UK Health Security Agency

National Influenza and COVID-19 surveillance report

Week 12 report (up to week 11 2024 data)

21 March 2024

Contents

For additional information including regional data on COVID-19 and other respiratory viruses, COVID-19 in educational settings, co- and secondary infections with COVID-19 and other data supplementary to this report, please refer to the accompanying graph pack.

For additional information regarding data source please refer to sources of surveillance data for influenza, COVID-19 and other respiratory viruses.

Executive summary

This report summarises the information from the surveillance systems which are used to monitor COVID-19 (caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)), influenza, and diseases caused by seasonal respiratory viruses in England. References to COVID-19 represent the disease name and SARS-CoV-2 represent the virus name. The report is based on data from week 11 of 2024 (between 11 March and 17 March 2024).

Overall

In week 11, overall influenza and COVID-19 activity remained stable. Respiratory syncytial virus (RSV) activity remained low with further decreases across some indicators.

Influenza

Through Respiratory DataMart, influenza positivity increased slightly to 5.9% in week 11 compared with 5.3% in the previous week.

Through primary care surveillance, the influenza-like-illness (ILI) consultations indicator increased slightly to 5.5 per 100,000 in week 11 compared with 5.3 per 100,000 in the previous week and remained within the baseline activity level range. The influenza positivity in GP sentinel swabbing remained stable in week 10 compared with week 9.

Through the SARS-CoV2- Immunity and Reinfection Evaluation (SIREN) healthcare worker cohort study, influenza positivity increased in week 11 compared with the previous week.

There were 19 confirmed influenza acute respiratory incidents (ARI) reported in week 11. This number increased slightly compared with the previous week.

Overall, influenza hospitalisations influenza decreased slightly to 2.59 per 100,000 compared with 2.72 per 100,000 in the previous week and was within the low impact range. The overall intensive care unit (ICU) or high dependency unit (HDU) admission rate for influenza decreased to 0.04 per 100,000 compared with 0.08 in the previous week and was within the baseline impact range.

Emergency department (ED) attendances for ILI remained stable overall.

Monthly vaccine uptake data is reported for the fifth and final time this season for frontline healthcare workers.

COVID-19

Through Respiratory DataMart, SARS-CoV-2 positivity remained stable at 3.7% compared with 3.7% in the previous week.

COVID-19 case rates and positivity in Pillar 1 decreased overall and within some age, ethnic groups, and regions in week 11.

The overall number of reported SARS-CoV-2 confirmed ARI in week 11 decreased compared with the previous week. There were 5 SARS-CoV-2 confirmed ARI reported in week 11 in England.

Through SIREN healthcare cohort study, the SARS-CoV-2 positivity increased in week 11 compared with the previous week.

Overall, COVID-19 hospitalisations increased slightly to 1.85 per 100,000 compared with 1.76 per 100,000 in the previous week. Hospitalisations were highest in the 85 years and over age group. COVID-19 ICU admissions remained low and stable at 0.06 per 100,000 in week 11.

Respiratory Syncytial Virus (RSV)

Through Respiratory DataMart, RSV positivity remained low at 0.6%, with the highest positivity in those aged under 5 years at 1.2%. ED attendances for acute bronchiolitis increased nationally. Through SIREN healthcare cohort study, the RSV positivity decreased in week 11 compared with the previous week. The overall hospital admission rate for RSV remained low at 0.15 per 100,000, compared with 0.16 per 100,000 in the previous week.

Other viruses

Adenovirus positivity remained low at 2.6%, with the highest positivity in those aged under 5 years at 6.4%. Human metapneumovirus (hMPV) positivity increased to 4.1%, with the highest positivity in those aged under 5 years at 5.4%. Parainfluenza increased to 7.2%, with the highest positivity in those aged under 5 years at 13.2%. Rhinovirus positivity increased slightly to 8.7% overall, with the highest positivity in those aged under 5 years at 24.6%.

User feedback

As part of our ongoing commitment to continuous improvement, we are asking for feedback on the National weekly influenza and COVID-19 surveillance report through the survey accessible below. The purpose of this survey is to deepen our understanding of how readers engage with the report, highlighting areas readers find valuable and pinpointing areas for enhancement. The insights obtained from this survey will play a pivotal role in shaping the direction of future report development. The survey will be open until the end of the weekly reporting season.

Scan this QR code using a mobile device:

National weekly influenza and COVID-19 surveillance report 2023/24 Feedback Survey

Laboratory surveillance

Respiratory DataMart system (England)

In week 11, data is based on reporting from 11 out of the 16 sentinel laboratories.

In week 11, 6,674 respiratory specimens reported through the Respiratory DataMart System were tested for influenza. There were 392 positive samples for influenza; 225 influenza A(not subtyped), 88 influenza A(H3N2), 13 influenza A(H1N1)pdm09, and 66 influenza B (Figure 3). Overall, influenza positivity increased slightly to 5.9% in week 11 compared with 5.3% in the previous week.

In week 11, 6,347 respiratory specimens reported through the Respiratory DataMart System were tested for SARS-CoV-2. There were 233 positive samples for SARS-CoV-2 with an overall positivity of 3.7%, which remained stable compared with 3.7% in the previous week. The highest positivity was seen in adults aged over 65 years at 5.4%.

RSV positivity remained low at 0.6%, with the highest positivity in those aged under 5 years at 1.2%.

Adenovirus positivity remained low at 2.6%, with the highest positivity in those aged under 5 years at 6.4%.

Human metapneumovirus (hMPV) positivity increased to 4.1%, with the highest positivity in those aged under 5 years at 5.4%.

Parainfluenza positivity increased to 7.2%, with the highest positivity in those aged under 5 years at 13.2%.

Rhinovirus positivity increased slightly to 8.7% overall, with the highest positivity in those aged under 5 years at 24.6%.

DataMart data is provisional and subject to retrospective updates.

Figure 1a. Respiratory DataMart weekly positivity (%) for influenza, SARS-CoV-2, RSV and rhinovirus, England

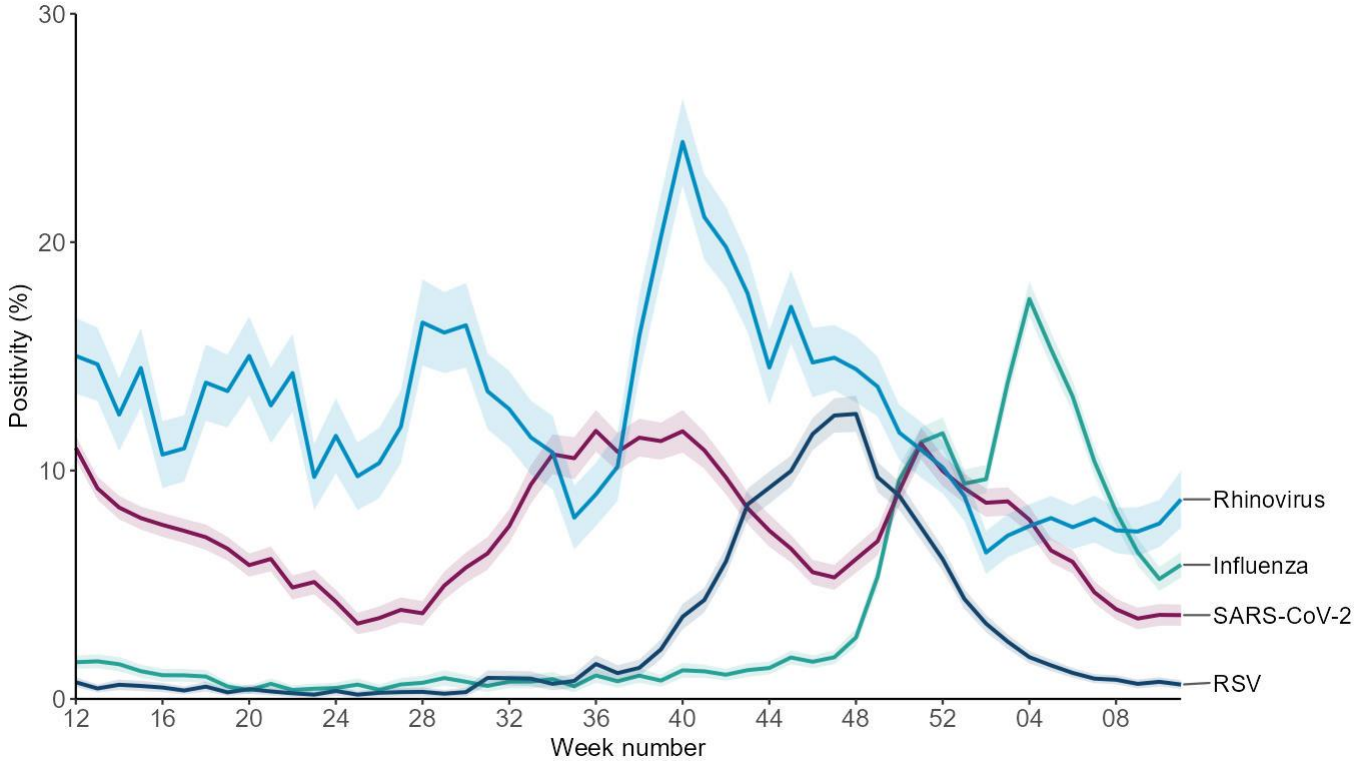


Figure 1b. Respiratory DataMart weekly positivity (%) for adenovirus, hMPV and parainfluenza, England

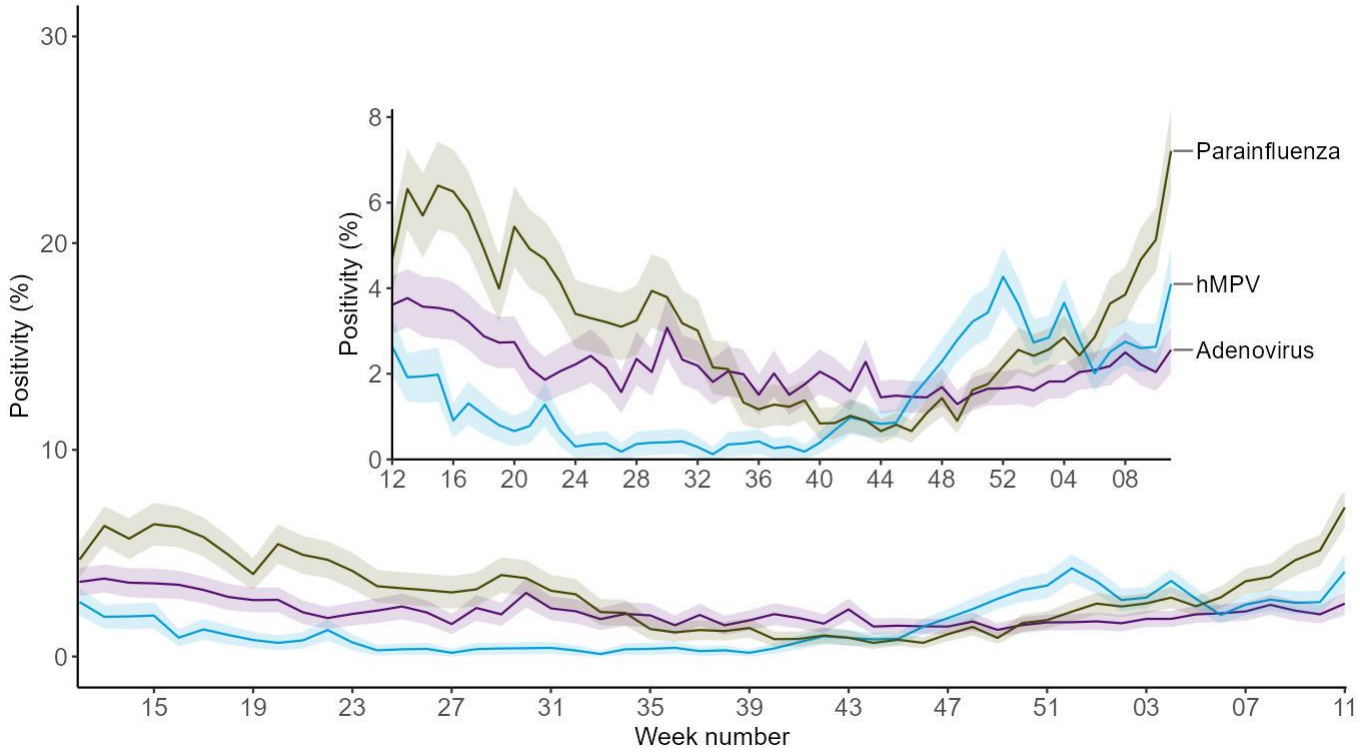
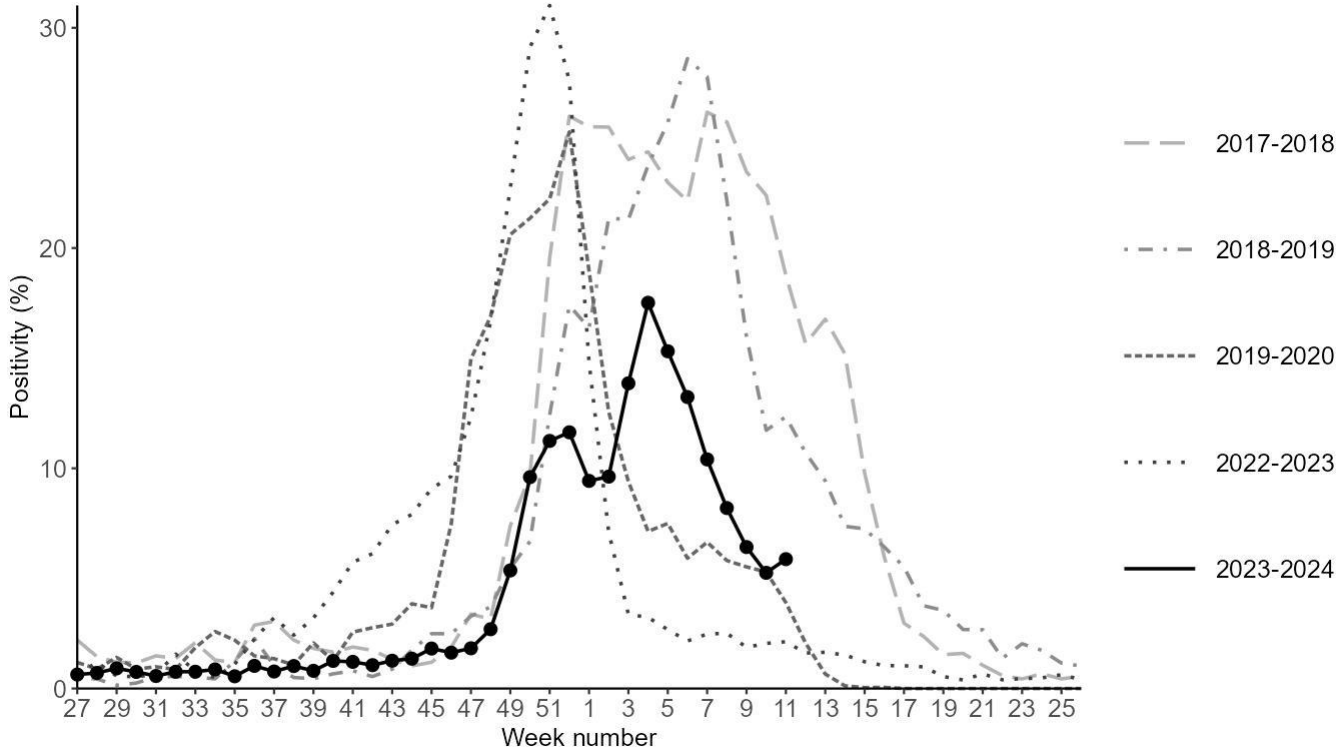


Figure 2. Respiratory DataMart weekly positivity (%) for influenza by year, England [note 1]



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

Figure 3. Respiratory DataMart samples positive for influenza by type and subtype, England

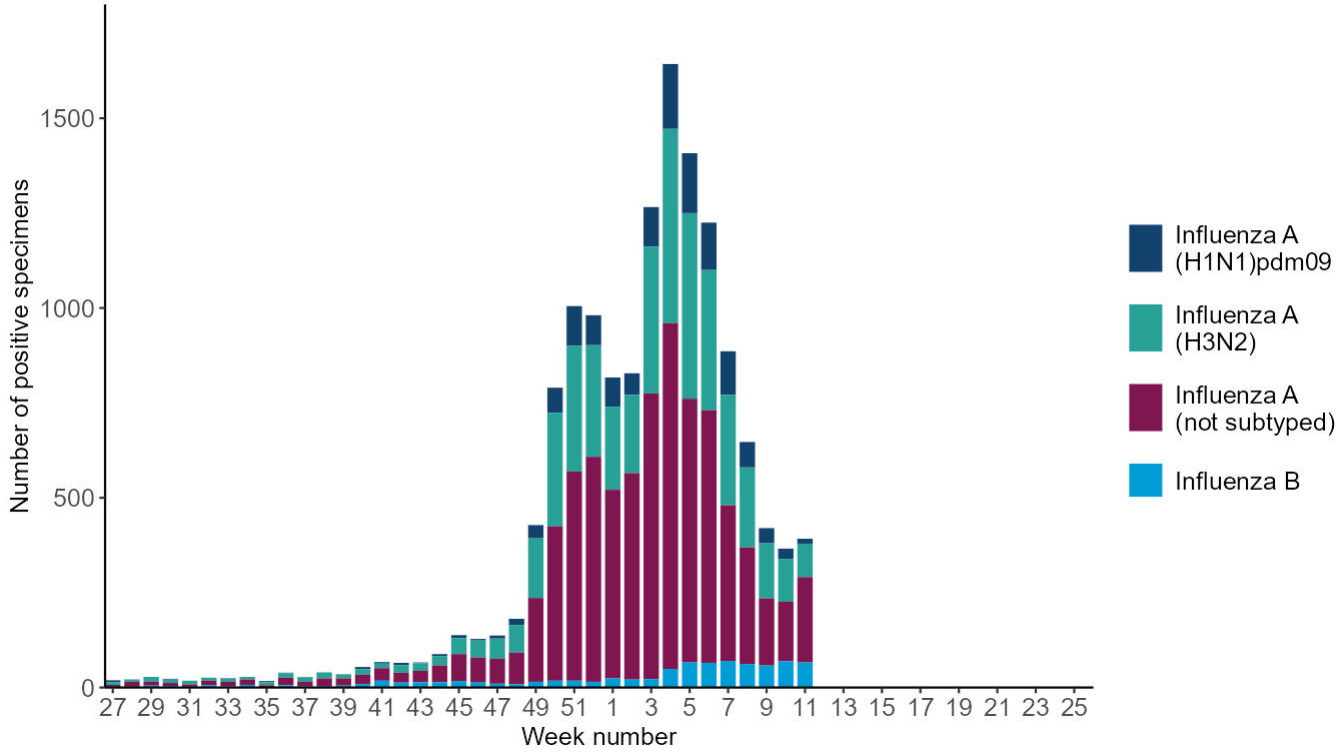


Figure 4. Respiratory DataMart weekly positivity (%) for influenza by age, England

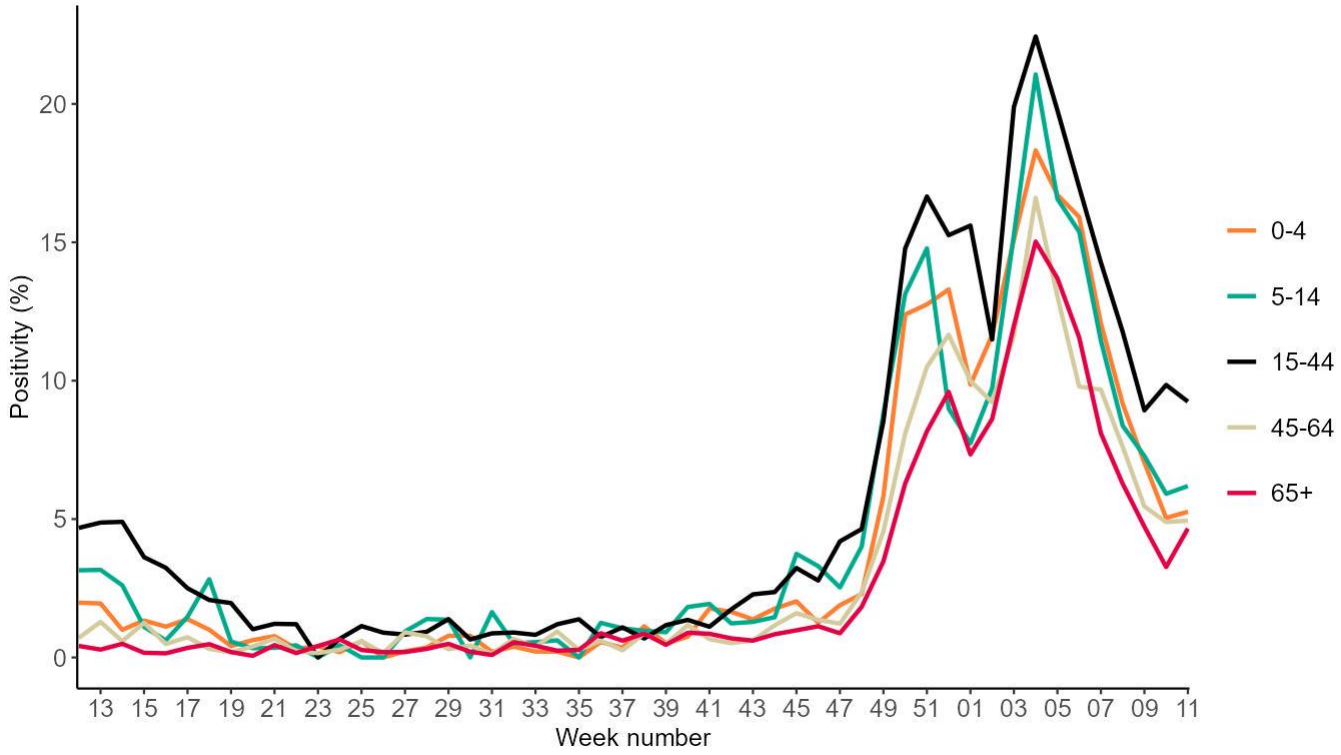


Figure 5. Respiratory DataMart weekly positivity (%) for SARS-CoV-2 by year, England

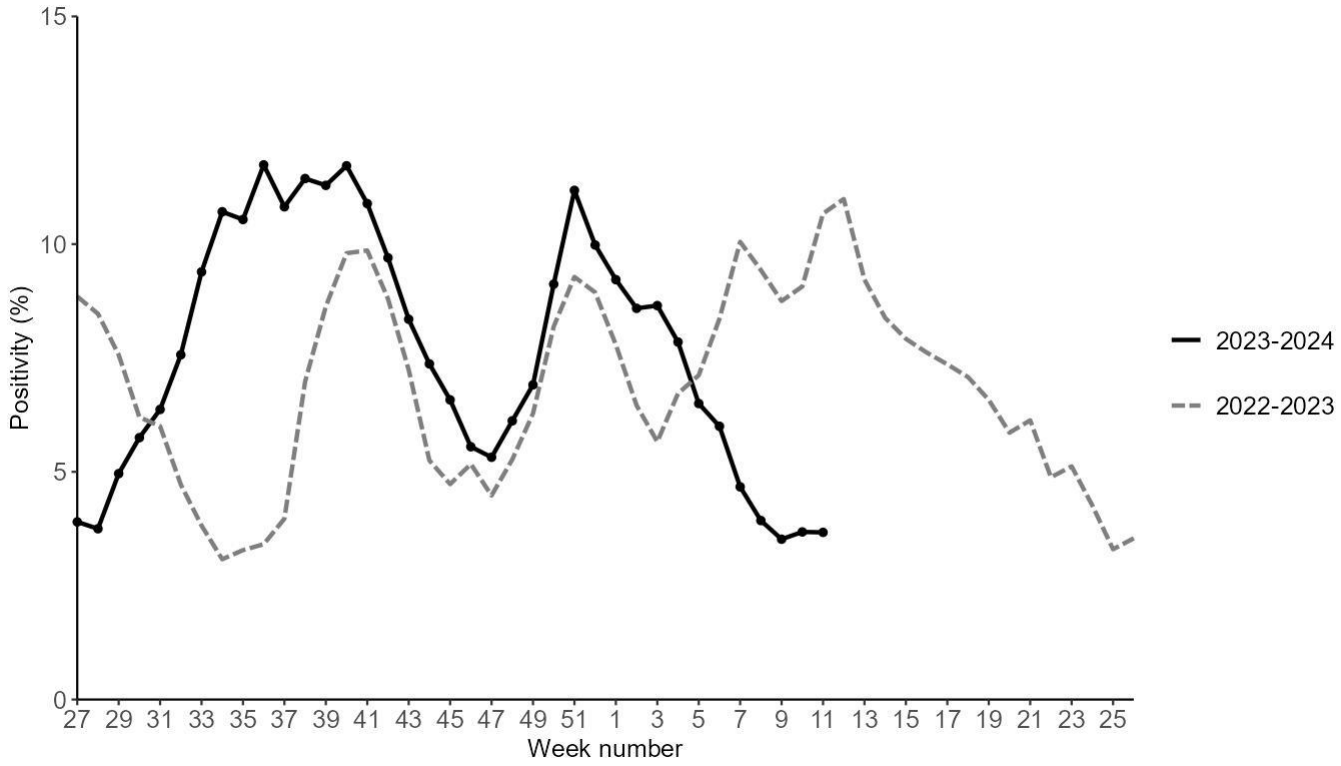


Figure 6. Respiratory DataMart weekly positivity (%) for SARS-CoV-2 by age, England

