

National influenza and COVID-19 surveillance report

Week 16 report (up to week 15 2024 data) 18 April 2024

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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 <u>accompanying graph pack</u>.

For additional information regarding data source please refer to <u>sources of surveillance data for</u> 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 15 of 2024 (between 8 April and 14 April 2024).

Overall

In week 15, influenza activity continued to decrease across most indicators, and COVID-19 activity remained at low levels. Respiratory syncytial virus (RSV) activity remained at low levels across all indicators.

Influenza

Through Respiratory DataMart, influenza positivity decreased to 2.7% in week 15 compared with 3.5% in the previous week.

Through primary care surveillance, the influenza-like-illness (ILI) consultations indicator remained stable at 3.3 per 100,000 in week 15 compared with 3.4 per 100,000 in the previous week and remained within the baseline activity level range. The influenza positivity in GP sentinel swabbing increased slightly in week 14 compared with week 13.

There were 6 confirmed influenza acute respiratory incidents (ARI) reported in week 15. This number decreased slightly compared with the previous week.

Overall, the hospitalisation rate for influenza decreased further to 0.72 per 100,000 compared with 1.18 per 100,000 in the previous week. The latest rate was within the baseline range (less than 1.57 per 100,000). The overall ICU or HDU rate for influenza was low at 0.03 per 100,000 compared with 0.04 in the previous week and was within the baseline impact range.

Emergency department (ED) attendances for ILI decreased nationally.

This season we have seen a combination of influenza A(H1N1) and A(H3N2). There has also been a small amount of influenza B activity later in the season.

COVID-19

Through Respiratory DataMart, SARS-CoV-2 increased to 4.2% compared with 3.9% in the previous week.

COVID-19 case rates decreased overall and positivity remained stable compared with the previous week. Positivity decreased within some age groups, regions and most ethnic groups in week 15.

The overall number of reported SARS-CoV-2 confirmed ARI in week 15 remained stable compared with the previous week. There were 12 SARS-CoV-2 confirmed ARI reported in week 15 in England.

Overall, COVID-19 hospitalisations decreased slightly to 1.77 per 100,000 compared with 1.87 per 100,000 in the previous week. Hospitalisations were highest in those aged 85 years and above. COVID-19 ICU admissions remained low and stable at 0.06 per 100,000 in week 15.

Respiratory Syncytial Virus (RSV)

Through Respiratory DataMart, RSV positivity remained low at 0.3%, with the highest positivity in those aged under 5 years at 0.5%. ED attendances for acute bronchiolitis decreased nationally. In week 15, the overall hospital admission rate for RSV remained low and stable at 0.14 per 100,000, compared with 0.11 per 100,000 in the previous week.

Other viruses

Adenovirus positivity remained low at 2.4%, with the highest positivity in those aged under 5 years at 7.7%. Human metapneumovirus (hMPV) positivity increased slightly to 3.6%, with the highest positivity in those aged under 5 years at 5.9%. Parainfluenza positivity decreased to 5.9%, with the highest positivity in those aged under 5 years at 9.4%. Rhinovirus positivity decreased slightly to 9.0%, with the highest positivity in those aged under 5 years at 24.0%.

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 <u>survey accessible</u> <u>below</u>. 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:



Laboratory surveillance

Respiratory DataMart system (England)

In week 15, data is based on reporting from 12 out of the 16 sentinel laboratories.

In week 15, 6,041 respiratory specimens reported through the Respiratory DataMart System were tested for influenza. There were 163 positive samples for influenza; 74 influenza A(not subtyped), 45 influenza A(H3N2), 12 influenza A(H1N1)pdm09, and 32 influenza B (Figure 3). Overall, influenza positivity decreased to 2.7% in week 15 compared with 3.5% in the previous week.

In week 15, 5,322 respiratory specimens reported through the Respiratory DataMart System were tested for SARS-CoV-2. There were 222 positive samples for SARS-CoV-2 with an overall positivity of 4.2%, which increased slightly compared with 3.9% in the previous week. The highest positivity was seen in adults aged over 65 years at 5.9%.

RSV positivity remained low at 0.3%, with the highest positivity in those aged under 5 years at 0.5%.

Adenovirus positivity remained low at 2.4%, with the highest positivity in those aged under 5 years at 7.7%.

Human metapneumovirus (hMPV) positivity increased slightly to 3.6%, with the highest positivity in those aged under 5 years at 5.9%.

Parainfluenza positivity decreased to 5.9%, with the highest positivity in those aged under 5 years at 9.4%.

Rhinovirus positivity decreased slightly to 9.0%, with the highest positivity in those aged under 5 years at 24.0%.

DataMart data is provisional and subject to retrospective updates.



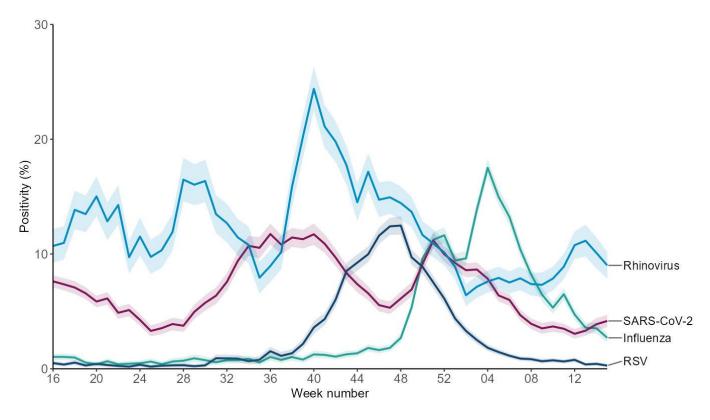
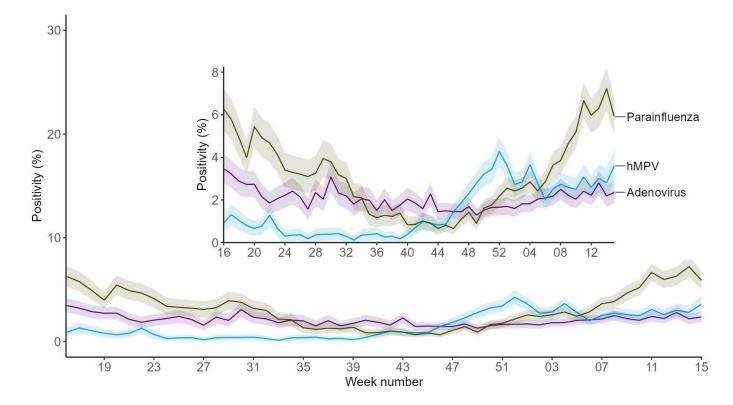


Figure 1b. Respiratory DataMart weekly positivity (%) for adenovirus, hMPV and parainfluenza, England



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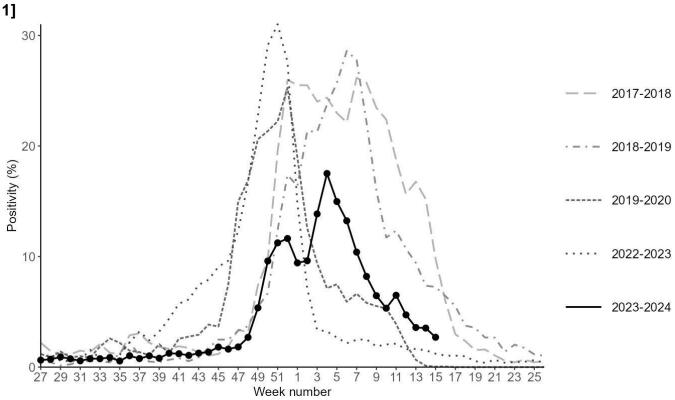
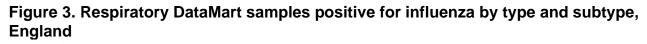
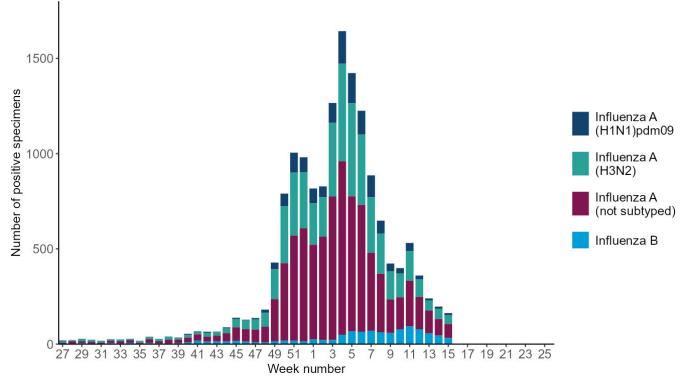


Figure 2. Respiratory DataMart weekly positivity (%) for influenza by year, England [note 1]

