Summary

Week 19/2022 (09 May-15 May 2022)

- 8 of 41 countries across the Region reported widespread influenza activity.
- The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus decreased to 10% from 14% in the previous week.
- Three countries reported seasonal influenza activity above 30% positivity in sentinel primary care: Finland (50%), Slovakia (38%) and the Netherlands (31%).
- Both influenza type A and type B viruses were detected with A(H3) viruses being dominant across all monitoring systems.
- Hospitalized patients with laboratory confirmed influenza were infected with type A or B viruses.

2021-2022 season overview

- For the Region as a whole, influenza activity reached levels well above those observed in the 2020/21 season.
- Influenza activity, based on sentinel primary care specimens from patients presenting with ILI or ARI symptoms, first peaked in week 52/2021 (reaching 19% positivity), declining thereafter until week 4/2022, when it increased again reaching a plateau phase (25-30% positivity) between weeks 10 and 15/2022 (this represents late activity compared to most previous seasons) followed by a subsequent 4-week decline.
- Different levels of activity have been observed between the countries and areas of the Region, with a dominance of A(H3) viruses in most countries.
- During the influenza Vaccine Composition Meeting for the northern hemisphere 2022/23 season, held in February 2022, WHO

recommended updating of the A(H3N2) and the B/Victoria-lineage components. The full report can be found here.

- The European I-MOVE network estimated influenza VE using a multicenter test-negative design among symptomatic patients presenting at primary care between October 2021 and March 2022. Preliminary influenza VE against influenza A among seven study sites and among all ages was 36% (95% CI: 13–53) and 41% (95% CI: 15–59) among those aged 18–64 years. All-age VE against influenza A(H3N2) was 35% (95% CI: 6–54) and 37% (95% CI: 3–59) among those aged 18–64 years. There were too few influenza-positive cases among other age groups to allow VE estimations.
- In Sweden, the vaccine effectiveness against laboratory-confirmed influenza was estimated to be 47% for individuals over 65 years of age.
- According to preliminary data in mainland France, the VE was estimated to be 50% (95% CI: 14-71) against all circulating influenza viruses, 77% (95% CI: 36-92) for A(H1N1)pdm09 and 31% (95% CI: -29-64) for A(H3N2).
- For children aged 2 to 6 years in Denmark, the estimated VE against influenza A viruses was estimated at 63% (95% CI: 10.9–84.4) in those hospitalized, and 64% (95% CI: 50.5–74.1) in those not hospitalized.
- Preliminary results of 2021-2022 seasonal influenza vaccine effectiveness (VE) estimates from the United States showed that VE against medically attended outpatient acute respiratory infection associated with A(H3N2), the dominant influenza virus in circulation, was 16% (95% CI = −16% to 39%).
- With increased circulation of influenza viruses clinicians should consider early antiviral treatment of patients in at-risk groups with influenza virus infection, according to local guidance, to prevent severe outcomes. The majority of viruses analyzed so far have remained susceptible to neuraminidase inhibitors and baloxavir marboxil.

Other news

For information about the SARS-CoV-2 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 19/2022, of 40 countries and areas reporting on intensity of influenza activity, 24 reported baseline-intensity (across the Region), 13 reported low-intensity (across the Region), 2 reported high-intensity (Finland and Luxembourg) and 1 reported medium-intensity (Latvia) (Fig. 1).

Of 41 countries and areas reporting on geographic spread of influenza viruses, 15 reported no activity (in eastern, southern and western areas), 15 reported sporadic spread (across the Region), 2 reported local spread (Luxembourg and Slovenia), 1 reported regional spread (France) and 8 reported widespread activity (Estonia, Finland, Germany, Latvia, Netherlands, Norway, Portugal and Sweden) (Fig. 2).