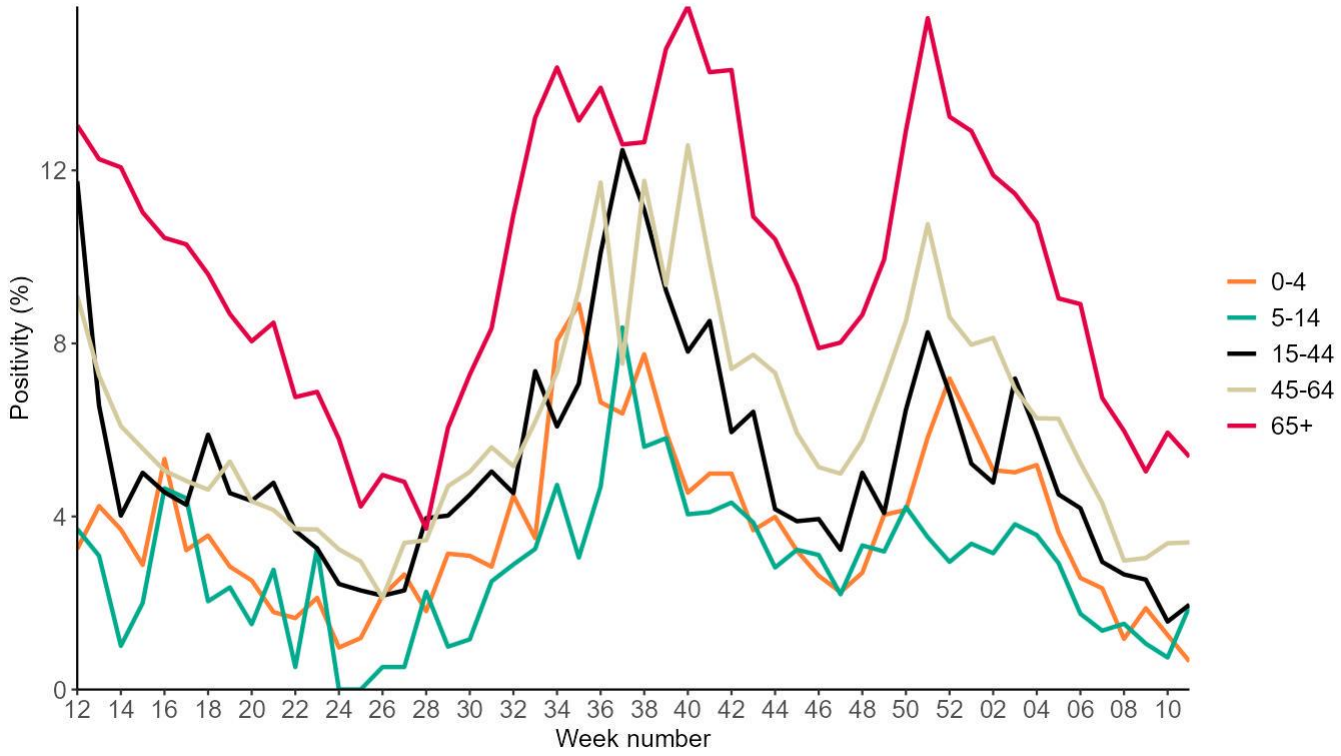


Figure 7. Respiratory DataMart weekly positivity (%) for RSV by year, England

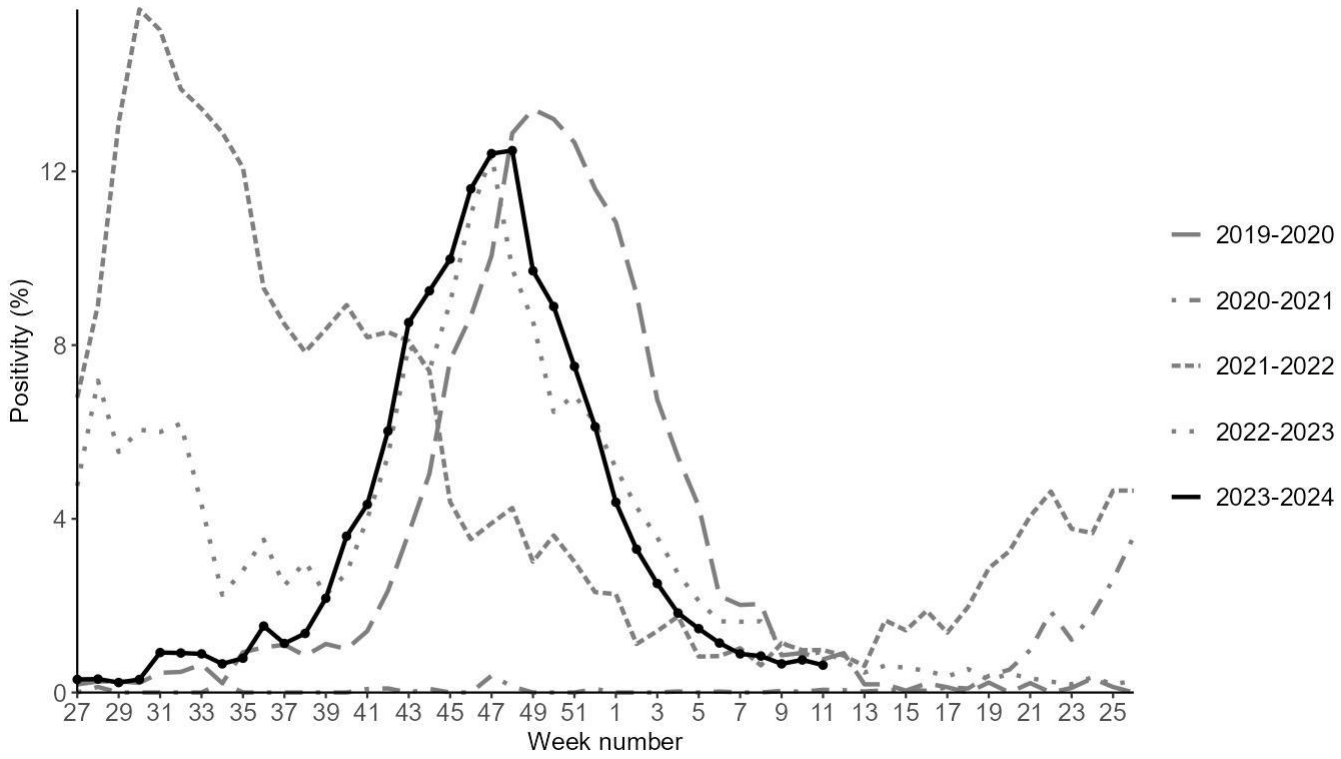
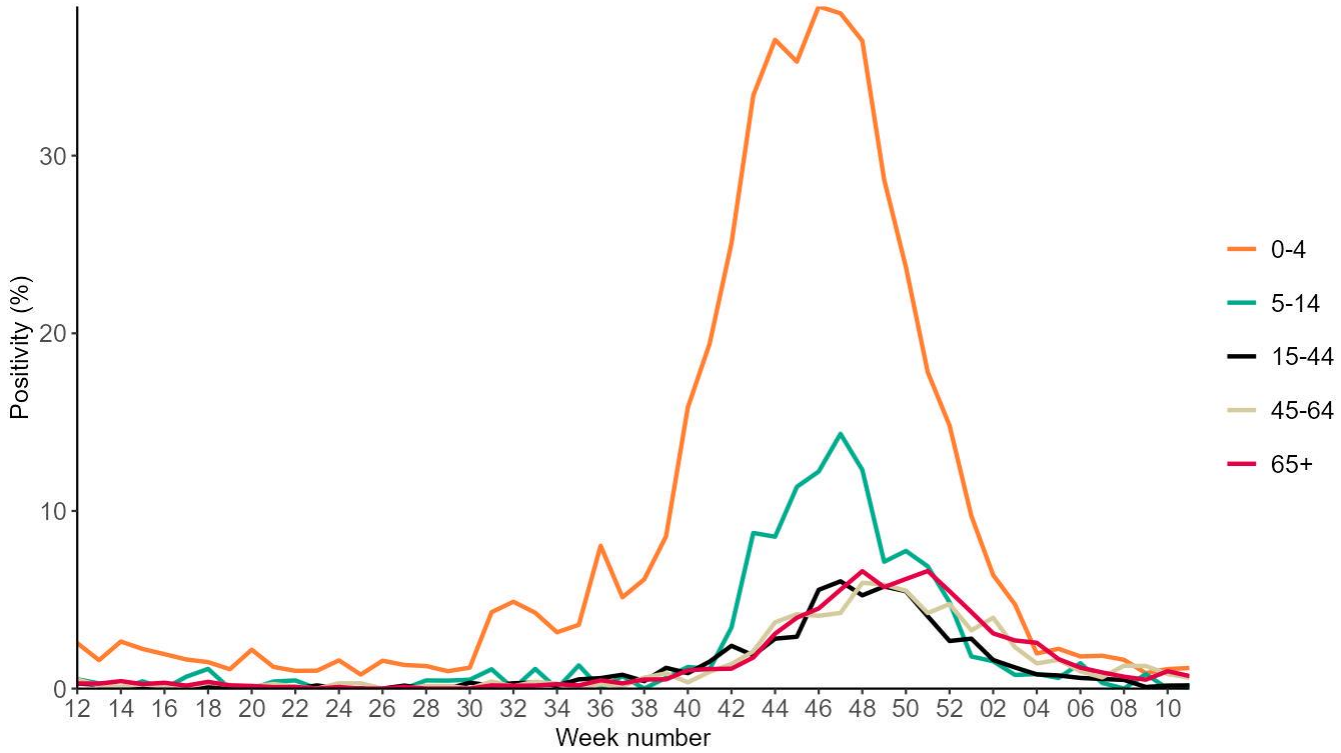


Figure 8. Respiratory DataMart weekly positivity (%) for RSV by age, England



Confirmed COVID-19 cases (England)

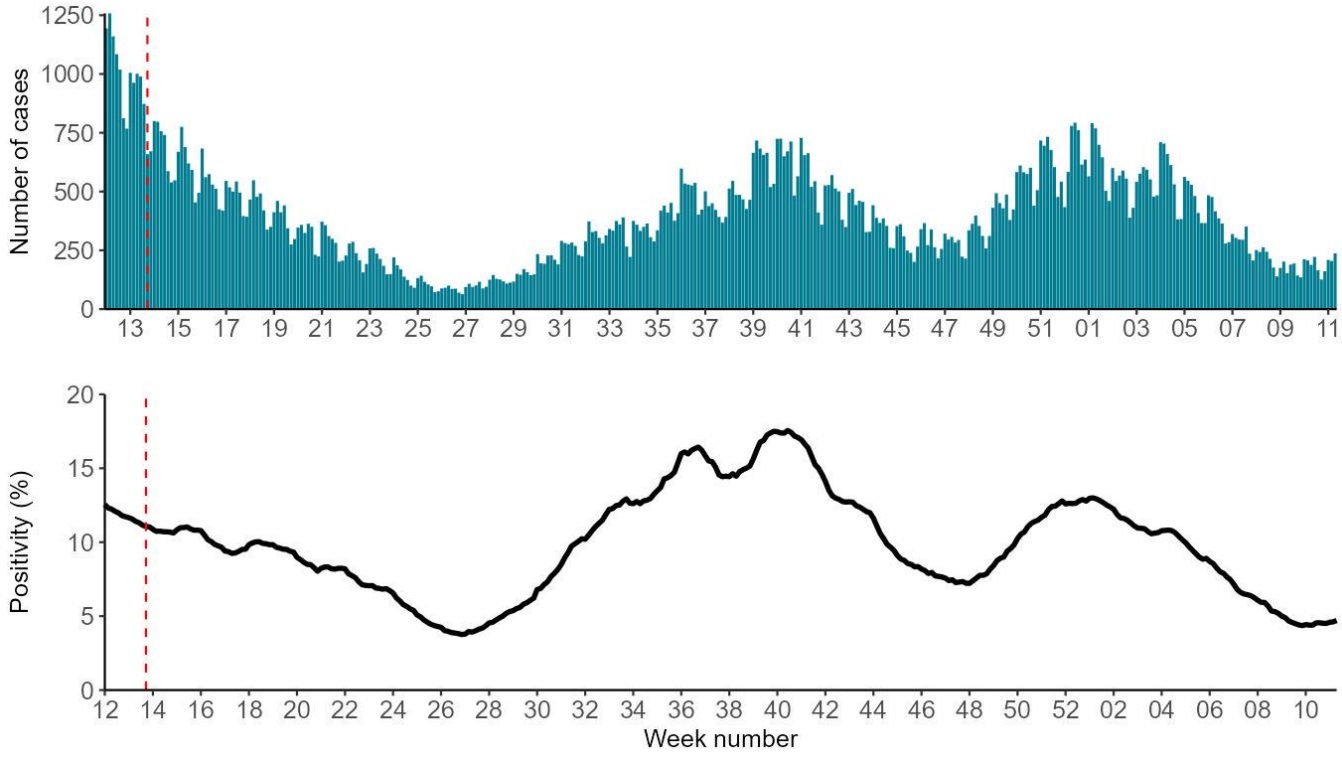
As of 9am on 19 March 2024, there were a total of 1,247 Pillar 1 cases in week 11, a 2.7% decrease from the previous week.

COVID-19 PCR positivity for Pillar 1 increased slightly in week 11, with a weekly mean positivity rate of 4.6% compared with 4.5% in the previous week.

Pillar 1 positivity rates were highest in those aged over 85 years at a weekly mean positivity rate of 8.6% (this increased from 7.5% among those aged over 85 years in week 10). They were highest in the North East at a weekly mean positivity rate of 6.8% (a slight increase from 5.8% in the North East in week 10).

Data notes: Changes to testing policies over time may affect positivity rates and incidence rates and should be interpreted accordingly. COVID-19 case reporting in England uses an 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 rapid lateral flow device). Each infection episode begins with the earliest positive specimen date. Additionally, further changes in testing policy are in effect since 1 April 2023, which may affect case rates and positivity rates.

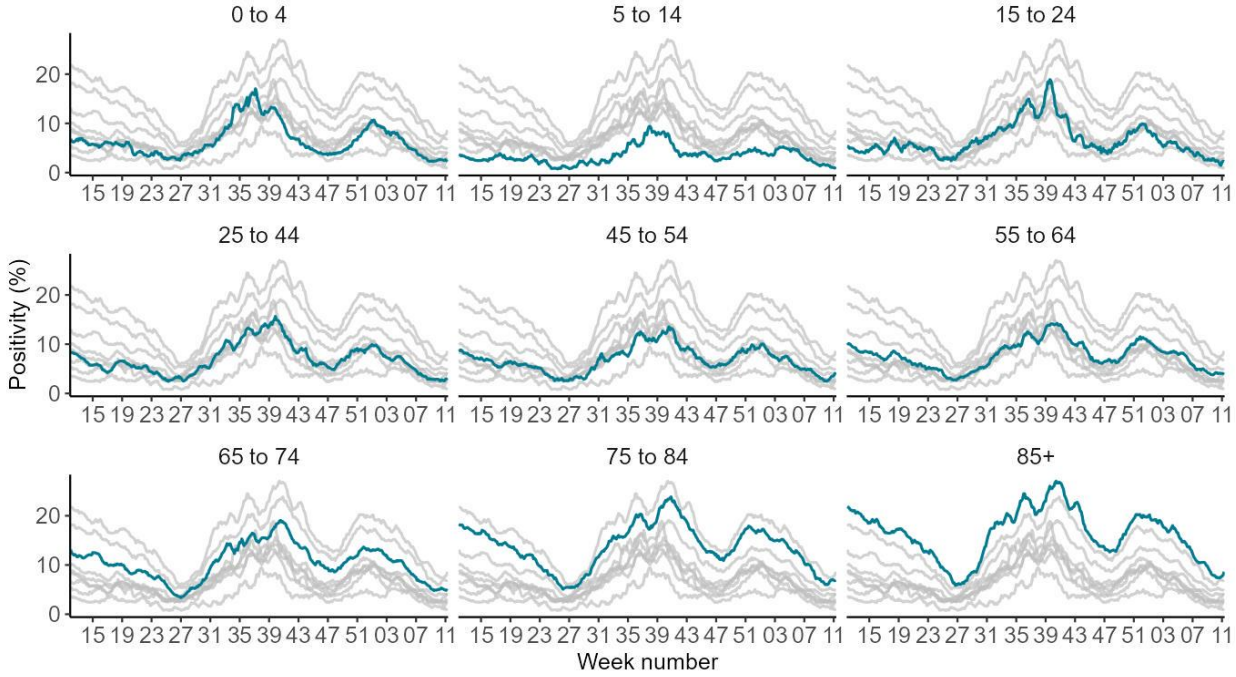
Figure 9. Confirmed COVID-19 episodes tested under Pillar 1, based on sample date with overall 7-day rolling average PCR positivity for Pillar 1 (%) [note 2]



[note 2] The vertical dashed line (red) denotes changes in testing policies. For the lower subgraph there has been only a partial update compared with last week's report.

Age

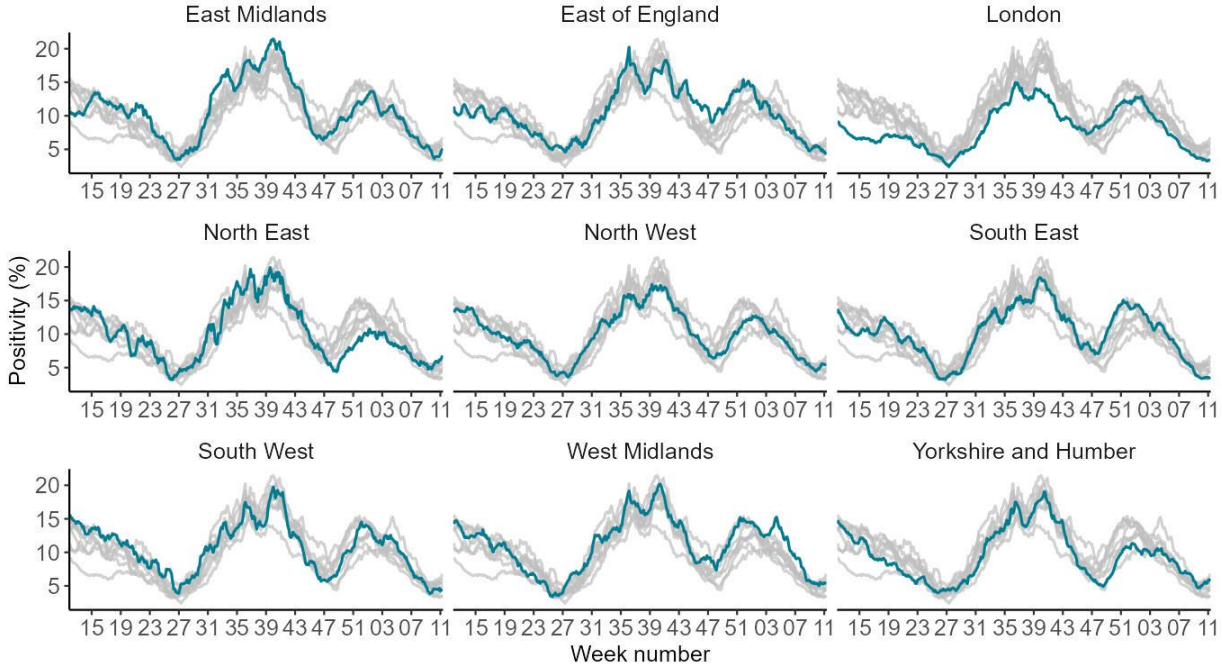
Figure 10. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by age group [note 3]



[note 3] The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups.

Geography

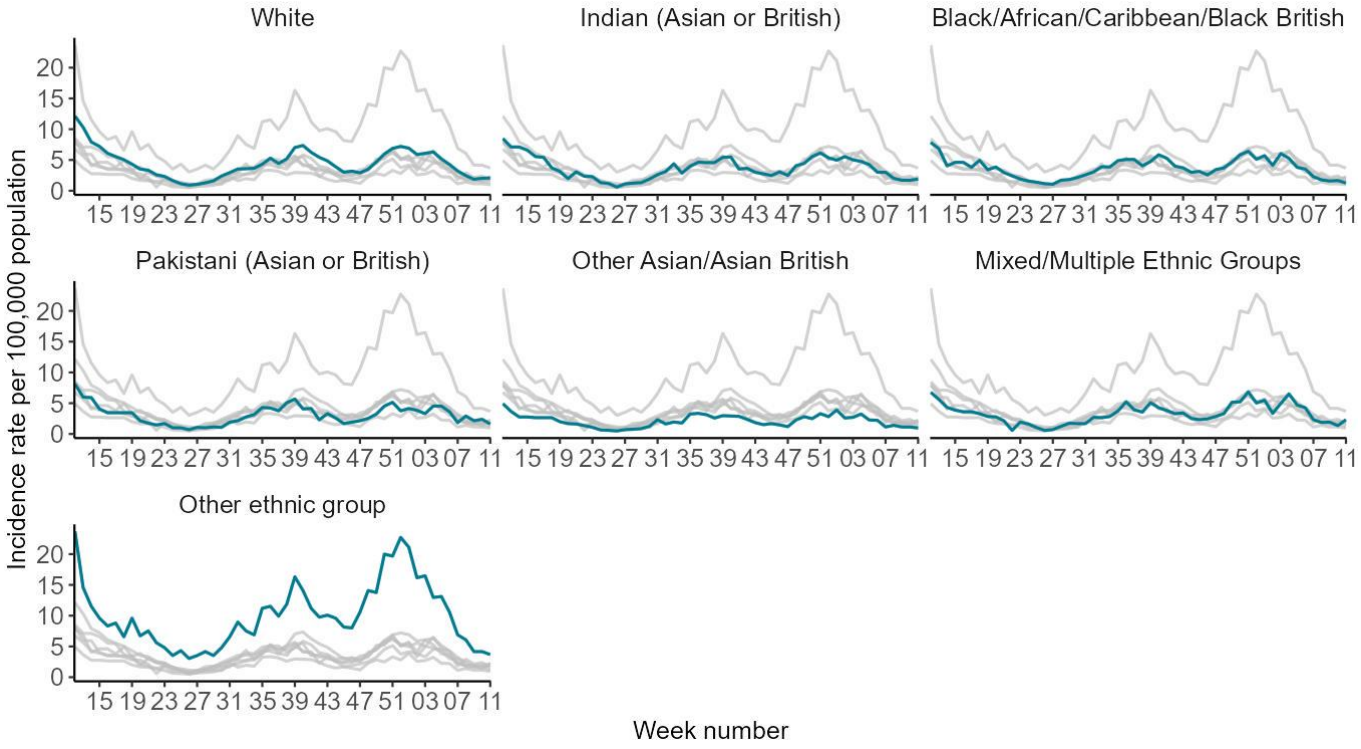
Figure 11. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by UKHSA region [note 4]



[note 4] The highlighted line corresponds to the UKHSA region in the subplot title, grey lines correspond to all other regions.

Ethnicity

Figure 12. Weekly incidence of confirmed COVID-19 cases per 100,000 population by ethnicity (Pillar 1), England [note 5]



[note 5] The highlighted line corresponds to the ethnicity in the subplot title, grey lines correspond to all other ethnicities.

Microbiological surveillance

SARS-CoV-2 variants

This section is updated fortnightly. The next update will be included in the week 13 report.

The UK Health Security Agency (UKHSA) conducts genomic surveillance of SARS-CoV-2 variants.

This section provides an overview of new and current circulating variants in England.

Detailed information on circulating SARS-CoV-2 lineages is published monthly and can be found in the SARS-CoV-2 genome sequence prevalence and growth rate updates.

Information on whole genome sequencing coverage of PCR tests can be found in the accompanying slide set.

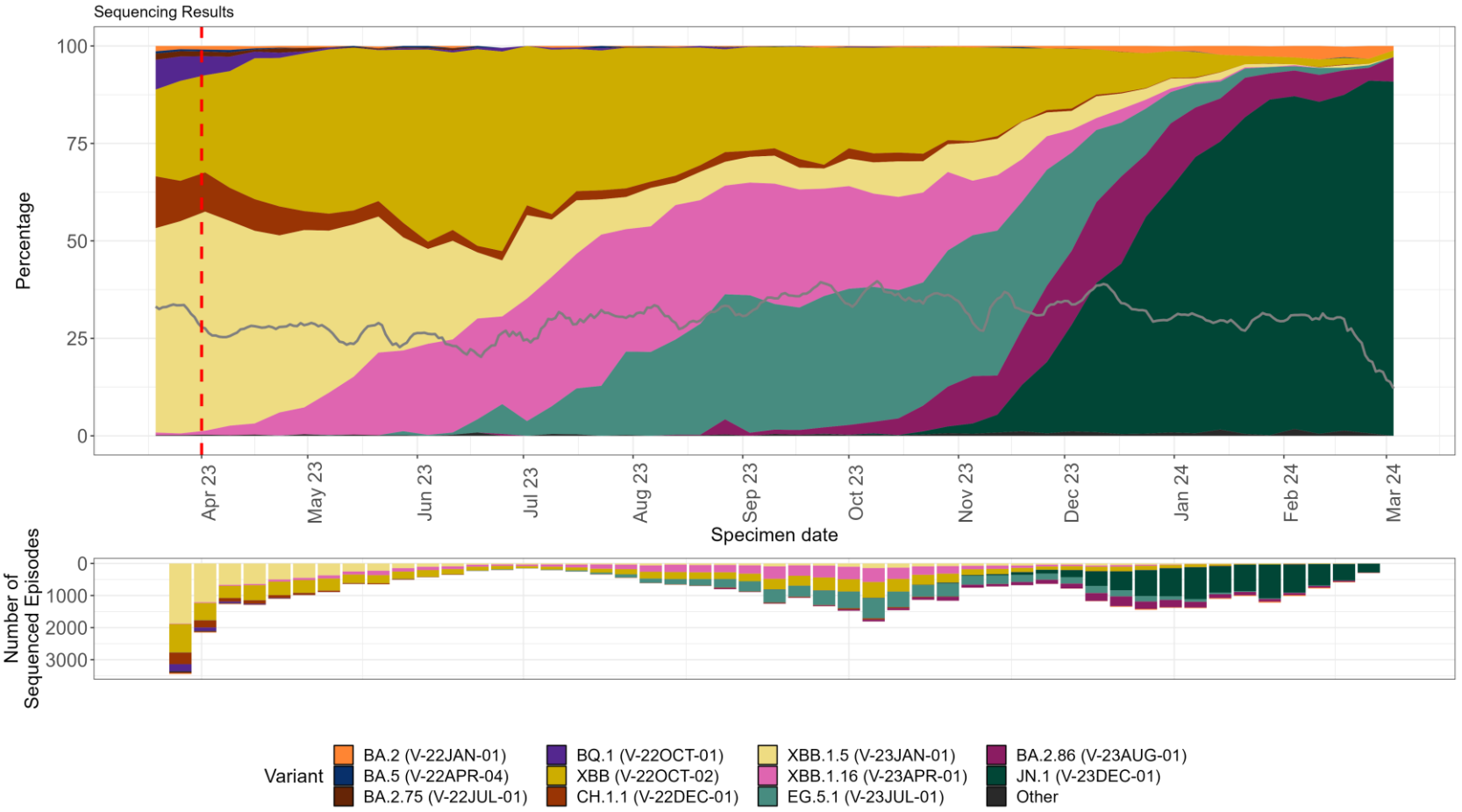
The sequence data used in this report is classified using UKHSA variant definitions (rather than Pangolin lineage assignment, which is commonly used to assign lineages to sequences). UKHSA defines variants based on a set of mutations common to a lineage to allow consistent detection, monitoring and reporting.

Poorer quality sequence data may be classified as a more ancestral variant due to missing data. Furthermore, variants may include sub-lineages that have not been individually designated for example HK.3 within EG.5.1 (V-23JUL-01). Once a sub-lineage meets required thresholds, it will be designated as a variant and prevalence of this sub-lineage in positive cases will then be identifiable in the data. The UKHSA variant definition repository contains the previous genomic definitions for UKHSA declared variants.

The prevalence of different UKHSA-designated variants amongst sequenced cases is presented in Figure 13.

To account for sequencing delays, we report the proportion of variants from sequenced cases between 19 February 2024 and 25 February 2024. Of those sequenced in this period, 90.4% were classified as JN.1 (V-23DEC-01), 3.3% as BA.2.86 (V-23AUG-01), 3.3% as BA.2 (V-22JAN-01), and 1.3% as XBB (V-22OCT-02).

Figure 13. Prevalence of SARS-CoV-2 variants amongst available sequenced cases for England from 19 March 2023 to 3 March 2024 [note 6]



The grey line indicates proportion of cases sequenced. The vertical dashed line (red) in April 2023 denotes changes in PCR testing in social care and hospital settings.
[note 6] Recombinants such as XD, are not specified but are largely within the 'Other' group currently as numbers are too small.