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





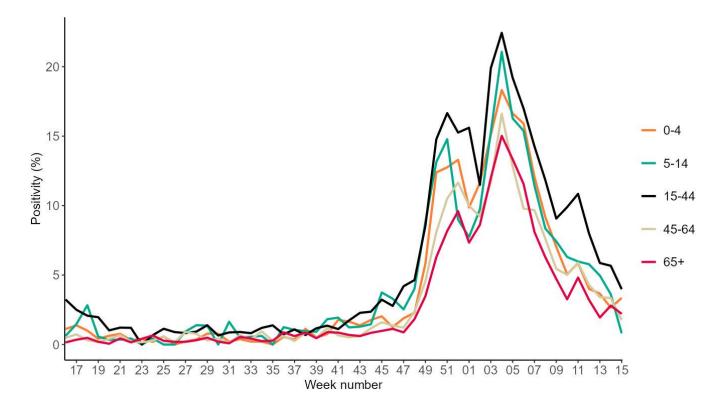


Figure 4. Respiratory DataMart weekly positivity (%) for influenza by age, England

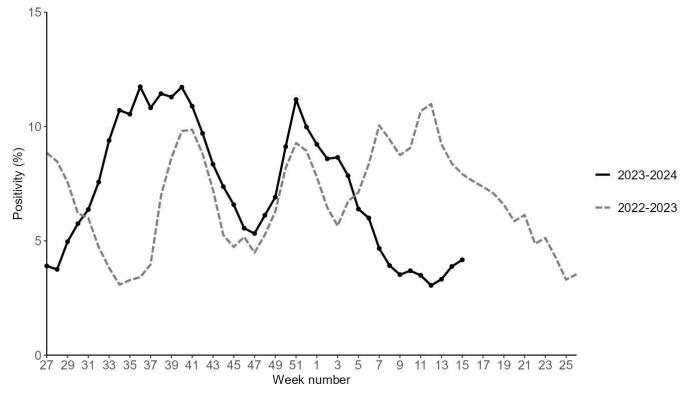
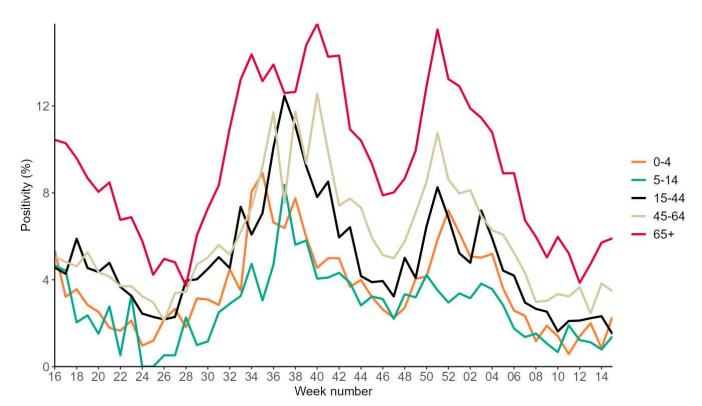


Figure 5. Respiratory DataMart weekly positivity (%) for SARS-CoV-2 by year, England

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



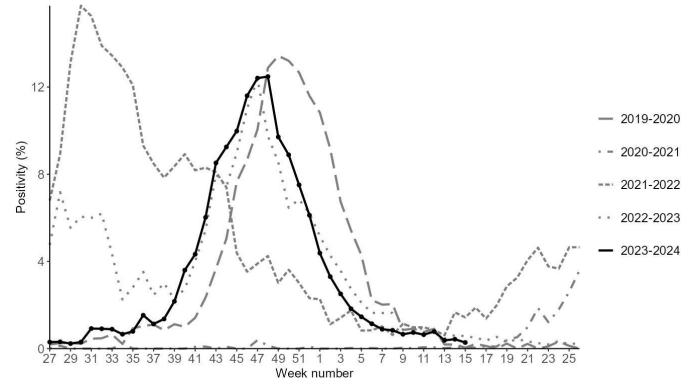
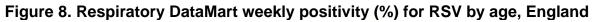
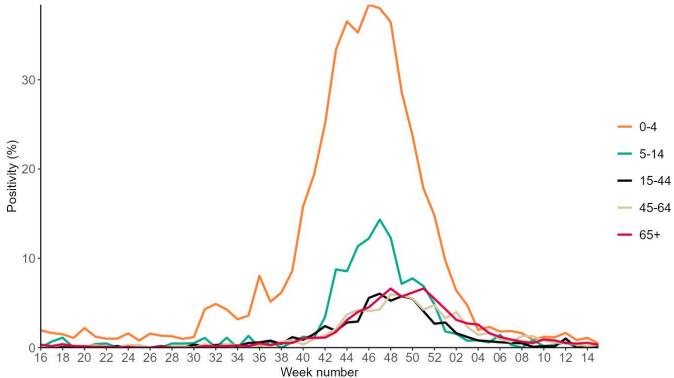


Figure 7. Respiratory DataMart weekly positivity (%) for RSV by year, England





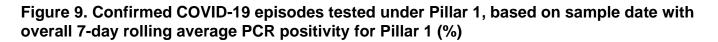
Confirmed COVID-19 cases (England)

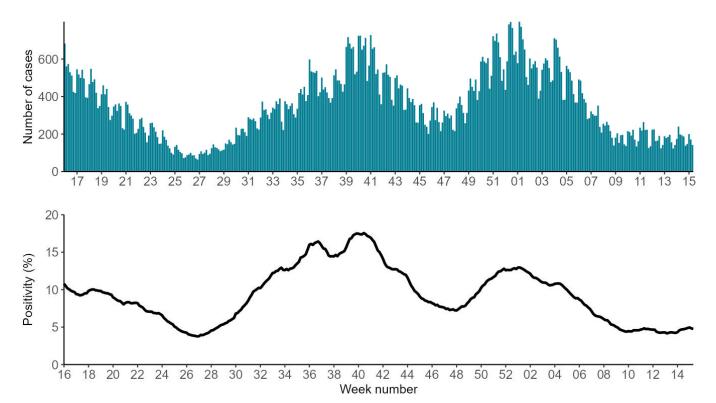
As of 9am on 15 April 2024, there were a total of 945 Pillar 1 cases in week 15, a 26% decrease from the previous week.

COVID-19 PCR positivity for Pillar 1 remained stable in week 15, with a weekly mean positivity rate of 4.8% compared to 4.7% in the previous week.

Pillar 1 positivity rates were highest in those aged over 85 years at a weekly mean positivity rate of 8.7% (a slight increase from 8.1% among those aged over 85 years in week 14) and in the West Midlands at a weekly mean positivity rate of 6.4% (a slight decrease from 6.0% in the West Midlands in week 14).

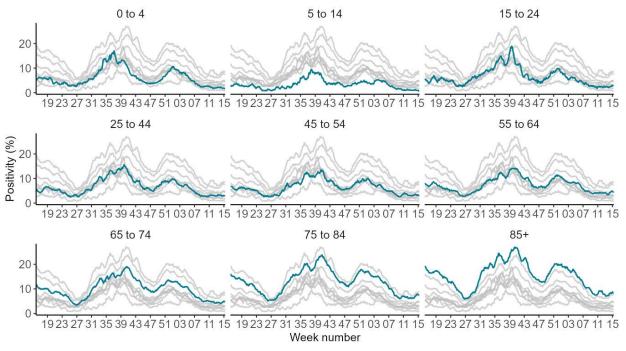
Data notes: Changes to testing policies over time may affect positivity rates and incidence rates and should be interpreted accordingly. COVID-19 case reporting in England uses an episodebased definition which includes possible reinfections, each infection episode is counted separately if there are at least 91 days between positive test results (PCR or rapid lateral flow device). Each infection episode begins with the earliest positive specimen date.





Age

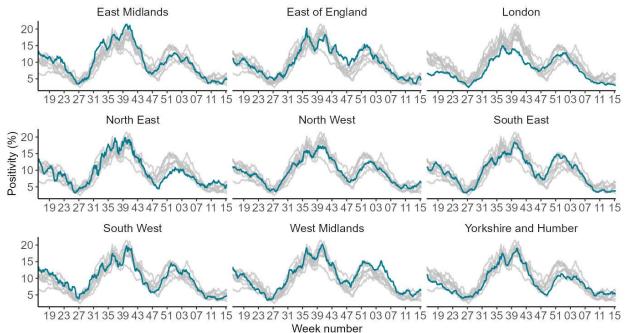
Figure 10. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by age group [note 2]



[note 2] The highlighted line corresponds to the age group in the subplot title, grey lines correspond to all other age groups.

Geography

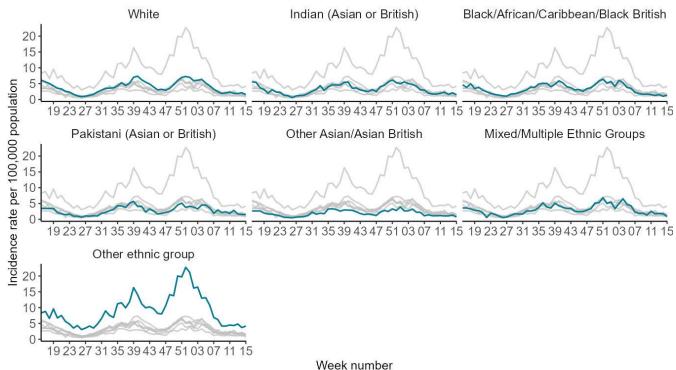
Figure 11. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by UKHSA region [note 3]



[note 3] 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 4]



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

Microbiological surveillance

SARS-CoV-2 variants

Due to processing changes for this dataset, updates to this section of the report are currently temporarily paused from 8 April 2024. Further information on future publication will be provided when available.

