



UK Health
Security
Agency

National Influenza and COVID-19 surveillance report

Week 23 report (up to week 22 data)

8 June 2023

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National Influenza and COVID-19 Report: week 23 report (up to week 22 data)

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

For additional information regarding data source please refer to [Sources of surveillance data for influenza, COVID-19 and other respiratory viruses](#)

Executive summary

This report summarises the information from the surveillance systems which are used to monitor coronavirus (COVID-19), influenza, and other 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 22 (between 29 May and 4 June 2023) and for some indicators daily data up to 6 June 2023.

Please be aware that this report has been scaled back from the week 21 report, as we move into the summer reporting period. A detailed description of the changes made can be found in the accompanying [“changes to reporting over the summer period 2023”](#) document.

Overall

In week 22, from most indicators, influenza activity remained stable and COVID-19 activity decreased.

COVID-19

COVID-19 case rates through Pillar 1 decreased in all regions and ethnic groups in week 22. Through Respiratory Datamart, SARS-CoV-2 positivity decreased to 5.0% compared to the previous week.

The overall number of reported COVID-19 confirmed outbreaks decreased compared to the previous week. Five COVID-19 confirmed outbreaks were reported in week 22 in England.

Overall, COVID-19 hospitalisations and ICU admissions decreased in week 22 compared to the previous week. Hospitalisations were highest in the 85 years and over age group. Through syndromic surveillance indicators, emergency department attendances for covid-like illness decreased nationally.

Influenza

In week 22, influenza remained low and stable at 0.4% compared to the previous week, with highest positivity seen in the 15 to 44 years old age group at 1.4%.

Through primary care surveillance, the influenza-like-illness consultations indicator remained stable in week 22 compared to the previous week and was within the baseline activity level range.

No influenza confirmed outbreaks were reported in week 22 in England.

Influenza ICU admissions remained low and stable in week 22 and remained within the baseline range of activity.

Emergency department attendances for influenza-like illness remained stable nationally.

RSV

The overall positivity for RSV remained low at 0.3%, with the highest positivity in those aged under 5 years old at 1.2%. Emergency department attendances for acute bronchiolitis decreased nationally.

Other viruses

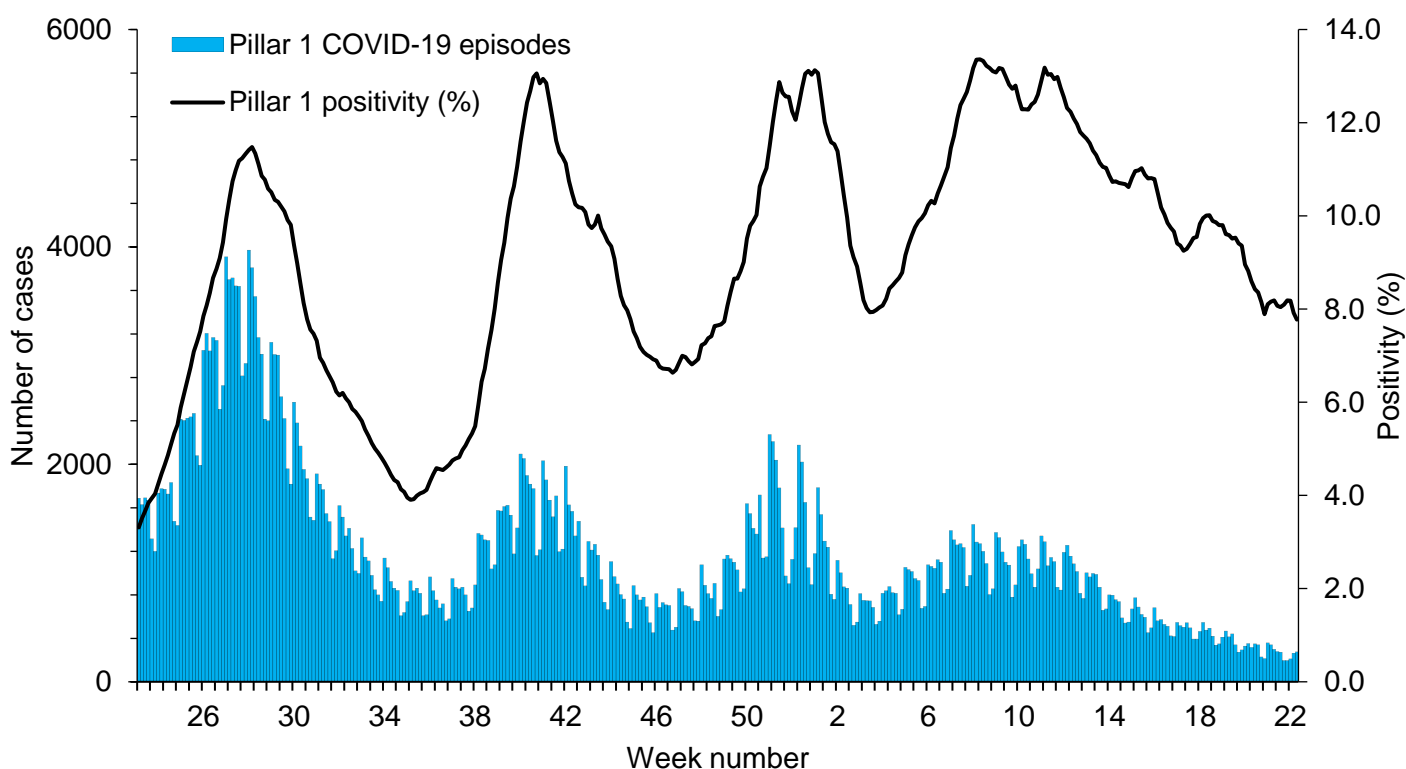
Adenovirus positivity remained low at 1.9%, with the highest positivity in the 5 to 14 year olds at 7.8%. Human metapneumovirus (hMPV) positivity remained low at 1.3%, with the highest positivity in the 5 to 14 year olds at 2.5%. Parainfluenza positivity decreased slightly to 4.5%, with the highest positivity in those aged under 5 years old at 9.0%. Rhinovirus positivity increased slightly to 13.6% overall, with the highest positivity in those aged under 5 years old at 31.2%.

Laboratory surveillance

Confirmed COVID-19 cases (England)

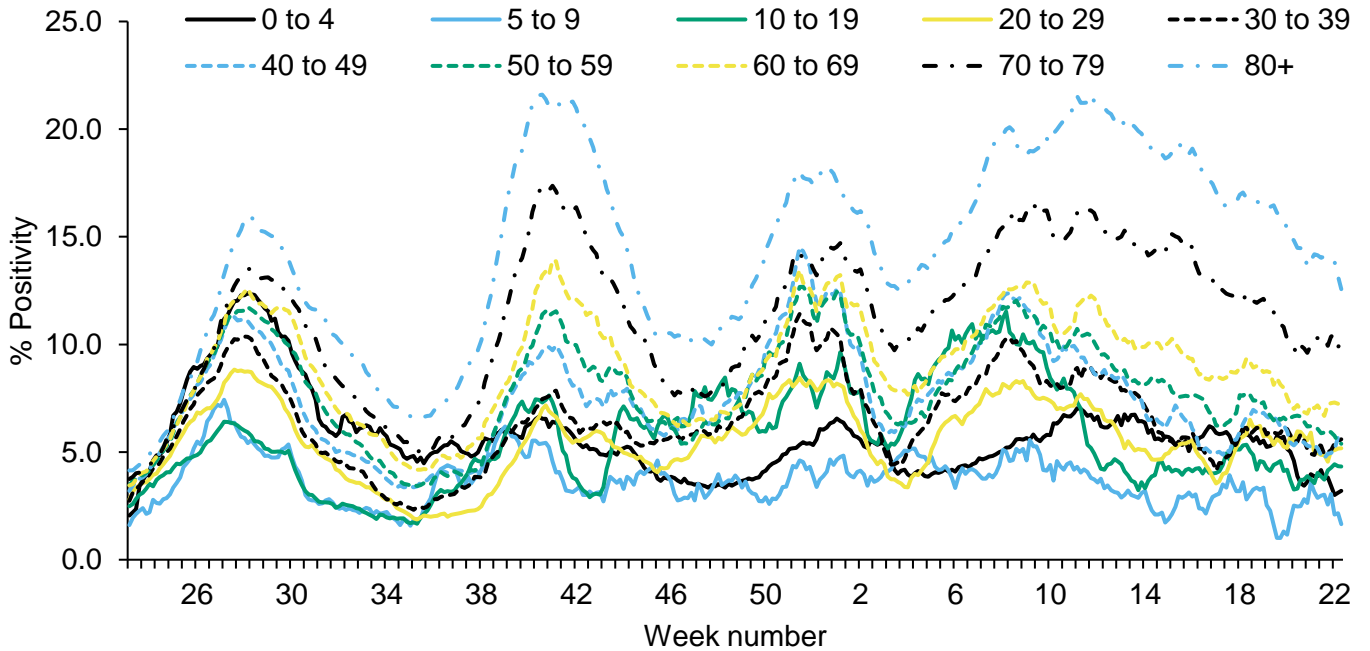
As of 9am on 4 June 2023, a total of 2,085,573 episodes have been confirmed for COVID-19 in England under Pillar 1, and 18,751,177 episodes under Pillar 2, since the beginning of the pandemic. COVID-19 case rates through Pillar 1 decreased in all regions and ethnic groups in week 22.

