

Summary

Week 39/2021 (27 September – 3 October 2021)

- Influenza activity remained at interseasonal levels, with an increase in A(H3) detections in sentinel and non-sentinel specimens in the last two weeks (see figures 3 and 8).
- Of the 23 countries who have reported RSV data, 19 reported unusual out of season activity starting on average from week 20/2021.
- This is the last issue of the interseasonal report, from next week data will be updated on a weekly basis.

Qualitative indicators

Information on countries and areas reporting on intensity of activity and geographic spread for this week can be seen in Figures 1 and 2, respectively.

Figure 1. Intensity in the European Region, week 39/2021

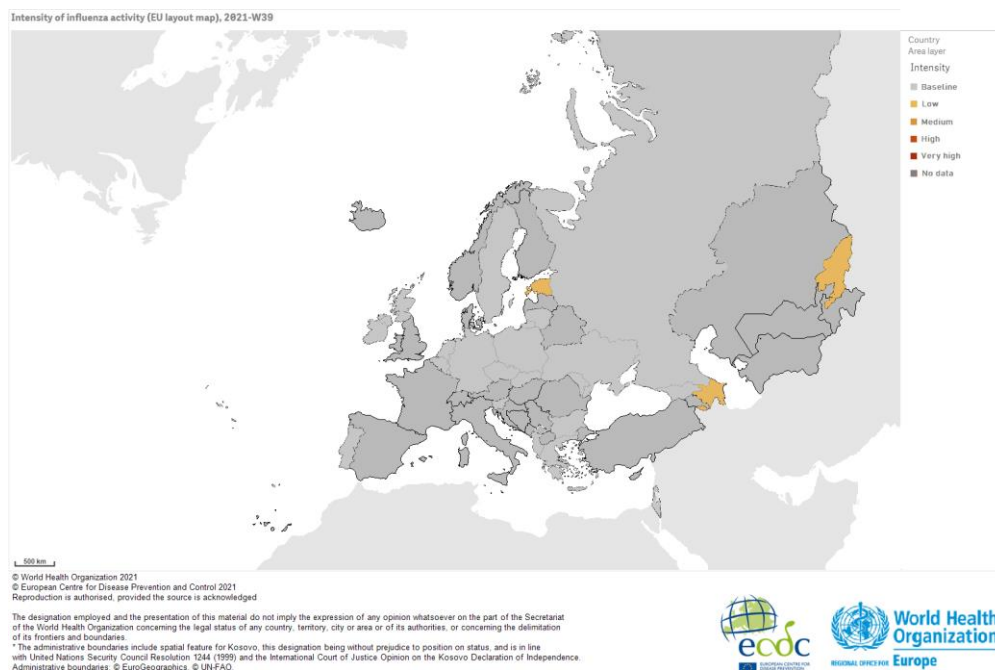
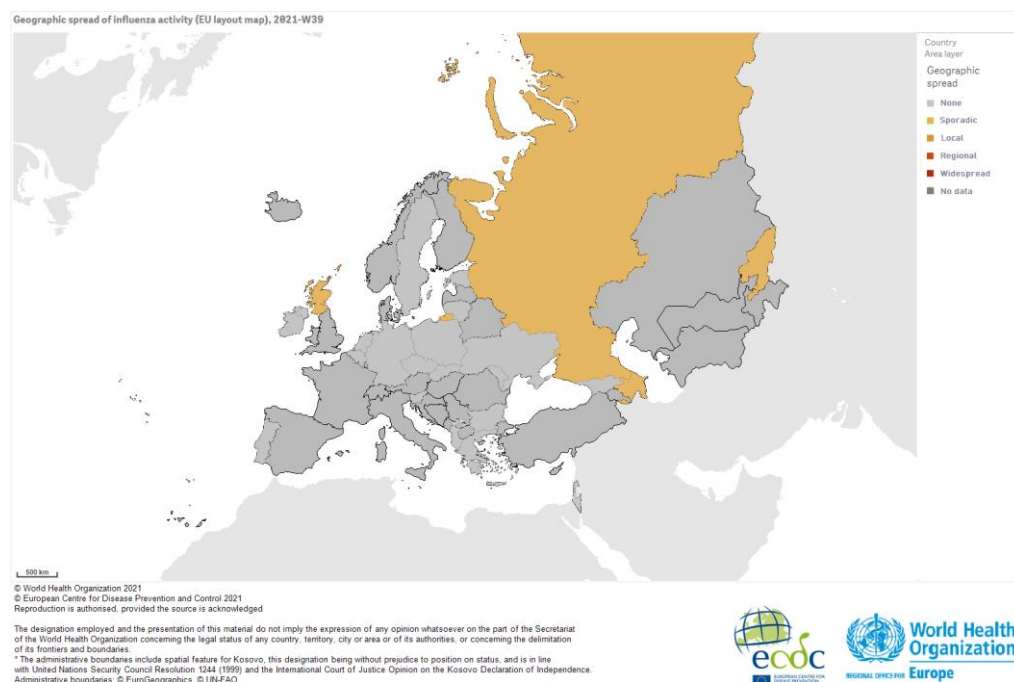


Figure 2. Geographic spread in the European Region, week 39/2021



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.

