

# National influenza and COVID-19 surveillance report

Week 19 report (up to week 18 2024 data) 9 May 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 <a href="accompanying graph pack">accompanying graph pack</a>.

For additional information regarding data source please refer to <u>sources of surveillance data for influenza</u>, 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 18 of 2024 (between 29 April and 5 May 2024).

#### Overall

In week 18, influenza activity remained stable at low levels, and COVID-19 activity continued to increase across most indicators. Respiratory syncytial virus (RSV) activity fluctuated at low interseasonal levels.

#### Influenza

Through Respiratory DataMart, influenza positivity remained stable at 2.6% in week 18 compared with 2.5% in the previous week.

Through primary care surveillance, consultations for influenza-like-illness (ILI) remained stable at 2.8 per 100,000 in week 18 compared with 2.9 per 100,000 in the previous week and remained within the baseline activity level range. The influenza positivity in GP sentinel swabbing decreased to 1.2% in week 17.

There were 5 confirmed influenza acute respiratory infection (ARI) incidents reported in week 18, a slight increase compared with the previous week (2 ARI).

Overall, the hospitalisation rate for influenza remained stable and was at low levels at 0.62 per 100,000 compared with 0.65 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 and stable at 0.02 per 100,000 compared with 0.02 in the previous week and was within the baseline impact range.

Emergency department (ED) attendances for ILI remained stable.

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 8.6% compared with 6.8% in the previous week.

COVID-19 case rates and positivity in Pillar 1 increased overall and within most age groups and regions, and some ethnic groups in week 18.

The overall number of reported SARS-CoV-2 confirmed ARI incidents in week 18 increased slightly compared with the previous week. There were 20 SARS-CoV-2 confirmed ARI incidents reported in week 18 in England, an increase from 17 in the previous week.

Overall, COVID-19 hospitalisations increased to 3.28 per 100,000 compared with 2.50 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 0.07 per 100,000 in week 18.

#### 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 0.9%. ED attendances for acute bronchiolitis remained stable nationally.

#### Other viruses

Adenovirus positivity remained low at 2.2%, with the highest positivity in those aged under 5 years at 5.0%. Human metapneumovirus (hMPV) positivity decreased slightly to 2.3%, with the highest positivity in those aged under 5 years at 3.7%. Parainfluenza positivity decreased to 4.5%, with the highest positivity in those aged between 45 and 64 years at 5.7%. Rhinovirus positivity increased slightly to 12.9% overall, with the highest positivity in those aged under 5 years at 31.1%.

## 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 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:

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



## Laboratory surveillance

## Respiratory DataMart system (England)

In week 18, data is based on reporting from 12 out of the 16 sentinel laboratories.

In week 18, 4,302 respiratory specimens reported through the Respiratory DataMart System were tested for influenza. There were 114 positive samples for influenza; 59 influenza A(not subtyped), 26 influenza A(H3N2), 2 influenza A(H1N1)pdm09, and 27 influenza B (Figure 3). Overall, influenza positivity remained stable at 2.6% in week 18 compared with 2.5% in the previous week.

In week 18, 5,178 respiratory specimens reported through the Respiratory DataMart System were tested for SARS-CoV-2. There were 443 positive samples for SARS-CoV-2 with an overall positivity of 8.6%, which increased compared with 6.8% in the previous week. The highest positivity was seen in adults aged over 65 years at 12.4%.

RSV positivity remained low at 0.3%, with the highest positivity in those aged under 5 years at 0.9%.

Adenovirus positivity remained low at 2.2%, with the highest positivity in those aged under 5 years at 5.0%.

Human metapneumovirus (hMPV) positivity decreased slightly to 2.3%, with the highest positivity in those aged under 5 years at 3.7%.

Parainfluenza positivity decreased slightly to 4.5%, with the highest positivity in those aged between 45 and 64 years at 5.7%.

Rhinovirus positivity increased to 12.9% overall, with the highest positivity in those aged under 5 years at 31.1%.

DataMart data is provisional and subject to retrospective updates.

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

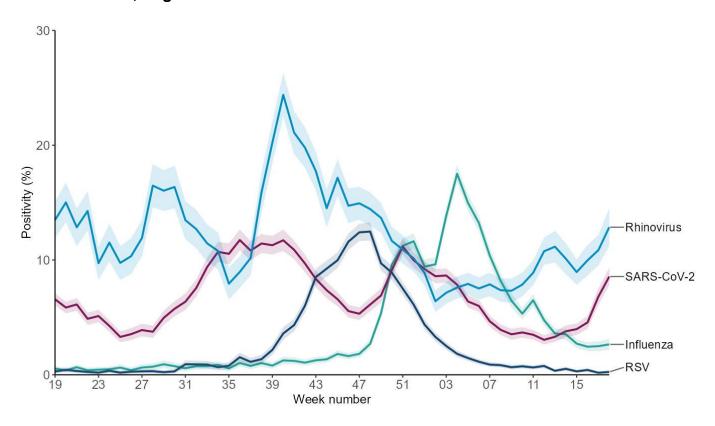
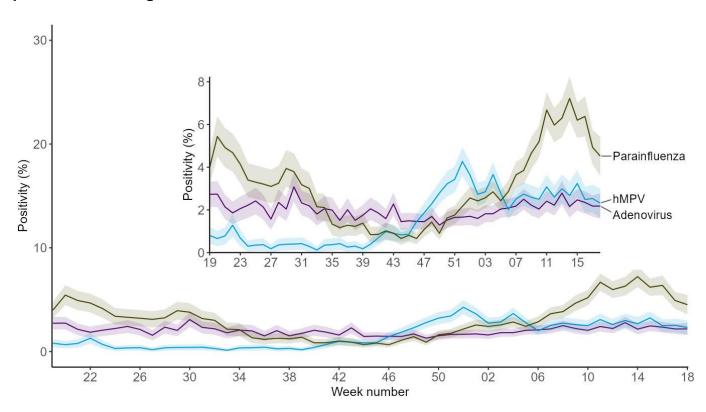


Figure 1b. Respiratory DataMart weekly positivity (%) for adenovirus, hMPV and parainfluenza, England



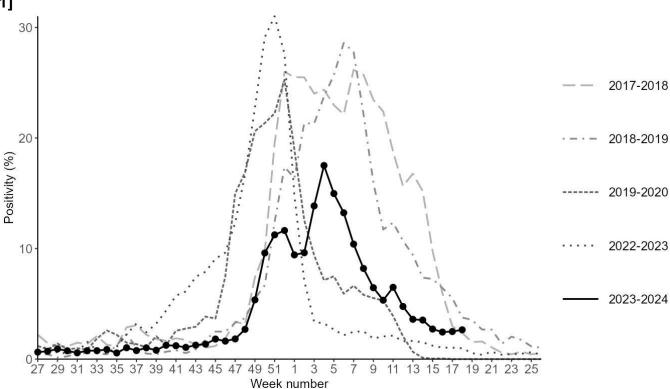


Figure 2. Respiratory DataMart weekly positivity (%) for influenza by year, England [note 1]

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

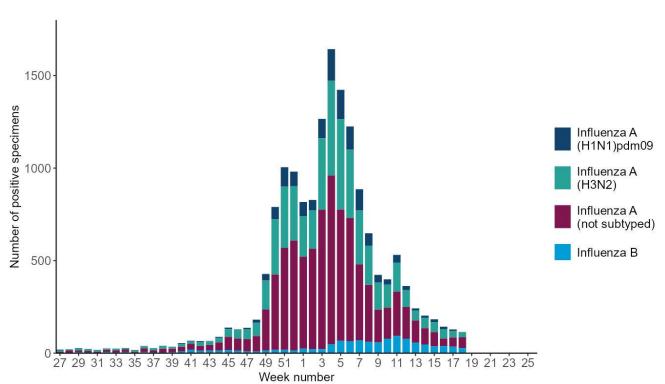


Figure 3. Respiratory DataMart samples positive for influenza by type and subtype, England