Figure 1: Confirmed COVID-19 episodes tested under Pillar 1, based on sample day with overall seven-day rolling average PCR positivity for Pillar 1 (%)



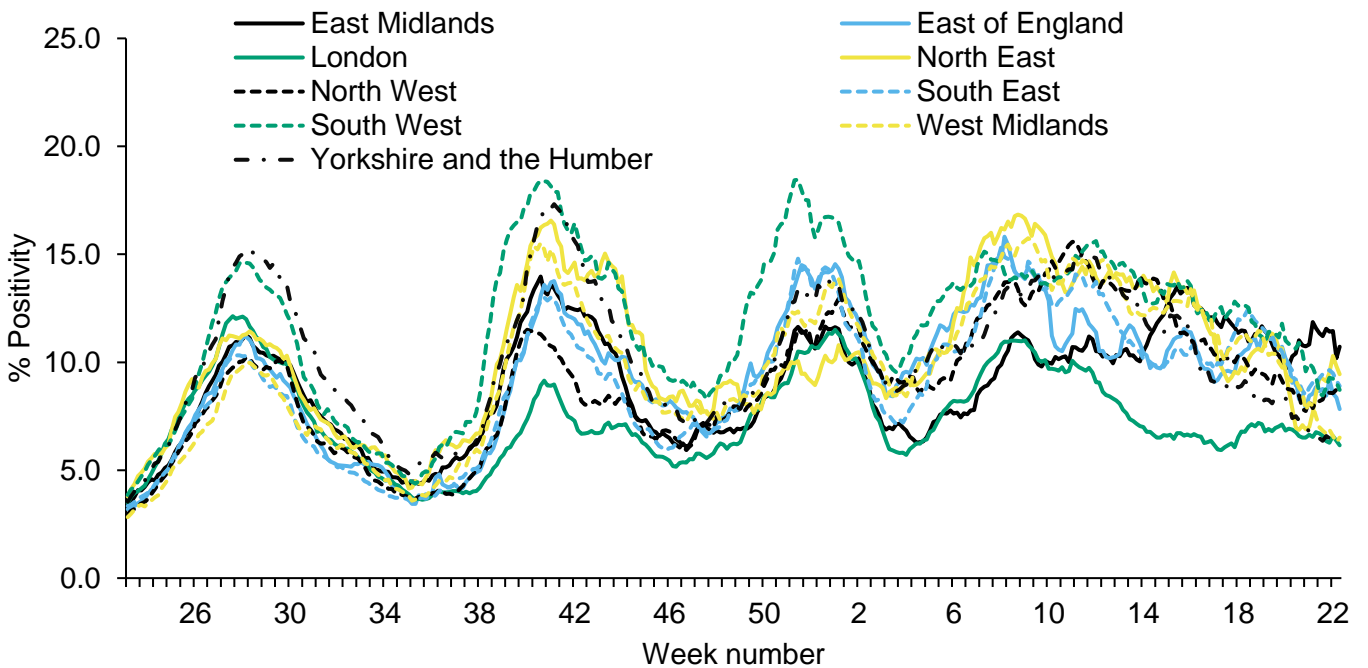
Age

Figure 2: Seven-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by age group



Geography

Figure 3: Seven-day rolling average PCR positivity (%) of confirmed COVID-19 cases tested under Pillar 1 by UKHSA centres



Respiratory DataMart system (England)

In week 22, data is based on reporting from 12 out of the 16 sentinel laboratories.

In week 22, 5,891 respiratory specimens reported through the Respiratory DataMart System were tested for SARS-CoV-2. 293 samples were positive for SARS-CoV-2 with an overall positivity of 5.0%, which decreased compared to the previous week. The highest positivity was seen in the 65 years old and over at 6.7%.

In week 22, 3,235 respiratory specimens reported through the Respiratory DataMart System were tested for influenza. 14 samples tested positive for influenza; one influenza A(H1N1), two influenza A(H3N2), eight influenza A(not subtyped) and three influenza B (Figure 4). Overall, influenza positivity remained low at 0.4% in week 22 compared to the previous week, with the highest positivity seen in the 15 to 44 years old age group at 1.4%.

Adenovirus positivity remained low at 1.9%, with the highest positivity in the 5 to 14 year olds at 7.8%.

Human metapneumovirus (hMPV) positivity remained low at 1.3%, with the highest positivity in the 5 to 14 year olds at 2.5%.

Parainfluenza positivity decreased slightly to 4.5%, with the highest positivity in those aged under 5 years old at 9.0%.

Rhinovirus positivity increased slightly to 13.6% overall, with the highest positivity in those aged under 5 years old at 31.2%.

The overall positivity for RSV remained low at 0.3%, with the highest positivity in those aged under 5 years old at 1.2%.

Figure 4: Respiratory DataMart samples positive for influenza and weekly positivity (%) for influenza, England

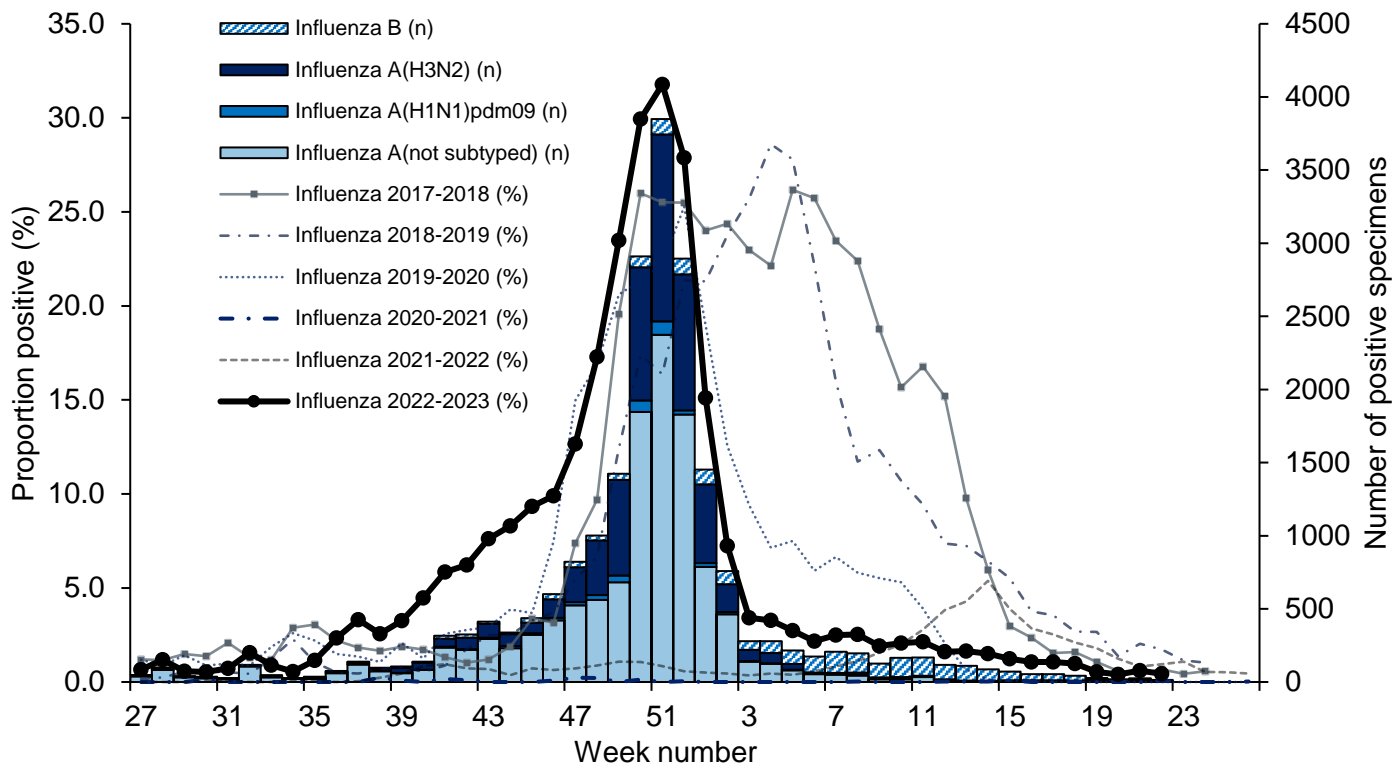
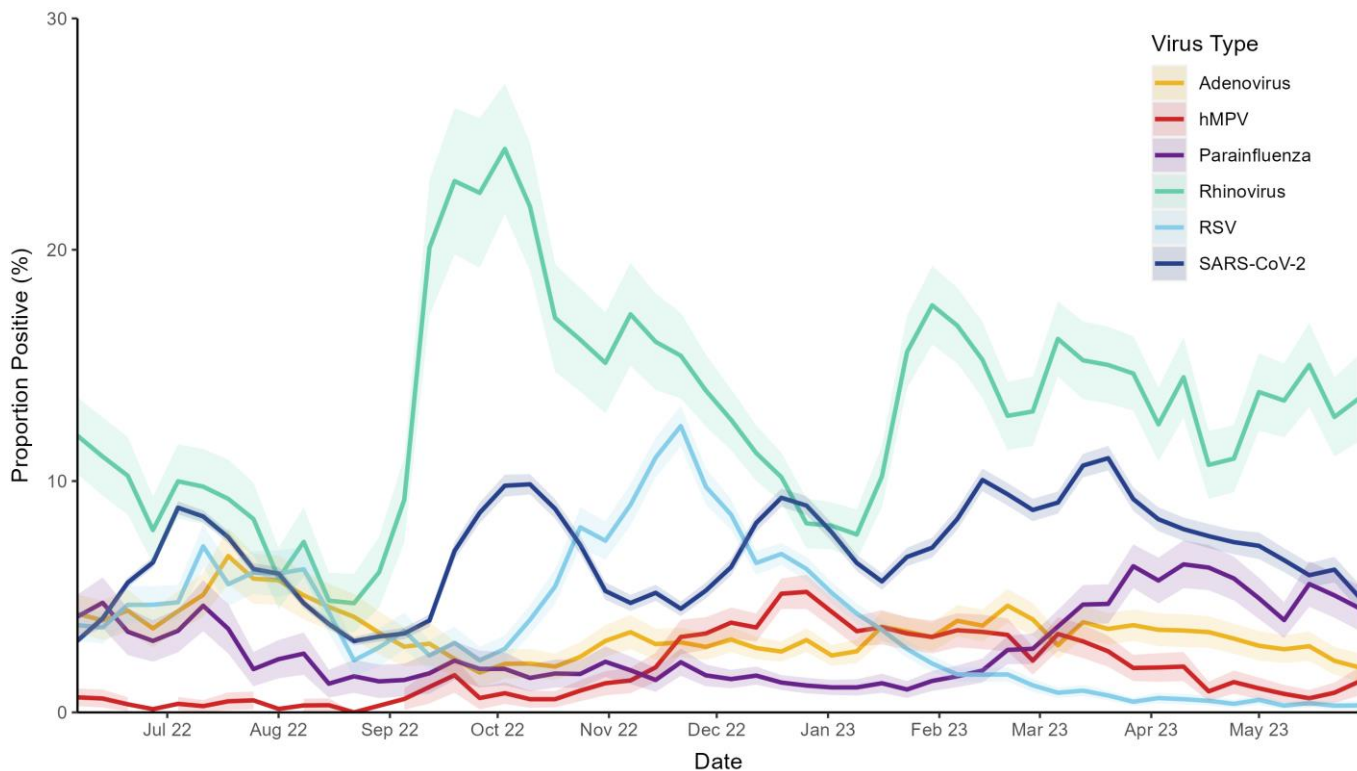