Figure 1. Intensity of influenza activity in the European Region, week 19/2022

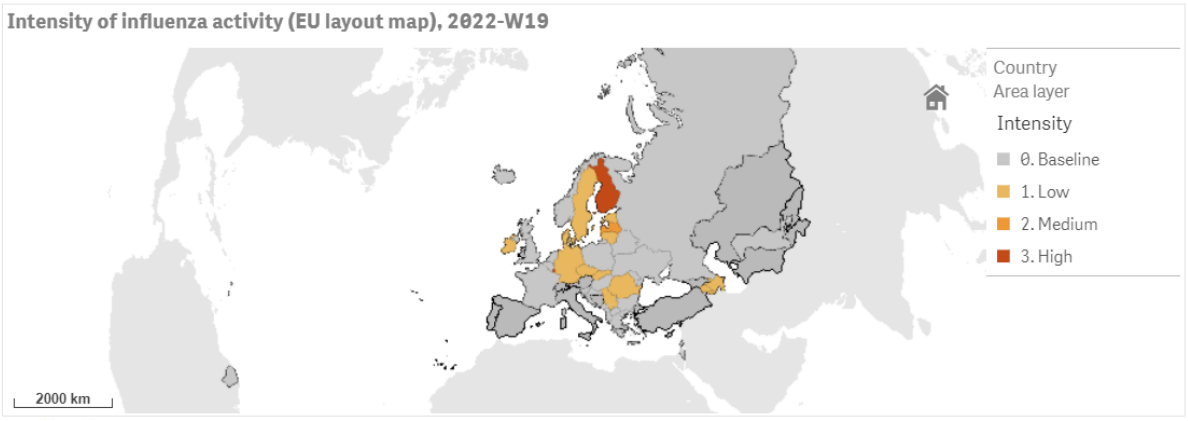
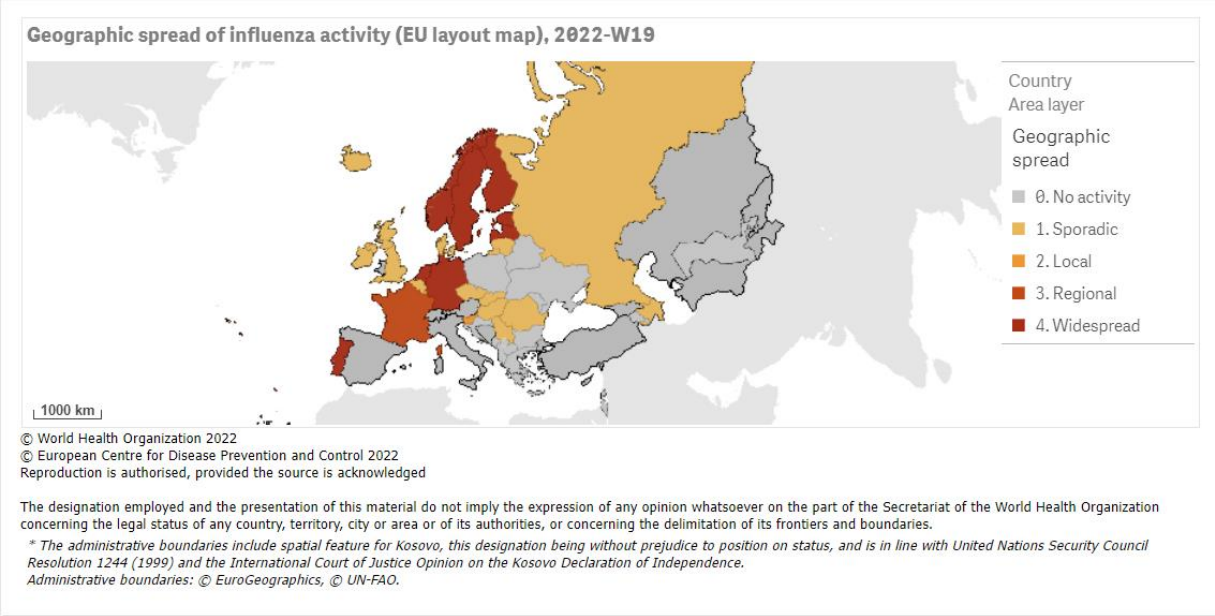


Figure 2. Geographic spread of influenza viruses in the European Region, week 19/2022



For interactive maps of influenza intensity and geographic spread, see the Flu News Europe website.

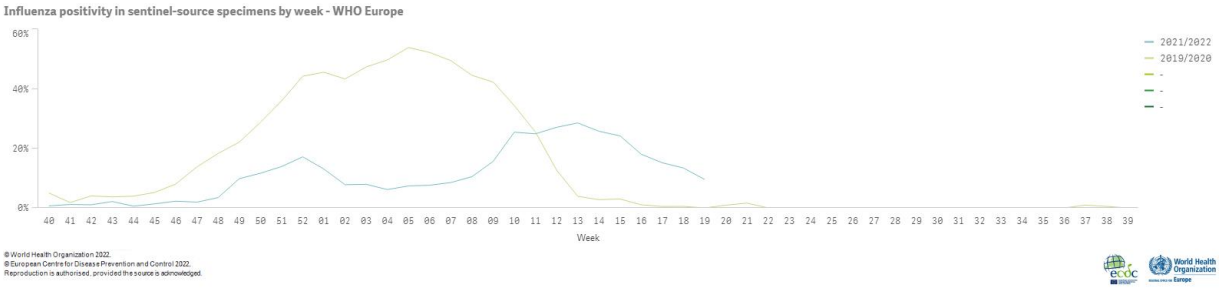
Please note:

- 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 virus, including SARS-CoV-2, leading to observed increases in the absence of influenza virus detections.
- 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 primary care specimens decreased from 14% in the previous week to 10% which is the set epidemic threshold (Fig. 3).

