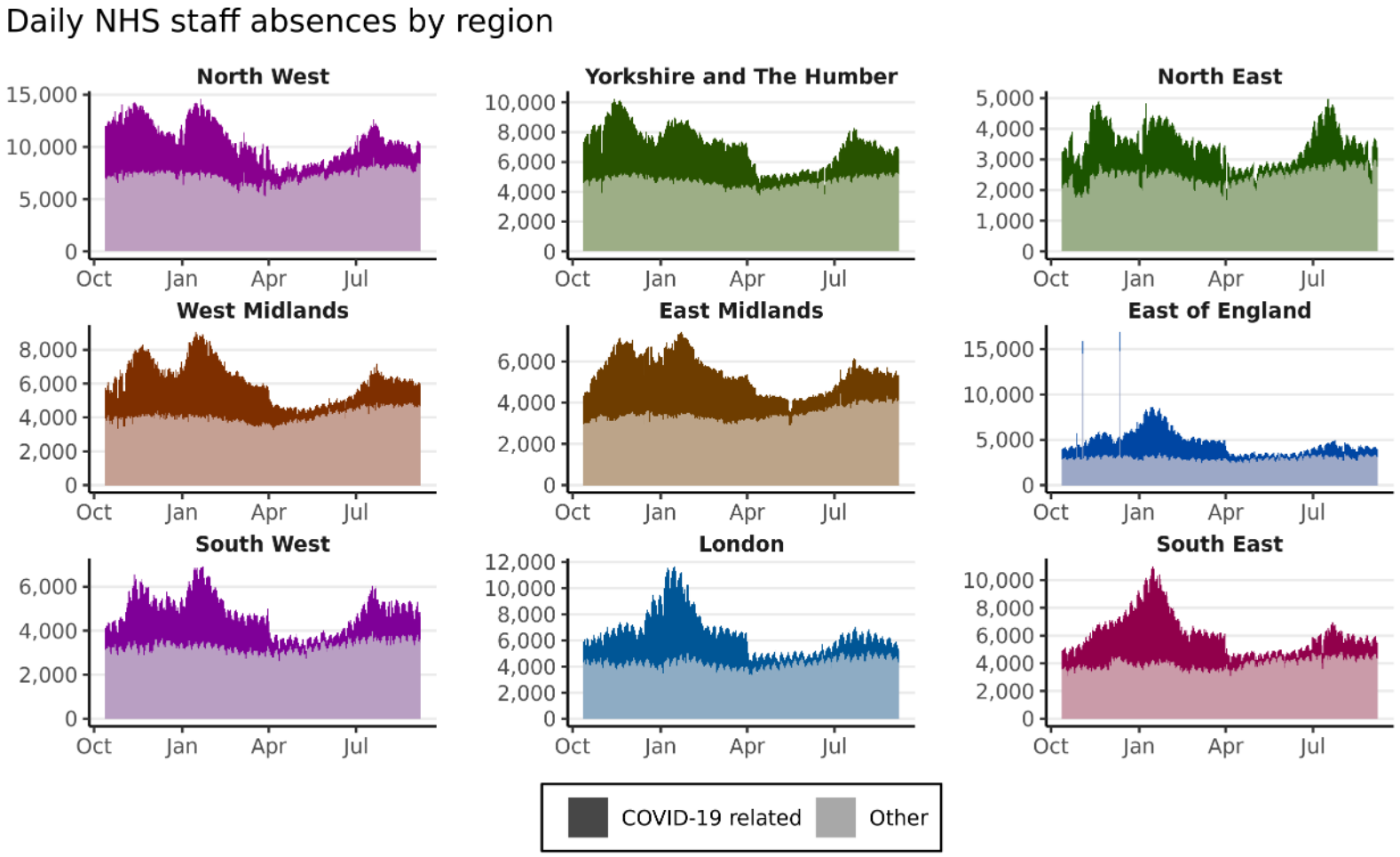
COVID-19 diagnoses in hospitals by region



Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 19 October 2020 to 06 September 2021. Produced by Joint Biosecurity Centre.

Last updated 06/09/2021

NHS staff absences by region (COVID-19 related and other)

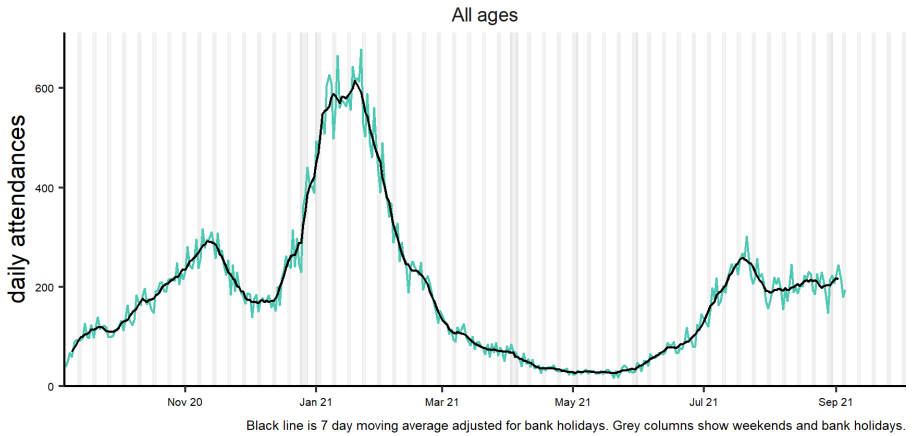


Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 13 October 2020 to 06 September 2021. Produced by Joint Biosecurity Centre.

Emergency Department Syndromic Surveillance System COVID-19-like attendances

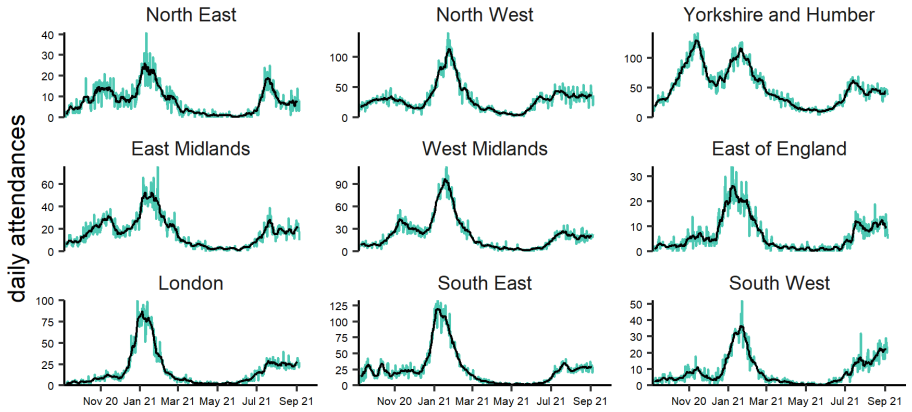
Trends in daily ED COVID-19-like attendances, national, PHE Centre and by age (to 05 September 2021)

Covid-19-like 06/09/2020 - 05/09/2021



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

Covid-19-like by PHE centre 06/09/2020 - 05/09/2021

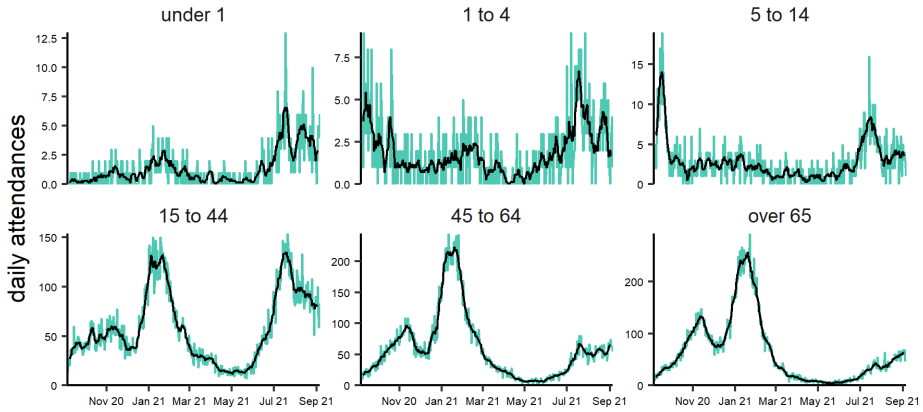


NOTE: SCALES MAY VARY IN EACH GRAPH TO ENABLE TREND COMPARISON. Black line is 7 day moving average adjusted for bank holidays.

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 age group (years) 06/09/2020 - 05/09/2021



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

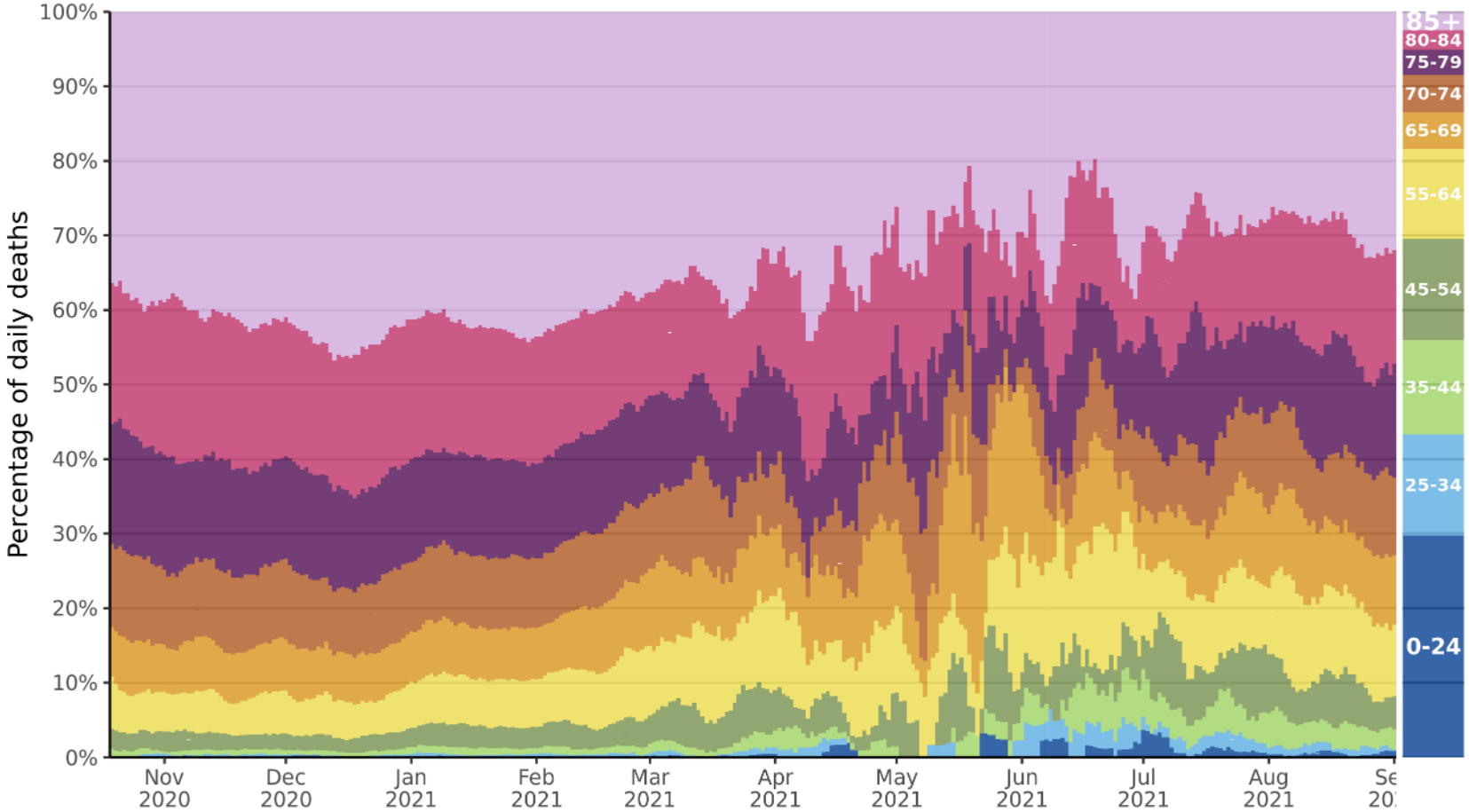
Further information and weekly EDSSS reports containing COVID-19-like attendance surveillance data is available from the PHE EDSSS bulletin.

