National Influenza and COVID-19 surveillance report
Week 1 report (up to week 52 2023 data)
4 January 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 accompanying graph pack.

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

This report summarises the information from the surveillance systems which are used to monitor COVID-19 (caused by 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 51 (between 18 December and 24 December 2023) and week 52 (between 25 December and 31 December 2023).

Please note data for this week’s report should be interpreted with caution in the light of changes in patterns of healthcare use, social mixing and lagged reporting due to the Christmas and New Year’s Day holidays.

Overall

In week 52, influenza activity increased across most indicators, including hospital admissions. COVID-19 activity showed mixed activity, with stabilisation of test positivity rates and reported acute respiratory outbreaks, but slight increases in hospital and intensive care unit (ICU) or high dependency unit (HDU) admissions. Respiratory syncytial virus (RSV) activity decreased in children aged under 5 years, while RSV hospital admissions increased in older adult groups.

Influenza

Through Respiratory DataMart, influenza positivity increased slightly to 11.8% in week 52 compared to 11.2% in the previous week.

Through primary care surveillance, the influenza-like-illness (ILI) consultations indicator decreased to 4.9 per 100,000 in week 52 compared to 7.7 per 100,000 the previous week and remained within the baseline activity level range.

There were 14 influenza confirmed acute respiratory incidents reported in England in week 52.

Overall, influenza hospitalisations increased from 5.1 per 100,000 in week 51 to 6.8 per 100,000 in week 52 and has crossed the medium impact threshold. ICU or HDU admissions increased compared to the previous week and remained the low impact threshold.

Emergency department (ED) attendances for ILI increased nationally.

Weekly influenza vaccine uptake for the 2023 to 2024 season is reported for week 51. Compared to the equivalent week in the 2022 to 2023 season, vaccine uptake is higher for children aged 2 and 3 years, and lower for those aged 65 years and over, pregnant women and those under 65 years in clinical risk groups.
COVID-19

Through Respiratory DataMart, SARS-CoV-2 positivity decreased to 10.1% in week 52 compared to 11.2% in the previous week.

COVID-19 case rates and positivity in Pillar 1 remained stable, with decreases observed in some age groups, regions, and ethnic groups in week 52.

Two-thirds (66%) of sequenced SARS-CoV-2 cases were classified as BA.2.86 (V-23AUG-01) in week 52.

The overall number of reported SARS-CoV-2 confirmed acute respiratory incidents (ARIs) in week 52 remained stable compared to the previous week. There were 50 SARS-CoV-2 confirmed ARIs reported in week 52 in England.

Overall, COVID-19 hospitalisations increased to 5.2 per 100,000 in week 52 compared to 4.8 per 100,000 in the previous week. Hospitalisations were highest in the 85 years and over group. COVID-19 ICU admissions increased in week 52 compared to the previous week.

Weekly COVID-19 vaccine update for the 2023 to 2024 season is reported for week 52. Overall, 70.2% of all people aged over 65 years in England had been vaccinated with an autumn 2023 booster dose since 1 September 2023. Compared to the equivalent week in the 2022 to 2023 season, vaccine uptake is lower among all eligible age groups.

Respiratory Syncytial Virus (RSV)

Through Respiratory DataMart, positivity for RSV decreased to 5.8%, with the highest positivity in those aged under 5 years at 14.2%. ED attendances for acute bronchiolitis continued to decrease in children aged under 5 years. Overall RSV hospitalisations increased slightly to 2.2 per 100,000 compared to 2.0 per 100,000 in the previous week. The highest rate was seen in those aged 85 years and over at 17.9 per 100,000, which increased compared from 14.3 per 100,000 in the previous week. In children aged under 5 years, hospitalisations rates remained stable at 14.1 per 100,000 compared to 14.4 per 100,000 in the previous week, following 3 weeks of decreases.

Other viruses

Adenovirus positivity remained low at 1.9%, with the highest positivity in those aged under 5 years at 5.9%. Human metapneumovirus (hMPV) positivity increased to 4.6%, with the highest positivity in those aged under 5 years at 10.9%. Parainfluenza positivity remained low at 2.2%, with the highest positivity in those aged under 5 years at 4.6%. Rhinovirus positivity decreased to 9.7% overall, with the highest positivity in those aged under 5 years at 19.7%.
Laboratory surveillance

Respiratory DataMart system (England)

In week 52, data is based on reporting from 11 out of the 16 sentinel laboratories.

In week 52, 6,780 respiratory specimens reported through the Respiratory DataMart System were tested for influenza. There were 802 positive samples for influenza; 558 influenza A (not subtyped), 200 influenza A (H3N2), 8 were influenza B, and 36 were influenza A (H1N1)pdm09 (Figure 4). Overall, influenza positivity increased slightly to 11.8% in week 52 compared to 11.2% in the previous week.

In week 52, 6,372 respiratory specimens reported through the Respiratory DataMart System were tested for SARS-CoV-2. There were 645 positive samples for SARS-CoV-2 with an overall positivity of 10.1%, which decreased compared to 11.2% in the previous week. The highest positivity was seen in adults aged over 65 years at 13.4%.

RSV positivity decreased to 5.8%, with the highest positivity in those aged under 5 years at 14.2%.