2020-2021 season overview

- For the Region as a whole, influenza activity has been at baseline level since the start of the season.
- The influenza epidemic in the European Region did not increase above baseline, despite widespread and regular testing for influenza viruses. Reported influenza activity has remained at a very low level throughout the season, likely due to the impact of the various public health and social measures implemented to reduce transmission of SARS-CoV-2.
- The COVID-19 pandemic affected healthcare seeking behaviours, healthcare provision, and testing practices and capacities in countries and areas of the European Region. This had a negative impact on the collection of influenza epidemiologic and virologic data from March 2020. However, surveillance improved over the course of the 2020-2021 season and although there were similar or even higher numbers of samples tested as compared with previous seasons and years, there was a remarkable decrease (>99%) in the number of influenza infections detected, with numbers detected on a weekly basis being similar to those reported during interseasonal periods.

Other news

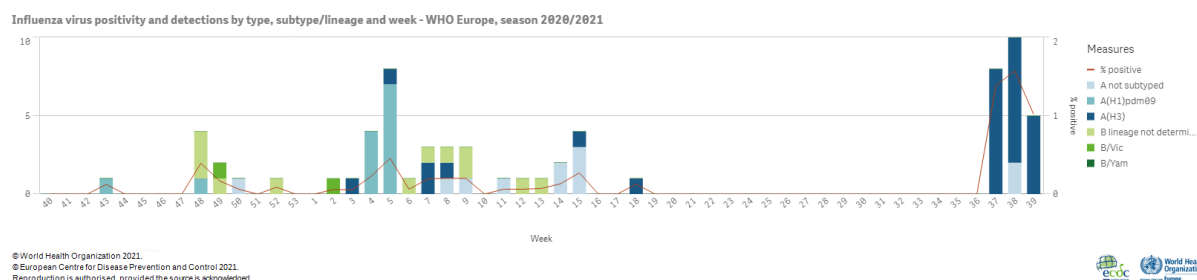
The World Health Organization categorized COVID-19 as a pandemic on 11 March 2020. For more information about the situation in the WHO European Region visit:

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

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 virus detections in sentinel-source specimens by type and subtype, and for weeks 40/2020-39/2021



External data sources

Mortality monitoring: Please refer to the [EuroMOMO](#) project for additional information.

Primary care data

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

Please refer to respective Table 1 and Figure 3, respectively, for additional information on sentinel specimens tested for influenza viruses for this week.

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

Table 1. Influenza virus detections in sentinel-source specimens by type and subtype for week 39/2021 and cumulatively for 40/2020-397/2021

Virus type and subtype	Current Week (39)		Weeks 40/2020 - 39/2021	
	Number	% ^a	Number	% ^a
Influenza A	5	100	52	79
A(H1)pdm09	0	-	11	46
A(H3)	5	-	13	54
A not subtyped	0	-	28	-
Influenza B	0	0	14	21
B/Victoria lineage	0	-	2	-
B/Yamagata lineage	0	-	0	-
Unknown lineage	0	-	12	-
Total detections (total tested)	5 (492)	2	66 (52 783)	0.1

^aFor 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 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

Please refer to the respective Figures 4 and 5, respectively, below for more information for this week.

Figure 4. Number of laboratory-confirmed hospitalized cases in intensive care units (ICU) by week of reporting, WHO Europe, for weeks 40/2020–39/2021

