

Summary

Week 40/2021 (4 – 10 October 2021)

- This is the first weekly report for the 2021-2022 influenza season.
- Influenza activity was low throughout the European Region.
- Influenza viruses were detected sporadically in specimens from persons with respiratory illness presenting to medical care.
- Both influenza A and B type viruses were detected, predominantly of A(H3) subtype.
- No patient with influenza infection has been reported from hospital settings.

2021-2022 season overview

- For the Region as a whole, influenza activity has been at baseline level with sporadic detections mostly of A(H3) viruses.
- During the influenza Vaccine Composition Meeting for the southern hemisphere 2022 season, held in September 2021, WHO recommended the replacement of the A(H3N2) and the B/Victoria-lineage component. The full report can be found [here](#).

Other news

On 30 January, 2020 following the recommendations of the Emergency Committee, the WHO Director General declared that the SARS-CoV-2 outbreak constituted a Public Health Emergency of International Concern (PHEIC). For more information about the situation in the WHO European Region visit:

- WHO website: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- ECDC website: <https://www.ecdc.europa.eu/en/novel-coronavirus-china>

Qualitative indicators

For week 40/2021, of 33 countries and areas reporting on influenza intensity, all reported baseline or low intensity (Fig. 1). Of 33 Member States and areas reporting on geographic spread, 27 reported no activity (across the region), 5 reported sporadic cases (Azerbaijan, Germany, Kyrgyzstan, Russia and UK-Scotland) and 1 reported local (Poland) (Fig. 2).

