

# Weekly influenza overview

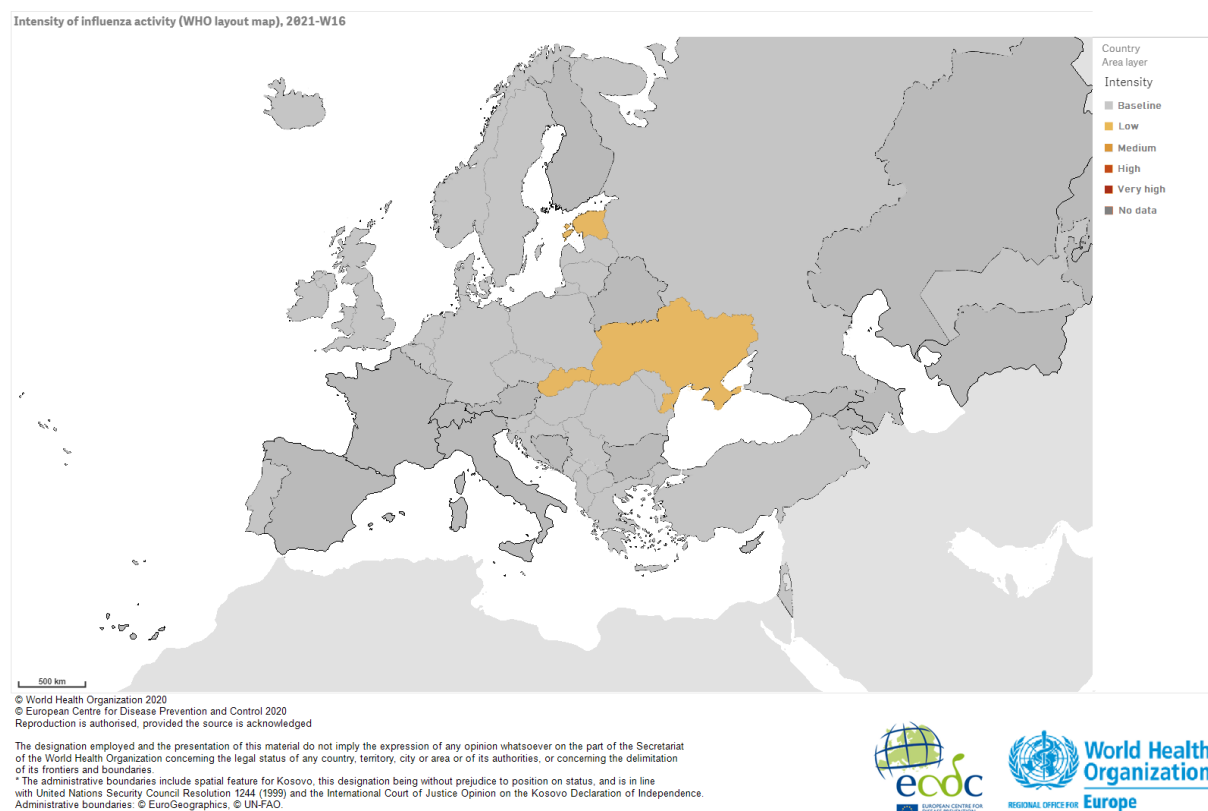
## Weekly overview

- Influenza activity remains at or below interseasonal level.
- Display of data will be updated on a weekly basis until the end of the regular influenza season timing (week 20 data) and on a monthly basis during the interseason.