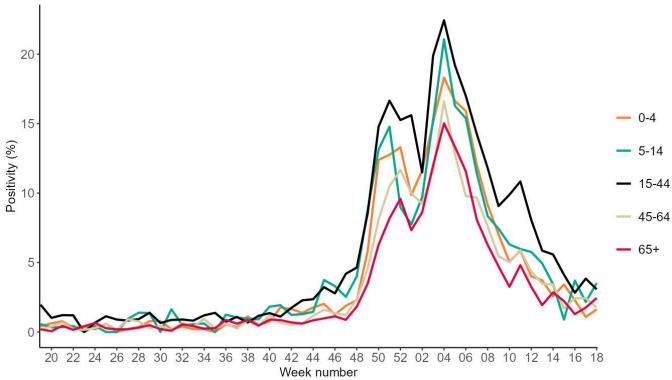


Figure 4. Respiratory DataMart weekly positivity (%) for influenza by age, England

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

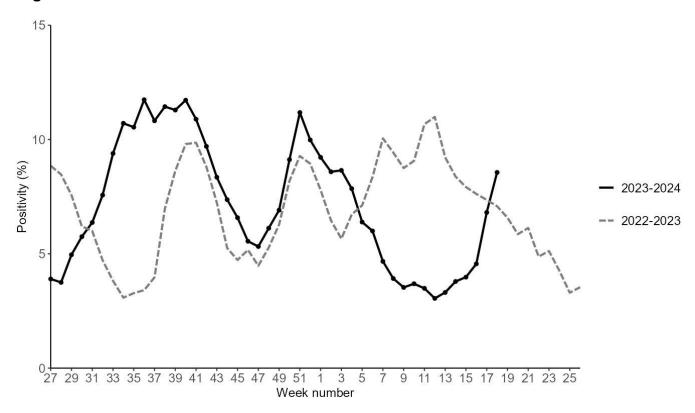


Figure 6. Respiratory DataMart weekly positivity (%) for SARS-CoV-2 by age, England

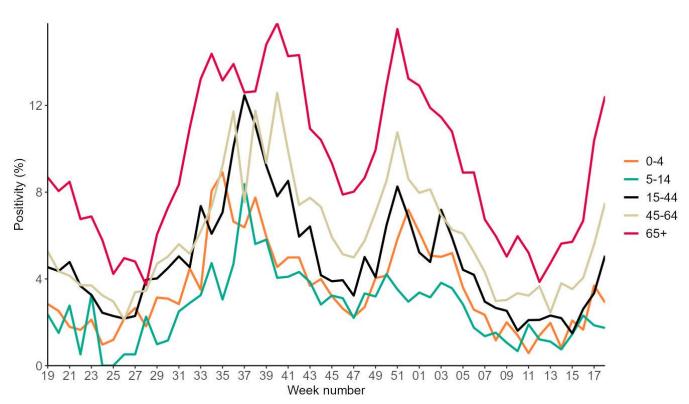


Figure 7. Respiratory DataMart weekly positivity (%) for RSV by year, England

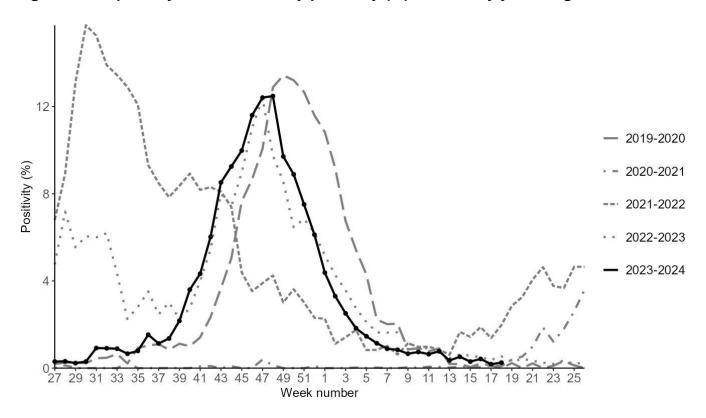
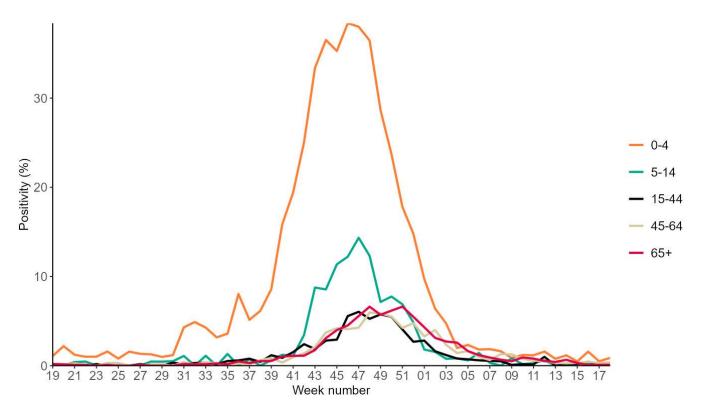


Figure 8. Respiratory DataMart weekly positivity (%) for RSV by age, England



## Confirmed COVID-19 cases (England)

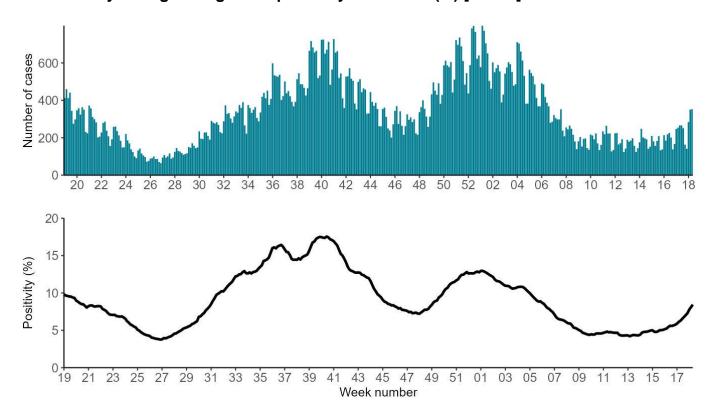
As of 9am on 7 May 2024, there were a total of 1,985 Pillar 1 cases in week 18, a 25.0% increase from the previous week.

COVID-19 polymerase chain reaction (PCR) positivity for Pillar 1 increased in week 18, with a weekly mean positivity rate of 8.6% compared with 6.6% in the previous week.

Pillar 1 positivity rates were highest in those aged over 85 years at a weekly mean positivity rate of 15.0% (increased from 11.4% among those aged over 85 years in week 17). They were highest in South West at a weekly mean positivity rate of 10.6% (this increased from 7.4% in South West in week 17).

