

Influenza and COVID-19 surveillance graphs

UKHSA publishes a national influenza and COVID-19 surveillance report which summarises the information from the surveillance systems which are used to monitor influenza, COVID-19, and other seasonal respiratory viruses in England.

Additional figures based on these surveillance systems are included in this slide set.

The figures presented in this slide set are based on data from week 50 (between 9 December 2024 and 15 December 2024).



Contents

- 1) [Laboratory-confirmed cases \(England\)](#)
- 2) [Respiratory Datamart system \(England\)](#)
- 3) [Primary Care surveillance](#)
- 4) [Secondary Care surveillance](#)
- 5) [Co- and secondary infections in persons with COVID-19 and influenza in England](#)



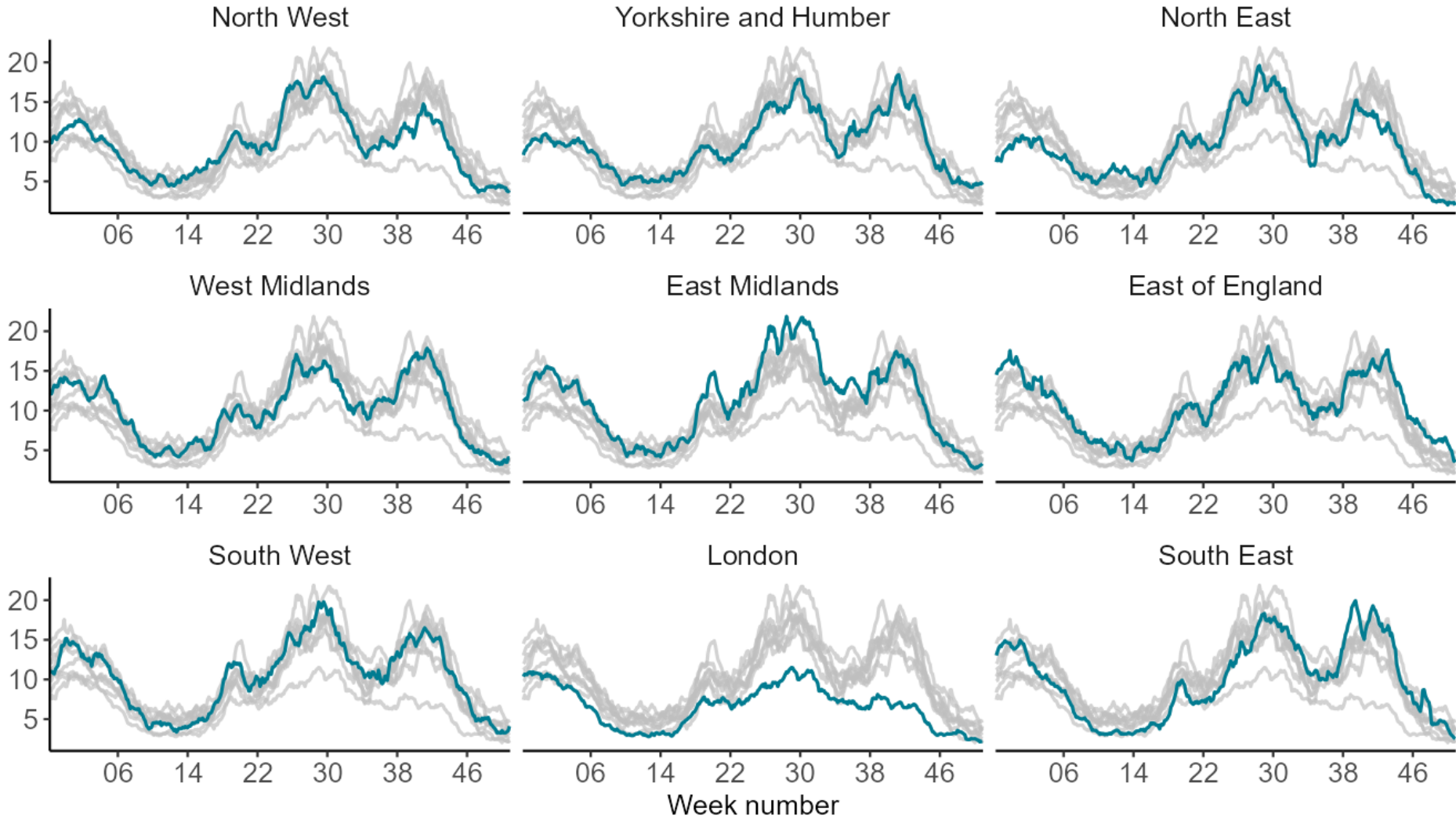
Laboratory-confirmed cases (England)

Confirmed COVID-19 episodes in England

Data Information

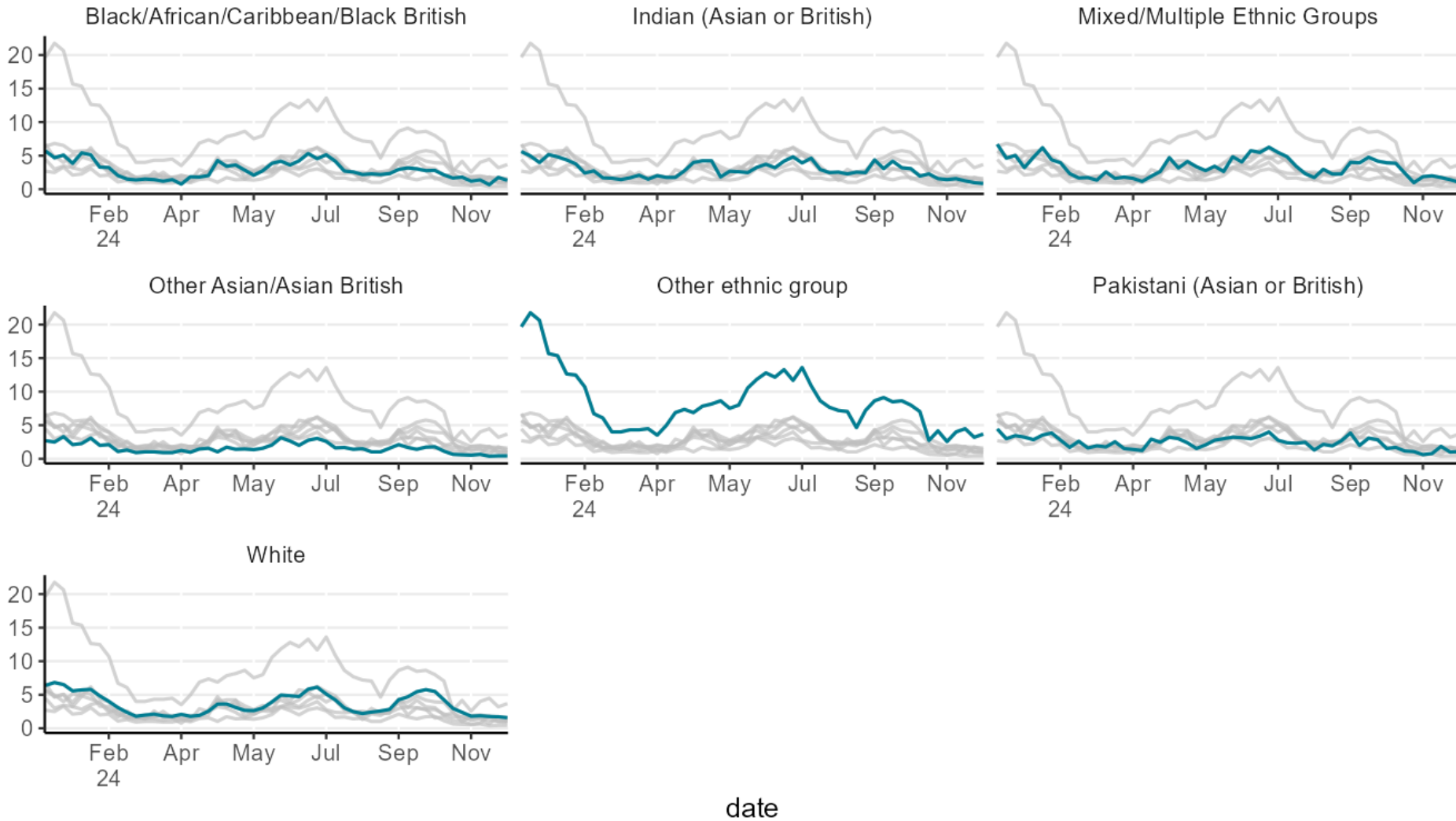
- From week 32 report onwards, case rates have been updated to use the latest ONS population estimates for mid-2020. Previously case rates were calculated using the mid-2019 population estimates
- From 11 January 2022 the requirement for [confirmatory PCR testing in individuals who test positive using a lateral flow device was temporarily removed](#).
- Rates by ethnicity and IMD quantile will continue to be presented using the mid-2019 estimates.
- From 31 January 2022, UKHSA moved all COVID-19 case reporting in England to use a new episode-based definition which includes possible reinfections. Each infection episode is counted separately if there are at least 91 days between positive test results (PCR or LFD). Each infection episode begins with the earliest positive specimen date. Further information can be found on the [UK COVID-19 dashboard](#).
- Since 1 April 2022, free universal symptomatic and asymptomatic testing for the general public in England is no longer available, as outlined in the plan for [living with COVID-19](#). As such, there will be a reduction in the reporting of data obtained through Pillar 2 from April 2022 onwards. Data in this report should be interpreted in the context of this change to testing. [Public health guidance](#) remains in place for cases and their close contacts. Additionally, further changes in [testing policy](#) are in effect since 1 April 2023, which may affect case rates and positivity rates.

Confirmed COVID-19 cases - weekly positivity by UKHSA region



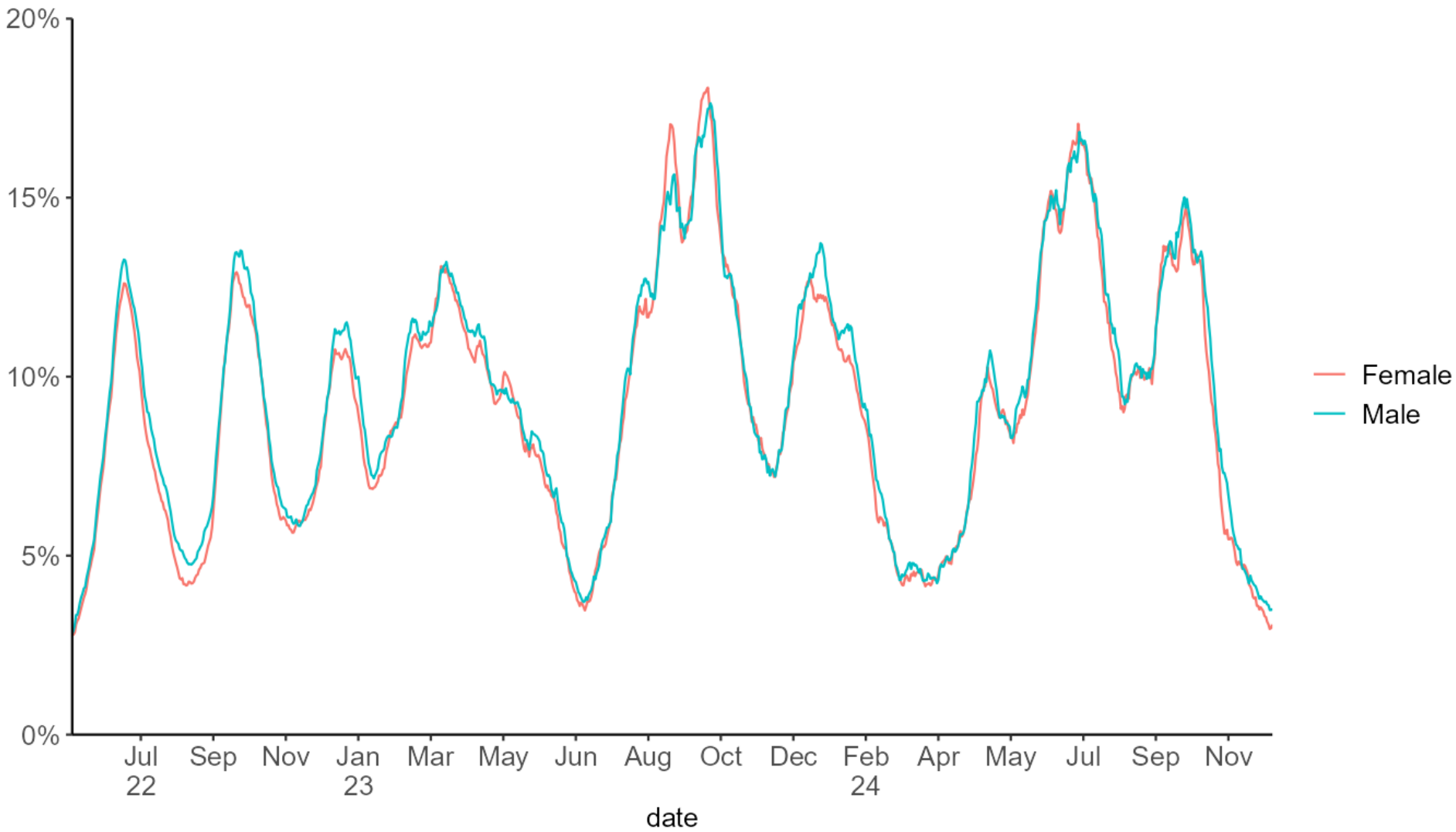
The highlighted line corresponds to the region in the subplot title, grey lines correspond to all other regions