Adenovirus positivity remained low at 1.9%, with the highest positivity in those aged under 5 years at 5.9%.

Human metapneumovirus (hMPV) positivity increased to 4.6%, with the highest positivity in those aged under 5 years at 10.9%.

Parainfluenza positivity remained low at 2.2%, with the highest positivity in those aged under 5 years at 4.6%.

Rhinovirus positivity decreased to 9.7% overall, with the highest positivity in those aged under 5 years at 19.7%.
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 2 January 2024, there were 3,421 Pillar 1 cases in week 52, an 17.8% decrease from the previous week.

COVID-19 polymerase chain reaction (PCR) positivity for Pillar 1 remained stable in week 52, with a weekly mean positivity rate of 12.4% compared to 12.6% in the previous week. Pillar 1 positivity rates were highest in those aged 85 years and over at a weekly mean positivity rate of 19.4% (a decrease from 20.4% in week 51) and in the East of England at a weekly mean positivity rate of 14.8% (a slight decrease from 14.9% in week 51).

Data notes: Changes to testing policies over time may affect positivity rates and incidence rates and should be interpreted accordingly. COVID-19 case reporting in England uses an episode-based definition which includes possible reinfections, each infection episode is counted separately if there are at least 91 days between positive test results (PCR or rapid lateral flow device). Each infection episode begins with the earliest positive specimen date. Additionally, further changes in testing policy are in effect since 1 April 2023, which may affect case rates and positivity rates.

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

[note 2] The vertical dashed line (red) denotes changes in testing policies.
Age

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

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

Geography

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

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

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

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

SARS-CoV-2 variants

This section is updated fortnightly with updated data presented in this report.

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

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

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

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

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 JN.1 within BA.2.86 (V-23AUG-01). Once a sub-lineage meets required thresholds, it will be designated as a variant and prevalence of this sub-lineage in positive cases will then be identifiable in the data. The UKHSA variant definition repository contains the previous genomic definitions for UKHSA declared variants.

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

To account for sequencing delays, we report the proportion of variants from sequenced cases between 11 December 2023 and 17 December 2023. Of those sequenced in this period, 1.4% were classified as BA.2 (V-22JAN-01), 9.3% were classified as XBB (V-22OCT-02), 4% were classified as XBB.1.5 (V-23JAN-01), 14.1% were classified as EG.5.1 (V-23JUL-01), 4% were classified as XBB.1.16 (V-23APR-01), and 66.6% were classified as BA.2.86 (V-23AUG-01).

Please note that the BA.2.86 (V-23AUG-01) variant also includes the JN.1 (V-23DEC-01) sub-lineage.
Figure 13: Prevalence of SARS-CoV-2 variants amongst available sequenced cases for England from 8 January 2023 to 24 December 2023 [note 6]

The grey line indicates proportion of cases sequenced. The vertical dashed line (red) in April 2023 denotes changes in PCR testing in social care and hospital settings.

[note 6] Recombinants such as XD, are not specified but are largely within the ‘Other’ group currently as numbers are too small.
Table 1. Total distribution of SARS-CoV-2 variants detected in England in the last 12 weeks, up to week 51 (week ending 24 December 2023)

<table>
<thead>
<tr>
<th>Variant</th>
<th>Other names by which this variant is known</th>
<th>Total sequenced cases in the last 12 weeks [note 7]</th>
<th>Last reported specimen date</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-22JAN-01</td>
<td>Omicron BA.2</td>
<td>59</td>
<td>19-12-2023</td>
</tr>
<tr>
<td>V-22OCT-02</td>
<td>Omicron XBB</td>
<td>2,413</td>
<td>19-12-2023</td>
</tr>
<tr>
<td>V-22DEC-01</td>
<td>Omicron CH.1.1</td>
<td>133</td>
<td>19-12-2023</td>
</tr>
<tr>
<td>V-23JAN-01</td>
<td>Omicron XBB.1.5</td>
<td>846</td>
<td>20-12-2023</td>
</tr>
<tr>
<td>V-23APR-01</td>
<td>Omicron XBB.1.16</td>
<td>1,750</td>
<td>19-12-2023</td>
</tr>
<tr>
<td>V-23JUL-01</td>
<td>Omicron EG.5.1</td>
<td>3,419</td>
<td>20-12-2023</td>
</tr>
<tr>
<td>V-23AUG-01</td>
<td>Omicron BA.2.86</td>
<td>2,875</td>
<td>20-12-2023</td>
</tr>
</tbody>
</table>

[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). These data are 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 52 of 2023, the UKHSA Respiratory Virus Unit (RVU) has genetically characterised 210 influenza A(H3N2) viruses, which were detected since week 40. Sequencing of the haemagglutinin (HA) gene shows that the 208 of these A(H3N2) viruses belong in genetic subclade 3C.2a1b.2a.2 in the 2a.3a.1 subgroup. One A(H3N2) virus belonging to the 2a.3 subgroup and one A(H3N2) virus belonging to the 2a.3a subgroup were detected. 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, 231 influenza A(H1N1)pdm09 viruses have been characterised to date this season, with 193 belonging in genetic subgroup 6B.1A.5a.2a and 38 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, 9 influenza B/Victoria lineage viruses have been genetically characterised belonging in subclade V1A3, within the subgroup V1A3a.2. The Northern Hemisphere 2023/24 influenza B/Victoria lineage vaccine strain (a B/Austria/1359417/2021-like virus) also belongs in this V1A3a.2 subclade/group.