Figure 3. Influenza virus positivity in sentinel-source specimens by week, WHO European Region, seasons 2019/2020 and 2021/2022



External data sources

Mortality monitoring: In week 19/2022 overall pooled EuroMOMO estimates of all-cause mortality for the participating European countries showed decreasing, but still elevated, excess mortality among the elderly (65 years or older). Data from 26 European countries or subnational regions were included in the week's pooled analysis of all-cause mortality. The full EuroMOMO report can be found here: https://www.euromomo.eu/.

Primary care data

Syndromic surveillance data

Of the countries and areas in which thresholds for ILI activity are defined, countries in eastern (n=1; Azerbaijan), northern (n=3; Denmark, Estonia and Latvia), southern (n=1; Croatia) and western (n=2; Belgium and Luxembourg) areas of the European Region reported activity above baseline levels.

Of the countries and areas in which thresholds for ARI activity are defined, countries in eastern (n=1; Belarus) and northern (n=1; Latvia) areas of the European Region reported activity above baseline levels.

Please note:

- Assessment of the syndromic surveillance data of ILI or ARI rates might be driven by respiratory infections other than influenza virus, including SARS-CoV-2, leading to observed increases in the absence of influenza virus detections. The thresholds mentioned are related to the Moving Epidemic Method (MEM) and based on historic ILI/ARI data.

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

For week 19/2022, 85 (10%) of 892 sentinel specimens tested positive for an influenza virus; 83 (98%) were type A and 2 (2%) were type B. Of 55 subtyped A viruses, 87% were A(H3) and 13% A(H1)pdm09. Only 1 type B virus was ascribed to a lineage and it was B/Victoria (Fig. 4 and Table 1). Of 19 countries or areas across the Region that each tested at least 10 sentinel specimens in week 19/2022, 8 reported a rate of influenza virus detections above 10% (median 24%; range 16% - 50%): Finland (50%), Slovakia (38%), Netherlands (31%), Norway (26%), Luxembourg (21%), France (17%), Italy (17%) and Germany (16%).

For the season to date, 6 804 (12%) of 58 012 sentinel specimens tested positive for an influenza virus. More influenza type A (n=6 710, 99%) than type B (n=94, 1%) viruses have been detected. Of 5 579 subtyped A viruses, 5 195 (93%) were A(H3) and 384 (7%) were A(H1)pdm09. Of 14 influenza type B viruses ascribed to a lineage, all were B/Victoria (85% of type B viruses were reported without a lineage) (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 positivity and detections by type, subtype/lineage – sentinel sources, WHO European Region, season 2021/22

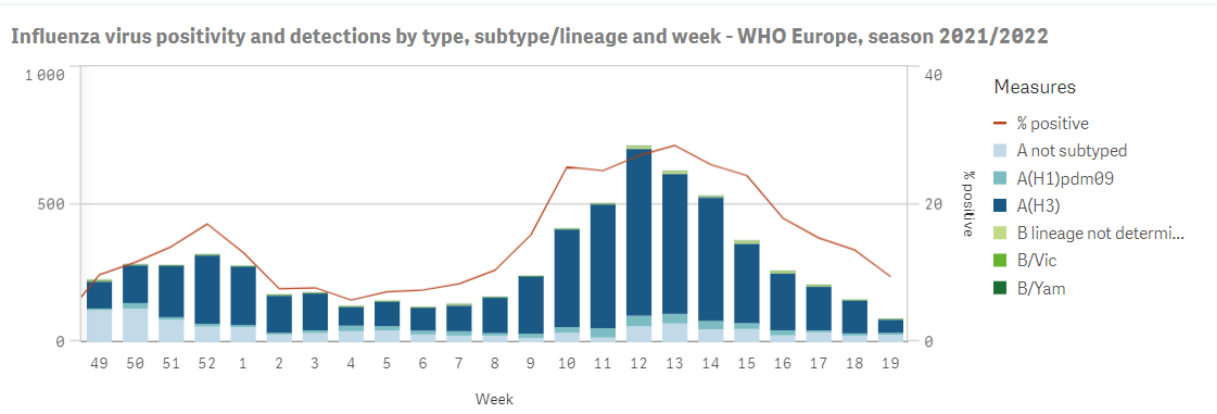


Table 1. Influenza virus detections in sentinel source specimens by type and subtype for week 19/2022 and cumulatively for the season

Sentinel	Current Week (19)		Season 2021-2022	
Virus type and subtype	Number	%[a]	Number	%[a]

Influenza A	**83**	**97.6**	**6 710**	**98.6**
A(H1)pdm09	7	12.7	384	6.9
A(H3)	48	87.3	5 195	93.1
A not subtyped	28	-	1 131	-
Influenza B	**2**	**2.4**	**94**	**1.4**
B/Victoria lineage	1	100	14	100
B/Yamagata lineage	0	-	0	0
Unknown lineage	1	-	80	-
Total detections (total tested)	**85 (892)**	**9.5**	**6 804 (58 012)**	**11.7**

[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 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 week 18/2022.

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).