Figure 5: Respiratory DataMart weekly positivity (%) for other viruses, England



Community surveillance

Acute respiratory infection incidents

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

43 new ARI incidents have been reported in week 22 in the UK:

- 30 incidents were from care homes, where six had at least one linked case that tested positive for SARS-CoV-2
- Six incidents were from hospitals, where four had at least one linked case that tested positive for SARS-CoV-2
- One incident was from a prison, where no test result was available
- One incident was from an educational setting, where no test result was available
- Five incidents were from other settings, where one had at least one linked case that tested positive for SARS-CoV-2

Figure 6: Number of acute respiratory infection (ARI) incidents by setting, England

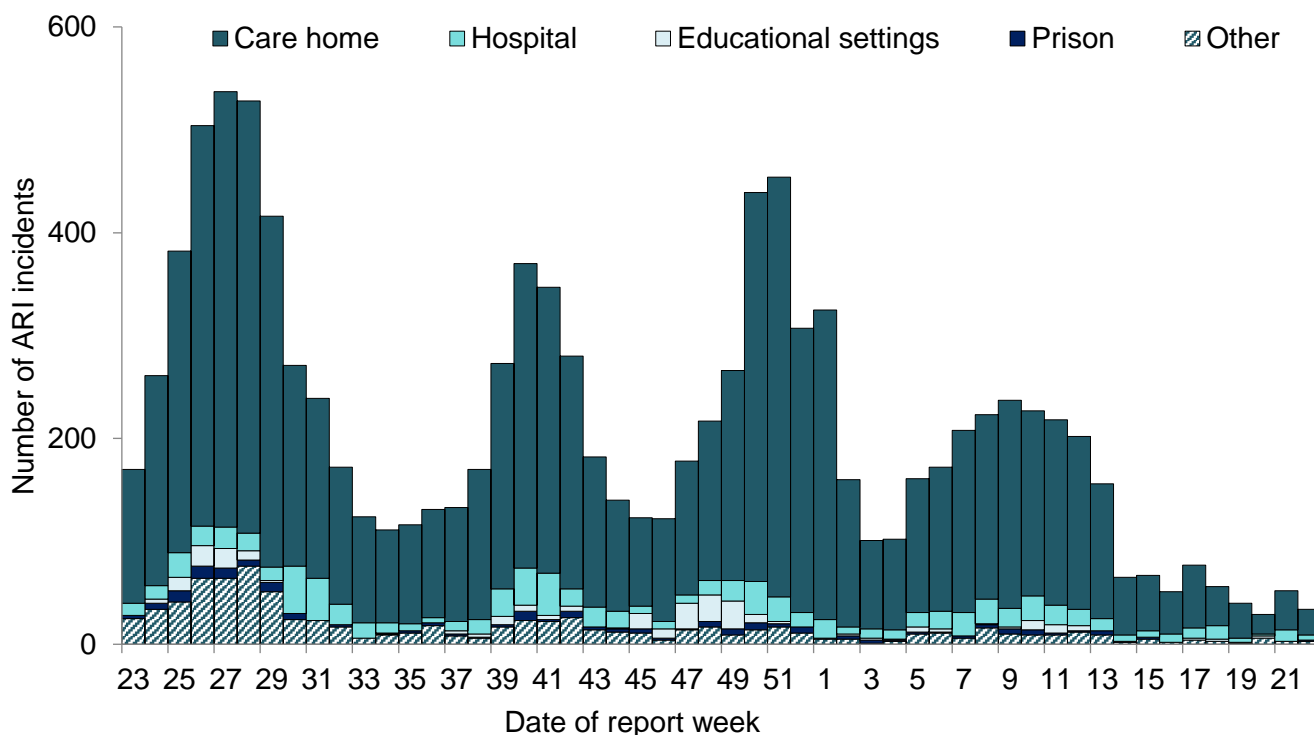
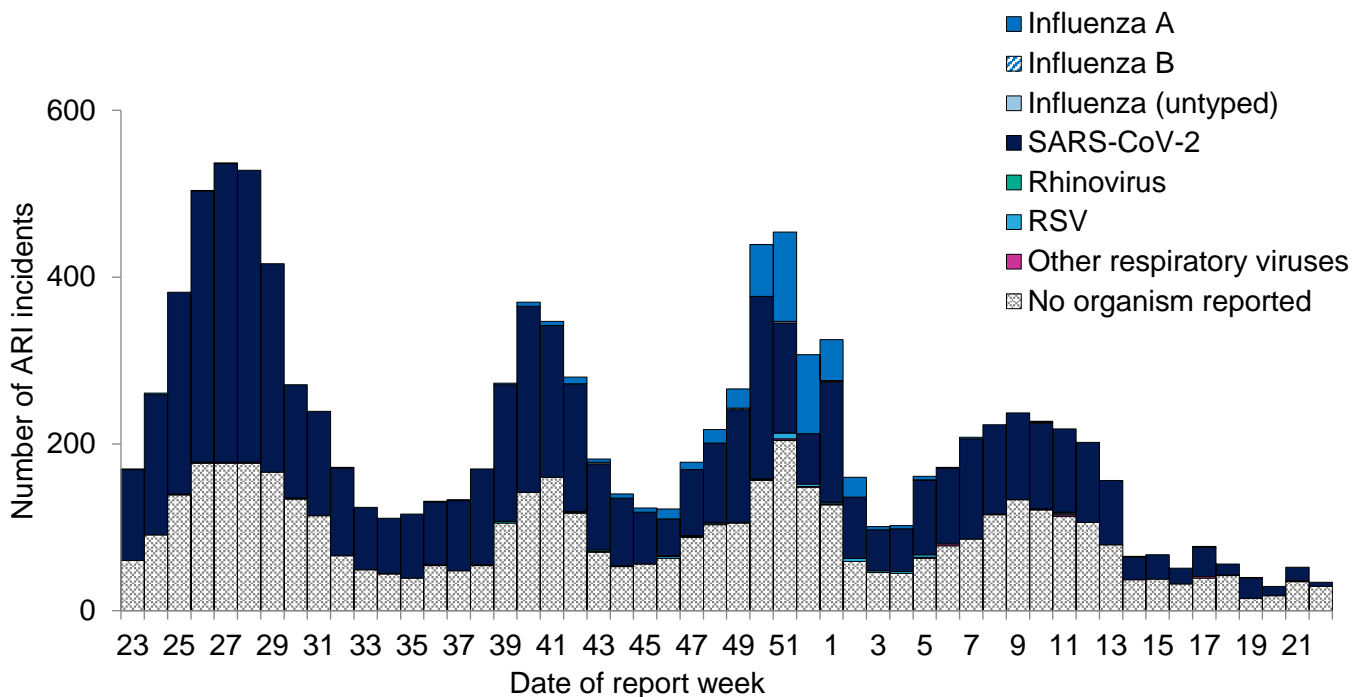


Figure 7: Number of acute respiratory infection (ARI) incidents in all settings by virus type, England



Syndromic surveillance

During week 22, NHS 111 calls for cold or flu and cough remained stable. GP in hours consultation rates for influenza-like illness were stable and similar to baseline levels. Emergency department attendances (ED) for covid-19-like illness, acute respiratory infection and acute bronchiolitis decreased nationally, while attendances for influenza-like illness remained stable nationally.

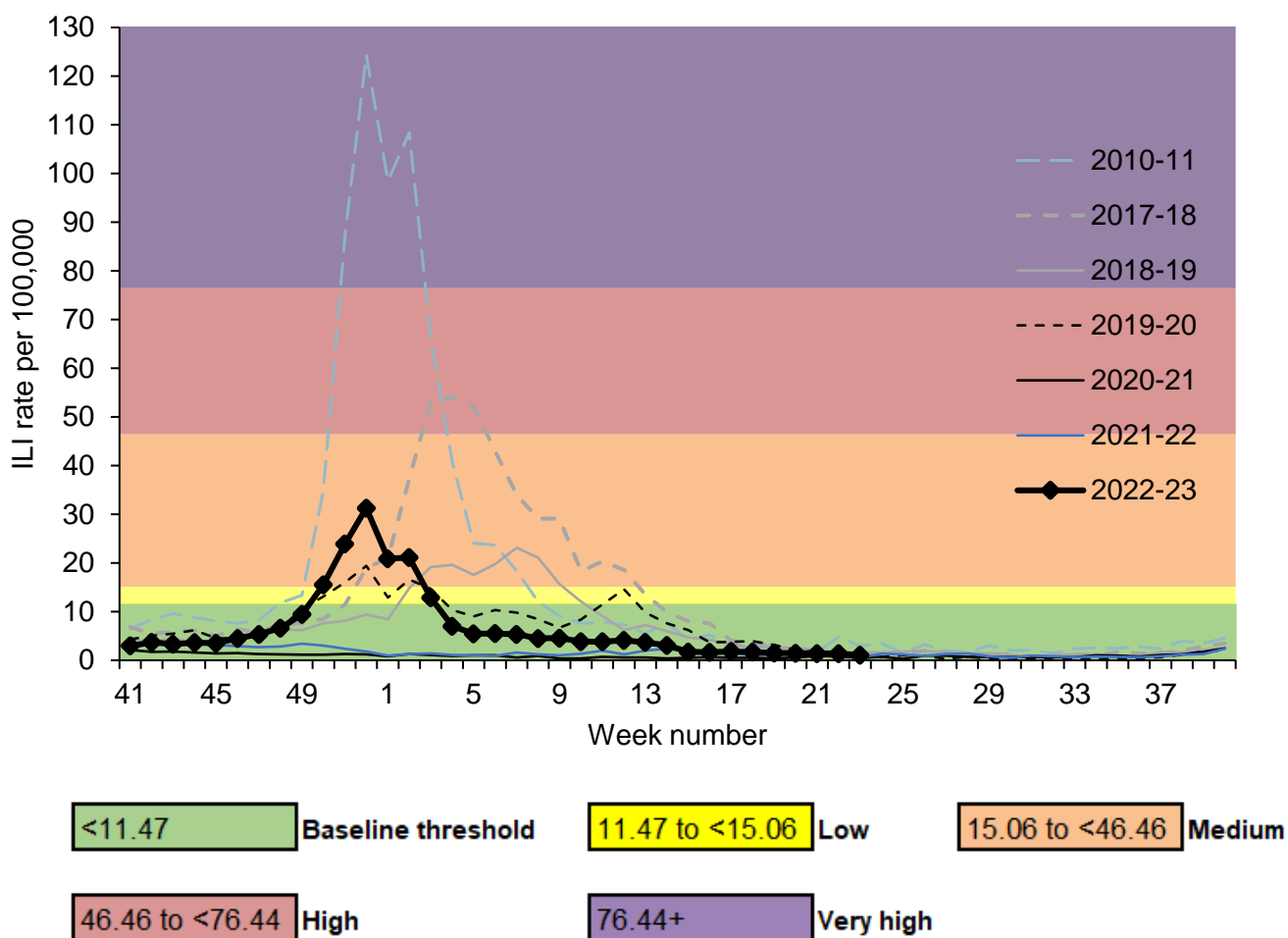
For further information on syndromic surveillance please see the [Syndromic Surveillance: weekly summaries](#).