At this early stage of the influenza season, it is too early to predict which influenza lineages will dominate throughout 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 6 influenza B positive samples collected since week 40, from children aged between 2 and 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**

<table>
<thead>
<tr>
<th>(Sub)type</th>
<th>Genetic group</th>
<th>Number sequenced</th>
</tr>
</thead>
<tbody>
<tr>
<td>A(H3N2)</td>
<td>3C.2a1b.2a.2a.3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3C.2a1b.2a.2a.3a</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3C.2a1b.2a.2a.3a.1</td>
<td>208</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>210</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>6B.1A.5a.2a</td>
<td>193</td>
</tr>
<tr>
<td></td>
<td>6B.1A.5a.2a.1</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>231</td>
</tr>
<tr>
<td>B/Victoria-lineage</td>
<td>V1A3a.2</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9</td>
</tr>
<tr>
<td>A(H1N2)v</td>
<td>1B 1.1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1</td>
</tr>
</tbody>
</table>
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 weeks 40 of 2023 and 52 of 2023 have been analysed. Analysis of 208 A(H3N2) viruses found no viruses with known markers of resistance to neuraminidase inhibitors. Analysis of 227 A(H1N1)pdm09 by sequencing found 3 oseltamivir resistant viruses taken from 2 patients: 2 with a H275Y amino acid substitution (89.5% and 92.3%) taken from the same patient, and one with D199E amino acid substitution (99.8%). All 3 samples were collected from immune compromised adult patients who were known to have received oseltamivir treatment.

Analysis of 8 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 184 A(H3N2), 194 A(H1N1)pdm09 and 7 influenza B PA sequences analysed.

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

<table>
<thead>
<tr>
<th>(Sub)type</th>
<th>Neuraminidase inhibitors: susceptible</th>
<th>Neuraminidase inhibitors: reduced susceptibility</th>
<th>Baloxavir: susceptible</th>
<th>Baloxavir: reduced susceptibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>A(H3N2)</td>
<td>208</td>
<td>0</td>
<td>184</td>
<td>0</td>
</tr>
<tr>
<td>A(H1N1)pdm09</td>
<td>224</td>
<td>3</td>
<td>194</td>
<td>0</td>
</tr>
<tr>
<td>B/Victoria-lineage</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>
Community surveillance

SIREN healthcare cohort study

This section is updated fortnightly. The next update will be on 11 January 2024.

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

Figure 14 describes fortnightly positivity rates (per 100 tests) of SARS-CoV-2, Influenza A/B and RSV in the SIREN cohort over the last 12 months. During the fortnight commencing 27 November 2023, 4,019 swabs were returned (67.3% of participants). Influenza positivity currently remains low (0.17% positive compared to 0.10% in previous fortnight). SARS-CoV-2 positivity has increased since the last fortnight (2.37% positive compared to 1.78% in previous fortnight). RSV positivity has increased since the start of October (1.69% swabs positive compared to 1.13% in previous fortnight).

Figure 14. SIREN study fortnightly PCR positivity (%) for influenza, SARS-CoV-2 and RSV, UK [note 8]

[note 8] The week number indicates the fortnight commencing.
Winter COVID-19 Infection Study

This section is updated fortnightly. The next update will be on 11 January 2024. The Winter Coronavirus (COVID-19) Infection Study aims to understand the impact of COVID-19, particularly over the winter period. The study is run jointly by the Office for National Statistics (ONS) and UKHSA, with data collected via online questionnaire completion and self-reported lateral flow device (LFD) results from previous participants of the COVID-19 Infection Survey.

Modelling prevalence

Prevalence is a modelled estimate of people currently infected with SARS-CoV-2 using percentage of people testing positive (percentage of people infected with SARS-CoV-2) and adjusted to account for lower sensitivity of LFD tests and weighted to be representative of the general population. These data are published by UKHSA (Winter COVID-19 Infection Study) and are presented as daily estimates.

On 13 December 2023, the estimated prevalence in England and Scotland was 4.2% (95% credible interval (CrI): 3.3% to 5.4%) compared to 1.8% (95% CrI 1.4% to 2.3%) on 29 November 2023 (figure 15). The estimated prevalence on 13 December 2023 corresponds to around 2,549,000 (95% CrI 1,996,000 to 3,236,000) people infected or 1 in 24 people (95% CrI: 1 in 30 to 1 in 19).

Within age groups, the group with the highest prevalence on 13 December were those aged between 18 to 34 (prevalence 5.8%, 95% CrI 4.1% to 8.0%) and 35 to 44 (prevalence 5.7%, 95% CrI 4.4% to 7.5%). Regionally, the highest prevalence was estimated in London (prevalence 6.1%, 95% CrI 4.6% to 8.1%). Graphs on prevalence by age and region are shown in the supplementary slide set.