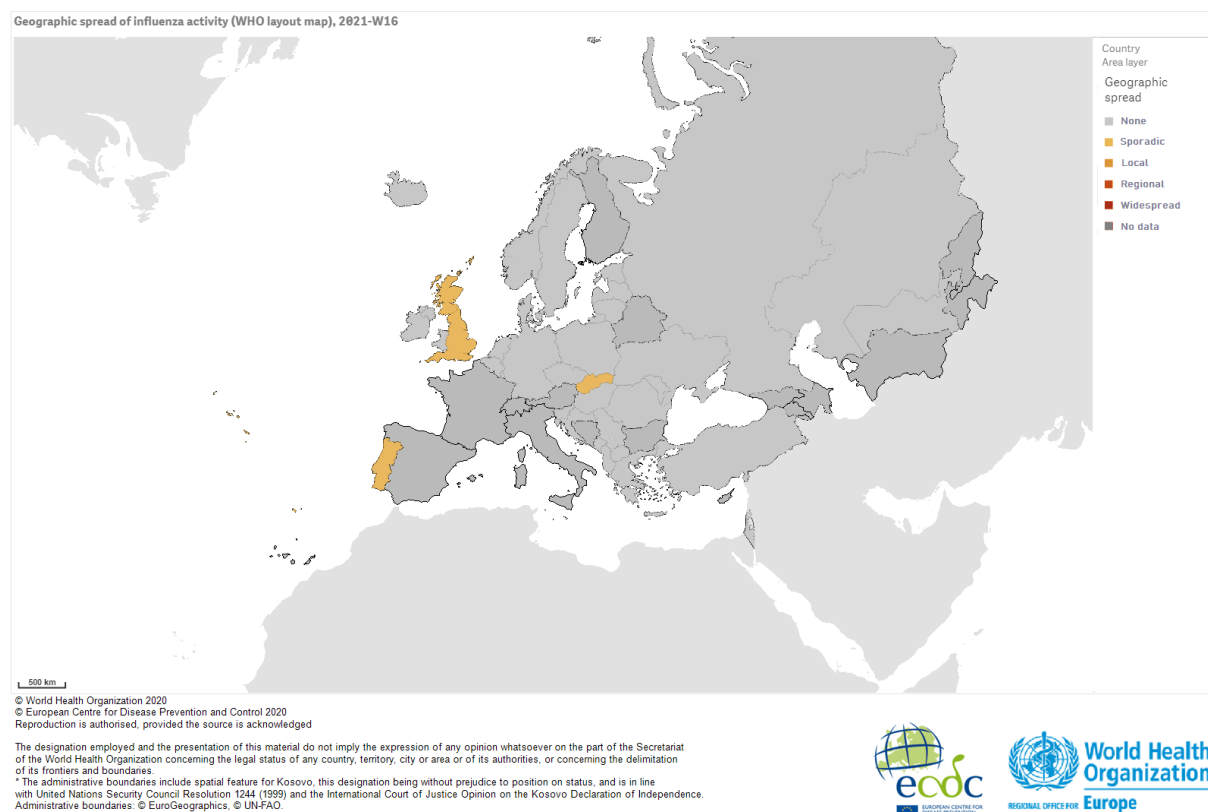
## Qualitative indicators

Information on countries and areas reporting on intensity of activity and geographic spread this week can be seen in respective figures below.

**Fig. 1. Intensity in the European Region, week 16/2021**



**Fig. 2. Geographic spread in the European Region, week 16/2021**



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.
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 had affected healthcare seeking behaviours, healthcare provision, and testing practices and capacities in countries and areas of the European Region, which negatively impacted 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 was a small decrease in the number of samples tested as compared with previous seasons, 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:

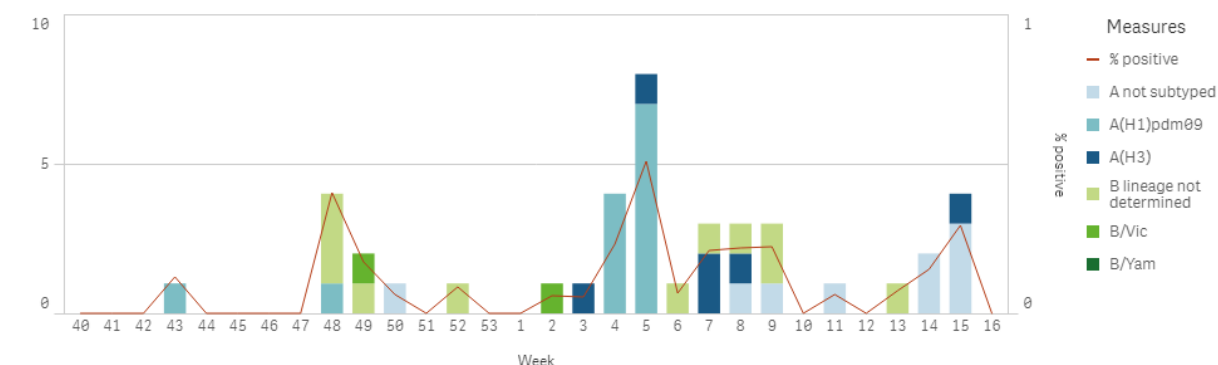
- WHO website: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- ECDC website: <https://www.ecdc.europa.eu/en/novel-coronavirus-china>

## Influenza positivity

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

**Fig. 3. Influenza virus detections in sentinel-source specimens by type and subtype, and week for weeks 40/2020-16/2021**

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



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## 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 for additional information on sentinel specimens tested for influenza viruses 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 16/2021 and cumulatively for the influenza season 2020-2021**

			Current Week (16)		Influenza Season 2020-2021	
Virus type and subtype	Number	% <sup>a</sup>	Number	% <sup>a</sup>		
<b>Influenza A</b>	<b>0</b>	<b>0</b>	<b>28</b>	<b>68.3</b>		
A(H1)pdm09	0	0	13	68.4		
A(H3)	0	0	6	31.6		
A not subtyped	0	-	9	-		
<b>Influenza B</b>	<b>0</b>	<b>0.0</b>	<b>13</b>	<b>31.7</b>		
B/Victoria lineage	0	-	2	100		
B/Yamagata lineage	0	-	0	0.0		
Unknown lineage	0	-	11	-		
<b>Total detections (total tested)</b>	<b>0 (996)</b>	<b>0.3</b>	<b>41 (37 639)</b>	<b>0.1</b>		

<sup>a</sup> 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 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

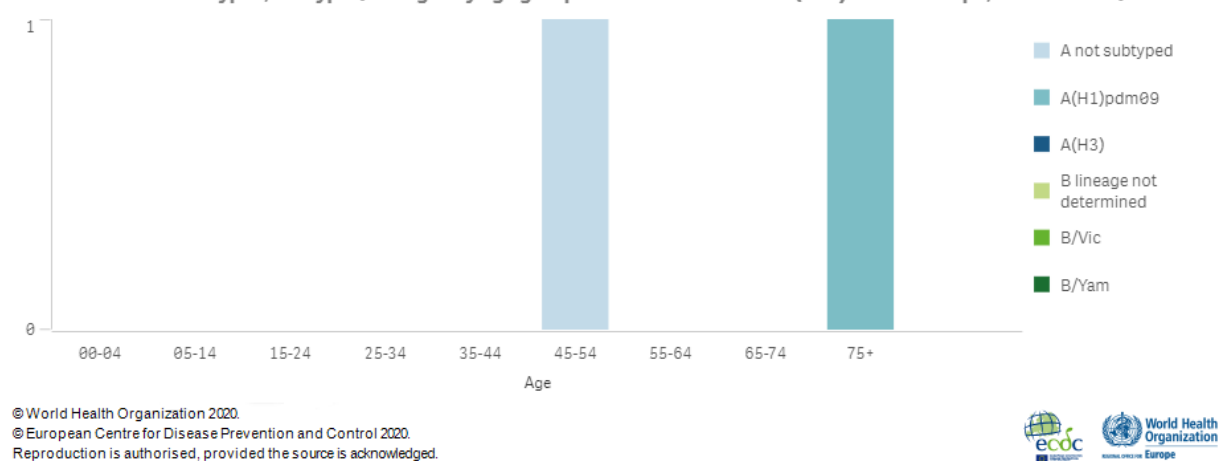
Please refer to the respective figures 4 and 5 below for more information for this week.