Primary care surveillance

RCGP Clinical Indicators (England)

The weekly ILI consultation rate through the RCGP surveillance remained stable at 1.1 per 100,000 registered population in participating GP practices in week 22 and was within baseline activity levels (less than 11.47 per 100,000) (Figure 8).

Figure 8: RCGP influenza-like illness (ILI) consultation rates, all ages, England

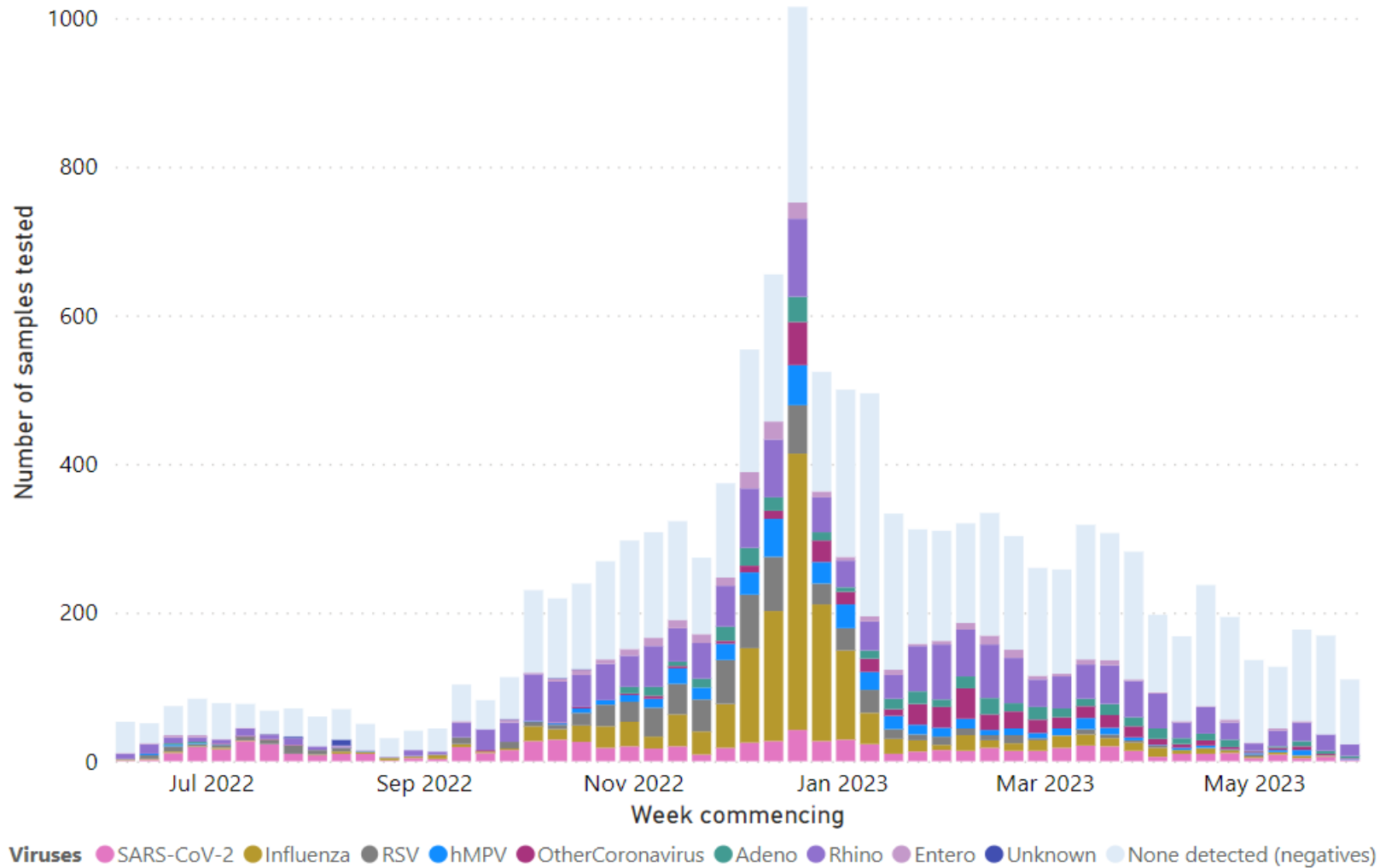


RCGP sentinel swabbing scheme in England

Based on the date samples were received in the reference laboratory, in week 22 2023 (week commencing 29 May 2023) 109 samples were tested through the GP sentinel swabbing scheme in England, of which 23 samples tested positive (Figure 9). Among all positive samples, 69.5% were for rhinovirus, 13.0% for adenovirus, 8.7% for SARS-CoV-2, 4.4% for hMPV and 4.4% for seasonal coronaviruses (Figure 10).

Based on the date samples were taken, influenza, SARS-CoV-2 and RSV positivity decreased in week 22 compared to the previous week (Figure 11). Data for the most recent week will be updated retrospectively. Positivity (%) is not calculated when the total number tested based on sample date is less than 20 (Figure 11).

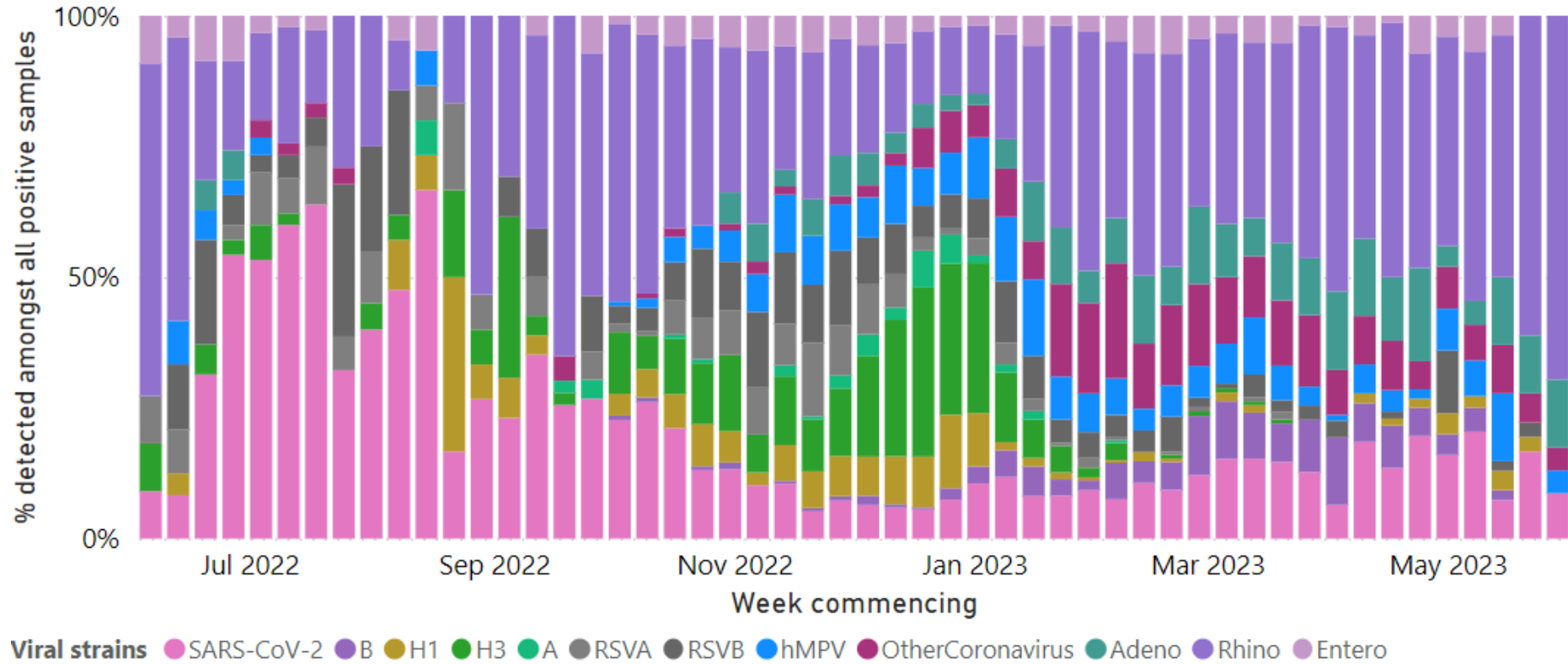
Figure 9: Number of samples tested for SARS-CoV-2, influenza, and other respiratory viruses in England by week, GP sentinel swabbing



Unknown category corresponds to samples with no result yet.