Figure 15. Estimates of prevalence between 14 November 2023 and 13 December 2023, Winter CIS, England and Scotland
Percentage testing positive

This section presents the number of people who self-reported a positive LFD result out of those who self-reported an LFD test result in England, as reported by ONS (Winter Coronavirus (COVID-19) Infection Study, England and Scotland). The results are presented by reporting week. In the latest 2 weeks, 1.4 (95% confidence interval 1.2-1.5) of study participants tested positive between 30 November 2023 and 6 December 2023 and 2.3 (95% confidence interval 2.1-2.4) between 7 December 2023 and 13 December 2023 (table 4).

The age group with the highest positivity in the latest week were in those between 35 and 44 years of age. In the latest week, London was the region with the highest positivity (3.2, 95% CI of 2.6% to 3.7%). Data on age and region can be found in the supplementary data file.

Table 4. Percentage testing positive for COVID-19, Winter COVID-19 infection study, England

<table>
<thead>
<tr>
<th>Time period</th>
<th>Percentage testing positive (%)</th>
<th>95% confidence interval</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 November 2023 to 22 November 2023</td>
<td>1.0</td>
<td>0.9 to 1.2</td>
<td>25,607</td>
</tr>
<tr>
<td>23 November 2023 to 29 November 2023</td>
<td>1.2</td>
<td>1.1 to 1.4</td>
<td>25,449</td>
</tr>
<tr>
<td>30 November 2023 to 6 December 2023</td>
<td>1.4</td>
<td>1.2 to 1.5</td>
<td>25,489</td>
</tr>
<tr>
<td>7 December 2023 to 13 December 2023</td>
<td>2.3</td>
<td>2.1 to 2.4</td>
<td>24,774</td>
</tr>
</tbody>
</table>
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 133 new ARI incidents reported in week 51 and 95 new ARI incidents reported in week 52 in England. In the latest week, these included:

- 89 incidents reported from care homes, of which 44 were laboratory confirmed for SARS-CoV-2, 13 for influenza A (not subtyped), 7 for RSV, 1 for hMPV, 1 for rhinovirus and 1 for SARS-CoV-2 and influenza A (mixed infection)
- 4 incidents reported from hospitals, of which 3 were laboratory confirmed for SARS-CoV-2
- 1 incident reported from a prison, which was laboratory confirmed for SARS-CoV-2
- 1 incident reported from other settings, which was laboratory confirmed for SARS-CoV-2
- there were no incidents reported from educational settings

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 16. Number of ARI incidents by setting, England**
Figure 17. Number of ARI incidents in all settings by virus type, England

Figure 18. Number of ARI incidents in care homes by virus type, England
Figure 19. Number of ARI incidents in educational settings by virus type, England
FluSurvey

FluSurvey is an internet-based participatory surveillance system based on the InfluenzaNet platform. FluSurvey monitors 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 to last season, including the possibility that new registrations and re-registrations may have been initiated by recent onset of illness.

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

During week 52, there were 1,763 participants completing the weekly symptoms questionnaire of which 293 (16.6%) reported fever or cough and 96 (5.4%) reported ILI.

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

Self-reported daily social contact patterns are also reported. A contact is defined as a person outside the household who is approached at a distance of less than one metre, on the day prior to survey completion. There was a slight decrease in daily contacts reported outside the household in week 52 (Figure 21).
Figure 20. FluSurvey participants self-reporting fever or cough and ILI symptoms, and trends in healthcare seeking behaviour among these participants, England [note 9]

[note 9] Please note in week 50 of 2022 there was no data available. The lines in the upper panel have been continued using interpolation.

Figure 21. FluSurvey participants’ self-reported number of social contacts outside the household
Google search queries

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

During week 52, the overall and media-debiasing weighted Google search scores remained stable compared to the previous week (Figure 22).

Figure 22. Normalised Google search score for COVID-19 symptoms, with weighted score for media-debiasing and historical trend, England
Flu Detector

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

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

For week 52, the daily ILI rate fluctuated, activity remained below baseline activity (Figure 23).

Figure 23. Daily estimated ILI Google search query rates per 100,000 population, England
Syndromic Surveillance

During week 52, NHS 111 calls for cold or flu and cough increased but remain below baseline levels nationally. GP in-hours consultation rates for influenza like illness (ILI) were stable and remained below expected levels. GP out of hours contacts for ARI and ILI continued to increase in those aged over 15 years. ED attendances for acute bronchiolitis continued to decrease in children aged under 5 years old. Acute respiratory infection attendances continued to increase particularly across adult age groups and are now above seasonally expected levels. COVID-19-like attendances increased as well as ILI attendances also increased across all age groups.

For further information on syndromic surveillance please see the Syndromic Surveillance: weekly summaries.
Figure 24a. Daily ED attendances for acute respiratory infection nationally, England [note 10]

[note 10] 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 24b. Daily ED attendances for acute respiratory infection by age group, England [note 11]

[note 11] 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 25a. Daily ED attendances for influenza-like illness nationally, England [note 10]

See [note 10] as above.

Figure 25b. Daily ED attendances for influenza-like illness by age group, England [note 11]

See [note 11] as above.
Figure 26a. Daily ED attendances for acute bronchiolitis nationally, England [note 10, 12]

See [note 10] as above.

Figure 26b. Daily ED attendances for acute bronchiolitis by age group, England [note 11, 12]

See [note 11] as above.