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 <u>SARS-CoV-2 genome sequence prevalence and growth rate updates</u>.

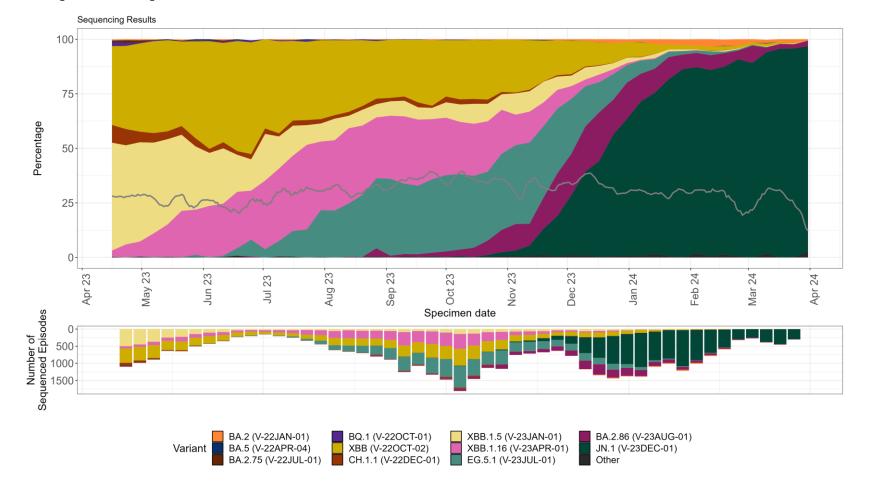
Information on whole genome sequencing coverage of PCR tests can be found in the accompanying slide set.

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 <u>UKHSA variant definition repository</u> contains the previous genomic definitions for UKHSA declared variants.

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

To account for sequencing delays, we report the proportion of variants from sequenced cases between 18 March 2024 and 24 March 2024. Of those sequenced in this period, 95.5% were classified as JN.1 (V-23DEC-01), 1.9% as BA.2.86 (V-23AUG-01), and 1.6% as BA.2 (V-22JAN-01).





[note 5] The grey line indicates proportion of cases sequenced.

[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 13 (week ending 31
March 2024) [note 7]

Variant	Other names by which this variant is known	Total sequenced cases* in the last 12 weeks	Last reported specimen date
V-23DEC-01	Omicron JN.1	6,529	31-03-2024
V-23AUG-01	Omicron BA.2.86	528	27-03-2024
V-22JAN-01	Omicron BA.2	188	27-03-2024
V-22OCT-02	Omicron XBB	153	24-03-2024
V-23JUL-01	Omicron EG.5.1	125	04-03-2024

[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 15 of 2024, the UKHSA Respiratory Virus Unit (RVU) has genetically characterised 895 influenza A(H3N2) viruses, which had been detected this season (since week 40), with 893 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, 1,124 influenza A(H1N1)pdm09 viruses have been characterised. Sequencing of the haemagglutinin (HA) gene shows that 967 belong in genetic subgroup 6B.1A.5a.2a and 157 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, 341 influenza B/Victoria lineage viruses have been genetically characterised belonging in clade V1A.3a.2. Of these, 340 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. These have been 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	
	3C.2a1b.2a.2a.3	2
	Total	895
A(H1N1)pdm09	6B.1A.5a.2a	967
	6B.1A.5a.2a.1	157
	Total	1,124
B/Victoria-lineage	V1A3a.2 / C.5	340
	V1A3a.2 / C.2	1
	Total	341
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 15 of 2024 have been analysed.

Analysis of 868 A(H3N2) viruses found no viruses with known markers of resistance to neuraminidase inhibitors. Analysis of 1,121 A(H1N1)pdm09 by sequencing found 6 oseltamivir resistant viruses taken from 5 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
- Patient 5: 1 sample with a H275Y amino acid substitution. Adult patient referred for resistance testing and clinical details are pending

Analysis of 337 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 772 A(H3N2), 922 A(H1N1)pdm09 and 290 influenza B PA sequences analysed.

(Sub)type	Neuraminidase inhibitors: susceptible	Neuraminidase inhibitors: reduced susceptibility	Baloxavir: susceptible	Baloxavir: reduced susceptibility
A(H3N2)	868	0	772	0
A(H1N1)pdm09	1,115	6	922	0
B/Victoria-lineage	337	0	290	0

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

Community surveillance

SIREN healthcare cohort study

Testing in SIREN has paused from 7 April 2024.

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 <u>Office for National Statistics (ONS)</u> webpage and <u>UKHSA webpage</u>.

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 44 new ARI incidents reported in week 15 in England. In the latest week, these included:

- 36 incidents reported from care homes, of which 8 were laboratory confirmed for SARS-CoV-2, 3 for influenza A(not subtyped), 1 for RSV, 1 for hMPV and 1 mixed infection with influenza A(not subtyped)/SARS-CoV-2
- 6 incidents reported from hospitals, of which 3 were laboratory confirmed for SARS-CoV-2 and 2 for influenza A(not subtyped)
- 1 incident reported from a prison, which was laboratory confirmed for influenza A(not subtyped)
- 1 incident reported from other settings, which was laboratory confirmed for SARS-CoV-2

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.

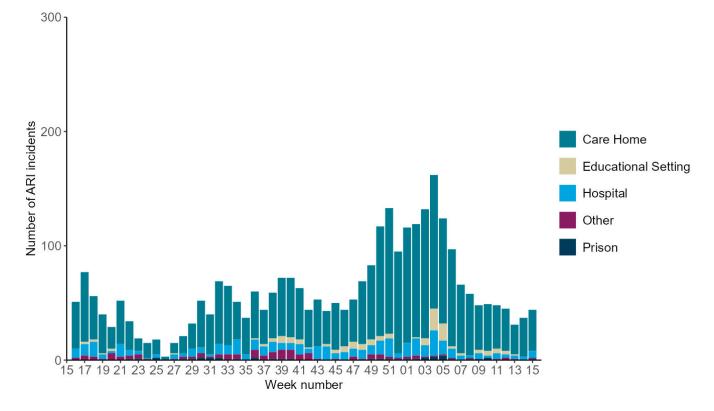
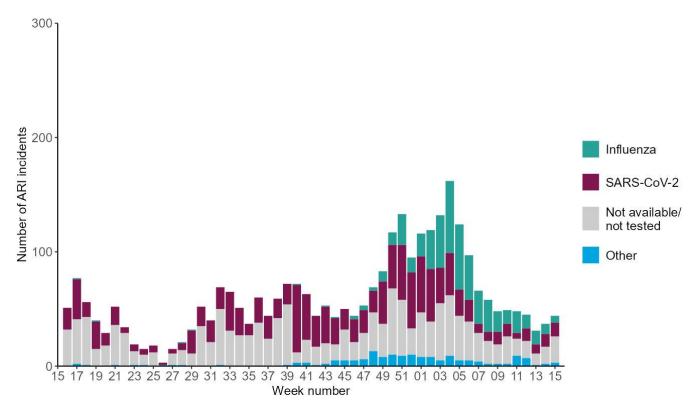




Figure 15. Number of ARI incidents in all settings by virus type, England



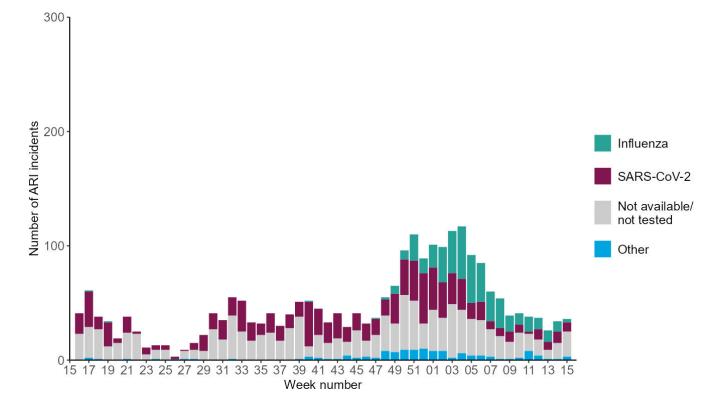
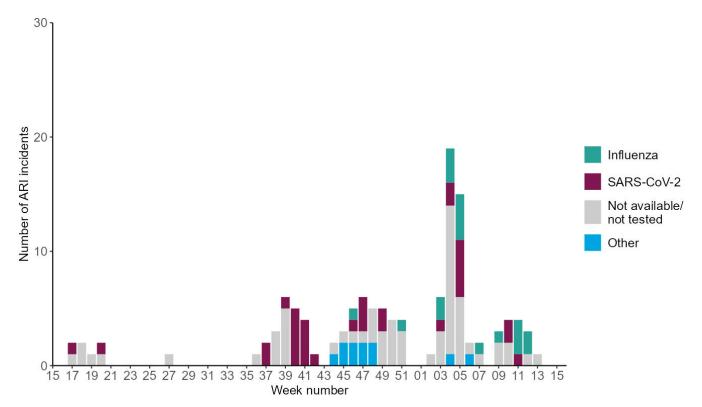


Figure 16. Number of ARI incidents in care homes by virus type, England

Figure 17. Number of ARI incidents in educational settings by virus type, England



FluSurvey

<u>FluSurvey</u> 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.