Confirmed COVID-19 cases - weekly positivity by ethnicity

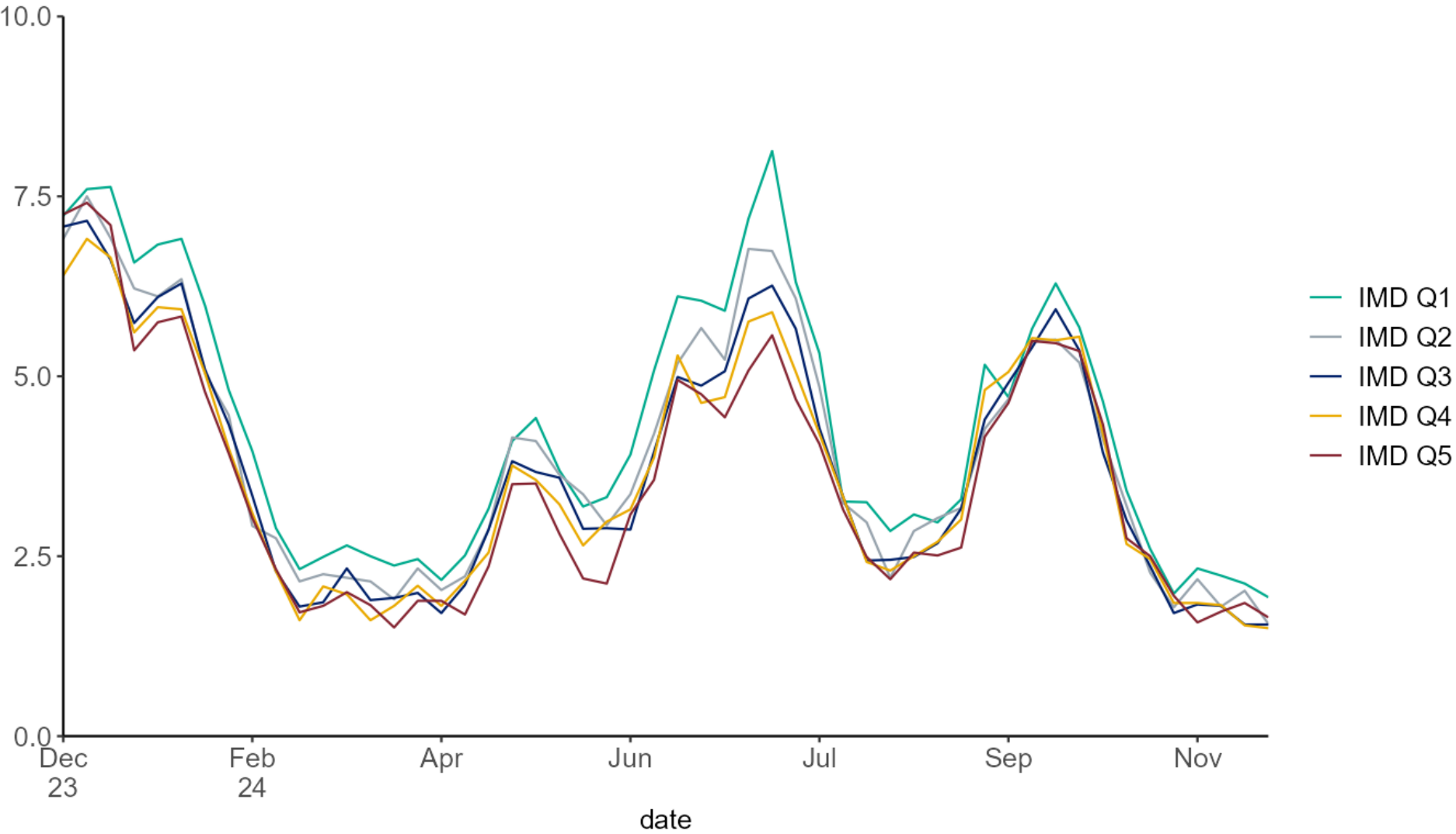


The highlighted line corresponds to the ethnicity in the subplot title, grey lines correspond to all other ethnicities

Seven-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested by sex under Pillar 1



Weekly COVID-19 rate tested under Pillar 1, per 100,000 population by IMD quintile (1 being the most deprived and 5 being the least deprived)

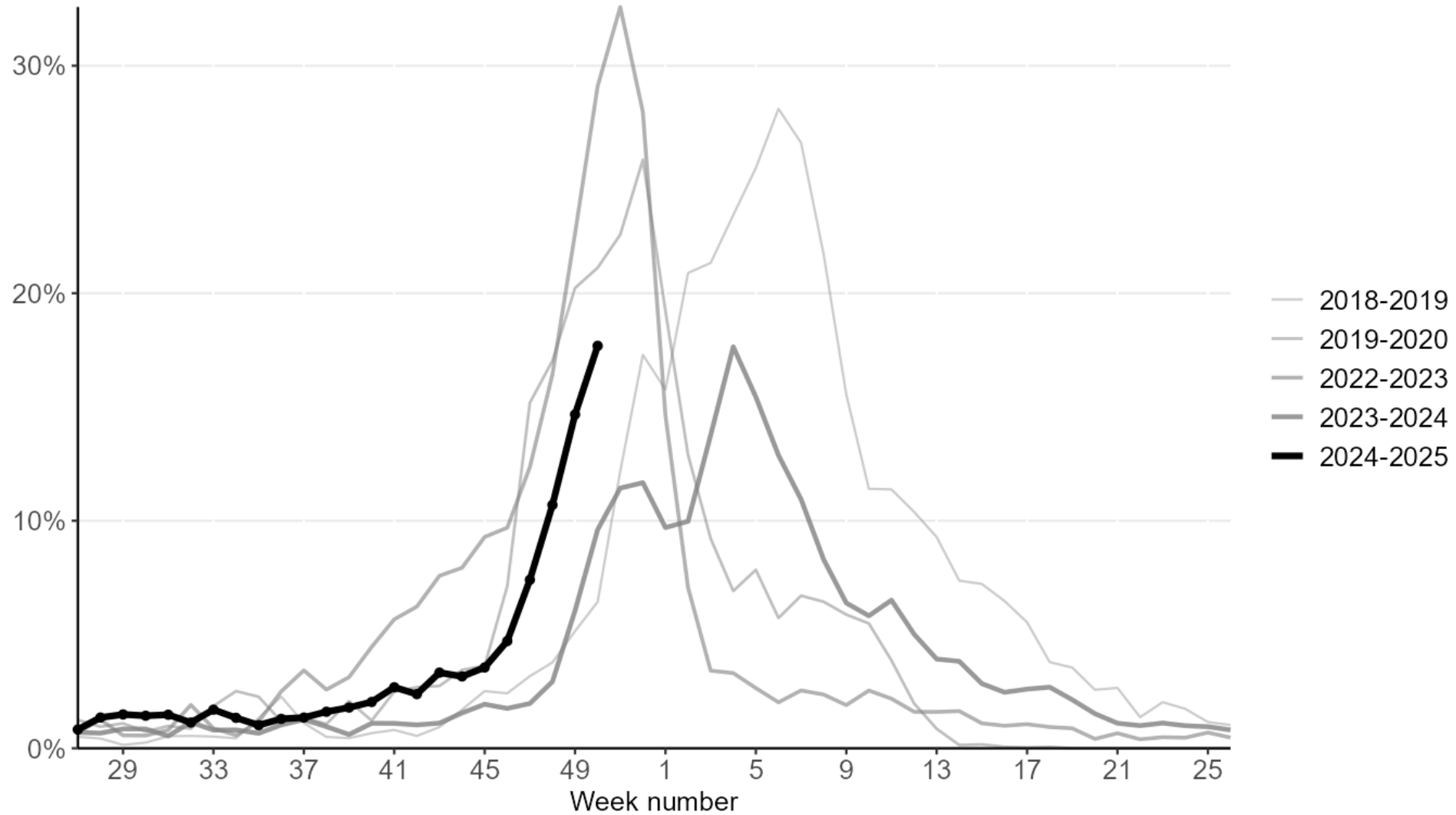


*incidence rates have been calculated using the mid-2019 ONS population estimates



Respiratory Datamart system (England)

Respiratory DataMart – influenza positivity by seasons



[note 1] Data from seasons 2020 to 2021 and 2021 to 2022 has been removed as there was low activity throughout these seasons.

