Public Health England

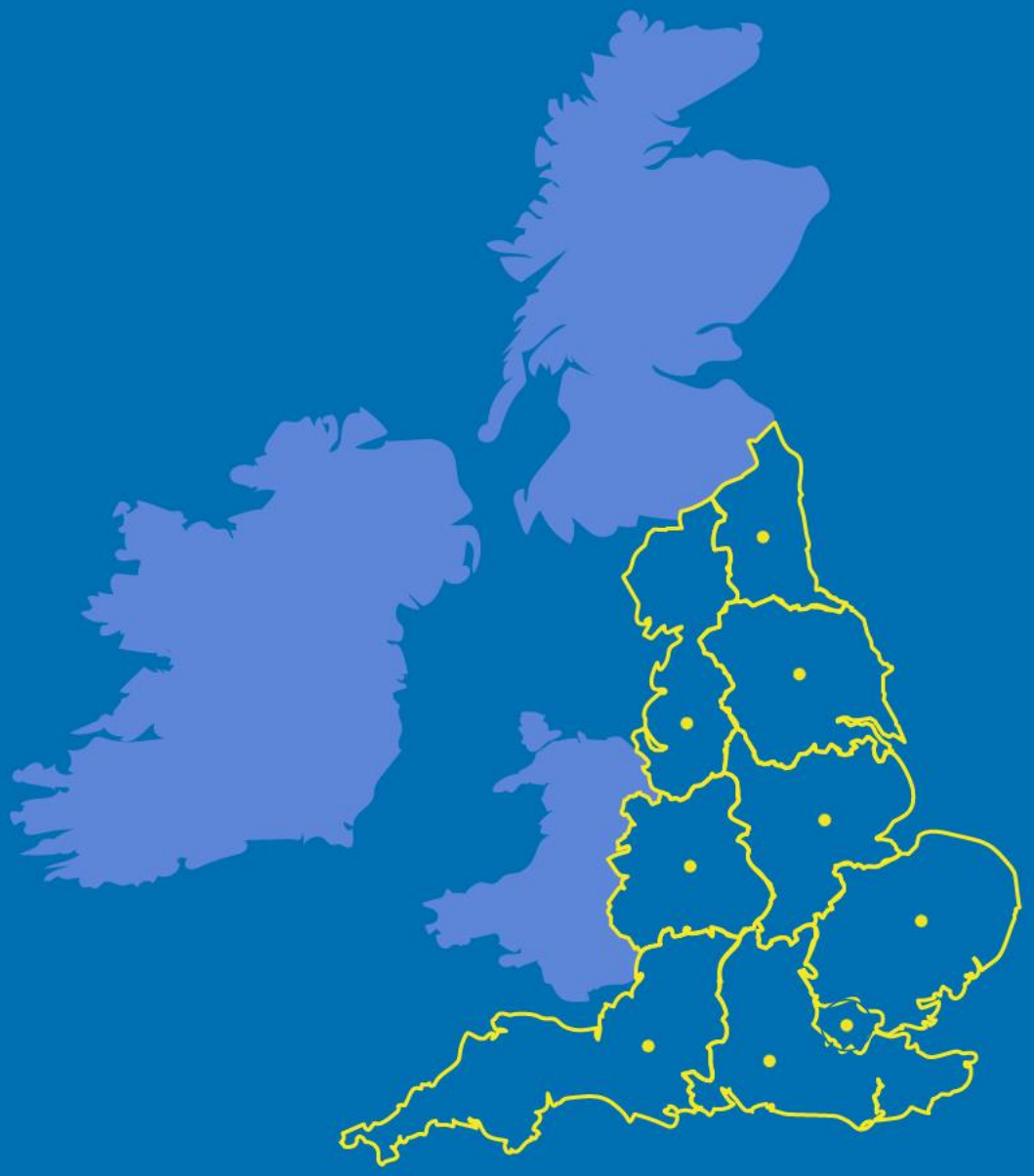
Joint Biosecurity Centre

CORONAVIRUS SITUATIONAL AWARENESS

Summary

date: 2 December 2020

Appendix



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This situational awareness summary report appendix:

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  - Map of Positivity in testing
  - Map Testing rates
- Charts of case rate, Positivity and testing across selected age groups
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- Hospitalisation
- Mortality
- [redacted]
- Hospitalisation
- Contact tracing
- [redacted]
- Outbreak reports
  - Overall by geography
  - [redacted]
  - Other settings
- Acute respiratory infections
- Weekly positivity for other respiratory viruses

Please note:

13/10/2020 - denominator data for case and testing rates have been updated to 2019 mid-year population estimates.

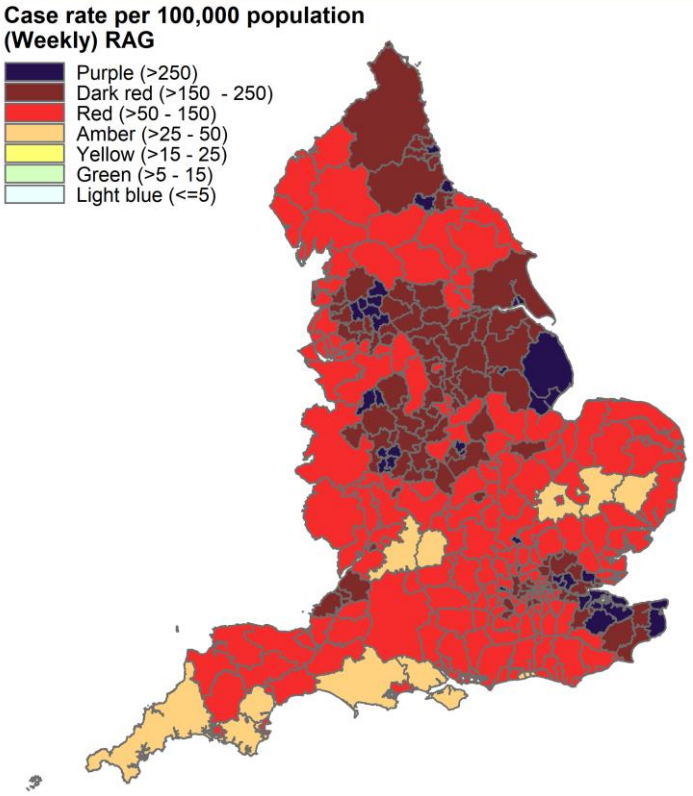
20/10/20 - PHE has adjusted its approach to test positivity and testing rate metrics. Previously, any repeat tests for individuals since pandemic onset had been deduplicated. As the likelihood of individuals being tested multiple times has increased over time, test positivity and testing rate data are now deduplicated within each 7-day window. This change has been made in all OST outputs as of 20/10/2020 and applied retrospectively.

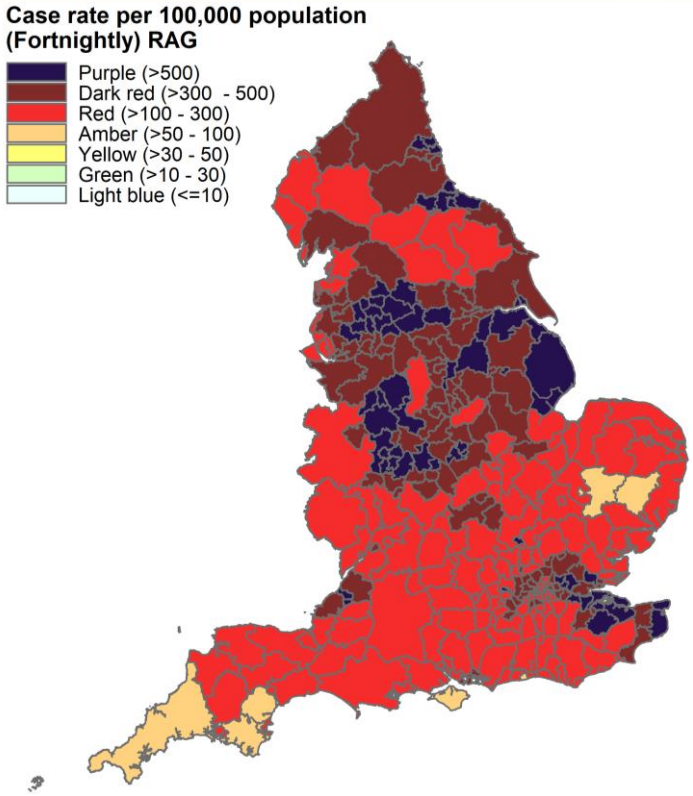
16/11/20 -PHE has updated the way it records the location of people who test positive or negative for COVID-19. It now prioritises addresses given at the point of testing over the details registered on a patient's record in the NHS Digital Patient Demographic Service. This better reflects the distribution 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.

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

Average weekly case rates per 100,000 population by LA

Data for specimens taken between 21 November and 27 November (7 day) and 14 November and 27 November (14 day)



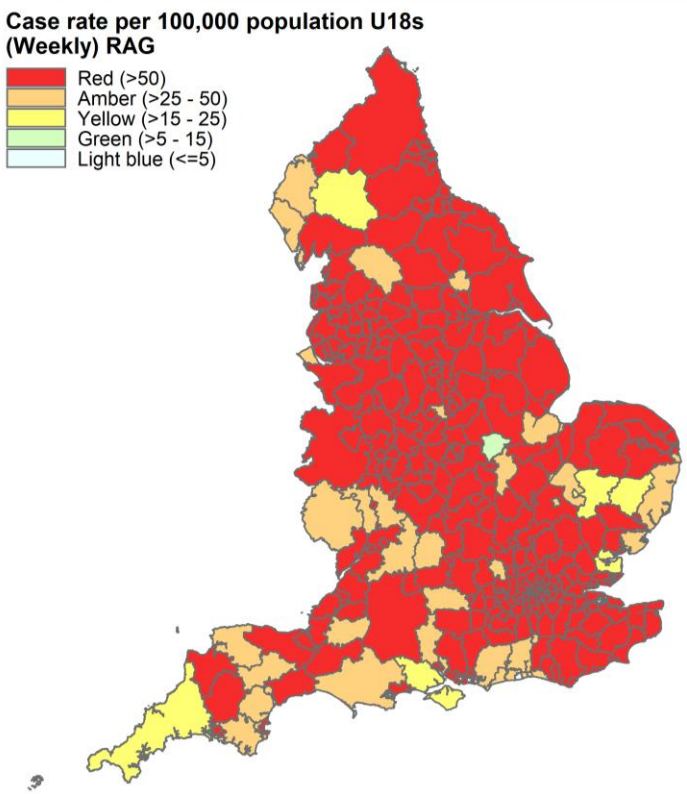


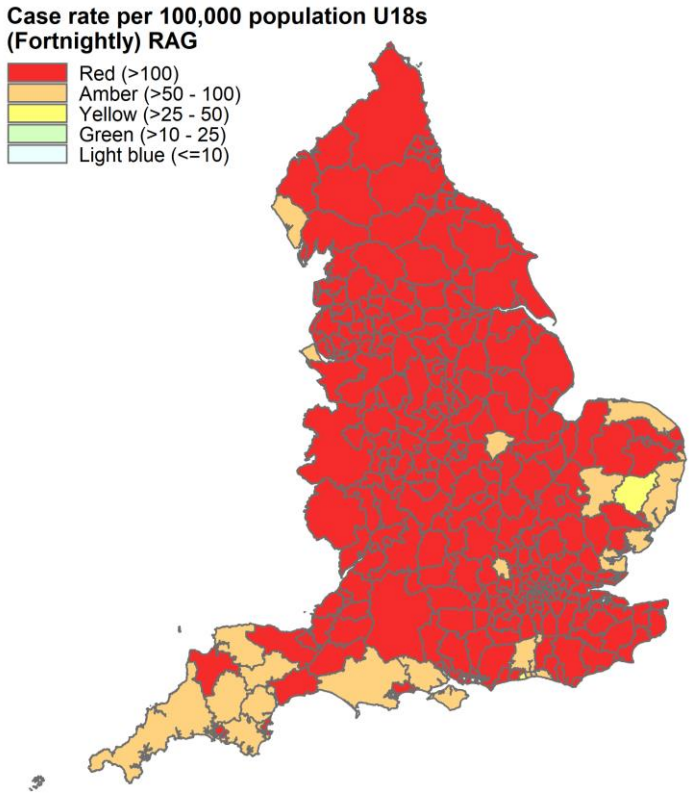
Local Authorities with the highest rate			
	Rate		Rate
Swale	556.4	Lincoln	371.6
Medway	519.8	Stoke-on-Trent	363.5
Boston	501.6	Maidstone	345.7
Thanet	451	Oadby and Wigston	328
Gravesham	380.6	Dover	323.4

Local Authorities with the highest rate			
	Rate		Rate
Swale	1096.7	Kingston upon Hull, City of	811.5
Boston	937.7	Dudley	769.6
Medway	937.7	Gravesham	766.8
Thanet	935	East Lindsey	752.9
Stoke-on-Trent	819.1	Oadby and Wigston	748.9

Average weekly case rates under 18s per 100,000 population by LA

Data for specimens taken between 21 November and 27 November (7 day) and 14 November and 27 November (14 day)



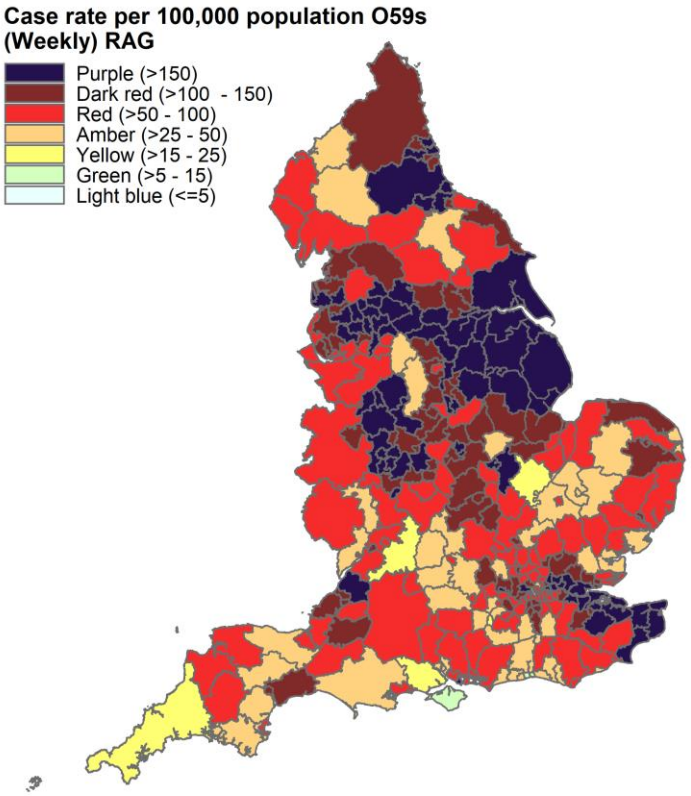


Local Authorities with the highest rate			
	Rate		Rate
Swale	511.5	Basildon	360.8
Oadby and Wigston	407.9	Dover	336.2
Rossendale	389	Boston	322.5
Medway	381.7	Burnley	295.5
Thanet	371.3	South Ribble	279.9

Local Authorities with the highest rate			
	Rate		Rate
Swale	969.8	Basildon	669
Oadby and Wigston	892.3	South Lakeland	654.7
Thanet	756.1	Blaby	619.1
Medway	740.2	Dover	603.4
Rossendale	688.8	Havering	598

Average weekly case rates for individuals aged 59 and over per 100,000 population by LA

Data for specimens taken between 21 November and 27 November (7 day)