Table 1. Total distribution of SARS-CoV-2 variants detected in England in the last 12 weeks, up to week 9 (week ending 3 March 2024)

Variant	Other names by which this variant is known	Total sequenced cases in the last 12 weeks [note 7]	Last reported specimen date
V-23DEC-01	Omicron JN.1	8,419	03-03-2024
V-23AUG-01	Omicron BA.2.86	1,426	02-03-2024
V-23JUL-01	Omicron EG.5.1	674	23-02-2024
V-22OCT-02	Omicron XBB	599	29-02-2024
V-22JAN-01	Omicron BA.2	251	26-02-2024
V-23JAN-01	Omicron XBB.1.5	193	20-02-2024
V-23APR-01	Omicron XBB.1.16	110	03-02-2024

[note 7] Sequenced cases are PCR confirmed COVID-19 cases with a validated sequencing result meeting the case definitions.

Designated variants with 50 or more sequenced cases in the past 12 weeks are presented in the table above.

Sequencing data has a lag of approximately 2 weeks therefore the data presented should be interpreted in this context.

Cumulative numbers may be revised up or down as a result of reclassification, re-infections and changes to diagnostic tests, new variants or public health management levels.

Influenza virus characterisation

UKHSA characterises the properties of influenza viruses through one or more tests, including genome sequencing (genetic analysis) and haemagglutination inhibition (HI) assays (antigenic analysis). This data is used to compare how similar the currently circulating influenza viruses are to the strains included in seasonal influenza vaccines, and to monitor for changes in circulating influenza viruses. The interpretation of genetic and antigenic data sources is complex due to a number of factors, for example, not all viruses can be cultivated in sufficient quantity for antigenic characterisation, so that viruses with sequence information may not be able to be antigenically characterised as well. Occasionally, this can lead to a biased view of the properties of circulating viruses, as the viruses which can be recovered and analysed antigenically, may not be fully representative of majority variants, and genetic characterisation data does not always predict the antigenic characterisation.

As of week 11 of 2024, the UKHSA Respiratory Virus Unit (RVU) has genetically characterised 821 influenza A(H3N2) viruses, which had been detected this season (since week 40), with 819 of these belonging in genetic subclade 3C.2a1b.2a.2 in the 2a.3a.1 subgroup. 2 A(H3N2) viruses belonging to subgroup 2a.3 were characterised. The Northern Hemisphere 2023/24 influenza A(H3N2) vaccine strain (an A/Darwin/9/2021-like virus) also belongs in genetic subclade 3C.2a1b.2a.2.

In the same period, 1,036 influenza A(H1N1)pdm09 viruses have been characterised. Sequencing of the haemagglutinin (HA) gene shows that 887 belong in genetic subgroup 6B.1A.5a.2a and 149 in subgroup 6B.1A.5a.2a.1. The Northern Hemisphere 2023/24 influenza A(H1N1)pdm09 vaccine strain (an A/Victoria/4897/2022 (H1N1)pdm09-like virus) also belongs in genetic subclade 6B.1A.5a, within the 6B.1A.5a.2a.1 cluster.

Since week 40, 204 influenza B/Victoria lineage viruses have been genetically characterised belonging in clade V1A.3a.2. Of these 203 viruses belonged in genetic subclade C.5 and one in C.2. The Northern Hemisphere 2023/24 influenza B/Victoria lineage vaccine strain (a B/Austria/1359417/2021-like virus) also belongs in this V1A.3a.2 clade.

Different lineages may dominate during the season, and a close watch will be kept on the proportion of different viruses circulating to assist with the evaluation of vaccine effectiveness.

The RVU has confirmed by genome sequencing the detection of live attenuated influenza vaccine (LAIV) viruses in 5 influenza A positive samples and in 8 influenza B positive samples collected since week 40, from children aged 2 to 16 years.

One influenza A(H1N2)v virus has been genetically characterised belonging in clade 1B 1.1. This is an unusual detection of a variant H1N2 (H1N2v) virus in a human clinical sample. The HA and NA genes as well as internal gene segments from the A(H1N2)v detection show a very close relationship to contemporary 1B.1.1 swine influenza A viruses from the UK.

Table 2. Number of influenza viruses characterised by genetic and antigenic analysis at the UKHSA Respiratory Virus Unit since week 40 of 2023

(Sub)type	Genetic group	Number sequenced
A(H3N2)	3C.2a1b.2a.2a.3a.1	819
	3C.2a1b.2a.2a.3	2
	Total	821
A(H1N1)pdm09	6B.1A.5a.2a	887
	6B.1A.5a.2a.1	149
	Total	1,036
B/Victoria-lineage	V1A3a.2 / C.5	203
	V1A3a.2 / C.2	1
	Total	204
A(H1N2)v	1B.1.1	1
	Total	1

Influenza antiviral susceptibility

Influenza positive samples are genome sequenced and screened for mutations in the virus neuraminidase (NA) and the cap-dependent endonuclease (PA) genes known to confer neuraminidase inhibitor or baloxavir resistance, respectively. The samples tested are routinely obtained for surveillance purposes, but diagnostic testing of patients suspected to be infected with antiviral-resistant virus is also performed.

Influenza virus sequences from samples collected between week 40 of 2023 and week 11 of 2024 have been analysed.

Analysis of 794 A(H3N2) viruses found no viruses with known markers of resistance to neuraminidase inhibitors. Analysis of 1,033 A(H1N1)pdm09 by sequencing found 5 oseltamivir resistant viruses taken from 4 patients:

- Patient 1: 2 samples with a H275Y amino acid substitution. Immune compromised adult patient known to have received oseltamivir treatment.
- Patient 2: 1 sample with a H275Y amino acid substitution. Adult patient with a COPD exacerbation known to have received oseltamivir treatment.
- Patient 3: 1 sample with a H275Y amino acid substitution. Immune compromised adult patient known to have received oseltamivir treatment.
- Patient 4: 1 sample with a D199E amino acid substitution. Immune compromised adult patient known to have received oseltamivir treatment.

Analysis of 201 influenza B NA sequences found no evidence of known markers of resistance to neuraminidase inhibitors.

No viruses with known markers of resistance to baloxavir marboxil were detected in 705 A(H3N2), 858 A(H1N1)pdm09 and 178 influenza B PA sequences analysed.

Table 3. Antiviral susceptibility of influenza positive samples tested at UKHSA-RVU

(Sub)type	Neuraminidase inhibitors: susceptible	Neuraminidase inhibitors: reduced susceptibility	Baloxavir: susceptible	Baloxavir: reduced susceptibility
A(H3N2)	794	0	705	0
A(H1N1)pdm09	1,028	5	858	0
B/Victoria-lineage	201	0	178	0

Community surveillance

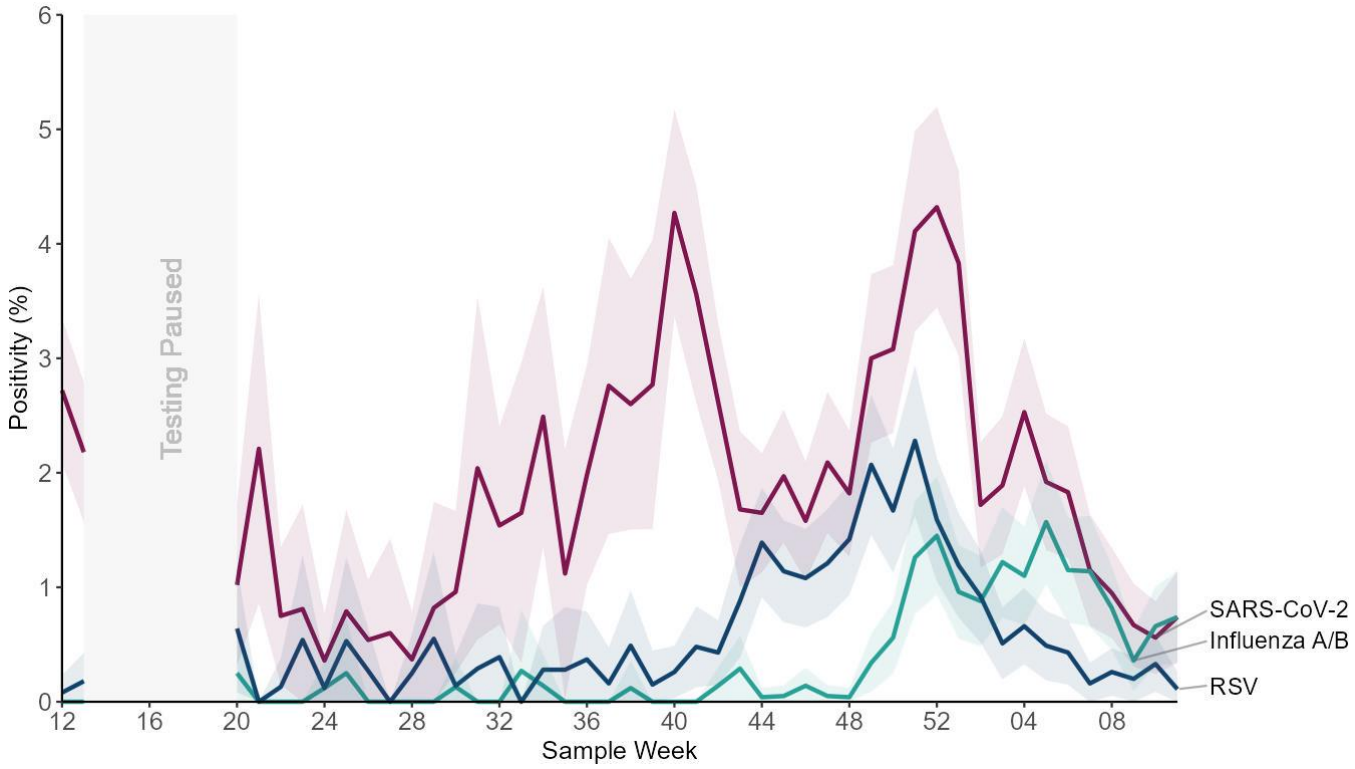
SIREN healthcare cohort study

The SIREN healthcare cohort study was set up in June 2020 and recruited over 44,500 participants to investigate SARS-CoV-2 infections and immunity among UK healthcare workers. 6,000 participants from the original cohort were re-recruited into the study and undergo fortnightly asymptomatic PCR testing for SARS-CoV-2, influenza A/B and RSV, to monitor positivity rates and the emergence of new SARS-CoV-2 variants. Participants are distributed across the UK, with a median age of 53 years, and 78% are female.

Please note: SIREN participants are currently divided into 2 cohorts that test fortnightly, on alternate weeks. The SIREN study team used a targeted recruitment strategy for the second cohort, to increase the numbers of under-represented groups within the study. Therefore, the demographic breakdown of each cohort differs slightly.

Figure 14 describes weekly positivity rates (per 100 tests) of SARS-CoV-2, Influenza A/B and RSV in the SIREN cohort over the last 12 months. During the week commencing 11 March 2024, 1,749 swabs were tested (61.2% of participants). Influenza positivity increased in the previous week (0.74% positive compared with 0.66%). SARS-CoV-2 positivity increased in the previous week (0.74% positive compared with 0.56%). RSV positivity decreased in the previous week (0.11% positive compared with 0.33%).

Figure 14. SIREN study weekly PCR positivity (%) for influenza, SARS-CoV-2 and RSV, UK



Winter COVID-19 Infection study

The Winter COVID-19 Infection Survey has now ended, with a final publication on 14 March 2024. Published reports can be accessed through the Office for National Statistics (ONS) webpage and the UKHSA webpage.

Acute respiratory infection incidents (ARI)

Here we present data on ARI incidents in different settings that are reported to UKHSA Health Protection Teams (HPTs).

There were 48 new ARI incidents reported in week 11 in England. In the latest week, these included:

- 38 incidents reported from care homes, of which 12 were laboratory confirmed for influenza A(not subtyped), 4 for parainfluenza, 3 for hMPV, 2 for SARS-CoV-2, 1 for influenza B and 1 for RSV
- 5 incidents reported from hospitals, of which 2 were laboratory confirmed for influenza A(not subtyped), 2 for SARS-CoV-2 and 1 for influenza(no subtype information available)
- 4 incidents reported from educational settings, of which 3 were laboratory confirmed for influenza A(not subtyped) and 1 for SARS-CoV-2
- no incidents were reported from prisons
- 1 incident reported from other settings which was laboratory reported for adenovirus

Please note that data back to week 40 was retrospectively updated following an improvement in the method to assign incidents to an identified pathogen using reports from health protection teams.

Figure 15. Number of ARI incidents by setting, England

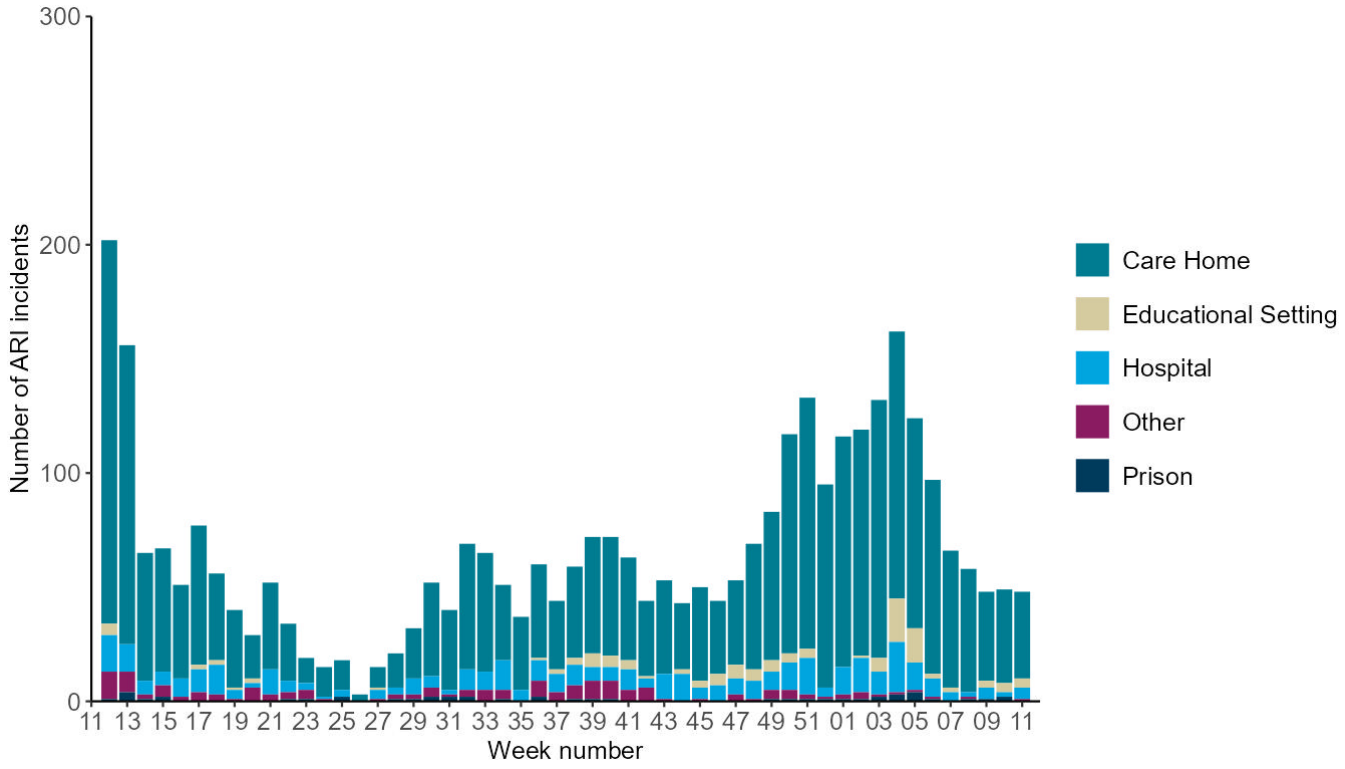


Figure 16. Number of ARI incidents in all settings by virus type, England

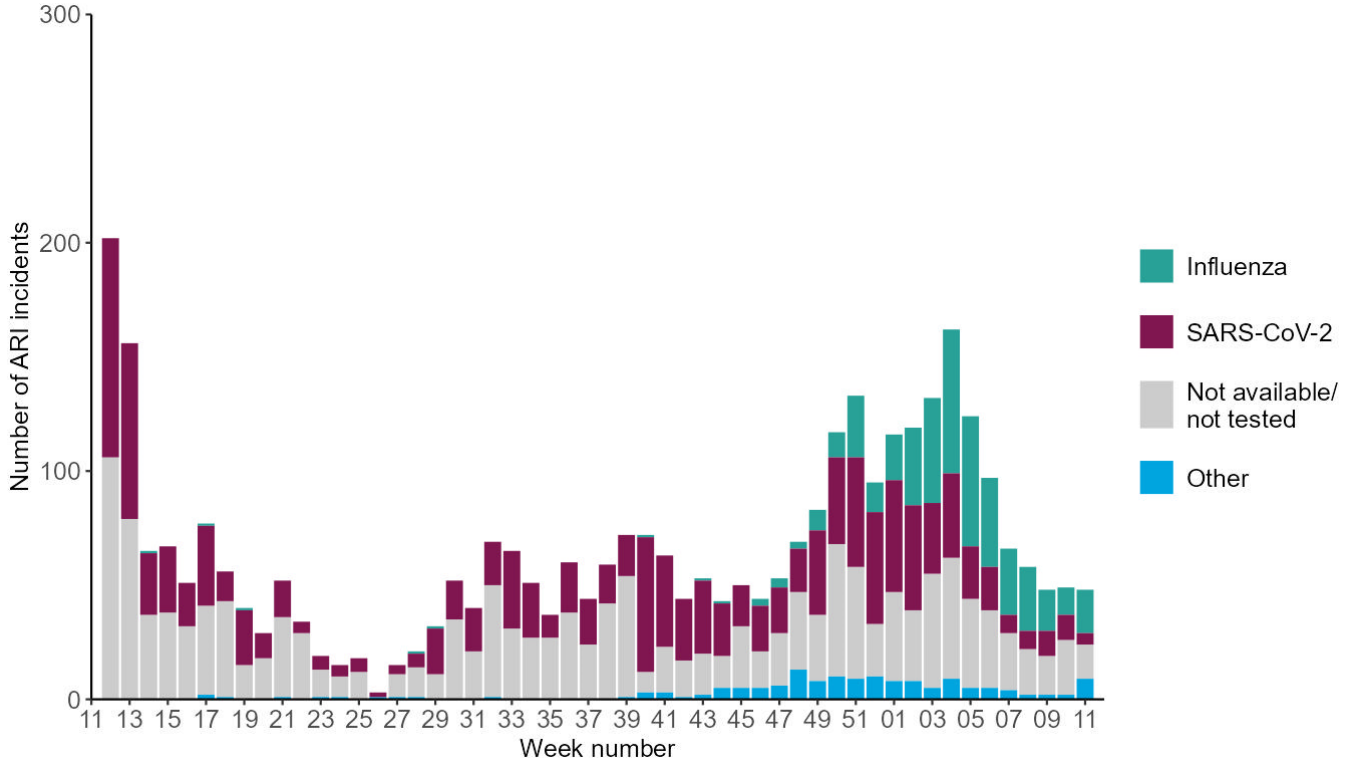


Figure 17. Number of ARI incidents in care homes by virus type, England

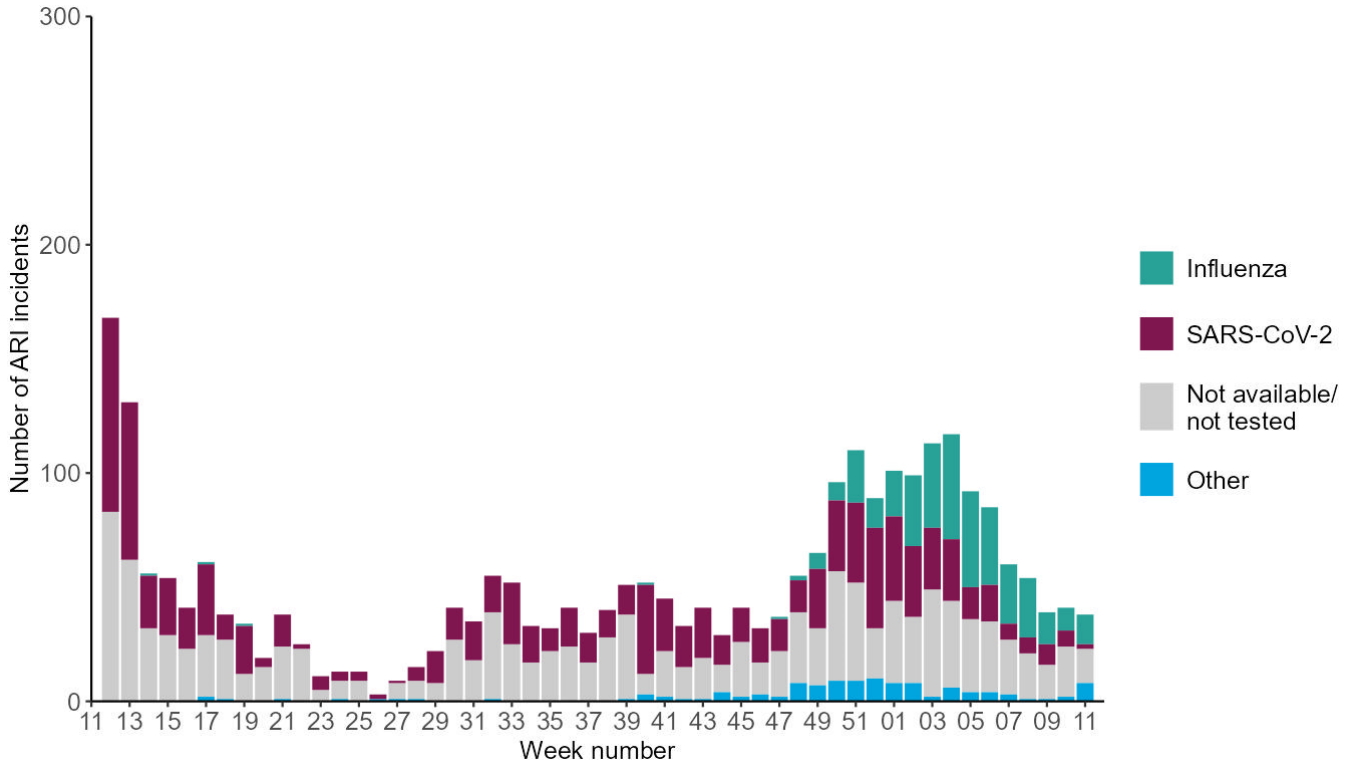
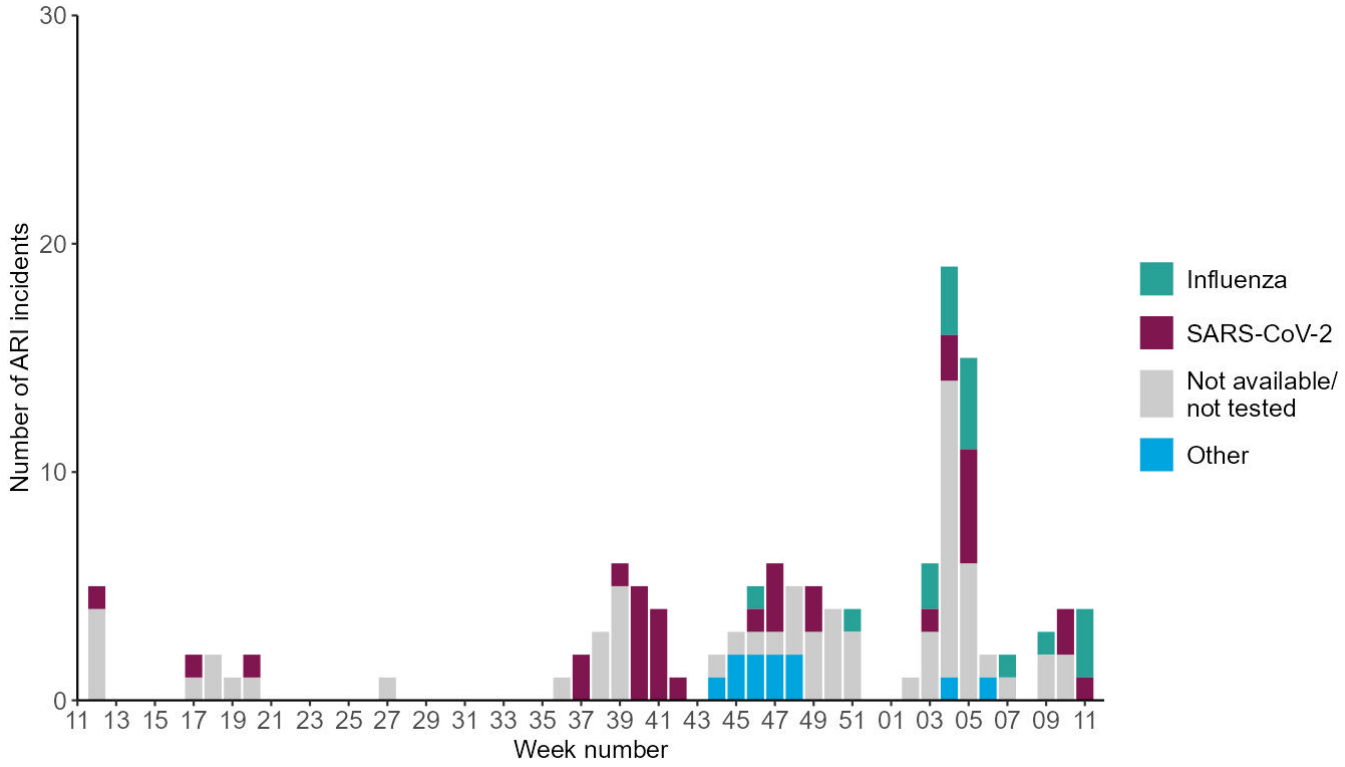


Figure 18. Number of ARI incidents in educational settings by virus type, England



FluSurvey

FluSurvey is an internet-based participatory surveillance system based on the InfluenzaNet platform. FluSurvey monitor trends of influenza-like illness (ILI) in the community using self-reported respiratory symptoms from registered participants. The platform has been adapted to capture respiratory symptoms, exposure risk and healthcare seeking behaviours among registered participants to contribute to national surveillance of COVID-19 activity as well as influenza activity since week 44 of 2020.

The survey had a planned pause in summer 2023 (as was the norm prior to COVID-19 emergence) and restarted in autumn 2023 on the FluSurvey 2.0 web platform with a mixture of previous participants and new participants. Therefore, the baseline demographics and level of symptoms may have changed compared with last season, including the possibility that new registrations and re-registrations may have been initiated by recent onset of illness.