Laboratory-confirmed hospitalized cases

1.1) Hospitalized laboratory-confirmed influenza cases – ICUs

For week 19/2022, 4 laboratory-confirmed influenza cases were reported from ICU wards (in Czechia and Sweden). The patients were infected with influenza A virus, only 1 of which was ascribed to a subtype, it was A(H3) (Fig. 5 and 6).

Since week 40/2021, more influenza type A (n=742, 97.6%) than type B (n=18, 2.4%) viruses were detected (in Czechia, France, Ireland, Sweden and United Kingdom (England)). Of 155 subtyped influenza A viruses, 61% were A(H3) and 39% were A(H1)pdm09. No influenza B viruses were ascribed to a lineage. Of 556 cases with known age, 248 were 15-64 years old, 197 were 65 years and older, 58 were 0-4 years old and 53 were 5-14 years old.

Figure 5. Number of laboratory-confirmed hospitalized influenza cases in intensive care units (ICU) by week of reporting, WHO European Region, season 2021/2022

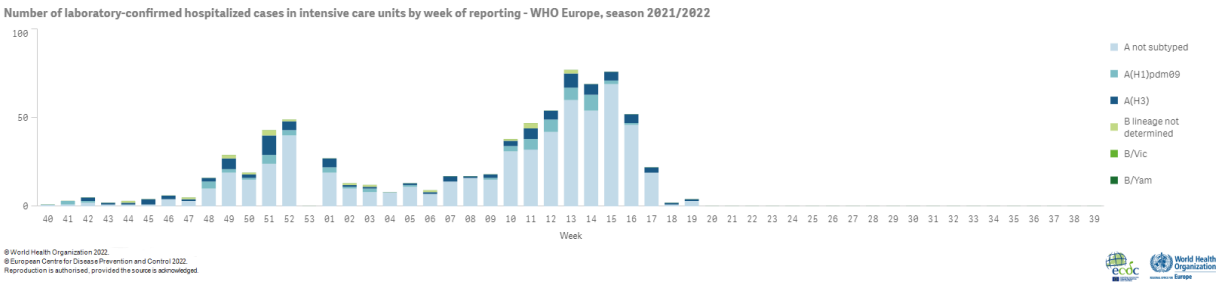
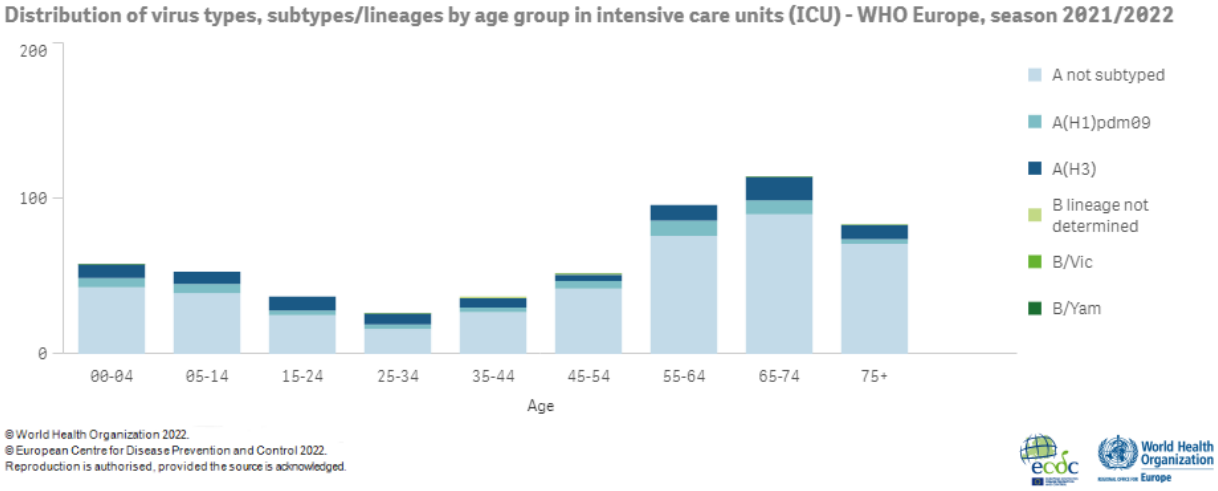


Figure 6. Distribution of influenza virus types, subtypes/lineages by age group in intensive care units (ICU), WHO European Region, season 2021/2022



1.2) Hospitalized laboratory-confirmed influenza cases – other wards

For week 19/2022, 4 laboratory-confirmed influenza cases were reported from other wards (in Czechia and Ireland). Only influenza type A viruses were detected, one of which was assigned to a subtype, and it was A(H1)pmd09 (Fig. 7 and 8).

Since week 40/2021, 547 influenza type A viruses and 2 influenza type B viruses were detected (in Czechia, Ireland and Ukraine). Of 143 subtyped influenza A viruses, 98% were A(H3) and 2% A(H1)pdm09. The 549 cases with known age fell in 4 age groups: 237 were 65 years and older, 208 were 15-64 years old, 69 were 0-4 years old and 35 were 5-14 years old.