Last updated 06/09/2021

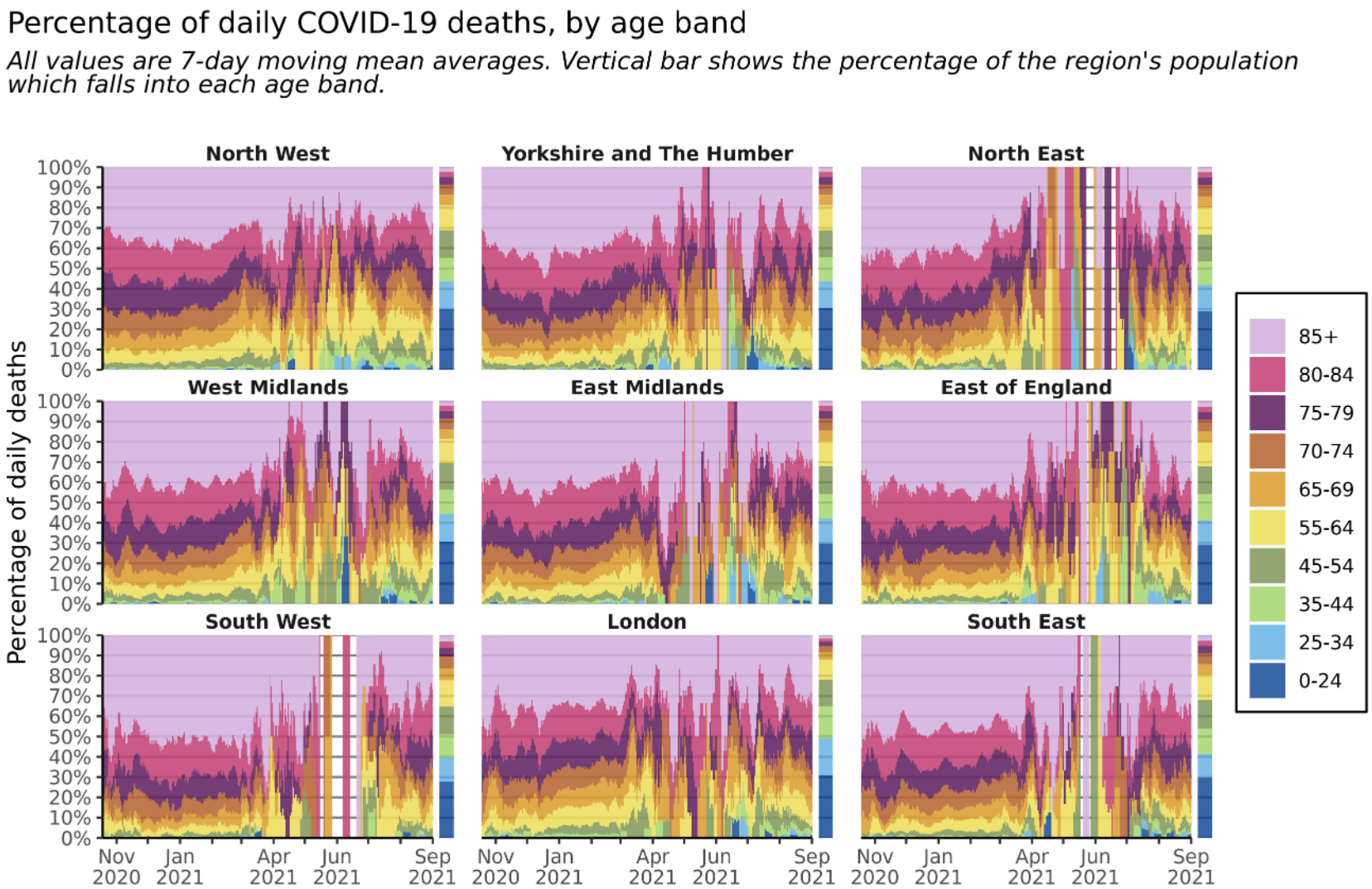
Deaths - proportional by age band, national

Percentage of daily COVID-19 deaths in England, by age band

All values are 7-day moving mean averages. Vertical bar shows the percentage of the region's population which falls into each age band.



Deaths - proportional by age band, regional



NOTE: Data represents daily reported deaths per region. Where there is no age-coded color assigned there were zero daily deaths reported.

Last updated 06/09/2021

Hospital indicators - North West

Hospital indicators: high-level summary by STP/ICS for North West

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
North West	[redacted]	2.7%		[redacted]	10.0%		[redacted]	11.8%	
By STP/ICS									
Cheshire And Merseyside		7.7%			14.5%			39.5%	
Cumbria And North East		–25.0%			10.5%			50.0%	
Greater Manchester Health And Social Care Partnership		–6.5%			3.8%			–5.7%	
Healthier Lancashire And South Cumbria		13.0%			16.0%			0.0%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Last updated 06/09/2021

Hospital indicators - Yorkshire and The Humber

Hospital indicators: high-level summary by STP/ICS for Yorkshire and The Humber

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
Yorkshire and The Humber		1.2%			3.9%			0.0%	
By STP/ICS									
Humber, Coast And Vale		20.0%			−2.2%			18.2%	
South Yorkshire And Bassetlaw		6.7%			13.1%			8.0%	
West Yorkshire And Harrogate (Health & Care Partnership)		−4.4%			0.0%			−9.3%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Last updated 06/09/2021

Hospital indicators - North East

Hospital indicators: high-level summary by STP/ICS for North East

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
North East	[redacted]	3.7%		[redacted]	2.4%		[redacted]	8.3%	
By STP/ICS									
Cumbria And North East		3.7%			2.4%			8.3%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Last updated 06/09/2021

Hospital indicators - West Midlands

Hospital indicators: high-level summary by STP/ICS for West Midlands

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
West Midlands	[redacted]	−7.2%		[redacted]	−5.1%		[redacted]	−12.7%	
By STP/ICS									
Birmingham And Solihull		0.0%			−10.7%			−10.5%	
Coventry And Warwickshire		−15.4%			−8.5%			−33.3%	
Herefordshire And Worcestershire		−37.5%			−11.1%			150.0%	
Shropshire And Telford And Wrekin		16.7%			22.2%			−20.0%	
Staffordshire And Stoke On Trent		−40.0%			−18.1%			−33.3%	
The Black Country And West Birmingham		11.1%			5.4%			−3.1%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

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Last updated 06/09/2021

Hospital indicators - East Midlands

Hospital indicators: high-level summary by STP/ICS for East Midlands

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
East Midlands		0.0%			7.6%			−4.4%	
By STP/ICS									
Joined Up Care Derbyshire		−8.3%			23.0%			10.0%	
Leicester, Leicestershire And Rutland		−7.1%			−7.7%			25.0%	
Lincolnshire		80.0%			37.1%			0.0%	
Northamptonshire		0.0%			5.9%			−25.0%	
Nottingham And Nottinghamshire Health And Care		0.0%			8.2%			−28.6%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Hospital indicators - East of England

Hospital indicators: high-level summary by STP/ICS for East of England

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
East of England		−1.5%			5.1%			16.9%	
By STP/ICS									
Bedfordshire, Luton And Milton Keynes		−7.1%			−9.6%			−20.0%	
Cambridgeshire And Peterborough		−23.1%			−3.1%			7.1%	
Hertfordshire And West Essex		−16.7%			5.3%			38.5%	
Mid And South Essex		9.1%			11.0%			25.0%	
Norfolk And Waveney Health & Care Partnership		30.0%			23.2%			125.0%	
Suffolk And North East Essex		0.0%			18.0%			0.0%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

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Hospital indicators - South West

Hospital indicators: high-level summary by STP/ICS for South West

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
South West		5.3%			7.7%			-9.1%	
By STP/ICS									
Bath And North East Somerset, Swindon And Wiltshire		27.3%			14.1%			-15.4%	
Bristol, North Somerset And South Gloucestershire		20.0%			-3.0%			-35.3%	
Cornwall And The Isles Of Scilly Health & Social Care Partnership		14.3%			62.5%			-50.0%	
Devon		-22.7%			0.0%			13.3%	
Dorset		16.7%			25.7%			16.7%	
Gloucestershire		-12.5%			-20.7%			100.0%	
Somerset		16.7%			20.0%			33.3%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Last updated 06/09/2021

Hospital indicators - London

Hospital indicators: high-level summary by STP/ICS for London

	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
London	[redacted]	−9.4%		[redacted]	−3.1%		[redacted]	10.6%	
By STP/ICS									
East London Health & Care Partnership		12.5%			−1.2%			10.2%	
North London Partners In Health & Care		−25.0%			−9.7%			14.0%	
North West London Health & Care Partnership		−5.9%			9.8%			5.6%	
Our Healthier South East London		−12.0%			5.8%			12.7%	
South West London Health & Care Partnership		−19.0%			−26.0%			6.2%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

Last updated 06/09/2021

Hospital indicators - South East

Hospital indicators: high-level summary by STP/ICS for South East

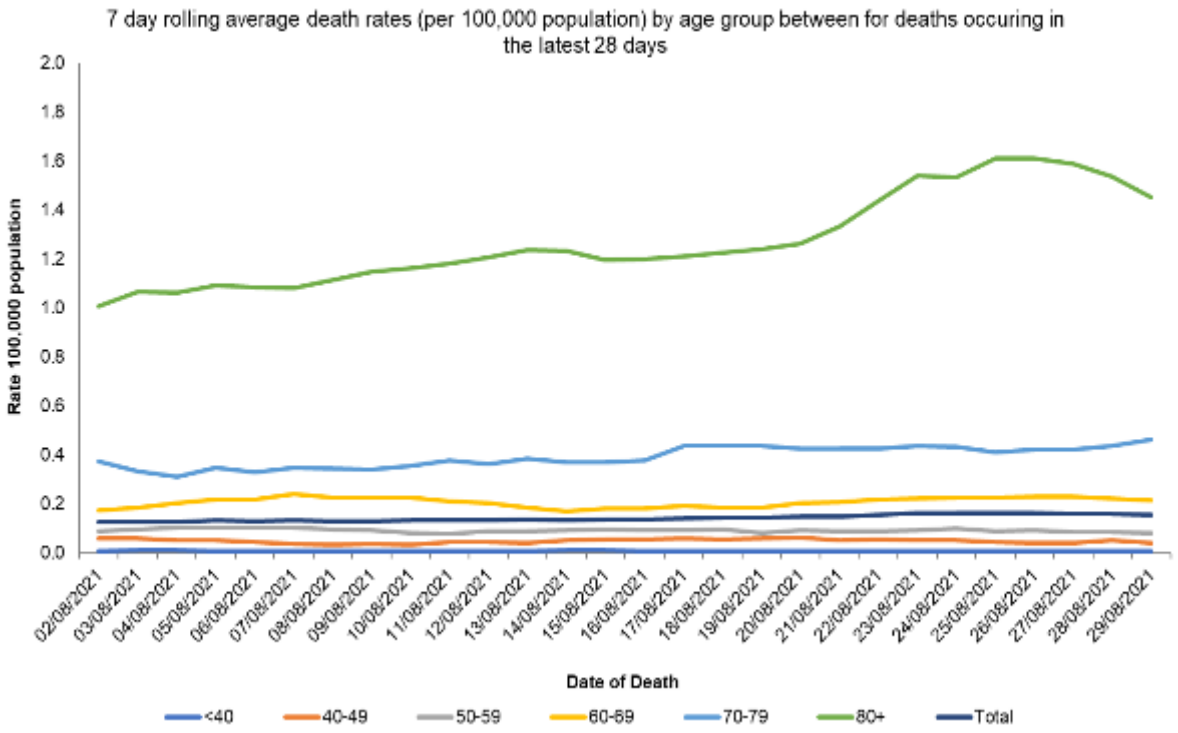
	New COVID-19 patients admitted to hospital			Number of COVID-19 patients in hospital			Mechanical ventilation beds occupied by COVID-19 patients		
	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend	04 Sep 2021	7-day change	21-day trend
Total									
South East	[redacted]	7.4%		[redacted]	22.3%		[redacted]	20.8%	
By STP/ICS									
Buckinghamshire, Oxfordshire And Berkshire West		27.3%			19.8%			−7.1%	
Frimley Health & Care Ics		12.5%			22.6%			12.5%	
Hampshire And The Isle Of Wight		3.8%			21.9%			26.3%	
Kent And Medway		38.5%			77.5%			75.0%	
Surrey Heartlands Health & Care Partnership		−25.0%			7.0%			25.0%	
Sussex Health And Care Partnership		−6.7%			−3.8%			15.8%	

Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 08 August 2021 to 04 September 2021. Values in parentheses are change from the previous day. All values are 7-day averages, i.e. mean averages of daily values from the 7 days up to and including the date in the column heading; totals are presented as integers, which may lead to small discrepancies due to rounding. The '7-day change' columns reflect the difference in 7-day average values compared to the value one week prior. Scale within each 'trend' column is consistent across all STP/ICSs, except for the total row, which is scaled independently. Produced by Joint Biosecurity Centre.

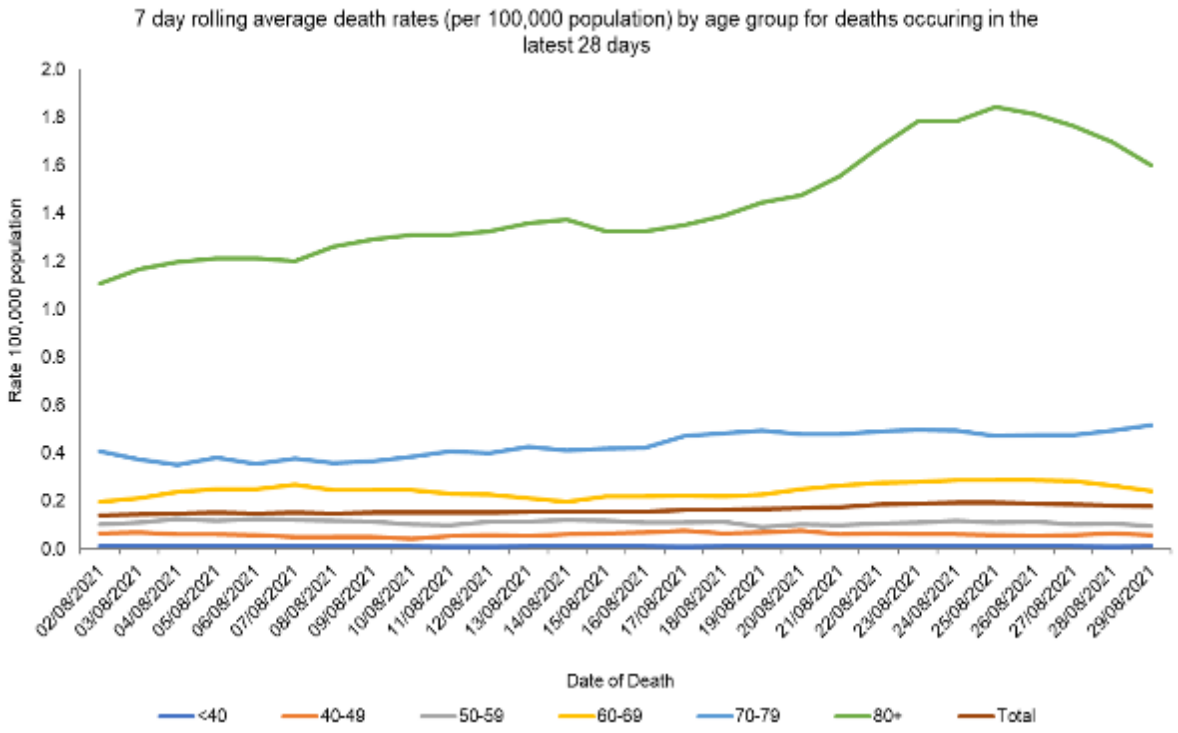
NOTE: All values are 7-day averages rounded up to the nearest whole number. As a result of rounding, there may be a small discrepancy between the STP/ICS sum and the total region value. Relative changes on small numbers can result in a large percentage change.

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

Deaths within 28 days of a positive specimen



Deaths within 60 days of a positive specimen or on death certificate

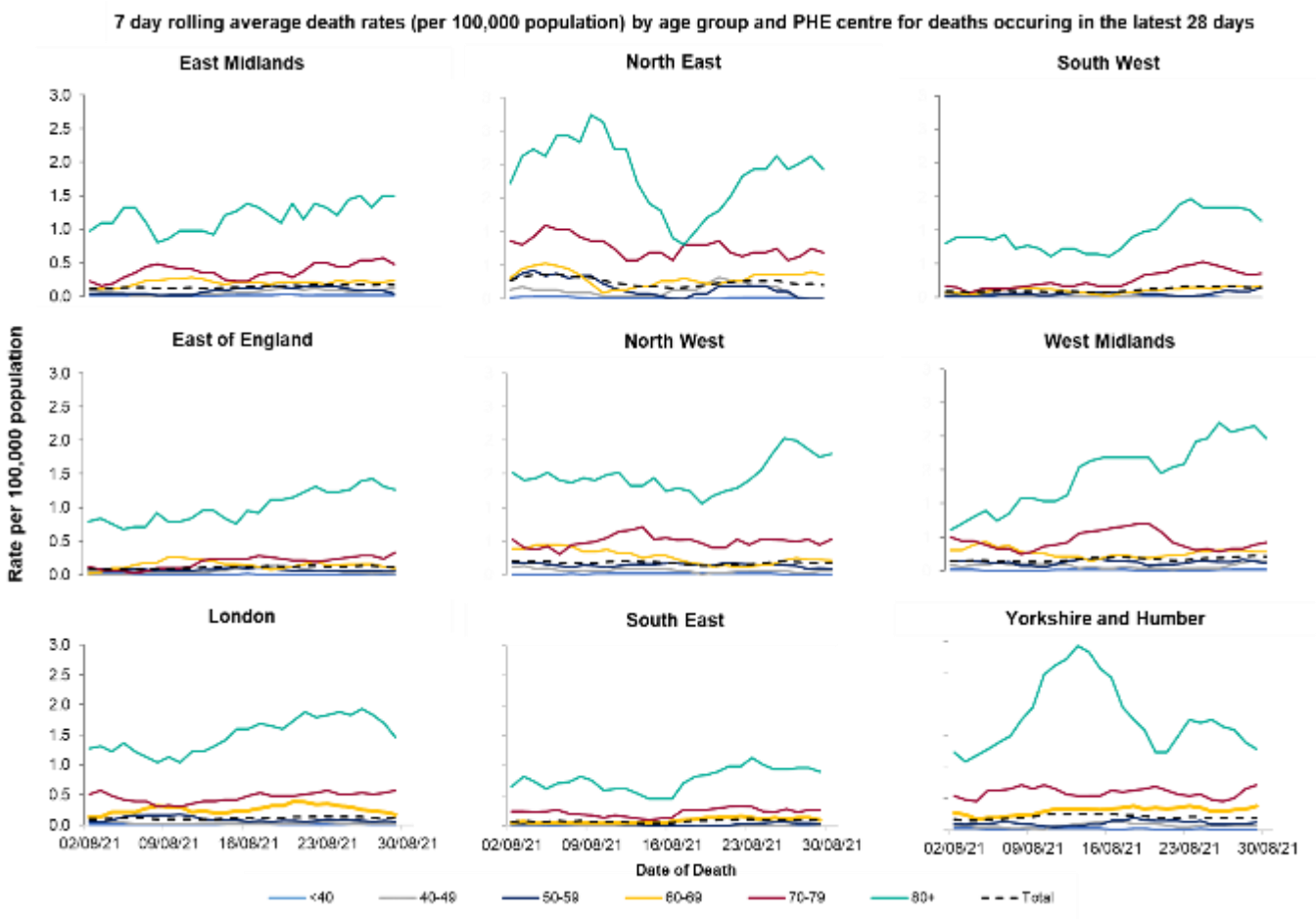


*These data contains a 4 day delay from the day it was produced to allow time for reporting delay

Prepared by PHE Epidemiology Cell

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

for deaths within 28 days of first positive specimen



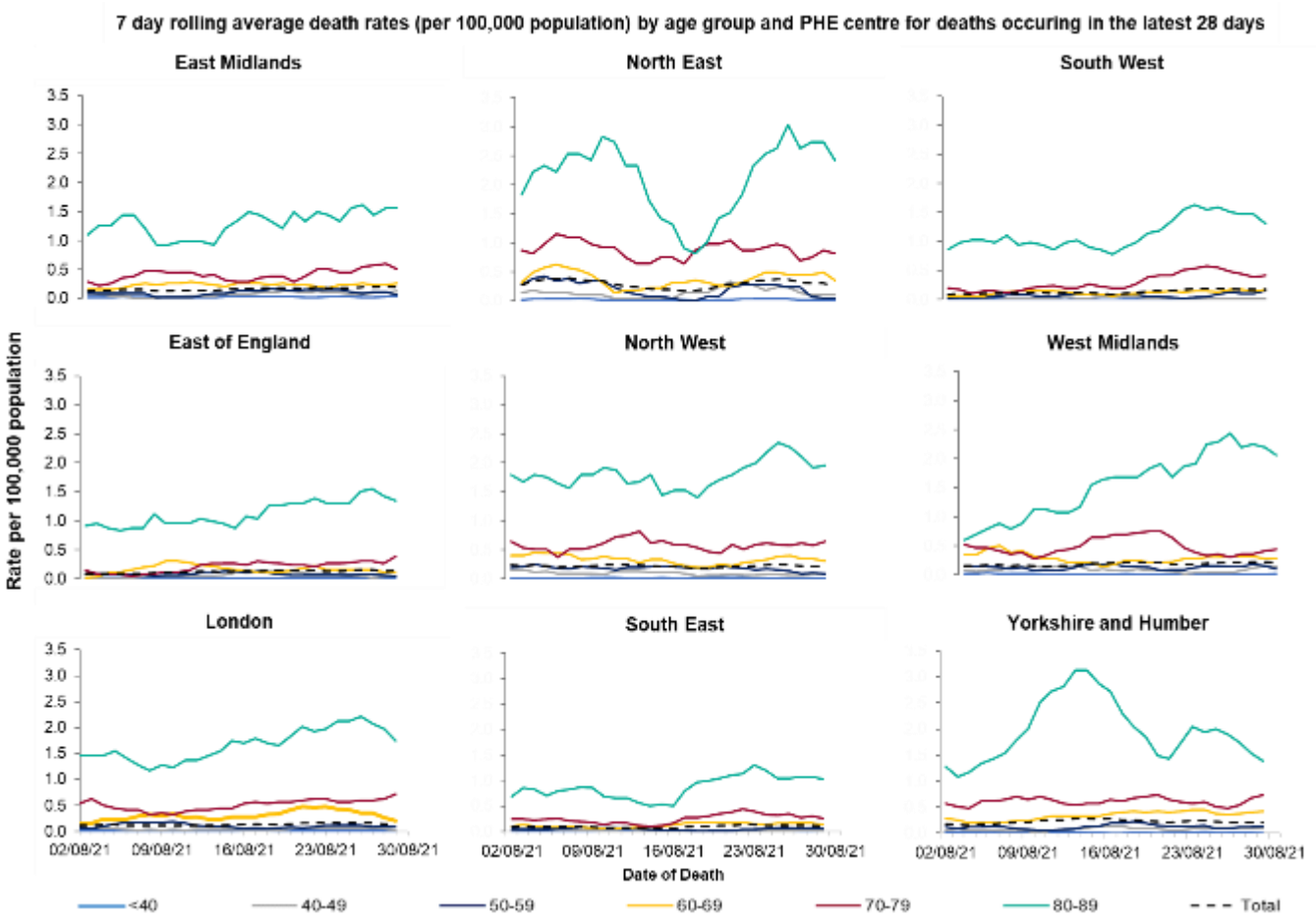
*These data contains a 4 day delay from the day it was produced to allow time for reporting delay