**Fig. 4. Number of laboratory-confirmed hospitalized cases in intensive care units (ICU) by week of reporting. WHO Europe, season 2020/21**



**Fig. 5 Distribution of virus types, subtypes/lineages by age group in intensive care units (ICU), WHO Europe, season 2020/21**

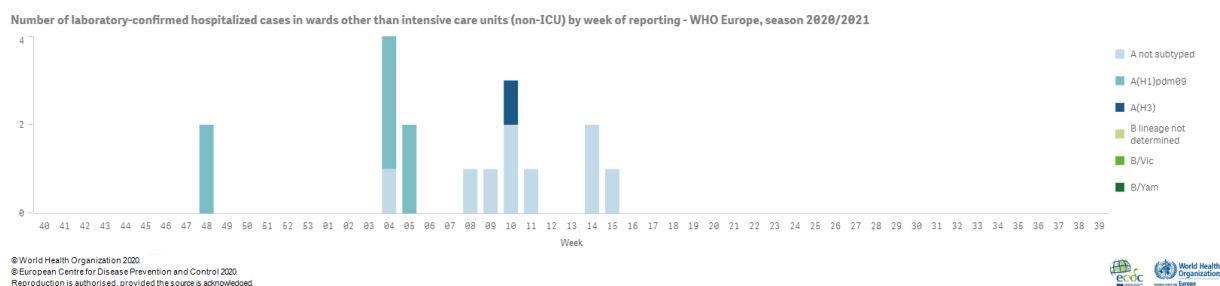
Distribution of virus types, subtypes/lineages by age group in intensive care units (ICU) - WHO Europe, season 2020/2021



## 1.2) Hospitalized laboratory-confirmed influenza cases – other wards

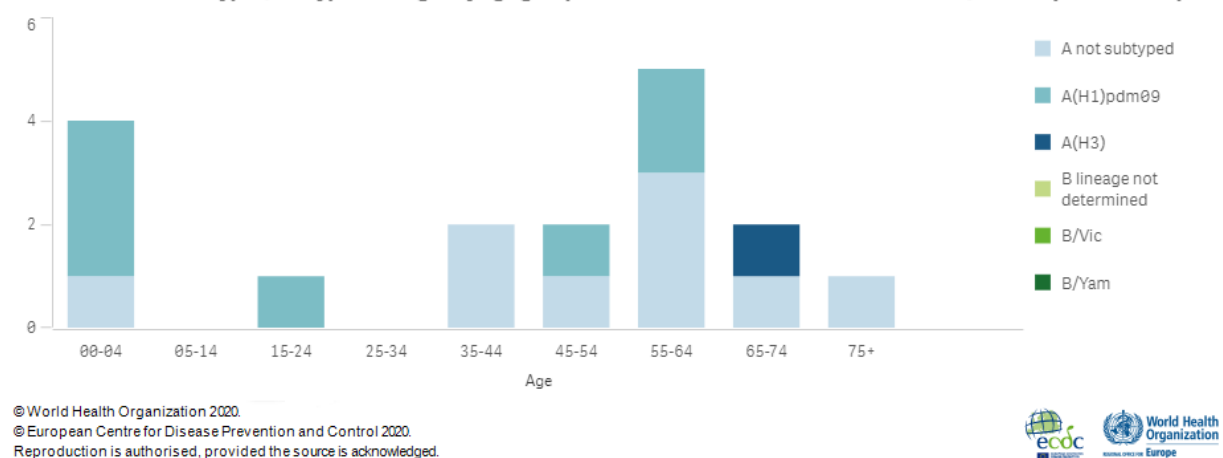
Please refer to the respective figures 6 and 7 for more information for this week.