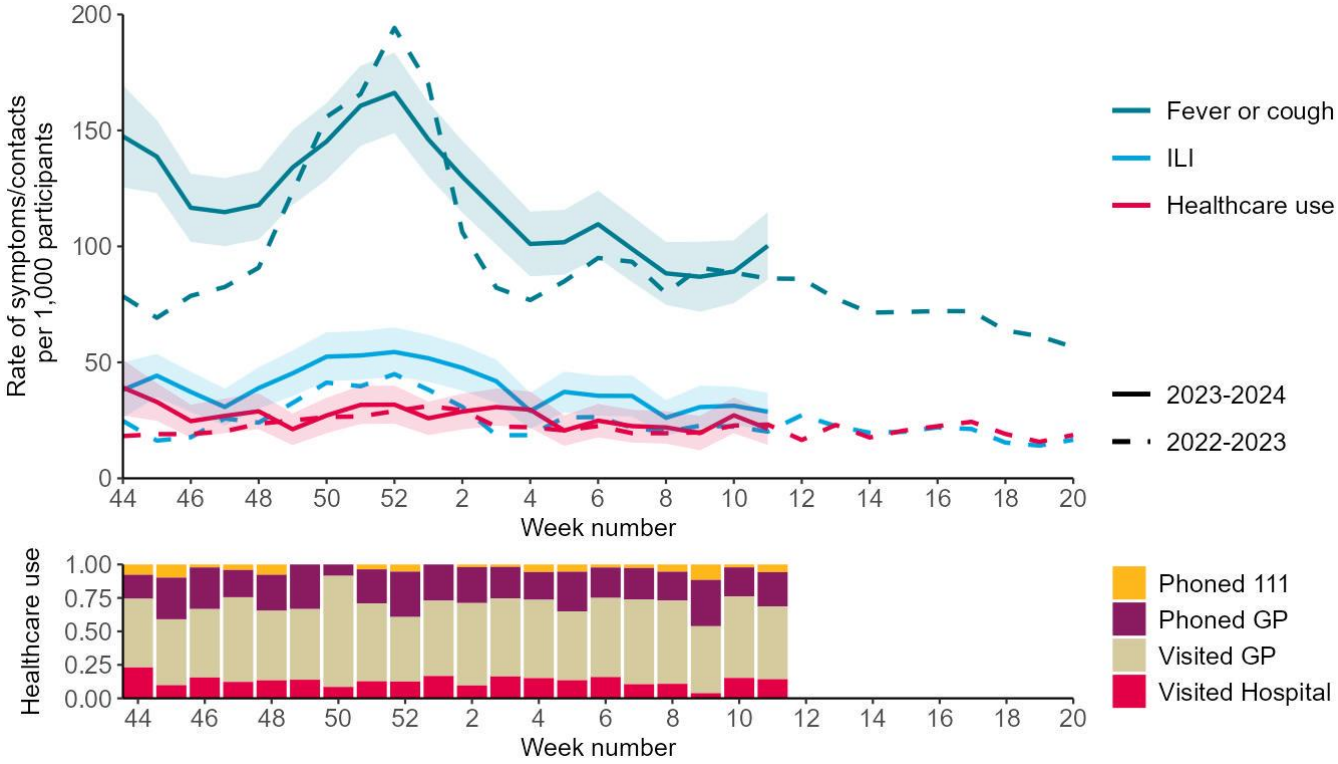
Note that ILI is defined as sudden onset of symptoms with at least one of fever (chills), malaise, headache, muscle pain and at least one of cough, sore throat, shortness of breath.

During week 11, there were 1,636 participants completing the weekly symptoms questionnaire of which 164 (10.0%) reported fever or cough and 47 (2.9%) reported ILI. COVID-19 like symptoms increased slightly while ILI amongst participants reporting symptoms remained stable compared with week 10. The most commonly reported contact with healthcare services as a result of symptoms was a visit to a GP surgery.

Healthcare use is presented as total use due to reported related symptoms and is classified by the most resource intensive use of health care resource if any is used (hospital being more intensive than physically visiting the general practitioner). Amongst people reporting at least one respiratory symptom, the most reported contact with healthcare services was a visit to their GP surgery.

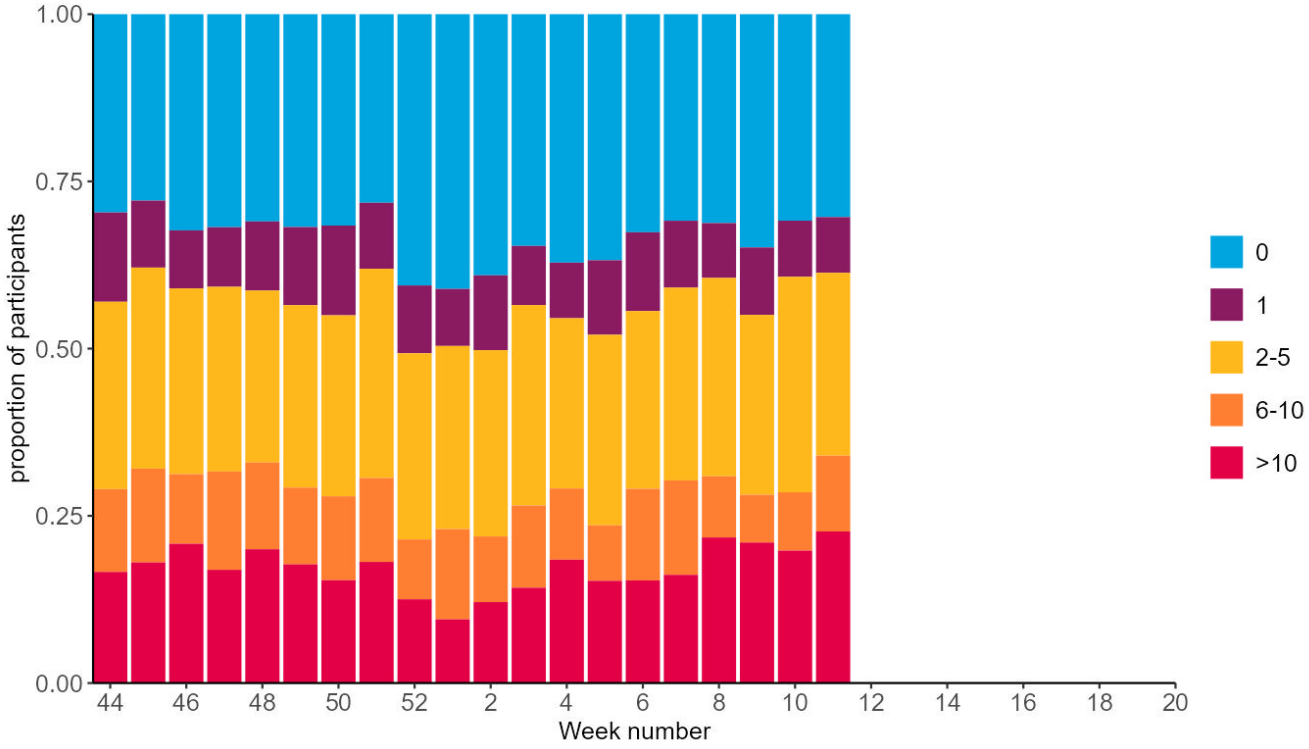
Self-reported daily social contact patterns by participants reporting symptoms are also reported. A contact is defined as a person outside the household who is approached at less than one metre, on the day prior to survey completion (Figure 20). There remains variation on social mixing patterns amongst participants with more people reporting not meeting any individual outside of their households during week 11.

Figure 19. FluSurvey participants self-reporting fever or cough and ILI symptoms, and trends in healthcare seeking behaviour among these participants, England [note 8]



[note 8] Please note in week 49 of 2022 there was no data available. The lines in the upper panel have been continued using interpolation.

Figure 20. FluSurvey participants' self-reported number of social contacts outside the household

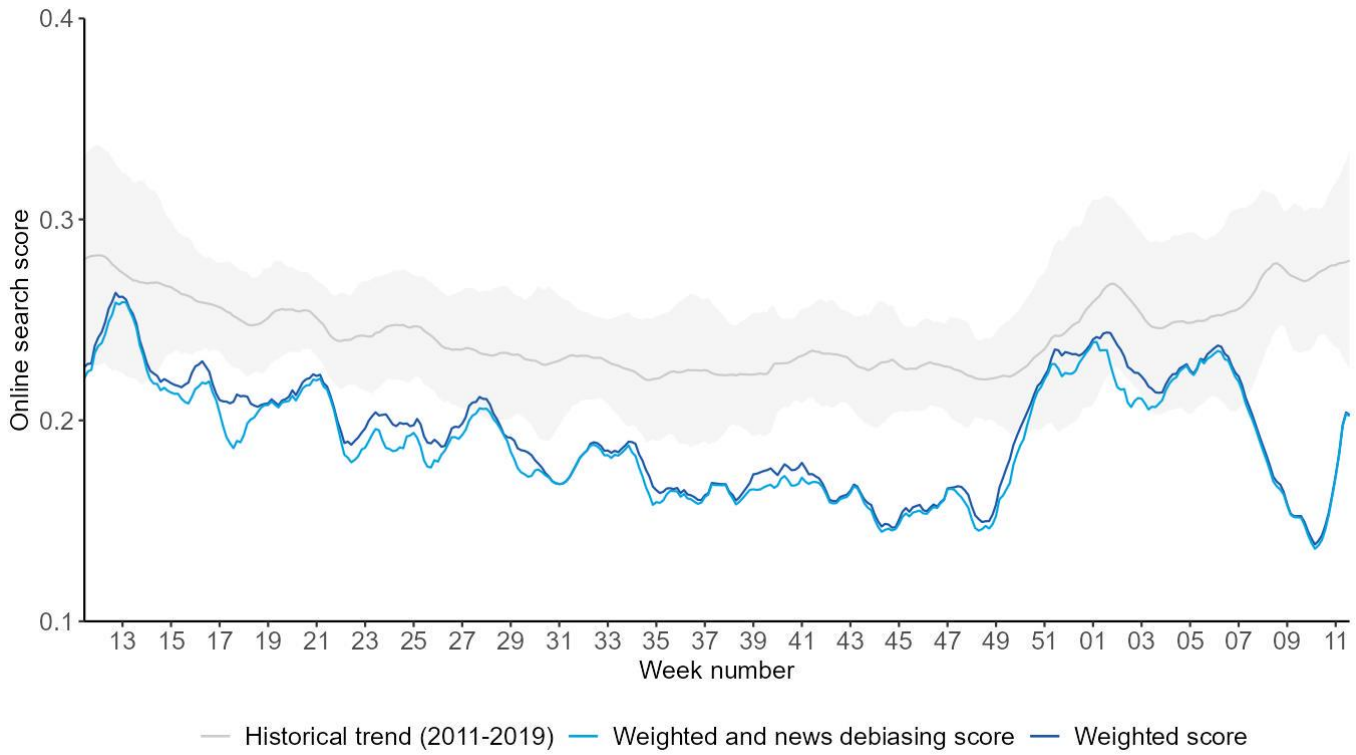


Google search queries

This is a web-based syndromic surveillance system which uses daily search query frequency statistics obtained from the Google Health Trends API (Application Programming Interface). This model focuses on search queries about COVID-19 symptoms as well as generic queries about 'coronavirus' (for example 'COVID-19'). The search query frequency time series is weighted based on symptom frequency as reported in other data sources. Frequency of searches for symptoms is compared with a baseline calculated from historical daily data. Further information on this model is available online.

During week 11, the overall and media-debiasing weighted Google search scores increased compared with the previous week (Figure 21).

Figure 21. Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



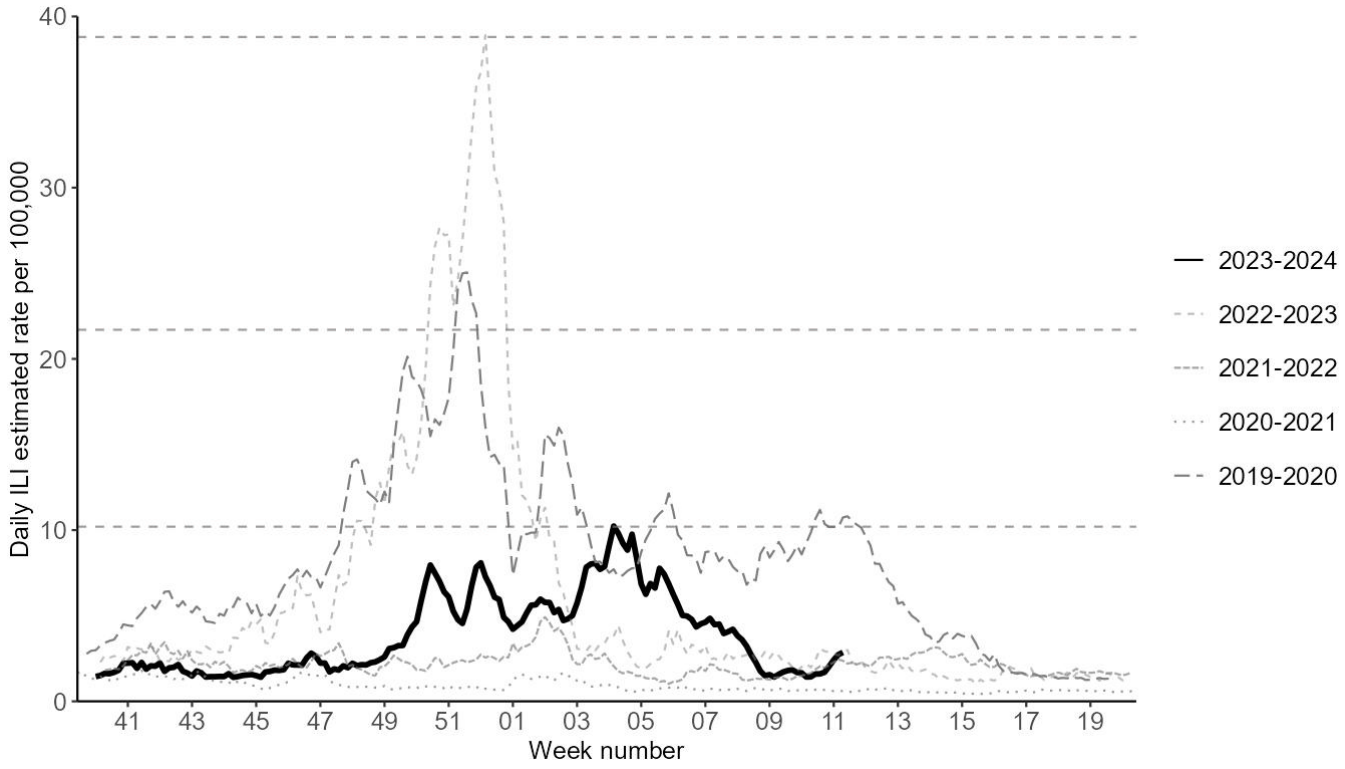
Flu Detector

FluDetector is a web-based model which assesses internet-based search queries for influenza-like illness (ILI) in the general population.

Daily ILI rate estimates are based on uniformly averaged search query frequencies for a week-long period (including the current day and the 6 days before it).

For week 11, the daily ILI query rate increased and was below baseline activity (Figure 22).

Figure 22. Daily estimated ILI Google search query rates per 100,000 population, England



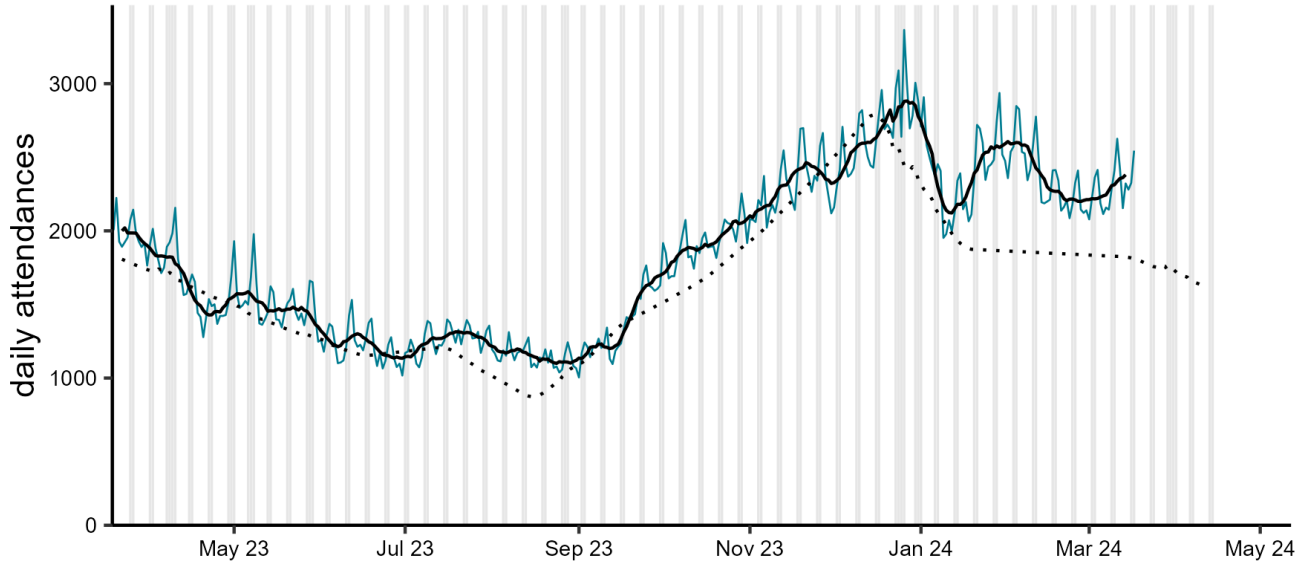
Syndromic surveillance

During week 11, NHS 111 calls for cold or flu and calls for cough remained stable or showed an increase in activity, particularly in children aged between 5 and 14 years. GP in-hours consultation rates for influenza-like-illness (ILI) remained stable nationally and below baseline. GP out of hours daily contacts for acute respiratory infection increased but remained similar to baseline levels. ED attendances for acute respiratory infections (ARI) increased, particularly in children aged between 5 and 14 years. ED attendances for acute bronchiolitis increased. Both were above baseline levels. ED attendances for influenza-like illness and COVID-19 like illness remained stable.

Please note during January, February and March 2024, new NHS Pathways system updates (NHS Pathways Release 41 and 42) have resulted in updates to the clinical triage of certain calls and online assessments. These updates have particularly affected the number of syndromic NHS 111 calls for the cold or flu and cough indicators. NHS 111 syndromic calls for cold or flu and cough indicators should be interpreted with caution.

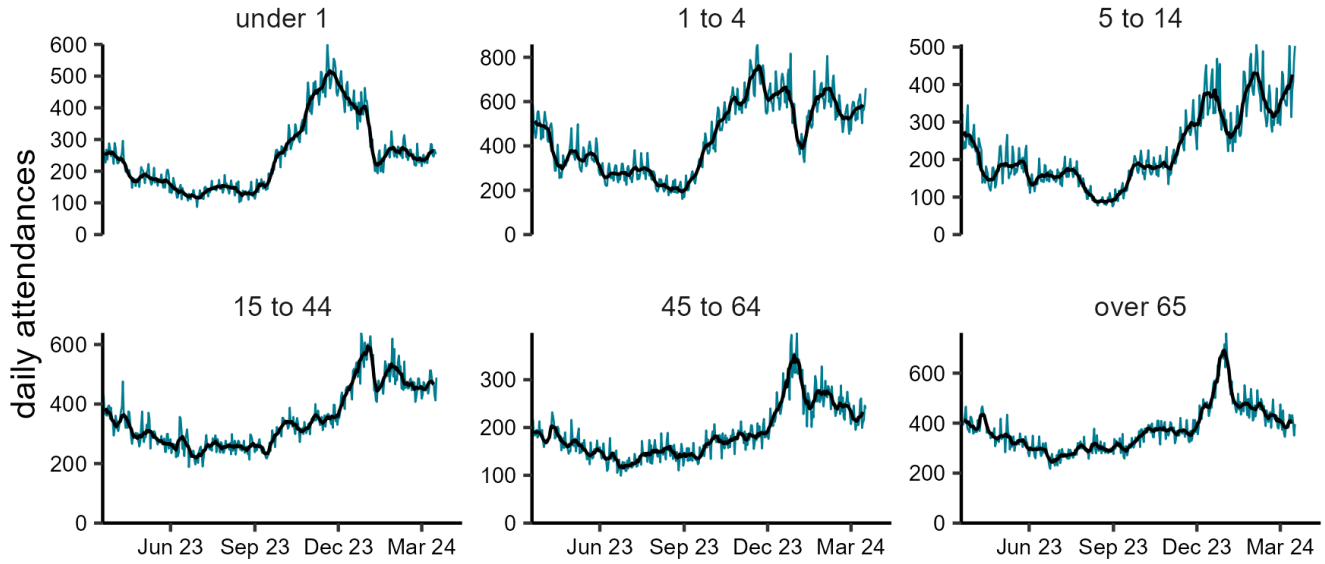
For further information on syndromic surveillance please see Syndromic surveillance: weekly summaries.

Figure 23a. Daily ED attendances for acute respiratory infection nationally, England [note 9]



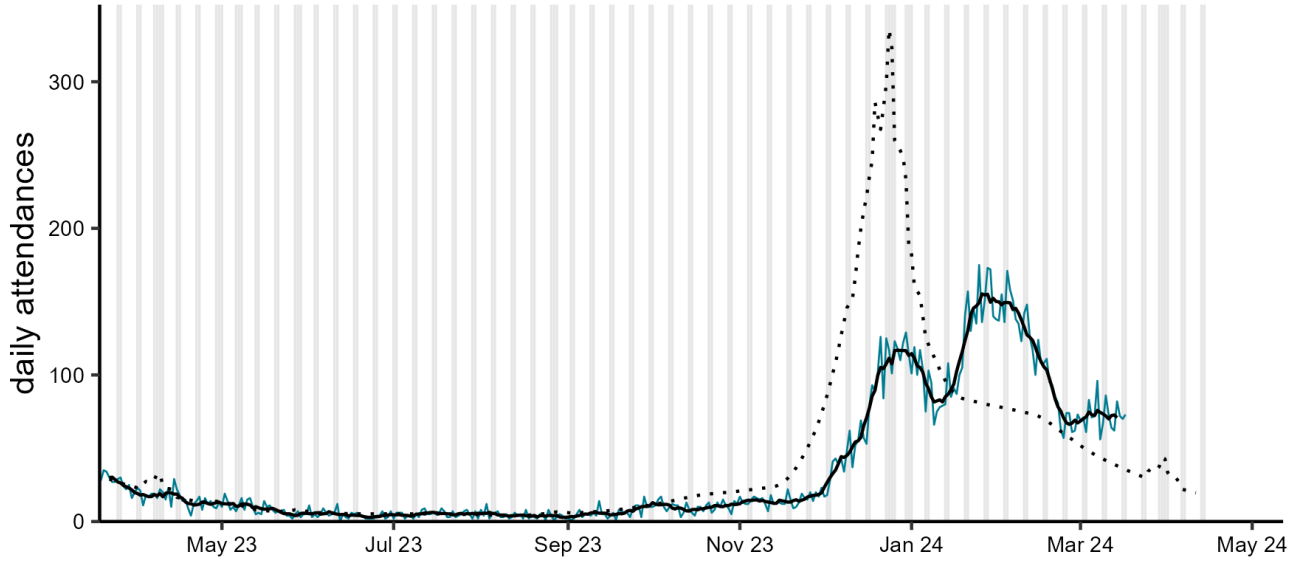
[note 9] The solid black line is a 7-day moving average adjusted for holidays. The solid green line is the daily attendances. The black dotted line is the baseline. The grey columns show weekends and bank holidays.

Figure 23b. Daily ED attendances for acute respiratory infection by age group, England [note 10]



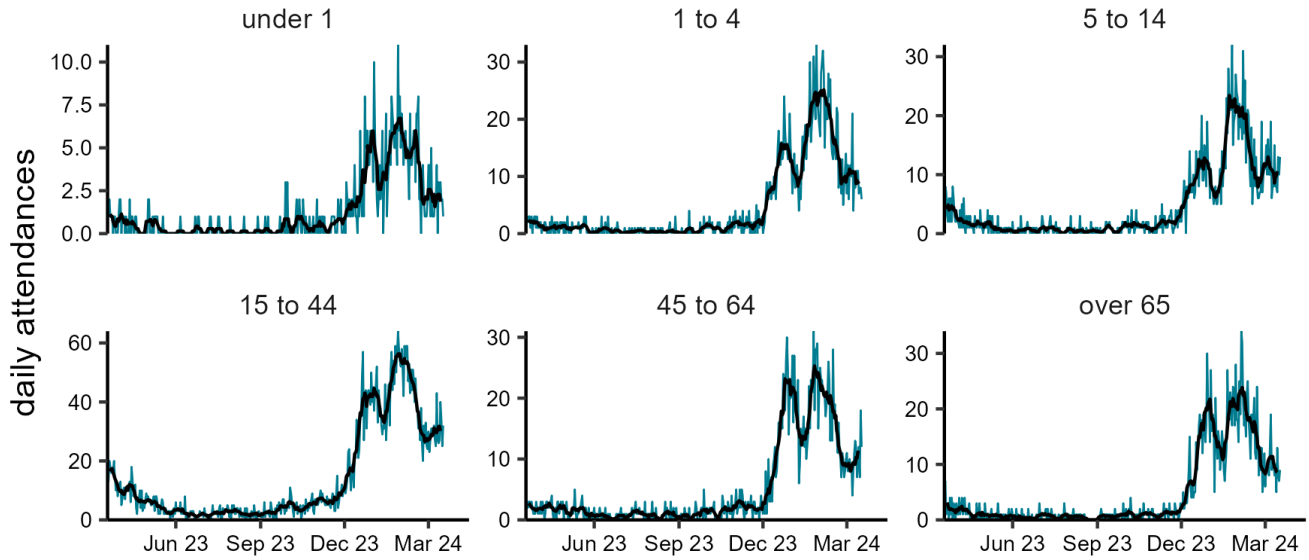
[note 10] The scales may vary in each graph to enable trend comparison. The black line is the 7-day moving average adjusted for bank holidays.

Figure 24a. Daily ED attendances for influenza-like illness nationally, England [note 9]



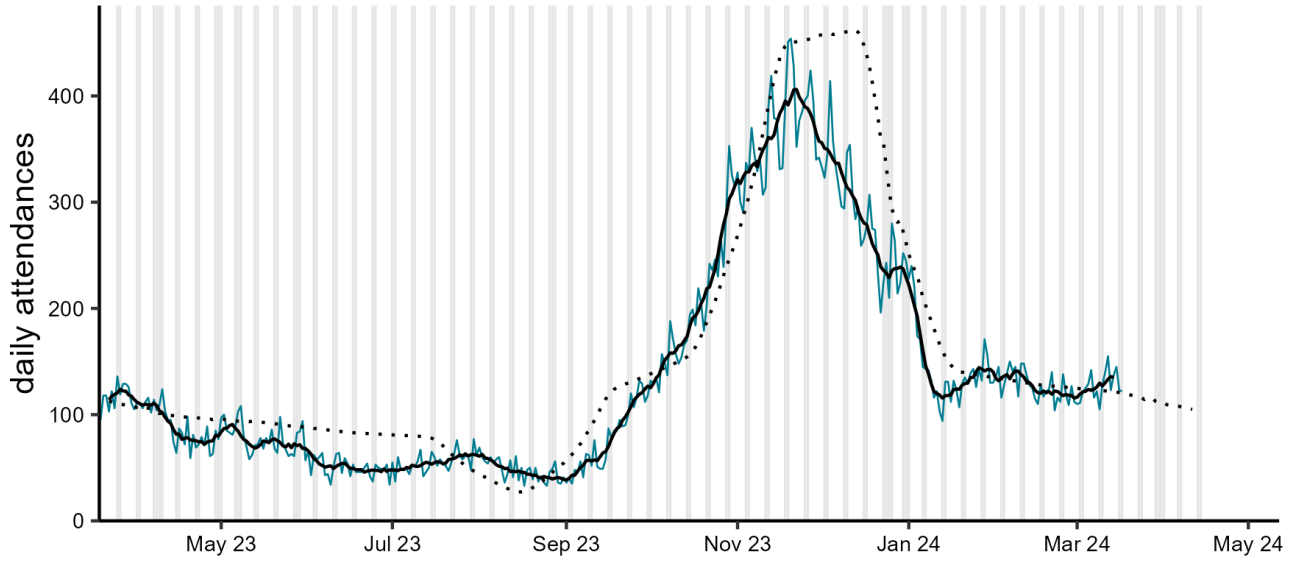
See [note 9] as above.