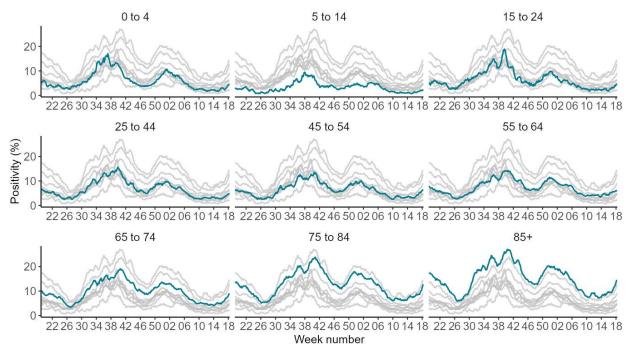
Data notes: Changes to testing policies over time may affect positivity rates and incidence rates and should be interpreted accordingly. COVID-19 case reporting in England uses an episode-based definition which includes possible reinfections, each infection episode is counted separately if there are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

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]



#### Age

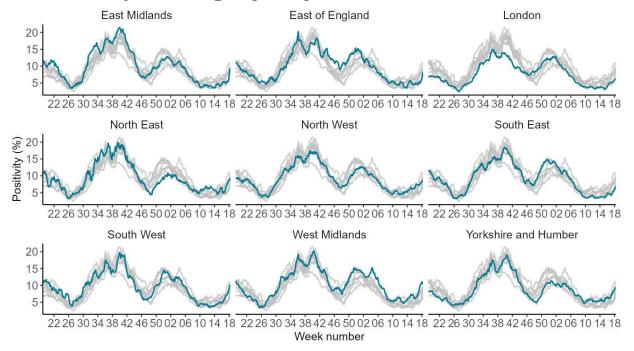
Figure 10. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by age group [note 2]



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

#### Geography

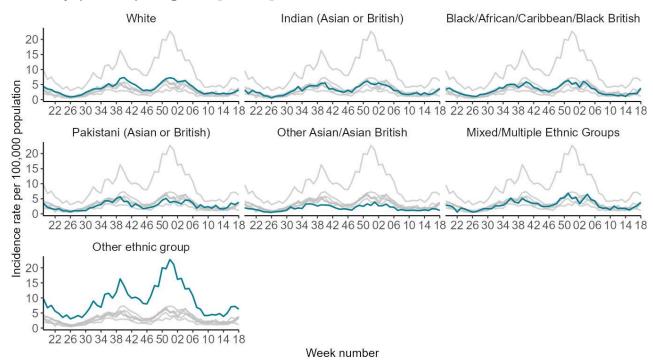
Figure 11. 7-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by UKHSA region [note 3]



[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 publications will be provided when available.

#### 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 18 of 2024, the UKHSA Respiratory Virus Unit (RVU) has genetically characterised 927 influenza A(H3N2) viruses, which had been detected this season (since week 40), with 925 of these belonging in genetic subclade 3C.2a1b.2a.2 in the 2a.3a.1 subgroup. 2 A(H3N2) viruses belonging to subgroup 2a.3a 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, 1,151 influenza A(H1N1)pdm09 viruses have been characterised. Sequencing of the haemagglutinin (HA) gene shows that 992 belong in genetic subgroup 6B.1A.5a.2a and 159 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, 485 influenza B/Victoria lineage viruses have been genetically characterised belonging in clade V1A.3a.2. Of these, 484 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 1. 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		
	Total	927	
A(H1N1)pdm09	6B.1A.5a.2a	992	
	6B.1A.5a.2a.1		
	Total	1,151	
B/Victoria-lineage	V1A3a.2 / C.5	484	
	V1A3a.2 / C.2	1	
	Total	485	
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 18 of 2024 have been analysed.

Analysis of 899 A(H3N2) viruses found no viruses with known markers of resistance to neuraminidase inhibitors. Analysis of 1,148 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, clinical details pending

Analysis of 479 influenza B NA sequences found no evidence of known markers of resistance to neuraminidase inhibitors. One influenza B virus with a I221T mutation, previously known to result in reduced susceptibility to Oseltamivir was detected.

No viruses with known markers of resistance to baloxavir marboxil were detected in 799 A(H3N2), 942 A(H1N1)pdm09 and 417 influenza B PA sequences analysed.

Table 2. 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)	899	0	799	0
A(H1N1)pdm09	1,142	6	942	0
B/Victoria-lineage	479	1	417	0

## **Community surveillance**

## SIREN healthcare cohort study

Testing in SIREN has been paused from 28 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 Office for National Statistics (ONS webpage and 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 41 new ARI incidents reported in week 18 in England. In the latest week, these included:

- 29 incidents reported from care homes, of which 11 were laboratory confirmed for SARS-CoV-2, and 4 for influenza A(not subtyped)
- 9 incidents reported from hospitals, of which 8 were laboratory confirmed for SARS-CoV-2
- 1 incident reported from an educational setting, with no test results available.
- 2 incidents reported from other settings, of which 1 was laboratory confirmed for SARS-CoV-2, and 1 for influenza B

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 13. Number of ARI incidents by setting, England

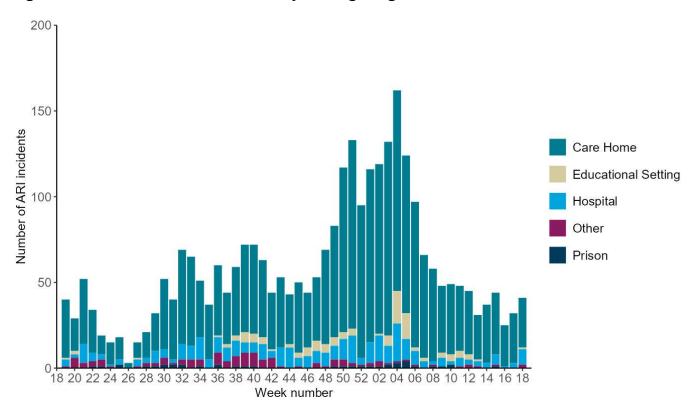


Figure 14. Number of ARI incidents in all settings by virus type, England

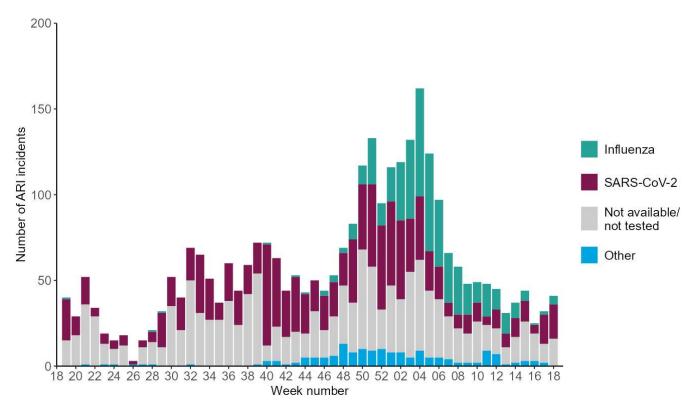


Figure 15. Number of ARI incidents in care homes by virus type, England

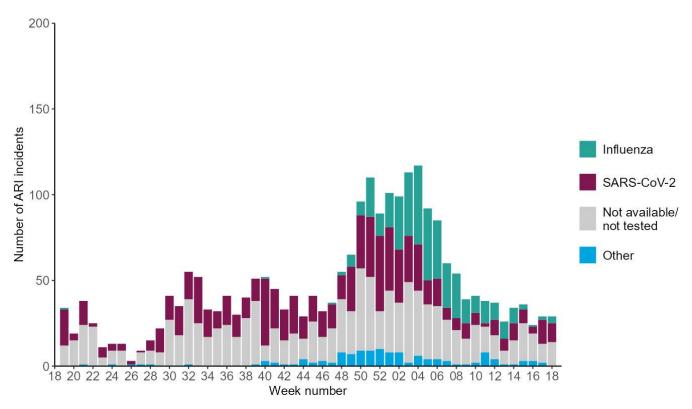
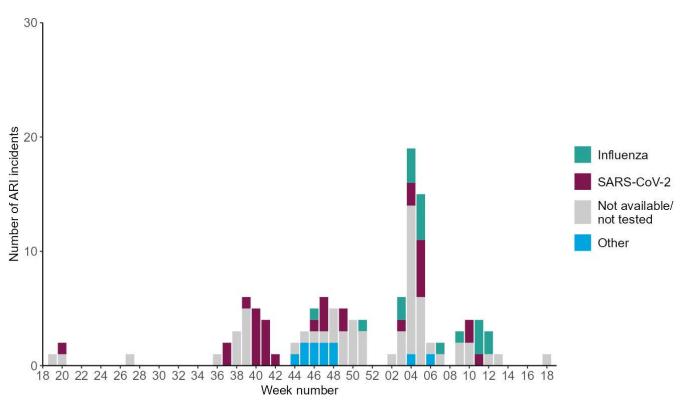