**Fig. 6 Number of laboratory-confirmed hospitalized cases in wards other than intensive care units (non-ICU) by week of reporting, WHO Europe, season 2020/21**



**Fig. 7 Distribution of virus types, subtypes/lineages by age group in wards other than intensive care units (non-ICU), WHO Europe, season 2020/21**

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

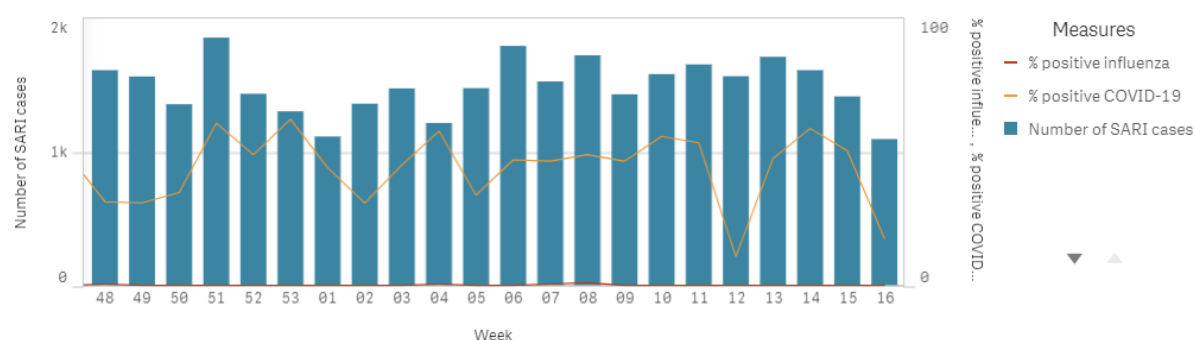


## Severe acute respiratory infection (SARI)-based hospital surveillance

Please refer to the respective figures 8 and 9 for more information for this week.

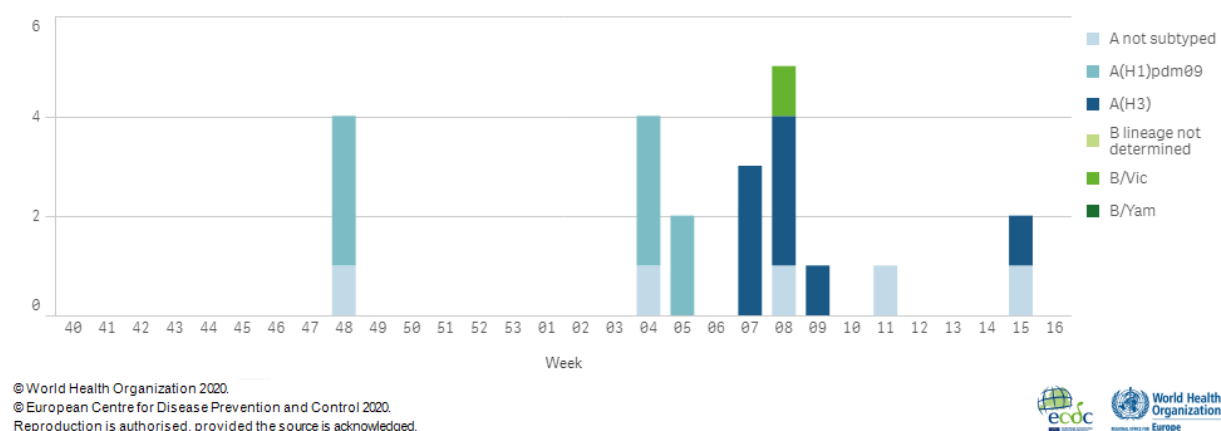
**Fig. 8 Number of severe acute respiratory infection (SARI) cases (bar) and positivity for influenza and COVID-19 (line) by week of reporting, WHO Europe, season 2020/21**

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



**Fig. 9 Influenza detections by virus type, subtype/lineage from severe acute respiratory infection (SARI) surveillance in hospitals, WHO Europe, season 2020/21**

Influenza detections by virus type, subtype/lineage from severe acute respiratory infection (SARI) surveillance in hospitals - WHO E...