Figure 24b. Daily ED attendances for influenza-like illness by age group, England [note 10]



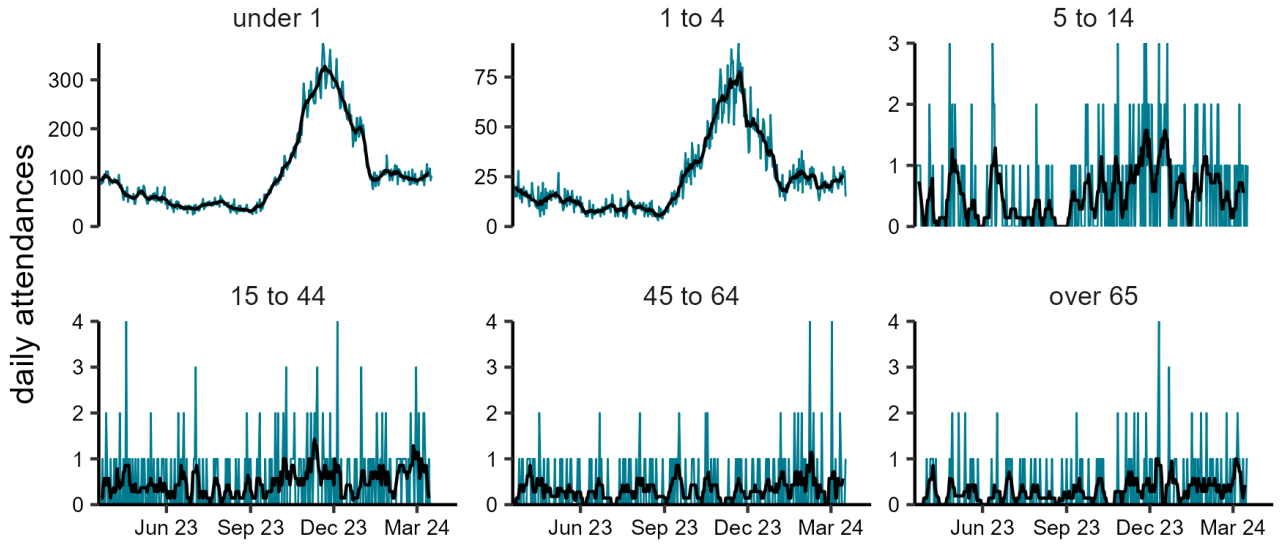
See [note 10] as above.

Figure 25a. Daily ED attendances for acute bronchiolitis nationally, England [note 11]



See [note 9] as above.

Figure 25b. Daily ED attendances for acute bronchiolitis by age group, England [note 12]



See [note 10] as above.

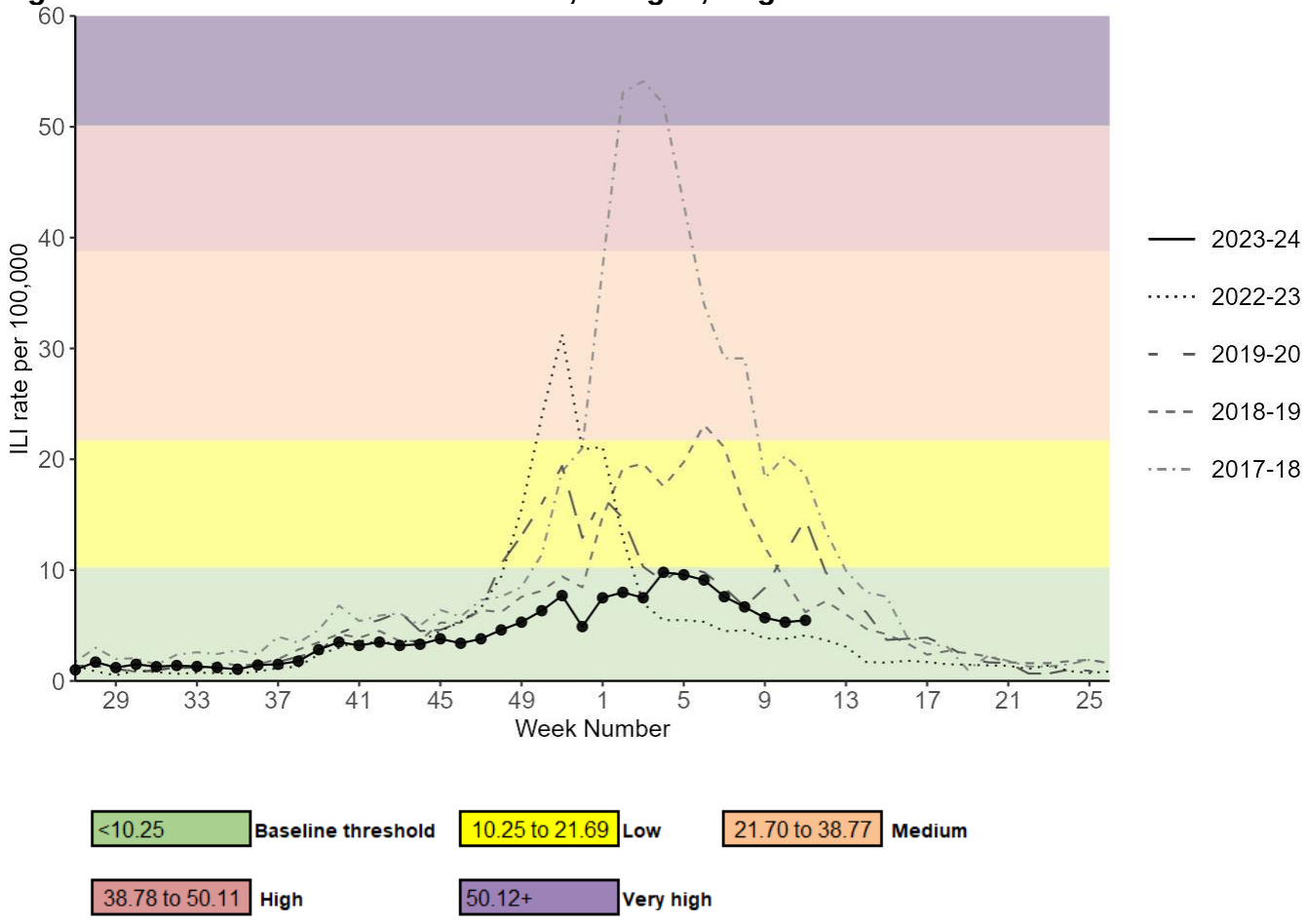
[note 11] Please note, there was no update in week 14 for acute bronchiolitis syndromic surveillance.

Primary care surveillance

RCGP Clinical Indicators (England)

The weekly ILI consultation rate through the Royal College of General Practitioners (RCGP) surveillance increased slightly to 5.5 per 100,000 registered population in participating GP practices in week 11 compared with 5.3 per 100,000 in the previous week. This was within baseline activity levels (less than 10.25 per 100,000) (Figure 26). By age group, the highest rates were seen in those aged between 15 and 44 years (6.6 per 100,000), followed by those aged under 1 (5.7 per 100,000). The lower respiratory tract infections (LRTI) consultation rate remained stable at 119.4 per 100,000 in week 11 compared with 116.6 per 100,000 in the previous week.

Figure 26. RCGP ILI consultation rates, all ages, England



Moving Epidemic Method (MEM) thresholds are based on data from the 2015 to 2016 season to the 2022 to 2023 season. Please note the 2020 to 2021 and 2021 to 2022 seasons have been removed due to low activity throughout these seasons.

RCGP sentinel swabbing scheme in England

Due to reporting delays, there were insufficient results of samples taken in week 11 of 2024 to report. These will be included in next week's report. Additionally, starting in week 51, testing for enterovirus and rhinovirus have been delayed.

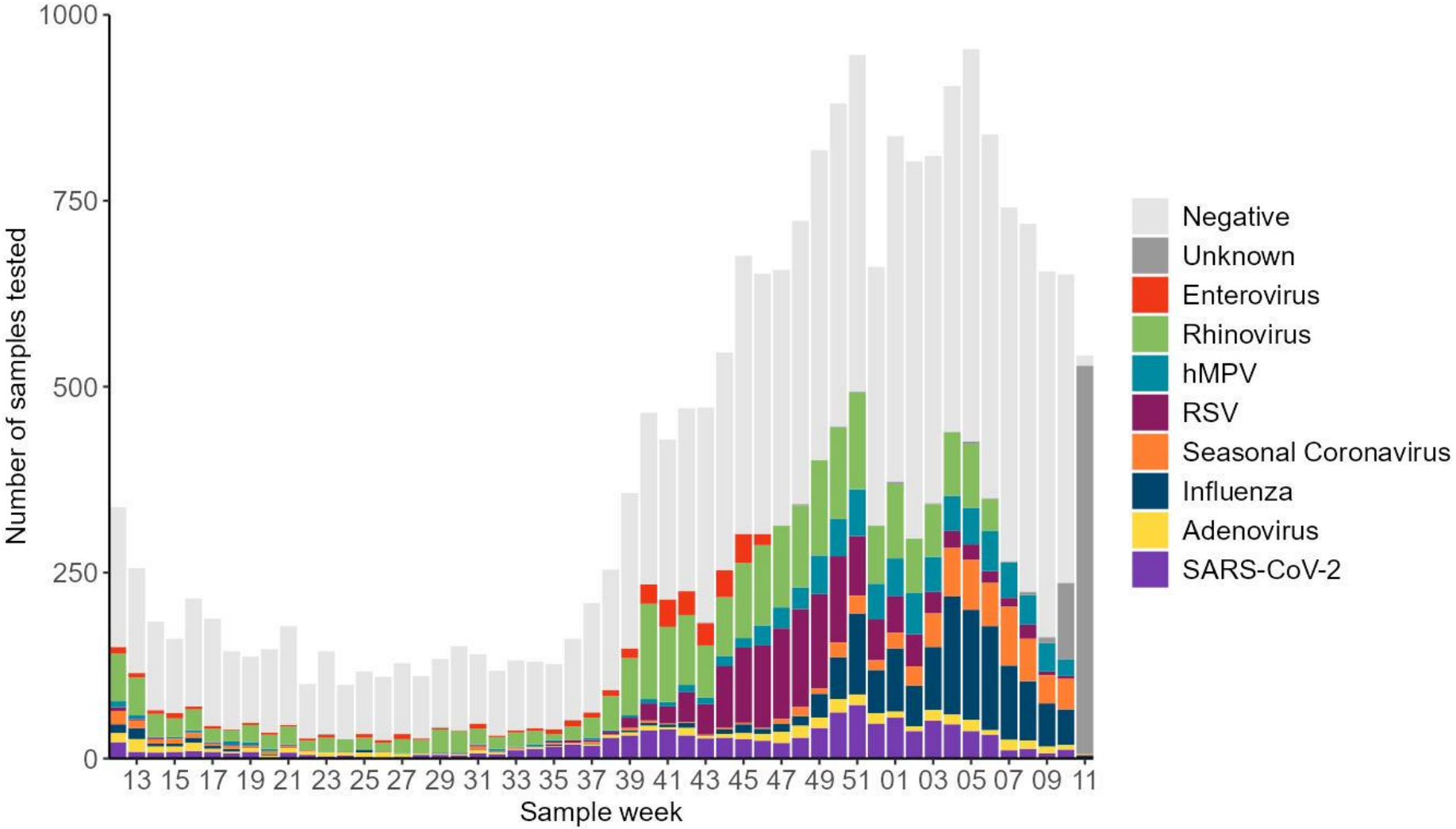
Based on the date samples that were taken, in week 10 of 2024 (week commencing 4 March 2024) 650 samples were tested through the GP sentinel swabbing scheme in England of which 133 samples tested positive (Figure 27). Among all positive samples, 36.1% were positive for influenza, 30.8% were positive for other seasonal coronaviruses, 16.5% were positive for hMPV, 9.0% were positive for SARS-CoV-2, 4.5% were positive for adenovirus and 3.0% were positive for RSV (Figure 28). Due to the number of samples which have not yet been categorised, data should be interpreted with caution when compared with previous weeks. There were 20 available results for week 11. The proportion of detections among all positive samples is not calculated when the number of samples with result is less than 50.

Among all samples which had a known test result, in week 10, positivity for SARS-CoV-2 was 2.2%, positivity for influenza was 8.9%, and positivity for RSV was 0.7% (Figure 29). Due to the number of samples which have not yet been categorised, data should be interpreted with caution when compared with previous weeks.

In previous reports, Figure 27 and Figure 28 were produced based on the date samples were received in the reference laboratory. From 23 November 2023 (week 47 report) these figures have been updated to be based on the date samples were taken.

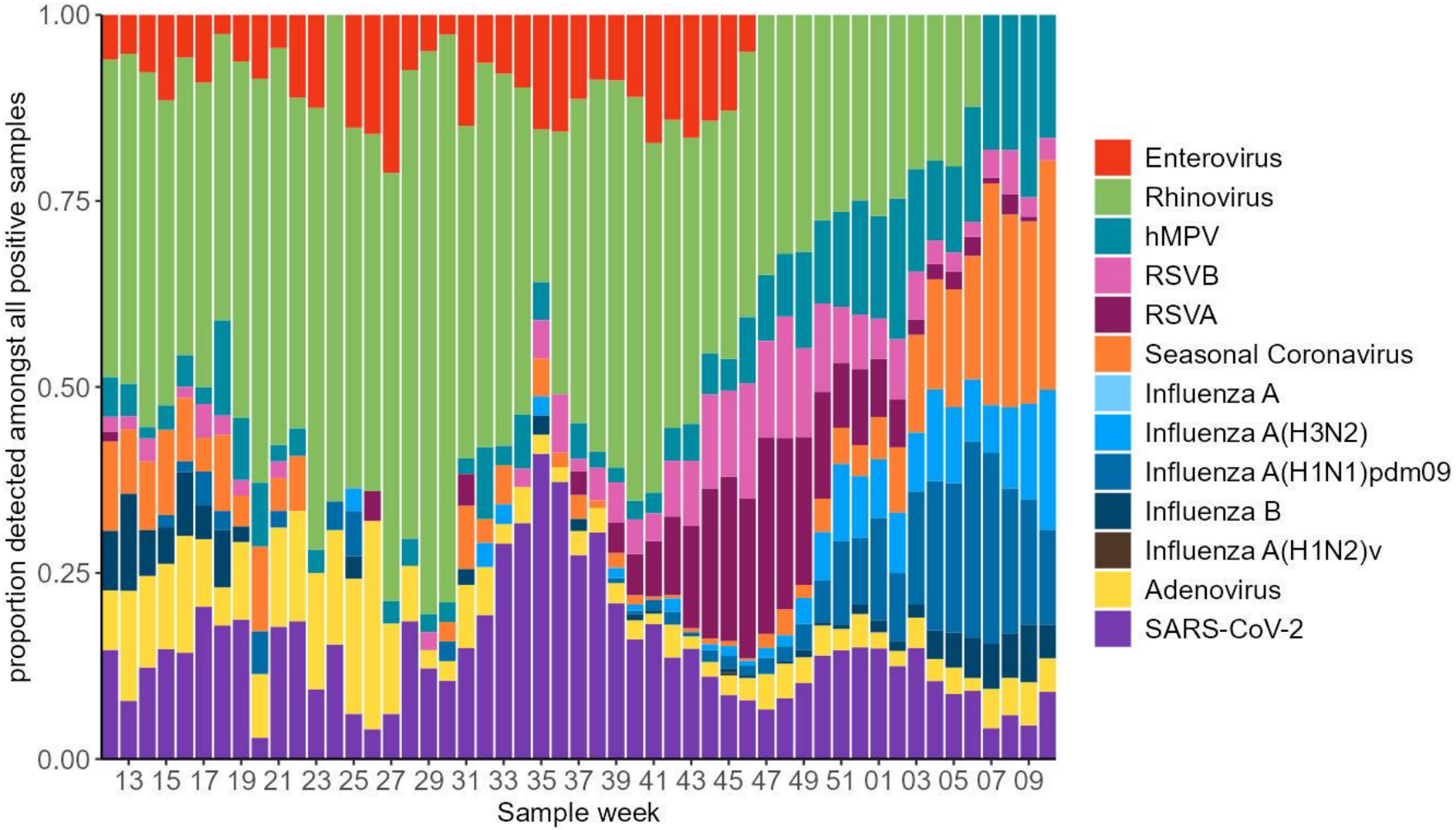
From 27 November 2023, swabbing was temporarily increased in the Yorkshire and Humber region in response to the identification of a case of influenza A(H1N2)v. This may lead to an over-representation of the Yorkshire and Humber region.

Figure 27. Number of samples tested for SARS-CoV-2, influenza, and other respiratory viruses in England by week, GP sentinel swabbing [note 12]



[note 12] Unknown category corresponds to samples with no result yet.

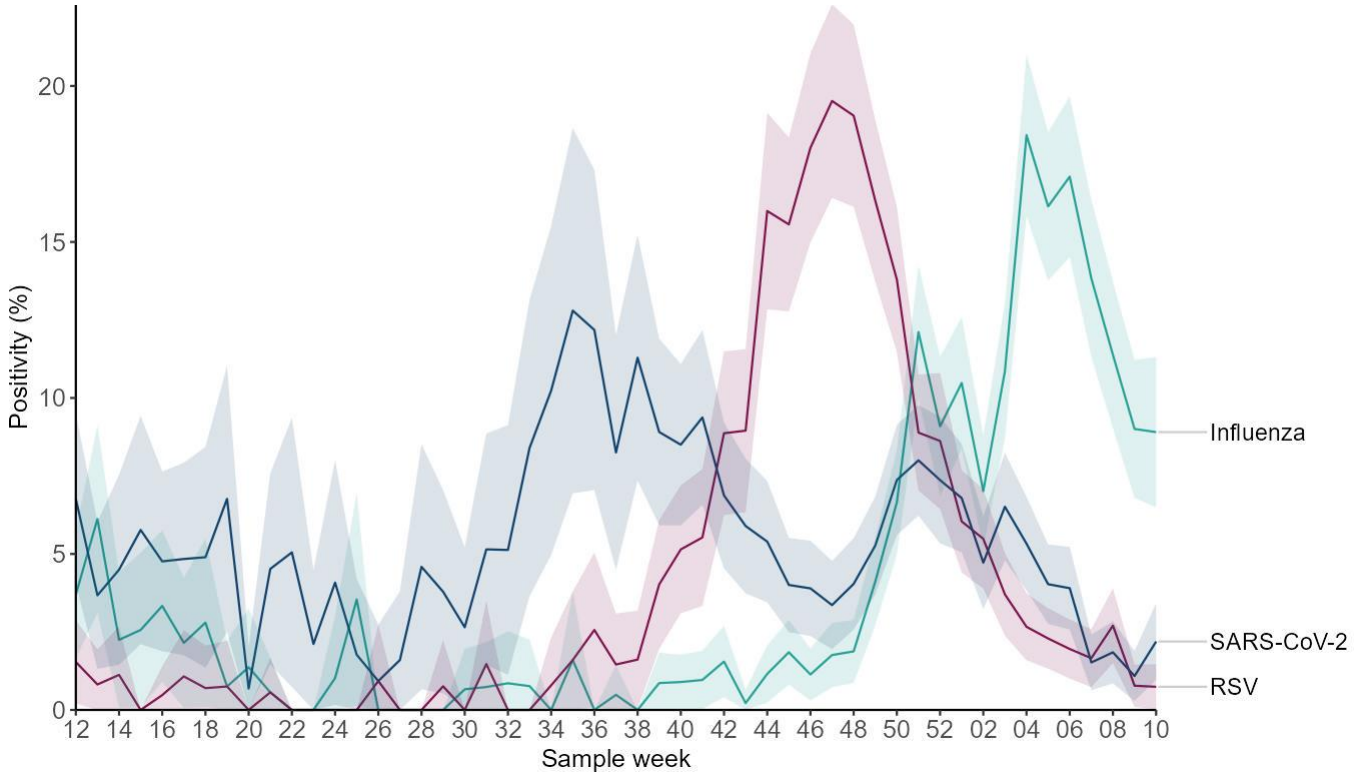
Figure 28. Proportion of detections of SARS-CoV-2, influenza, and other respiratory viral strains amongst virologically positive respiratory surveillance samples in England by week, GP sentinel swabbing scheme [note 13] [note 14]



[note 13] From week 51 data contains a substantial reduction of test results for enterovirus and rhinovirus due to a delay in testing for these pathogens.

[note 14] Data from the most recent weeks are not shown on this graph due to reporting delays.

Figure 29. Weekly positivity (%) for COVID-19, influenza and RSV in England, GP sentinel swabbing [note 14]



See [note 14] as above.

Secondary care surveillance

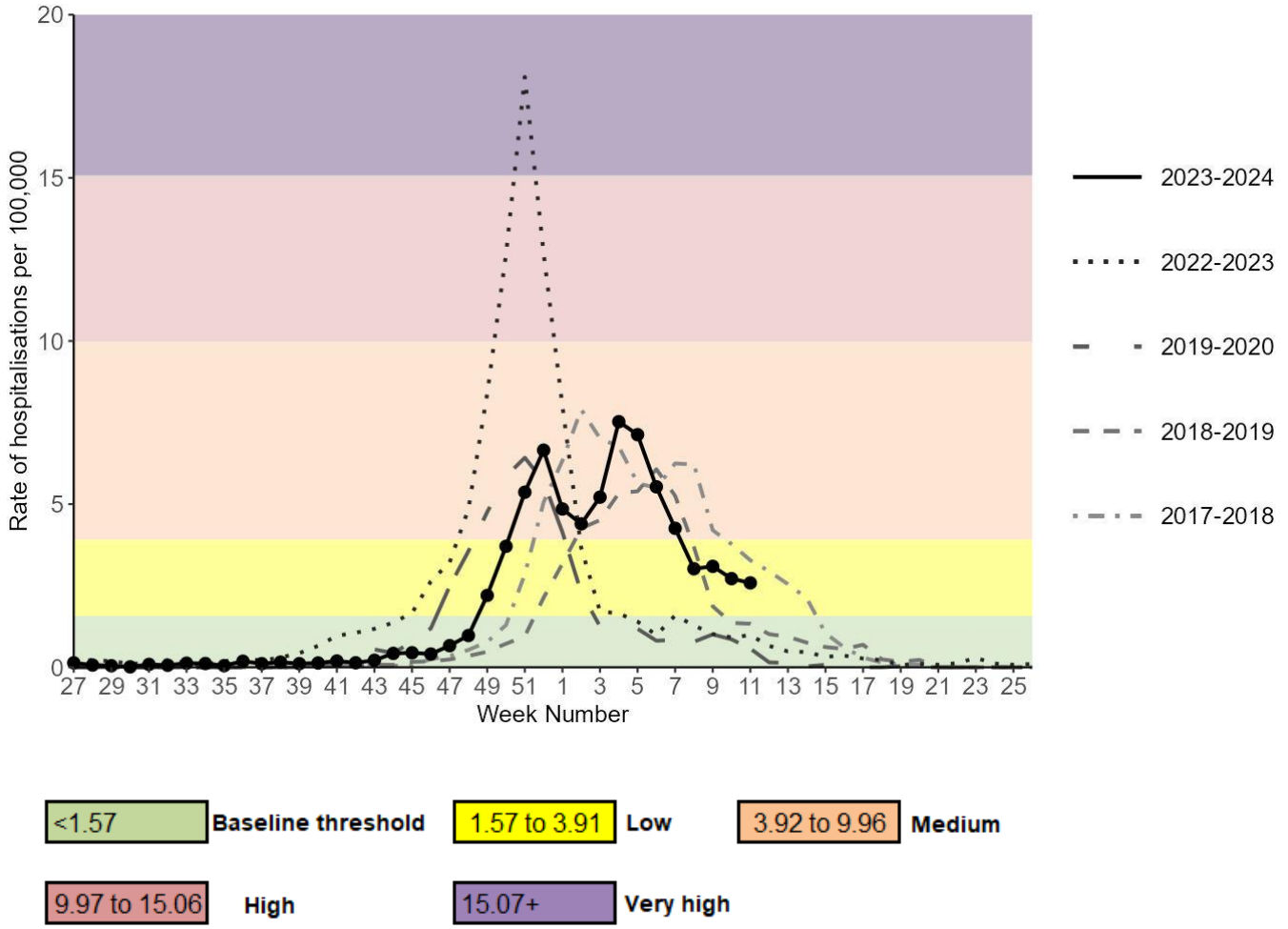
Influenza, SARI Watch

Surveillance of influenza hospitalisations to all levels of care is based on data from a small sentinel network of acute NHS trusts in England. Surveillance of admissions to ICU or HDU for influenza is mandatory with data required from all acute NHS trusts in England. Please note that the SARI Watch rates for 2023 to 2024 use the latest trust catchment population. For consistency the rates have been updated back to October 2020. The population denominator reflects changes in trust reconfiguration, hospital admission activity and population estimates.

In week 11 (ending 17 March 2024), the overall weekly hospital admission rate for influenza decreased slightly to 2.59 per 100,000 compared with 2.72 per 100,000 in the previous week. The rate in the latest rate was within the low impact range (1.57 to 3.91 per 100,000). There were 237 new hospital admissions for influenza (178 influenza A(not subtyped), 17 influenza A(H1N1)pdm09, 5 influenza A(H3N2), and 37 influenza B).

In week 11, the overall ICU or HDU rate for influenza decreased to 0.04 per 100,000 compared with 0.08 in the previous week. The rate in the latest week remained within the baseline impact range (fewer than 0.11 per 100,000). There were 16 new case reports of an ICU or HDU admission for influenza in week 11 (11 influenza A(not subtyped), 2 influenza A(H1N1)pdm09, 2 influenza A(H3N2) and 1 influenza B).