Figure 1. Intensity in the European Region, week 40/2021

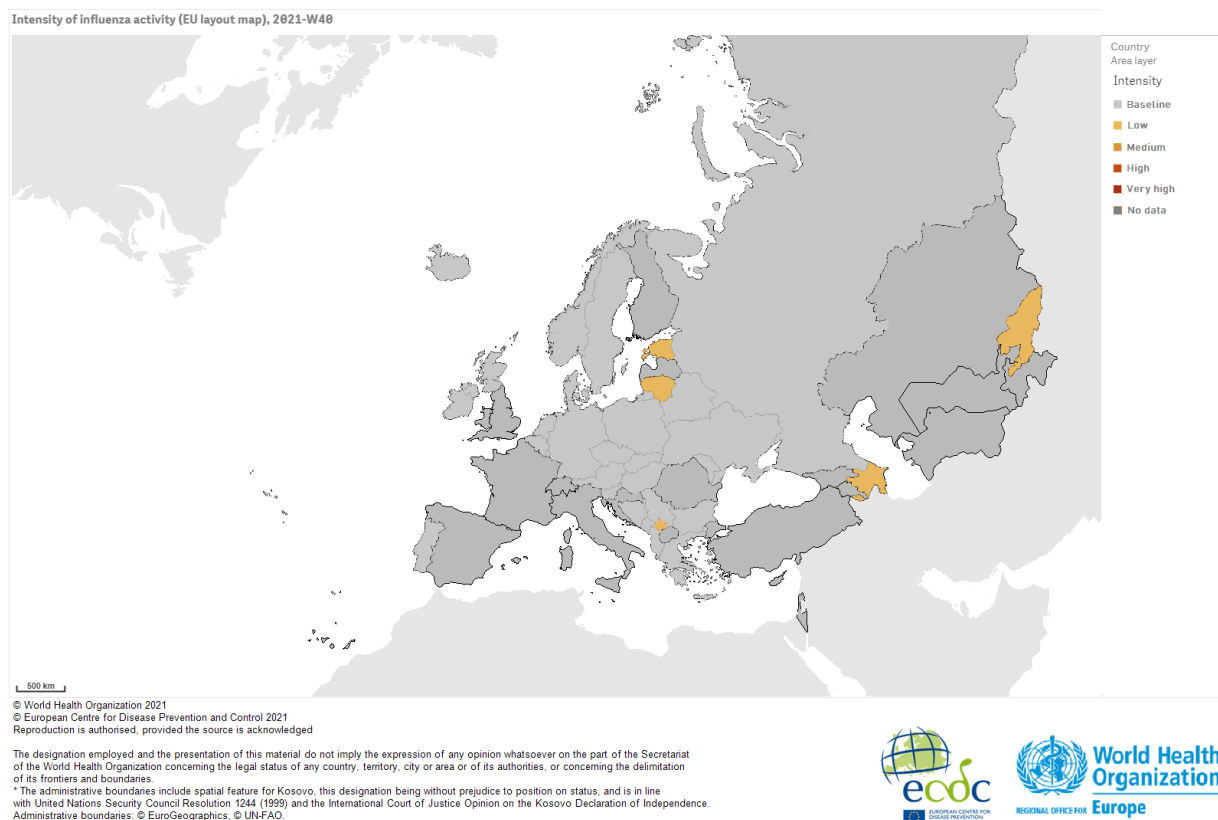
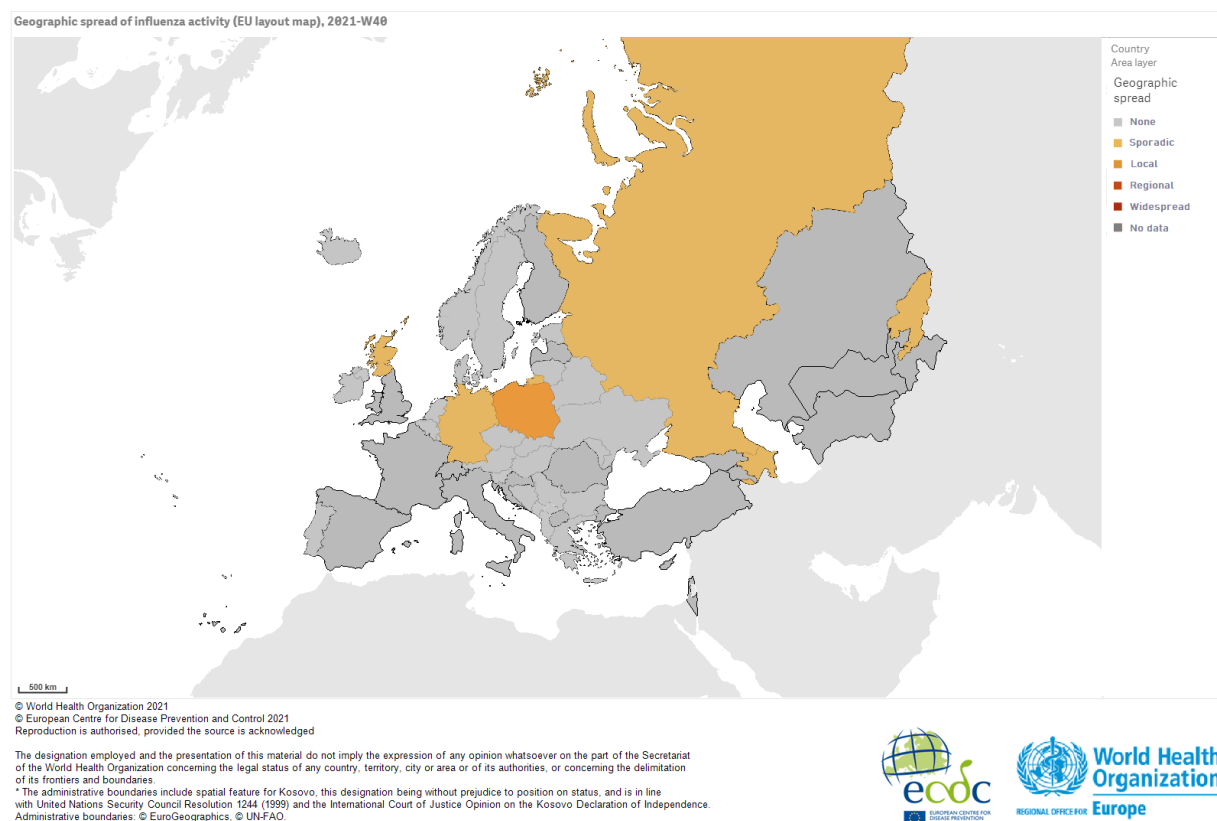


Figure 2. Geographic spread in the European Region, week 40/2021



For interactive maps of influenza intensity and geographic spread, see the [Flu News Europe website](#).