Figure 7. Number of laboratory-confirmed hospitalized influenza cases in wards other than intensive care units (non-ICU) by week of reporting, WHO European Region, season 2021/2022

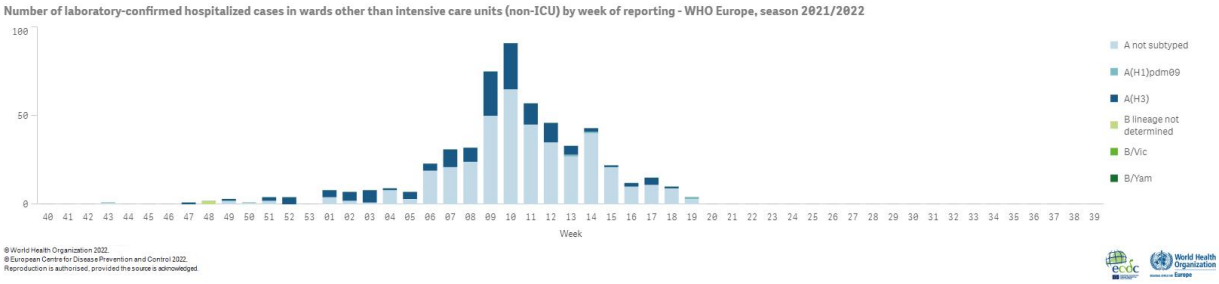
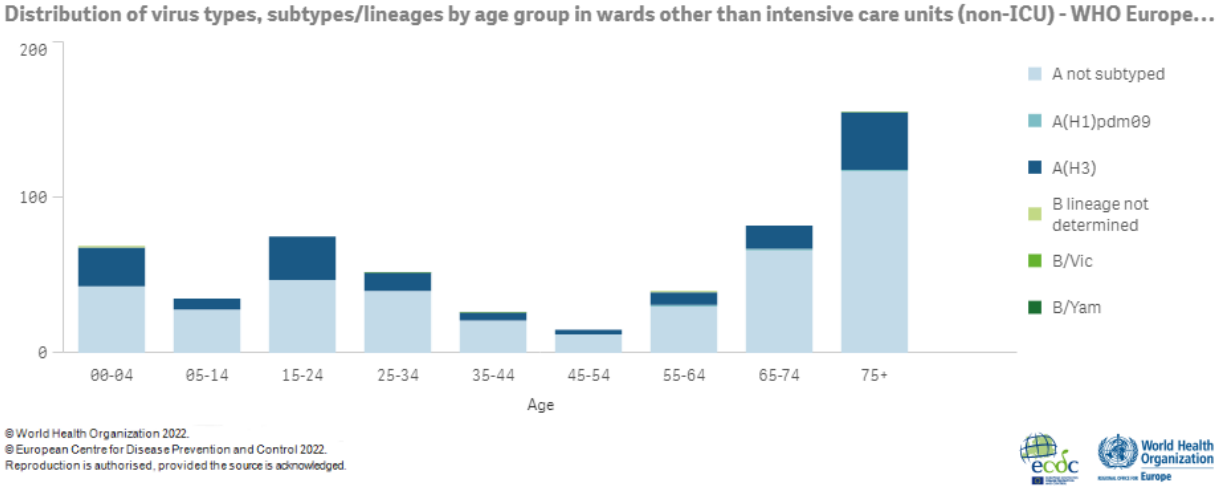


Figure 8. Distribution of influenza virus types, subtypes/lineages by age group in wards other than intensive care units (non-ICU), WHO European Region, season 2021/2022



Severe acute respiratory infection (SARI)-based hospital surveillance

For week 19/2022, 1 556 SARI cases were reported by 14 countries or areas (Albania, Armenia, Germany, Ireland, Lithuania, Montenegro, North Macedonia, Republic of Moldova, Romania, Russian Federation, Serbia, Spain, Ukraine and Uzbekistan). Of 171 specimens tested for influenza viruses, 2% (n=3) were positive, 2 type B virus and 1 type A virus. The type A virus was A(H3) subtype (Fig. 9 and Fig. 10). No country reported positivity rates above 10%.

For the season, 130 432 SARI cases were reported by 23 countries or areas (Albania, Armenia, Belarus, Belgium, Croatia, Georgia, Germany, Ireland, Kazakhstan, Kyrgyzstan, Lithuania, Malta, Montenegro, North Macedonia, Republic of Moldova, Romania, Russian Federation, Serbia, Spain, Turkey, Ukraine, Uzbekistan and Kosovo (in accordance with Security Council resolution 1244 (1999))). For SARI cases testing positive for influenza virus since week 40/2021, type A viruses have been the most common (n=1 282, 95%). For 1 143 cases where influenza virus subtyping was performed, 1118 (98%) were

infected by A(H3) viruses and 25 (2%) were infected by A(H1)pdm09 viruses. Of those influenza B viruses that have been ascribed to a lineage (n=10, 5%), all were B/Victoria (Fig. 10).