Figure 30. Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch sentinel surveillance, England

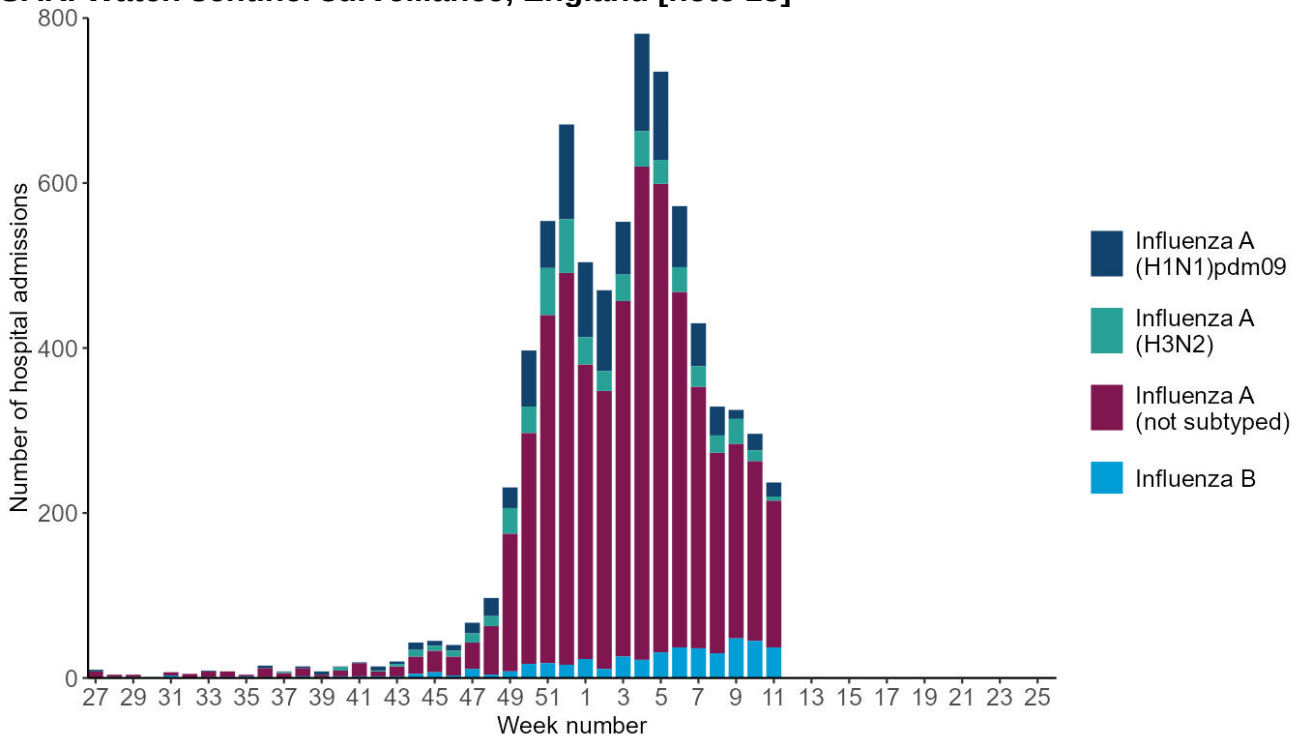


MEM thresholds are based on data from the 2015 to 2016 season to the 2022 to 2023 season. Please note the 2020 to 2021 and 2021 to 2022 seasons have been removed due to low activity throughout these seasons.

Influenza hospital admission rate based on 21 sentinel NHS trusts for week 11.

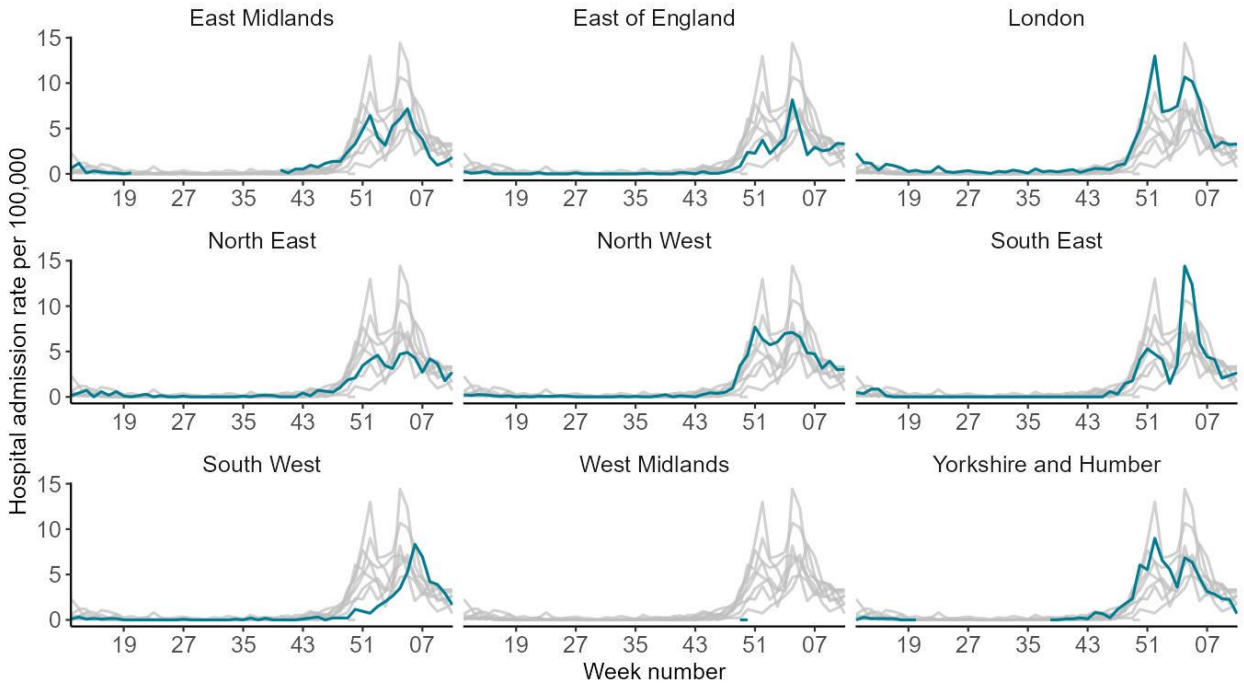
SARI Watch data is provisional and subject to retrospective updates.

Figure 31. Weekly influenza hospital admissions by influenza type, reported through SARI Watch sentinel surveillance, England [note 15]



[note 15] Number of influenza hospital admissions based on sentinel NHS trusts.

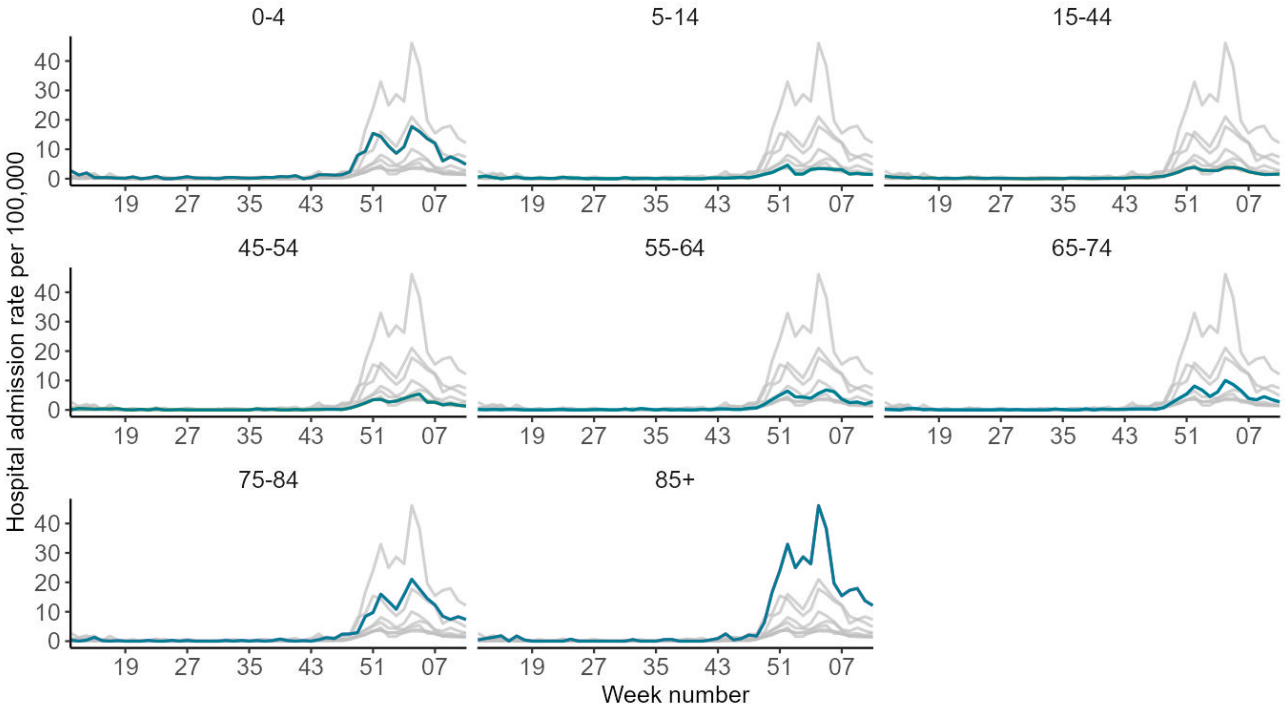
Figure 32. Weekly hospital admission rate by UKHSA region for new influenza reported through SARI Watch sentinel surveillance [note 4] [note 16]



[note 16] Rates in some regions may not include all influenza surveillance sentinel trust sites from week to week. This may lead to variation in regional representation hence caution is required in interpreting the weekly data by region.

See [note 4] as above.

Figure 33a. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - fixed y-axis [note 3]



See [note 3] as above.

Figure 33b. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - adjusted y-axis

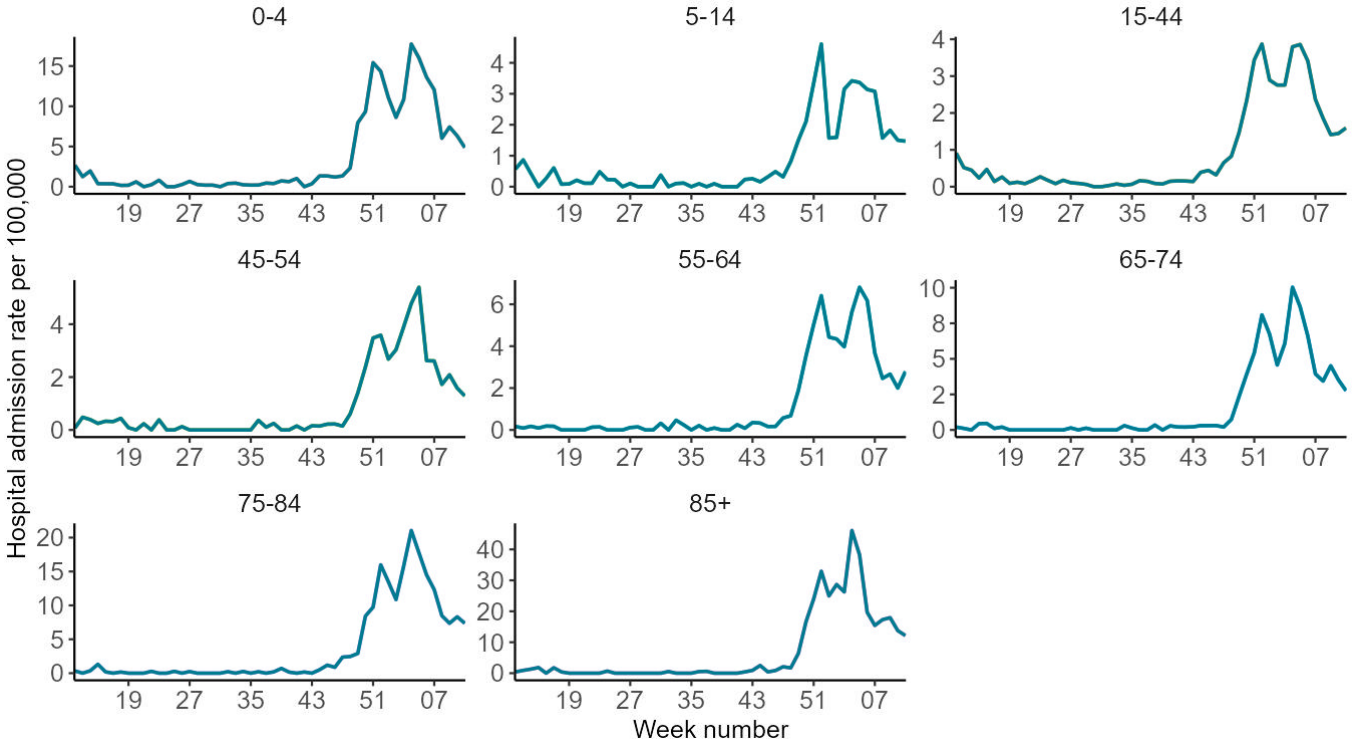
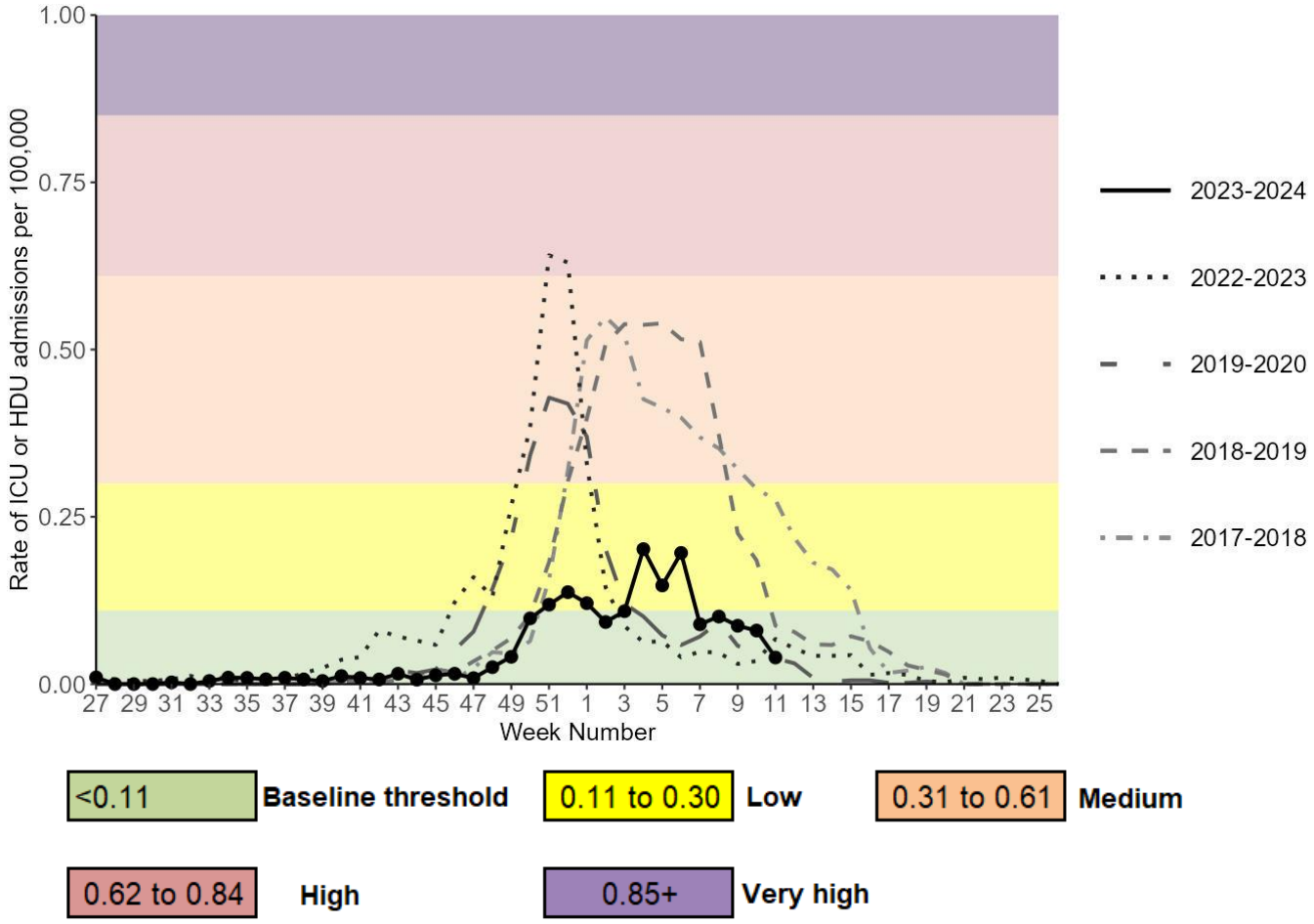


Figure 34. Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch mandatory surveillance, England



MEM thresholds are based on data from the 2015 to 2016 to the 2022 to 2023 seasons. Please note the 2020 to 2021 and 2021 to 2022 seasons have been removed due to low activity throughout these seasons.

Influenza ICU or HDU admission rate based on 92 NHS trusts for week 11.

SARI Watch data is provisional and subject to retrospective updates.

Figure 35. Weekly influenza ICU or HDU admissions by influenza type, reported through SARI Watch mandatory surveillance, England

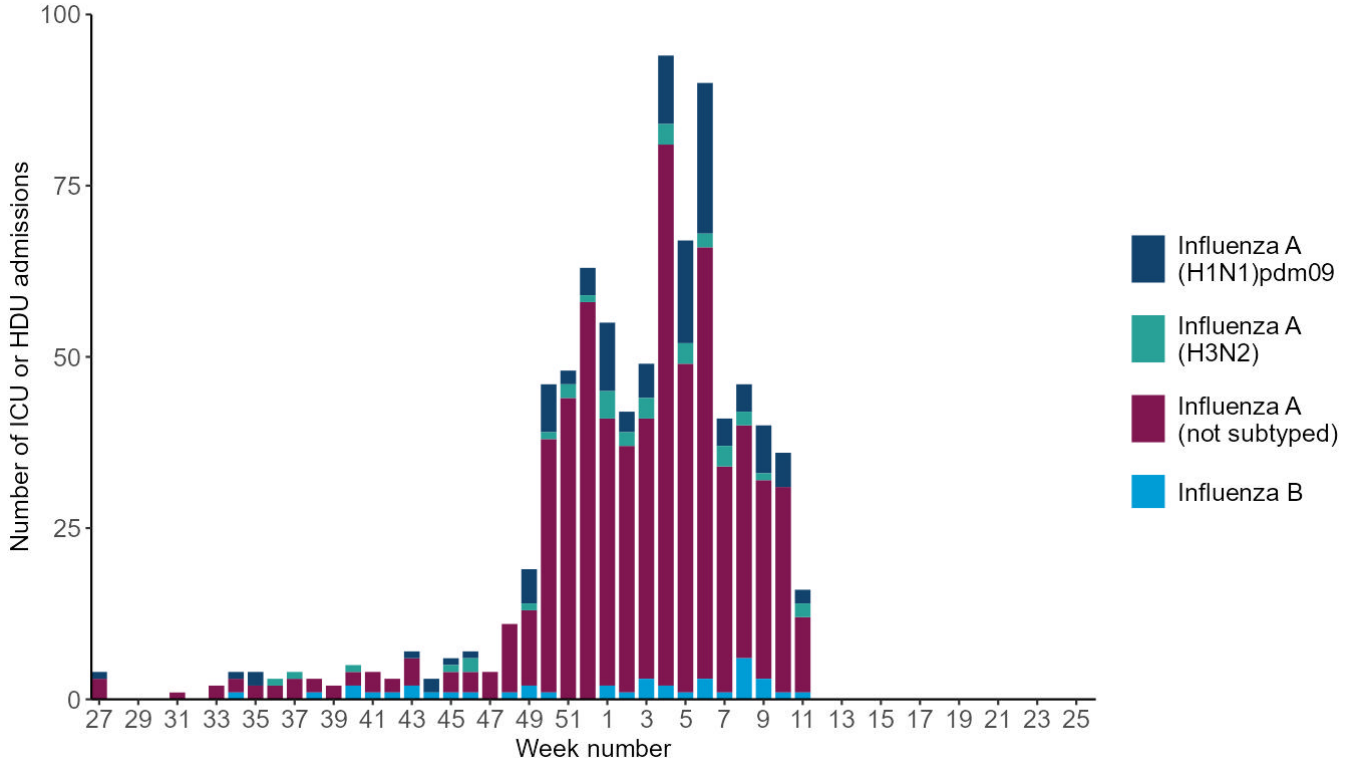
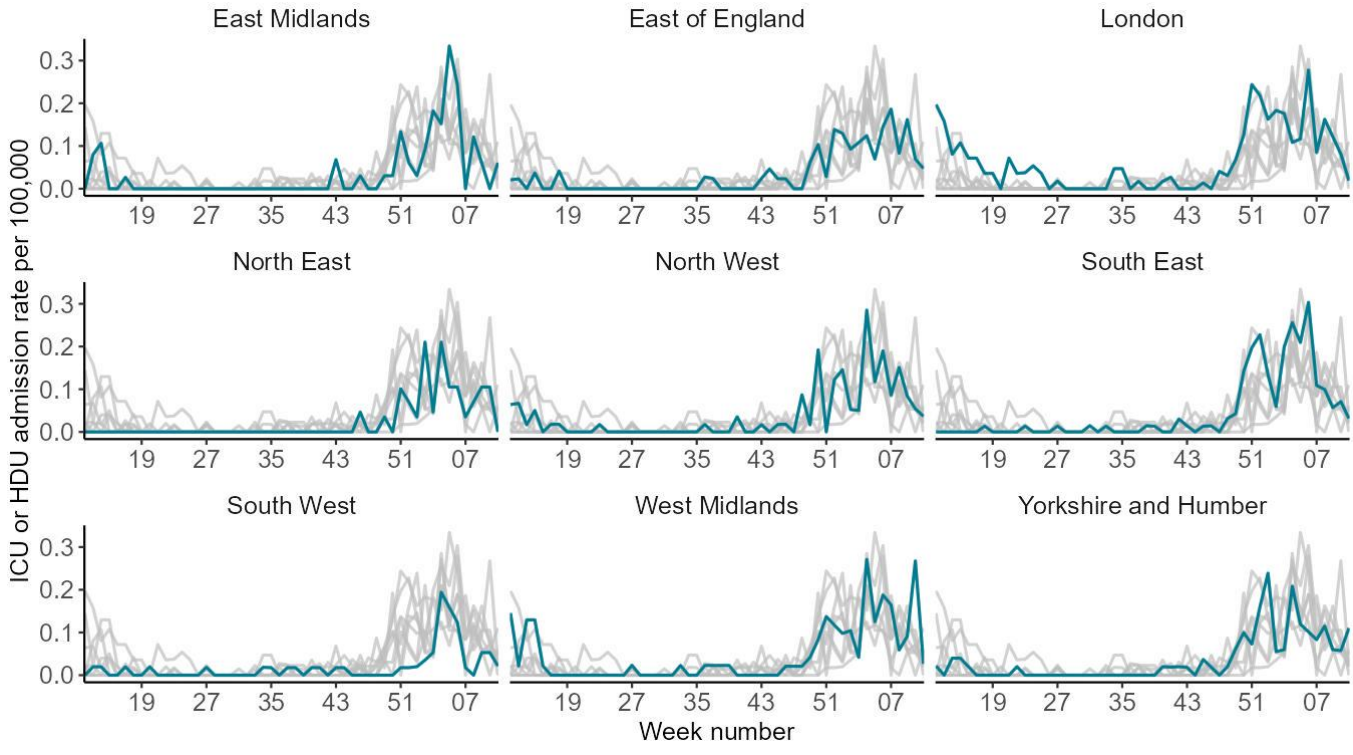
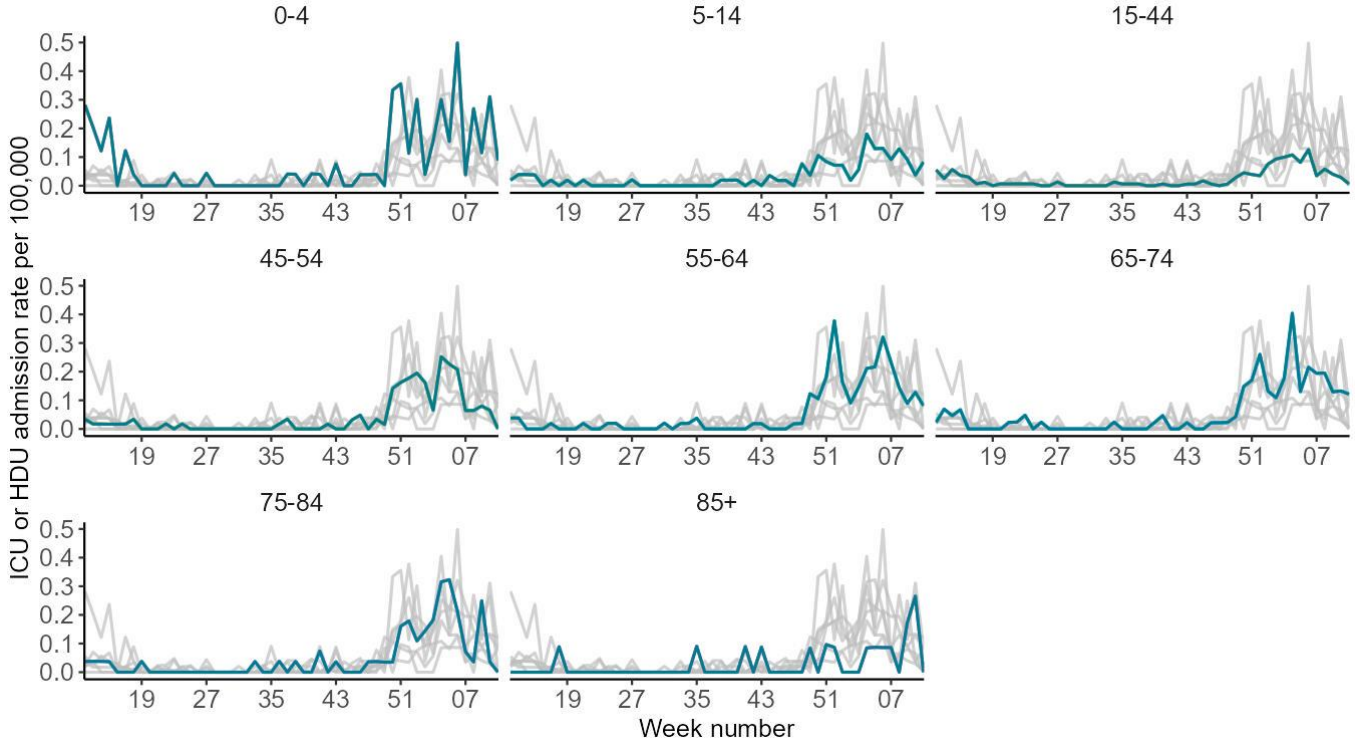


Figure 36. Weekly ICU or HDU admission rate by UKHSA region for new influenza, reported through SARI Watch mandatory surveillance [note 4]



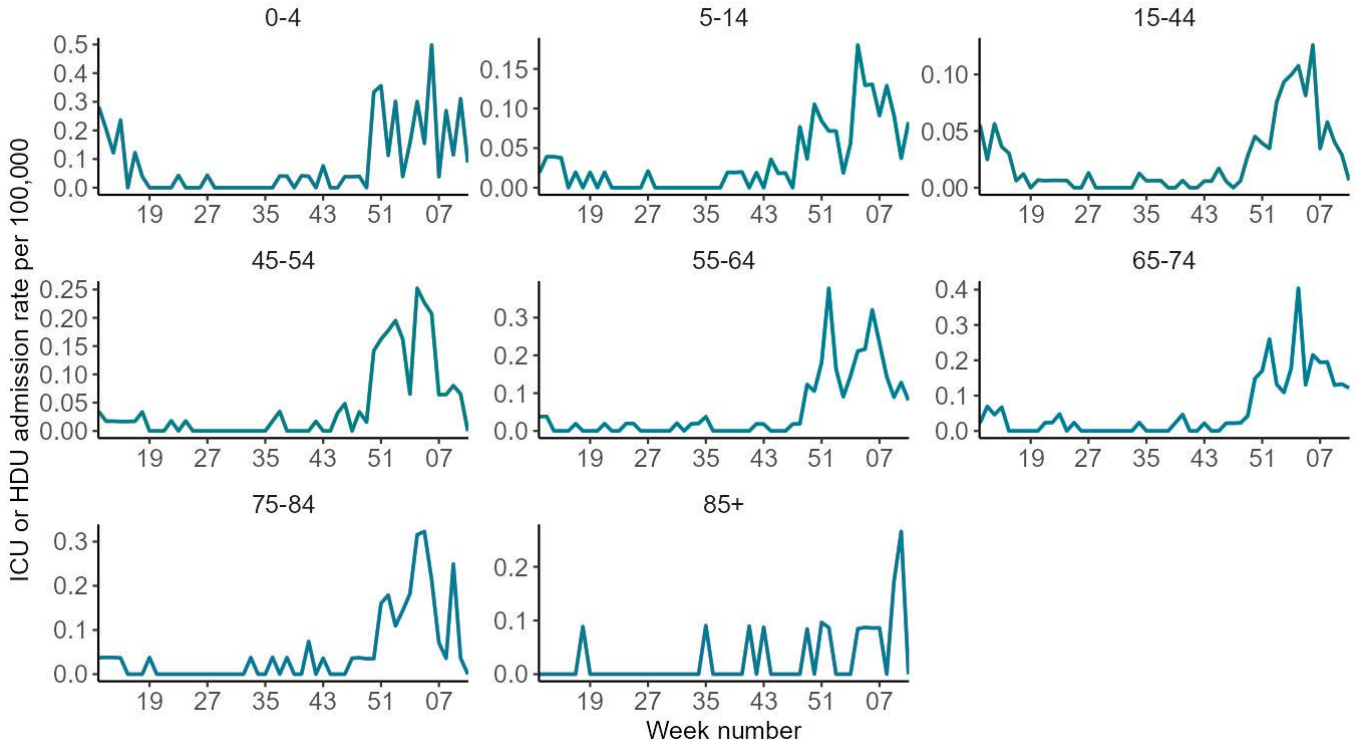
See [note 4] as above.