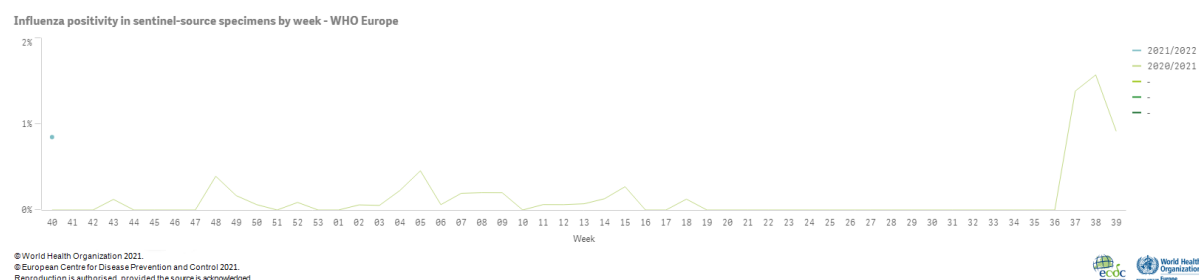
Please note:

1. Assessment of the intensity of activity indicator includes consideration of ILI or ARI rates. These ILI or ARI rates might be driven by respiratory infections other than influenza, including SARS-CoV-2, leading to observed increases in the absence of influenza virus detections. Countries should be aware of the potential for out-of-season increases in non-SARS-CoV-2 viruses as public health measures are relaxed over the summer months.
2. Assessment of intensity and geographic spread indicators includes consideration of sentinel and non-sentinel influenza virus detection data. Non-sentinel influenza virus detections, often higher, might translate into reporting of elevated geographic spread even in the absence of sentinel detections.

Influenza positivity

For the European Region, influenza virus positivity in sentinel specimens remained below the epidemic threshold, which is set at 10% (Figure 3).

Figure 3. Influenza positivity in sentinel-source specimens by week, WHO Europe



External data sources

Mortality monitoring: Data from 25 European countries or subnational regions reported to EuroMOMO this week. Overall pooled estimates of all-cause mortality for the participating European countries are at expected levels. Please refer to the [EuroMOMO project](#) for additional information.

Primary care data

Syndromic surveillance data

Based on syndromic surveillance data for influenza-like illness (ILI) and/or acute respiratory infection (ARI), all countries reported activity within baseline levels.

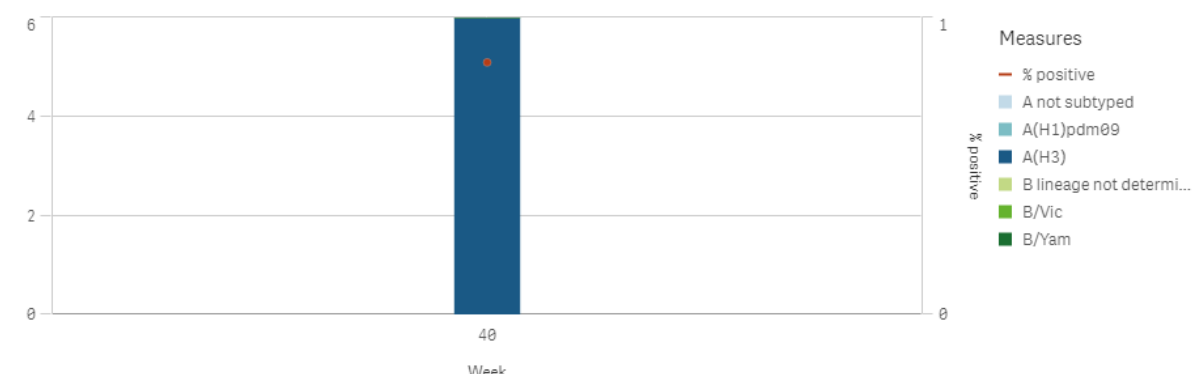
Viruses detected in sentinel-source specimens (ILI and ARI)

For week 40/2021, 6 of 707 (<1%) sentinel specimens tested positive for an influenza virus; all were of subtype A(H3) (Fig. 4 and Table 1).