There were 1,590 participants completing the weekly symptoms questionnaire of which 131 (8.2%) reported fever or cough and 40 (2.5%) reported influenza like illness (ILI). COVID-19-like symptoms decreased and ILI remained stable among participants reporting symptoms in week 15.

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). Among 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 19). There remains variation on social mixing patterns among participants with more people reporting not meeting any individual outside of their households during week 15, which remained similar to previous weeks.

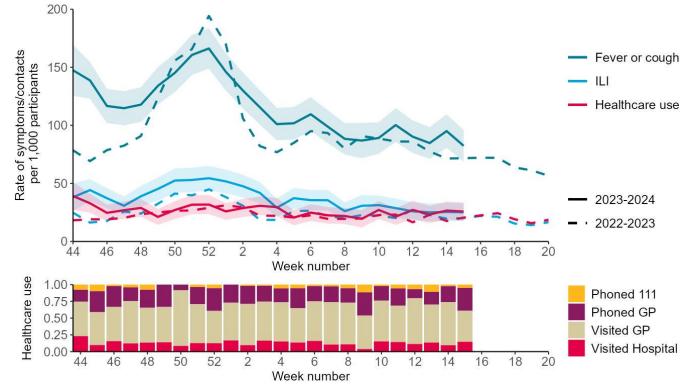


Figure 18. FluSurvey participants self-reporting fever or cough and ILI symptoms, and trends in healthcare seeking behaviour among these participants, England [note 8]

[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.

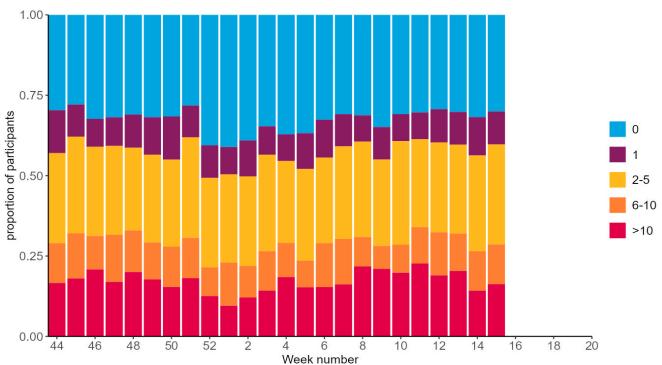


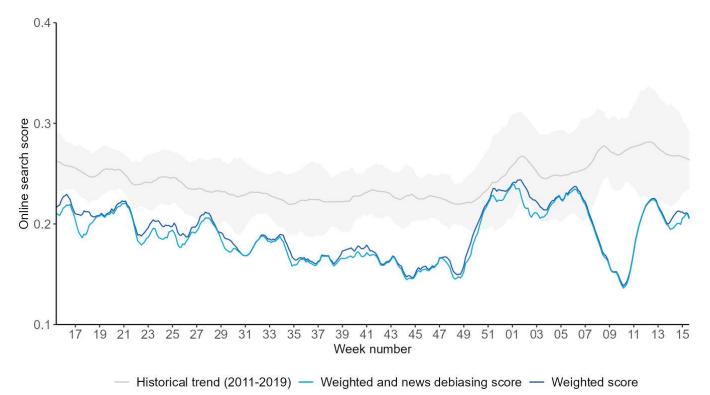
Figure 19. FluSurvey participants' self-reported number of social contacts outside the household

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. <u>Further information on this model</u> is available online.

During week 15, the overall and media-debiasing weighted Google search scores remained stable compared with the previous week (Figure 20).

Figure 20. Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



Flu Detector

Flu Detector is a web-based model which assesses internet-based search queries for influenzalike illness (ILI) in the general population.

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

For week 15, the daily ILI query rate remained stable and was below baseline activity (Figure 21).

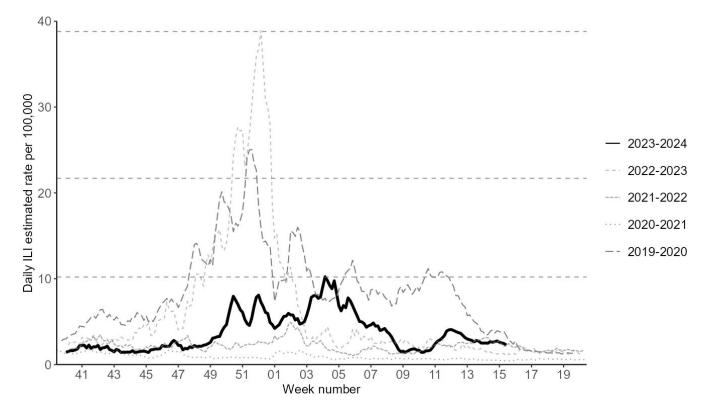


Figure 21. Daily estimated ILI Google search query rates per 100,000 population, England

Syndromic surveillance

During week 15, NHS 111 calls for cold or flu and calls for cough decreased nationally. GP inhours consultations for most respiratory indicators decreased, however lower respiratory tract infections and pneumonia still remain above seasonally expected levels. GP out-of-hours daily contacts for acute respiratory infections decreased nationally. ED attendances for acute respiratory infections, influenza like illness and acute bronchiolitis decreased nationally.

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 the <u>Syndromic surveillance:</u> <u>weekly summaries</u>.

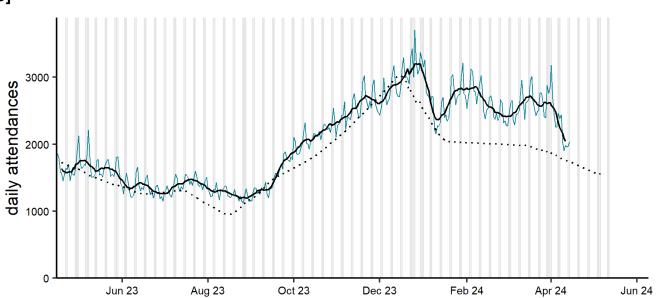
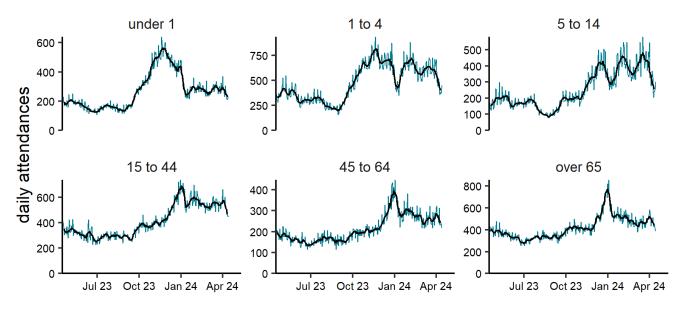


Figure 22a. Daily ED attendances for acute respiratory infection nationally, England [note 9]

[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 22b. 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.

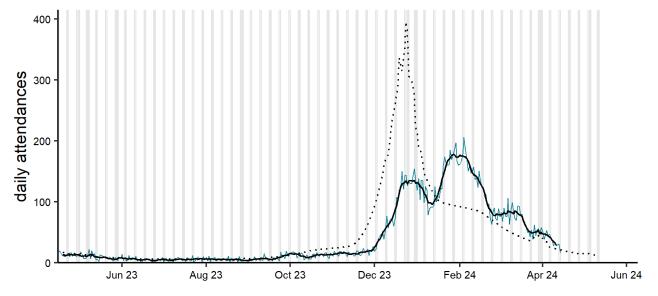
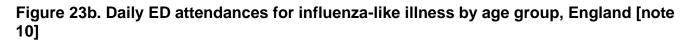
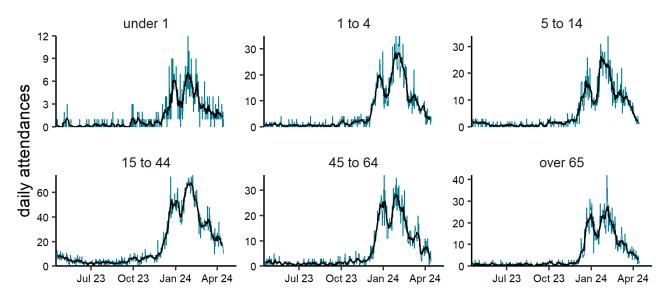


Figure 23a. Daily ED attendances for influenza-like illness nationally, England [note 9]

See [note 9] as above.





See [note 10] as above.