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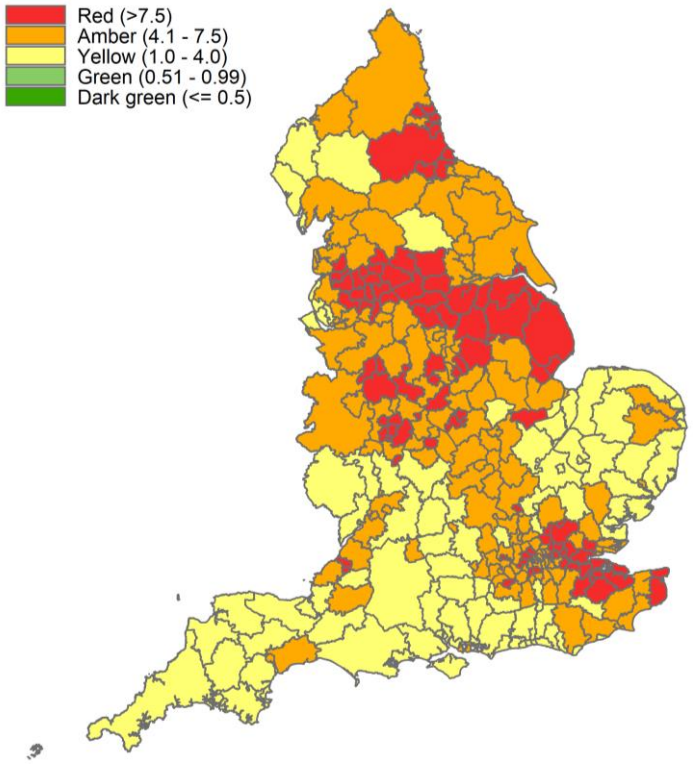
Contains National Statistics data © Crown copyright and database right 2020

Local Authorities with the highest rate			
	Rate		Rate
Boston	522.1	Rochdale	330
Lincoln	413.4	Stoke-on-Trent	328.8
Medway	392.1	West Lindsey	302.1
Swale	385.7	Thanet	298.8
Gravesham	358.1	Blackburn with Darwen	292.5

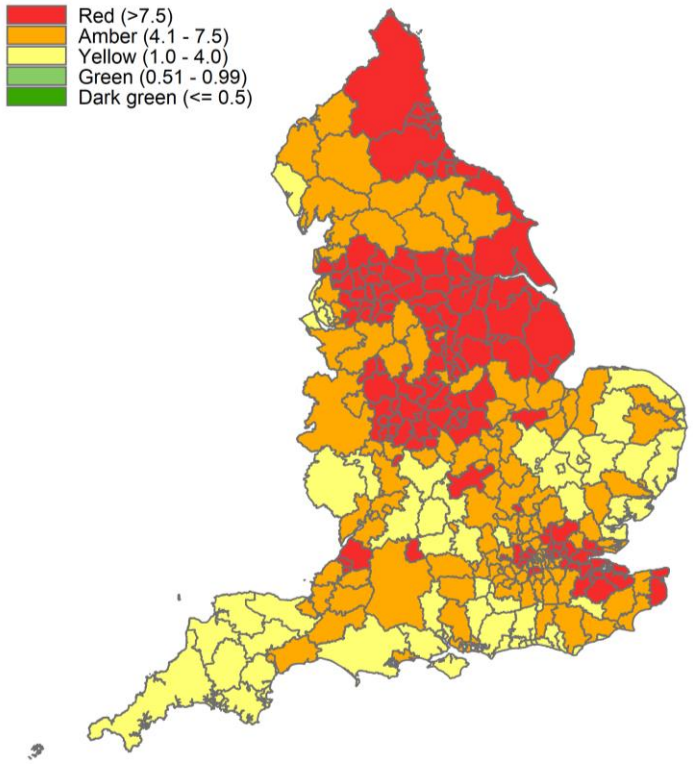
Testing: Individuals testing positive per 100 tests

Data for specimens taken between 21 November and 27 November (7 day) and 14 November and 27 November (14 day)

Percentage of individuals testing positive (weekly) RAG



Percentage of individuals testing positive (Fortnightly) RAG

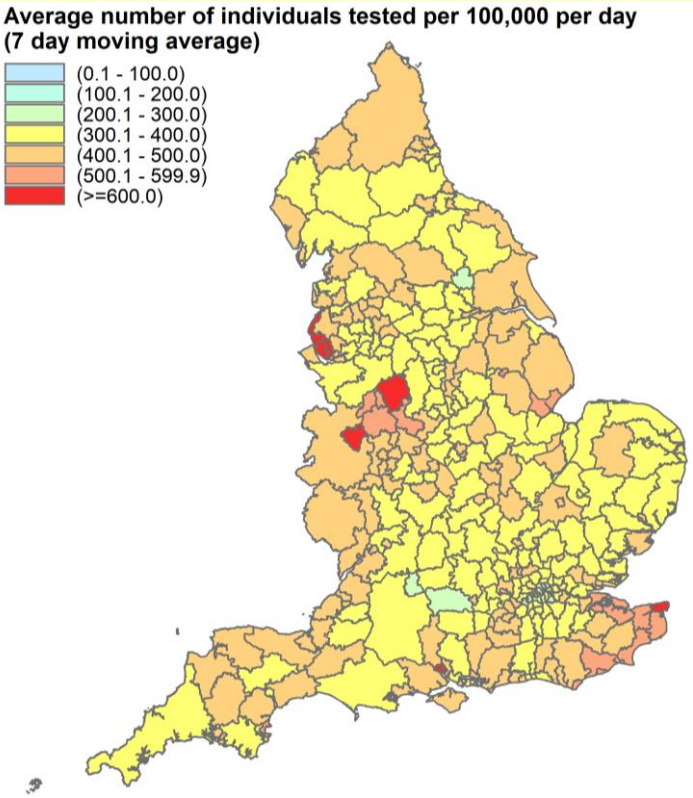


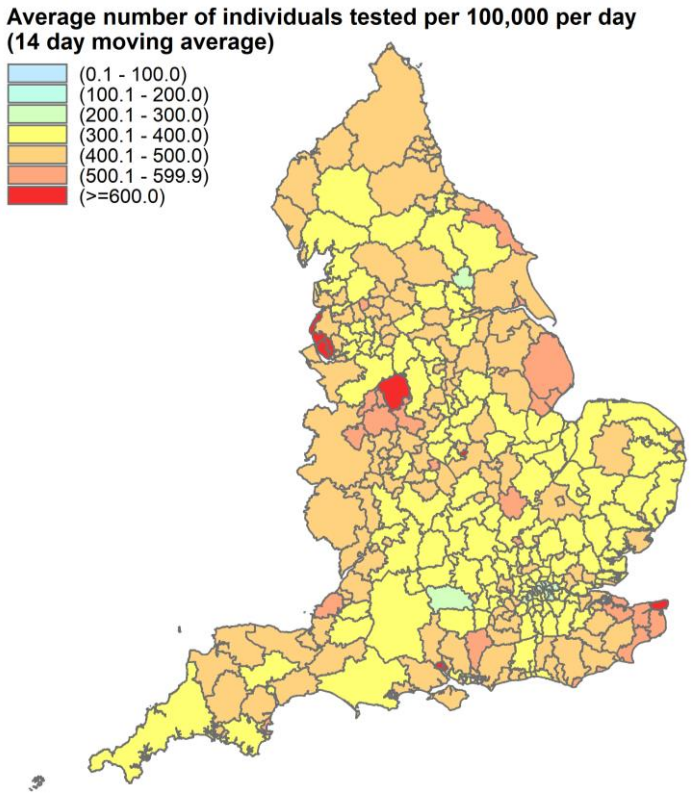
Local Authorities with the highest percentages			
	%		%
Medway	16.1	Tower Hamlets	12.3
Swale	15.5	Newham	12.3
Boston	14.8	Sandwell	11.7
Gravesham	14.1	Hartlepool	11.5
Redbridge	13.2	Slough	11.5

Local Authorities with the highest percentages			
	%		%
Swale	15.3	Sandwell	13.5
Medway	15.1	Redbridge	13.5
Boston	14.4	Stockton-on-Tees	13.4
Gravesham	14.1	Hartlepool	13
Kirklees	13.8	Tower Hamlets	12.8

Testing: Individuals tested per 100,000 population per day

Data for specimens taken between 21 November and 27 November (7 day) and 14 November and 27 November (14 day)

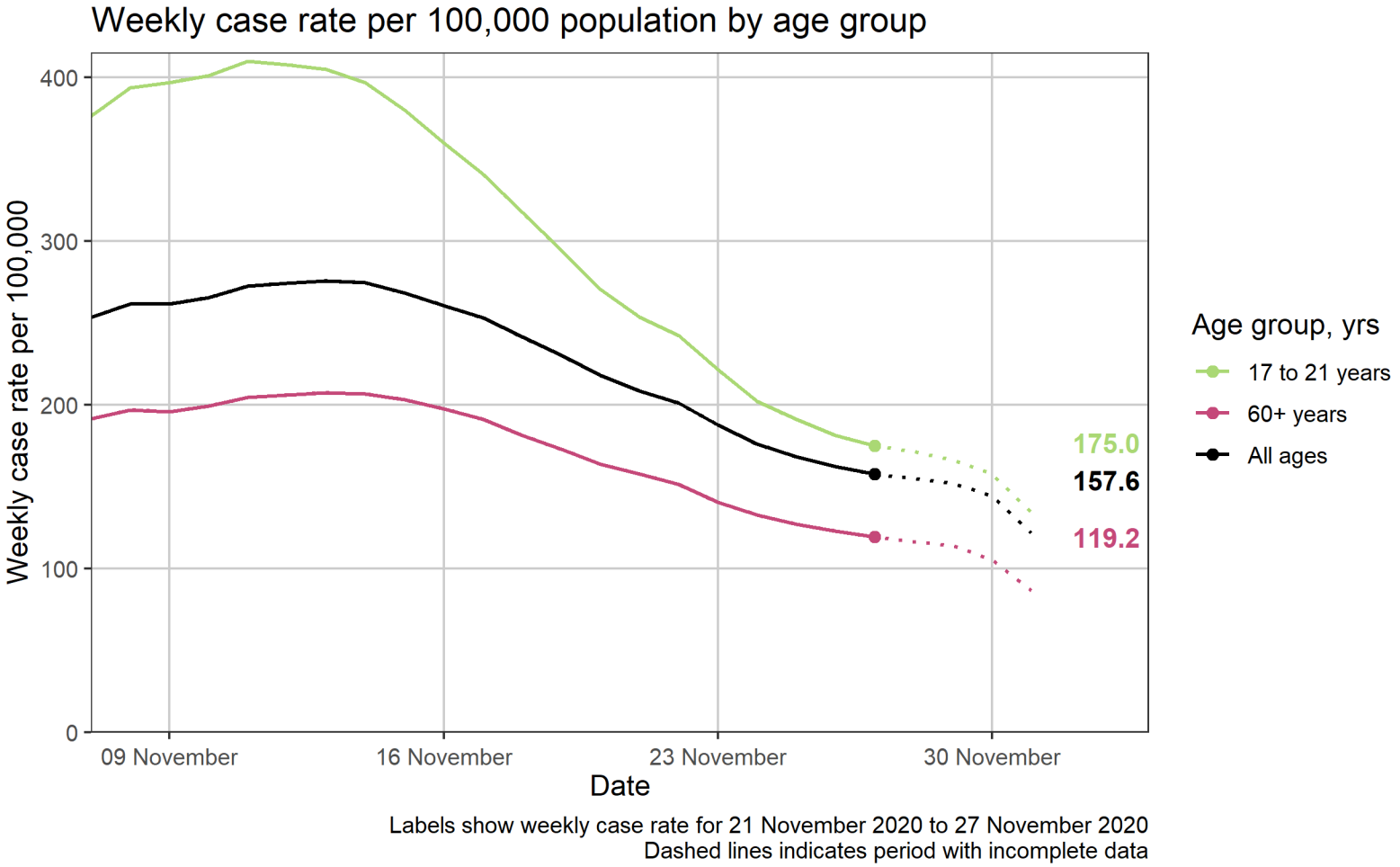




Local Authorities with the highest rate			
	Rate		Rate
Liverpool	1631.2	Thanet	648.9
Sefton	744.9	Telford and Wrekin	627.5
Knowsley	739.5	Oadby and Wigston	598.8
Southampton	725.9	Dover	582
Staffordshire Moorlands	683.3	Swale	580.5

Local Authorities with the highest rate			
	Rate		Rate
Liverpool	1701	Staffordshire Moorlands	617.4
Knowsley	789	Oadby and Wigston	601.8
Sefton	779.7	Stoke-on-Trent	596.5
Southampton	761	Torbay	592.8
Thanet	665.3	Swale	571.3

Case rate across both pillars 1 and 2 (weekly) – selected ages
Data up to the 27 November 2020