Figure 9. Number of severe acute respiratory infection (SARI) cases (bar) and positivity for influenza virus and SARS-CoV-2 (line) by week, WHO European Region, season 2021/2022

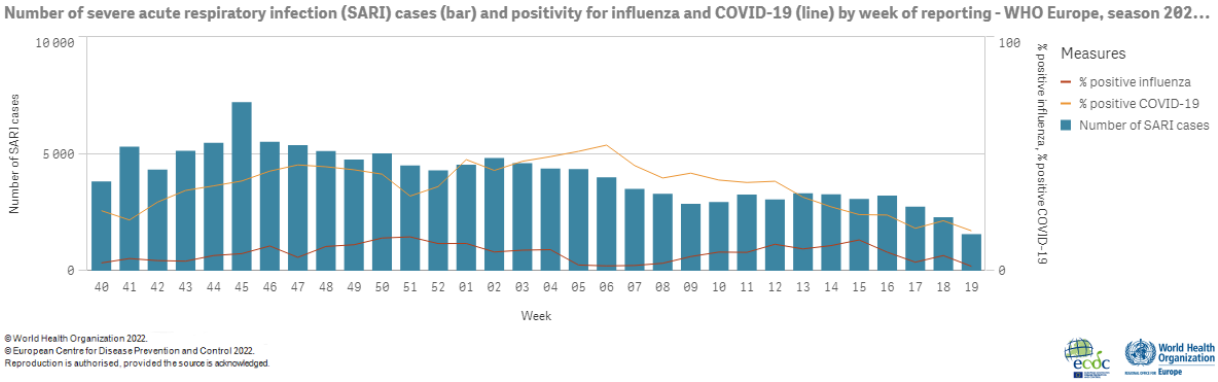
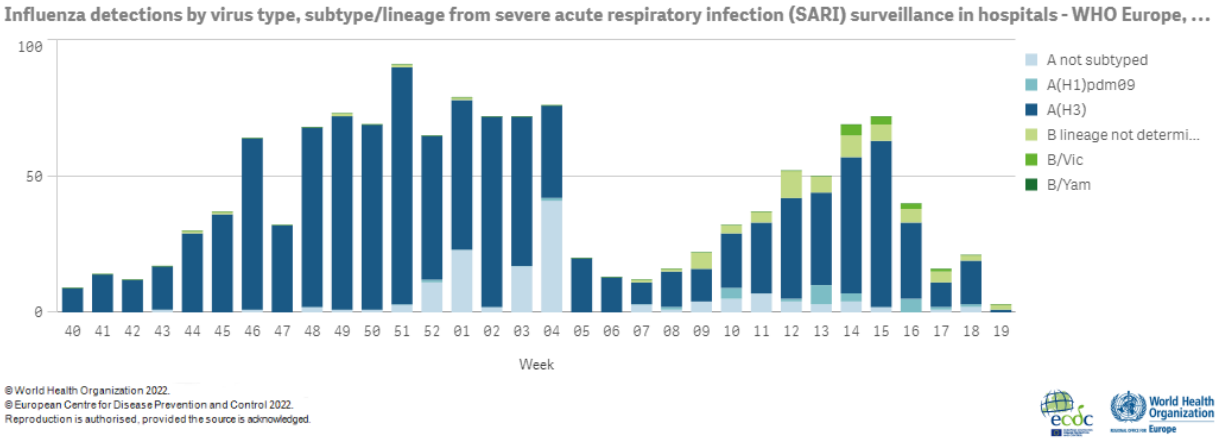


Figure 10. Influenza virus detections by type, subtype/lineage from severe acute respiratory infection (SARI), WHO European Region, season 2021/2022



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 19/2022, 1 831 of 37 537 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 an influenza virus; 1 768

(97%) were type A and 63 (3%) were type B. Of 346 subtyped A viruses, 336 (97%) were A(H3) and 10 (3%) were A(H1)pdm09. Of 2 type B viruses ascribed to a lineage, both were Victoria lineage (Fig. 11 and Table 2).

For the season to date, more influenza type A (n=121 978, 98%) than type B (n=2 135, 2%) viruses have been detected. Of 29 173 subtyped A viruses, 26 739 (92%) were A(H3) and 2 434 (8%) were A(H1)pdm09. Of 88 influenza type B viruses ascribed to a lineage, 98% were B/Victoria and 2% were B/Yamagata (96% of type B viruses were reported without a lineage) (Fig. 11 and Table 2).