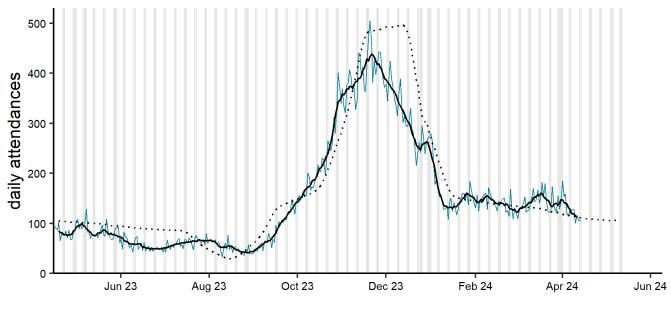
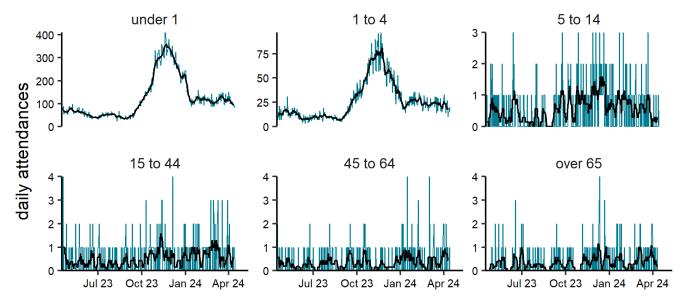


Figure 24a. Daily ED attendances for acute bronchiolitis nationally, England [note 11]

See [note 9] as above.

Figure 24b. Daily ED attendances for acute bronchiolitis by age group, England [note 12]



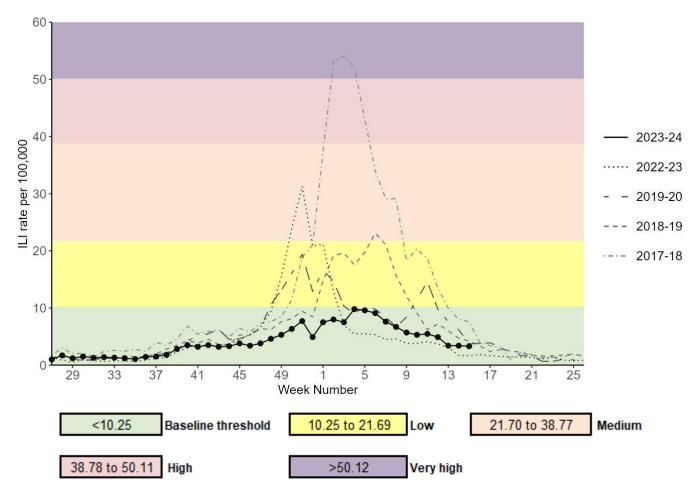
See [note 10] as above.

[note 11] Please note, there was no update in week 16 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 remained stable at 3.3 per 100,000 registered population in participating GP practices in week 15 compared with 3.4 per 100,000 in the previous week. This was within baseline activity levels (less than 10.25 per 100,000) (Figure 25). By age group, the highest rates were seen in those aged between 15 and 44 years (4.1 per 100,000), followed by those aged between 65 and 74 years (3.3 per 100,000). The lower respiratory tract infections (LRTI) consultation rate increased slightly to 110.7 per 100,000 in week 15 compared with 104.4 per 100,000 in the previous week.





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

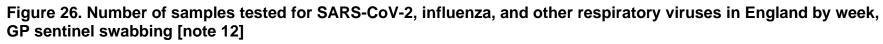
Due to reporting delays, there were insufficient results of samples taken in week 15 of 2024 to report. These will be included in next week's report. Additionally, starting in week 51, testing for enterovirus and rhinovirus have been delayed. Starting in week 14, testing for seasonal coronaviruses has been paused due to unavailability of a key reagent.

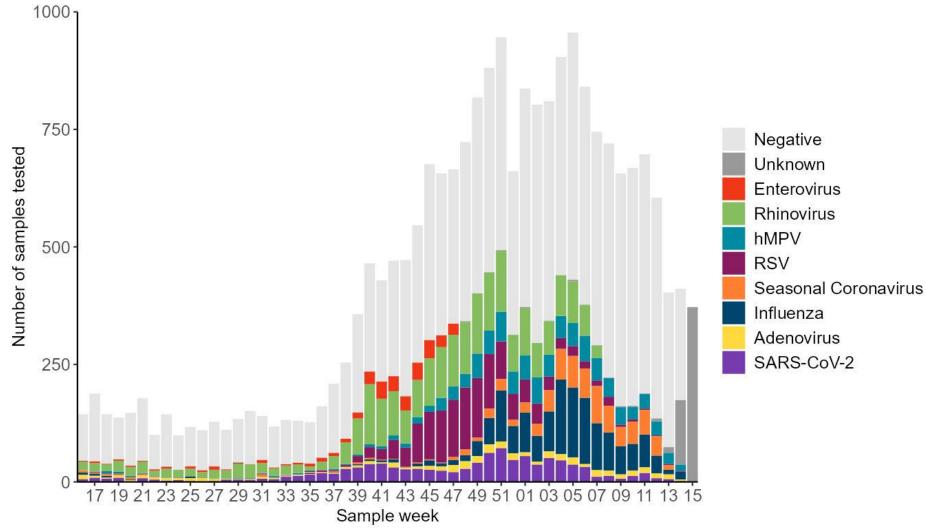
Based on the date samples were taken, in week 14 of 2024 (week commencing 1 April 2024) 411 samples were tested through the GP sentinel swabbing scheme in England of which 37 samples tested positive (Figure 26). Among all positive samples, 46.0% were positive for influenza, 35.1% were positive for hMPV, 8.1% were positive for adenovirus, 5.4% were positive for RSV and 5.4% were positive for SARS-CoV-2 (Figure 27). 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 0 available results for week 15. The proportion of detections among all positive samples is not calculated when the number of samples with a result is fewer than 50.

Among all samples which had a known test result, in week 14, positivity for SARS-CoV-2 was 0.7%, positivity for influenza was 6.2%, and positivity for RSV was 0.7% (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.

In previous reports, Figure 26 and Figure 27 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 <u>identification of a case of influenza A(H1N2)v</u>. This may lead to an over-representation of the Yorkshire and Humber region.





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

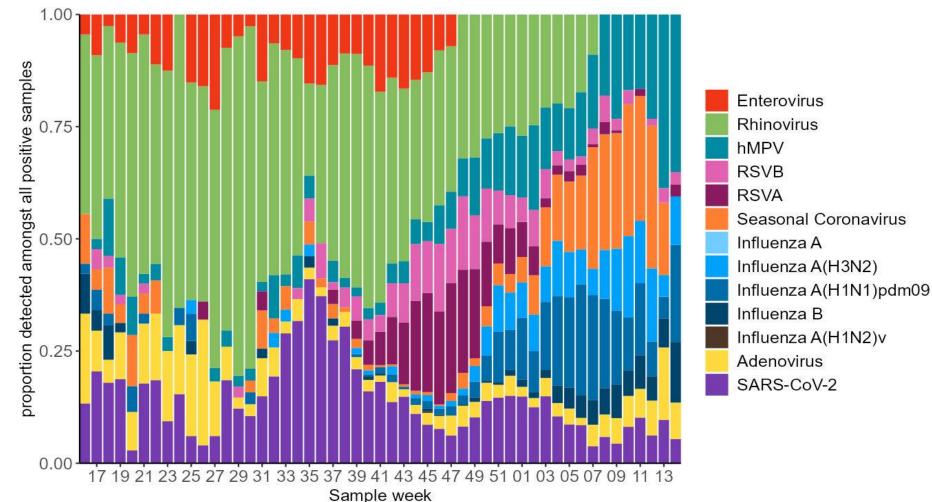
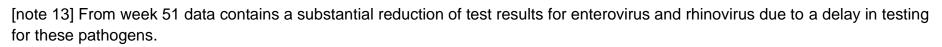
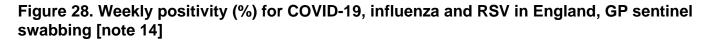
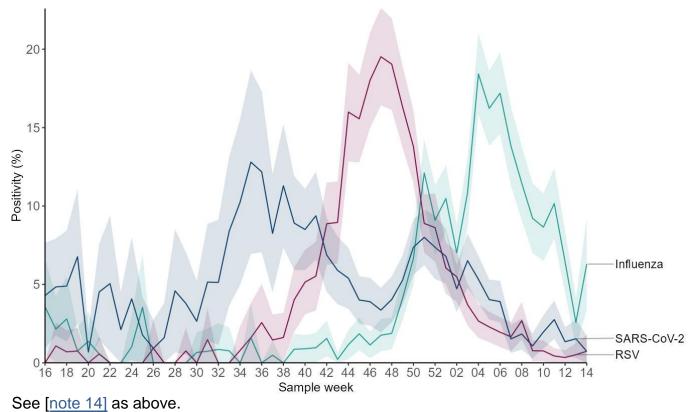


Figure 27. Proportion of detections of SARS-CoV-2, influenza, and other respiratory viral strains among virologically positive respiratory surveillance samples in England by week, GP sentinel swabbing scheme [note 13] [note 14]



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





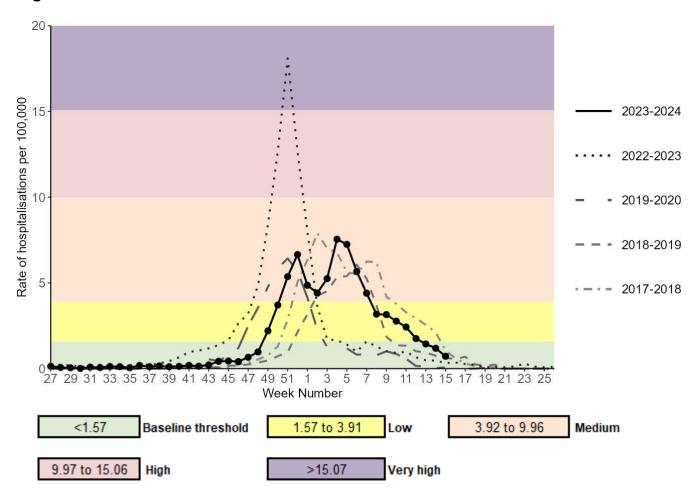
Secondary care surveillance

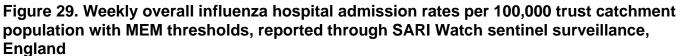
Influenza, SARI Watch

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 15 (ending 14 April 2024), the overall weekly hospital admission rate for influenza decreased to 0.72 per 100,000 compared with 1.18 per 100,000 in the previous week. The rate in the latest rate was within baseline range (less than 1.57 per 100,000). There were 66 new hospital admissions for influenza (45 influenza A(not subtyped), 3 influenza A(H1N1)pdm09, 5 influenza A(H3N2), and 13 influenza B).