Respiratory DataMart – influenza weekly positivity by age

Up to 5 years

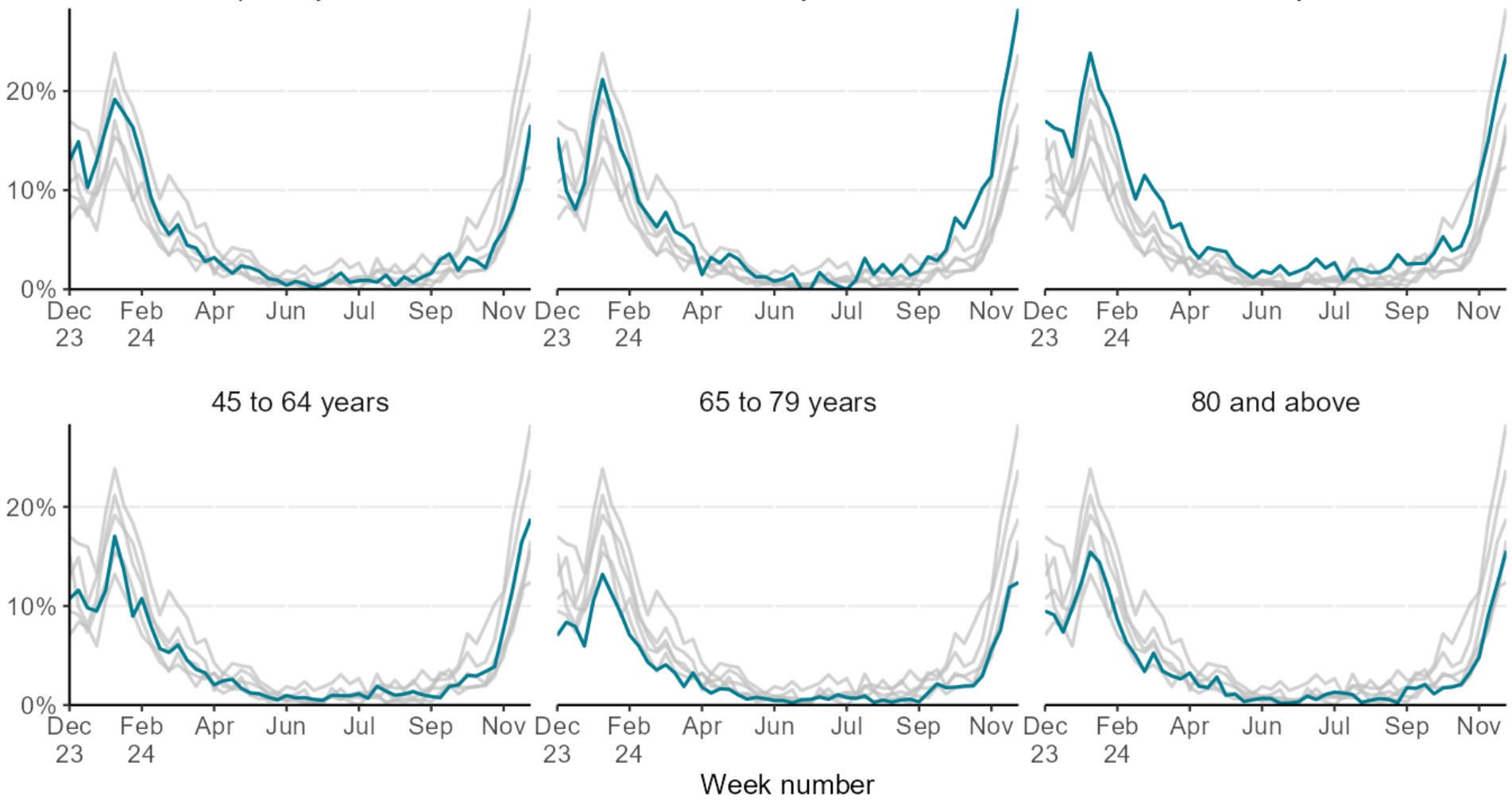
5 to 14 years

15 to 44 years

45 to 64 years

65 to 79 years

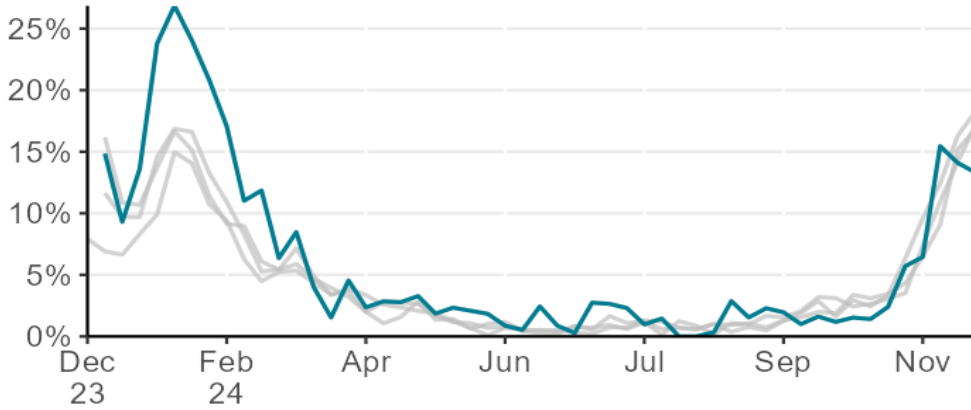
80 and above



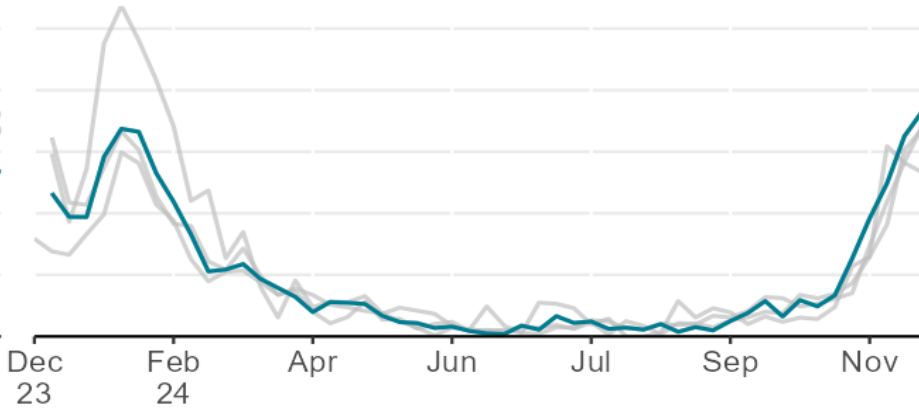
The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups

Respiratory DataMart – influenza weekly positivity by UKHSA region

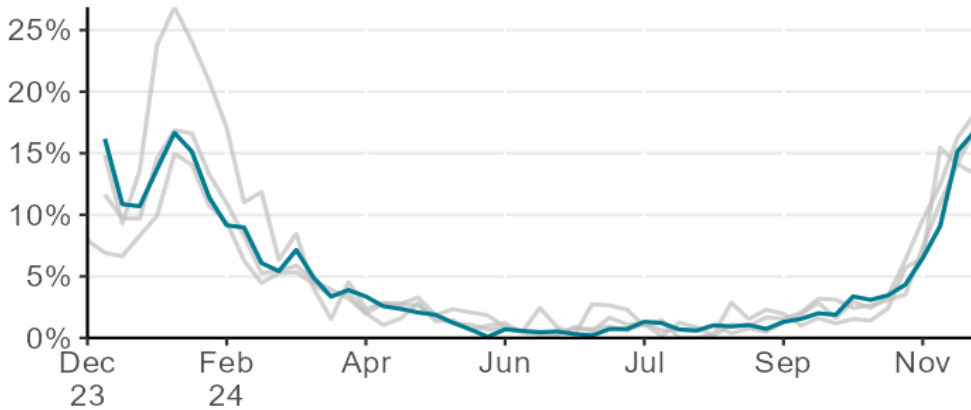
London



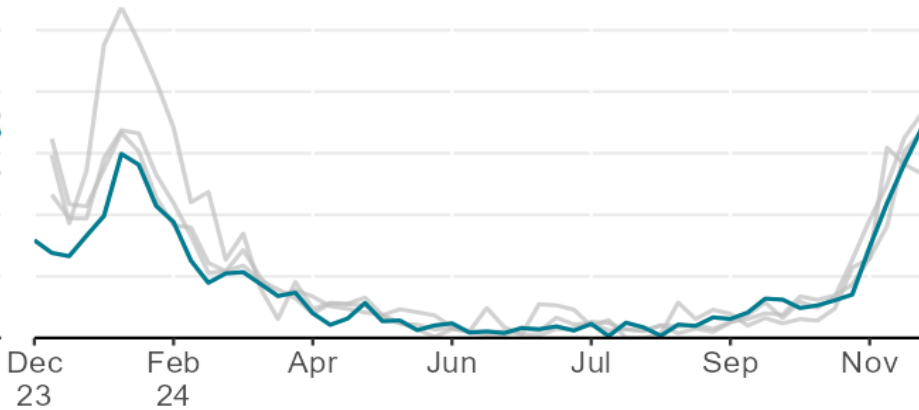
Midlands and East of England



North of England



South of England



Date

Changes in positivity in London should be interpreted with caution as there was a low number of samples this week and is subject to retrospective updates

The highlighted line corresponds to the region in the subplot title, grey lines correspond to all regions

Respiratory DataMart – Influenza subtypes

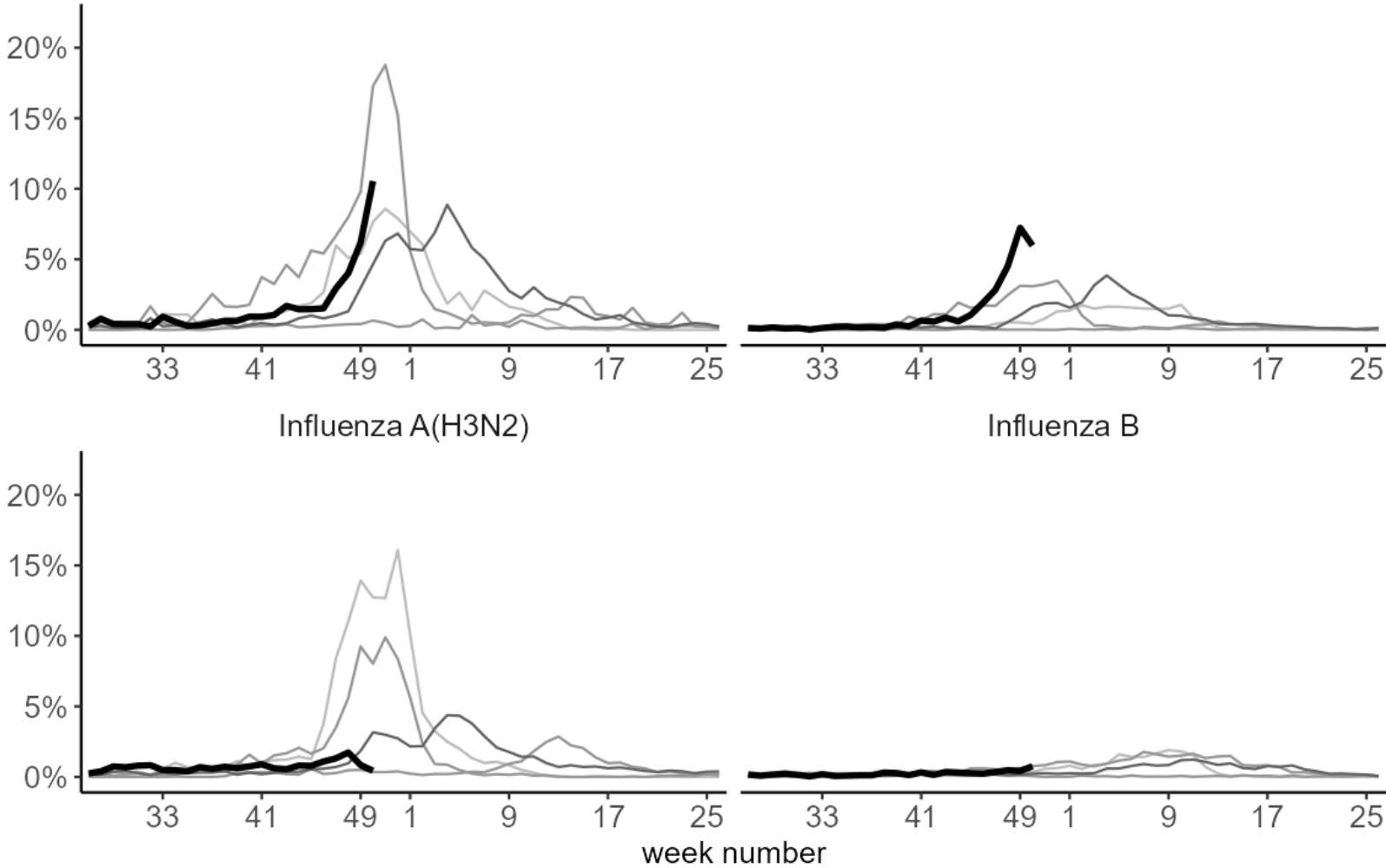
Influenza A (not subtyped)