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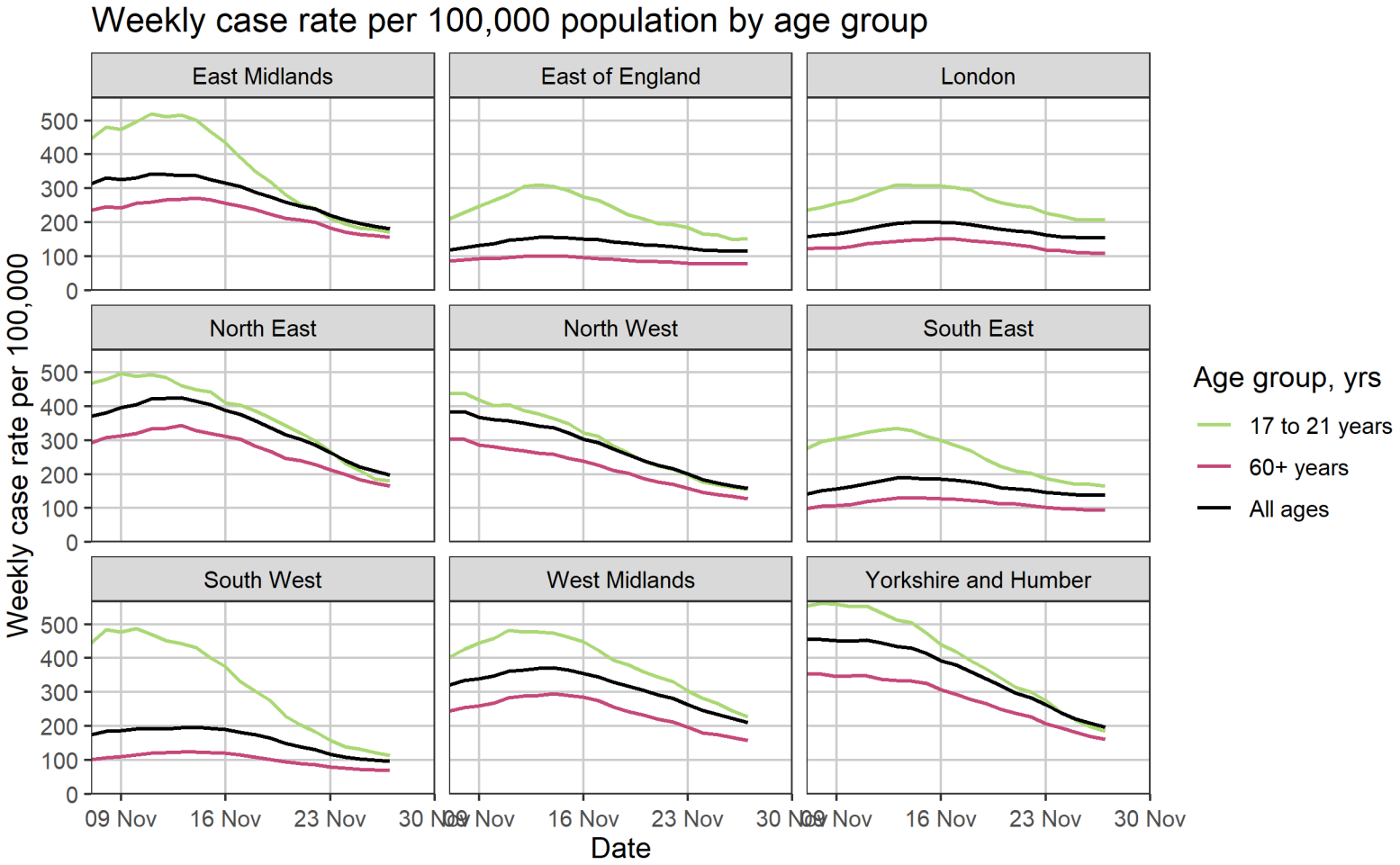
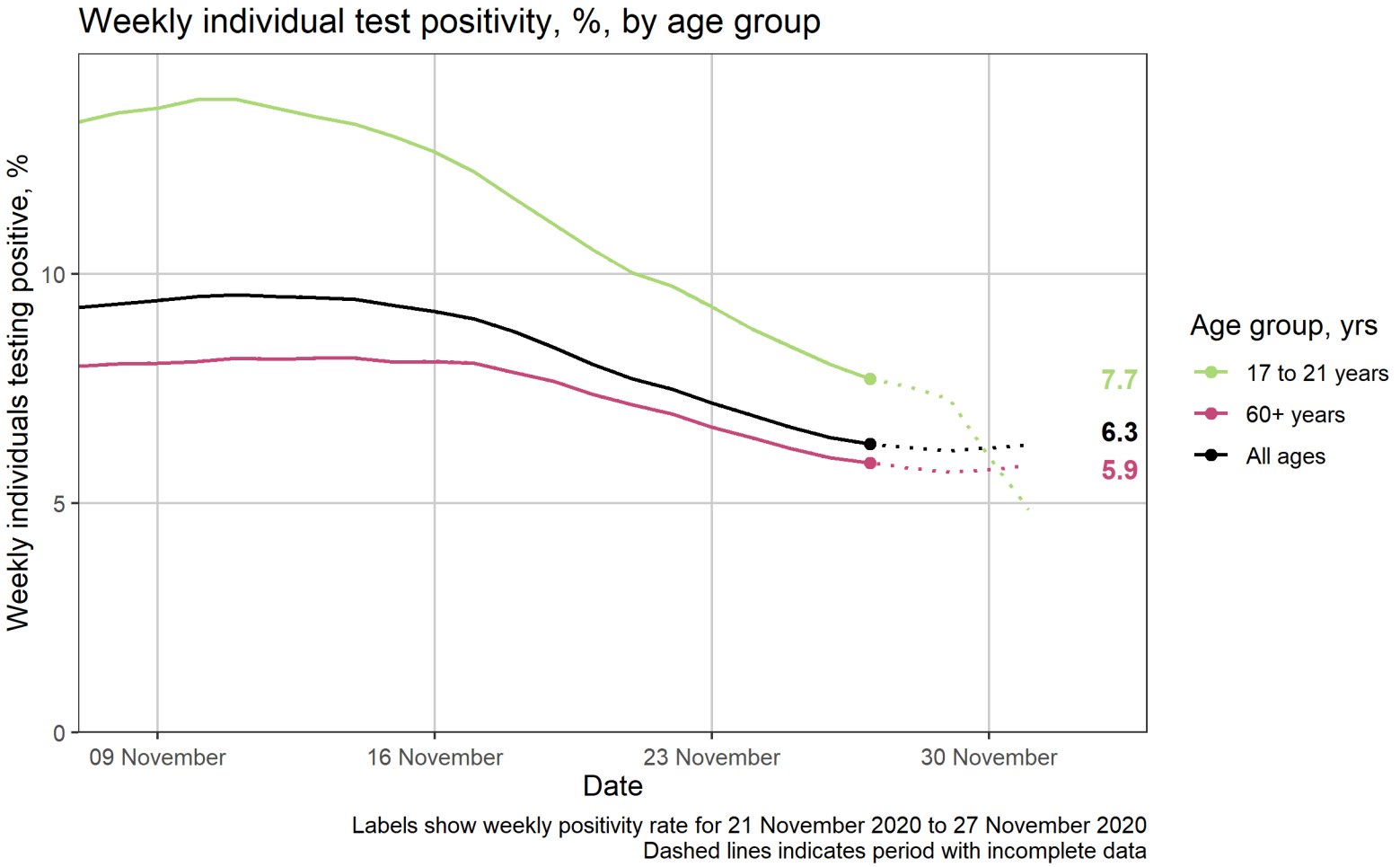
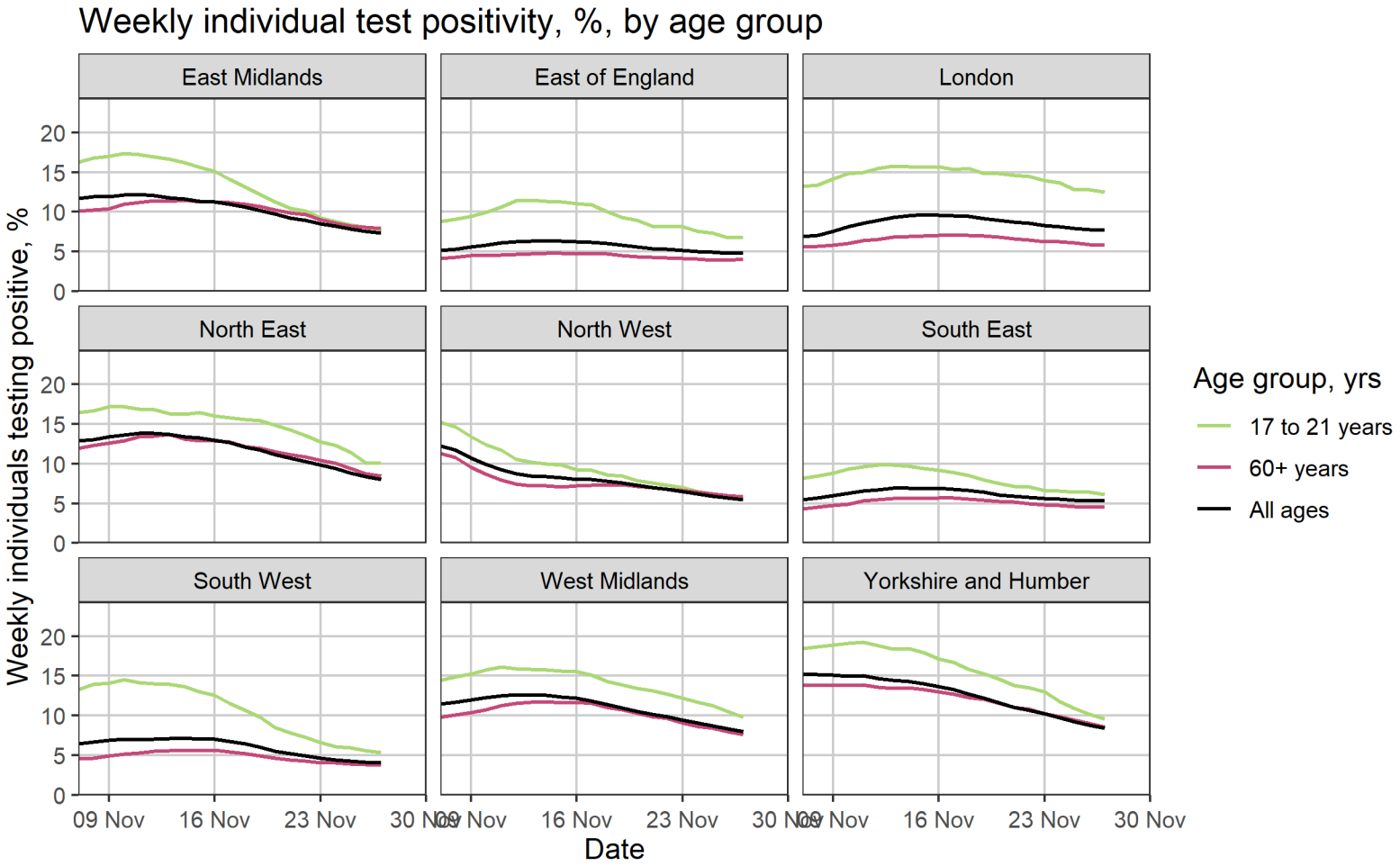
Data up to the 27 November 2020



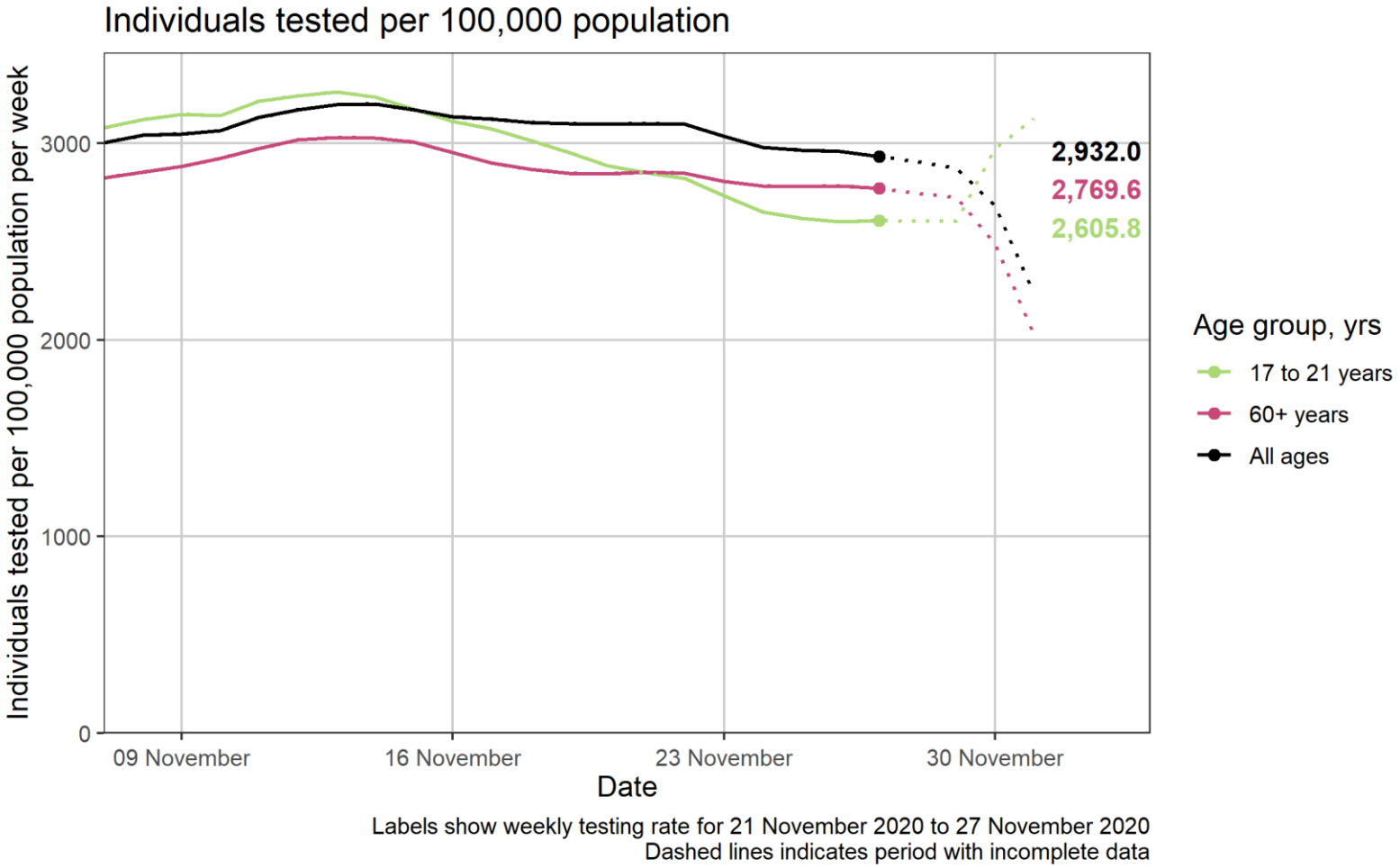
Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – selected ages
Data up to the 27 November 2020



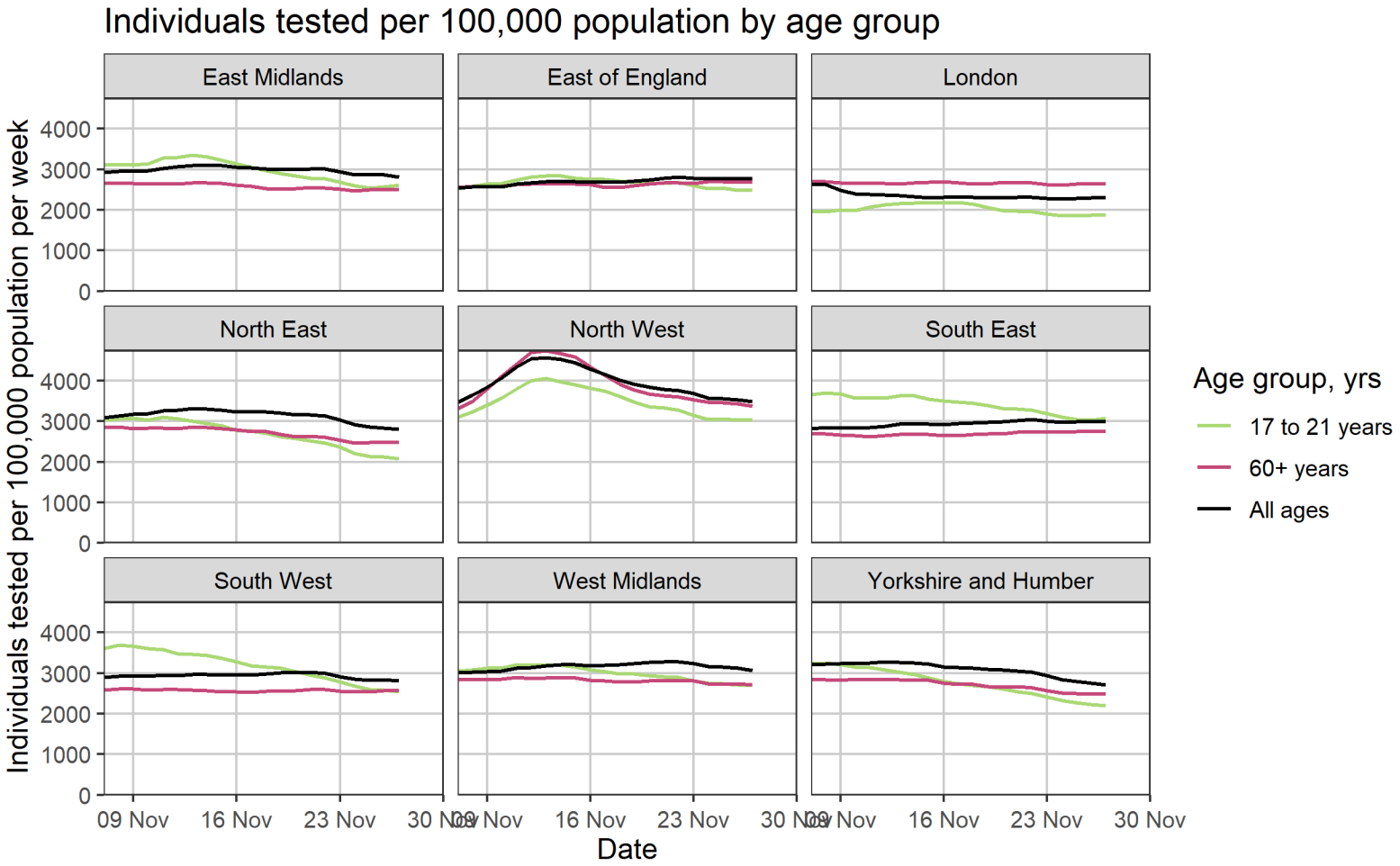
Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – selected ages
Data up to the 27 November 2020