Details of the distribution of viruses detected in non-sentinel-source specimens are presented in the [Virus characteristics](#) section.

Figure 4. Influenza virus detections in sentinel-source specimens by type and subtype, for week 40/2021

Influenza virus positivity and detections by type, subtype/lineage and week - WHO Europe, season 2021/2022



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Table 1. Influenza virus detections in sentinel-source specimens by type and subtype for week 40/2021 and cumulatively for the season

Sentinel	Current Week (40)		Season 2021-2022	
Virus type and subtype	Number	% ^a	Number	% ^a
Influenza A	6	100	6	100
A(H1)pdm09	0	0	0	0
A(H3)	6	100	6	100
A not subtyped	0	-	0	-
Influenza B	0	0.0	0	0.0
B/Victoria lineage	0	0	0	0
B/Yamagata lineage	0	0	0	0
Unknown lineage	0	-	0	-
Total detections (total tested)	6 (707)	0.8	6 (707)	0.8

^a For influenza type percentage calculations, the denominator is total detections; for subtype and lineage, it is total influenza A subtyped and total influenza B lineage determined, respectively; for total detections, it is total tested.

External data sources

[Influenzanet](https://influenzanet.eu) collects weekly data on symptoms in the general community from different participating countries across the EU/EEA. Please refer to the website for additional information for this week.

Hospital surveillance

A subset of countries and areas monitor severe disease related to influenza virus infection by surveillance of 1) hospitalized laboratory-confirmed influenza cases in ICUs or other wards, or 2) severe acute respiratory infection (SARI; mainly in the eastern part of the Region).

Laboratory-confirmed hospitalized cases

1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

For week 40/2021, no laboratory-confirmed influenza case was reported from ICU (Figures 5 and 6).

Figure 5. Number of laboratory-confirmed hospitalized cases in intensive care units (ICU) by week of reporting, WHO Europe, for week 40/2021

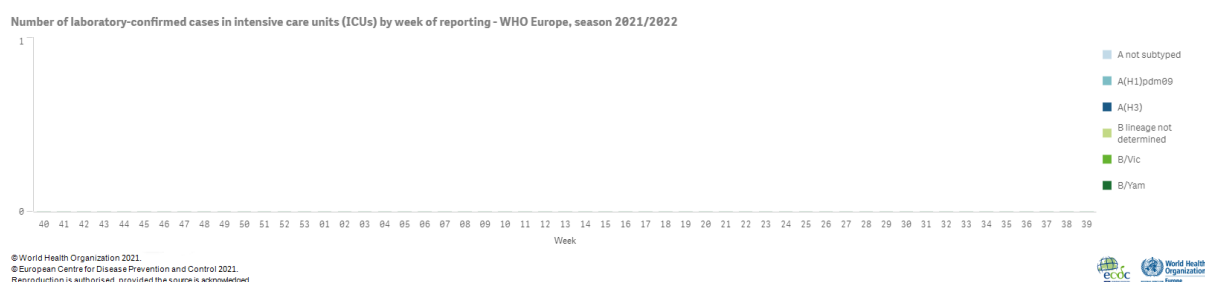
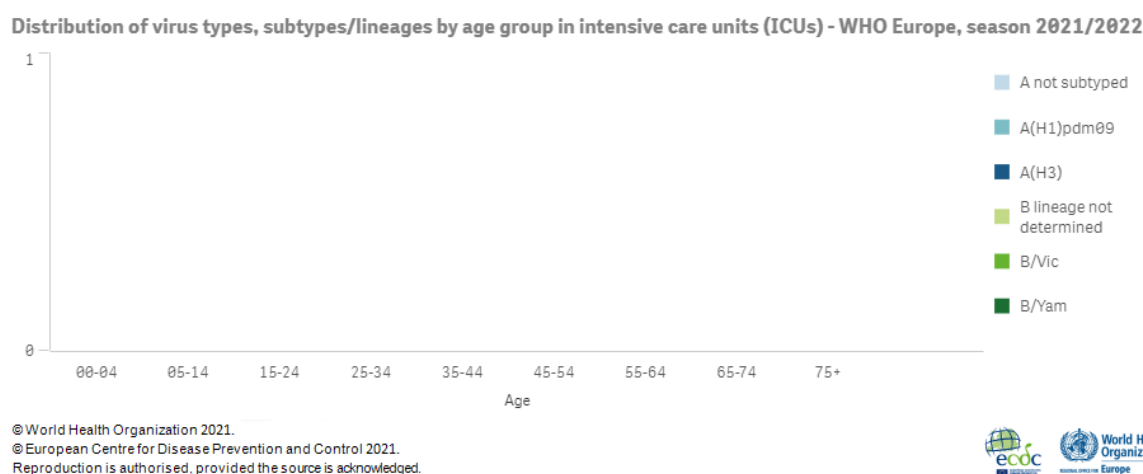