Influenza A(H1N1)pdm09

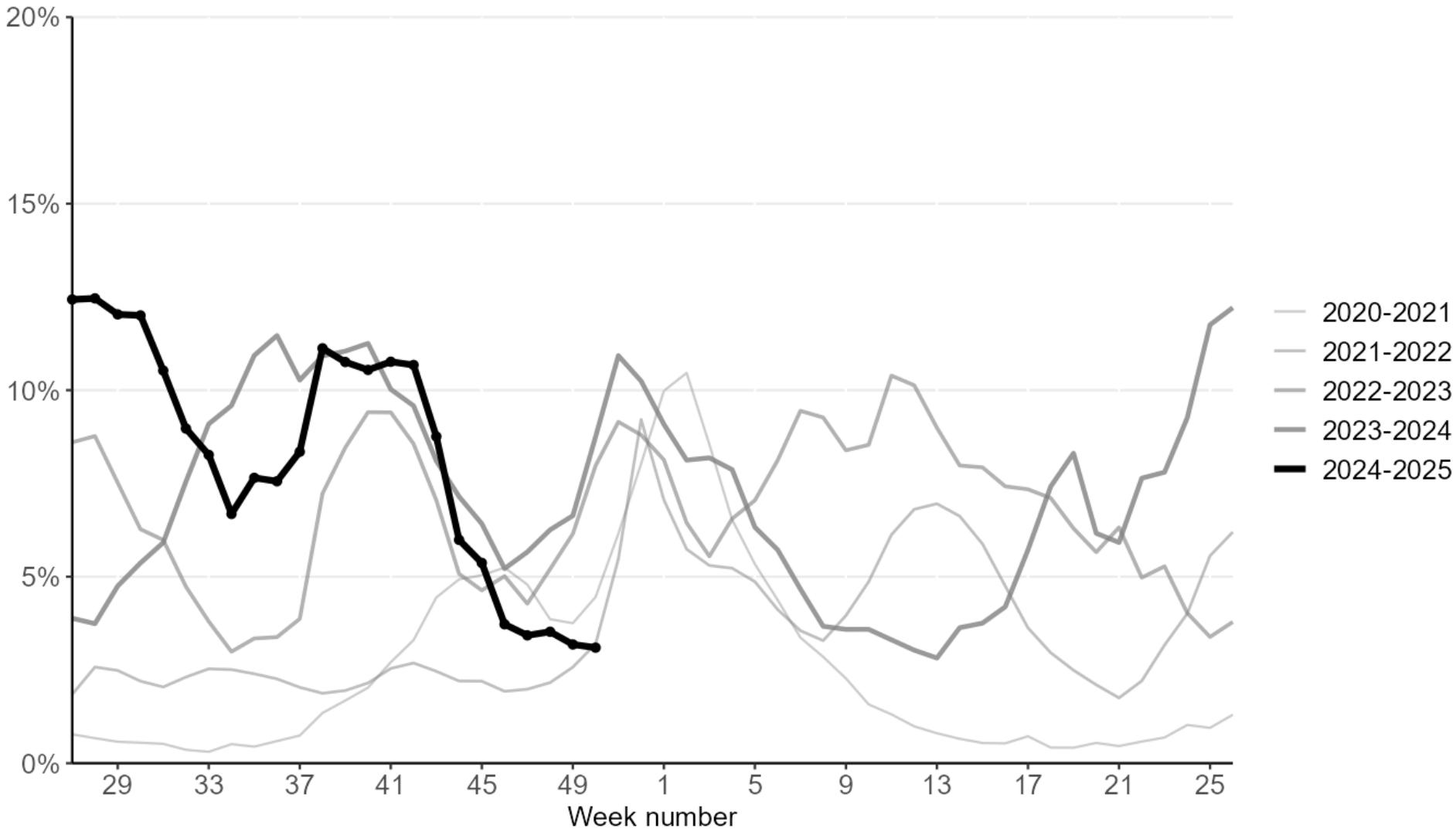
Influenza A(H3N2)

Influenza B

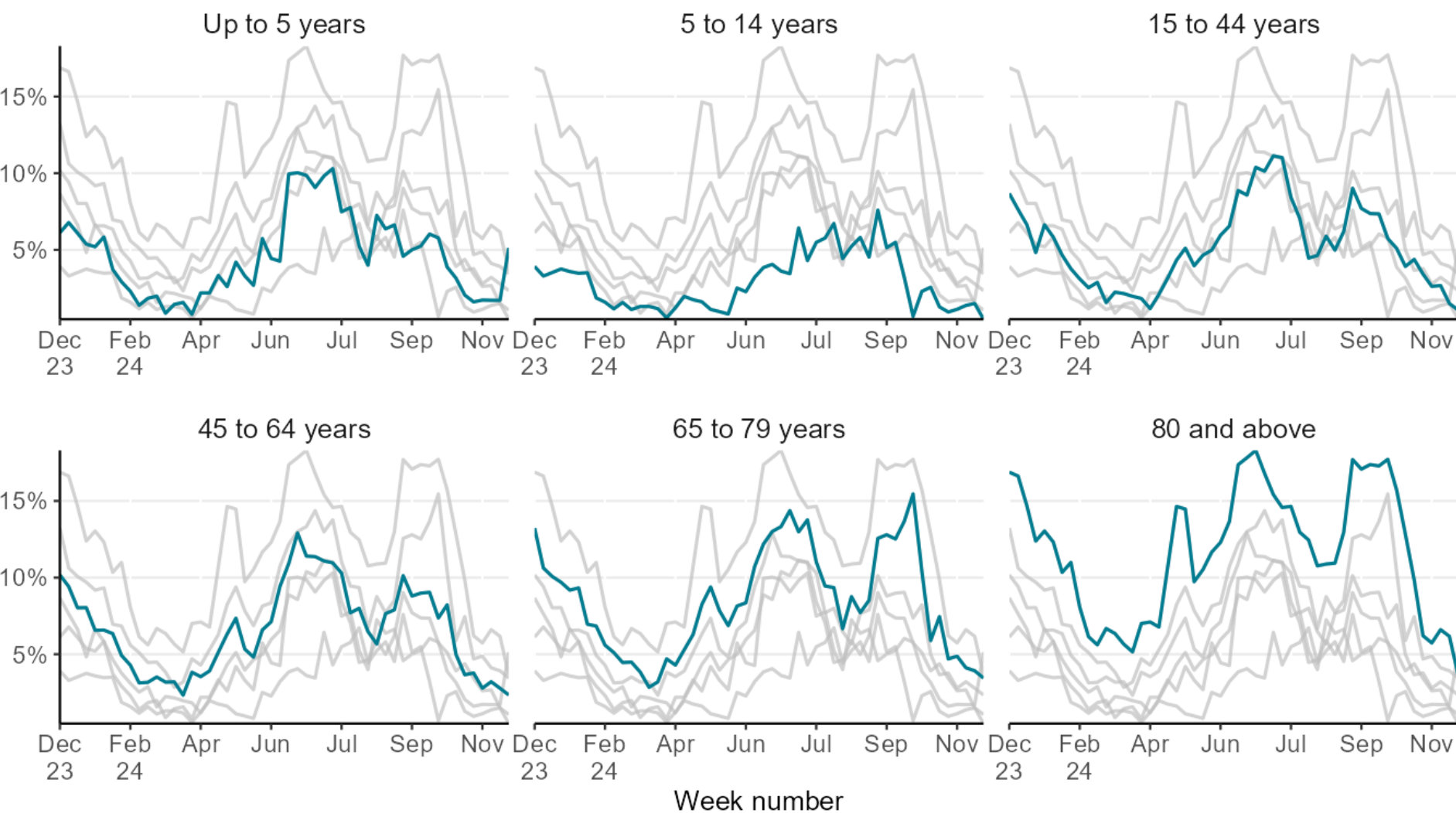
- 2019-2020
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025**



Respiratory DataMart – SARS-CoV-2 weekly positivity by seasons



Respiratory DataMart – SARS-CoV-2 weekly positivity by age group



The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups

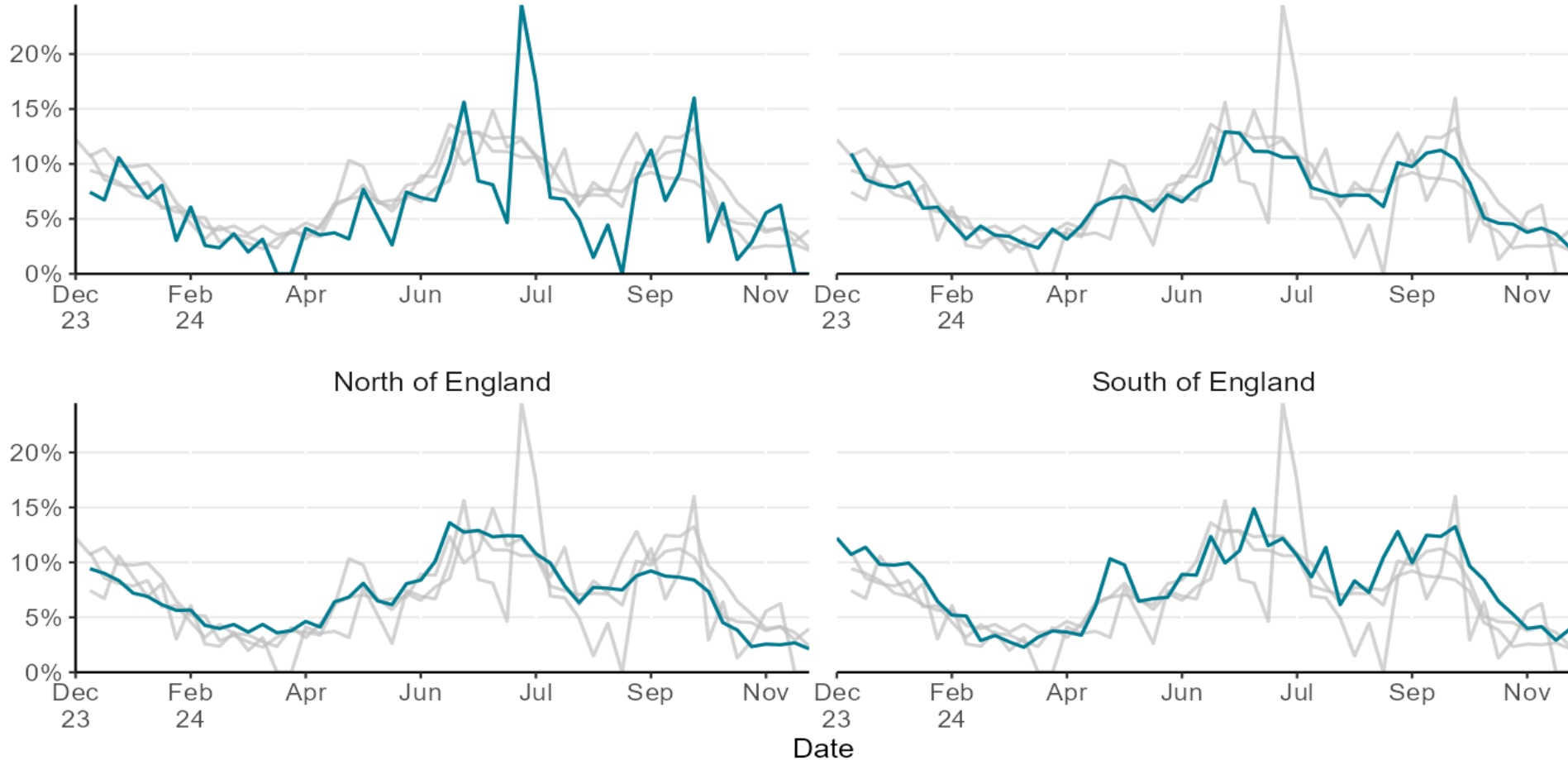
Respiratory DataMart – SARS-CoV-2 weekly positivity by UKHSA region

London

Midlands and East of England

North of England

South of England



Changes in positivity in London should be interpreted with caution as there was a low number of samples this week and is subject to retrospective updates

The highlighted line corresponds to the region in the subplot title, grey lines correspond to all regions

Respiratory DataMart – Respiratory syncytial virus (RSV) weekly positivity by UKHSA region

London

Midlands and East of England

North of England

South of England

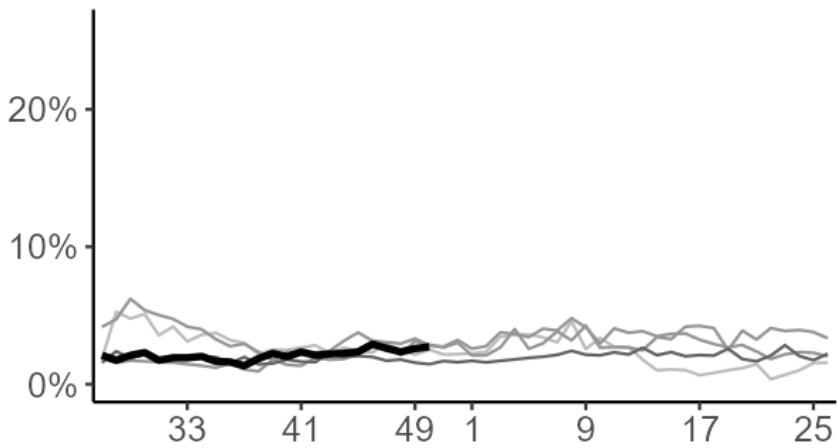
Date

Changes in positivity in London should be interpreted with caution as there was a low number of samples this week and is subject to retrospective updates

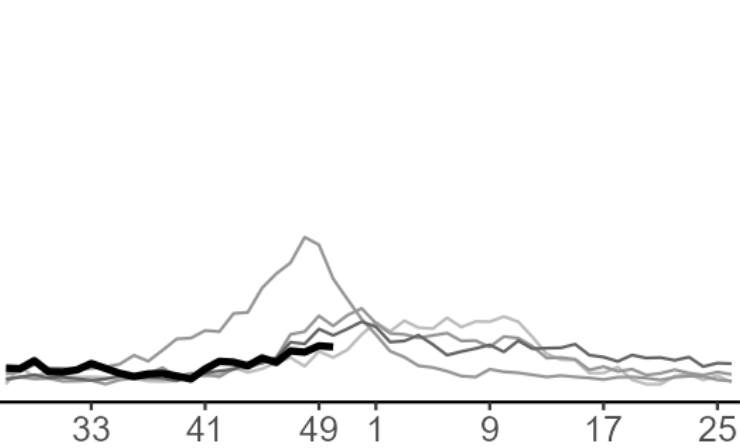
The highlighted line corresponds to the region in the subplot title, grey lines correspond to all regions