Figure 16. Number of ARI incidents in educational settings by virus type, England



## **FluSurvey**

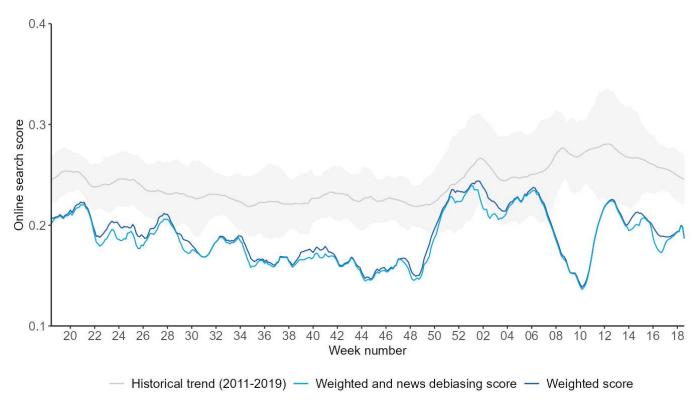
As of week 18 of 2024, community surveillance using FluSurvey has been paused and will resume during the 2024 to 2025 season. No further data for the 2023/24 season will be included in this report.

## 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 18, the overall and media-debiasing weighted Google search scores decreased compared with the previous week (Figure 17).

Figure 17. Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England



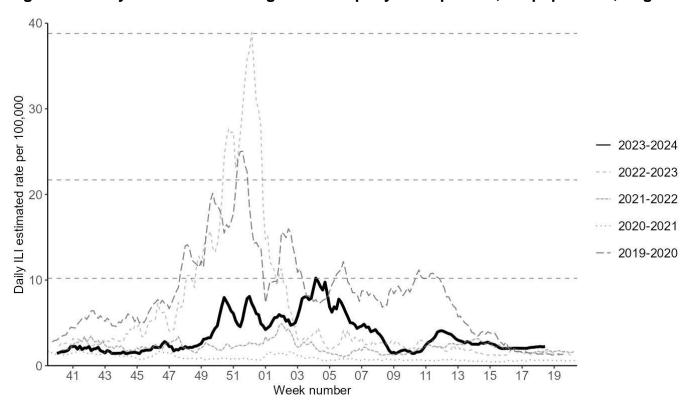
## Flu Detector

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 week-long period (including the current day and the 6 days before it).

For week 18, the daily ILI query rate remained stable and was below baseline activity (Figure 18).

Figure 18. Daily estimated ILI Google search query rates per 100,000 population, England



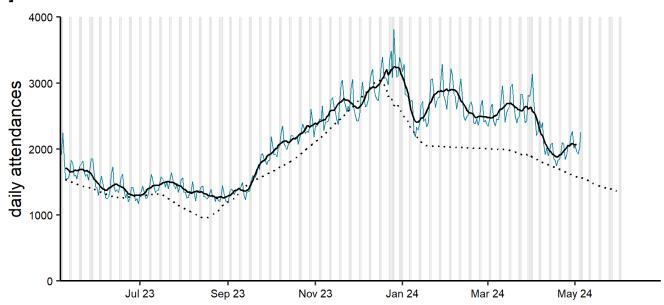
## Syndromic surveillance

During week 18, NHS 111 calls and online assessments for acute respiratory infections (ARI) increased across all age groups. GP in-hours consultations for influenza-like-illness decreased. GP out-of-hours daily contacts for ARI increased slightly and contacts for influenza-like-illness remained stable. ED attendances for ARI increased slightly in those aged between 5 and 14 years. ED attendances for COVID-19-like illness remained stable nationally but increased in those aged between 15 and 44 years and those aged 65 years and over. ED attendances for acute bronchiolitis and influenza-like-illness remained stable.

Please note that recent updates to the NHS Pathways clinical tool used by NHS 111 have affected levels of certain syndromic indicators. As a result of these changes a selection of existing NHS 111 syndromic respiratory indicators have been removed from this report and replaced with generic 'acute respiratory infections' calls and assessments indicators.

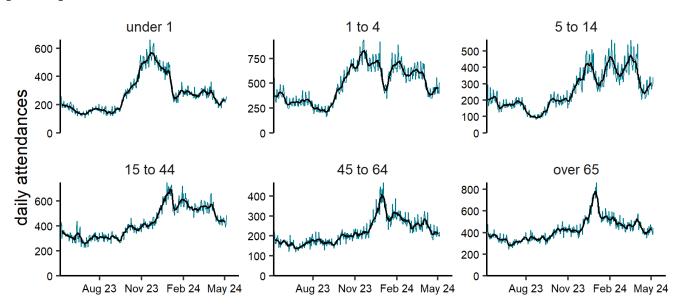
For further information on syndromic surveillance please see the <u>Syndromic surveillance</u>: weekly summaries.

Figure 19a. Daily ED attendances for acute respiratory infection nationally, England [note 5]



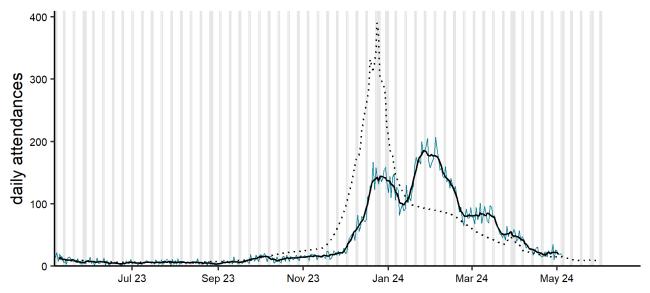
[note 5] The solid black line is a 7-day moving average adjusted for holidays. The solid green line is the daily attendances. The black dotted line is the baseline. The grey columns show weekends and bank holidays.

Figure 19b. Daily ED attendances for acute respiratory infection by age group, England [note 6]



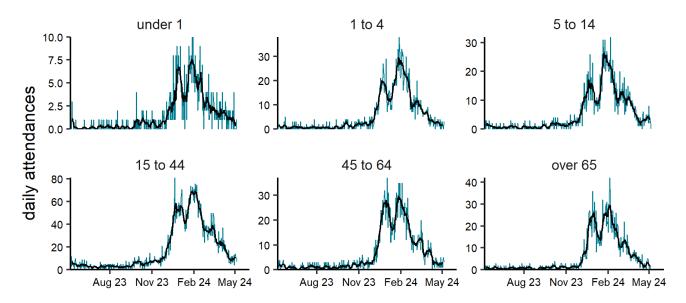
[note 6] The scales may vary in each graph to enable trend comparison. The black line is the 7-day moving average adjusted for bank holidays.

Figure 20a. Daily ED attendances for influenza-like illness nationally, England [note 5]



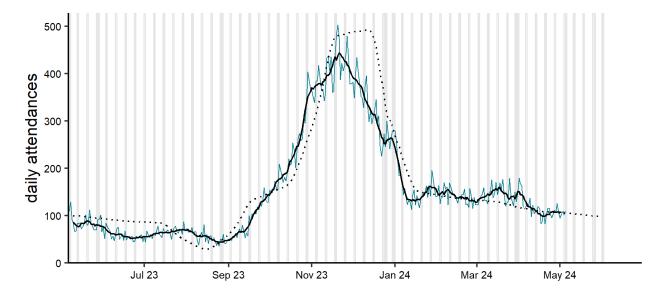
See [note 5] as above.