[note 12] Please note, there was no update in week 14 for acute bronchiolitis syndromic surveillance.
Primary care surveillance

RCGP Clinical Indicators (England)

The weekly ILI consultation rate through the Royal College of General Practitioners (RCGP) surveillance decreased to 4.9 per 100,000 registered population in participating GP practices in week 52 compared to 7.7 per 100,000 in the previous week. This is within baseline activity levels (less than 10.25 per 100,000) (Figure 27). By age group, the highest rates were seen those under one year (7.7 per 100,000), followed by those between 45 and 64 years of age (5.5 per 100,000). The lower respiratory tract infections (LRTI) consultation rate decreased to 109.1 per 100,000 in week 52 compared to 153.9 per 100,000 in the previous week.

Figure 27. RCGP ILI consultation rates, all ages, England

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

Due to reporting delays, there were insufficient results of samples taken in week 52 of 2023 to report. These will be included in next week’s report on 11 January 2024. Additionally, starting in week 51 testing for enterovirus and rhinovirus has been paused.

Based on the date samples were taken, in week 51 of 2023 (week commencing 18 December 2023) 888 samples were tested through the GP sentinel swabbing scheme in England, of which 201 samples tested positive (Figure 28). Among all positive samples, 28.9% were positive for influenza, 24.9% were positive for RSV, 19.4% were positive for SARS-CoV-2, 17.4% were positive for hMPV, 4.5% were positive for other seasonal coronaviruses and 4.5% were positive for adenovirus (Figure 29).

In week 51, positivity for RSV was 9.7%, positivity for SARS-CoV-2 was 7.2%, and positivity for influenza was 11.4% (Figure 30). Due to the number of samples which have not yet been categorised, data should be interpreted with caution when compared to previous weeks.

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

From 27 November 2023, swabbing was increased in the Yorkshire and Humber region in response to the identification of a case of influenza A(H1N2)v. This may lead to an over-representation of the Yorkshire and Humber region.
Figure 28. Number of samples tested for SARS-CoV-2, influenza, and other respiratory viruses in England by week, GP sentinel swabbing [note 13]

[note 13] Unknown category corresponds to samples with no result yet.
Figure 29. Proportion of detections of SARS-CoV-2, influenza, and other respiratory viral strains amongst virologically positive respiratory surveillance samples in England by week, GP sentinel swabbing scheme [note 14]

[Note 14] Week 51 data contains a substantial reduction of test results for enterovirus and rhinovirus due to a pause in testing for these pathogens.
Figure 30. Weekly positivity (%) for COVID-19, influenza and RSV in England, GP sentinel swabbing
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 52 (ending 31 December 2023), the overall weekly hospital admission rate for influenza increased to 6.79 per 100,000 compared to 5.11 per 100,000 in the previous week. The latest rate remained within the medium impact range (3.92 to 9.96 per 100,000). There were 540 new hospital admissions for influenza (452 influenza A(not subtyped), 29 influenza A(H3N2), 46 influenza A(H1N1)pdm09, and 13 influenza B).

In week 52, the overall ICU or HDU rate for influenza increased slightly to 0.17 per 100,000 compared to 0.10 per 100,000 in the previous week. The rate in the latest week remains in the low impact range. There were 63 new case reports of an ICU or HDU admission for influenza in week 52 (59 influenza A(not subtyped), 4 influenza A(H1N1)pdm09, zero influenza A(H3N2) and zero influenza B).
Figure 31. Weekly overall influenza hospital admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch sentinel surveillance, England

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

Influenza hospital admission rate based on 19 sentinel NHS trusts for week 52. SARI Watch data is provisional and subject to retrospective updates.
Figure 32. Weekly influenza hospital admissions by influenza type, reported through SARI Watch sentinel surveillance, England [note 15]

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

Figure 33. Weekly hospital admission rate by UKHSA region for new influenza reported through SARI Watch sentinel surveillance [note 4, 16]

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

See [note 4] as above
Figure 34a. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - fixed y-axis [note 3]

See [note 3] as above.

Figure 34b. Weekly hospital admission rate by age group for new influenza reported through SARI Watch sentinel surveillance - adjusted y-axis
Figure 35. Weekly overall influenza ICU or HDU admission rates per 100,000 trust catchment population with MEM thresholds, reported through SARI Watch, England

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

Influenza ICU or HDU admission rate based on 86 NHS trusts for week 52.
SARI Watch data is provisional and subject to retrospective updates.
Figure 36. Weekly influenza ICU or HDU admissions by influenza type, reported through SARI Watch, England

Figure 37. Weekly ICU or HDU admission rate by UKHSA region for new influenza, reported through SARI Watch [note 4]

See [note 4] as above.
Figure 38a. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch - fixed y-axis [note 3]

See [note 3] as above.

Figure 38b. Weekly ICU or HDU admission rate by age group for new influenza cases, reported through SARI Watch - 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 52 (ending 31 December 2023), the overall weekly hospital admission rate for COVID-19 increased slightly to 5.21 per 100,000 compared to 4.81 per 100,000 in the previous week. By UKHSA region, the highest hospital admission rate for COVID-19 was observed in South West. By age group, the highest hospital admission rate for confirmed COVID-19 continued to be in those aged 85 years and over, increasing further to 55.0 per 100,000. There were also increases in most of the other age groups including those aged 65 to 74 years and 75 to 84 years.