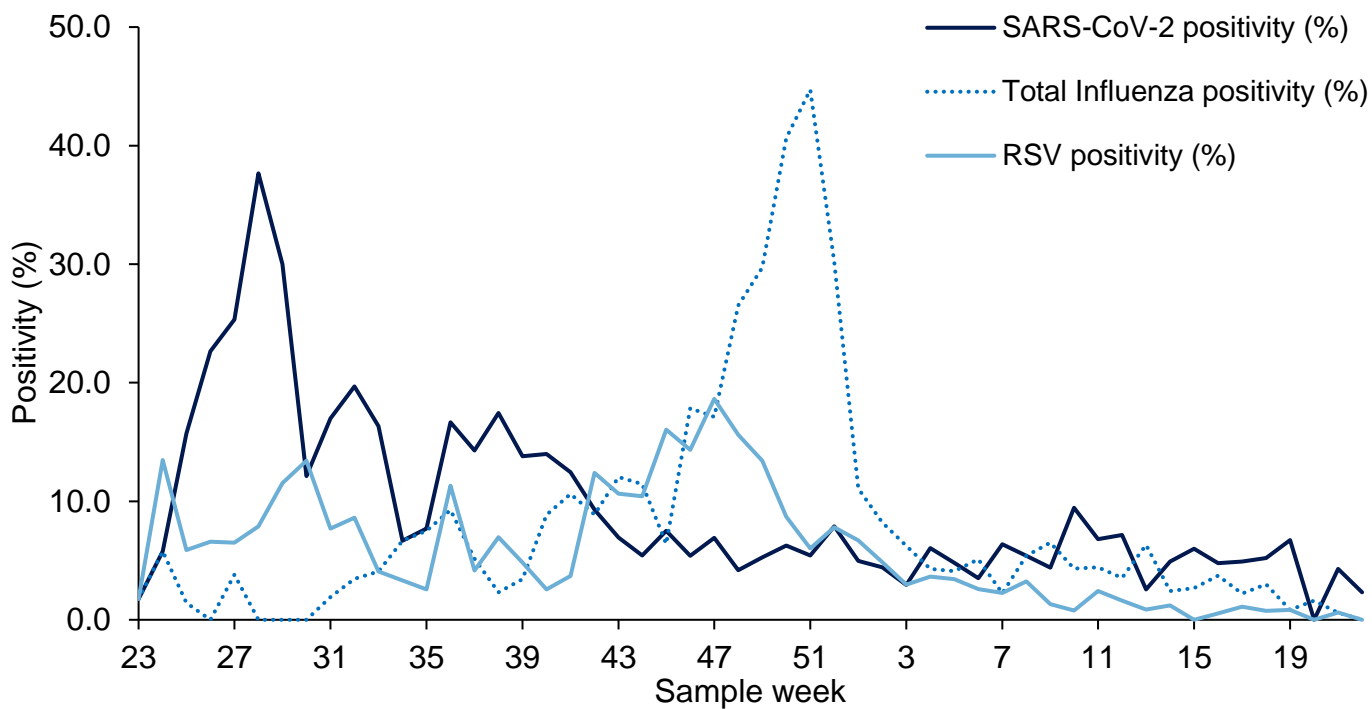
Source: RCGP Research and Surveillance Centre sentinel primary care practices ([RCGP Virology Dashboard](#))

Figure 10: Proportion of detections of SARS-CoV-2, influenza, and other respiratory viral strains amongst virologically positive respiratory surveillance samples in England by week, GP sentinel swabbing scheme



Source: RCGP Research and Surveillance Centre sentinel primary care practices ([RCGP Virology Dashboard](#))

Figure 11: Weekly positivity (%) for COVID-19, Influenza and RSV in England by week, GP sentinel swabbing



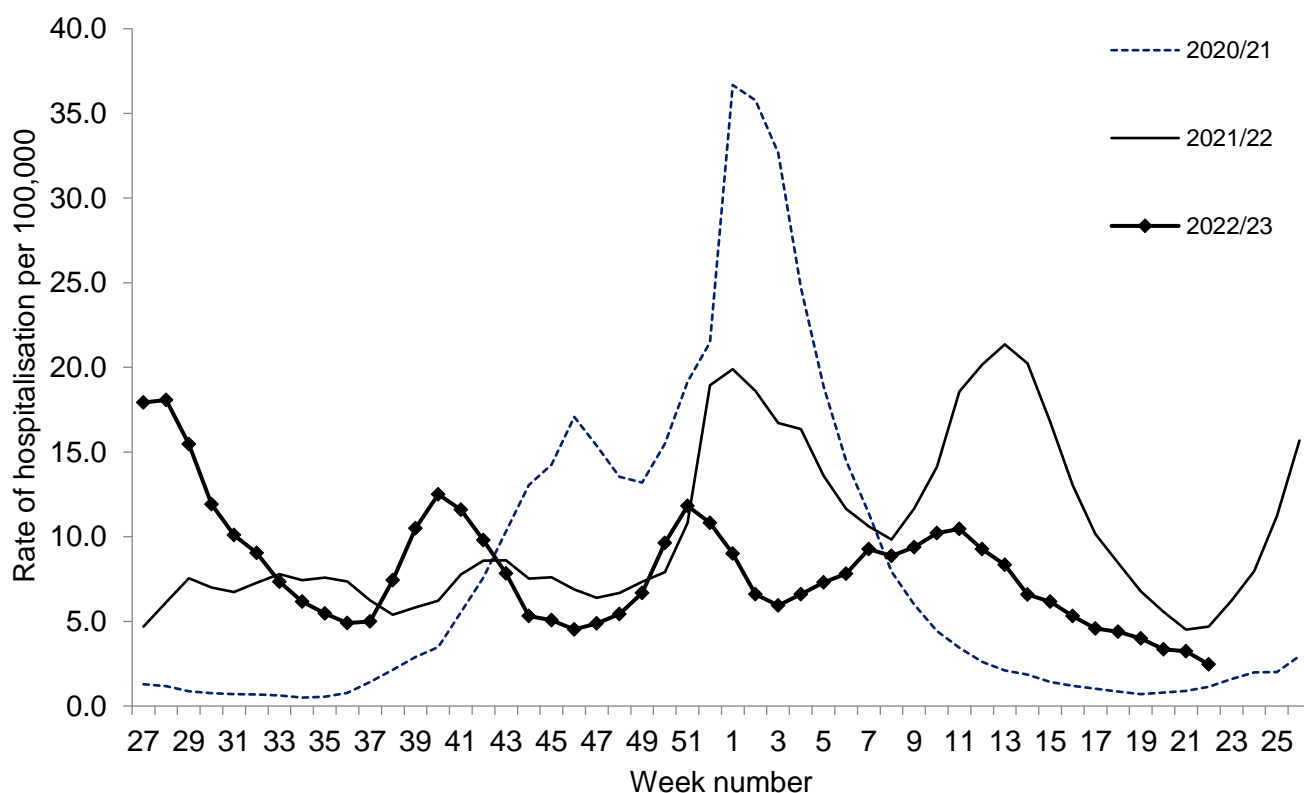
Secondary care surveillance

Hospitalisations, SARI Watch

In week 22 (ending 4 June 2023), the overall weekly hospital admission rate for COVID-19 decreased to 2.46 per 100,000 compared to 3.23 per 100,000 in the previous week, the lowest rate in 2023.

By UKHSA centre, the highest hospital admission rate for COVID-19 was observed in London. By age group, the highest hospital admission rate for confirmed COVID-19 continues to be in those aged 85 years old and over.

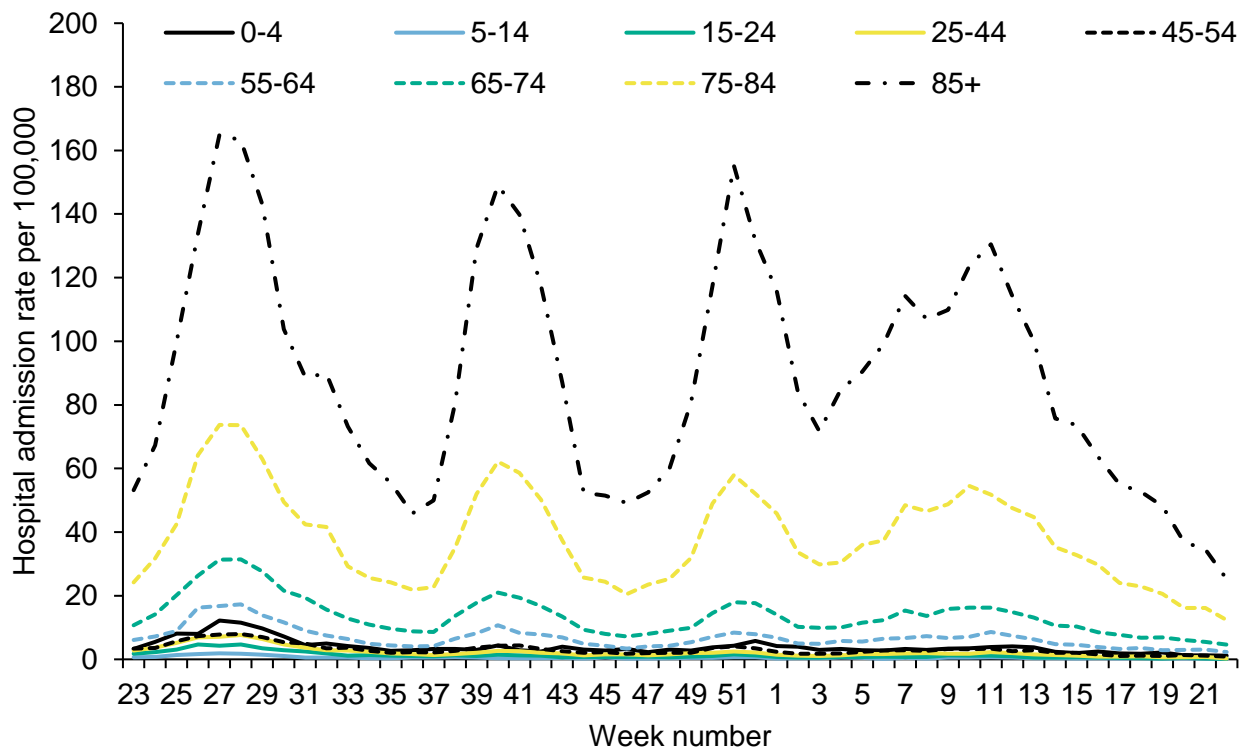
Figure 12: Weekly overall COVID-19 hospital admission rates per 100,000 trust catchment population, SARI Watch, England



* COVID-19 hospital admission rate based on 83 NHS trusts for week 22

* SARI Watch data is provisional and subject to retrospective updates

Figure 13: Weekly hospital admission rate by age group for new COVID-19 positive cases