Death definition: a death within 28 days of a positive specimen

Prepared by PHE Epidemiology Cell

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

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

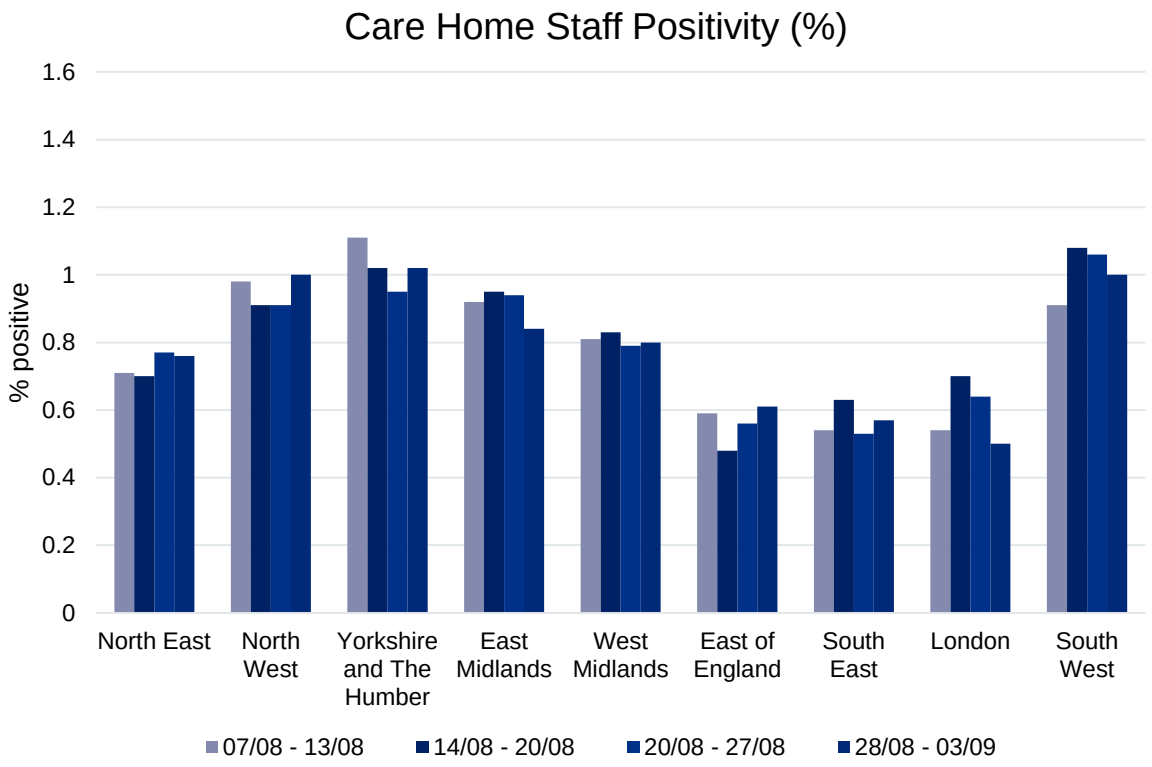


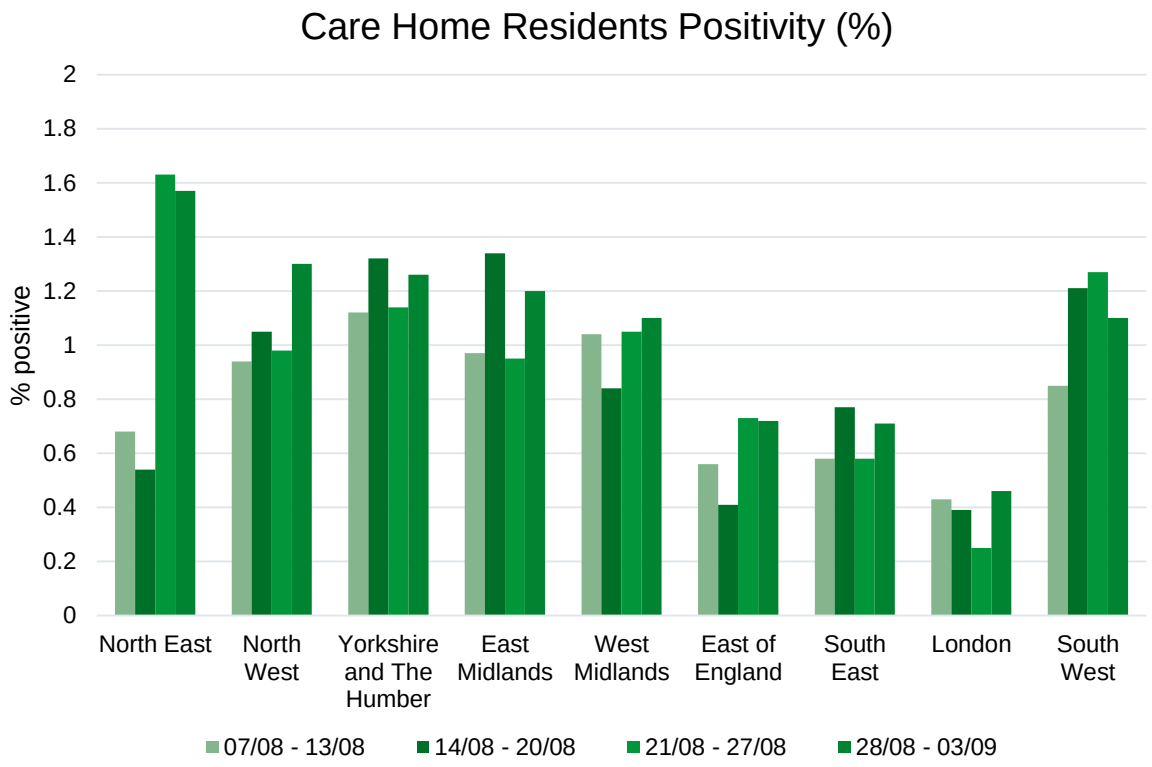
*These data contains a 4 day delay from the day it was produced to allow time for reporting delay