Figure 37a. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch mandatory surveillance - fixed y-axis [note 3]



See [note 3] as above.

Figure 37b. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch mandatory surveillance - adjusted y-axis



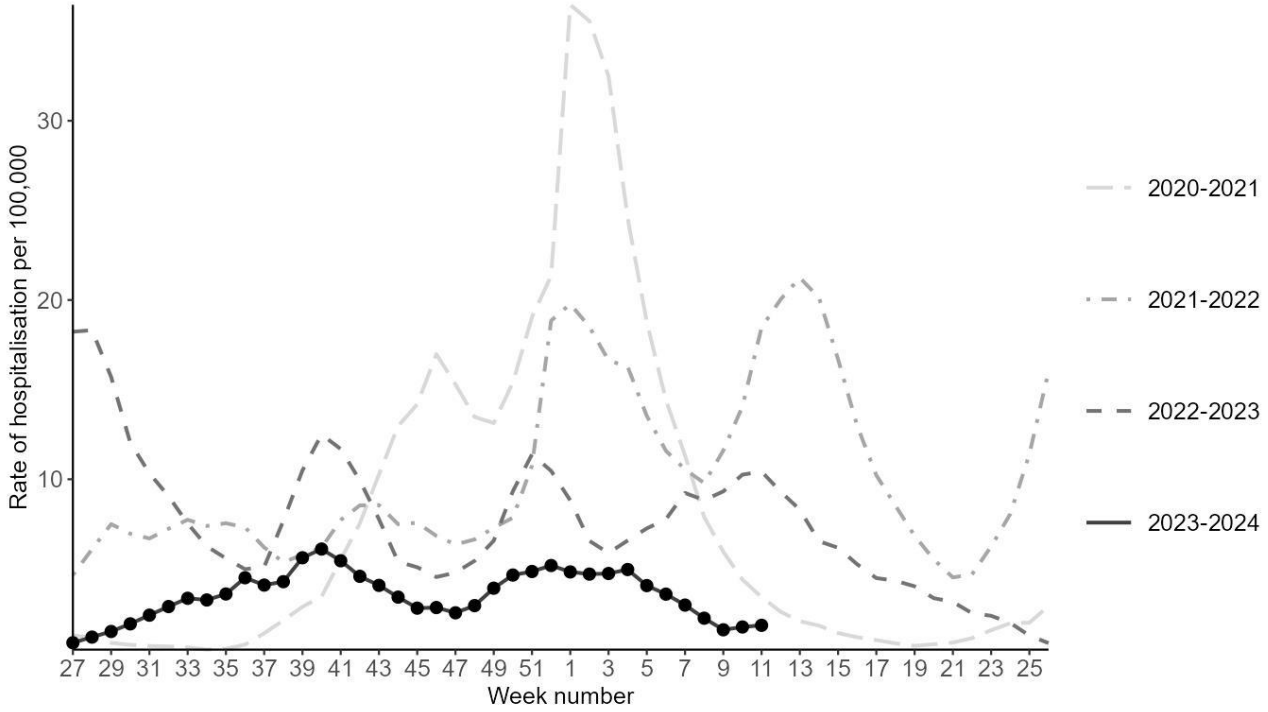
COVID-19, SARI Watch

Surveillance of COVID-19 hospitalisations to all levels of care and surveillance of admissions to ICU or HDU for COVID-19 are both mandatory with data required from all acute NHS trusts in England. Please note that the SARI Watch rates for 2023 to 2024 use the latest trust catchment population. For consistency the rates have been updated back to October 2020.

In week 11 (ending 17 March 2024), the overall weekly hospital admission rate for COVID-19 increased slightly to 1.85 per 100,000 compared with 1.76 per 100,000 in the previous week. By UKHSA region, the highest hospital admission rate for COVID-19 was observed in the North East (increased slightly to 3.44 per 100,000 from 2.56 per 100,000 in the previous week, with similarly small increases in three other regions, and decreases or stabilisation observed across the remaining regions). By age group, the highest hospital admission rate for confirmed COVID-19 continued to be in those aged 85 years and over and increased 21.45 per 100,000, with a mixed picture across the remaining age groups.

In week 11 (ending 10 March 2024), the overall weekly ICU or HDU admission rate for COVID-19 was very low and remained stable at 0.06 per 100,000, compared with 0.05 per 100,000 in the previous week. Note that with very low rates in critical care, small random fluctuations may occur. Note that ICU or HDU admission rates may represent a lag from admission to hospital to an ICU or HDU ward. The ICU or HDU admission rate for COVID-19 by UKHSA centre or by age group is currently fluctuating at low levels due to low underlying numbers.

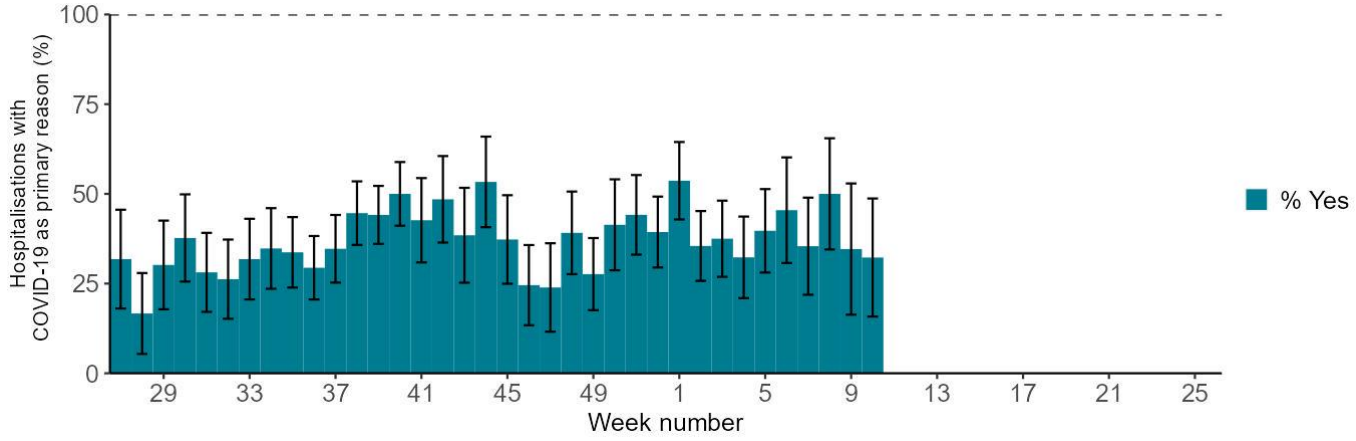
Figure 38a. Weekly overall COVID-19 hospital admission rates per 100,000 trust catchment population, reported through SARI Watch mandatory surveillance, England



COVID-19 hospital admission rate based on 86 NHS trusts for week 11.

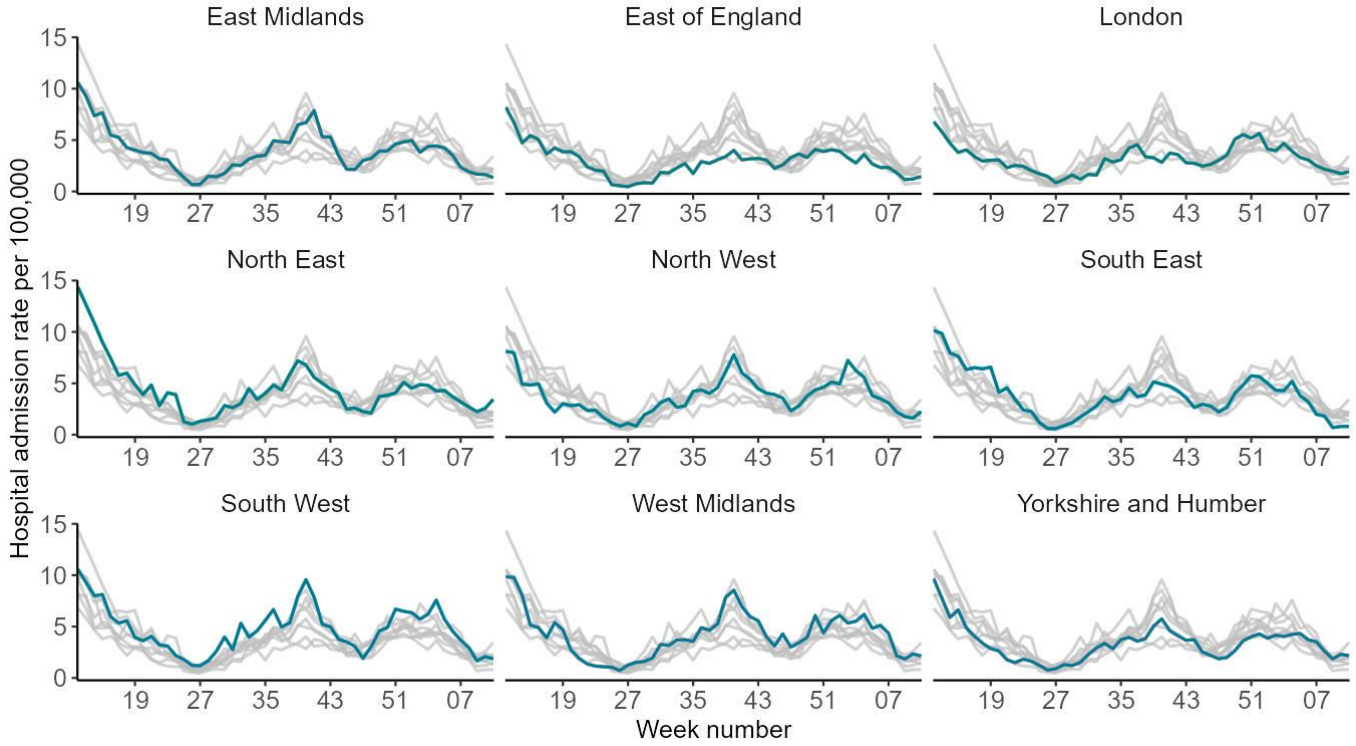
SARI Watch data is provisional and subject to retrospective updates.

Figure 38b. Weekly percentage of hospitalisations with COVID-19 as primary reason, reported through SARI Watch sentinel surveillance, England



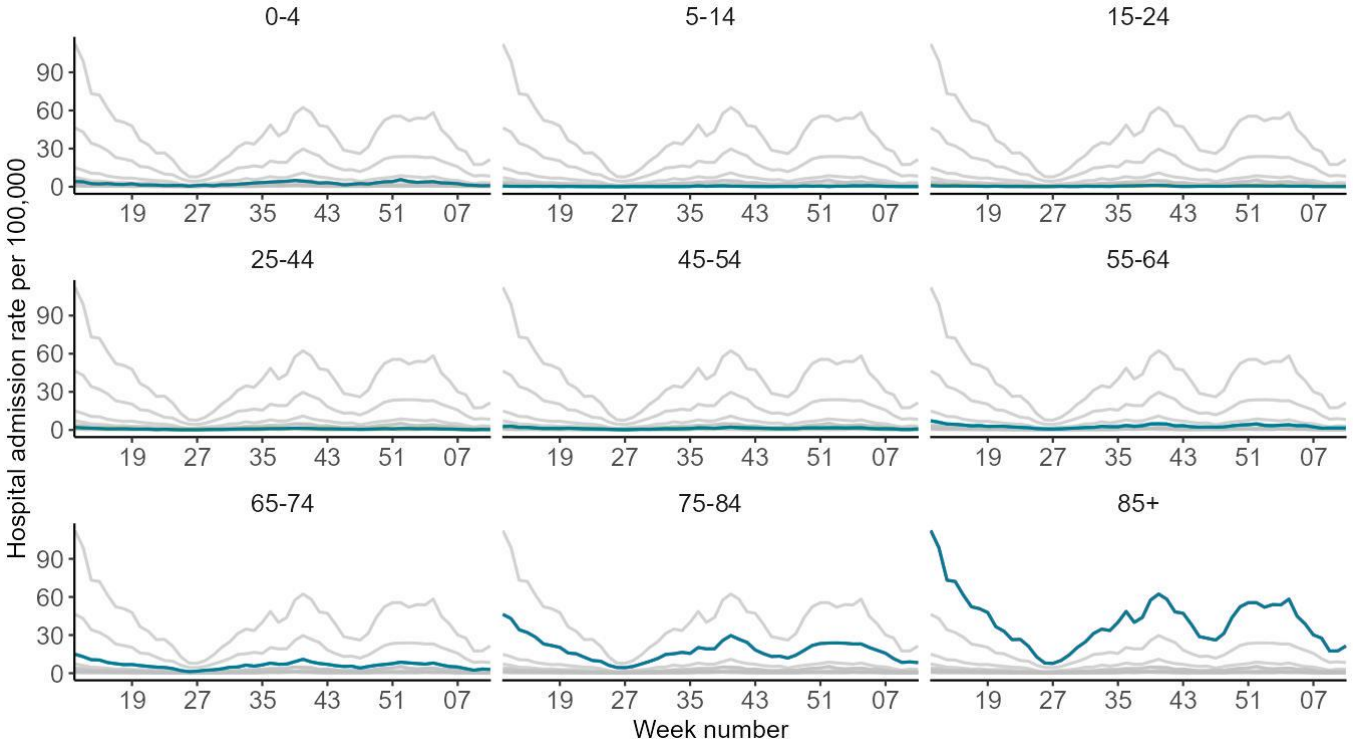
Data on proportions of hospitalisations primarily due to COVID-19 is based on returns from a smaller number of participating trusts in sentinel surveillance and may not be representative of all acute NHS trusts.

Figure 39. Weekly hospital admission rate by UKHSA region for new COVID-19 positive cases, reported through SARI Watch mandatory surveillance [note 4]



See [note 4] as above.

Figure 40a. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - fixed y-axis [note 3]



See [note 3] as above.

Figure 40b. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - adjusted y-axis

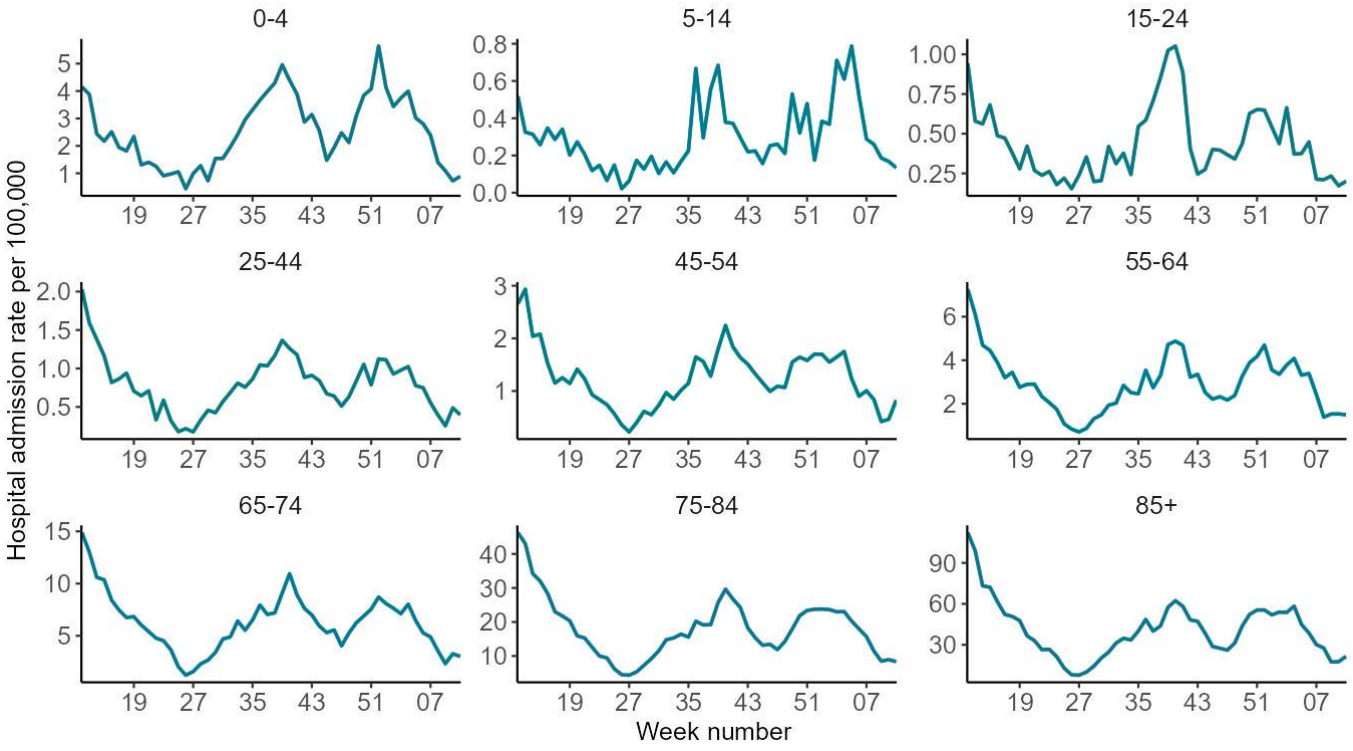
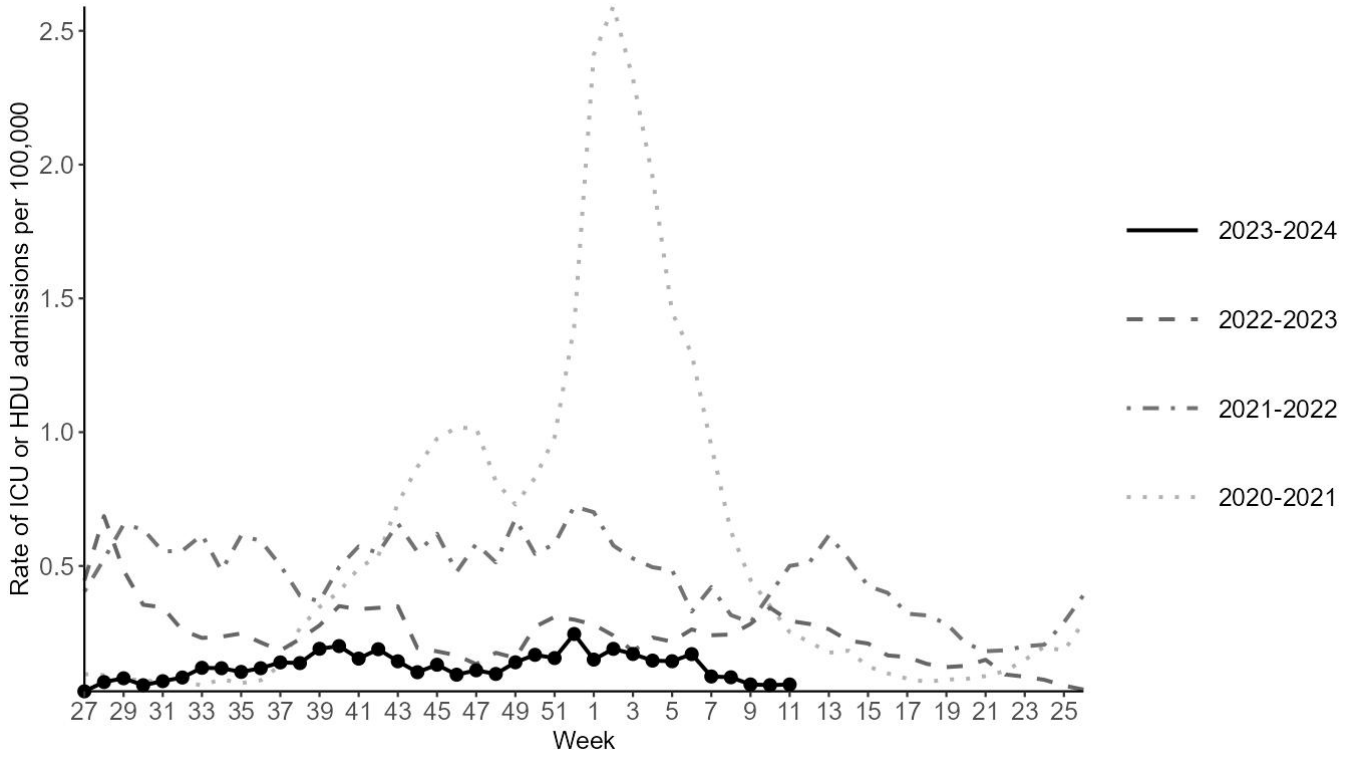


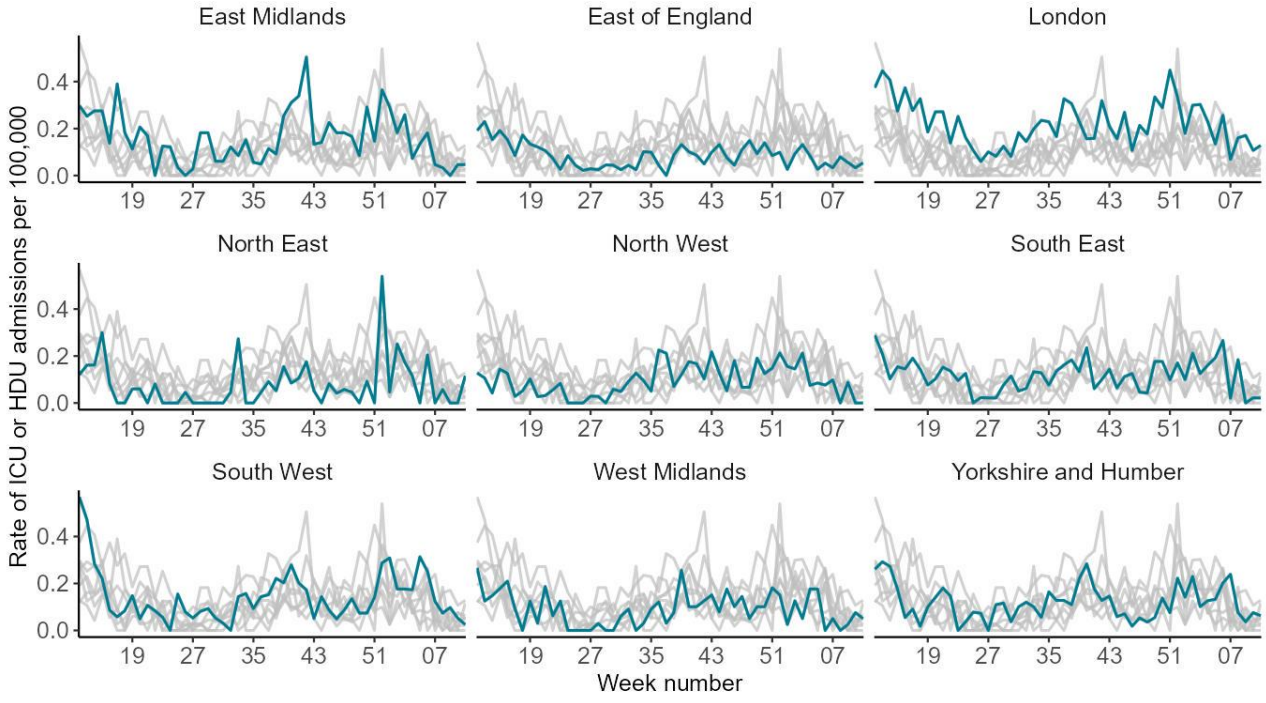
Figure 41: Weekly overall COVID-19 ICU or HDU admission rates per 100,000 trust catchment population, reported through SARI Watch mandatory surveillance, England



COVID-19 ICU or HDU admission rate based on 73 NHS trusts for week 11.