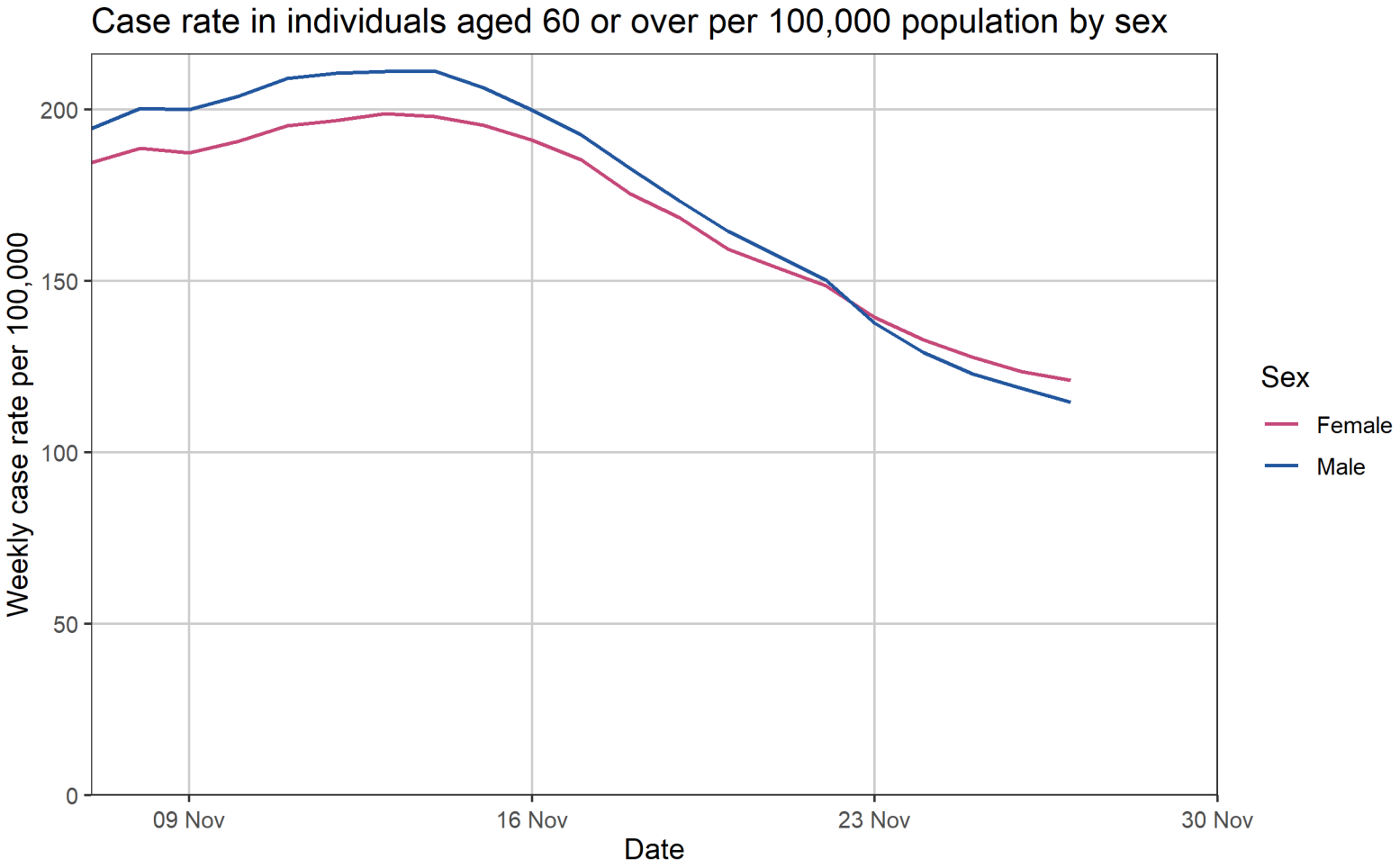
Individuals tested across both pillars 1 and 2 (weekly) – selected ages
Data up to the 27 November 2020



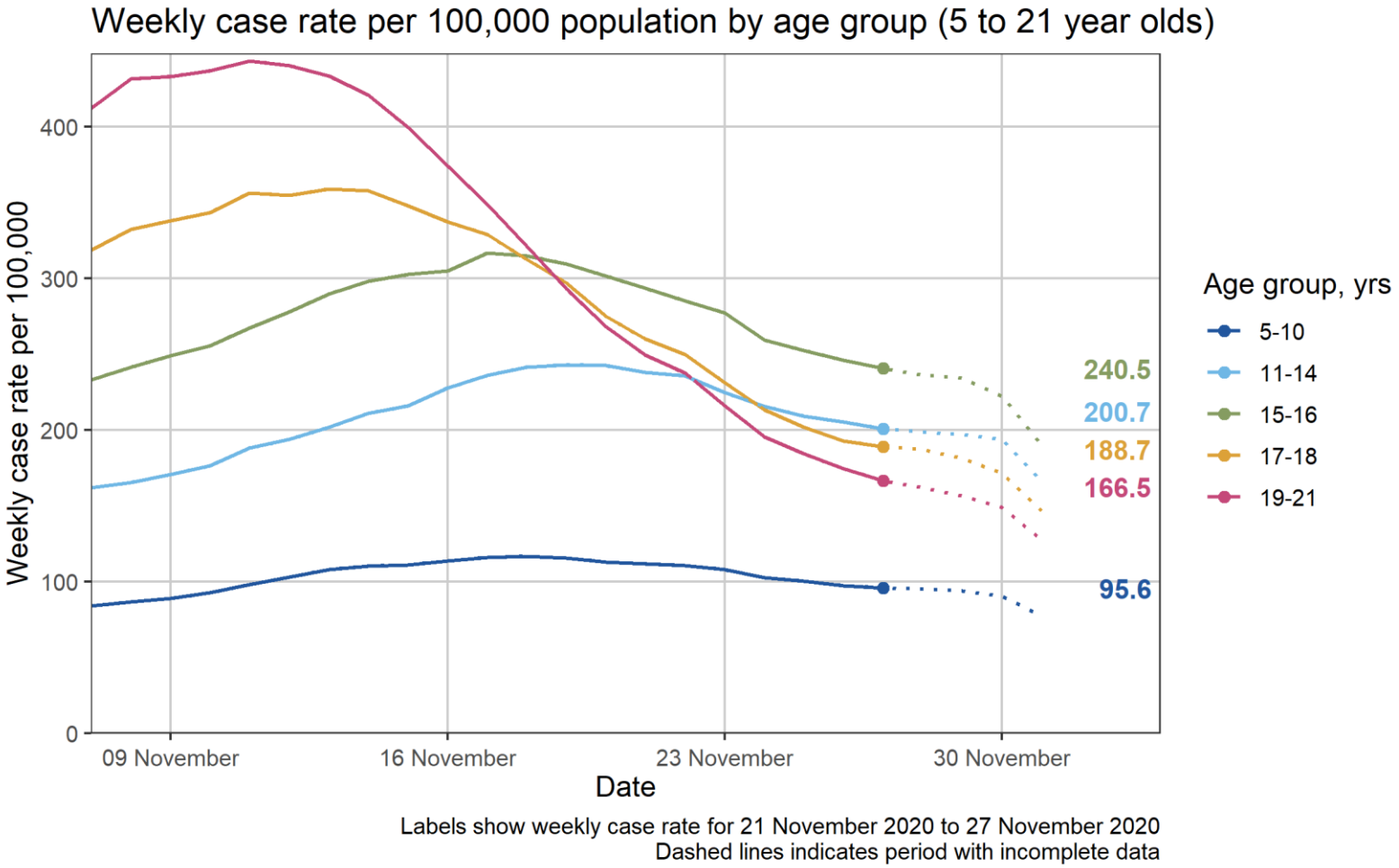
Individuals tested across both pillars 1 and 2 (weekly) – selected ages
Data up to the 27 November 2020



Case rate across both pillars 1 and 2 (weekly) – aged 60 or over
Data up to the 27 November 2020



Case rate across both pillars 1 and 2 (weekly) – young people
Data up to the 27 November 2020



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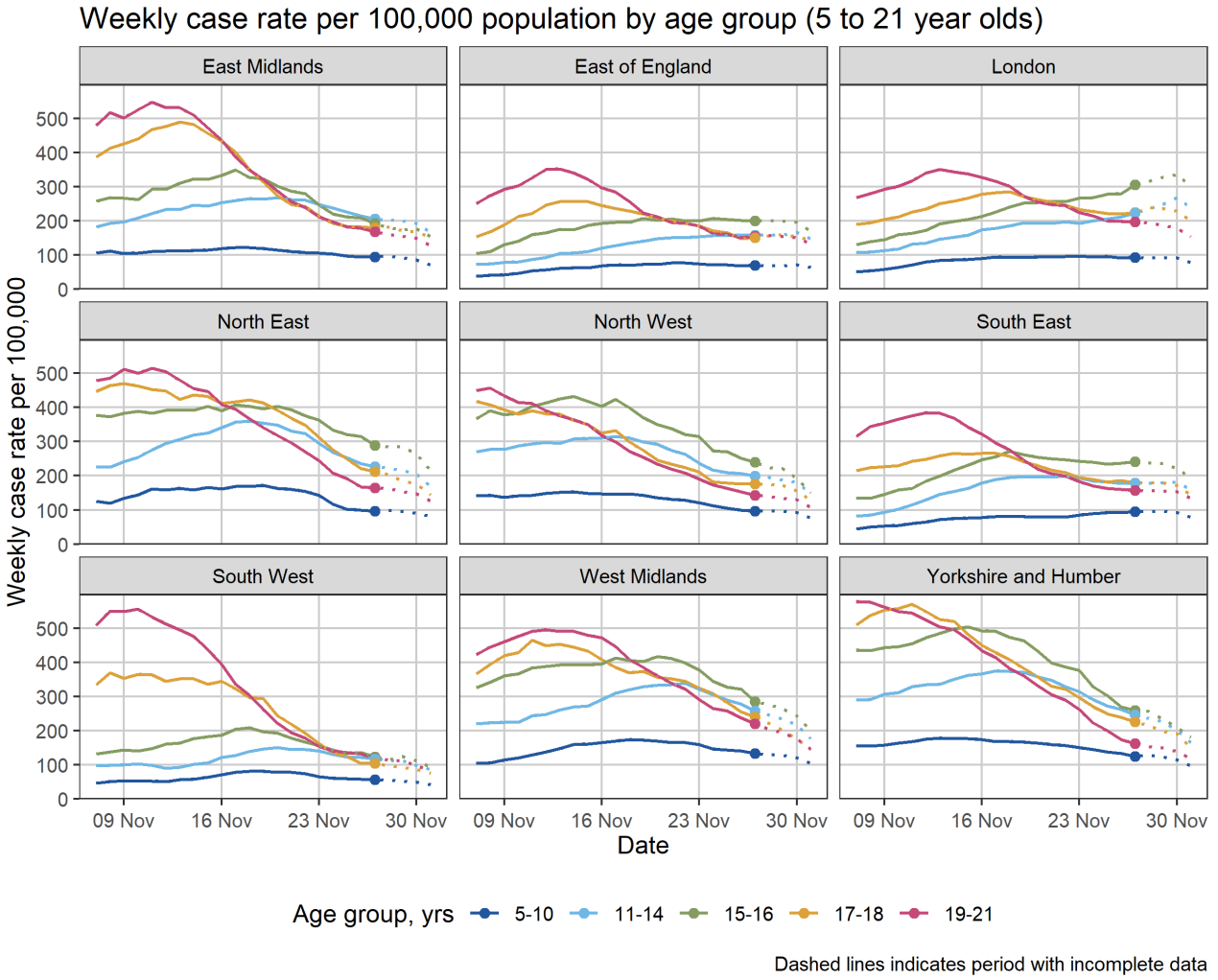
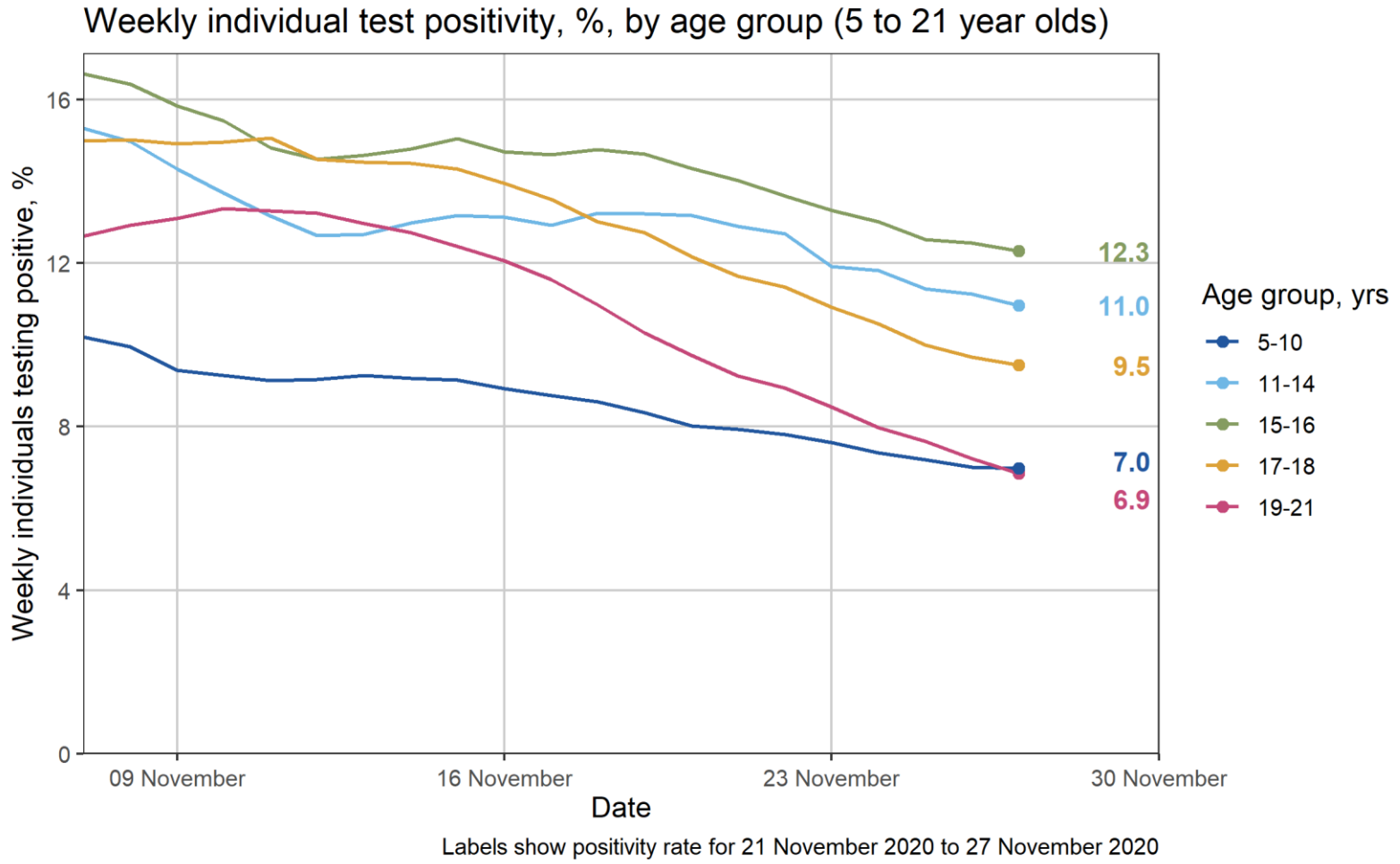


Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – young people
Data up to the 27 November 2020



Percentage of individuals testing positive across both pillars 1 and 2 (weekly) – young people
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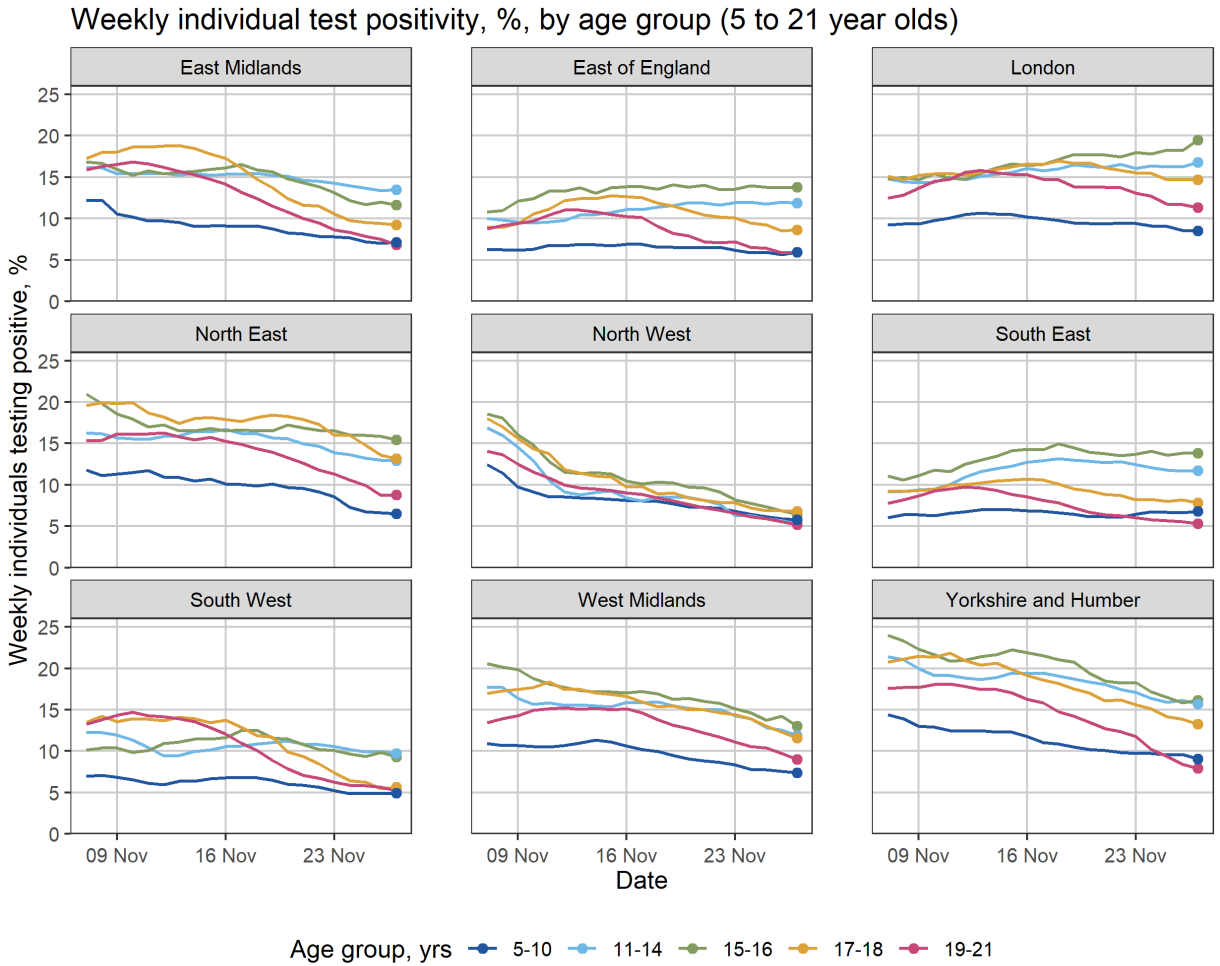
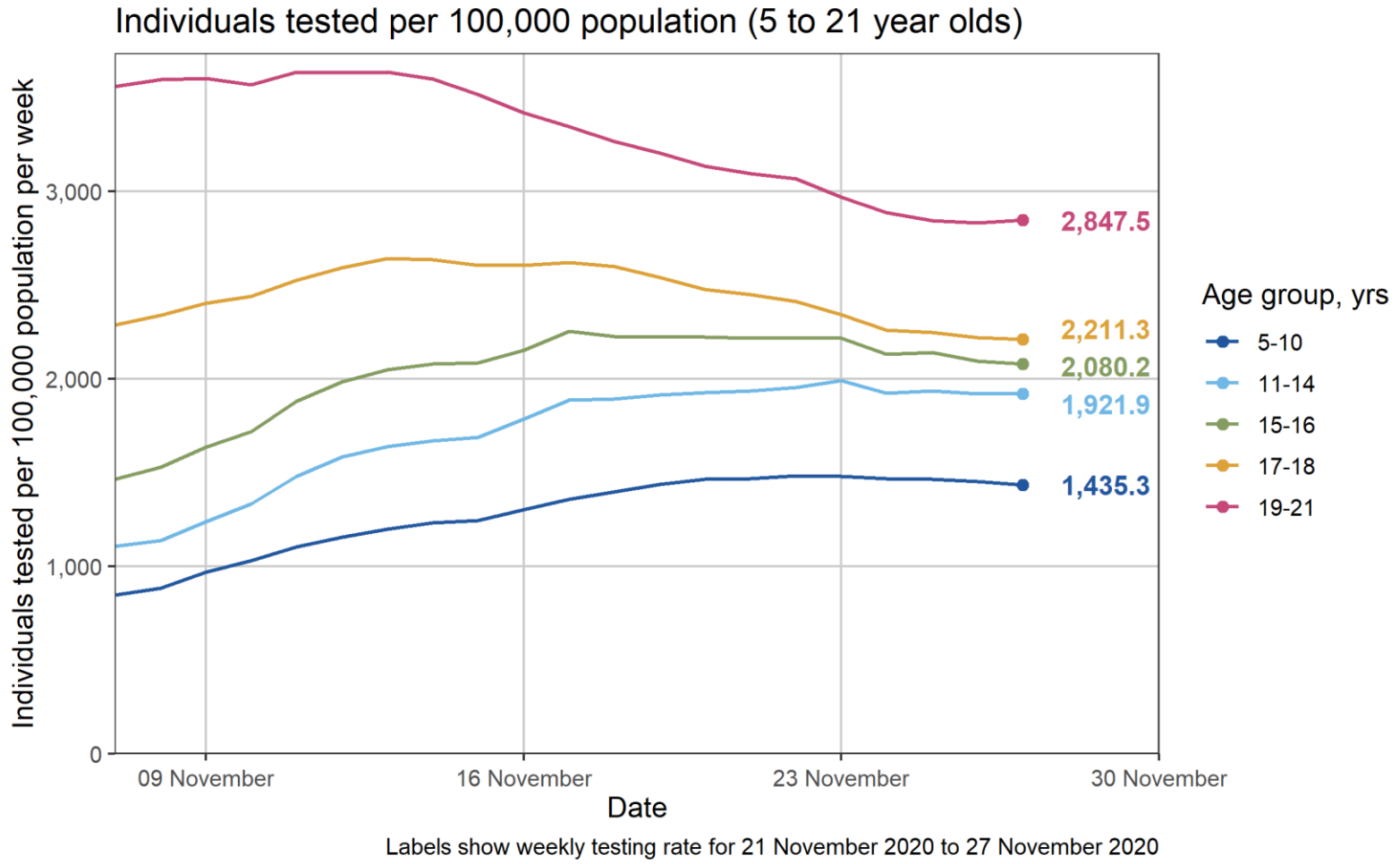
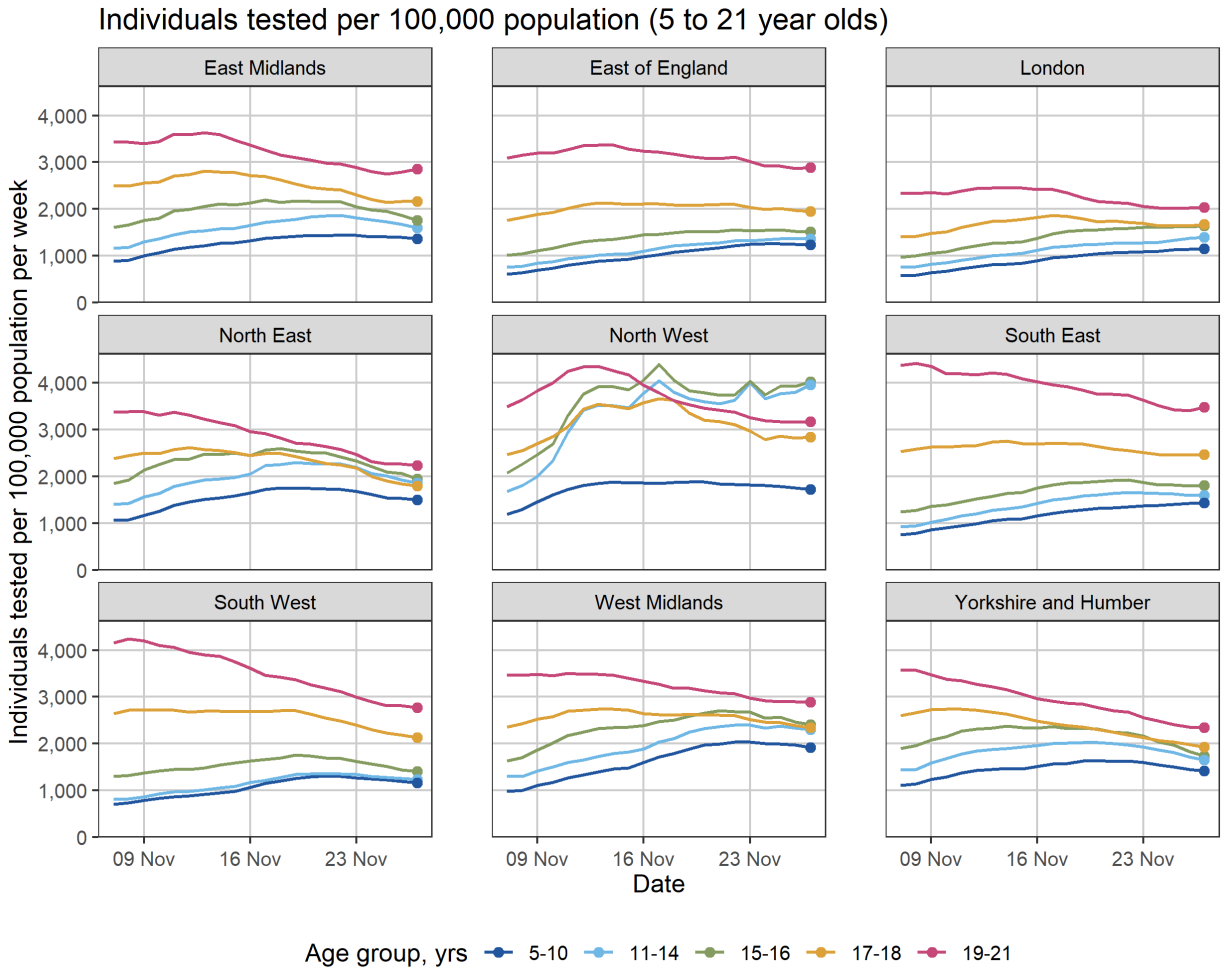


Individuals tested across both pillars 1 and 2 (weekly) – young people
Data up to the 27 November 2020



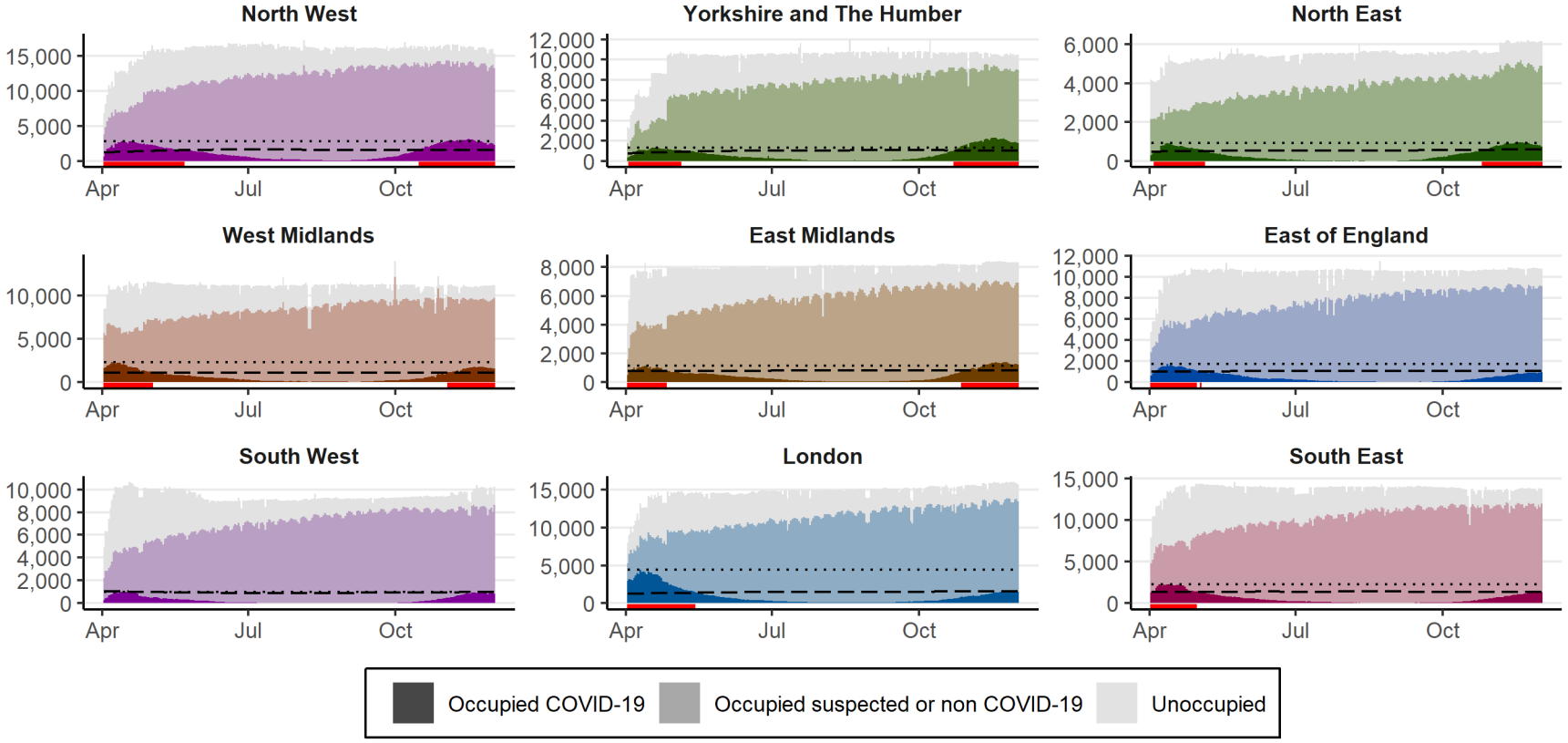
Individuals tested across both pillars 1 and 2 (weekly) – young people
Data up to the 27 November 2020



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.