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

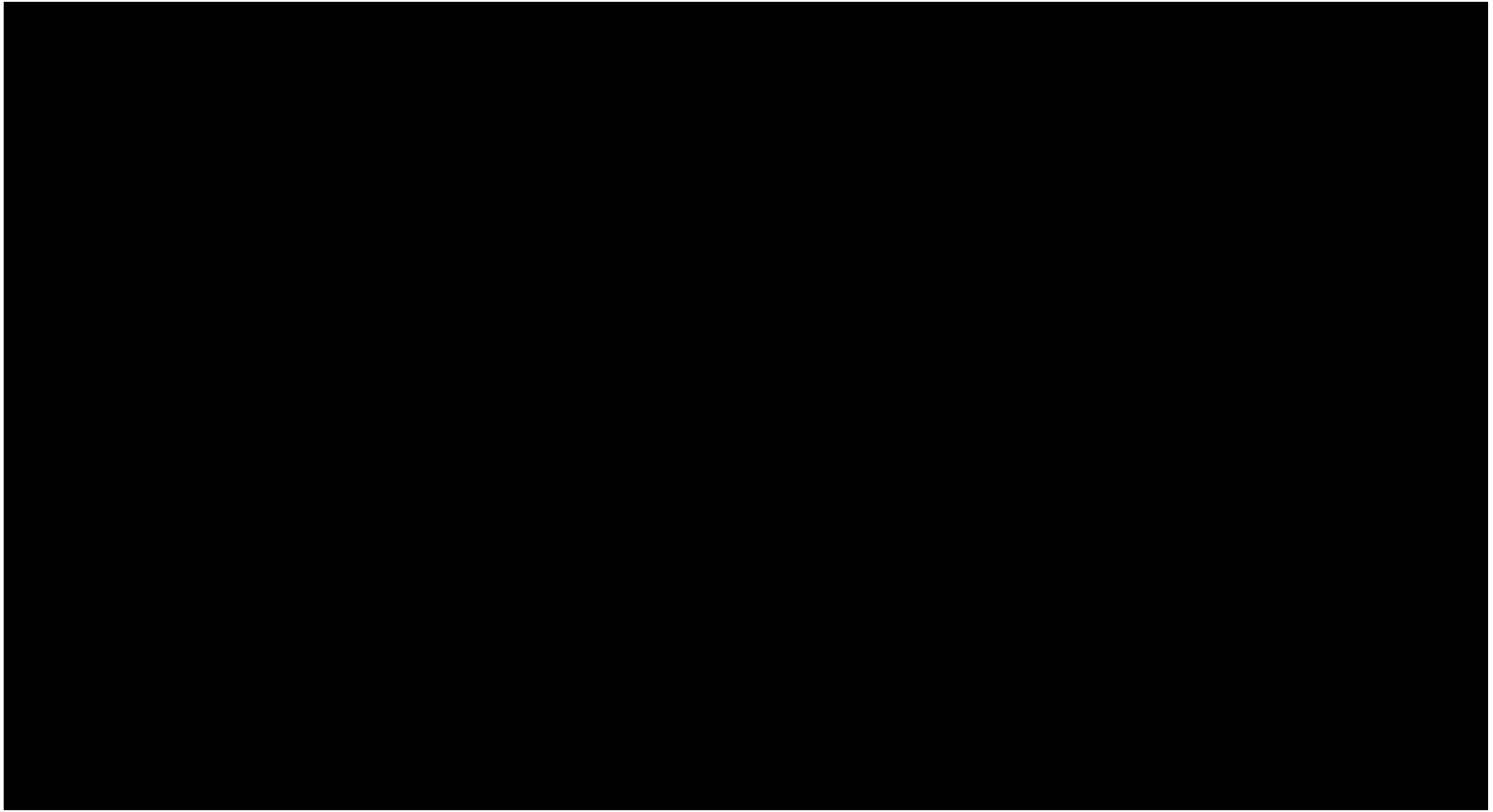
Prepared by PHE Epidemiology Cell

Care home resident and staff test positivity



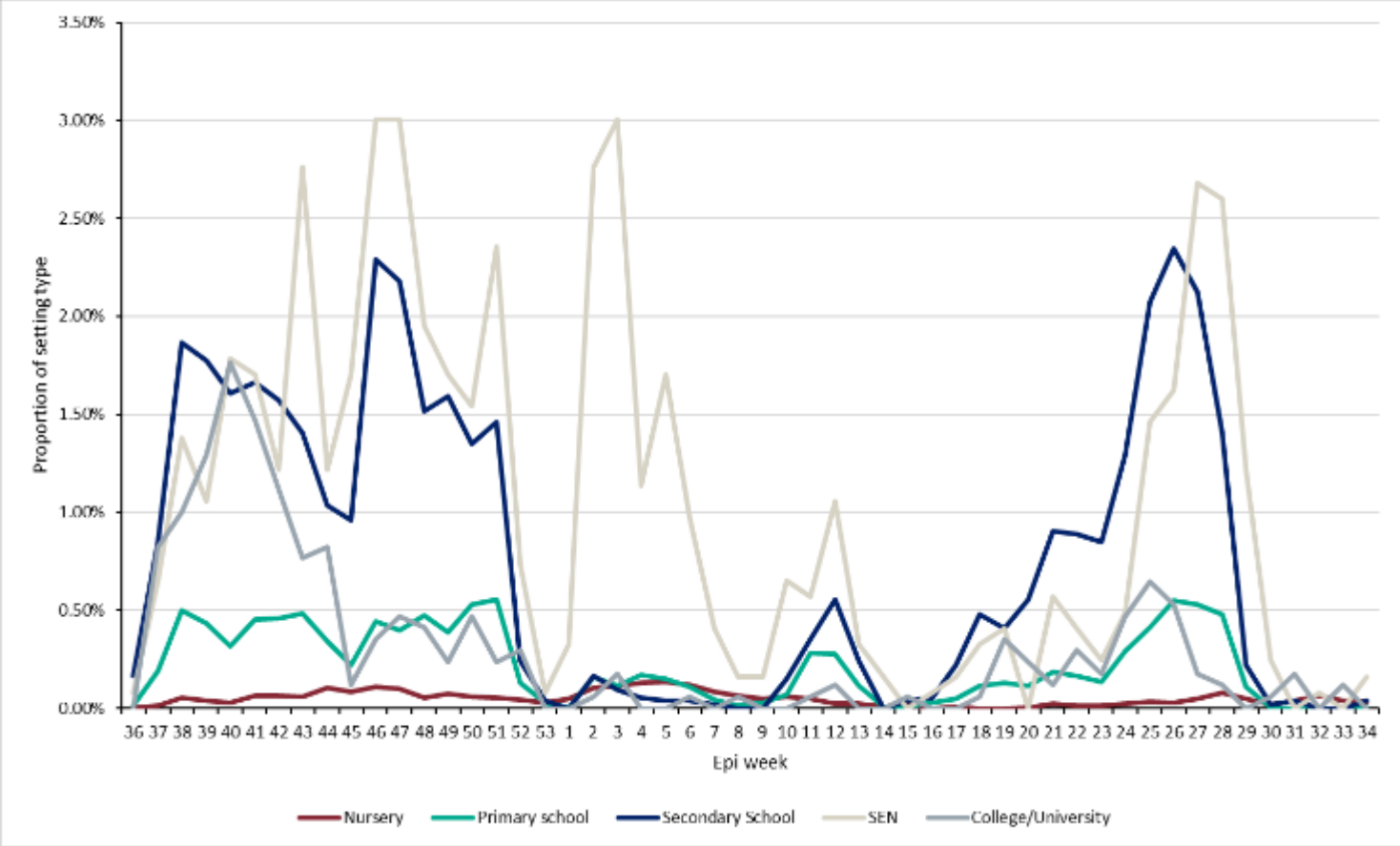


Source: Foundry DHSC ASC Covid-19 Dashboard Extracted 06/09/2021 14:09
Data presented by test date with a 3-day time lag applied to the most recent data.
Data from PCR tests conducted through the Whole Care Home Testing Programme. Care home residents are PCR-tested once every month and staff once every week under pillar 2. Only when a positive PCR result comes back do they test the whole care home under pillar 1.
Care home staff are identified as those where the patient has explicitly listed their occupation as one of: Care worker or home carer; Residential, day or domiciliary care manager or proprietor; or Senior care worker.
No deduplication has been applied. Staff undergo mid-week LFD testing in-between PCR tests and further enhanced tested may be carried out following identification of a positive case in a care home.



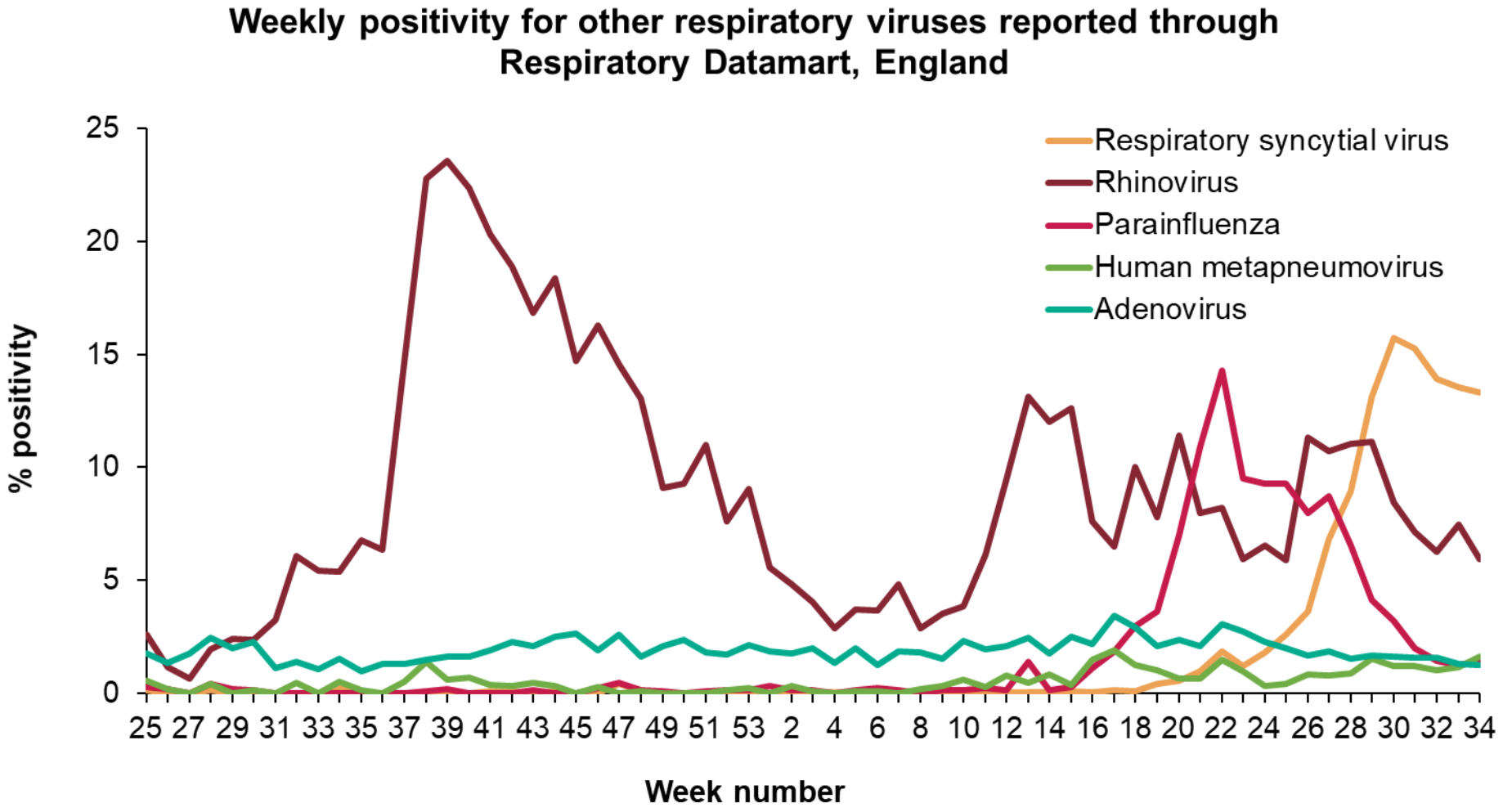
Proportion of educational settings reporting a confirmed COVID-19 cluster or outbreak to PHE in the 2020/21 academic year

Number of educational settings reporting a COVID-19 cluster or outbreak/s to PHE and entered on HPZone as a proportion of all educational settings (by type). From week 30 2021 schools were closed for the summer break.
Period of reporting: 2020/21 academic year, starting from week 36 2020 up until week 34 2021.