Respiratory DataMart – other respiratory viruses

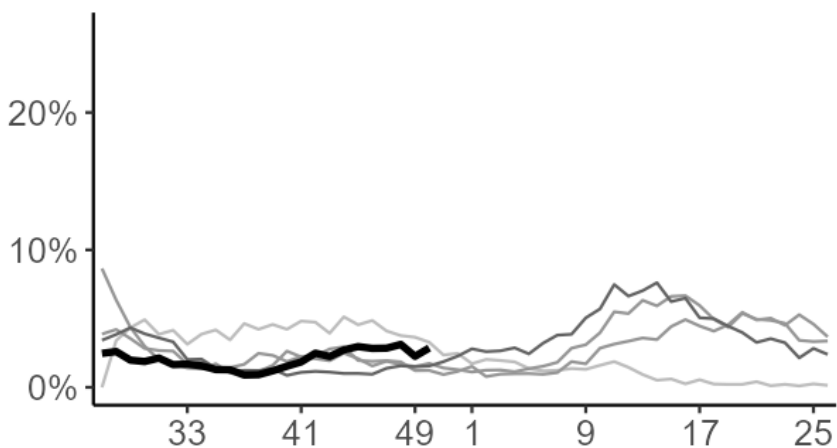
Adenovirus



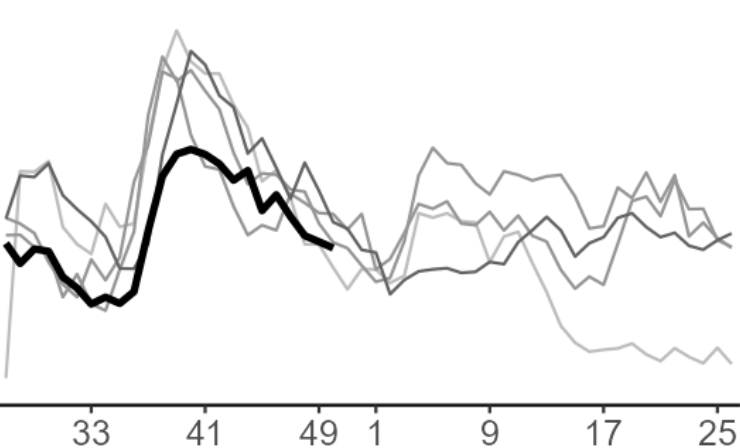
hMPV



Parainfluenza



Rhinovirus

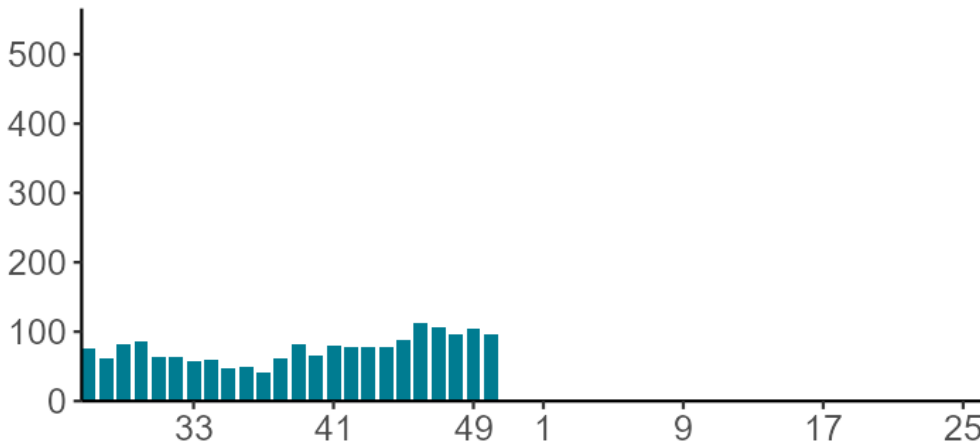


- 2019-2020
- 2021-2022
- 2022-2023
- 2023-2024
- 2024-2025**

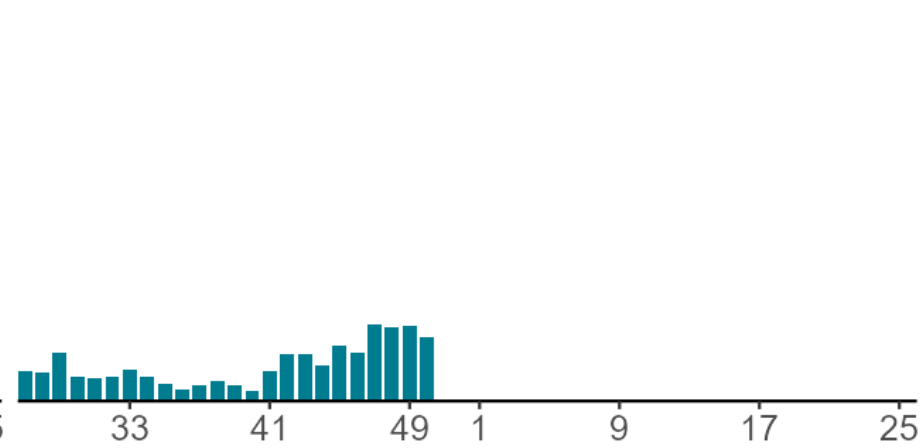
week number

Respiratory DataMart – other respiratory viruses

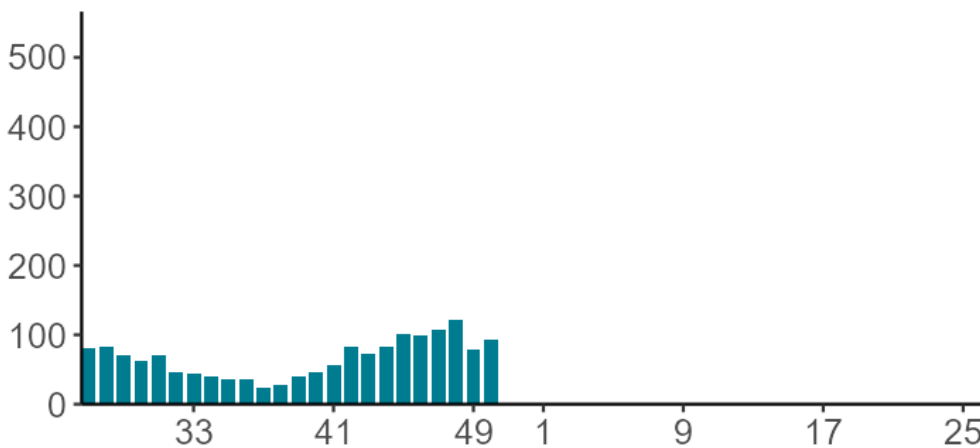
Adenovirus



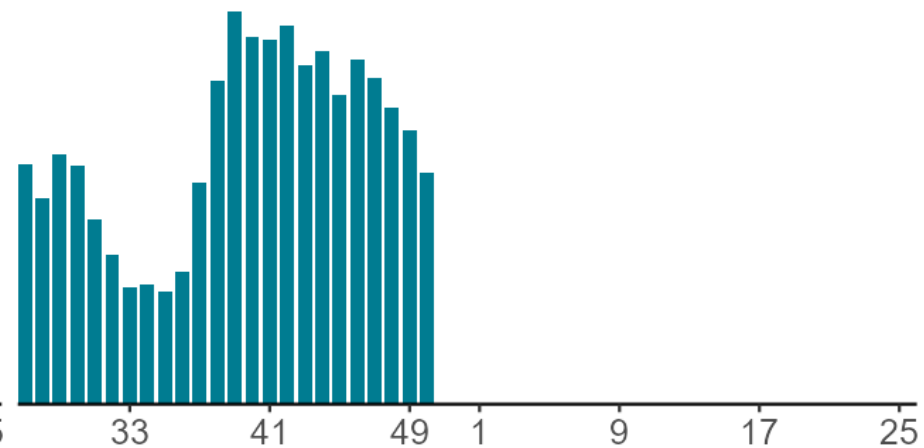
hMPV



Parainfluenza

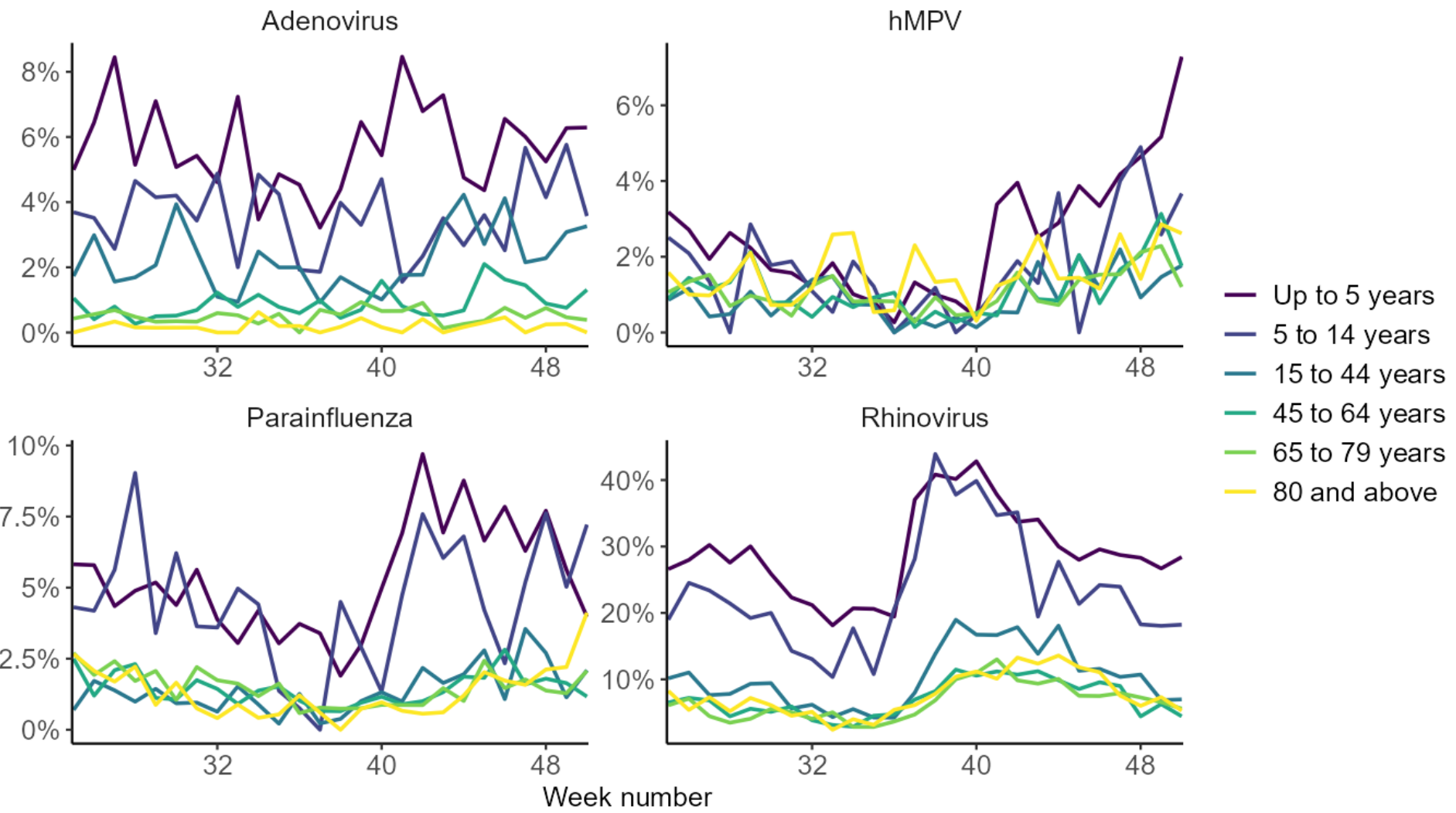


Rhinovirus



week number

Respiratory DataMart – other respiratory viruses

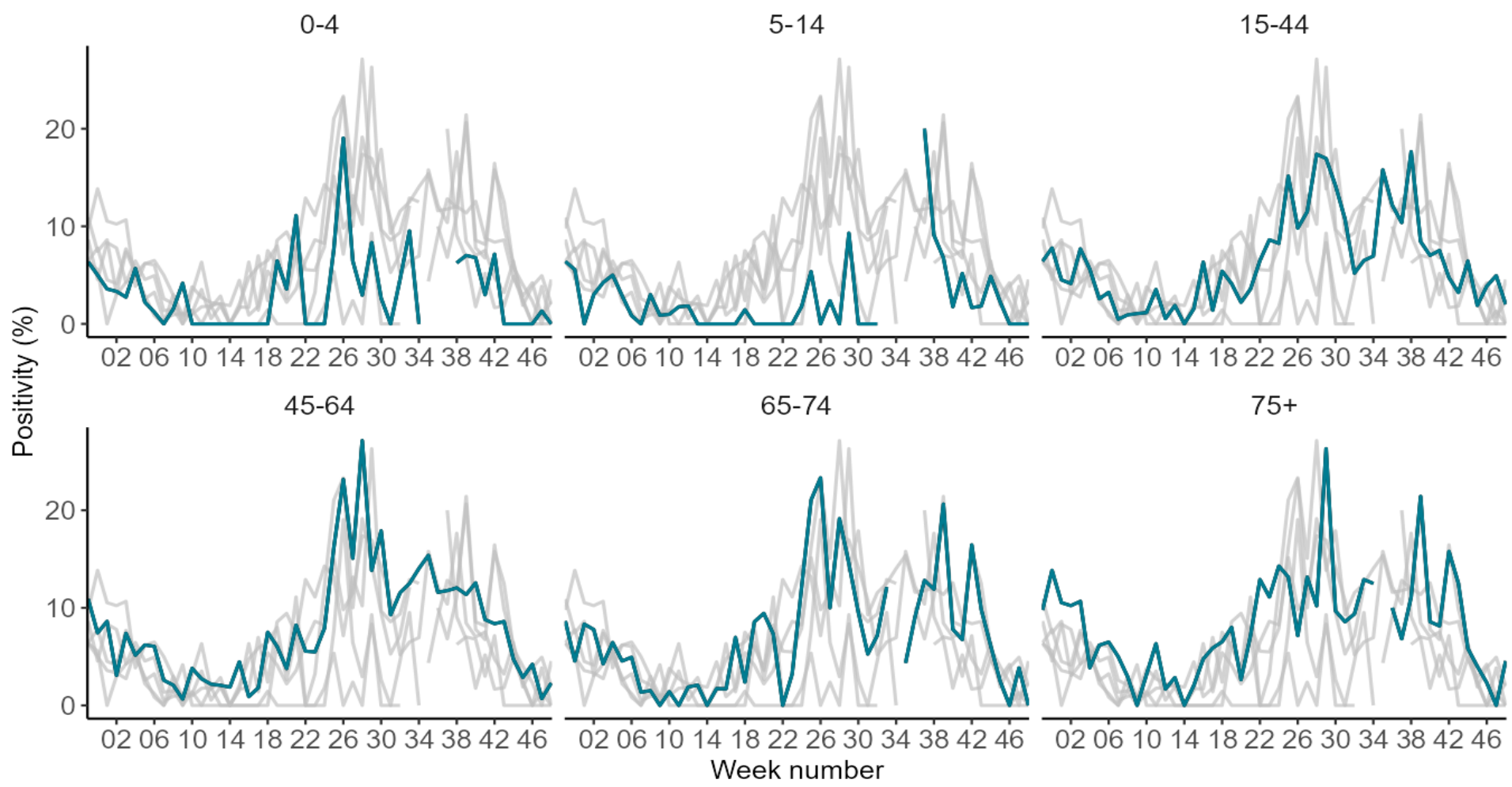


Please note y-axis uses different scales across graphs



Primary Care surveillance

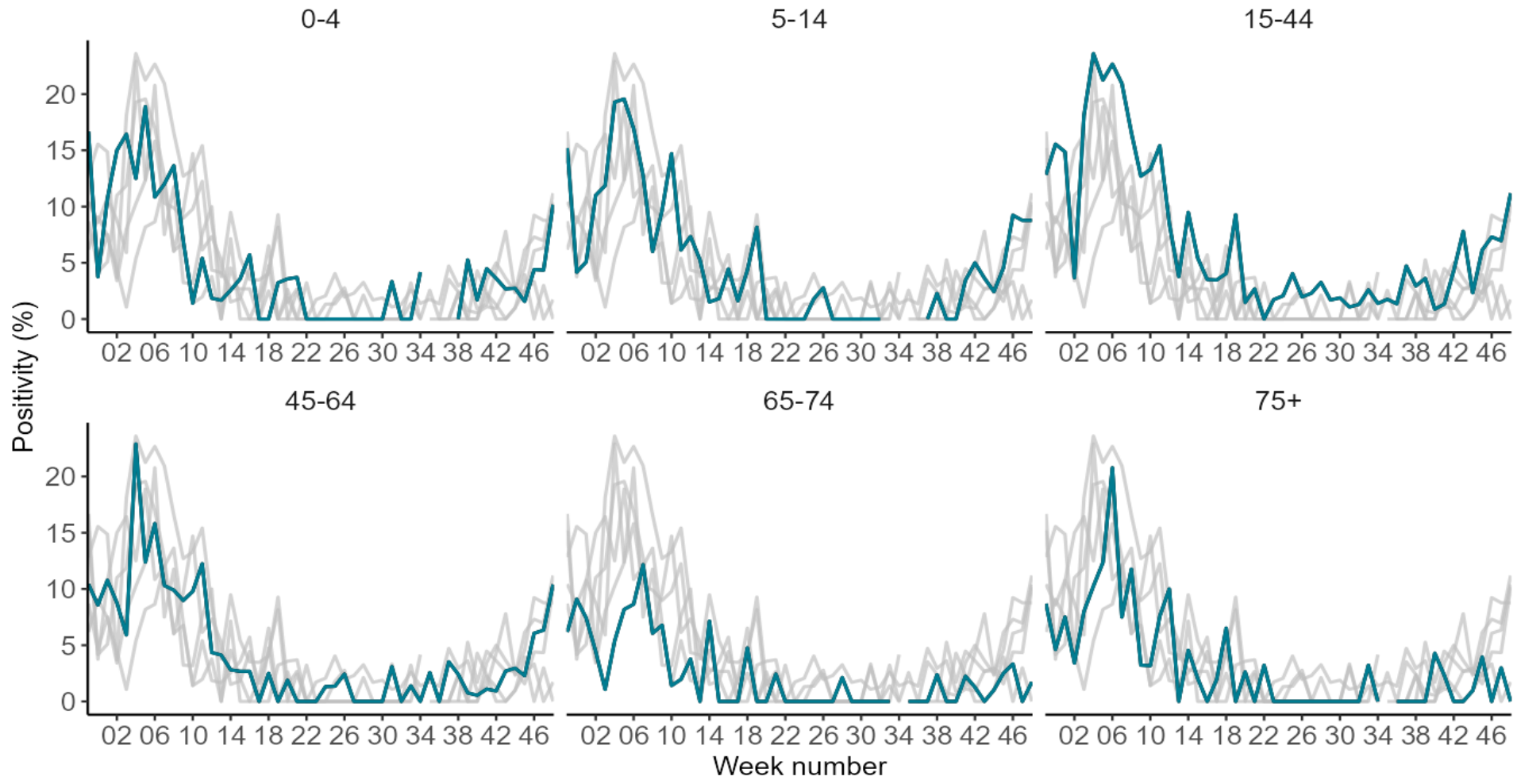
Weekly positivity for SARS-CoV-2 by age group in England, GP sentinel swabbing



Note: Weeks where fewer than 20 samples were tested in the age group are omitted