Figure 6. Distribution of virus types, subtypes/lineages by age group in intensive care units (ICU), WHO Europe, for week 40/2021



1.2) Hospitalized laboratory-confirmed influenza cases – other wards

For week 40/2021, no laboratory-confirmed influenza case from other wards was reported (Figures 7 and 8).

Figure 7. Number of laboratory-confirmed hospitalized cases in wards other than intensive care units (non-ICU) by week of reporting, WHO Europe, for week 40/2021

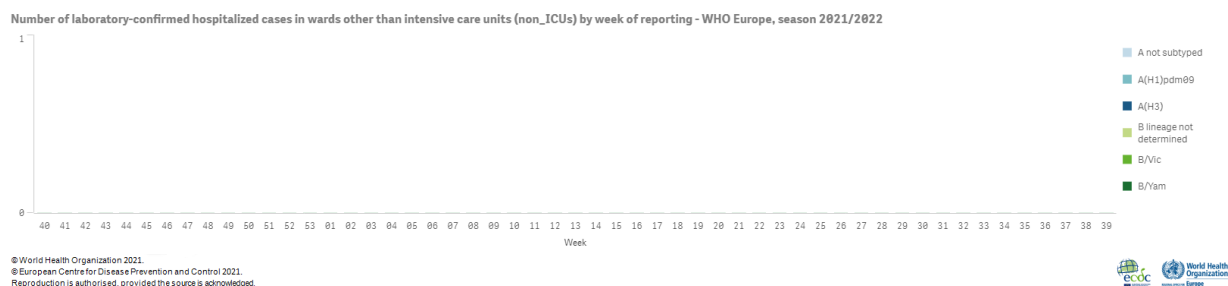
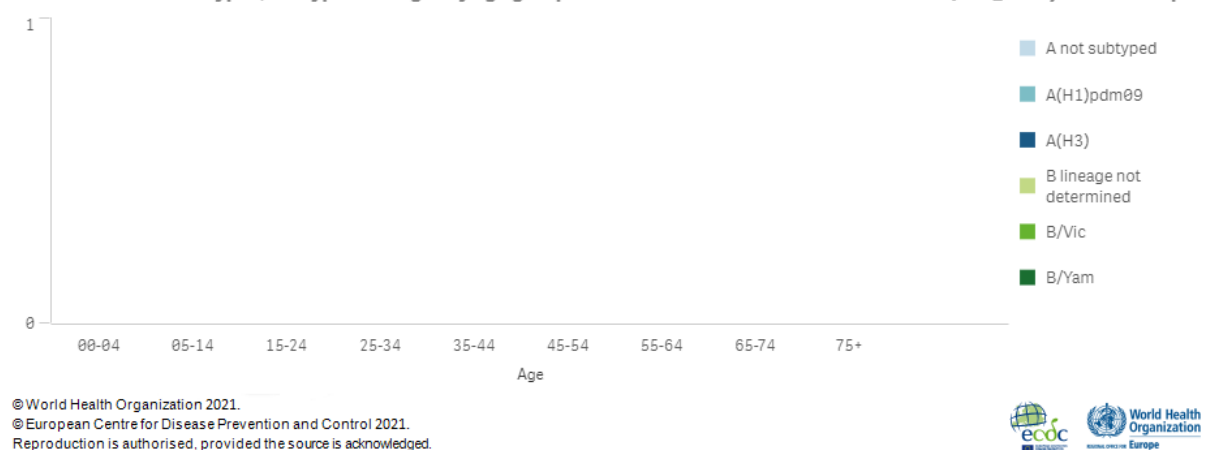