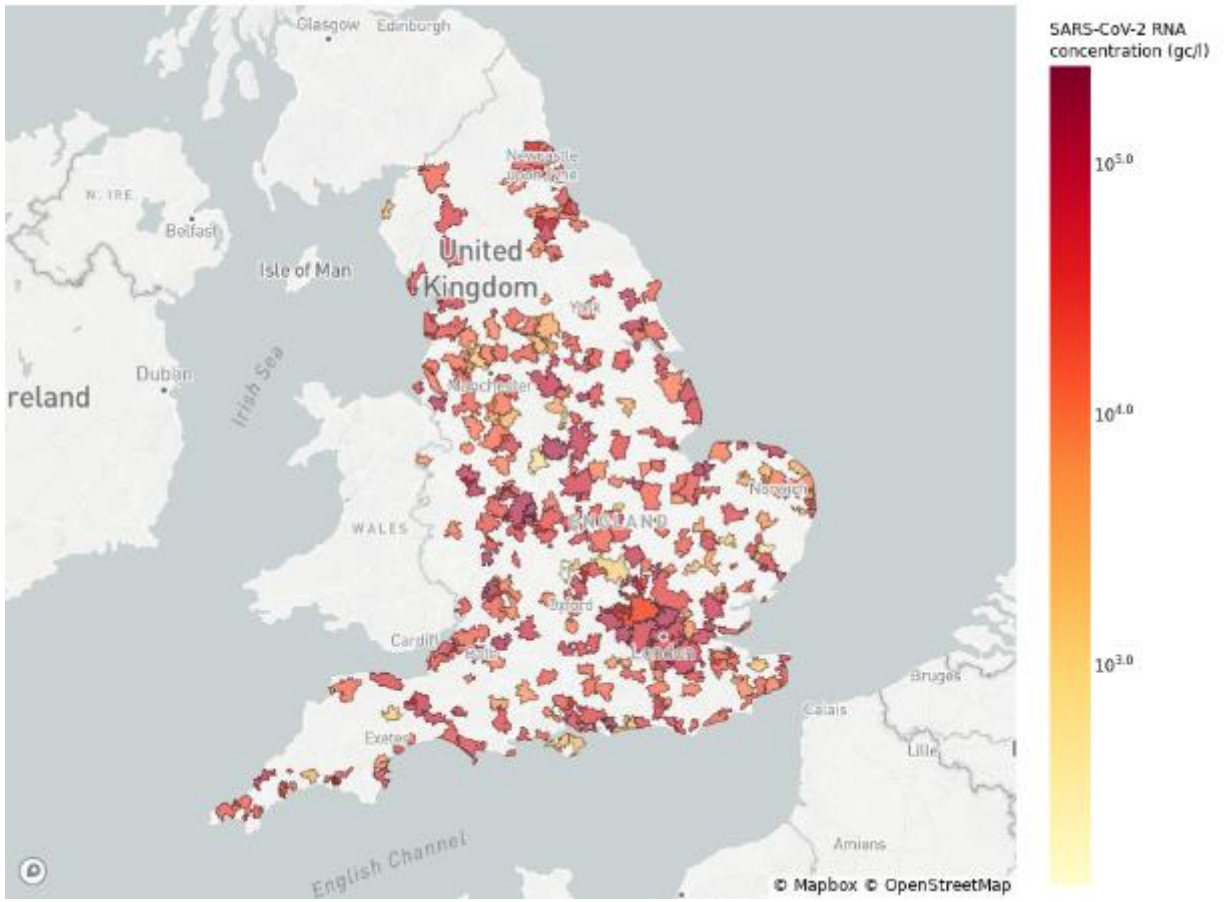


Weekly positivity for other respiratory viruses

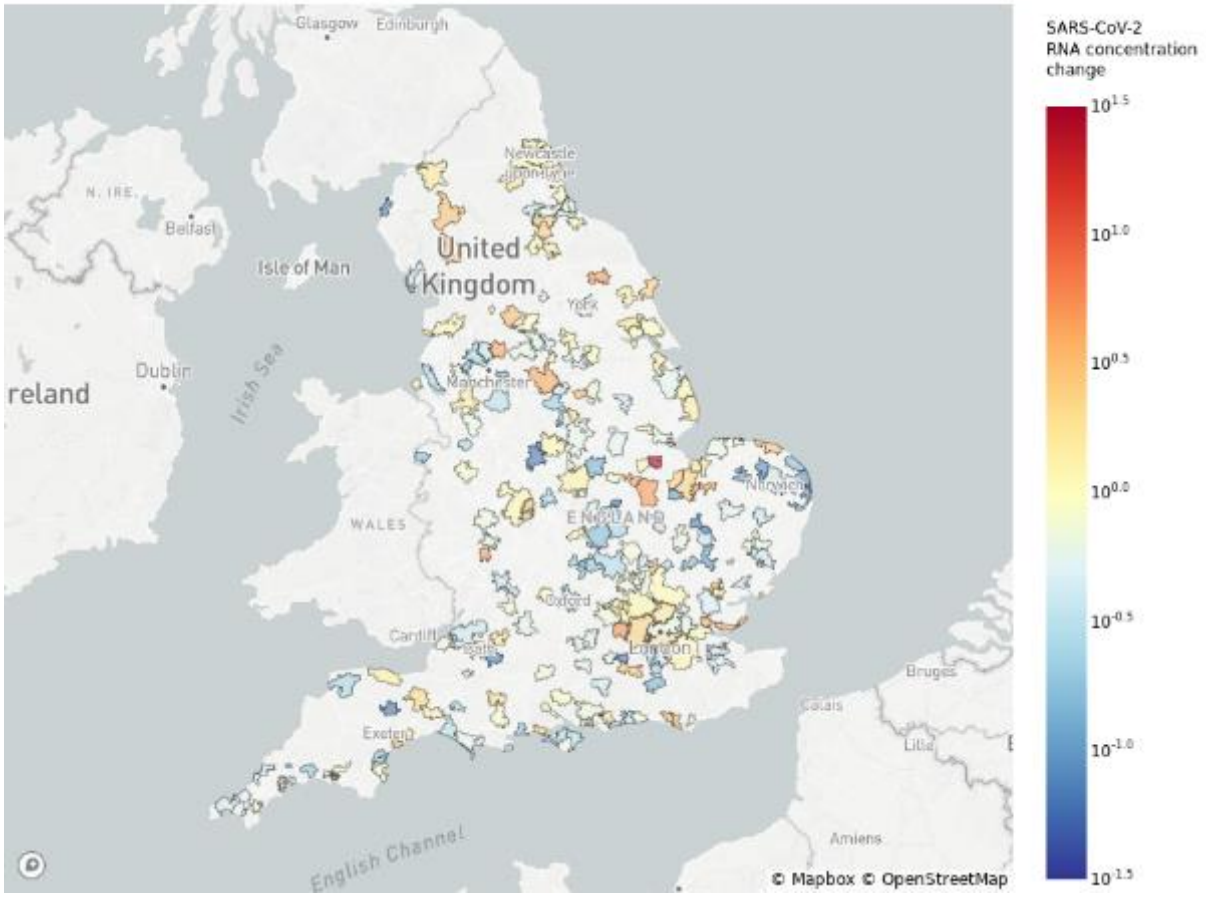
Week 33 – 15 June 2020 to 23 August 2021



EMHP Wastewater - National Summary



7-day average concentration of SARS-CoV-2 RNA in wastewater at treatment works in England. Data from 21st to 27th August 2021.



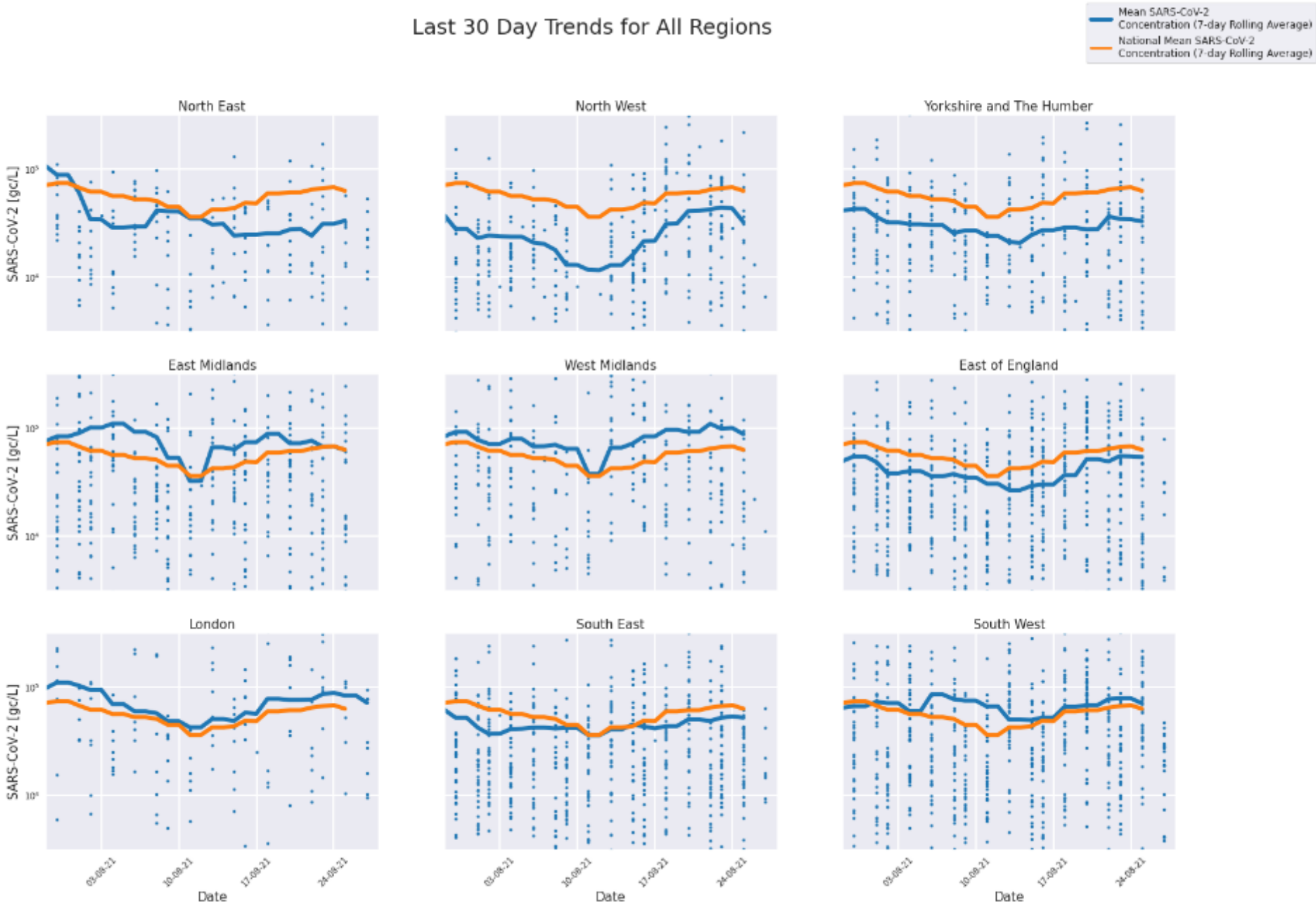
Change in weekly average concentration of SARS-CoV-2 RNA in wastewater at treatment works in England. Grey shading indicates where there was insufficient data to measure change.

NHS Test and Trace

Regional vs. national comparison of SARS-CoV-2 RNA concentration (gene copies/litre) in wastewater. Points show concentrations at individual sampling sites in the region, trendlines show 7-day rolling averages. 30 days up to and including 27/08/2021 is shown.

National mean concentration line is only plotted to the last day which all regional means concentrations are plotted. This ensures the national mean remains representative but can, in cases, cause it to stop early.

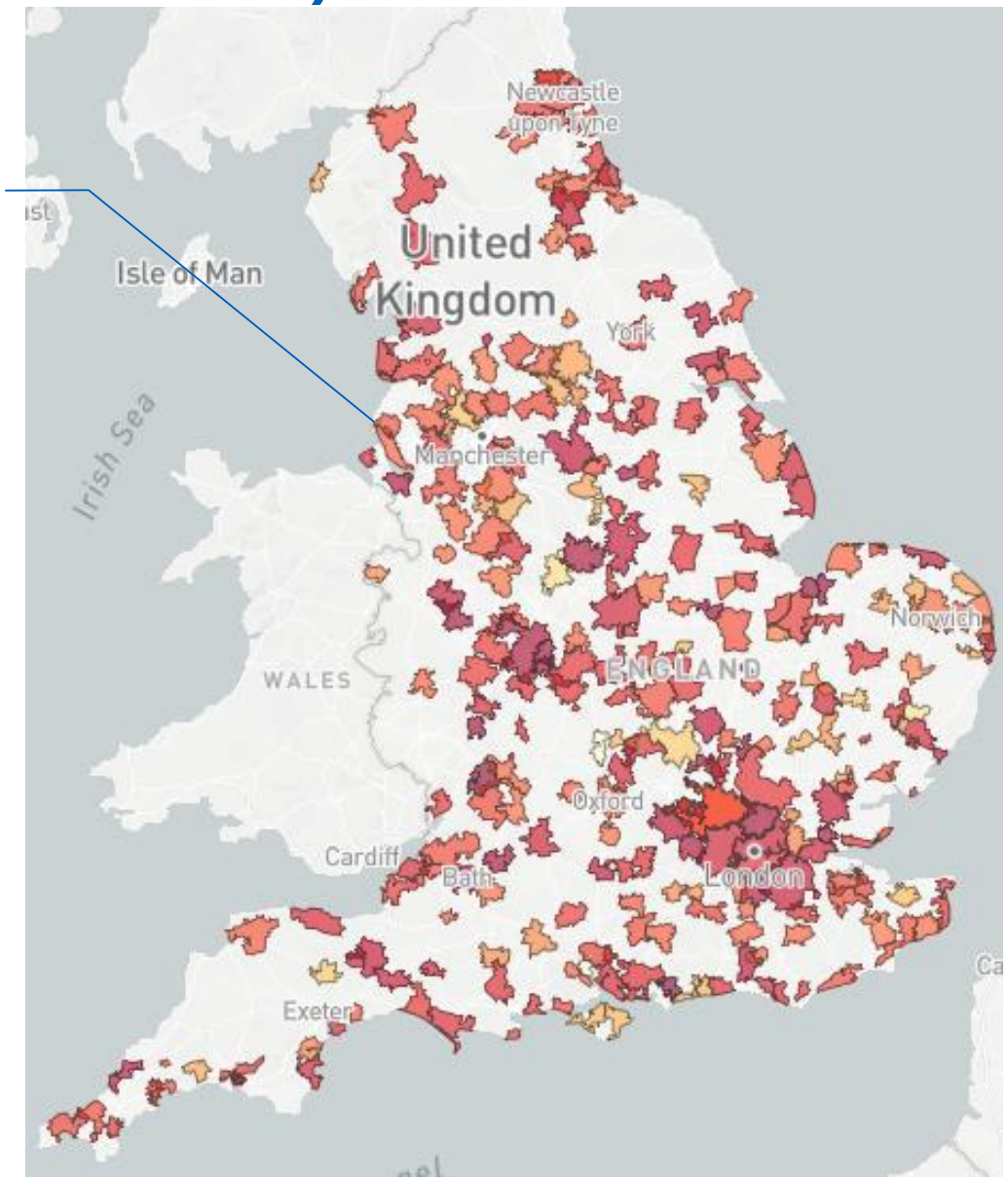
Note that the Y-axis scale only includes detections from $10^{3.5}$ to $10^{5.5}$ gc/l. This enables a better view of the average and trend, however many individual data points outside this range are not shown.