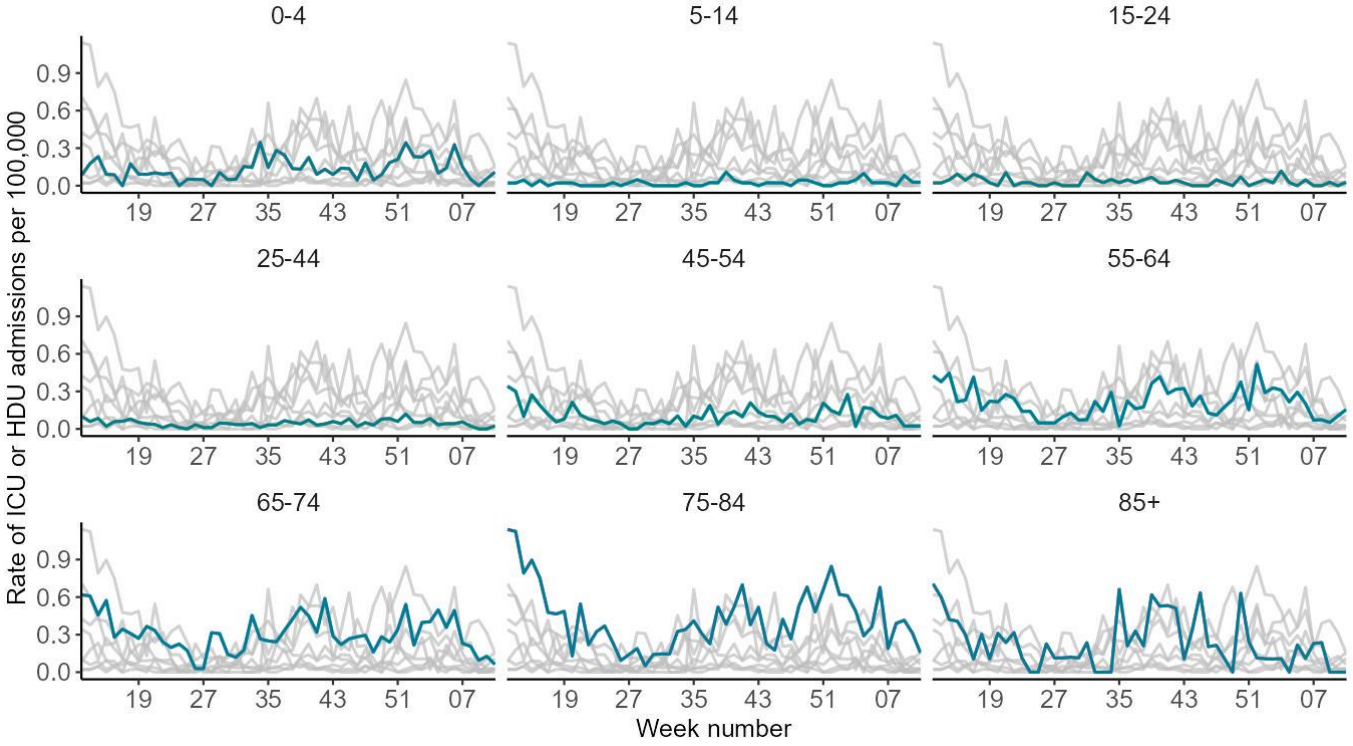
SARI Watch data is provisional and subject to retrospective updates.

Figure 42: Weekly ICU or HDU admission rate by UKHSA region for new COVID-19 positive cases reported through SARI Watch mandatory surveillance [note 4]



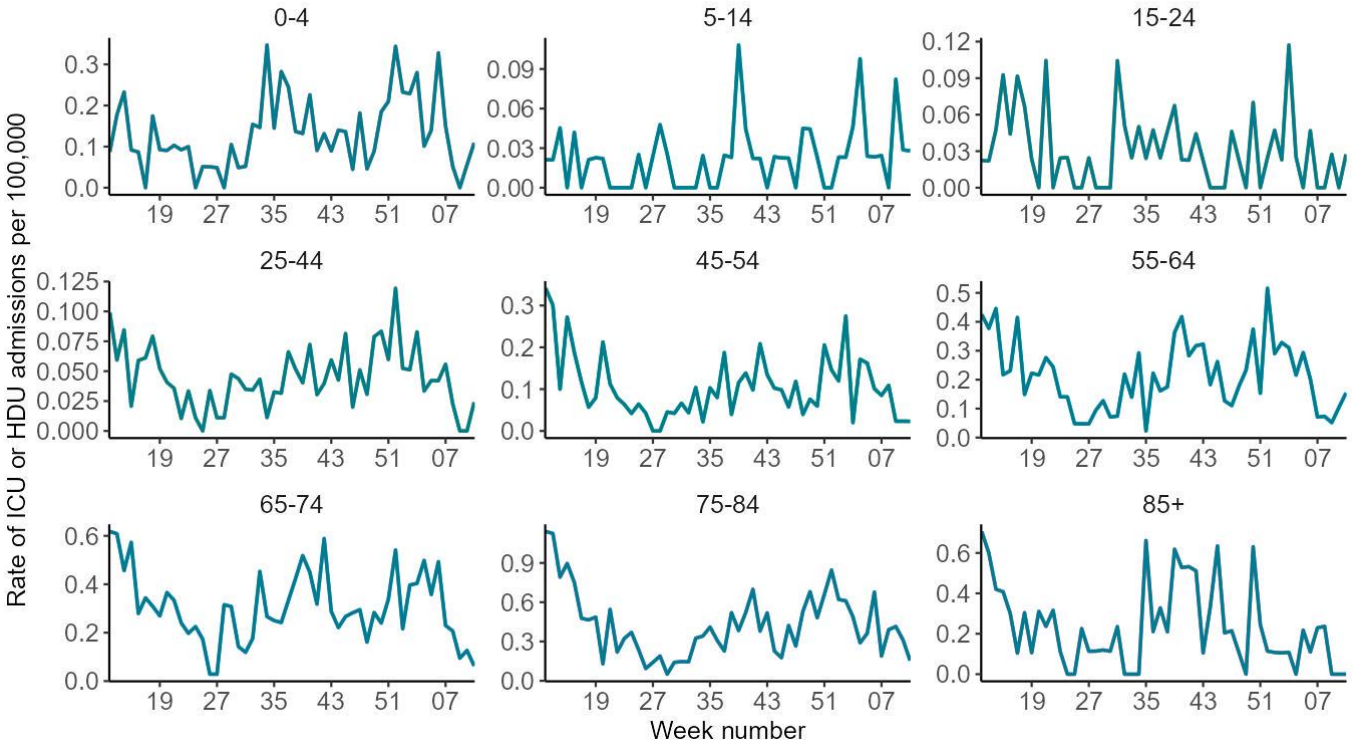
See [note 4] as above.

Figure 43a. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - fixed y-axis [note 3]



See [note 3] as above.

Figure 43b. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance adjusted y-axis

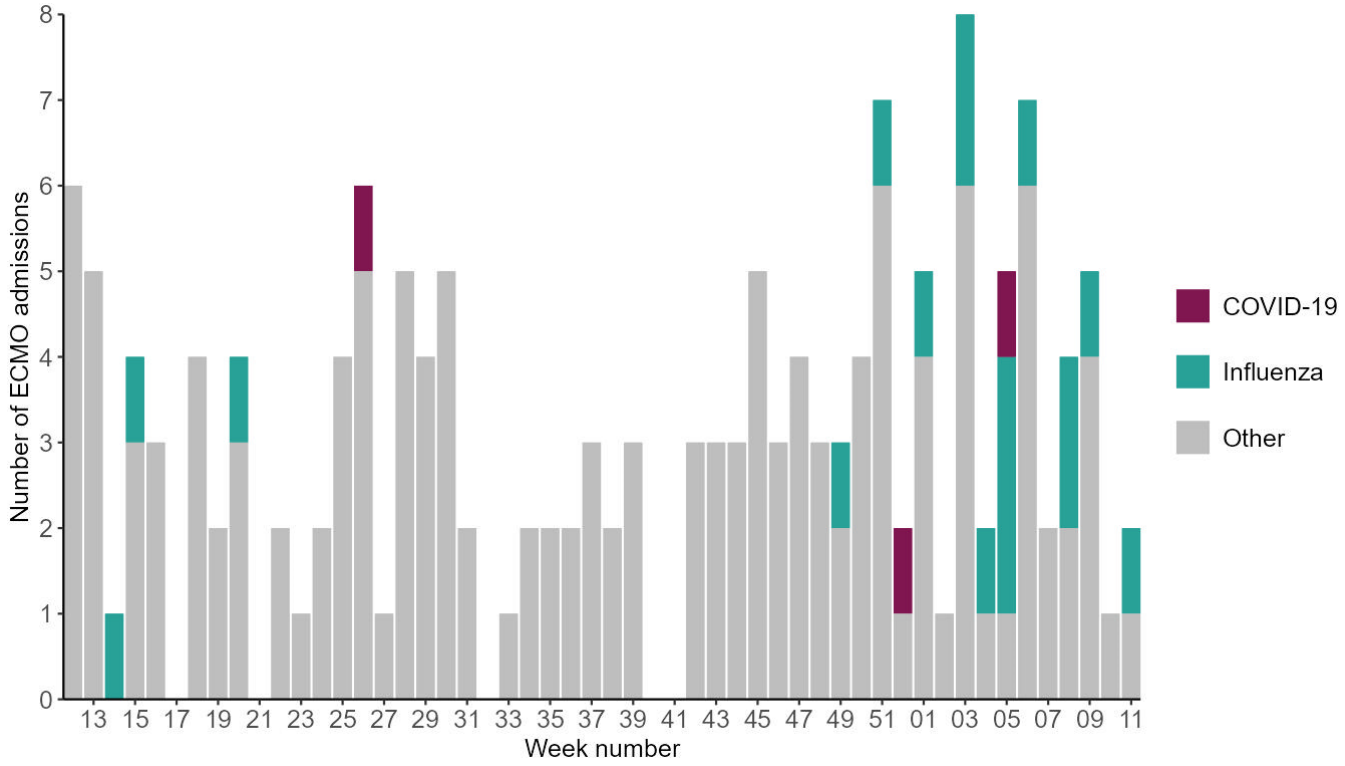


ECMO, SARI Watch

There were 2 new extra corporeal membrane oxygenation (ECMO) admission reported in week 11 from the 7 Severe Respiratory Failure (SRF) centres in the UK. 1 admission was due to influenza A(H3N2) and 1 due to other infectious causes.

Please note that the other group includes other viral, bacterial or fungal ARI, suspected ARI, non-infection (such as asthma, primary cardiac and trauma) and sepsis of non-respiratory origin.

Figure 44: Laboratory confirmed ECMO admissions in adults (COVID-19, influenza and non-COVID-19 confirmed) to Severe Respiratory Failure centres in the UK



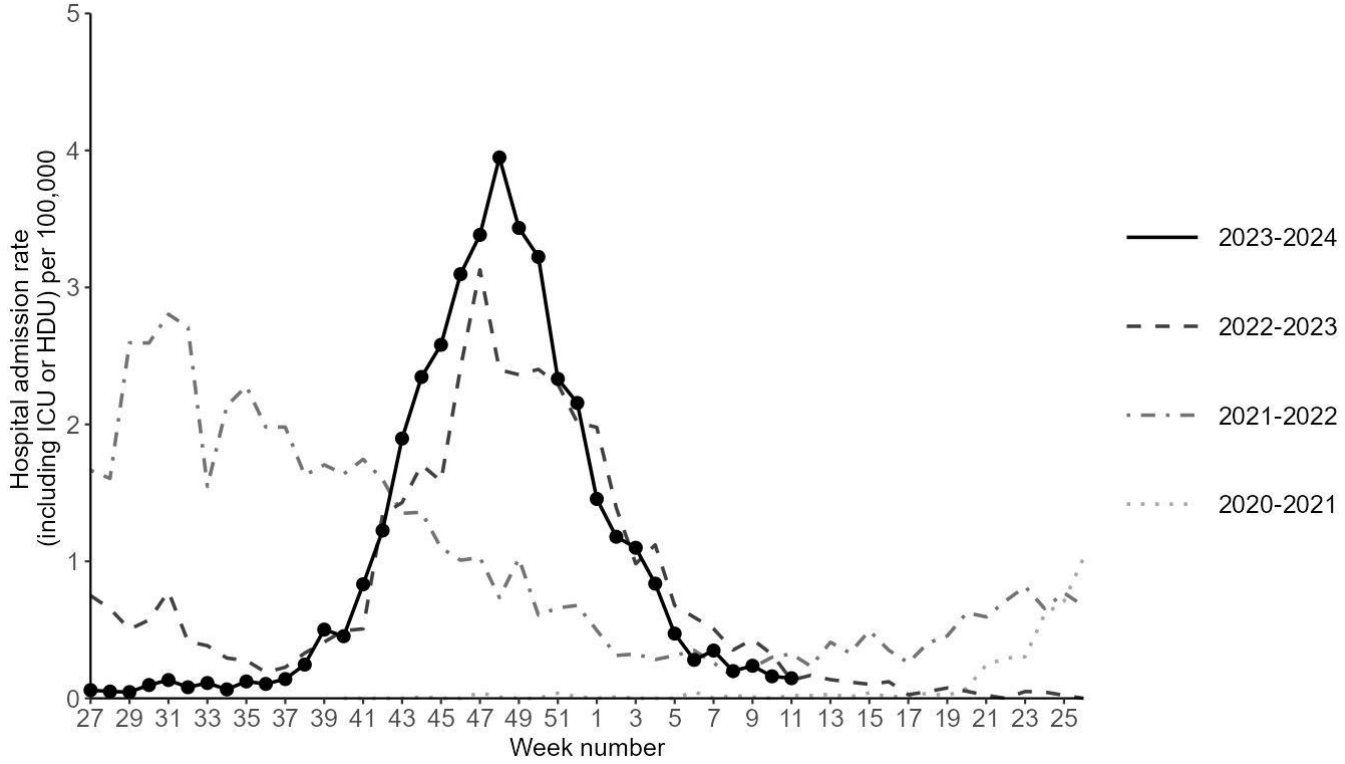
SARI Watch data is provisional and subject to retrospective updates.

RSV admissions, SARI Watch

Data on hospitalisations, including ICU or HDU admissions, with respiratory syncytial virus (RSV) are shown below. RSV SARI Watch surveillance is sentinel. Please note that the SARI Watch rates for 2023 to 2024 use the latest trust catchment population. For consistency the rates have been updated back to October 2020. The population denominator reflects changes in trust reconfiguration, hospital admission activity and population estimates.

In week 11, the overall hospital admission rate for RSV remained low at 0.15 per 100,000, compared with 0.16 per 100,000 in the previous week. In children aged under 5 years, hospitalisation rate was 1.86 per 100,000 and is fluctuating at low levels due to small underlying numbers. In those aged 85 years and over, RSV hospitalisation rates were low at 0.35 per 100,000 compared with 0.61 per 100,000 in the previous week.

Figure 45. Weekly overall hospital admission rates (including ICU or HDU) of RSV positive cases per 100,000 population reported through SARI Watch sentinel surveillance, England [note 17]

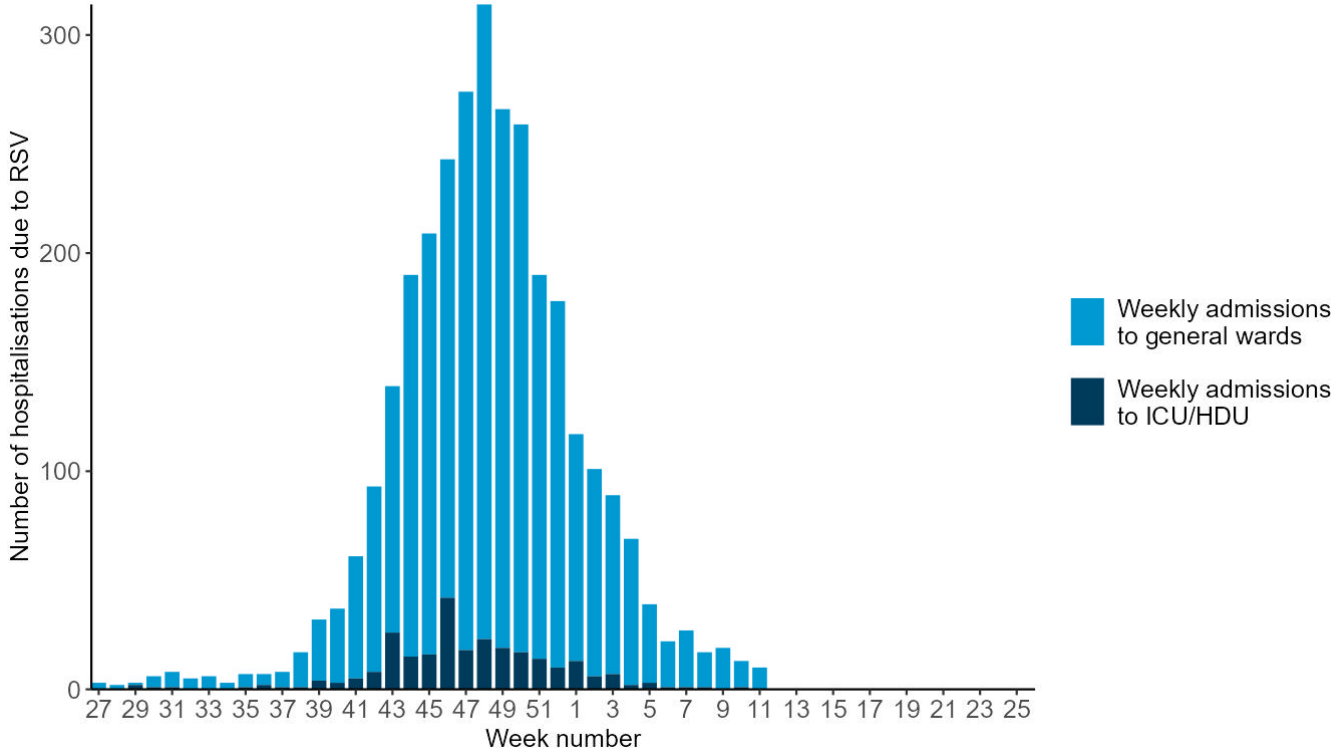


[note 17] Rates are based on the number of hospitalised cases divided by the trust catchment population.

RSV admission rate based on 15 NHS trusts for week 11.

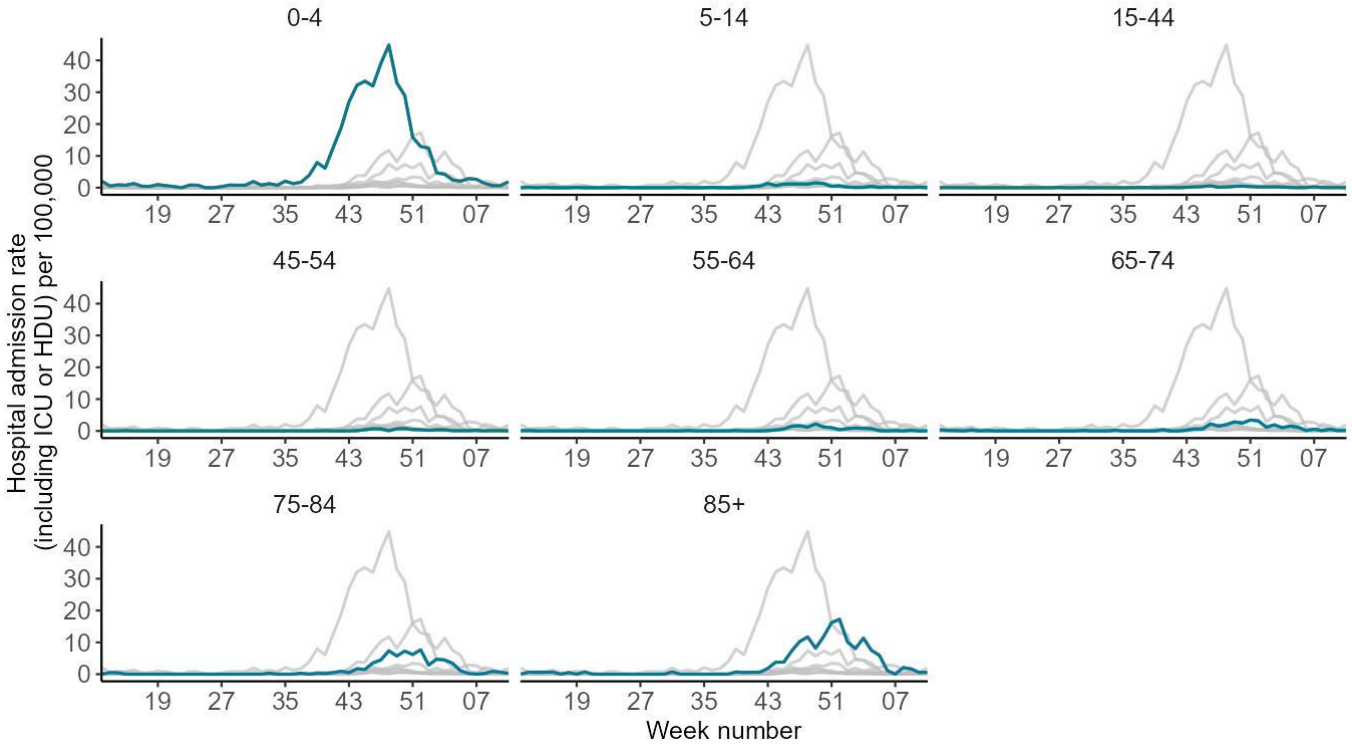
SARI Watch data is provisional.

Figure 46: Weekly count hospital admissions of RSV positive cases reported through SARI Watch sentinel surveillance by level of care, England [note 18]



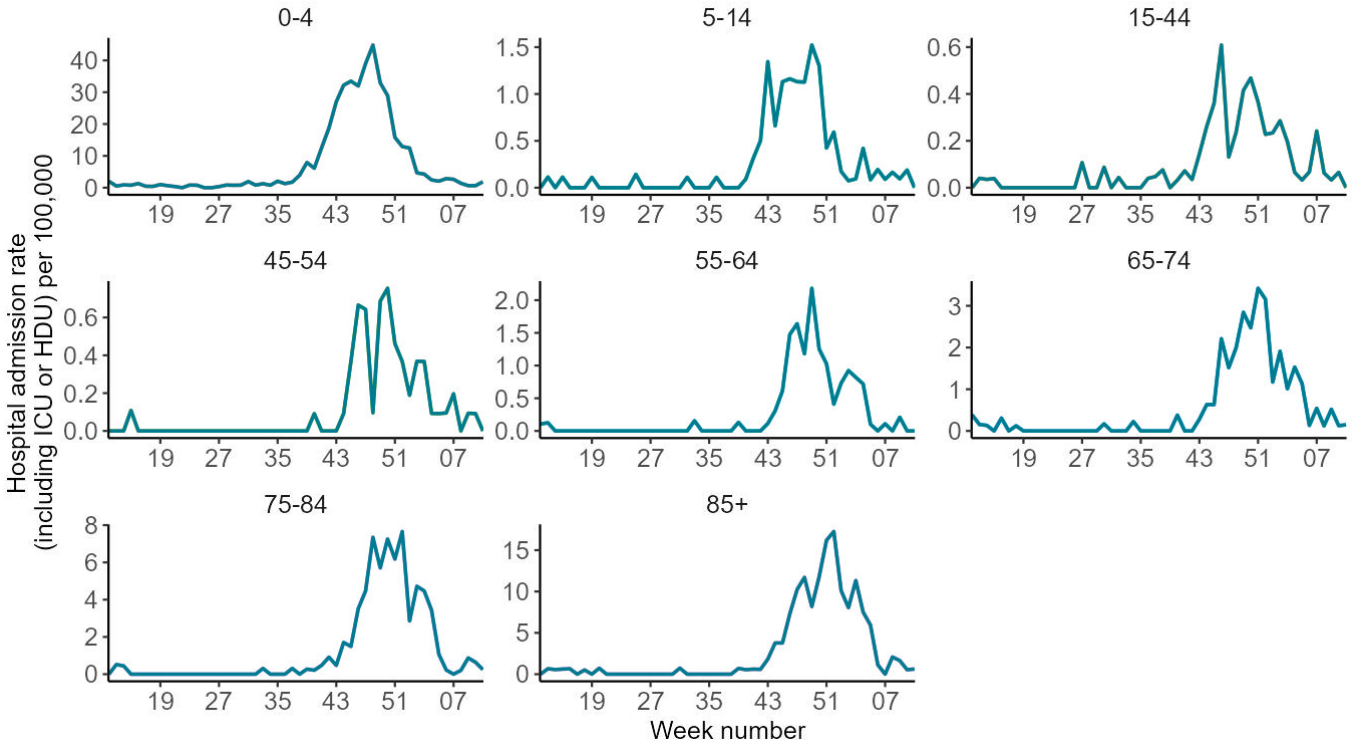
[note 18] Weekly admissions to general wards do not exclude subsequent admissions for the same person to ICU or HDU in the same week. The weekly ICU or HDU data may also include direct emergency admissions to ICU or HDU.

Figure 47a. Weekly hospitalisation (including ICU or HDU) admission rates by age group for RSV cases reported through SARI Watch sentinel surveillance, England - fixed y-axis [note 3]



See [note 3] as above.

Figure 47b. Weekly hospitalisation (including ICU or HDU) admission rates by age group for RSV cases reported through SARI Watch sentinel surveillance, England adjusted y-axis



Mortality surveillance

COVID-19 deaths

For further information on COVID-19 related deaths in England please see the COVID-19 dashboard for death.

All-cause mortality assessment (England)

For further information on all-cause mortality in England please see the Excess mortality within England: post-pandemic method report, which uses Office for National Statistics (ONS) death registration data, the all-cause mortality surveillance report, which uses the European mortality monitoring (EuroMOMO) model to identify weeks with higher than expected mortality and the ONS all-cause excess mortality report.

Respiratory virus vaccination

Influenza vaccination

Influenza vaccine uptake in healthcare workers

This week, provisional monthly data on influenza vaccine uptake in frontline healthcare workers was published for the last time this season, showing vaccine uptake at national, commissioning region, and trust level, and by staff group, between 1 September and 29 February 2024. National vaccine uptake is 42.8%. At this time in the season, this is the lowest uptake in 10 years.

International update

Global COVID-19 update

For further information on the global COVID-19 situation please see the World Health Organization (WHO) COVID-19 situation reports.

Global influenza update

For further information on the global influenza situation please see the World Health Organization (WHO) Influenza update.

Influenza in Europe

For further information on influenza in Europe please see the European Respiratory Virus Surveillance Summary weekly update.

Influenza in North America

For further information on influenza in the United States of America please see the Centre for Disease Control weekly influenza surveillance report. For further information on influenza in Canada please see the Public Health Agency weekly influenza report.

Influenza in Australia

For further information on influenza in Australia, please see the Australian Influenza Surveillance Report and Activity Updates.

Other respiratory viruses

Avian influenza and other zoonotic influenza

For further information, please see the Latest WHO update on 21 December 2023 and the Latest UKHSA avian influenza technical briefing 14 July 2023.

Middle East respiratory syndrome coronavirus (MERS-CoV)

For further information please see the WHO Disease Outbreak News Reports and the WHO publishes monthly updates.

Further information on management and guidance of possible cases is available online. The latest highlights that risk of widespread transmission of MERS-CoV remains very low.

Related links

Previous national COVID-19 reports

Previous weekly influenza reports

Annual influenza reports

COVID-19 vaccine surveillance reports

Previous COVID-19 vaccine surveillance reports

Public Health England (PHE) monitoring of the effectiveness of COVID-19 vaccination

Investigation of SARS-CoV-2 variants of concern: technical briefings

Sources of surveillance data for influenza, COVID-19 and other respiratory viruses

RCGP Virology Dashboard

UKHSA has delegated authority, on behalf of the Secretary of State, to process Patient Confidential Data under Regulation 3 The Health Service (Control of Patient Information) Regulations 2002

Regulation 3 makes provision for the processing of patient information for the recognition, control and prevention of communicable disease and other risks to public health.

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

The UK Health Security Agency is an executive agency, sponsored by the Department of Health and Social Care.

Prepared by: Immunisation and Vaccine Preventable Diseases Division
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Published: 21 March 2024
Publication reference: GOV-16370