Figure 8. Distribution of virus types, subtypes/lineages by age group in wards other than intensive care units (non-ICU), WHO Europe, for week 40/2021

Distribution of virus types, subtypes/lineages by age group in wards other than intensive care units (non_ICUs) - WHO Europ...

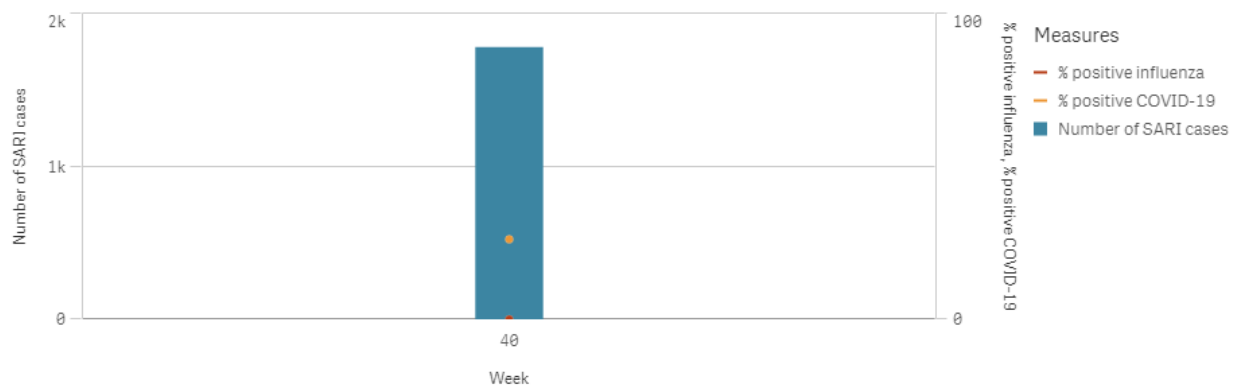


Severe acute respiratory infection (SARI)-based hospital surveillance

For week 40/2021, 1 781 SARI cases were reported by 7 Member States or areas (Albania, Belarus, Republic of Moldova, Russian Federation, Serbia, Spain, Ukraine). Of 97 SARI cases tested for influenza, none was positive (Figure 9).

Figure 9. Number of severe acute respiratory infection (SARI) cases (bar) and positivity for influenza and COVID-19 (point) by week of reporting, WHO Europe, week 40/2021

Number of severe acute respiratory infection (SARI) cases (bar) and positivity for influenza and COVID-19 (line) by week of r...



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Virus characteristics

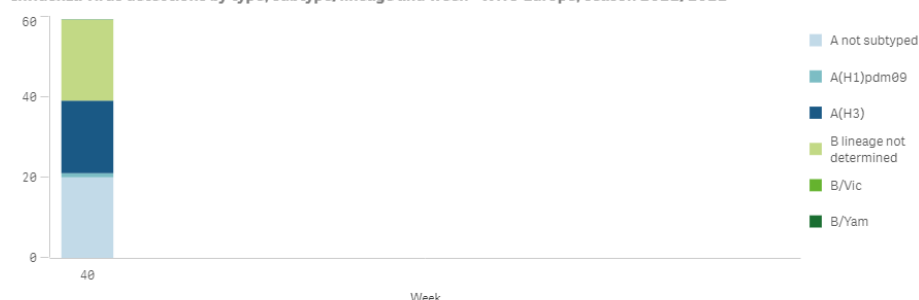
Details of the distribution of viruses detected in sentinel-source specimens can be found in the [Primary care data](#) section.