NHS Test and Trace

EMHP Wastewater – VOC/VUI detection 11th to 15th August (excludes Delta Variant)

Liverpool, Bank Hall Relief
Population 19,000*
Possible** detections of Beta (13th, 14th) and Gamma (13th, 14th)



Map showing concentration of SARS-CoV-2 RNA in wastewater (21st to 27th August) from Sewage Treatment Works.

Call out boxes show detection of VOC/VUI*** other than Delta in samples form Sewer Network Sites within cities.

EMHP produce a detailed VOC/VUI alert with additional information such as population of catchments and local mapping. [redacted]

*Population is calculated by matching the catchment area to LSOAs and is accurate to ± 15%.

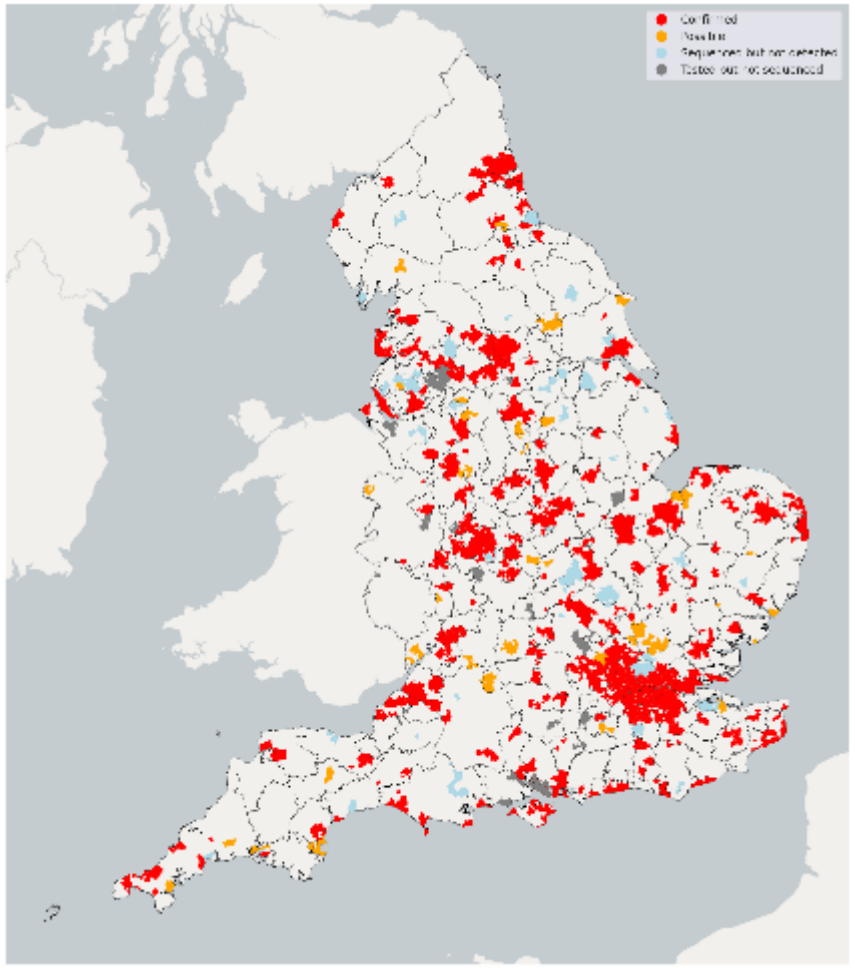
** Please see annex for guide of possible vs. confirmed detection.

***Or a single mutation that is present in a VOC/VUI

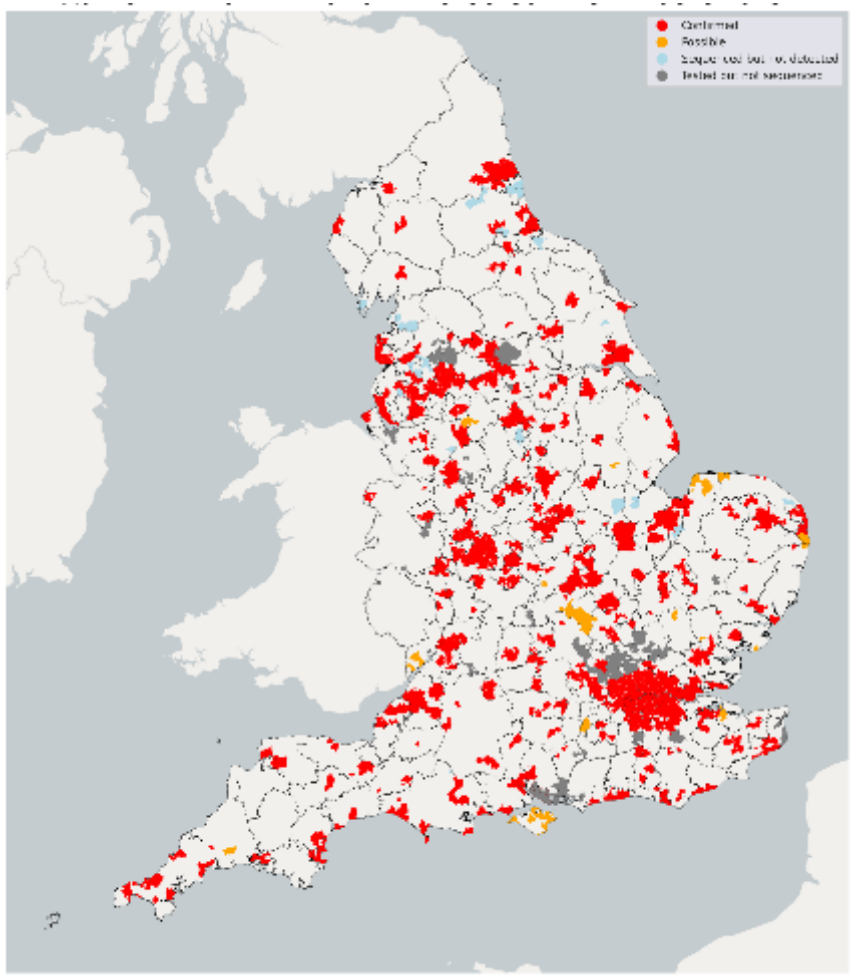
[redacted]

NHS Test and Trace

England Sewage Treatment Works (STW) Map; detection of B.1.617.2 (Delta Variant)



6th August to 8th August



11th August to 15th August

Map showing Sewage Treatment Works EMHP regularly sample from in England.

- Red-shading indicates confirmed detection of Delta variant
- Orange-shading indicates possible detection of Delta variant
- Blue-shading indicates areas from which samples were sequenced but Delta variant was not detected
- Grey-shading indicates areas that were sampled but not sequenced

Detection of Delta variant in all regions indicates VOC is widespread throughout the UK.

** Please see annex for guide of possible vs. confirmed detection.

NHS Test and Trace

Sources of data and signposting

Internal reports/updates

- Weekly COVID19_Epidemiological Internal Update report
- COVID-19 Exceedance Daily Review
- All regions PHE Situations of Interest daily update
- PHE NHS Test and Trace: Weekly Contact Tracing Report
- PHE Daily Care Home Report
- PHE Educational settings weekly report for NERVTAG
- COVID-19: nowcast and forecast

Published reports

- National flu and COVID-19 surveillance reports
- Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report
- Monthly COVID-19: reported SARS-CoV-2 deaths in England
- ONS - Coronavirus (COVID-19) Infection Survey, UK
- REACT-1 updated report

Data sources

Second Generation Surveillance System (SGSS)

Data as of **6 September 2021** 00:00hrs

Laboratory-confirmed cases reported to PHE. SGSS data is further de-duplicated and cleaned by the PHE ICC Epidemiology Cell. The dataset includes all positive COVID-19 cases reported through both Pillar 1 and Pillar 2 testing. Numbers in most recent days may rise due to potential delays to data reporting and validation. The number of confirmed cases reflects both the case rate of infection and testing rates.

PHE Unified Sample Dataset (USD)

Data as of **7 September 2021** 00:00hrs

Data on individuals testing negative for SARS-CoV2 in both Pillar 1 and 2. This data is deduplicated to only include one record for any individual who has had only negative samples

HPZone case and incident management system

Data as of **7 September 2021** 08:00hrs

Only outbreaks reported to PHE are included. Absolute numbers should be interpreted with caution. Reporting practice is known to vary with time and geography. Community outbreaks exclude outbreaks reported from secondary care and care home settings.

Case definitions of genomically confirmed and probable cases by variant

Genomic Match	VOC-20DEC-01 (Alpha)	VOC-20DEC-02 (Beta)	VUI-21JAN-01 (Zeta)	VOC-21JAN-02 (Gamma)	VUI-21FEB-01
Confirmed (sequencing)	COVID-19* confirmed case with at least 5 VOC-20DEC-01 lineage defining positions are called as alternate (variant) base and all other defining positions reported as N (unknown) or mixed bases	COVID-19* confirmed case where: • at least 4 VOC-20DEC-02 lineage defining positions are called as alternate (variant) base, and • all other defining positions reported as N (unknown) or mixed bases, or • at least 5 of the 9 non-synonymous changes	COVID-19* case confirmed as infected with Zeta VUI-21JAN-01 through whole genome sequencing (WGS) where: • results of all lineage defining non-synonymous changes called as alternate base, or • 6 of 7 non-synonymous changes called as alternate base, and • remaining position either N or mixed bases	COVID-19* confirmed case with: • at least 5 lineage defining non-synonymous changes called as alternate base, and • all other positions either N or mixed bases	COVID-19* confirmed case with: • at least 5 lineage defining non-synonymous changes called as alternate base, and • • all other positions either N or mixed base, or • at least 5 of the 9 non-synonymous changes
Probable (genotyping)	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available	*Genotyping not available for this variant*

Footnote: *A confirmed COVID-19 case: an individual who is confirmed to be infected with SARS-CoV-2 by polymerase chain reaction (PCR).