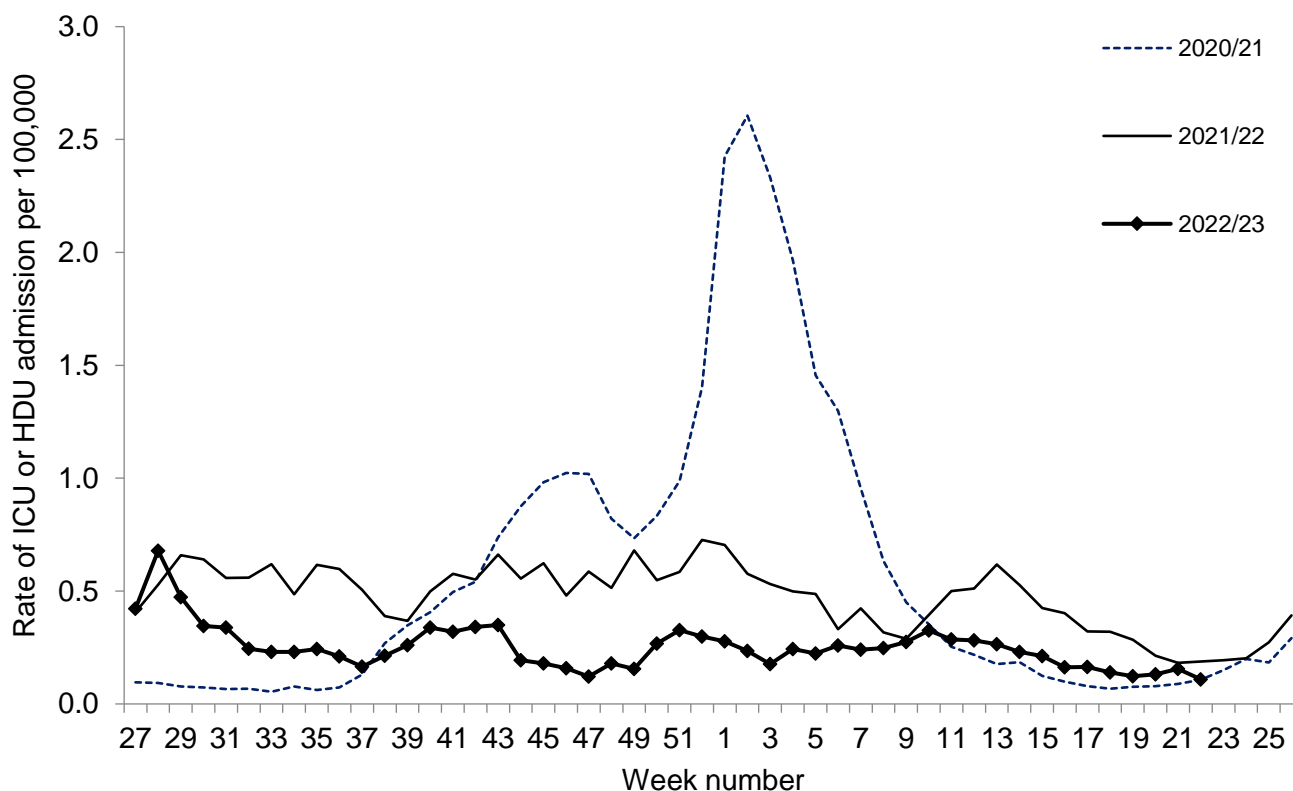


ICU or HDU admissions, SARI Watch

In week 22 (ending 4 June 2023), the overall weekly ICU or HDU admission rate for COVID-19 remained very low, decreasing slightly to 0.11 per 100,000, compared to 0.16 per 100,000 in the previous week. Note that ICU or HDU admissions rates may represent a lag from admission to hospital to an ICU or HDU ward.

In week 22, the overall ICU or HDU rate for influenza remained stable at 0.01 per 100,000 compared to 0.01 per 100,000 in the previous week. The rate in the latest week remained at baseline activity levels. There were three new case reports of an ICU or HDU admission for influenza in week 22 (one influenza A(H3N2), one influenza A(H1N1)pdm09 and one influenza A(not subtyped)).

Figure 14: Weekly overall COVID-19 ICU or HDU admission rates per 100,000 trust catchment population, SARI Watch, England



* COVID-19 ICU or HDU admission rate based on 76 NHS trusts for week 22

* SARI Watch data is provisional and subject to retrospective updates

Figure 15: Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, SARI Watch, England

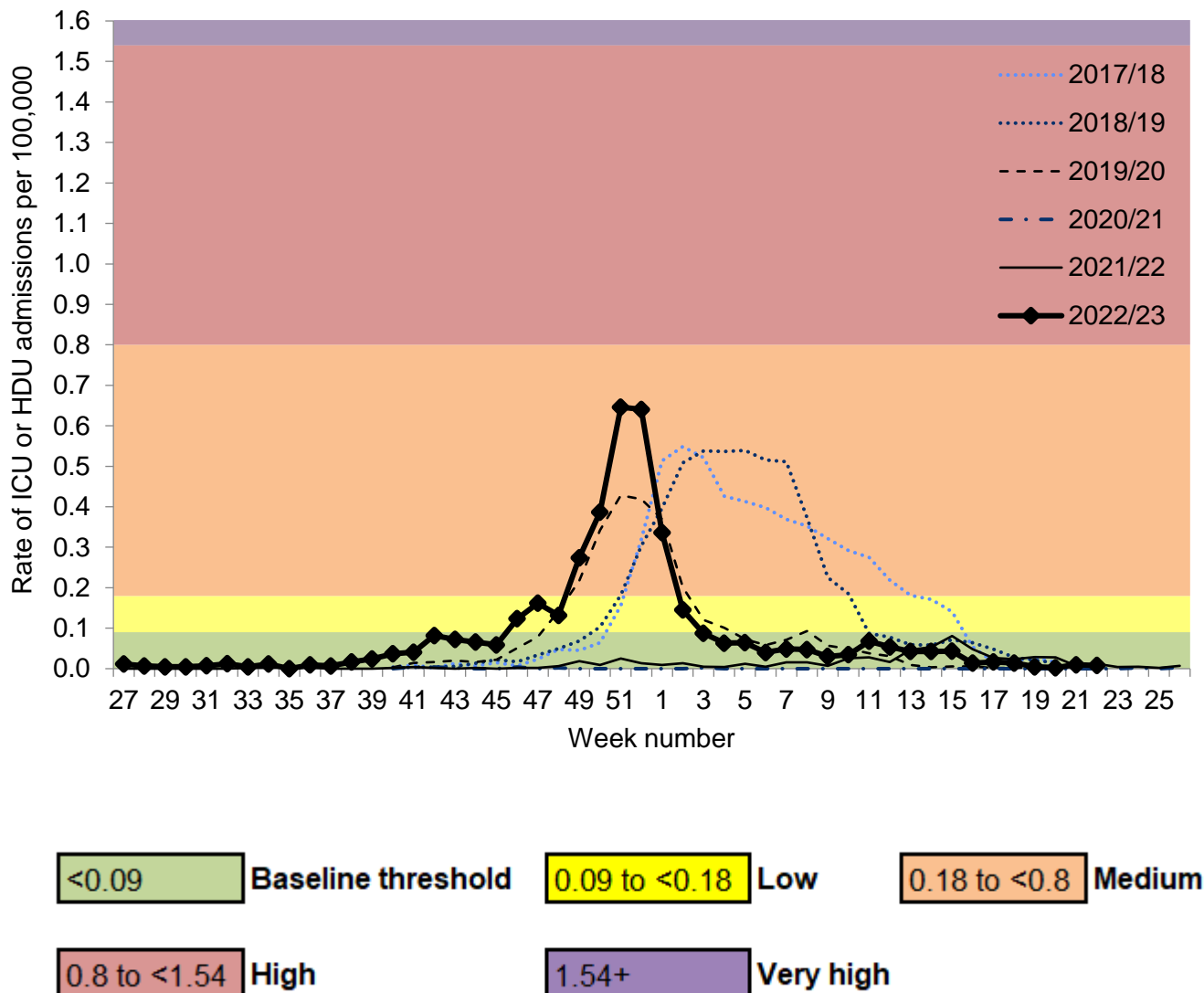
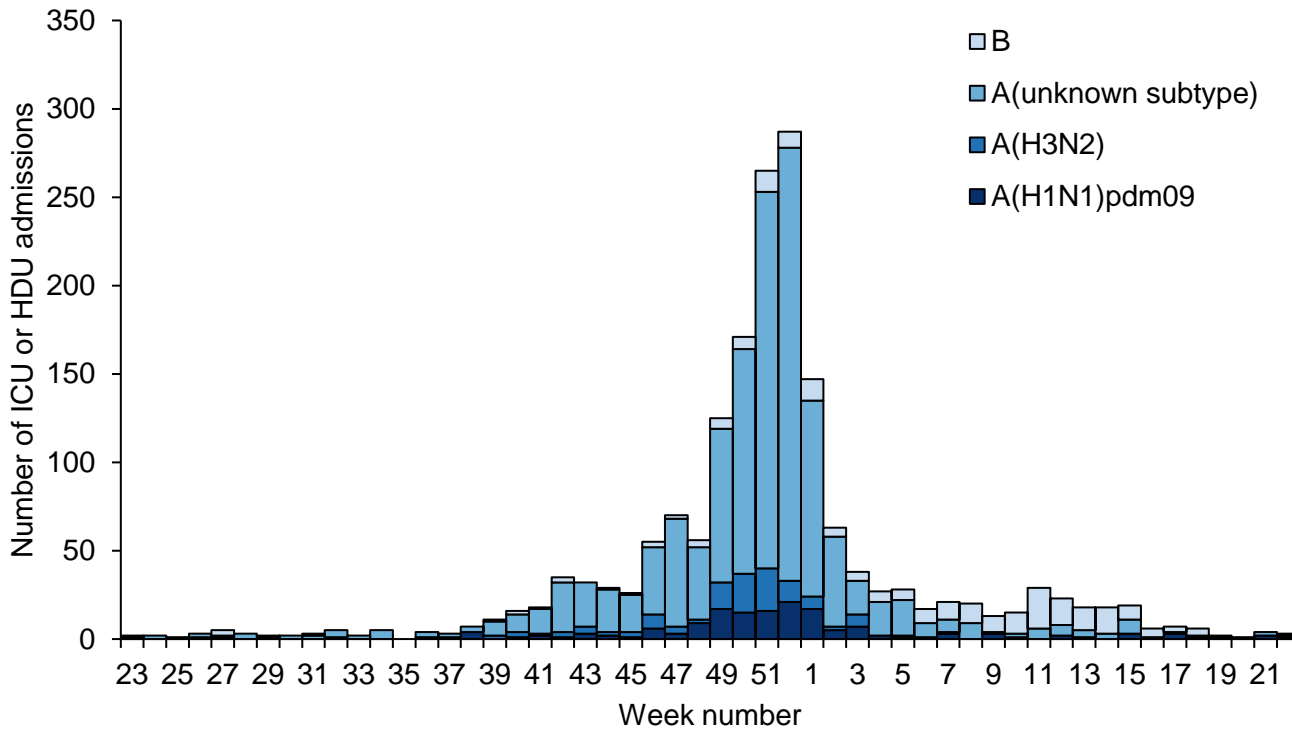