Figure 20b. Daily ED attendances for influenza-like illness by age group, England [note 6]



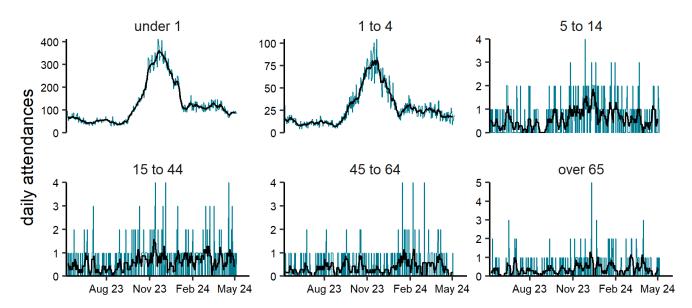
See [note 6] as above.

Figure 21a. Daily ED attendances for acute bronchiolitis nationally, England [note 5]



See [note 5] as above.

Figure 21b. Daily ED attendances for acute bronchiolitis by age group, England [note 6]



See [note 6] as above.

## Primary care surveillance

## RCGP Clinical Indicators (England)

The weekly ILI consultation rate through the Royal College of General Practitioners (RCGP) surveillance remained stable at 2.8 per 100,000 registered population in participating GP practices in week 18 compared with 2.9 per 100,000 in the previous week. This was within baseline activity levels (less than 10.25 per 100,000) (Figure 22). By age group, the highest rates were seen in those aged between 15 and 44 years (3.5 per 100,000), followed by those aged between 45 and 64 years (2.9 per 100,000). The lower respiratory tract infections (LRTI) consultation rate remained stable at 95.5 per 100,000 in week 18 compared with 97.3 per 100,000 in the previous week.

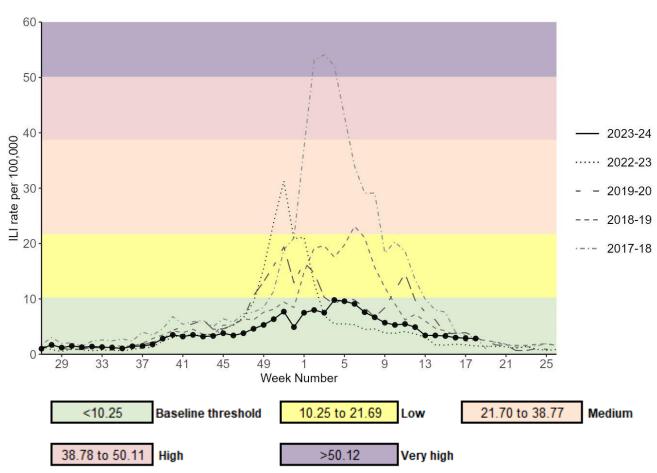


Figure 22. RCGP ILI consultation rates, all ages, England

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

Starting from week 51, testing for enterovirus and rhinovirus have been delayed.

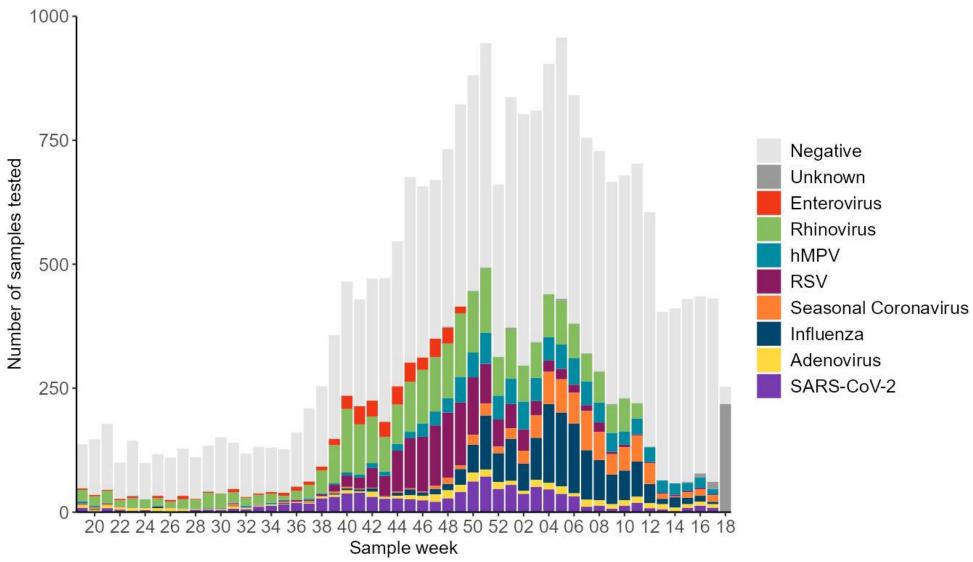
Based on the date samples were taken, in week 17 of 2024 (week commencing 22 April 2024) 431 samples were taken through the GP sentinel swabbing scheme in England of which 47 samples tested positive (Figure 23). Among all positive samples, 27.7% were positive for other seasonal coronaviruses, 23.4% were positive for hMPV, 19.1% were positive for SARS-CoV-2, 14.9% were positive for adenovirus, 10.6% for influenza and 4.3% were positive for RSV (Figure 24). Note there is a very small number of samples with an untyped influenza A result; this result occurs when subtyping fails due to a low viral load from the specimen. 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 36 available results for week 18. 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 17, positivity for SARS-CoV-2 was 2.2%, positivity for influenza was 1.2%, and positivity for RSV was 0.5% (Figure 25). 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, Figures 23, 24 and 25 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.

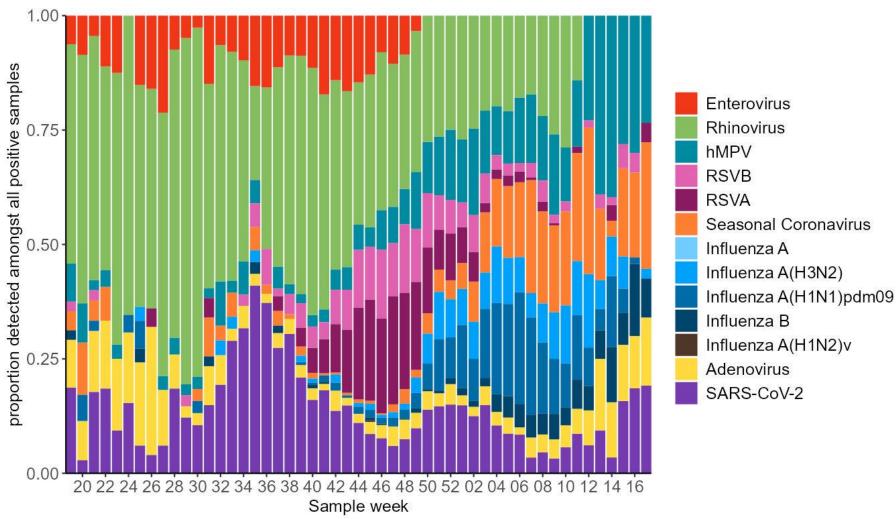
From 27 November 2023, swabbing was temporarily increased in the Yorkshire and Humber region in response to the <u>identification of a case of influenza A(H1N2)v</u>. This may lead to an over-representation of the Yorkshire and Humber region.

Figure 23. Number of samples tested for SARS-CoV-2, influenza, and other respiratory viruses in England by week, GP sentinel swabbing [note 7]



[note 7] Unknown category corresponds to samples with no result yet.