In week 52 (ending 31 December 2023), the overall weekly ICU or HDU admission rate for COVID-19 increased to 0.24 per 100,000, compared to 0.15 per 100,000 in the previous week. 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 region or by age group fluctuated at low levels in week 52 due to low underlying numbers.

Figure 39. Weekly overall COVID-19 hospital admission rates per 100,000 trust catchment population, reported through SARI Watch, England

COVID-19 hospital admission rate based on 86 NHS trusts for week 52
SARI Watch data is provisional and subject to retrospective updates
Data on proportions of hospitalisations primarily due to COVID 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 40. Weekly hospital admission rate by UKHSA region for new COVID-19 positive cases, reported through SARI Watch [note 4]

See [note 4] as above
Figure 41a. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch - fixed y-axis [note 3]

See [note 3] as above.

Figure 41b. Weekly hospital admission rate by age group for new COVID-19 positive cases reported through SARI Watch - adjusted y-axis
Figure 42: Weekly overall COVID-19 ICU or HDU admission rates per 100,000 trust catchment population, reported through SARI Watch, England

COVID-19 ICU or HDU admission rate based on 71 NHS trusts for week 52.
SARI Watch data is provisional and subject to retrospective updates.

Figure 43: Weekly ICU or HDU admission rate by UKHSA region for new COVID-19 positive cases reported through SARI Watch [note 4]

See [note 4] as above
Figure 44a. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch - fixed y-axis [note 3]

See [note 3] as above.

Figure 44b. Weekly ICU or HDU admission rate by age group for new COVID-19 positive cases reported through SARI Watch adjusted y-axis
ECMO, SARI Watch

There were 2 new extra corporeal membrane oxygenation (ECMO) admissions reported in week 52 from the 7 Severe Respiratory Failure (SRF) centres in the UK. One admission was related to COVID-19, the other due to non-infectious causes. In week 51, 7 ECMO admissions were reported, one due to influenza A(H3N2), 3 due to bacterial respiratory infections, one due to non-respiratory sepsis and 2 due to non-infectious causes.

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

Figure 45: Laboratory confirmed ECMO admissions in adults (COVID-19, influenza and non-COVID-19 confirmed) to Severe Respiratory Failure centres in the UK

SARI Watch data is provisional and subject to retrospective updates.
RSV admissions, SARI Watch

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

In week 52, the overall hospital admission rate for RSV increased slightly to 2.20 per 100,000 compared to 2.03 per 100,000 in the previous week. In children aged under 5 years hospitalisation rates were 14.1 per 100,000, remaining stable compared to 14.4 per 100,000 in the previous week. In those aged 85 years and over, RSV hospitalisation rates increased to 17.9 per 100,000 from 14.3 per 100,000.

Figure 46. Weekly overall hospital admission rates (including ICU or HDU) of RSV positive cases per 100,000 population reported through SARI Watch sentinel surveillance, England [note 17]

[note 17] Rates are based on the number of hospitalised cases divided by the Trust catchment population, multiplied by 100,000.
Figure 47: Weekly count hospital admissions of RSV positive cases reported through SARI Watch sentinel surveillance by level of care, England
Figure 48a. Weekly hospitalisation (including ICU or HDU) admission rates by age group for RSV cases reported through SARI Watch sentinel surveillance, England - fixed y-axis [note 3]

See [note 3] as above.

Figure 48b. Weekly hospitalisation (including ICU or HDU) admission rates by age group for RSV cases reported through SARI Watch sentinel surveillance, England adjusted y-axis

SARI Watch data is provisional.
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 European mortality monitoring (EuroMOMO) model to identify weeks with higher than expected mortality.
Influenza vaccination

Influenza vaccine uptake in GP patients

Weekly vaccine coverage data is provisional. Data is presented below for week 51. Data for week 52 (2023) and week 1 (2024) will be presented in next week’s report (11 January 2024).

Up to week 51 of 2023, in 95.4% of GP practices reporting weekly to ImmForm for the main collection, the provisional proportion of people in England who had received the 2023 to 2024 influenza vaccine in targeted groups was as follows:

- 40.1% in those under 65 years in a clinical risk group
- 30.7% in all pregnant women
- 76.9% in all those aged 65 years and over

This is the fifth weekly data this season which has included data from all GP IT suppliers for the GP main survey. Data prior to week 47 does not include responses from the largest GP IT supplier (representing approximately 60% of GP practices). When this data is provided for week 40 to week 46, the graph will be updated retrospectively, and a continuous trend line will be plotted for all data points.