Figure 16: Weekly influenza ICU or HDU admissions by influenza type, SARI Watch, England



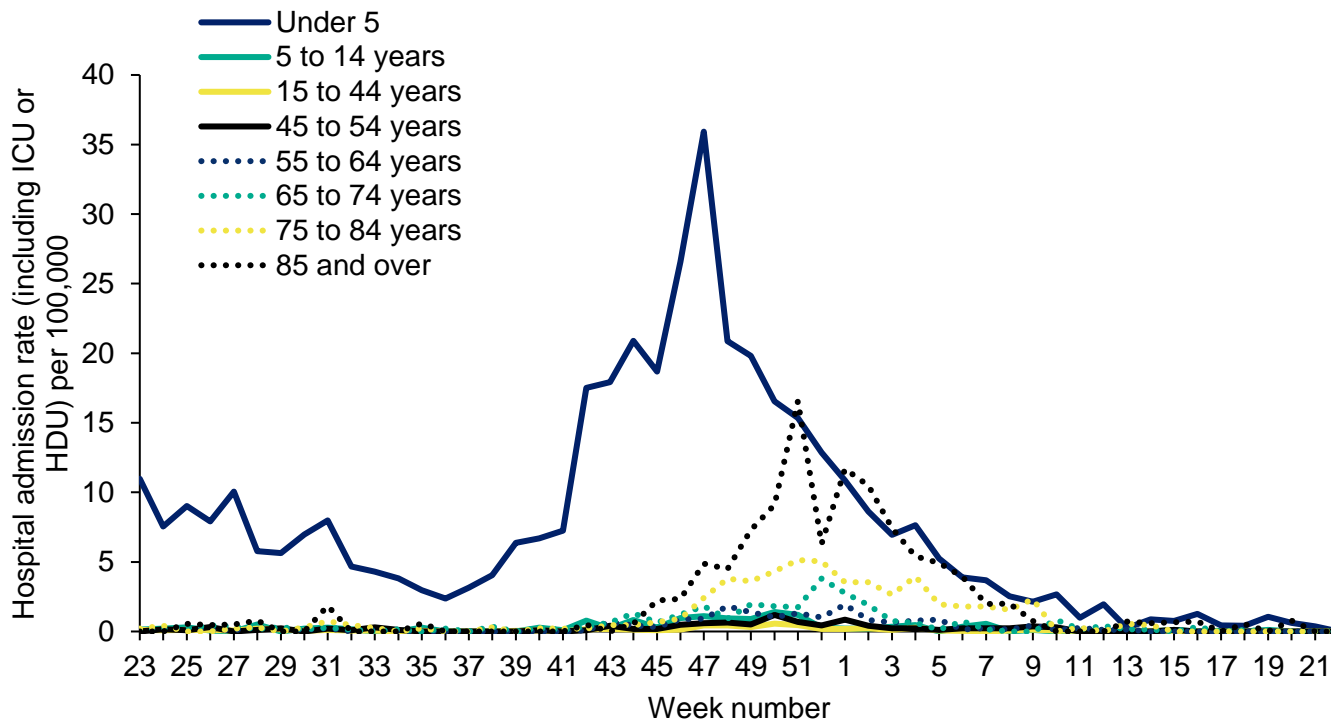
ECMO, SARI Watch

There was one new ECMO admission reported in week 22 from the 7 Severe Respiratory Failure (SRF) centres in the UK. The admission was due to a non-viral acute respiratory infection.

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.

Figure 17: Weekly hospitalisation (including ICU or HDU) admission rates by age group for new RSV cases reported through SARI Watch, England



* SARI Watch data is provisional

* Please note that rates are based on the number of hospitalised cases divided by the Trust catchment population, multiplied by 100,000

Mortality surveillance

COVID-19 deaths

For further information on COVID-19 related deaths in England please see the [COVID-19 dashboard for death](#).

Daily excess all-cause mortality (England)

For further information on excess all-cause mortality in England please see the [Fingertips excess mortality in England report](#), which uses ONS death registration data and the [all-cause mortality surveillance report](#), which uses the EuroMOMO model to measure excess deaths.

Microbiological surveillance

SARS-CoV-2 variants

Due to a technical issue, there is no update to the SARS-CoV-2 variants prevalence data (Figure 18). The SARS-CoV-2 variants update will be available in the next report.

UKHSA conducts genomic surveillance of SARS-CoV-2 variants.

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

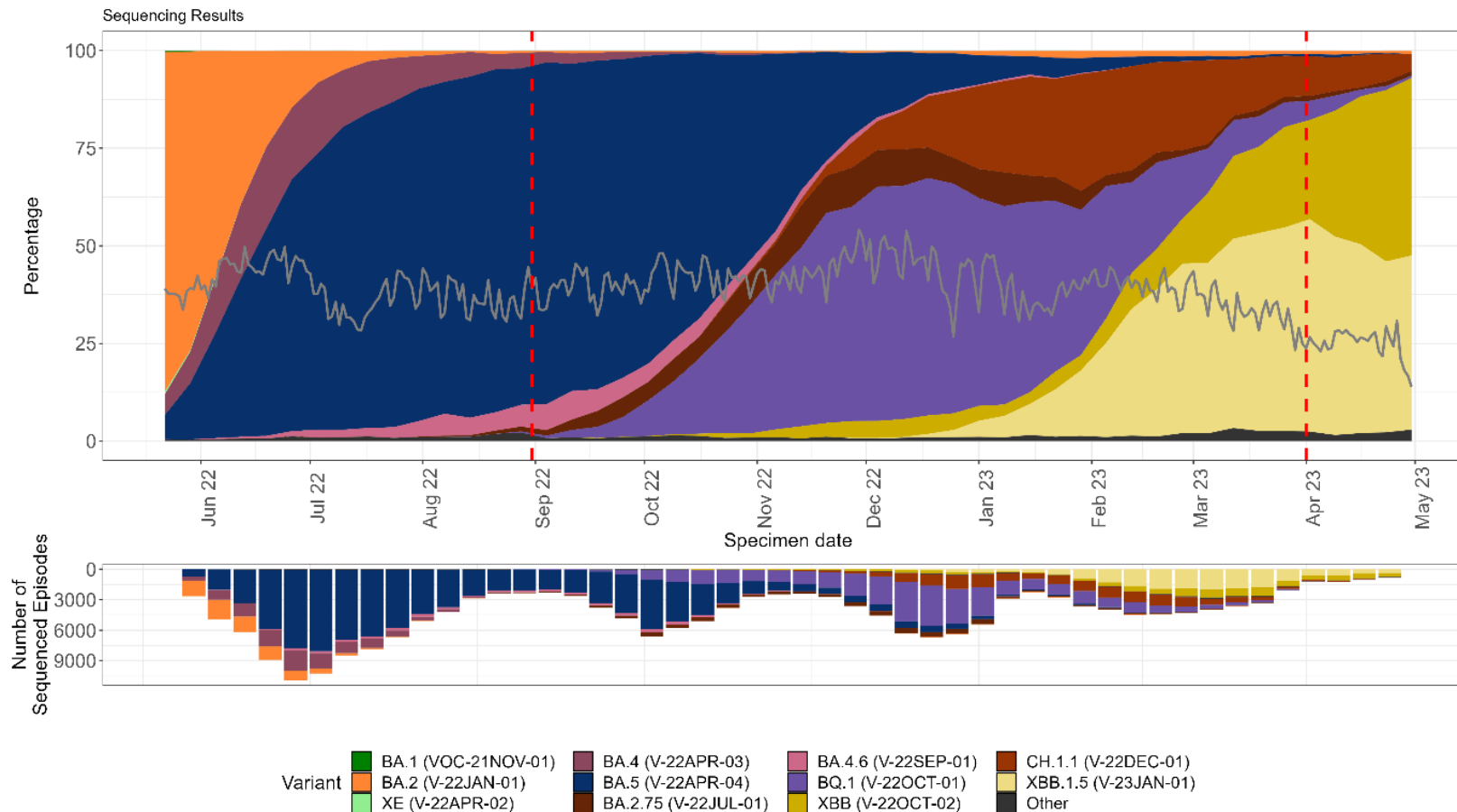
Detailed surveillance of particular variants of concerns can be found in recent [technical briefings](#).

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

The prevalence of different UKHSA-designated variants amongst sequenced episodes is presented in Figure 18.

To account for sequencing delays, we report the proportion of variants from sequenced episodes between 24 April 2023 and 30 April 2023. Of those sequenced in this period, 44.6% were classified as XBB.1.5 (V-23JAN-01), 45.4% as XBB (V-22OCT-02), 4.3% as CH.1.1 (V-22DEC-01), 0.6% as BQ.1 (V-22OCT-01), 1.2% as BA.2.75 (V-22JUL-01), 0.9% as BA.2 (V-22JAN-01) and 2.9% as Other.

Figure 18: Prevalence of SARS-CoV-2 variants amongst available sequences episodes for England from 16 May 2022 up to 30 April 2023



The grey line indicates proportion of cases sequenced.

The vertical dashed lines (red) denote changes in policies:

- Line 1: End of August 2022 denotes the change in asymptomatic testing
- Line 2: April 2023 denotes changes in PCR testing in social care and hospital settings

Note: Recombinants such as XD, are not specified but are largely within the 'Other' group currently as numbers are too small.