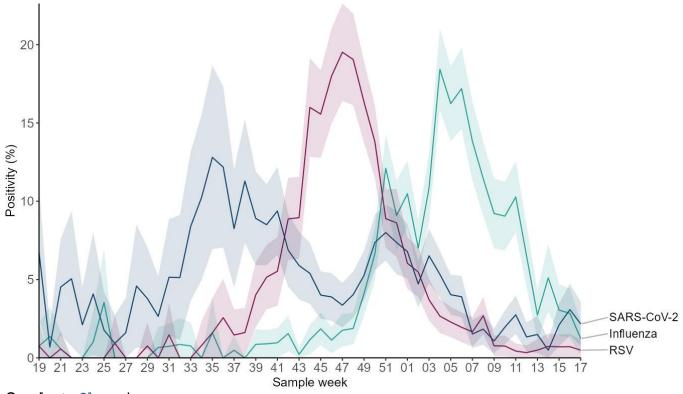
Figure 24. Proportion of detections of SARS-CoV-2, influenza, and other respiratory viral strains among virologically positive respiratory surveillance samples in England by week, GP sentinel swabbing scheme [note 8] [note 9]



[note 8] 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 9] Data from the most recent weeks are not shown on this graph due to reporting delays.

Figure 25. Weekly positivity (%) for COVID-19, influenza and RSV in England, GP sentinel swabbing [note 9]



See [note 9] as above.

## Secondary care surveillance

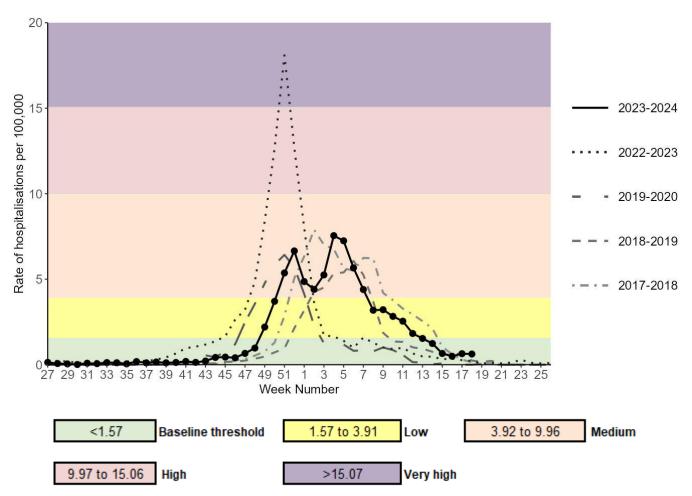
## Influenza, SARI Watch

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 18 (ending 5 May 2024), the overall weekly hospital admission rate for influenza was stable at 0.62 per 100,000 compared with 0.65 per 100,000 in the previous week. The rate in the latest rate was within the baseline range (less than 1.57 per 100,000). There were 47 new hospital admissions for influenza (27 influenza A(not subtyped), 1 influenza A(H1N1)pdm09, 2 influenza A(H3N2), and 17 influenza B).

In week 18, the overall ICU or HDU rate for influenza was low and stable at 0.02 per 100,000 compared with 0.02 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 9 new case reports of an ICU or HDU admission for influenza in week 18 (7 influenza A(not subtyped) and 2 influenza B).

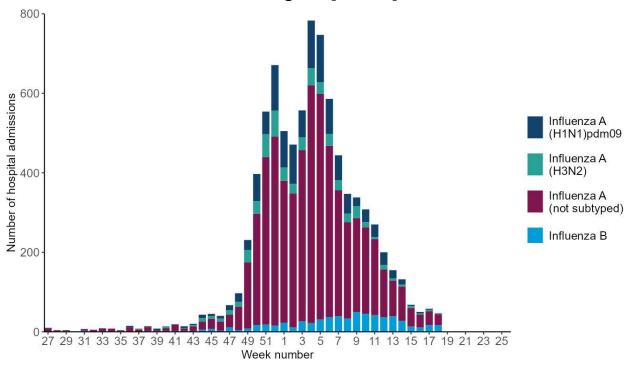
Figure 26. Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch sentinel surveillance, England



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.

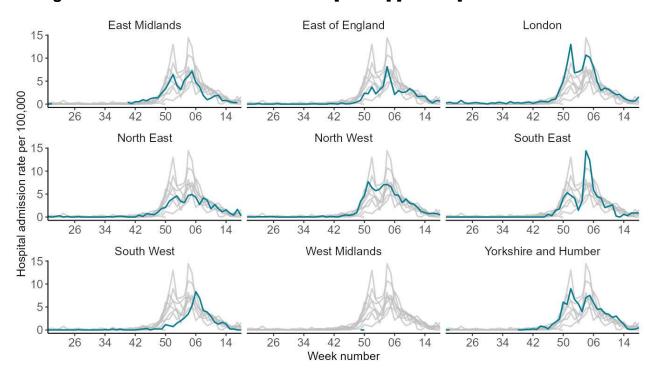
Influenza hospital admission rate is based on 19 sentinel NHS trusts for week 18. SARI Watch data is provisional and subject to retrospective updates.

Figure 27. Weekly influenza hospital admissions by influenza type, reported through SARI Watch sentinel surveillance, England [note 10]



[note 10] Number of influenza hospital admissions based on sentinel NHS trusts.

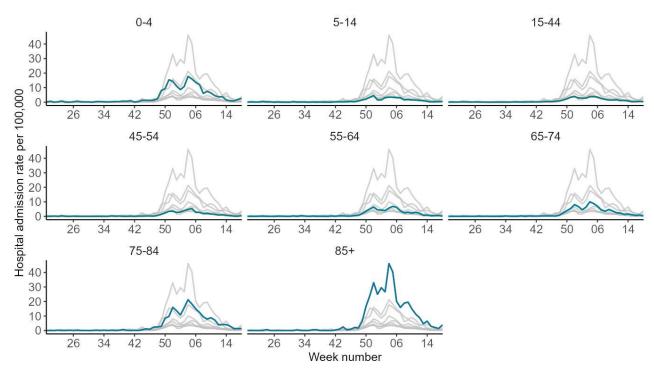
Figure 28. Weekly hospital admission rate by UKHSA region for new influenza reported through SARI Watch sentinel surveillance [note 3] [note 11]



[note 11] 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.

Figure 29a. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - fixed y-axis [note 2]



See [note 2] as above.

Figure 29b. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - adjusted y-axis

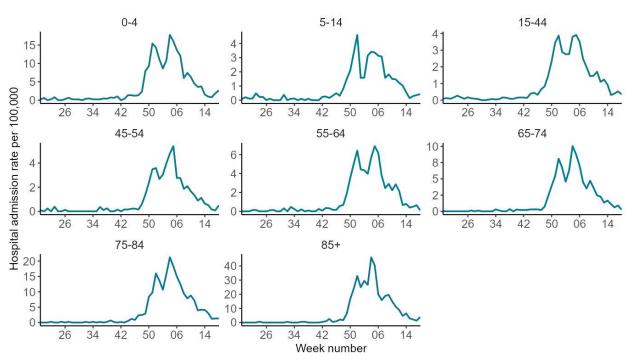
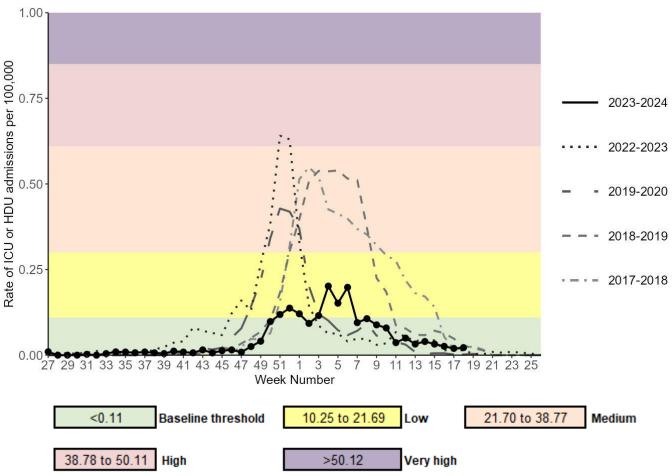


Figure 30. Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch mandatory surveillance, England



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 is based on 94 NHS trusts for week 18. SARI Watch data is provisional and subject to retrospective updates.