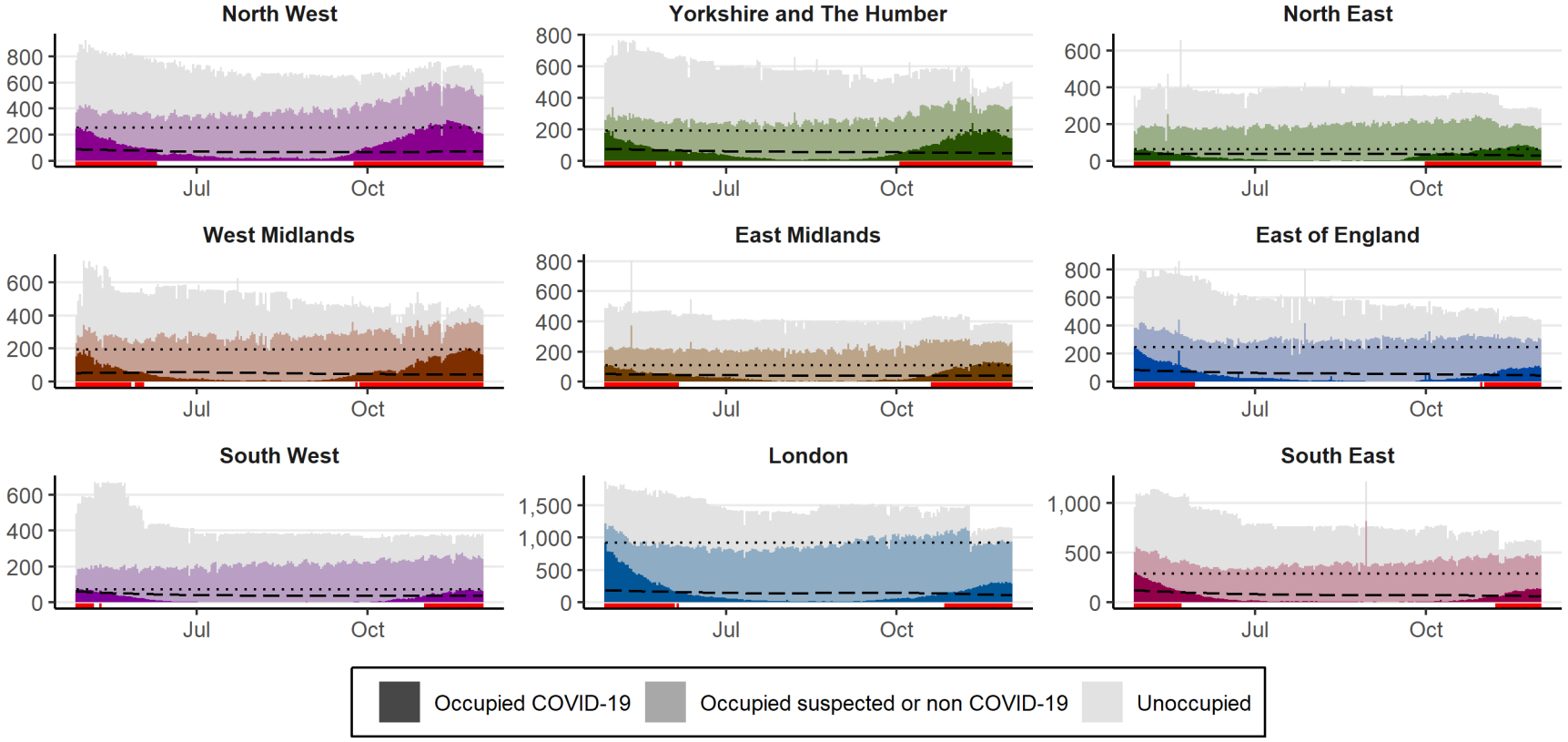


Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 02 April 2020 to 02 December 2020. Produced by Joint Biosecurity Centre.

Bed occupancy and capacity by region - HDU/ITU beds

HDU/ITU bed occupancy and capacity by region

Dotted line shows 'spring peak value', i.e. highest daily COVID-19 bed occupancy recorded between 27 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.



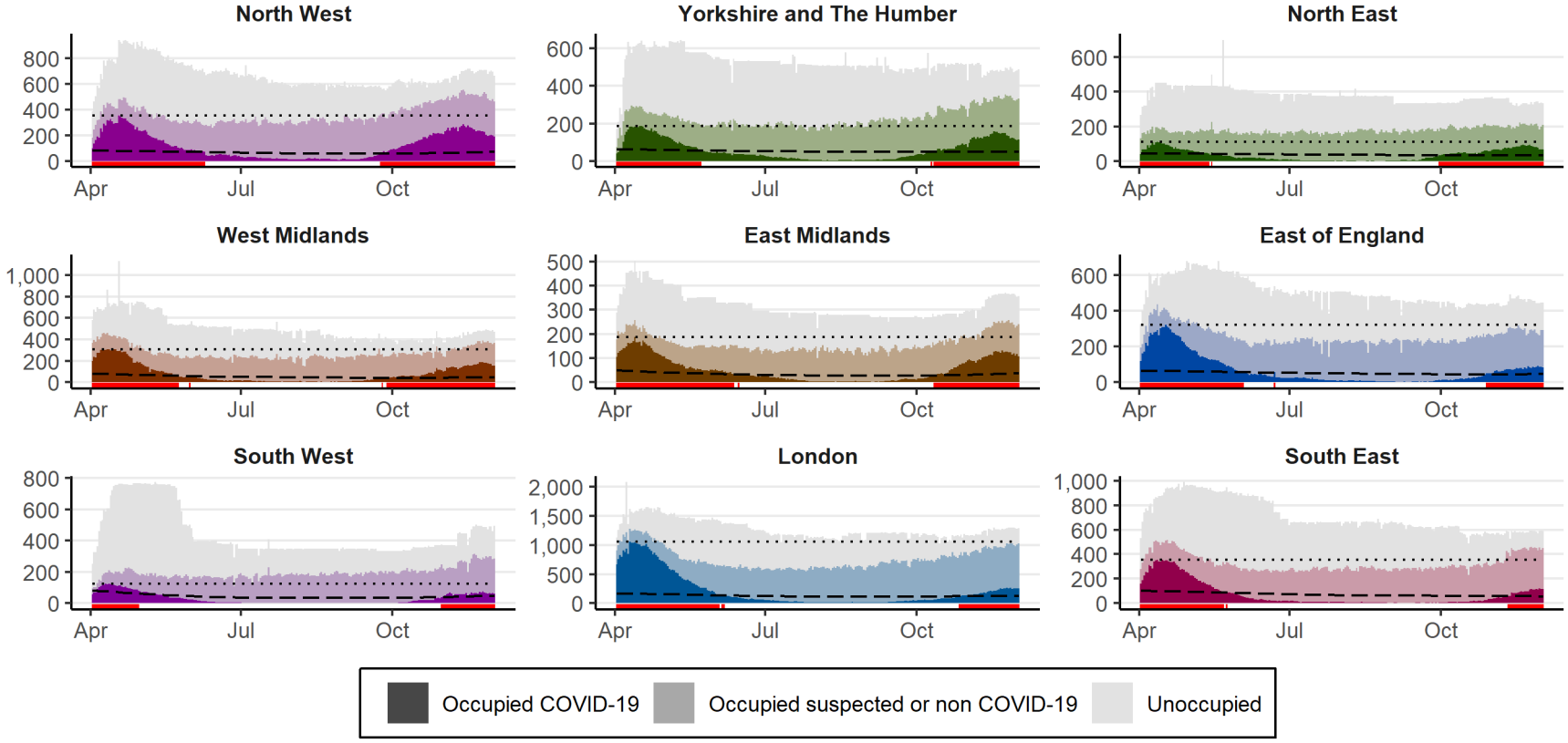
Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 27 April 2020 to 02 December 2020. Produced by Joint Biosecurity Centre.

Data show adult-only occupancy to reflect the fact that adults account for most COVID-19 cases in hospitals and that adult and child HDU/ITU

Bed occupancy and capacity by region - mechanical ventilation beds

Mechanical ventilation bed occupancy and capacity by region

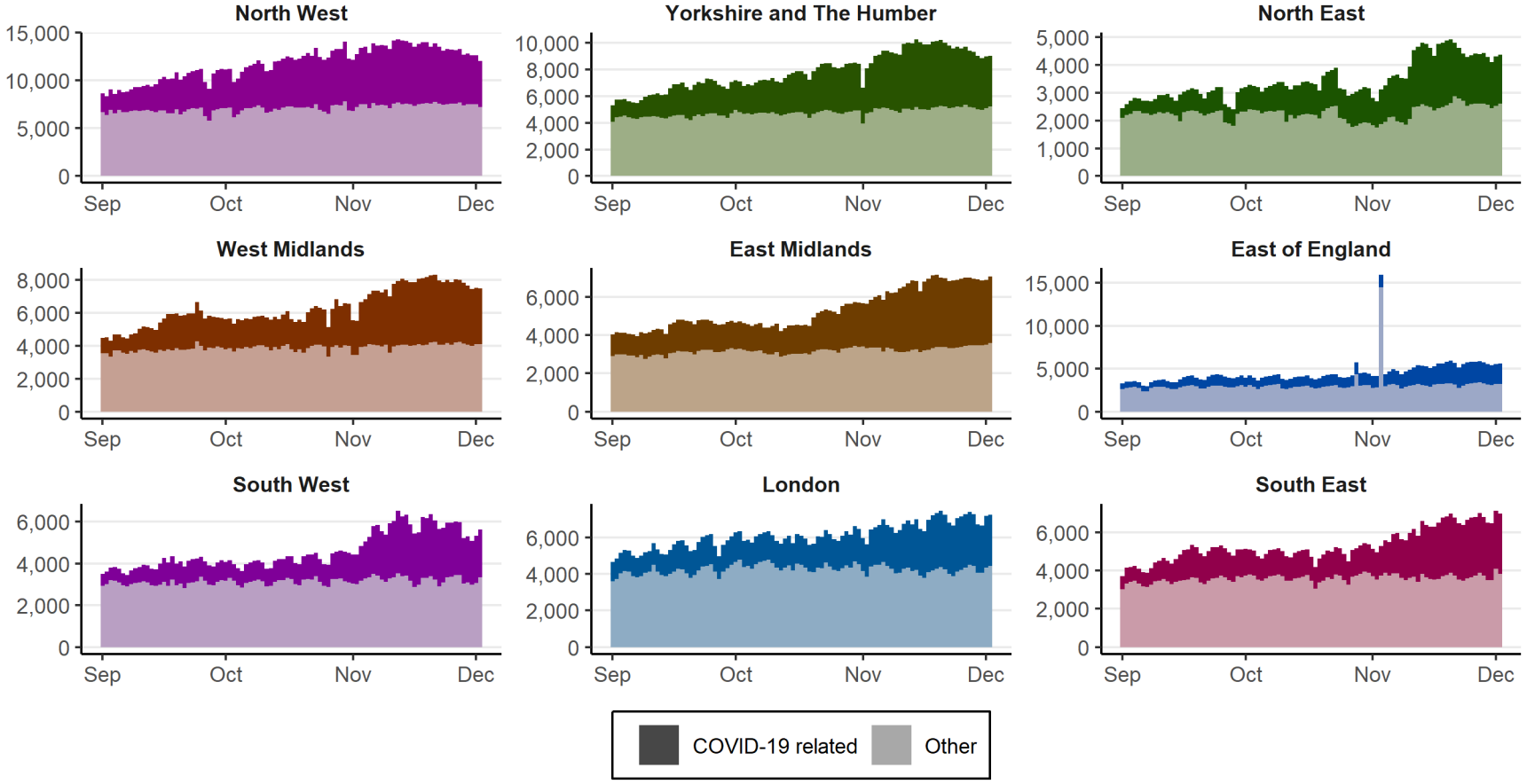
Dotted line shows 'spring peak value', i.e. highest daily COVID-19 bed occupancy recorded between 02 April 2020 and 01 June 2020. Solid bar above axis indicates when daily recorded COVID-19 bed occupancy is above 10% of daily available capacity, which is approximately shown by the dashed line.



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

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

Daily NHS staff absences by region



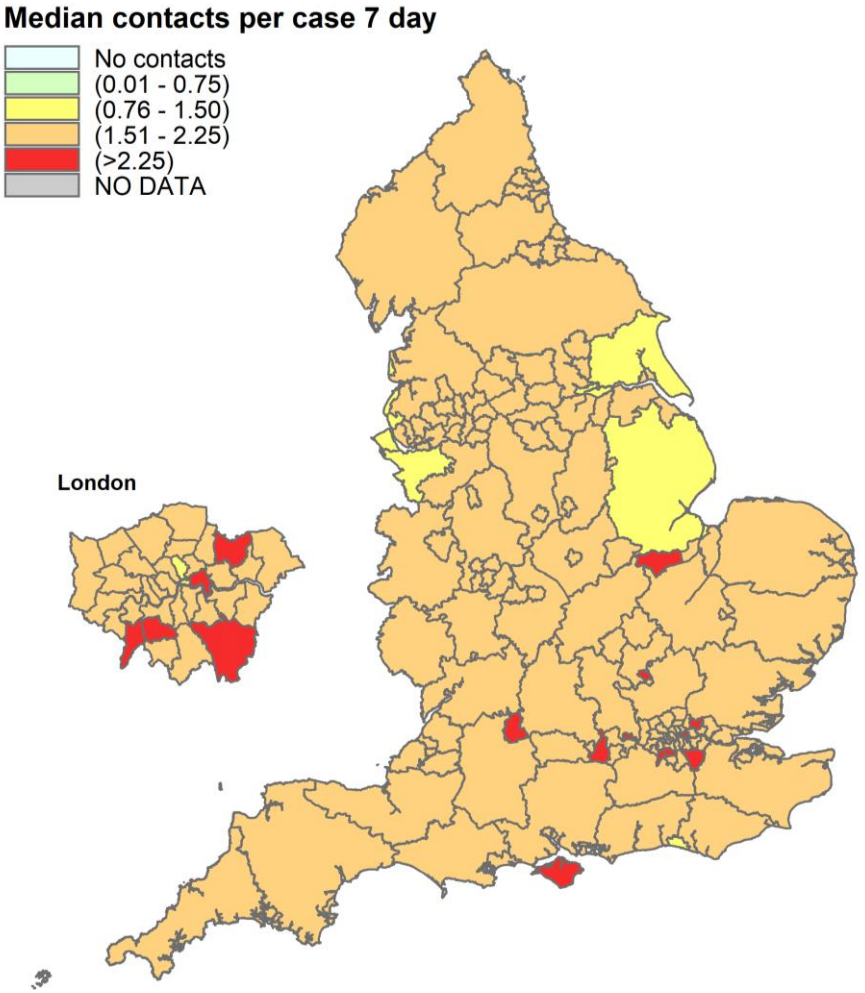
Source: NHS England & Improvement COVID-19 Hospital Activity Data, from 01 September 2020 to 02 December 2020.
Produced by Joint Biosecurity Centre.