Figure 11. Influenza virus detections by type, subtype/lineage and week, non-sentinel sources, WHO European Region, season 2021/2022

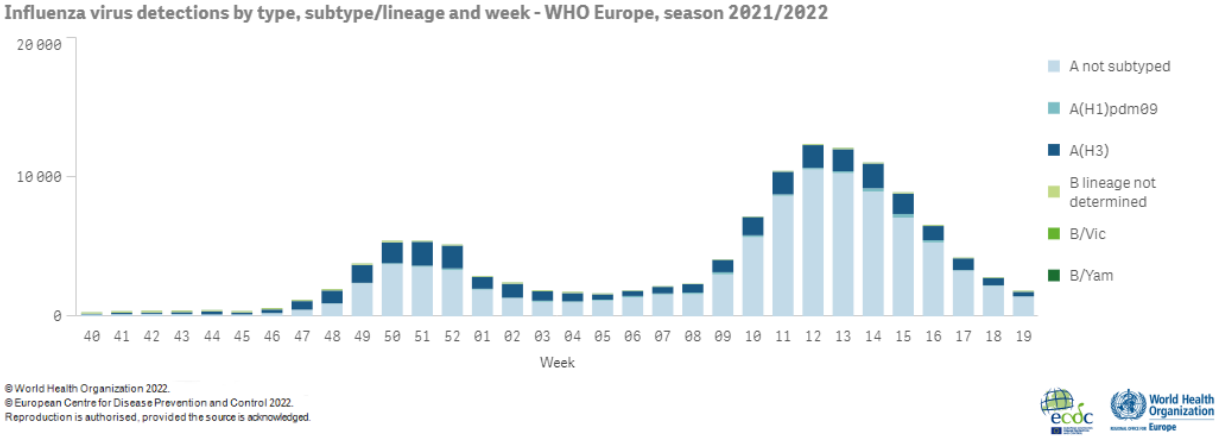


Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 19/2022 and cumulative for the season

	Current Week (19)		Season 2021-2022	
Virus type and subtype	**Number**	**%[a]**	**Number**	**%[a]**
Influenza A	**1 768**	**96.6**	**121 978**	**98.3**
A(H1)pdm09	10	2.9	2 434	8.3
A(H3)	336	97.1	26 739	91.7
A not subtyped	1 422	-	92 805	-
Influenza B	**63**	**3.4**	**2 135**	**1.7**
B/Victoria lineage	2	100	86	97.7
B/Yamagata lineage	0	0	2	2.3
Unknown lineage	61	-	2 047	-
Total detections (total tested)	**1 831 (37 537)**	**-**	**124 113 (2 501 854)**	**-**

[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 characterization

Of the 271 genetically characterized A(H1)pdm09 viruses up to week 19/2022, the majority (246; 91%) belonged to clade 6B.1A.5a.1, represented by A/Guangdong-Maonan/SWL1536/2019. Only a few viruses belonged to clade 6B.1A.5a.2: 7 (3%) were represented by A/India/Pun-NIV312851/2021 and 17 (6%) were represented by A/Victoria/2570/2019, the virus component for the 2021/22 and 2022/23 northern hemisphere vaccines. 1 virus was not attributed to a clade.

Among the A(H3) viruses characterized up to week 19/2022, 2 889 were attributed to a clade. The majority 2 879 (>99%) belonged to clade 3C.2a1b.2a.2, represented by the A/Darwin/9/2021 component of 2022/23 northern hemisphere vaccines. Only 9 (<1%) were clade 3C.2a1b.1a viruses and 1 (<1%) virus fell into clade 3C.2a1b.2a.1.

Up to week 19/2022, 54 B/Victoria viruses were characterized. 29 of the viruses belonged to clade V1A.3a.2, represented by B/Austria/1359417/2021, the recommended vaccine virus for the 2022/23 northern hemisphere influenza season. 23 of the viruses from recent weeks fell into clade V1A.3, which recently emerged in the European area, represented by B/Washington/02/2019, the recommended vaccine virus strain for the 2021/22 northern hemisphere influenza season. 2 viruses were not attributed to a clade.

7 viruses were characterized as B/Yamagata with 4 being B/Phuket/3073/2013-like, while 3 viruses were not attributed to a clade. However, the possibility that these 7 viruses were derived from live attenuated influenza vaccine (LAIV) could not be excluded.