Figure 49. Cumulative weekly influenza vaccine uptake by target group in England
In 2023 to 2024, all those aged 2 and 3 years continue to be eligible for influenza vaccination through their GPs. Up to week 51 of 2023, in 91.8% of GP practices reporting weekly to ImmForm for the childhood collection, the provisional proportion of children in England who had received the 2023 to 2024 influenza vaccine in targeted groups was as follows:
- 42.9% in all those aged 2 years
- 43.0% in all those aged 3 years

Figure 50. Cumulative weekly influenza vaccine uptake in those aged 2 and 3 years, in England

Monthly data which cover vaccinations that were given between 1 September and 30 November 2023 for GP patients, frontline healthcare workers and school aged children was published for the second time on 21 December 2023 and comparator data is available for previous seasons. The next monthly data will be published on 25 January 2024 and will cover vaccinations that were given between 1 September and 31 December 2023.
COVID-19 vaccination

COVID-19 vaccine uptake in England

COVID-19 vaccinations began in England on 8 December 2020 during week 50 of 2020 (week ending 13 December 2020). Cumulative data up to week 52 of 2023 (week ending 31 December 2023) was extracted from the National Immunisation Management Service (NIMS). The data presented this week is the provisional proportion of living people resident in England who had received COVID-19 vaccinations. Individuals vaccinated in England who have a registered address outside of England or where their address, age, or sex is unknown have been excluded. Due to changes in GP practice lists, in order to include newly registered patients and remove those who are no longer resident, there will be slight variation to the figures to reflect those who are currently resident in England.

Age is calculated as age on 31 March 2024. From 23 October 2023, data is extracted on a Monday with data capped to the previous Sunday. This change from Tuesday data extraction means that because of data lags, reported coverage for the most recent week will be marginally lower than if data were extracted on Tuesday. This change has been implemented to help ensure timely reporting. All backing data is updated each week going back to the start of the programme.

Data is provisional and subject to change following further validation checks. There are significant changes being undertaken in the data feeds that provide these statistics. It is therefore necessary to report the autumn campaign on a fixed denominator, the population as at 31 August 2023. Any changes to historic figures will be reflected in the most recent publication. Please note that numbers published by UKHSA are for public health surveillance purposes only.

Autumn 2023 Campaign

Immunity derived from vaccination declines over time, the Joint Committee on Vaccination and Immunisation (JCVI) has recommended an autumn 2023 campaign with the primary objective to boost immunity in those at higher risk from COVID-19 and thereby optimise protection against severe COVID-19, specifically hospitalisation and death in time for winter 2023 to 2024.

The autumn 2023 data reported below covers any dose administered from 1 September 2024 provided there is at least 20 days from the previous dose. Eligible groups for the autumn campaign are defined in the COVID-19 healthcare guidance Green Book.

Table 4 presents coverage as measured against the total population and includes people who are not yet due to have their autumn 2023 booster, specifically those turning aged 65 years by 31 March 2024. It is important that unvaccinated individuals, especially vulnerable adults, receive a primary course of vaccination, irrespective of whether individuals have had previous infection. To understand the data in the context of vaccine waning across the whole COVID-19 programme, we present Table 5 which shows how recently a person who is living and resident
in England has been vaccinated either through the primary vaccination campaign or a subsequent booster campaign.

By the end of week 52 of 2023 (week ending 31 December 2023), 70.2% (7,835,586 out of 11,164,326) of all people aged over 65 years who are living and resident in England who had been vaccinated with an autumn 2023 booster dose since 1 September 2023, Table 5 and Figure 51.

### Table 5. Provisional cumulative people vaccinated by age with a dose of COVID-19 vaccine from the 1 September 2023 as part of the autumn 2023 campaign in England

<table>
<thead>
<tr>
<th>National</th>
<th>People in NIMS cohort who are living and resident in England</th>
<th>Vaccinated since 1 September 2023 [note 18]</th>
<th>Percentage vaccine uptake</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 80</td>
<td>3,010,182</td>
<td>2,272,464</td>
<td>75.5</td>
</tr>
<tr>
<td>75 to under 80</td>
<td>2,458,682</td>
<td>1,852,272</td>
<td>75.3</td>
</tr>
<tr>
<td>70 to under 74</td>
<td>2,672,292</td>
<td>1,867,780</td>
<td>69.9</td>
</tr>
<tr>
<td>65 to under 70</td>
<td>3,023,170</td>
<td>1,843,070</td>
<td>61.0</td>
</tr>
<tr>
<td>Aged 65 years and over</td>
<td>11,164,326</td>
<td>7,835,586</td>
<td>70.2</td>
</tr>
</tbody>
</table>

[note 18] Autumn 2023 booster defined as any dose of vaccine given after 1 September 2023, provided there is an interval of at least 20 days since any previous dose.

On 21 December 2023, monthly data for frontline healthcare workers was published for the second time this season. This covers vaccinations that were given between 1 September and 30 November 2023 and is available under the [joint flu and COVID-19 vaccine uptake report](#). The next monthly data will be published on 25 January 2024 and will cover vaccinations that were given between 1 September and 31 December 2023.
Figure 51. Cumulative weekly COVID-19 vaccine uptake in those who are living and resident in England vaccinated with an autumn 2023 dose since 1 September 2023 [note 19]

[note 19] This graph shows data for the autumn 2022 campaign and does not correspond to the date axis but is aligned to the current autumn 2023 campaign to allow comparison of the rate of uptake in both campaigns.
National Influenza and COVID-19 Report: week 1 report (up to week 52 2023 data)

Proportion of people vaccinated by time since last vaccination

Table 6. Provisional cumulative people vaccinated with any dose of COVID-19 vaccine in the last 3 months, 3 to 6 months and vaccinated more than 6 months ago