Contact tracing – 7 day

Data extracted 30 November 2020 – data up to 29 November 2020

Median number of individual contacts per case by lower-tier local authority, England, overall from **23 November** to **29 November 2020** (NHS Test and Trace).

Note this excludes contacts identified as part of complex situations managed by Level 1.

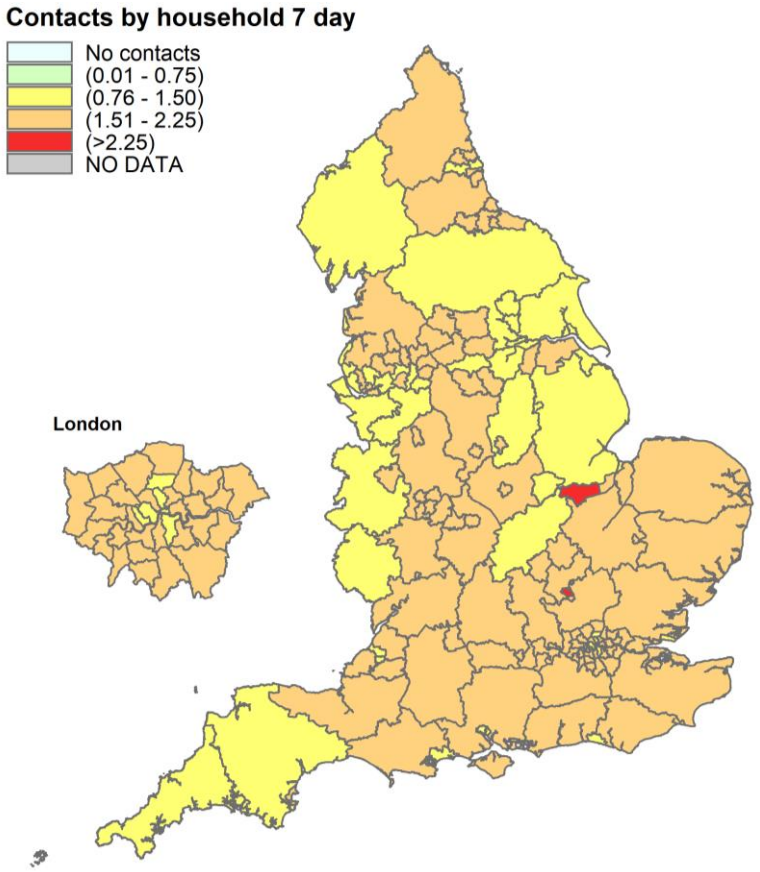


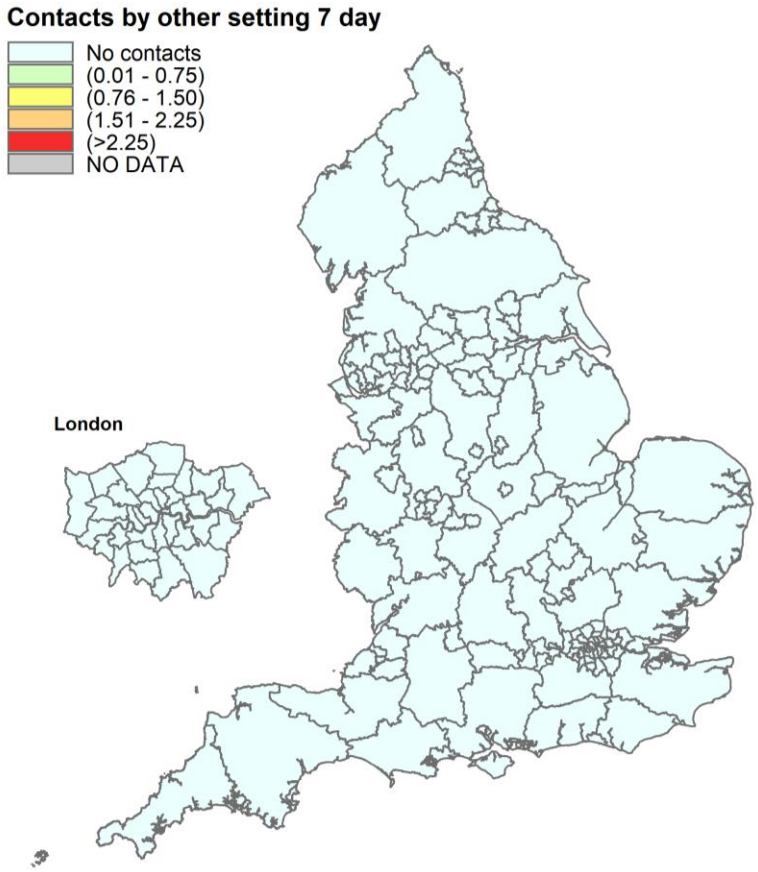
Contact tracing – 7 day

Data extracted 30 November 2020 – data up to 29 November 2020

Median number of contacts per case by setting (household or other) by lower-tier local authority, England, overall from **23 November** to **29 November 2020** (NHS Test and Trace).

Note that contacts with unknown geography are assigned to the upper-tier local authority of the case that identified them.



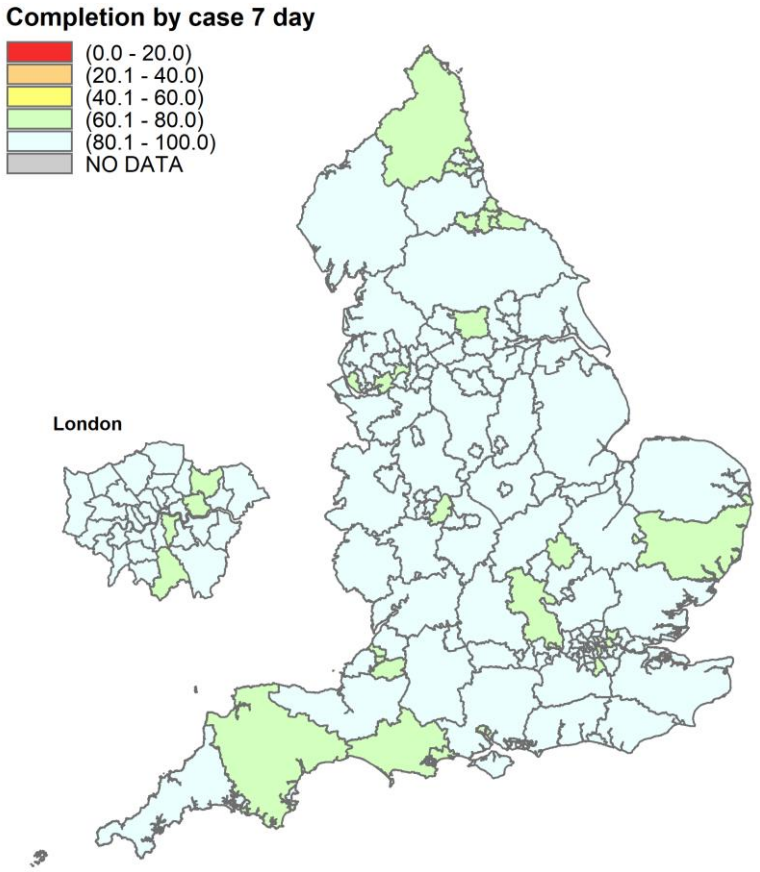


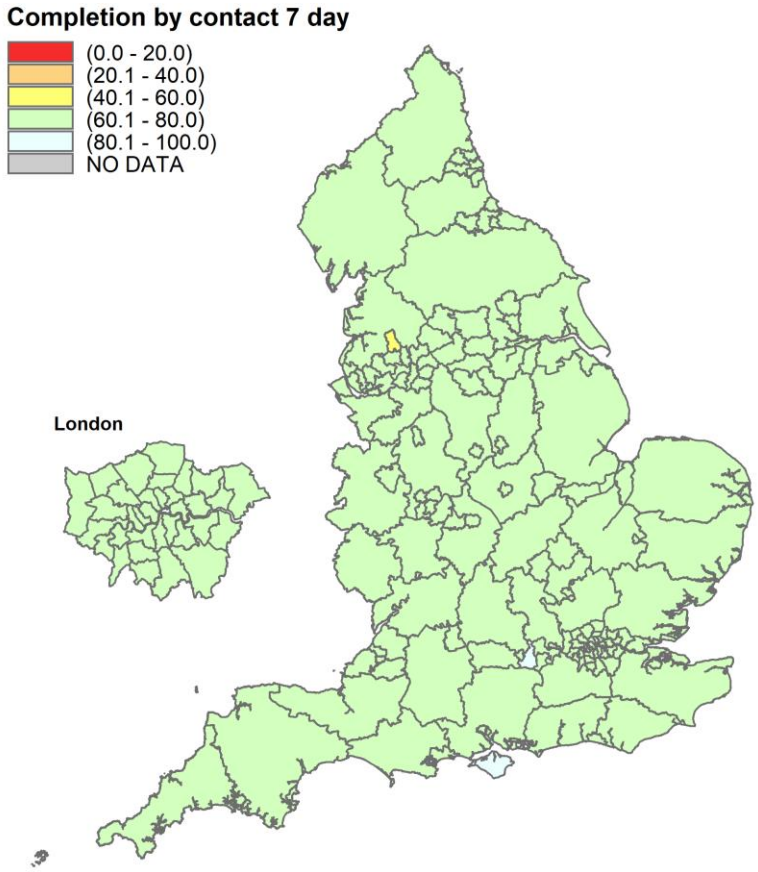
Contact tracing – 7 day

Data extracted 30 November 2020 – data up to 29 November 2020

Proportion of cases and contacts completing contact tracing by lower-tier local authority, England, overall from **23 November** to **29 November 2020** (NHS Test and Trace).

Note that contacts with unknown geography are assigned to the upper-tier local authority of the case that identified them.



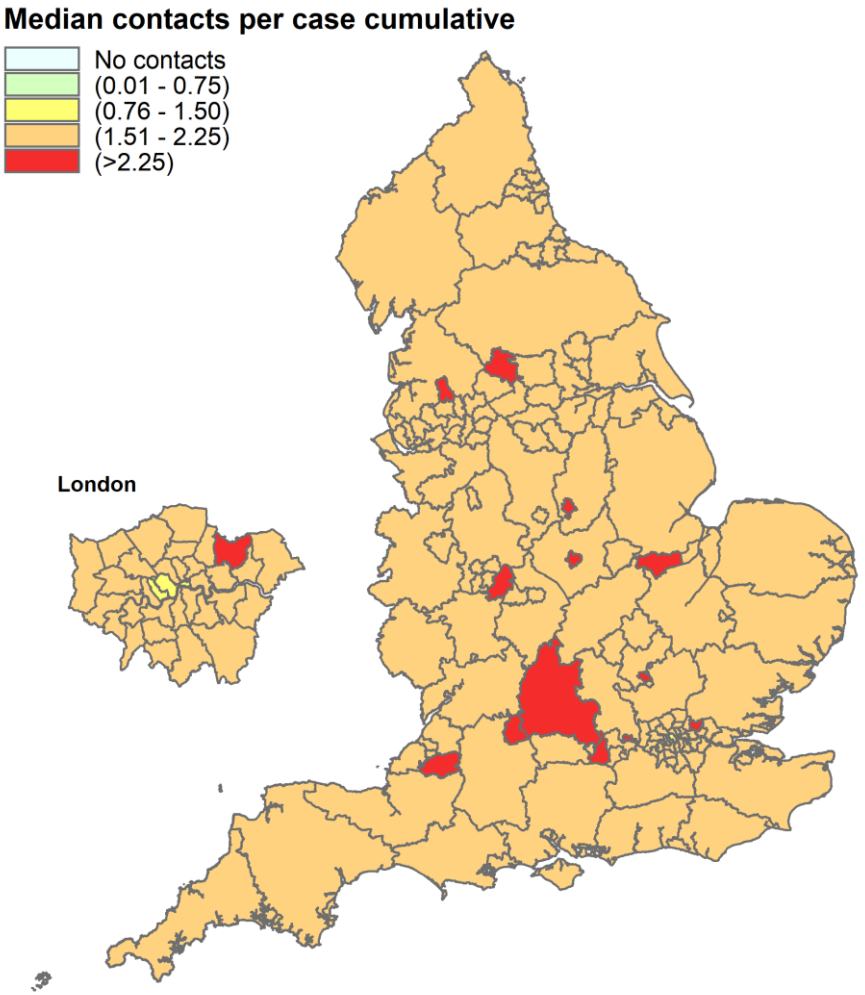


Contact tracing – cumulative

Data extracted 30 November 2020 – data up to 29 November 2020

Median number of individual contacts per case by lower-tier local authority, England, overall from **28 May** to **29 November 2020** (NHS Test and Trace).

Note this excludes contacts identified as part of complex situations managed by Level 1.

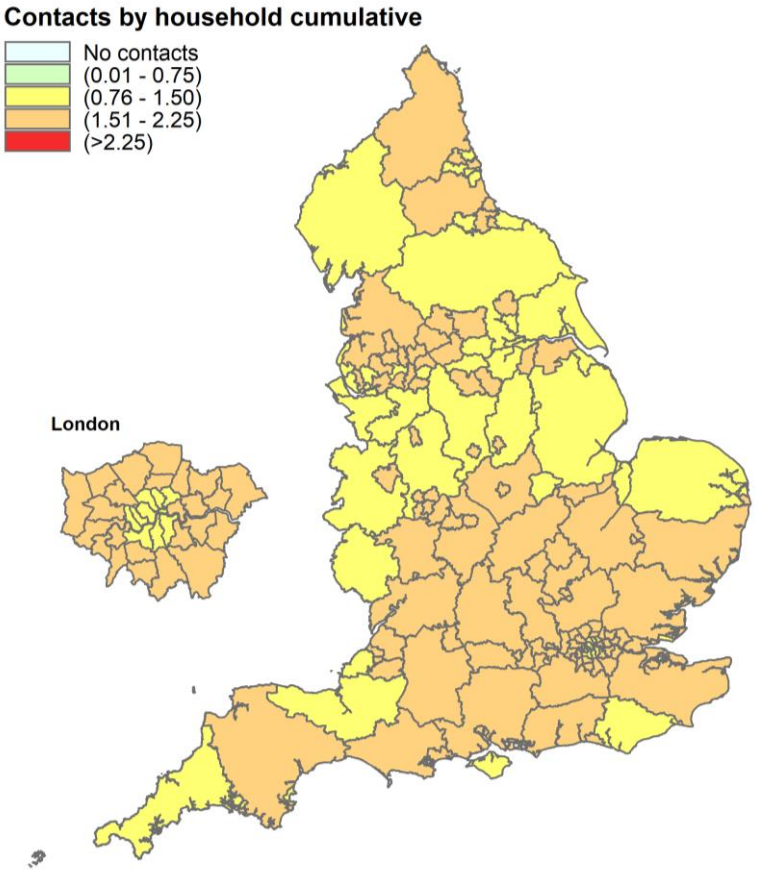


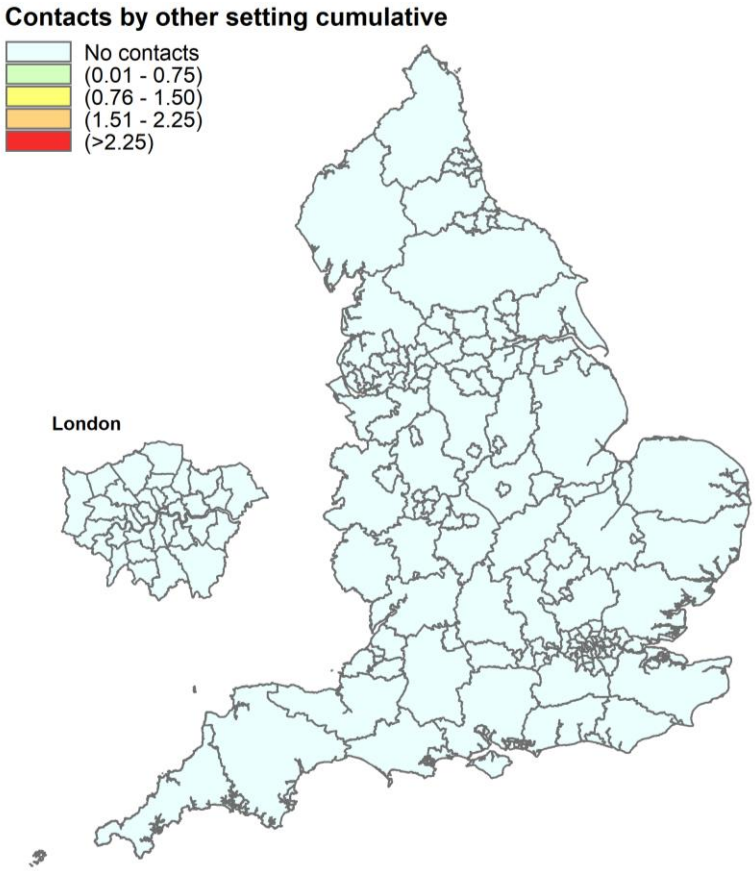
Contact tracing – cumulative

Data extracted 30 November 2020 – data up to 29 November 2020

Median number of contacts per case by setting (household or other) by lower-tier local authority, England, overall from **28 May** to **29 November 2020** (NHS Test and Trace).