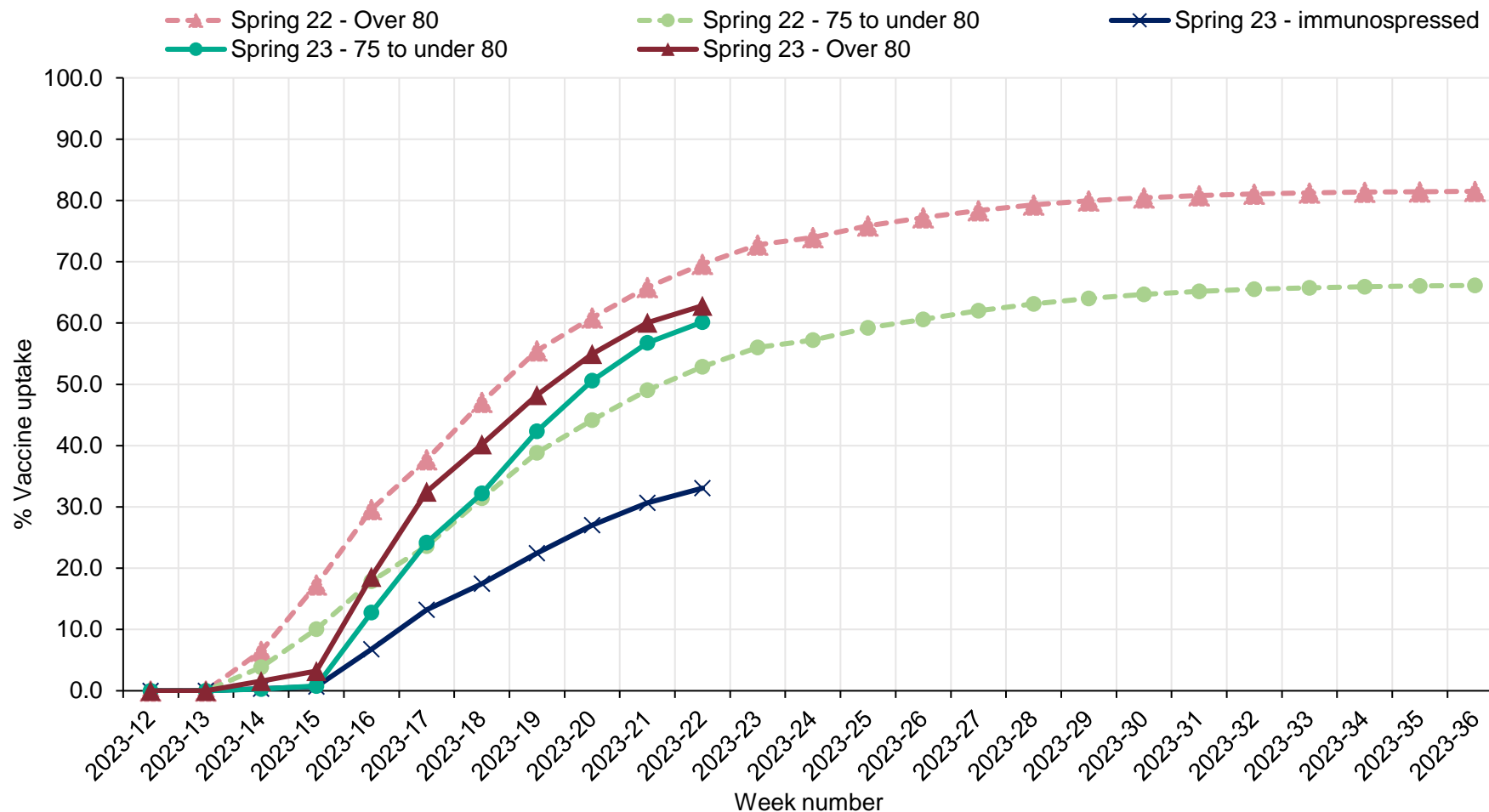
COVID-19 vaccination

COVID-19 vaccine uptake in England

By the end of week 22 2023 (week ending 4 June 2023), 61.6% (3,332,282 out of 5,407,023) of all people aged over 75 years old who are living and resident in England had been vaccinated with a Spring 2023 booster dose since 3 April 2023 (Figure 19).

By the end of week 22 2023 (week ending 4 June 2023), 33.1% (724,541 out of 2,191,442) of all people aged 5 years and over who are immunosuppressed and living and resident in England had been vaccinated with a Spring 2023 booster dose since 3 April 2023 (Figure 19).

Figure 19: Cumulative weekly COVID-19 vaccine uptake in those who are living and resident in England vaccinated with a Spring 2023 booster since 3 April 2023*



*Please note that this graph shows data for the Spring 2022 campaign and does not correspond to the date axis but is aligned to the current Spring 2023 campaign to allow comparison of both.

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

Updated 29 May 2023 (based on data up to 14 May 2023) ([WHO website](#)).

Globally, influenza detections decreased further due to a decline in detections in the northern hemisphere, while some countries in the southern hemisphere reported an increase in influenza detections in recent weeks.

In the countries of North America, most indicators of influenza activity were at levels typically observed between influenza seasons. Influenza B viruses predominated in Canada and the United States of America (USA).

In Europe, overall influenza detections decreased and influenza positivity from sentinel sites decreased to 4%, below the epidemic threshold of 10% at the regional level. All countries reported low or below baseline intensity. The number of countries reporting widespread activity decreased to four out of 36. Overall, influenza B viruses predominated in both sentinel and non-sentinel surveillance as all subregions experienced a wave of influenza B activity after an initial influenza A wave. Only four countries (Germany, Poland, Slovakia and Slovenia) reported influenza positivity above 10% in sentinel primary care. Influenza detections were low in all reporting countries.

In Central Asia, no influenza detections were reported this period despite continued testing.

In Northern Africa, influenza detections were low in reporting countries.

In Western Asia, influenza activity remained low overall with detections of all seasonal influenza subtypes.

In Eastern Asia, influenza activity decreased overall, although influenza detections increased slightly in South Korea in recent weeks.

In the Caribbean countries, influenza activity increased but remained low with influenza B/Victoria lineage viruses predominant.

In Central American countries, influenza activity increased slightly with A(H1N1)pdm09 viruses accounting for just over half the influenza detections in recent weeks. In Mexico, influenza activity increased to a moderate level with B/Victoria lineage virus detections increasing slightly over the past few weeks.

In the tropical countries of South America, influenza activity decreased overall during this reporting period although positivity remained at an extraordinary level in Bolivia.

In tropical Africa, influenza detections were low in reporting countries. Influenza A(H1N1)pdm09 viruses predominated among reported detections.

In Southern Asia, influenza activity remained low with all seasonal subtypes detected. In South-East Asia, influenza activity was stable, with continued reporting of predominantly A(H1N1)pdm09 virus detections from Malaysia, and A(H3N2) virus detections from Singapore. Other countries reported predominantly A(H1N1)pdm09 virus detections.

In the temperate zones of the southern hemisphere, influenza activity remained low, however influenza activity increased in Australia, Chile, in pneumonia surveillance in South Africa (indicating the start of the season), and in SARI cases in New Zealand. Influenza A viruses were predominant and among the subtyped viruses and influenza A(H1N1)pdm09 predominated in these countries.

The WHO GISRS laboratories tested more than 319,245 specimens between 1 May 2023 and 14 May 2023. 13,436 were positive for influenza viruses, of which 9,548 (71.06%) were typed as influenza A and 3,888 (28.94%) as influenza B. Of the subtyped influenza A viruses, 4,997 (68.79%) were influenza A(H1N1)pdm09 and 2,267 (31.21%) were influenza A(H3N2). Of the type B viruses for which lineage was determined, all belonged to the B/Victoria lineage.

Influenza in Australia

Updated 2 June 2023 (based on data up to fortnight ending 28 May 2023) ([Australian Government website](#)).

Australia monitors influenza through a number of complimentary systems. The Australian government advises caution is required in interpretation of these due to the effects of COVID-19, particularly inter-year comparisons. Caution should also be applied in assessing the implications of influenza activity in Australia to the UK. It is not possible to reliably predict the course of the 2023 southern hemisphere influenza season or the implications for the following 2023 to 2024 northern hemisphere season, such as the timing, activity and impact of the 2023 to 2024 influenza season in the UK. Australia is one of many countries from which flu may arrive in the UK, including other countries which are more populous and or have more frequent inbound travel. Australia's influenza activity reflects its specific epidemiological circumstance and has no bearing on the local persistence of influenza in the UK in our inter-seasonal period.

In the year-to-date (1 January to 28 May 2023), there have been 57,816 notifications of laboratory confirmed influenza reported to the National Notifiable Diseases Surveillance System (NNDSS) in Australia, of which 17,277 notifications had a diagnosis date this fortnight. In the year to date, notification rates have been highest in people aged 5 to 9 years, followed by those aged 0 to 4 years, and 10 to 14 years.

Influenza-like-illness (ILI) activity in the community has continued to increase this fortnight.

Since seasonal surveillance commenced in April 2023, there have been 518 sentinel hospital admissions with confirmed influenza, of which 37 (7%) were admitted directly to ICU.

In the year-to-date, 75% of notifications of laboratory-confirmed influenza reported to the NNDSS were influenza A, of which 95% were influenza A(unsubtyped); 5% were influenza A(H1N1); and 1% were influenza A(H3N2). Influenza B accounted for 23.4% of notifications; influenza A and B accounted for 0.1% of notifications, and 1% of influenza notifications were untyped.

There is currently not enough information to comprehensively assess the potential severity of the 2023 influenza season at this time.

For further information on influenza in Australia please see the [Australian Influenza Surveillance Report and Activity Updates](#).

Other respiratory viruses

Avian influenza and other zoonotic influenza

[Latest WHO update on 24 April 2023](#)

From 4 March 2023 to 24 April 2023, three human cases of infection with influenza A(H9N2) viruses and two human cases of infection with influenza A(H1N1) variant viruses were reported officially. Two of the A(H9N2) cases and both A(H1N1) variant cases were mentioned in the previous risk assessment. Additionally, one human case of infection with an influenza A(H3N8) virus and one human case of infection with an A(H5N1) virus were reported.

The overall public health risk from currently known influenza viruses at the human-animal interface has not changed, and the likelihood of sustained human-to-human transmission of these viruses remains low. Human infections with viruses of animal origin are expected at the human-animal interface wherever these viruses circulate in animals.

[Latest UKHSA avian influenza technical briefing 2 June 2023](#)

See also the [WHO Disease Outbreak News Reports](#) for more information.

Middle East respiratory syndrome coronavirus (MERS-CoV)

From April 2012 to May 2023, a total of 2,604 laboratory-confirmed cases of MERS-CoV and 936 associated deaths were reported globally to [WHO](#) under the International Health Regulations (IHR 2005).

Between 29 December 2021 and 31 October 2022, four laboratory-confirmed cases of MERS-CoV were reported to WHO by the Ministry of Health of the Kingdom of Saudi Arabia. No deaths were reported ([WHO website](#)).

On 28 April 2022, the National IHR Focal point of Oman notified WHO of one case of MERS-CoV in Oman ([WHO website](#)).

Between 22 March and 3 April 2022, the National IHR Focal Point of Qatar reported 2 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection to the WHO ([WHO website](#)).

A total of 5 cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (3 imported and 2 linked cases) have been confirmed in the UK through ongoing surveillance since September 2012.

[Further information on management and guidance of possible cases](#) is available online. The latest [ECDC MERS-CoV risk assessment](#) 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](#)

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

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

About the UK Health Security Agency

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