 Starting from week 48 2024, samples with more than 10 days between the sample collection date and the symptom onset date have been excluded

The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups

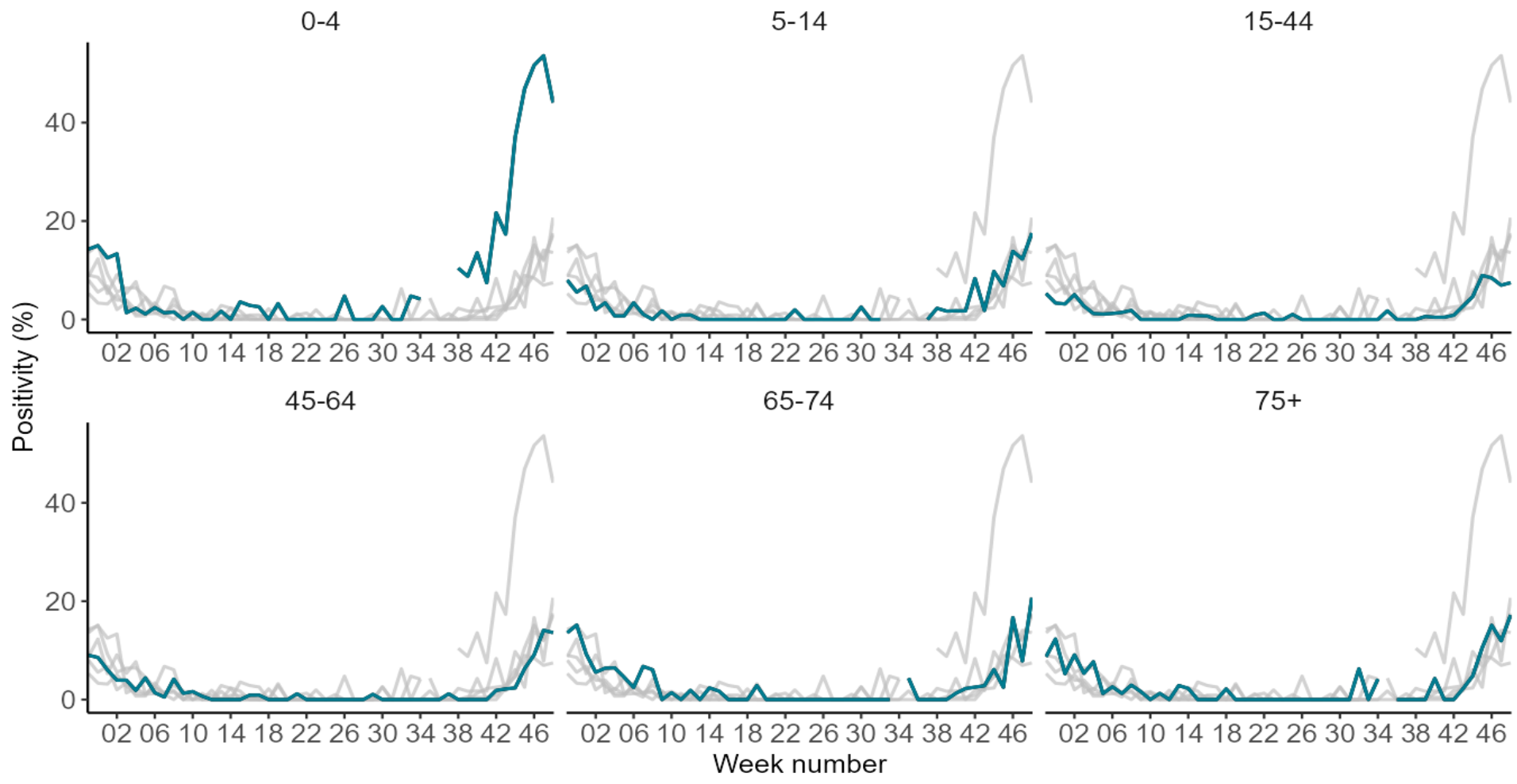
Weekly positivity for influenza by age group in England, GP sentinel swabbing



Note: Weeks where fewer than 20 samples were tested in the age group are omitted
 Starting from week 48 2024, samples with more than 10 days between the sample collection date and the symptom onset date have been excluded

The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups

Weekly positivity for RSV by age group in England, GP sentinel swabbing



Note: Weeks where fewer than 20 samples were tested in the age group are omitted
 Starting from week 48 2024, samples with more than 10 days between the sample collection date and the symptom onset date have been excluded