Figure 31. Weekly influenza ICU or HDU admissions by influenza type, reported through SARI Watch mandatory surveillance, England

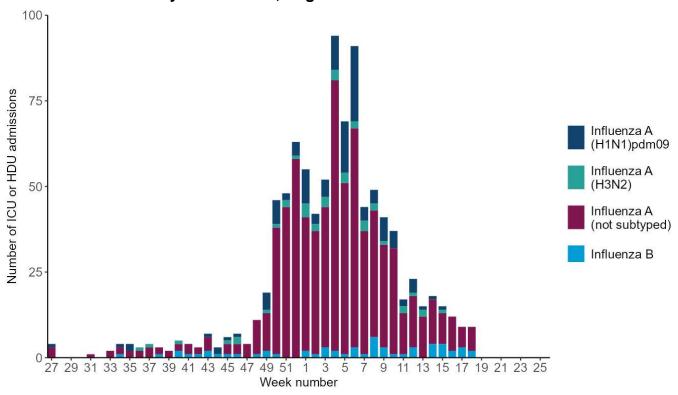
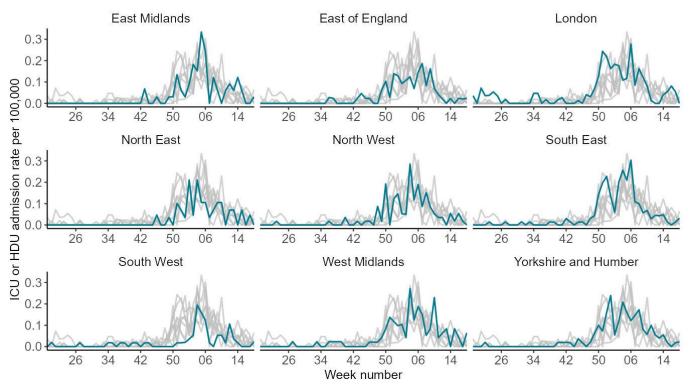
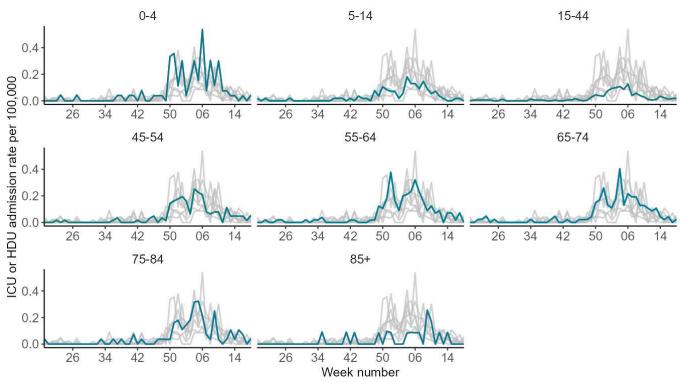


Figure 32. Weekly ICU or HDU admission rate by UKHSA region for new influenza, reported through SARI Watch mandatory surveillance [note 3]



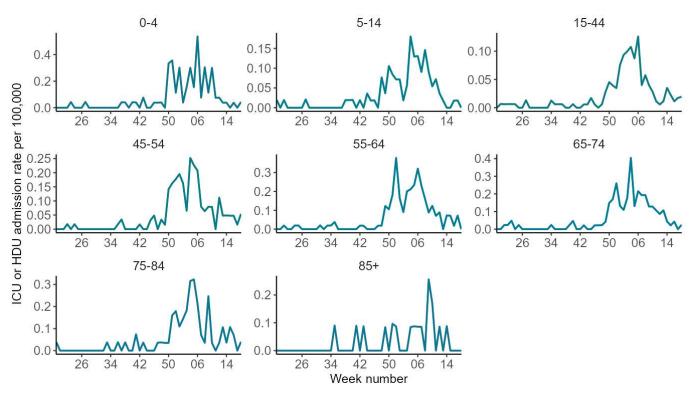
See [note 3] as above.

Figure 33a. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch mandatory surveillance - fixed y-axis [note 2]



See [note 2] as above.

Figure 33b. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch mandatory surveillance - adjusted y-axis



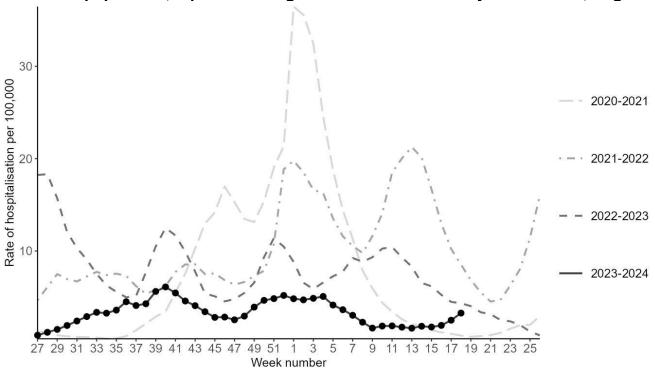
## COVID-19, SARI Watch

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 18 (ending 5 May 2024), the overall weekly hospital admission rate for COVID-19 increased to 3.28 per 100,000 compared with 2.50 per 100,000 in the previous week. By UKHSA region, the highest hospital admission rate for COVID-19 was observed in the North West (increased to 4.37 per 100,000 from 2.98 per 100,000 in the previous week, with increases 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 and increased to 35.14 per 100,000, with increases across the remaining age groups except in 15 to 24 years where the rate was stable.

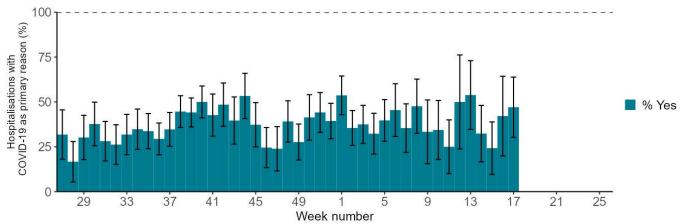
In week 18 (ending 5 May 2024), the overall weekly ICU or HDU admission rate for COVID-19 was very low and remained stable at 0.07 per 100,000, compared with 0.07 per 100,000 in the previous week. Note that with very low rates in critical care, small random fluctuations may occur. Note that ICU or HDU 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 34a. Weekly overall COVID-19 hospital admission rates per 100,000 trust catchment population, reported through SARI Watch mandatory surveillance, England



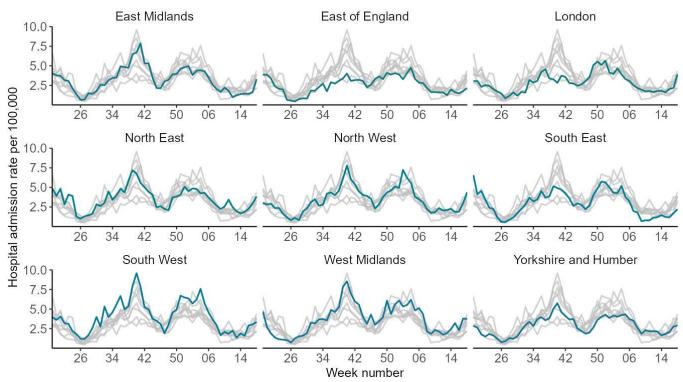
COVID-19 hospital admission rate is based on 85 NHS trusts for week 18. SARI Watch data is provisional and subject to retrospective updates.