In week 15, the overall ICU or HDU rate for influenza was very low at 0.03 per 100,000 compared with 0.04 in the previous week. The rate in the latest week remained within the baseline impact range (less than 0.11 per 100,000). There were 13 new case reports of an ICU or HDU admission for influenza in week 15 (8 influenza A(not subtyped), 1 influenza A(H1N1)pdm09, 1 influenza A(H3N2) and 3 influenza B).





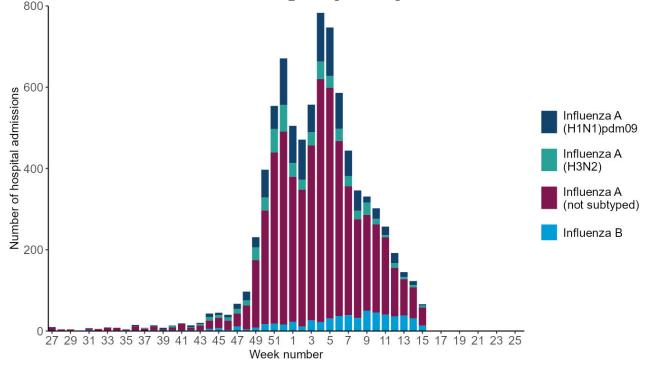
MEM thresholds are based on data from the 2015 to 2016 season to the 2022 to 2023 season.

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 is based on 22 sentinel NHS trusts for week 15.

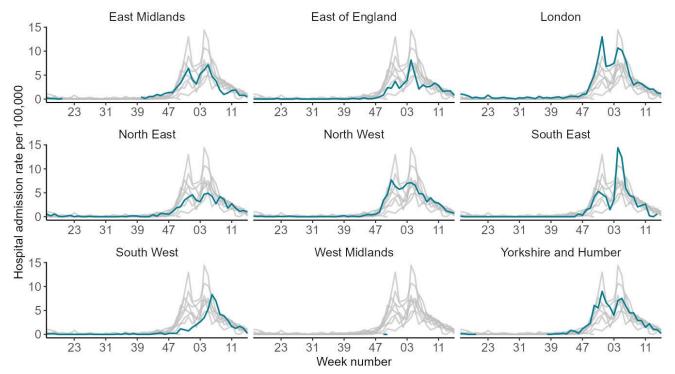
SARI Watch data is provisional and subject to retrospective updates.



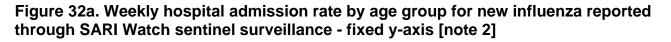


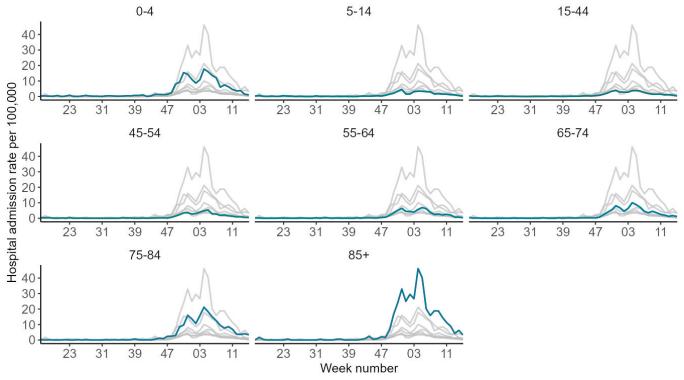
[note 15] Number of influenza hospital admissions based on sentinel NHS trusts.

Figure 31. Weekly hospital admission rate by UKHSA region for new influenza reported through SARI Watch sentinel surveillance [note 3] [note 16]



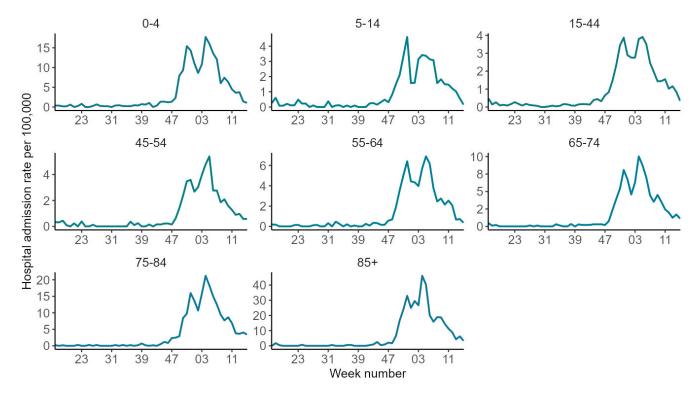
[note 16] Rates in some regions may not include all influenza surveillance sentinel trust sites from week to week. This may lead to variation in regional representation hence caution is required in interpreting the weekly data by region. See [note 3] as above.

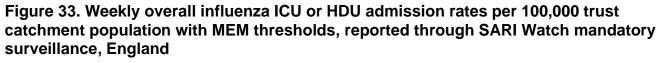


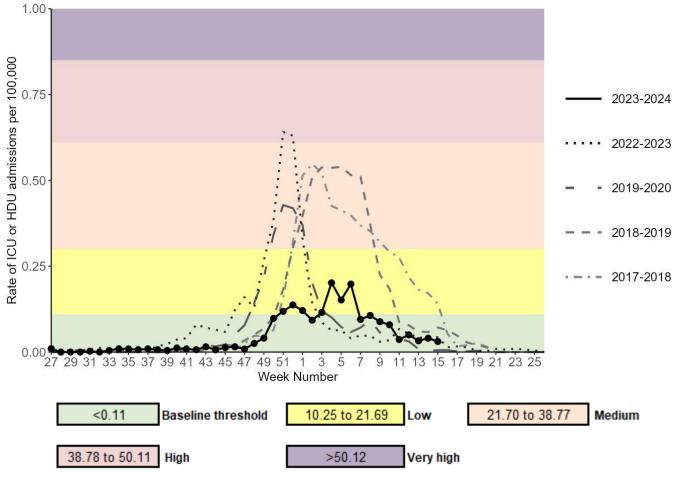


See [note 2] as above.

Figure 32b. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - adjusted y-axis







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 is based on 72 NHS trusts for week 15.

SARI Watch data is provisional and subject to retrospective updates.



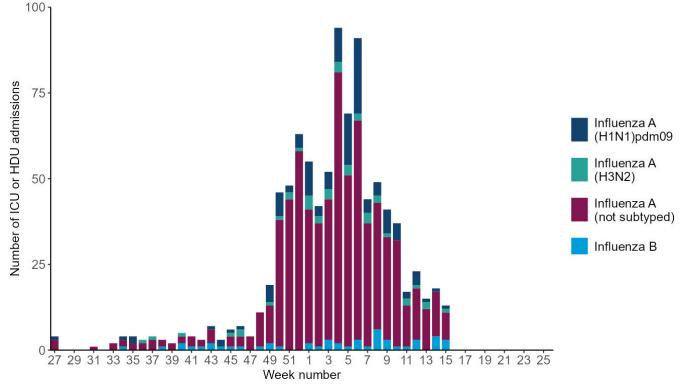
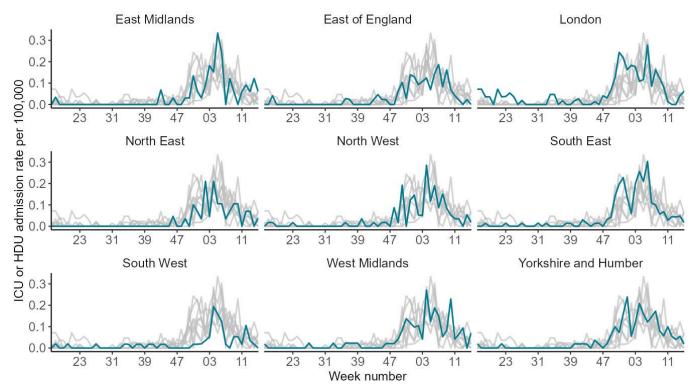
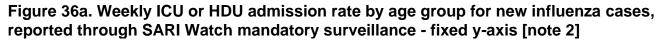
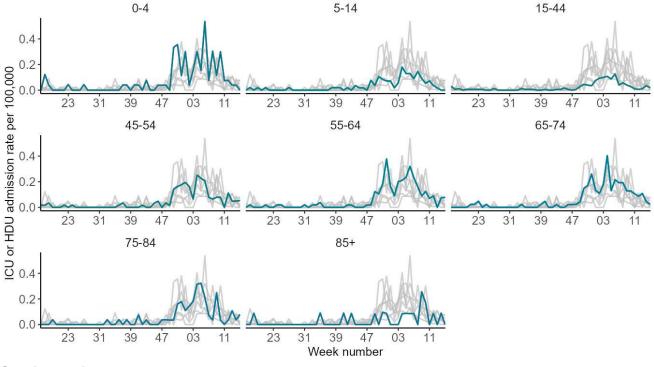