Table 3. Number of influenza viruses attributed to genetic groups, cumulative for the season- WHO Europe*

Number of influenza viruses attributed to genetic groups, cumulative for the season - WHO Europe

Virus Type	Virus Subtype	Genetic charact...	Number of influenza viruses attributed to genetic groups 2021/2022
Total			**3 221**
Influenza A			**3 160**
	A(H1)pdm09		**271**
		A(H1)pdm09_NOClade *	1
		A/Guangdong-Maonan/SWL1536/2019(H1N1)pdm09_6B.1A.5a.1	246
		A/India/Pun-NIV312851/2021(H1N1)pdm09_6B.1A.5a.2	7
		A/Victoria/2570/2019(H1N1)pdm09_6B.1A.5a.2	17
	A(H3)		**2 889**
		A/Bangladesh/4005/2020(H3)_3C.2a1b.2a.2	2 879
		A/Cambodia/e0826360/2020(H3)_3C.2a1b.2a.1	1
		A/Denmark/3264/2019(H3N2)_3C.2a1b.1a	9
Influenza B			**61**
	B/Vic		**54**
		B/Austria/1359417/2021(Victoria lineage_1A.3a.2)	29
		B/Victoria_NOClade *	1

ECDC published the March virus characterization report that describes the available data from circulating viruses this influenza season: currently type A influenza virus circulation is dominating over type B, due mainly to A(H3) viruses. Vaccination remains the best protective measure for prevention of influenza. However, based on post-infection ferret antisera data, the predominant A(H3N2) viruses in circulation are not well recognized by antisera raised against viruses genetically and antigenically similar to the vaccine virus, indicating antigenic diversity. Therefore, it is possible that the A(H3) vaccine component may induce less good recognition of the prevalent A(H3) viruses, although preliminary VE data indicates a still moderate level of protection against laboratory confirmed infection. Clinicians should therefore consider early antiviral treatment of at-risk groups with influenza infection, according to local guidance, to prevent severe outcomes.

This and previously published influenza virus characterization reports are available on the ECDC website.

Antiviral susceptibility of seasonal influenza viruses

Up to week 19/2022, 2 369 viruses were assessed for susceptibility to neuraminidase inhibitors (1 608 A(H3), 221 A(H1)pdm09 and 45 B viruses genotypically and 451 A(H3), 31 A(H1)pdm09 and 13 B viruses phenotypically), and 1 684 viruses were assessed for susceptibility to baloxavir marboxil (1 449 A(H3), 204 A(H1)pdm09 and 31 B viruses genotypically). Phenotypically, no viruses with reduced susceptibility were identified and genotypically 2 A(H3) viruses with potentially reduced susceptibility to baloxavir marboxil and 1 A(H1)pdm09 virus with potential highly reduced inhibition by oseltamivir were identified.

Vaccine effectiveness

The European I-MOVE network estimated influenza vaccine effectiveness (VE) using a multicentre test-negative design among symptomatic patients presenting at primary care level between October 2021 and March 2022. Preliminary influenza VE against influenza A among seven study sites and among all ages was 36% (95% CI: 13–53) and 41% (95% CI: 15–59) among those aged 18–64 years. All-age VE against influenza A(H3N2) was 35% (95% CI: 6–54) and 37% (95% CI: 3–59) among those aged 18–64 years. There were too few influenza-positive cases among other age groups to allow VE estimations.

In Sweden, the VE against laboratory-confirmed influenza was estimated to be 47% for individuals over 65 years of age.

According to preliminary data in mainland France, the VE was estimated to be 50% (95% CI: 14-71) against all circulating influenza viruses, 77% (95% CI: 36-92) for A(H1N1)pdm09 and 31% (95% CI: -29-64) for A(H3N2).

For children aged 2 to 6 years in Denmark, the estimated VE against influenza A viruses was estimated at 63% (95% CI: 10.9–84.4) in those hospitalised, and 64% (95% CI: 50.5–74.1) in those non-hospitalised.

Preliminary results of 2021-2022 seasonal influenza VE estimates from the United States showed that VE against medically attended outpatient acute respiratory infection associated with influenza A(H3N2) virus was 16% (95% CI = −16% to 39%), this was interpreted to show that "influenza vaccination did not reduce the risk for outpatient medically attended illness with influenza A(H3N2) viruses that predominated so far this season."

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:

The WHO recommends that quadrivalent vaccines for use in the 2022 influenza season in the southern hemisphere contain the following:

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 25 February 2022, WHO published recommendations for the components of influenza vaccines for use in the 2022-2023 northern hemisphere influenza season:

The WHO recommends that quadrivalent vaccines for use in the 2022-2023 influenza season in the northern hemisphere contain the following:

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 culture- 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.

The WHO recommends that trivalent vaccines for use in the 2022-2023 influenza season in the northern hemisphere 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 culture- 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

Disclaimer:

** The administrative boundaries include spatial feature for Kosovo, this designation being without prejudice to position on status, and is in line with*

United Nations Security Council Resolution 1244 (1999) and the International Court of Justice Opinion on the Kosovo Declaration of Independence.

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

External reviewers are: Rod Daniels, WHO Collaborating Centre for Reference and Research on Influenza, Francis Crick Institute (United Kingdom) and Adam Meijer, National Institute for Public Health and the Environment (the Netherlands).

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.

Suggested citation:

European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Flu News Europe, Joint ECDC–WHO weekly influenza update, week 19/2022.

Tables and Figures should be referenced:

European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Flu News Europe, Joint ECDC–WHO weekly influenza update, week 19/2022.