Figure 34b. Weekly percentage of hospitalisations with COVID-19 as primary reason, reported through SARI Watch sentinel surveillance, England



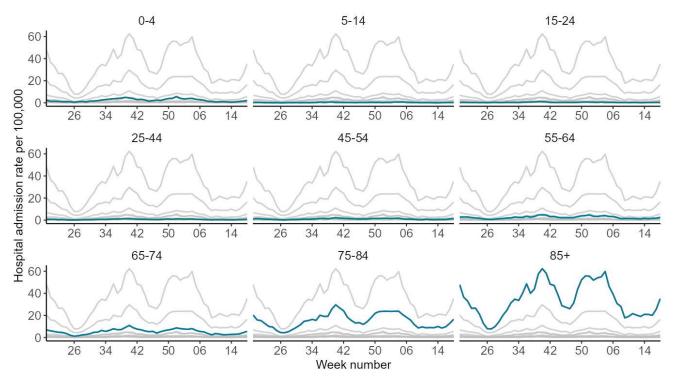
Data on proportions of hospitalisations primarily due to COVID-19 is based on returns from a smaller number of participating trusts in sentinel surveillance and may not be representative of all acute NHS trusts.

Figure 35. 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 36a. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - fixed y-axis [note 2]



See [note 2] as above.

Figure 36b. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch mandatory surveillance - adjusted y-axis

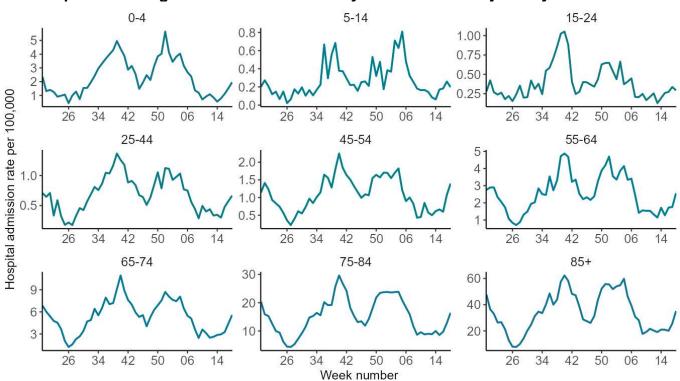
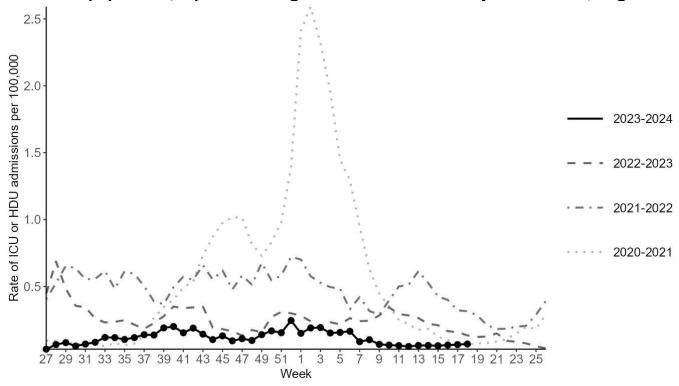
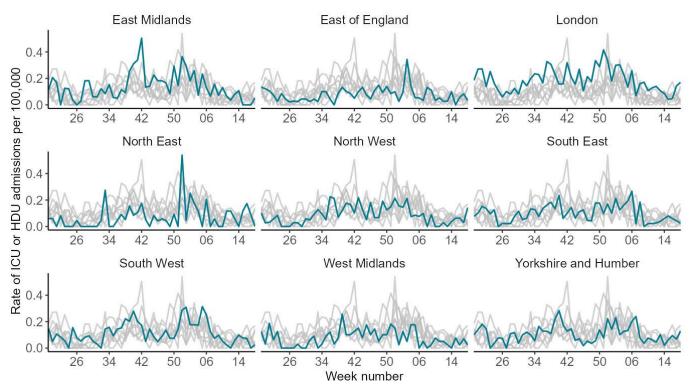


Figure 37. Weekly overall COVID-19 ICU or HDU admission rates per 100,000 trust catchment population, reported through SARI Watch mandatory surveillance, England



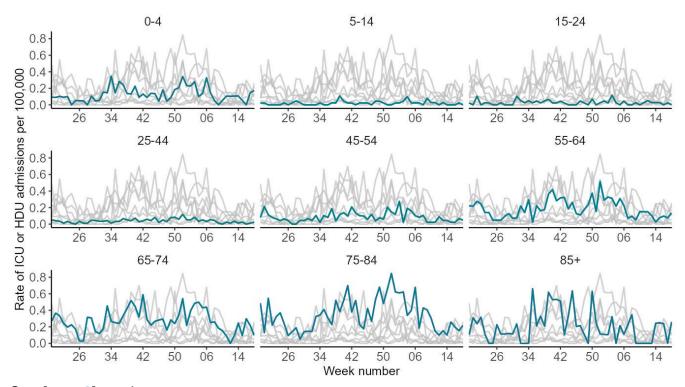
COVID-19 ICU or HDU admission rate is based on 71 NHS trusts for week 18. SARI Watch data is provisional and subject to retrospective updates.

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



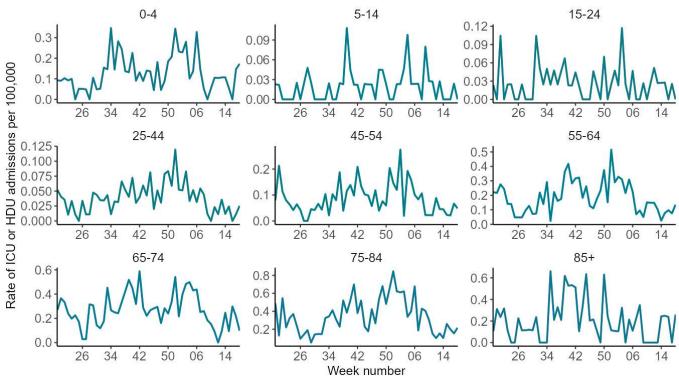
See [note 3] as above.

Figure 39a. 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]



See [note 2] as above.

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

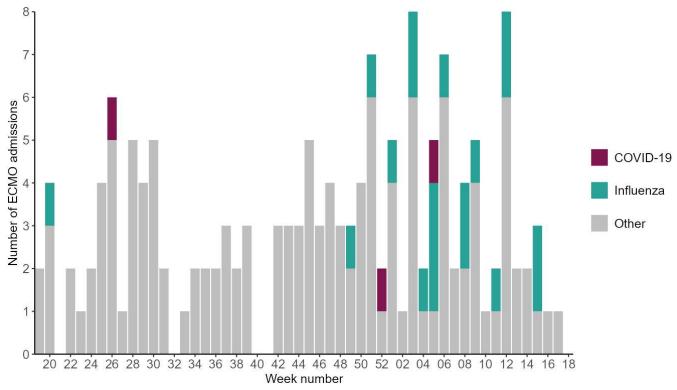


### ECMO, SARI Watch

There were no new extra corporeal membrane oxygenation (ECMO) admissions reported in week 18 from the 7 Severe Respiratory Failure (SRF) centres in the UK.

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 40. 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

Week 16 of 2024 was the last week of RSV SARI Watch surveillance for the season. Retrospective updates for data up to week 16 will be included in the supplementary datafile in the next weeks.

# **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 <a href="Excess mortality within England: post-pandemic method report">England: post-pandemic method report</a>, which uses ONS death registration data, the <a href="all-cause">all-cause</a> mortality surveillance report, which uses the European mortality monitoring (EuroMOMO) model to identify weeks with higher than expected mortality and the <a href="ONS all-cause excess mortality">ONS all-cause excess mortality report</a>.

## 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 <u>European Respiratory Virus</u> Surveillance Summary weekly update.

#### Influenza in North America

For further information on influenza in the United States of America please see the <u>Centre for 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 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 28 March 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

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.

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