The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups



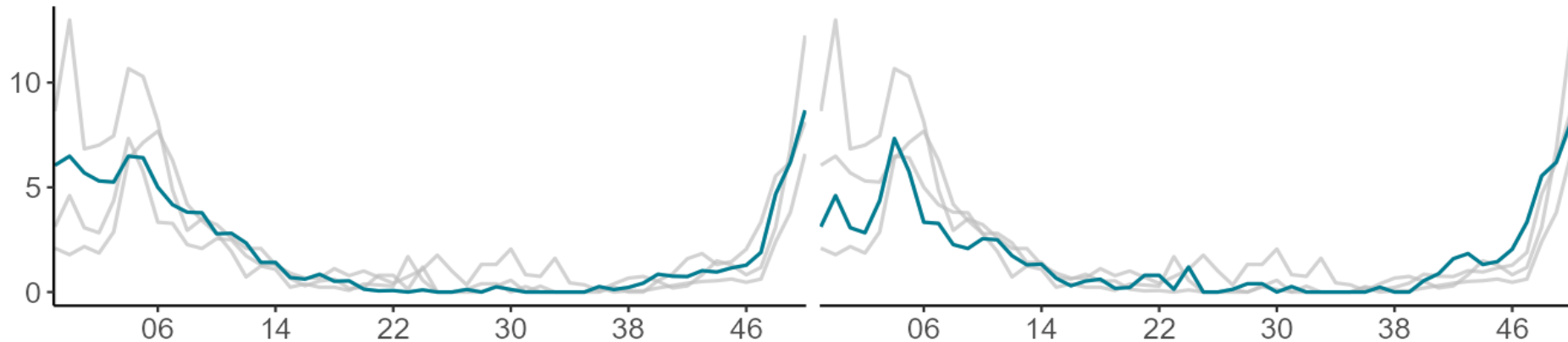
Secondary Care surveillance

Weekly influenza hospital admission rate by UKHSA region, SARI Watch sentinel surveillance

Weekly Hospitalisation rate per 100,000 trust catchment population

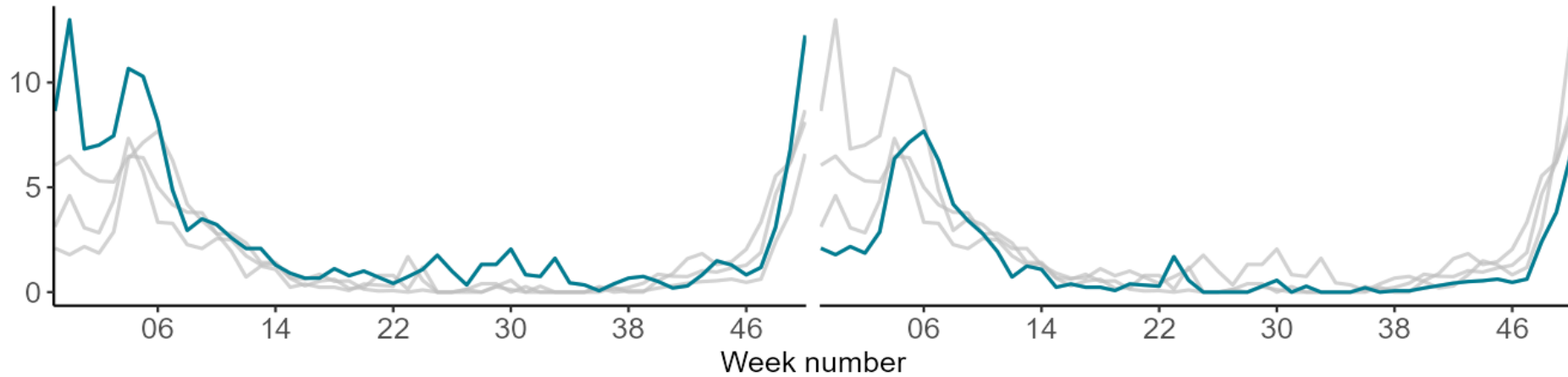
North of England

Midlands and East of England



London

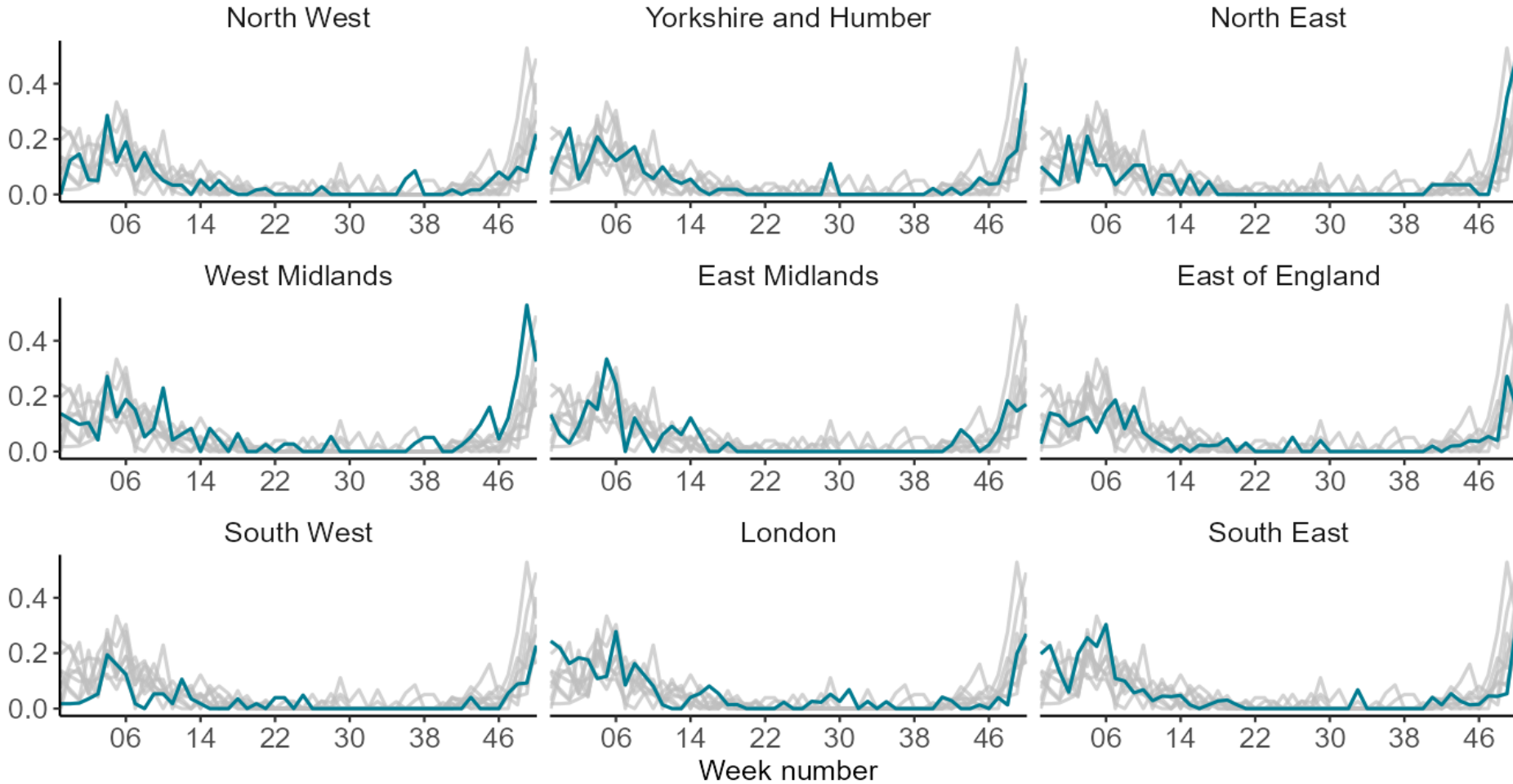
South of England



The highlighted line corresponds to the region in the subplot title, grey lines correspond to all other regions

Weekly ICU or HDU admission rate by UKHSA region for new influenza, reported through SARI Watch mandatory surveillance

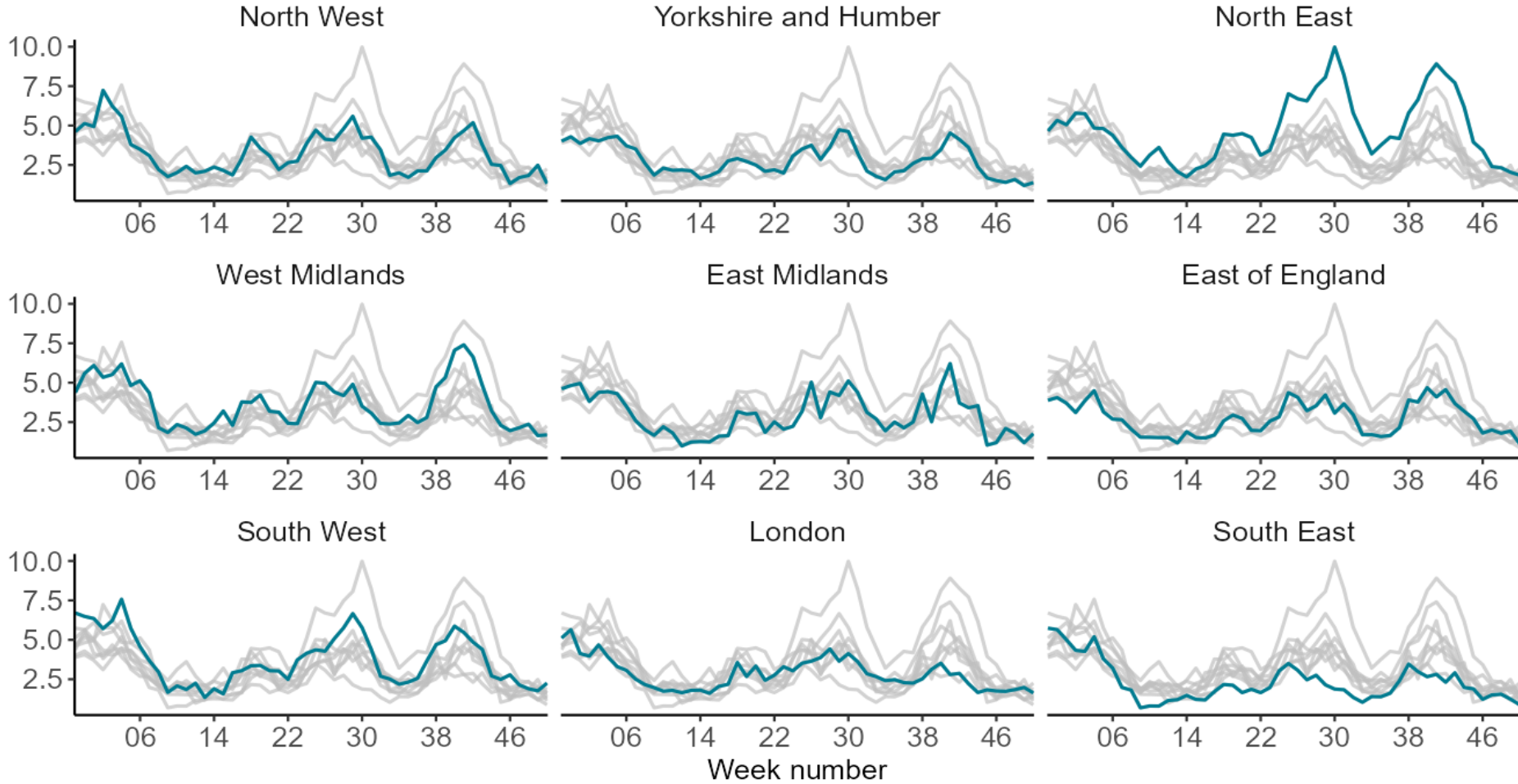
ICU admission rate per 100,000 trust catchment population



The highlighted line corresponds to the region in the subplot title, grey lines correspond to all other regions

Weekly hospital admission rate by region for new COVID-19 positive cases, SARI Watch mandatory surveillance