Figure 35. Weekly ICU or HDU admission rate by UKHSA region for new influenza, reported through SARI Watch mandatory surveillance [note 3]



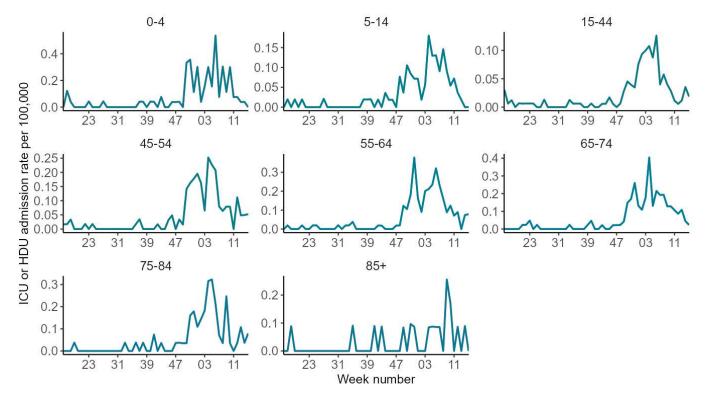
See [note 3] as above.





See [note 2] as above.

Figure 36b. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch mandatory surveillance - adjusted y-axis



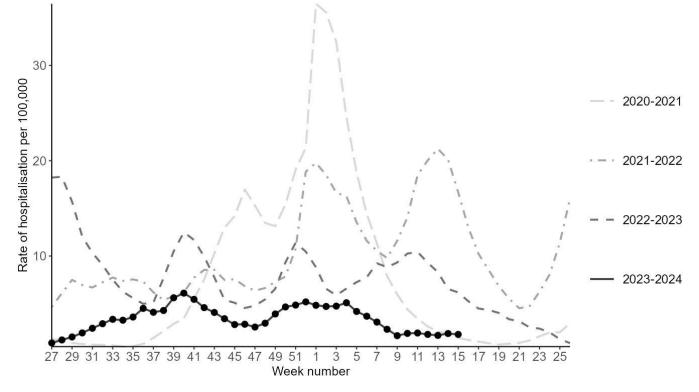
COVID-19, SARI Watch

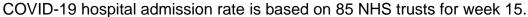
Surveillance of COVID-19 hospitalisations to all levels of care and surveillance of admissions to ICU or HDU for COVID-19 are both mandatory with data required from all acute NHS trusts in England. Please note that the SARI Watch rates for 2023 to 2024 use the latest trust catchment population. For consistency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

In week 15 (ending 14 April 2024), the overall weekly hospital admission rate for COVID-19 decreased slightly to 1.77 per 100,000 compared with 1.87 per 100,000 in the previous week. By UKHSA region, the highest hospital admission rate for COVID-19 was observed in the West Midlands (increased to 3.20 per 100,000 from 2.45 per 100,000 in the previous week, with decreases or stabilisation in 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. This remained stable at 20.56 per 100,000, with a decrease or stabilisation across the remaining age groups.

In week 15 (ending 14 April 2024), the overall weekly ICU or HDU admission rate for COVID-19 was very low and remained stable at 0.06 per 100,000, similar to 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.







SARI Watch data is provisional and subject to retrospective updates.

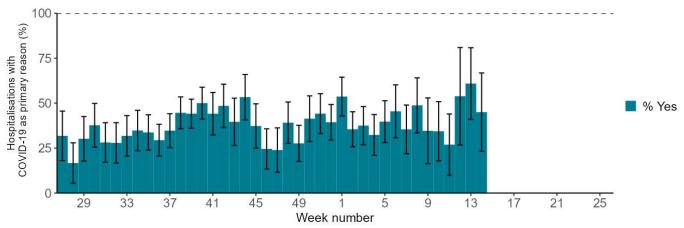
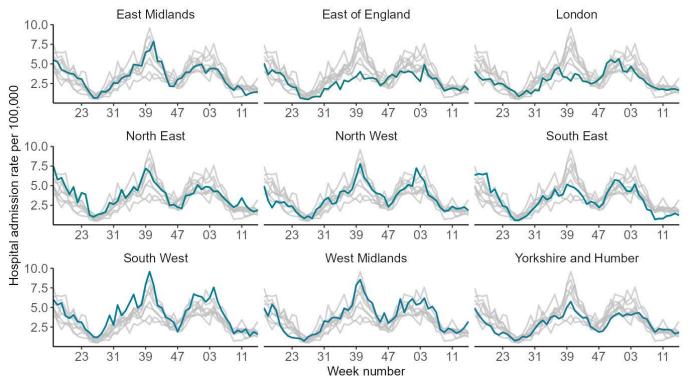


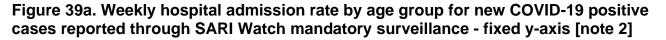
Figure 37b. Weekly percentage of hospitalisations with COVID-19 as primary reason, reported through SARI Watch sentinel surveillance, England

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 38. Weekly hospital admission rate by UKHSA region for new COVID-19 positive cases, reported through SARI Watch mandatory surveillance [note 3]



See [note 3] as above.



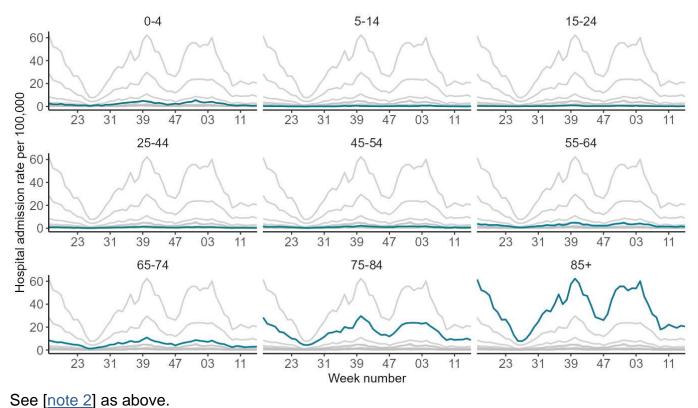
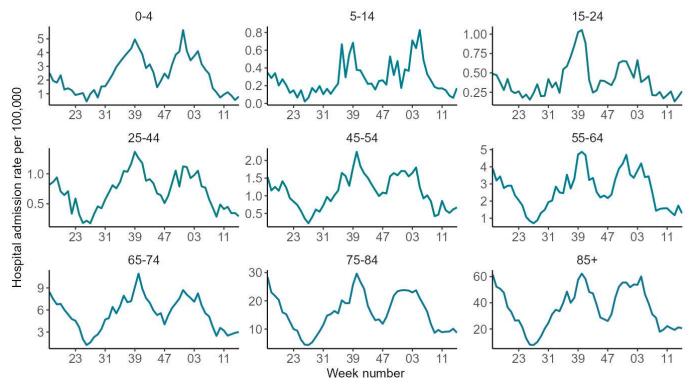
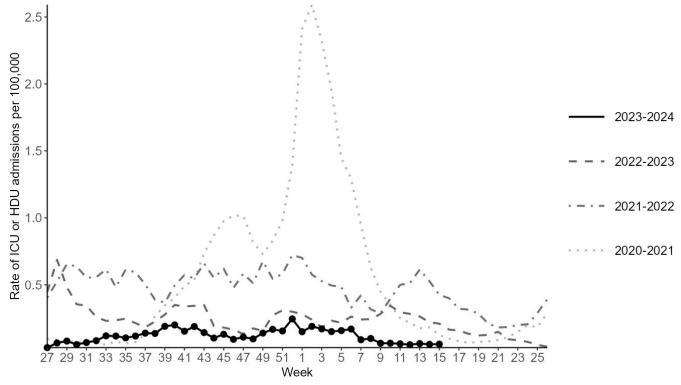


Figure 39b. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - adjusted y-axis

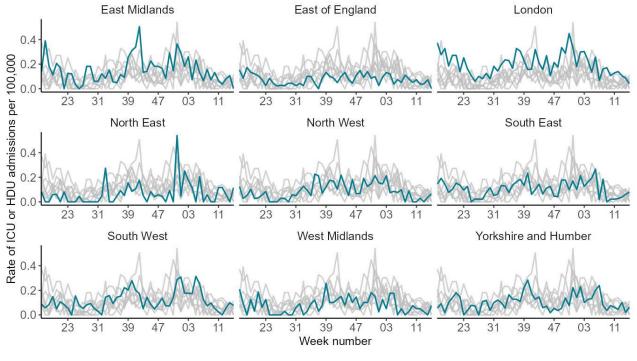






COVID-19 ICU or HDU admission rate is based on 72 NHS trusts for week 15. SARI Watch data is provisional and subject to retrospective updates.