<table>
<thead>
<tr>
<th>National</th>
<th>People in NIMS cohort who are living and resident in England</th>
<th>Vaccinated in the last 3 months (84 days)</th>
<th>Vaccinated 3 to 6 months ago (85 to 168 days)</th>
<th>Vaccinated 6 months ago (169 or more days)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Numbers vaccinated</td>
<td>Percentage vaccinated</td>
<td>Numbers vaccinated</td>
</tr>
<tr>
<td>Over 80</td>
<td>3,010,182</td>
<td>1,067,966</td>
<td>35.5</td>
<td>1,208,227</td>
</tr>
<tr>
<td>75 to under 80</td>
<td>2,458,682</td>
<td>844,224</td>
<td>34.3</td>
<td>1,011,433</td>
</tr>
<tr>
<td>70 to under 75</td>
<td>2,672,292</td>
<td>941,773</td>
<td>35.2</td>
<td>930,737</td>
</tr>
<tr>
<td>65 to under 70</td>
<td>3,023,170</td>
<td>1,003,101</td>
<td>33.2</td>
<td>845,351</td>
</tr>
<tr>
<td>60 to under 65</td>
<td>3,691,023</td>
<td>726,144</td>
<td>19.7</td>
<td>380,316</td>
</tr>
<tr>
<td>55 to under 60</td>
<td>4,133,235</td>
<td>557,558</td>
<td>13.5</td>
<td>253,124</td>
</tr>
<tr>
<td>50 to under 55</td>
<td>4,127,778</td>
<td>402,676</td>
<td>9.8</td>
<td>180,746</td>
</tr>
<tr>
<td>45 to under 50</td>
<td>3,873,067</td>
<td>248,145</td>
<td>6.4</td>
<td>114,361</td>
</tr>
<tr>
<td>40 to under 45</td>
<td>4,410,433</td>
<td>200,581</td>
<td>4.5</td>
<td>89,678</td>
</tr>
<tr>
<td>35 to under 40</td>
<td>4,711,499</td>
<td>165,255</td>
<td>3.5</td>
<td>71,300</td>
</tr>
<tr>
<td>30 to under 35</td>
<td>4,788,980</td>
<td>138,986</td>
<td>2.9</td>
<td>55,817</td>
</tr>
<tr>
<td>25 to under 30</td>
<td>4,416,848</td>
<td>99,864</td>
<td>2.3</td>
<td>37,012</td>
</tr>
<tr>
<td>20 to under 25</td>
<td>3,787,791</td>
<td>63,171</td>
<td>1.7</td>
<td>23,640</td>
</tr>
<tr>
<td>18 to under 20</td>
<td>1,402,413</td>
<td>15,487</td>
<td>1.1</td>
<td>5,534</td>
</tr>
<tr>
<td>16 to under 18</td>
<td>1,430,176</td>
<td>10,537</td>
<td>0.7</td>
<td>2,501</td>
</tr>
<tr>
<td>12 to under 16</td>
<td>2,994,199</td>
<td>21,964</td>
<td>0.7</td>
<td>2,179</td>
</tr>
<tr>
<td>5 to under 12</td>
<td>4,998,730</td>
<td>15,434</td>
<td>0.3</td>
<td>177</td>
</tr>
</tbody>
</table>

Table 6 is presented to provide an overview of how recently a person has been vaccinated either through the primary vaccination campaign or subsequent booster campaigns. This helps us understand the data in the context of vaccine waning across the whole COVID-19 programme. Breakdowns by Ethnicity, and IMD, for those aged 65 and over can be found in the supplementary datafile.
A regional breakdown of the ethnicity data is available in the accompanying data file for this report.

COVID-19 data on the real-world effectiveness of the COVID-19 vaccines, and on COVID-19 vaccination in pregnancy is available in the COVID-19 vaccine surveillance reports.

COVID-19 management information on the number of COVID-19 vaccinations provided by the NHS in England is available on the COVID-19 vaccinations webpage.

UK COVID-19 daily vaccination figures and definitions are available on the Vaccinations’ section of the UK COVID-19 dashboard.

The population coverage data representing the evergreen offer of doses 1, 2, and 3 has changed little in recent months and are no longer presented in both the UKHSA weekly flu and COVID-19 surveillance reports and in the UK COVID-19 Dashboard. Both the UKHSA weekly flu and COVID-19 surveillance reports and in the UK COVID-19 Dashboard now highlight data on the most recent vaccination campaign in those at higher risk from COVID-19 as immunity derived from vaccination declines over time. The overall vaccine uptake in the living and resident population for those with at least dose 1, 2 and 3 doses is still available within the backing tables for this section and in the dashboard APIs.
International update

Global COVID-19 update

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

Global influenza update

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

Influenza in Europe

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

Influenza in North America

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

Influenza in Australia

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

Other respiratory viruses

Avian influenza and other zoonotic influenza

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

Middle East respiratory syndrome coronavirus (MERS-CoV)

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

Further information on management and guidance of possible cases is available online. The latest 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
RCGP Virology Dashboard

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

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

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

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

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For queries relating to this document, please contact: Enquiries@ukhsa.gov.uk

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