Non-sentinel virologic data

For week 40/2021, 59 of 33 688 specimens from non-sentinel sources (such as hospitals, schools, primary care facilities not involved in sentinel surveillance, or nursing homes and other institutions) tested positive for influenza viruses; 66% were type A and 34% were type B. Of 19 A viruses subtyped, 95% were A(H3N2), and no B virus ascribed to a lineage (Figure 10 and Table 2).

Figure 10. Influenza detections by type, subtype/lineage and week, WHO Europe, for week 40/2021

Influenza virus detections by type, subtype/lineage and week - WHO Europe, season 2021/2022



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Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 40/2021 and cumulative for the season

Virus type and subtype	Current Week (40)		Week 40/2021	
	Number	% ^a	Number	% ^a
Influenza A	39	66	39	66
A(H1)pdm09	1	5	1	5
A(H3)	18	95	18	95
A not subtyped	20	-	20	-
Influenza B	20	34	20	34
B/Victoria lineage	0	0	0	0
B/Yamagata lineage	0	0	0	0
Unknown lineage	20	-	20	-
Total detections (total tested)	59 (33 688)	-	59 (33 688)	-

^a For type percentage calculations, the denominator is total detections; for subtype and lineage, it is total influenza A subtyped and total influenza B lineage determined, respectively; as not all countries have a true non-sentinel testing denominator, no percentage calculations for total tested are shown.

Genetic characterisation

For week 40/2021 no data on viruses that have been characterised genetically have been reported.

ECDC published the [July](#) virus characterisation report that describes the available data from circulating viruses collected after 31 August 2020. This and previously published influenza virus characterization reports are available on the [ECDC website](#).

Antiviral susceptibility of seasonal influenza viruses

For week 40/2021, no data on influenza viruses that have been tested for susceptibility to neuraminidase inhibitors have been reported.

Vaccine

Available vaccines in Europe

<https://www.ecdc.europa.eu/en/seasonal-influenza/prevention-and-control/vaccines/types-of-seasonal-influenza-vaccine>

Vaccine composition

On 24 September 2021, WHO published recommendations for the components of influenza vaccines for use in the 2022 southern hemisphere influenza season:

Egg-based Vaccines

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Cell- or recombinant-based Vaccines

- an A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus;
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.
-

It is recommended that **trivalent influenza vaccines** for use in the 2022 southern hemisphere influenza season contain the following:

Egg-based vaccines

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus.

Cell- or Recombinant-based vaccines

- an A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
- an A/Darwin/6/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus

The full report is published [here](#).

On 26 February 2021, WHO published [recommendations](#) for the components of influenza vaccines for use in the 2021-2022 northern hemisphere influenza season:

Egg-based Vaccines

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- an A/Cambodia/e0826360/2020 (H3N2)-like virus;
- a B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Cell- or recombinant-based Vaccines

- an A/Wisconsin/588/2019 (H1N1)pdm09-like virus;
- an A/Cambodia/e0826360/2020 (H3N2)-like virus;
- a B/Washington/02/2019 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

It was recommended that the influenza B virus component of **both trivalent vaccine types** for use in the 2021–2022 northern hemisphere influenza season should be a B/Washington/02/2019-like virus of the B/Victoria-lineage.

This weekly update was prepared by an editorial team at the European Centre for Disease Prevention and Control (Cornelia Adlhoch and Ole Heuer) and the WHO Regional Office for Europe (Margaux Meslé, Piers Mook and Richard Pebody).

Maps and commentary do not represent a statement on the legal or border status of the countries and territories shown.

All data are up to date on the day of publication. Past this date, however, published data should not be used for longitudinal comparisons, as countries retrospectively update their databases.

The WHO Regional Office for Europe is responsible for the accuracy of the Russian translation.

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