See [note 3] as above.

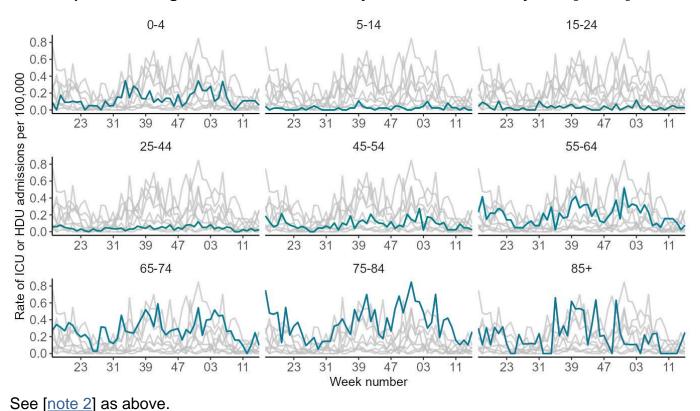
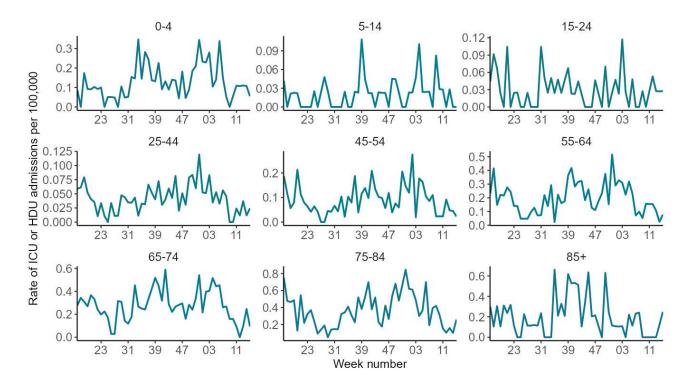


Figure 42a. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - fixed y-axis [note 2]

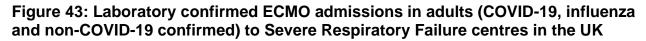
Figure 42b. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance adjusted y-axis

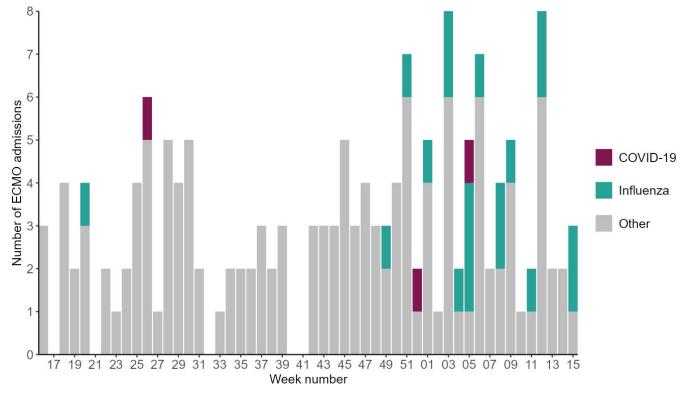


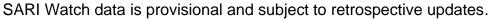
ECMO, SARI Watch

There were 3 new extra corporeal membrane oxygenation (ECMO) admissions reported in week 15 from the 7 Severe Respiratory Failure (SRF) centres in the UK. Two admissions were due to suspected influenza A(not subtyped) and one was due to a bacterial ARI.

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.





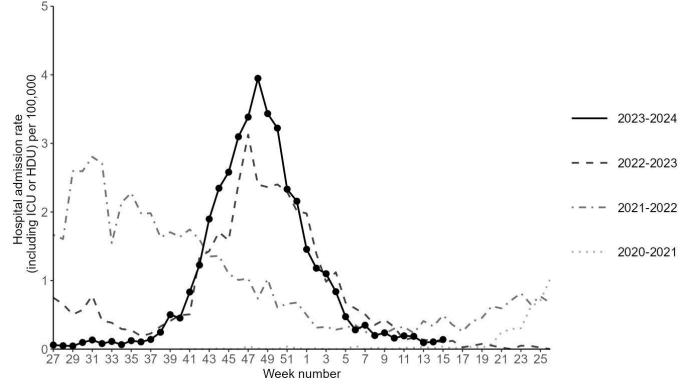


RSV admissions, SARI Watch

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 15, the overall hospital admission rate for RSV remained low and stable at 0.14 per 100,000, compared with 0.11 per 100,000 in the previous week. In children aged under 5 years the hospitalisation rate was 1.18 per 100,000 compared with 0.68 per 100,000 in the previous week. In those aged 85 years and over, the RSV hospitalisation rate was 0.0 per 100,000 and fluctuated at low levels due to small underlying case numbers.

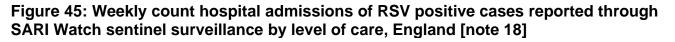
Figure 44. Weekly overall hospital admission rates (including ICU or HDU) of RSV positive cases per 100,000 population reported through SARI Watch sentinel surveillance, England [note 17]

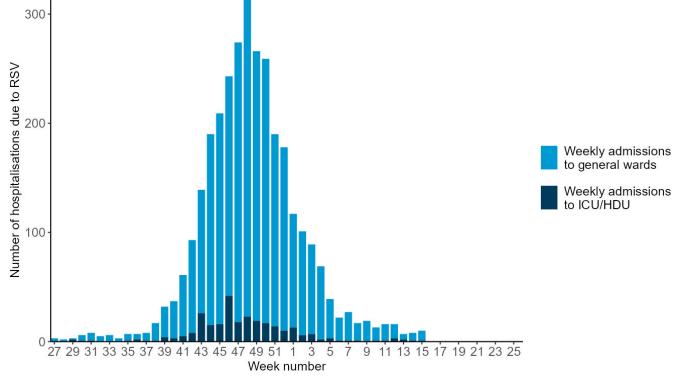


[note 17] Rates are based on the number of hospitalised cases divided by the NHS trust catchment population.

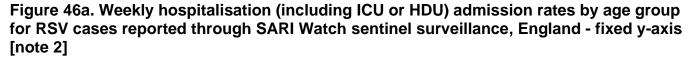
RSV admission rate is based on 17 NHS trusts for week 15.

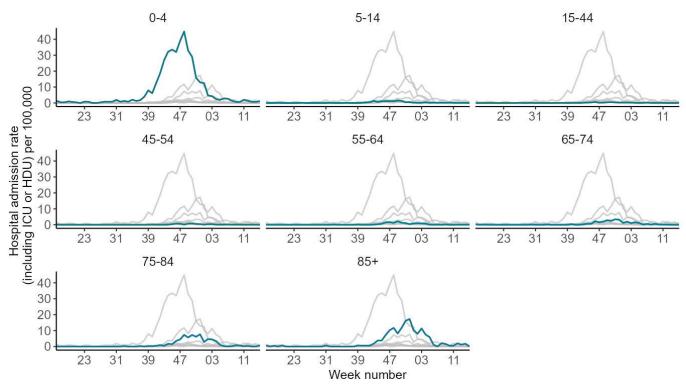
SARI Watch data is provisional.





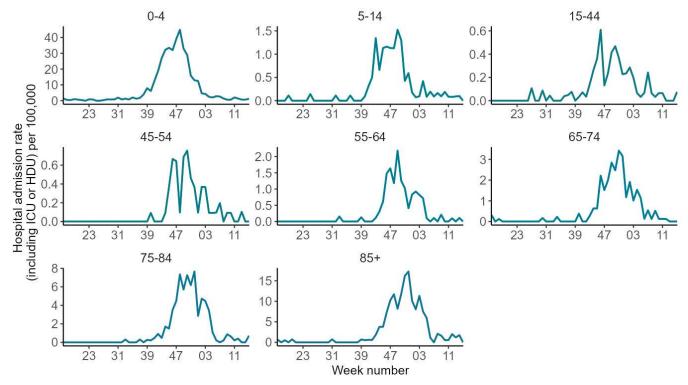
[[]note 18] Weekly admissions to general wards do not exclude subsequent admissions for the same person to ICU or HDU in the same week. The weekly ICU or HDU data may also include direct emergency admissions to ICU or HDU.





See [note 2] as above.

Figure 46b. 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 <u>COVID-19</u> <u>dashboard for death</u>.

All-cause mortality assessment (England)

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

International update

Global COVID-19 update

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

Global influenza update

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

Influenza in Europe

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

Influenza in North America

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

Influenza in Australia

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

Other respiratory viruses

Avian influenza and other zoonotic influenza

For further information, please see the <u>Latest WHO update on 26 February 2024</u> and the <u>Latest UKHSA avian influenza technical briefing 14 July 2023.</u>

Middle East respiratory syndrome coronavirus (MERS-CoV)

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

<u>Further information on management and guidance of possible cases</u> 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

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