Note that contacts with unknown geography are assigned to the upper-tier local authority of the case that identified them.





Contact tracing – cumulative

Data extracted 30 November 2020 – data up to 29 November 2020

Proportion of cases and contacts completing contact tracing by lower-tier local authority, England, overall from **28 May** to **29 November 2020** (NHS Test and Trace).

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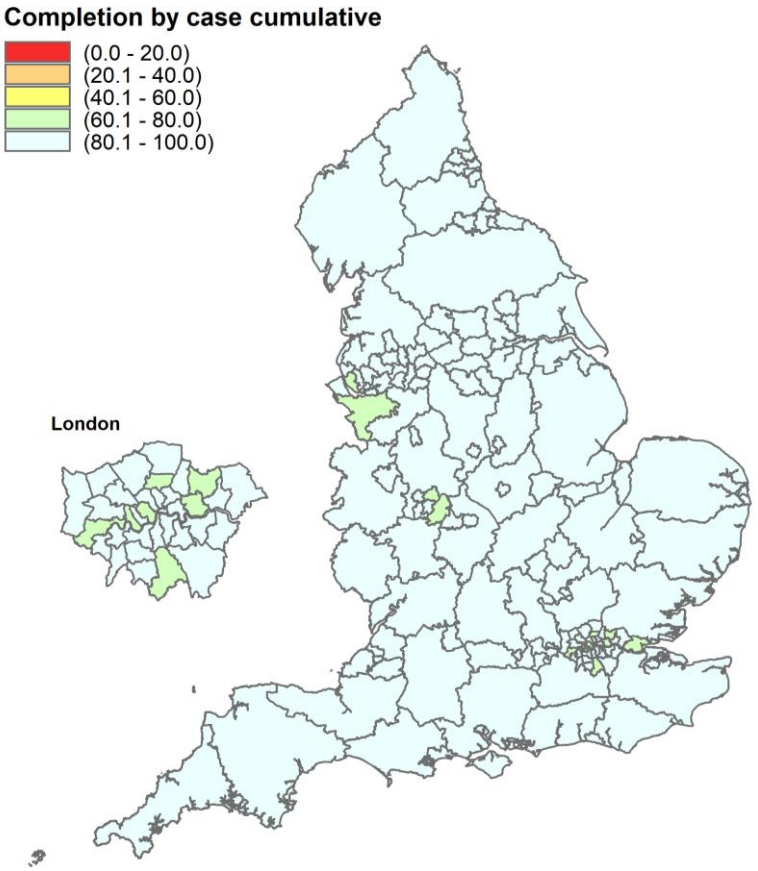
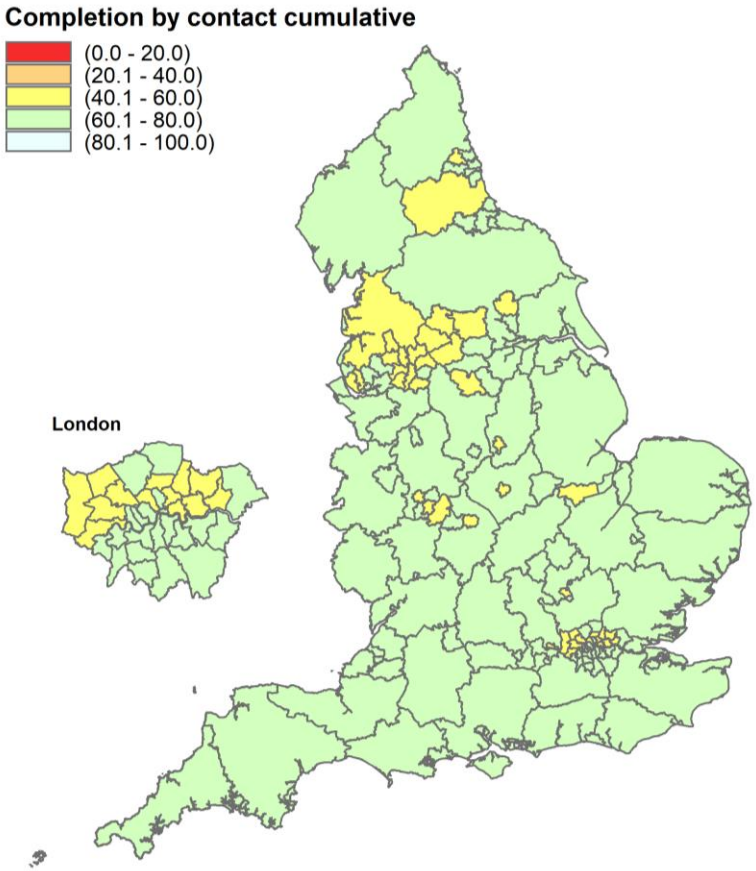
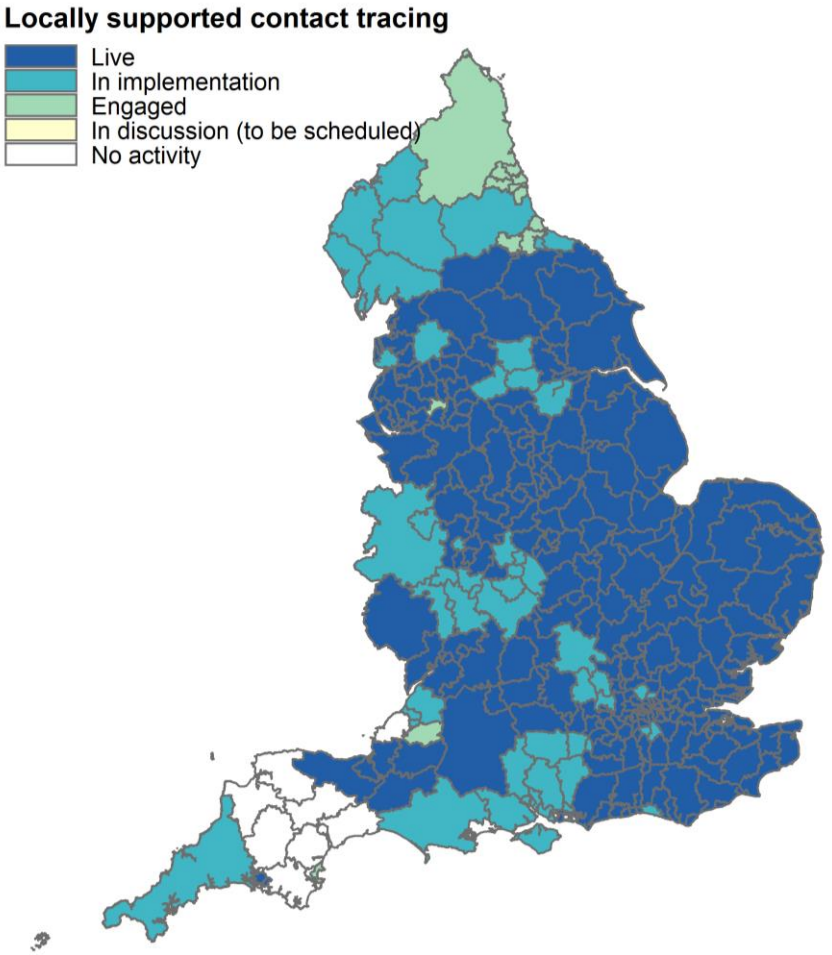




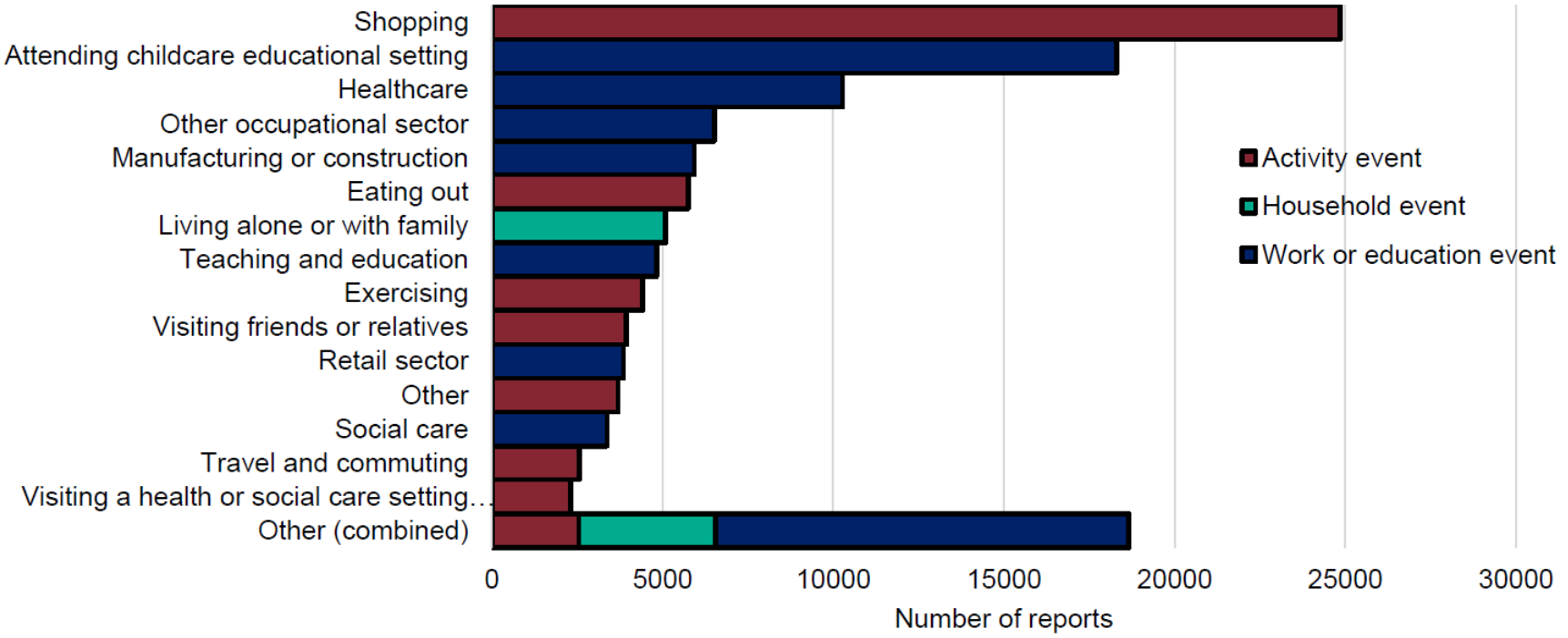
Locally supported contact tracing

Data extracted 1 December 2020



Enhanced contact tracing
Exposure setting for all reported contacts
(Data source: NHS Test and Trace)

Events and activities reported by people testing positive, prior to symptom onset in week 47, England



Note: 'Other' includes a wide range of different activities and settings, each of which has small numbers of individuals, as well as activities which did not fit any specific category and were added as Other by the case. This includes: (all within 'activities': Arts entertainment or recreation; Civil service or government; Close contact services; Community and charity activities; Critical national infrastructure; Emergency services; Financial services; Food production; Hospitality; Immigration border services; Information and communication; Military; Personal care; Prison; Private events and celebrations; Public events and mass gathering; event within a shared household; Sport events; Supported living; Teaching and education; Transport; 'Other (combined)' includes all exposure group types that have small counts such as "went to church", "went to the zoo" within that event type.

Data extracted 26 November 2020

Weekly report on Acute Respiratory Infection (ARI) Situations reported to PHE
Methodology, data sources and limitations

- We report on new acute respiratory infection (ARI) situations reported to Health Protection Teams (HPTs) and entered on HPZone in the previous reporting week by setting and locality.
- Daily and weekly aggregated surveillance reports are extracted from HPZone to generate the line listing.
- The weekly extracts include situations reported in the previous epidemiological week (Monday to Sunday) by locality and context (setting e.g. school)
- Situations associated with Educational settings and Workplaces undergo further investigation. Individual case notes are reviewed by an epidemiologist and an assessment made about whether the criteria for a confirmed COVID-19 cluster or outbreak are met. See definitions.
- Situations associated with Educational settings, Workplaces, Other settings and Food Outlets/ Restaurants are also further classified into sub-categories by review of individual records.
- It is important to note that many of these situations remain live and so the description presented here may not necessarily be final.
- Of note a national school helpline started operating on 17 September 2020 and a Universities helpline started operating on 7 October. This is likely to have had an impact on the number of situations/outbreaks being reported to HPTs in these settings.
- The denominator (the overall number of settings in each category) will differ by the setting category, for example there are fewer hospitals than workplaces, as will the propensity to report incidents to PHE. Therefore these data are more useful for monitoring trends over time than making comparisons across setting categories.
- Schools in England were closed for half-term during weeks 43 or/ and 44.
- The situations captured on HPZone represent a subset of all ongoing clusters and outbreaks in England rather than an exhaustive listing. A variety of arrangements are in place with local authorities and other stakeholders supporting HPTs, however data are not routinely documented on HPZone. As a result, the number of outbreaks reported for some of the regions are underestimates.

Methodology, data sources and limitations

Definitions

Cluster: two or more test-confirmed cases of COVID-19 among individuals associated with a specific non-residential setting with illness onset dates within a 14-day period (in the absence of detailed information about the type of contact between the cases).

Outbreak: two or more test-confirmed cases of COVID-19 among individuals associated with a specific non-residential setting with illness onset dates within 14 days, and one of:

- Identified direct exposure between at least 2 of the test-confirmed cases in that setting (for example under one metre face to face, or spending more than 15 minutes within 2 metres) during the infectious period of one of the cases
- When there is no sustained local community transmission - absence of an alternative source of infection outside the setting for the initially identified cases

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
- ONS - Coronavirus (COVID-19) Infection Survey, UK
- REACT-1 round 7 updated report

Data sources

Second Generation Surveillance System (SGSS)

Data as of 1 December 2020 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 2 December 2020 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 2 December 2020 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.