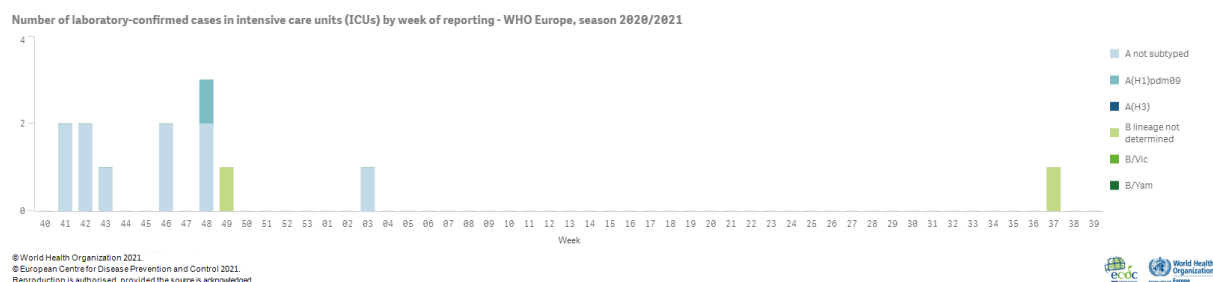
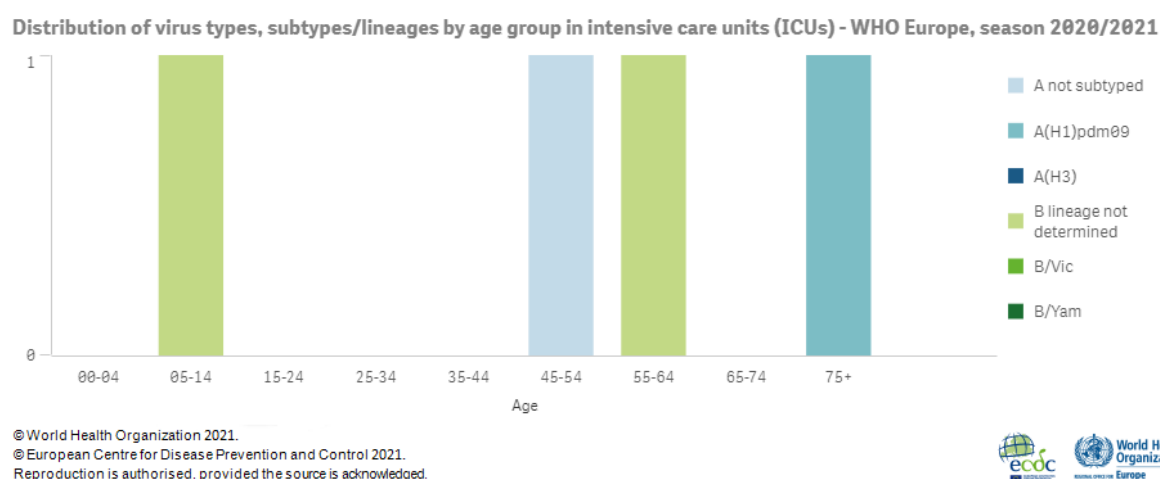


Figure 5. Distribution of virus types, subtypes/lineages by age group in intensive care units (ICU), WHO Europe, for weeks 40/2020–39/2021



1.2) Hospitalized laboratory-confirmed influenza cases – other wards

Please refer to the respective Figures 6 and 7, respectively, for more information for this week.

Figure 6. Number of laboratory-confirmed hospitalized cases in wards other than intensive care units (non-ICU) by week of reporting, WHO Europe, for weeks 40/2020–39/2021

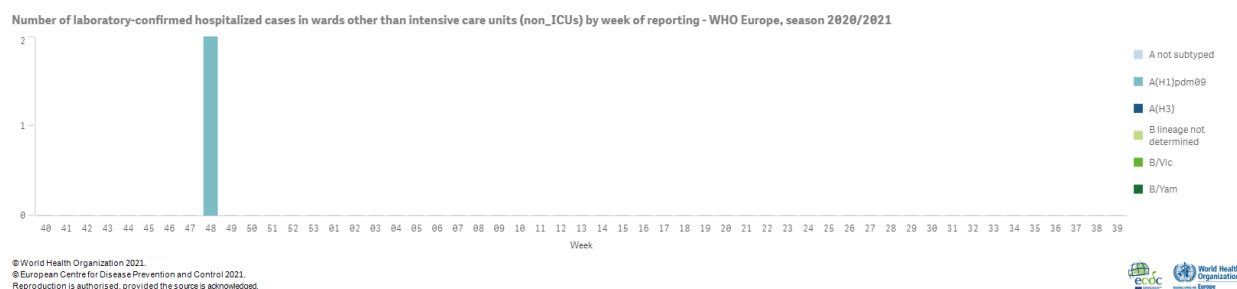
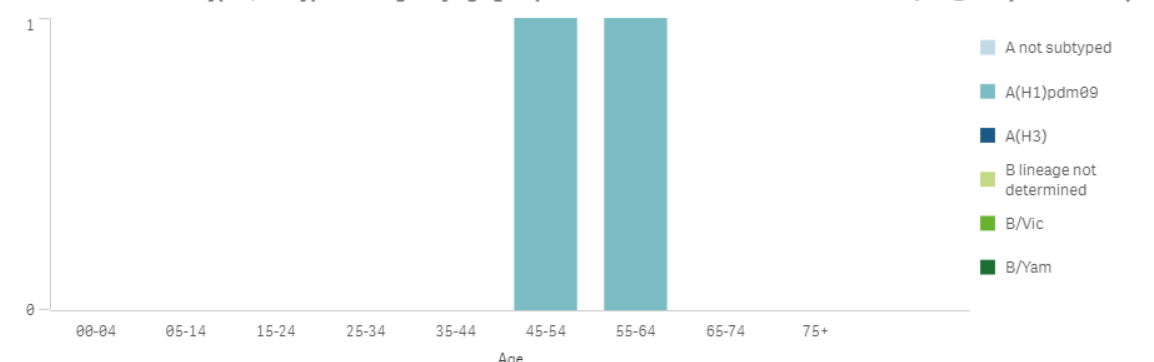