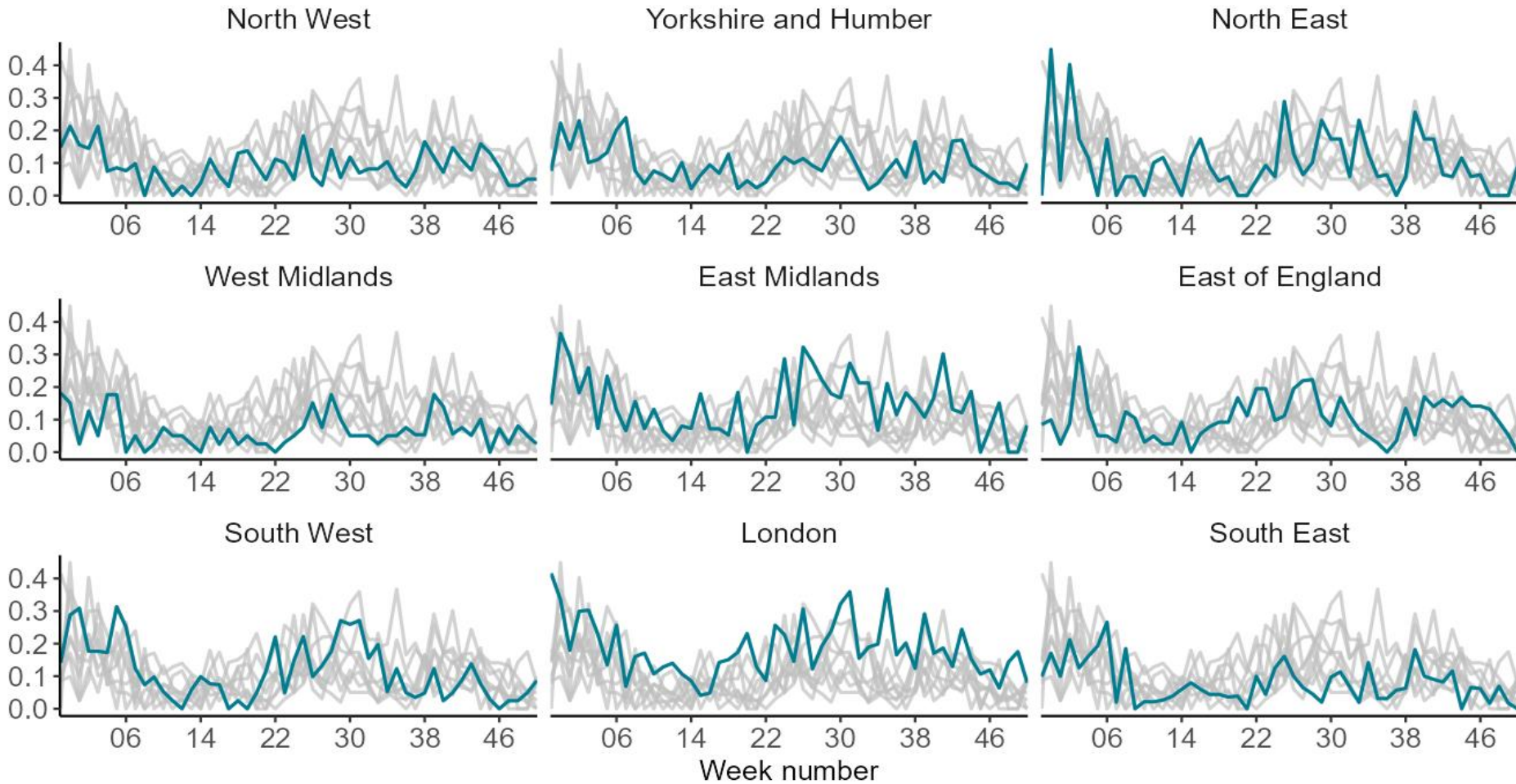
Weekly Hospitalisation rate per 100,000 trust catchment population



The highlighted line corresponds to the region in the subplot title, grey lines correspond to all other regions

Weekly COVID-19 ICU or HDU admission rate by UKHSA region for new COVID-19 positive cases reported through SARI Watch mandatory surveillance

ICU admission rate per 100,000 trust catchment population



The highlighted line corresponds to the region in the subplot title, grey lines correspond to all other regions

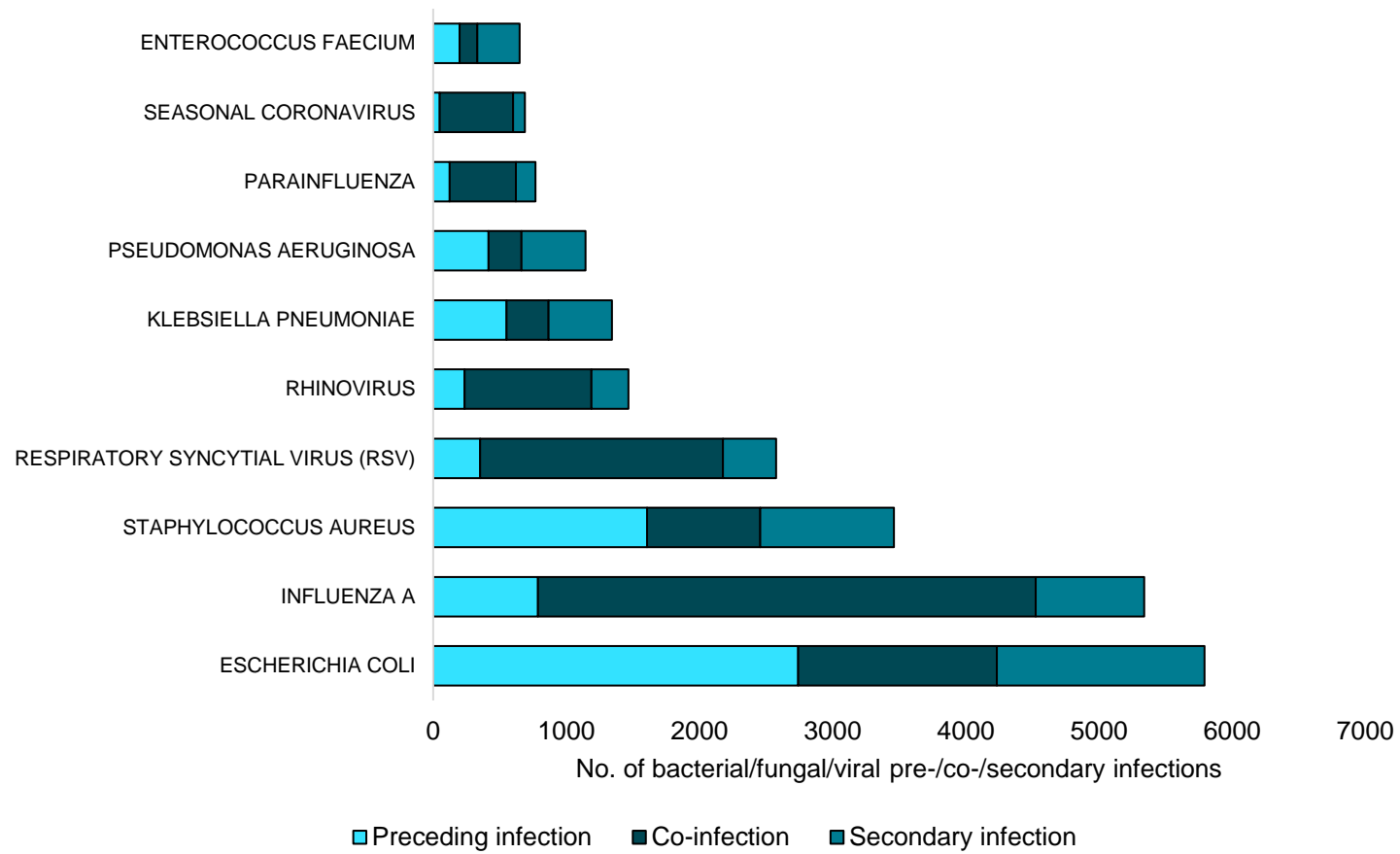


UK Health
Security
Agency

Preceding, co- and secondary infections in persons with COVID-19 and influenza in England, Jul 2022 – 9th December 2024

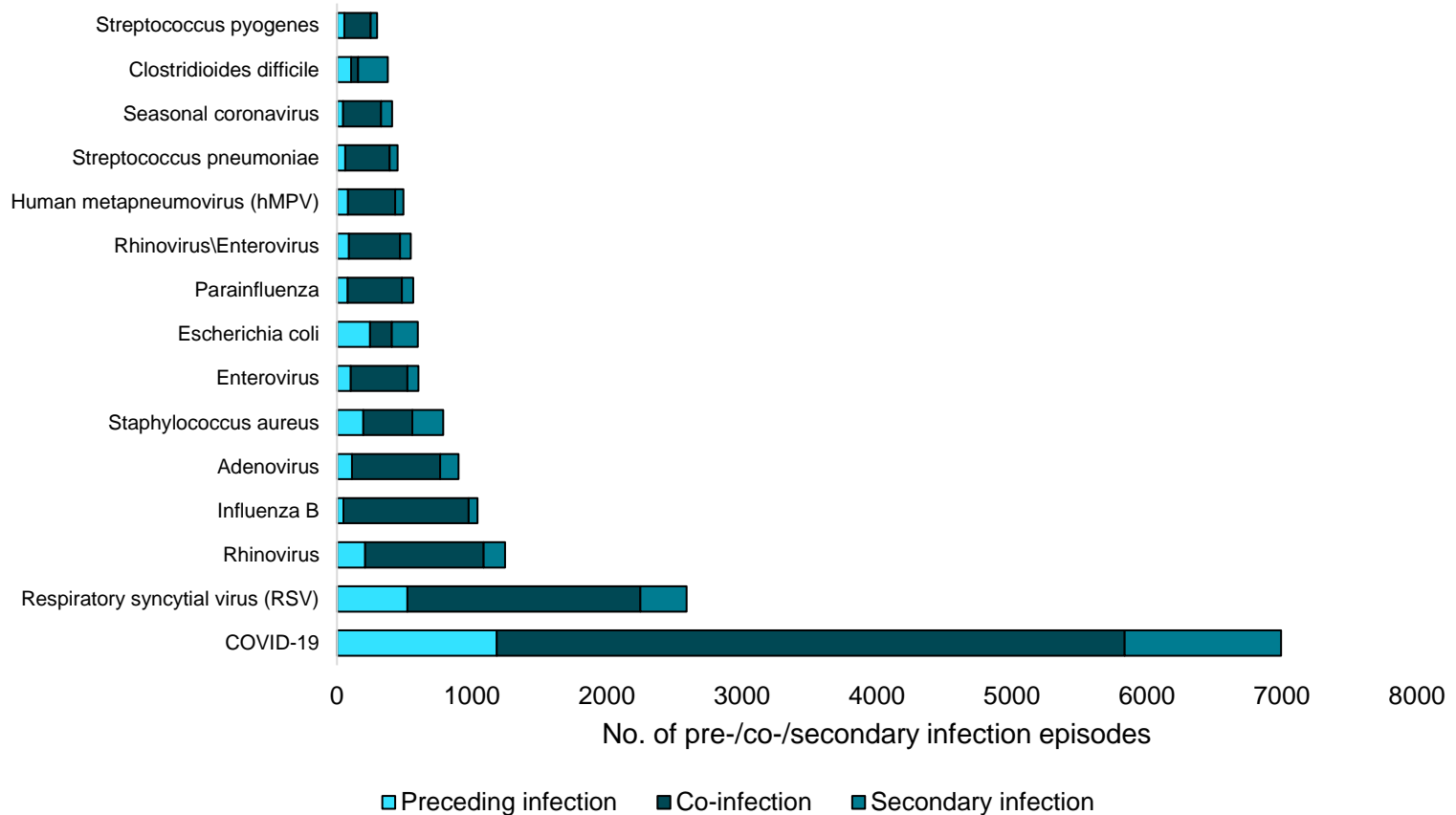
HCAI, Fungal, AMR, AMU & Sepsis Division

Most frequent bacterial, fungal, and viral specimens, by timing of diagnosis, in persons with COVID-19 in England from ISO week 27 of 2022



Key findings:
 From ISO week 27 of 2022, the most frequent organisms identified were *Escherichia coli*, Influenza A, and *Staphylococcus aureus*.

Most frequent bacterial/fungal/respiratory viral infections, by timing of diagnosis, in persons with influenza in England from ISO week 27 of 2022



Key findings:

From ISO week 27 of 2022, the most frequent organisms identified were COVID-19, RSV, and rhinovirus.

*The baseline infection is any type of influenza (influenza A or B or both) for all bacterial/fungal/respiratory viral preceding/co-/secondary infections except for influenza B, where the baseline infection is influenza A.