Case definitions of genomically confirmed and probable cases by variant

Genomic Match	VOC-21FEB-02	VUI-21FEB-03 (Eta)	VUI-21FEB-04	VUI-21MAR-01
Confirmed (sequencing)	COVID-19* case confirmed as infected with VOC-21FEB-02 through whole genome sequencing (WGS) where results of all lineage defining non-synonymous changes called as alternate bases.	COVID-19* confirmed case with: • at least 5 lineage defining non-synonymous changes called as alternate base, and • all other positions either N or mixed base	COVID-19* confirmed case with: • at least 5 lineage defining non-synonymous changes called as alternate base, and • all other positions either N or mixed base or • at least 5 of the 9 non-synonymous changes	COVID-19* case confirmed as infected with VUI-21MAR-01 through whole genome sequencing (WGS) where results of **All lineage defining non-synonymous changes called** as alternate bases.
Probable (genotyping)	*Genotyping not available for this variant*	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available.	*Genotyping not available for this variant*	*Genotyping not available for this variant*

Footnote: *A confirmed COVID-19 case: an individual who is confirmed to be infected with SARS-CoV-2 by polymerase chain reaction (PCR).

Case definitions of genomically confirmed and probable cases by variant

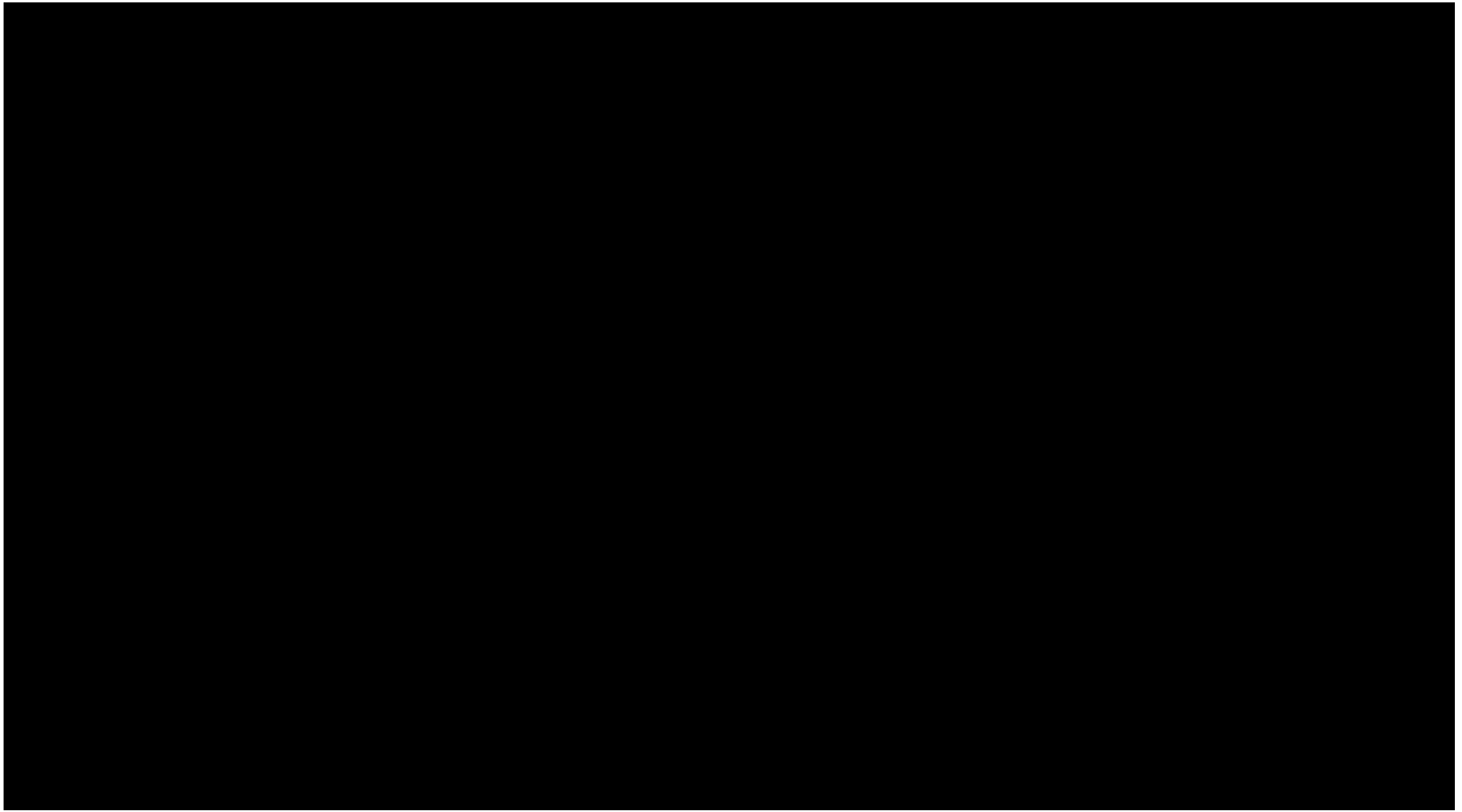
Genomic Match	VUI-21MAR-02 (Theta)	VUI-21APR-01 (Kappa)	VOC-21APR-02 (Delta)	VUI-21APR-03
Confirmed (sequencing)	COVID-19* confirmed case with: • at least 7 variant defining changes called as alternate base, and • all other positions either N or mixed base	COVID-19* confirmed case with: • at least 5 variant defining changes called as alternate base, and • all other positions either N or mixed base	COVID-19* confirmed case with at least 4 variant defining changes called as alternate base	COVID-19* confirmed case with: • at least 8 variant defining changes called as alternate base, and • all other positions either N or mixed base.
Probable (genotyping)	*Genotyping not available for this variant*	*Genotyping not available for this variant*	COVID-19* confirmed case with a genotyping result where sequencing confirmation is awaited or not available.	*Genotyping not available for this variant*

Footnote: *A confirmed COVID-19 case: an individual who is confirmed to be infected with SARS-CoV-2 by polymerase chain reaction (PCR).

Case definitions of genomically confirmed and probable cases by variant

Genomic Match	VUI-21MAY-01	VUI-21MAY-02	VUI-21JUN-01 (Lambda)	VUI-21JUL-01
Confirmed (sequencing)	COVID-19* confirmed case with: • at least 7 variant defining changes called as alternate base, and • all other positions either N or mixed base	At least 5 variant defining changes called as alternate base, and • all other positions either N or mixed base.	COVID-19* confirmed case with at least 5 VUI-21JUN-01 lineage defining positions are called as alternate (variant) base and all other defining positions reported as N (unknown) or mixed bases.	COVID-19 confirmed case with at least 5 VUI-21JUL-01 defining mutations called as alternate (variant) base and all other defining positions reported as N (unknown) or mixed bases
Probable (genotyping)	*Genotyping not available for this variant*	*Genotyping not available for this variant*	*Genotyping not available for this variant*	*Genotyping not available for this variant*

Footnote: *A confirmed COVID-19 case: an individual who is confirmed to be infected with SARS-CoV-2 by polymerase chain reaction (PCR).



Annex

Wastewater Variant Genomic Case Definitions ([redacted]

B.1.351 (VOC-20DEC-02) *BETA*

The B.1.351 lineage has 13 signature non-synonymous SNPs, of which 9 are unique amongst known VOC and VUI. Co-occurrence of signature mutations occurs on 2 and 1 amplicons for ARTIC and Nimagen protocols, respectively.

Confirmed – ≥ 10 of 13 signature SNPs detected, ≥ 7 of 9 unique SNPs detected and co-occurrence detected on at least one amplicon. If ≥ 10 signature SNPs and ≥ 7 unique SNPs are present, but those co-occurring are not covered, confirmed presence can also be assigned.

Possible – ≥ 5 of 13 signature SNPs detected and ≥ 2 of 9 unique SNPs detected. If < 5 signature SNPs and ≥ 2 unique SNPs are detected, but ≥ 5 SNPs are not covered possible presence can be assigned if those not covered are present across two dates from the same site, but in the same sequencing run.

Not detected - ≤ 4 of 13 signature SNPs detected.

P.2 (VUI-21JAN-01) *ZETA*

The P.2 lineage has 7 signature synonymous and non-synonymous SNPs, of which 6 are unique amongst known VOC and VUI. P.2 has no co-occurring signature mutations.

Confirmed – ≥ 5 of 7 signature SNPs detected and ≥ 4 of 6 unique SNPs detected.

Possible – ≥ 3 of 7 signature SNPs and ≥ 2 of 6 unique SNPs detected. If < 3 signature SNPs and ≥ 2 unique SNPs are detected, but ≥ 3 SNPs are not covered possible presence can be assigned if those not covered are present across two dates from the same site, but in the same sequencing run.

Not detected - ≤ 2 of 7 signature SNPs detected.

Annex

Wastewater Variant Genomic Case Definitions [redacted]

P.1 (VOC-21JAN-02) *GAMMA*

The P.1 lineage has 14 signature synonymous and non-synonymous SNPs of which 10 are unique amongst known VOC and VUI. Co-occurrence of signature mutations occurs on 3 amplicons for both ARTIC and Nimagen protocols, respectively.

Confirmed – ≥ 11 of 14 signature SNPs detected, ≥ 6 of 10 unique SNPs detected and co-occurrence detected on at least two. If ≥ 11 signature SNPs and ≥ 6 unique SNPs are present, but those co-occurring are not covered, confirmed presence can also be assigned.

Possible – ≥ 5 of 14 signature SNPs detected and ≥ 3 of 10 unique SNPs detected. If < 5 signature SNPs and ≥ 3 unique SNPs are detected, but ≥ 7 SNPs are not covered possible presence can be assigned if those not covered are present across two dates from the same site, but in the same sequencing run.

Not detected - ≤ 4 of 14 signature SNPs detected.

B.1.617.2 (VUI-21APR-02) *DELTA*

The B.1.617.2 lineage has 13 signature non-synonymous SNPs, of which none are unique amongst known VOC and VUI. Co-occurrence of signature mutations occurs on 1 amplicon for both ARTIC and Nimagen protocols, respectively.

Confirmed – ≥ 9 of 13 signature SNPs detected and co-occurrence detected on one amplicon. If ≥ 9 signature SNPs are present, but those co-occurring are not covered, confirmed presence can also be assigned.

Possible – ≥ 5 of 13 signature SNPs detected. If < 5 signature SNPs are detected, but ≥ 5 SNPs are not covered possible presence can be assigned if those not covered are present across two dates from the same site, but in the same sequencing run.

Not detected - ≤ 4 of 13 signature SNPs detected.

Annex

Wastewater Variant Genomic Case Definitions [redacted]

AV.1 (VUI-21MAY-01)

The AV.1 lineage has 21 signature synonymous and non-synonymous SNPs, of which 16 are unique amongst known VOC and VUI. Co-occurrence of signature mutations occurs on 3 and 4 amplicons for ARTIC and Nimagen protocols, respectively.

Confirmed – ≥ 16 of 21 signature SNPs detected, ≥ 11 of 16 unique SNPs detected and co-occurrence detected on one amplicon. If ≥ 16 signature SNPs and ≥ 11 unique SNPs are present, but those co-occurring are not covered, confirmed presence can also be assigned.

Possible – ≥ 7 of 21 signature SNPs detected at low – high frequency and ≥ 3 of 16 unique SNPs detected. If < 7 signature SNPs and ≥ 3 unique SNPs are detected, but ≥ 10 SNPs are not covered possible presence can be assigned if those not covered are present across two dates from the same site, but in the same sequencing run.

Not detected - ≤ 6 of 21 signature SNPs detected.