Figure 7. Distribution of virus types, subtypes/lineages by age group in wards other than intensive care units (non-ICU), WHO Europe, for weeks 40/2020-39/2021

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



© World Health Organization 2021.
© European Centre for Disease Prevention and Control 2021.
Reproduction is authorised, provided the source is acknowledged.



Severe acute respiratory infection (SARI)-based hospital surveillance

Data not displayed this week.

Virus characteristics

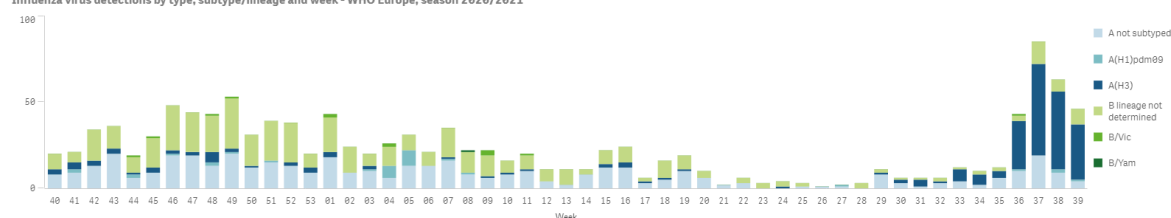
Details of the distribution of viruses detected in sentinel-source specimens can be found in the [Primary care data](#) section.

Non-sentinel virologic data

Please refer to Figure 8 and Table 2, respectively, for additional information on non-sentinel specimens tested for influenza viruses for this week.

Figure 8. Influenza detections by type, subtype/lineage and week, WHO Europe, for weeks 40/2020-39/2021

Influenza virus detections by type, subtype/lineage and week - WHO Europe, season 2020/2021



© World Health Organization 2021.
© European Centre for Disease Prevention and Control 2021.
Reproduction is authorised, provided the source is acknowledged.



Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 39/2021 and cumulatively for weeks 40/2020-39/2021

		Current Week (39)		Weeks 40/2020-39/2021	
Virus subtype	type and	Number	% ^a	Number	% ^a
Influenza A		37	80	710	56
A(H1)pdm09		1	0	33	12
A(H3)		32	86	236	88
A not subtyped		4	11	441	-
Influenza B		9	20	500	44
B/Victoria lineage		0	0	13	93
B/Yamagata lineage		0	0	1	7
Unknown lineage		9	-	486	-
Total detections (total tested)		46 (25 043)	-	1 210 (1 240 679)	-

^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

Please refer to Table 3 for additional information on viruses that have been characterised genetically.

Table 3. Number of influenza viruses attributed to genetic groups, cumulative for the influenza weeks 40/2020-39/2021

	Number of influenza viruses attributed to genetic groups 2020/2021
Total	27
Influenza A	21
A(H1)pdm09	2
A/Guangdong-Maonan/SWL1536/2019(H1N1)pdm09	1
A/Norway/3433/2018(H1N1)pdm09_6B.1A5A	1
A(H3)	19
A(H3)_SubgroupNotListed	9
A/Bretagne/1323/2020(H3N2)_3C.2a1b+T131K-B	1
A/Denmark/3264/2019(H3N2)_3C.2a1b+T135K-A	2
A/Slovenia/1637/2020(H3N2)_3C.2a1b+T131K-A	7
Influenza B	6
B/Vic	6
B/Washington/02/2019(Victoria lineage_1A(del162-164))	5
BVic_SubgroupNotListed	1

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

Very few influenza viruses have been tested for susceptibility to neuraminidase inhibitors and sequence analysis indicated normal inhibition by both oseltamivir and zanamivir.

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, Nishi Dave 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.

Suggested citation:

European Centre for Disease Prevention and Control/WHO Regional Office for Europe. Flu News Europe, Joint ECDC–WHO weekly influenza update, week 39/2021.

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 39/2021.

© World Health Organization 2021.

© European Centre for Disease Prevention and Control 2021.

Reproduction is authorized, provided the source is acknowledged.