## Virus characteristics

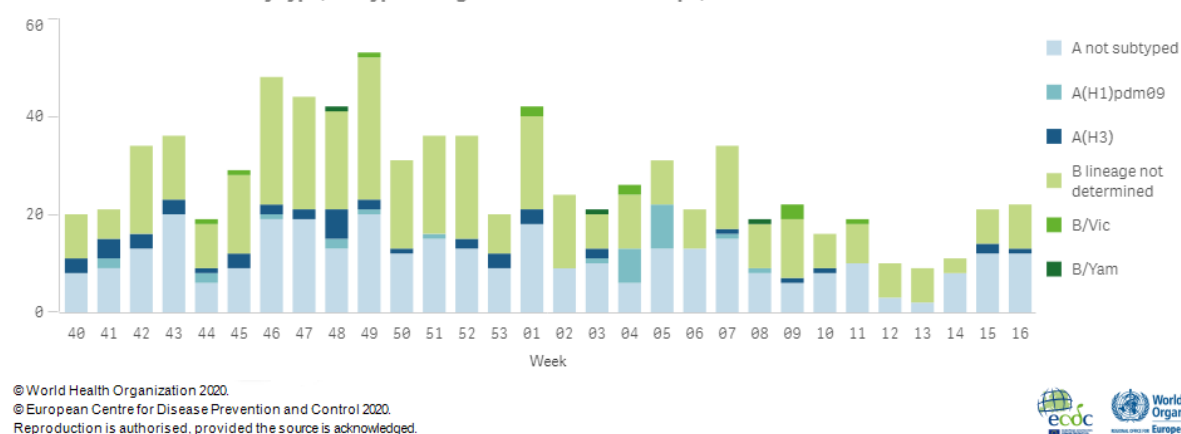
Details of the distribution of viruses detected in sentinel-source specimens can be found in the [Primary care data](#) section.

## Non-sentinel virologic data

Please refer to respective figure 10 and table 2 for additional information on non-sentinel specimens tested for influenza viruses this week.

**Fig. 10 Influenza detections by type, subtype/lineage and week, WHO Europe, season 2020/21**

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





**Table 2. Influenza virus detections in non-sentinel source specimens by type and subtype, week 16/2021 and cumulatively for the influenza season 2020-2021**

			Current Week (16)		Influenza Season 2020-2021	
Virus type and subtype	Number	% <sup>a</sup>	Number	% <sup>a</sup>	Number	% <sup>a</sup>
<b>Influenza A</b>	<b>13</b>	<b>66.7</b>	<b>412</b>	<b>50.4</b>		
A(H1)pdm09	0	-	28	37.8		
A(H3)	1	-	46	62.2		
A not subtyped	12	-	338	-		
<b>Influenza B</b>	<b>9</b>	<b>33.3</b>	<b>405</b>	<b>49.6</b>		
B/Victoria lineage	0	-	11	78.6		
B/Yamagata lineage	0	-	3	21.4		
Unknown lineage	9	-	391	-		
<b>Total detections (total tested)</b>	<b>22 (30 446)</b>	<b>-</b>	<b>817</b>	<b>-</b>	<b>(718 572)</b>	

<sup>a</sup> 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 respective table for additional information on viruses that have been characterised genetically.

ECDC published the [March](#) 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 28 February 2020, WHO published recommendations for the components of influenza vaccines for use in the 2020–2021 northern hemisphere influenza season.**

**Egg-based vaccines** should contain the following:

- an A/Guangdong-Maonan/SWL1536/2019 (H1N1)pdm09-like virus (Clade 6B.1A5A+187A);
- an A/Hong Kong/2671/2019 (H3N2)-like virus (Clade 3C.2a1b+T135K-B);
- a B/Washington/02/2019 (B/Victoria lineage)-like virus (Clade 1A( $\Delta$ 3)B); and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus (Clade 3).

**Cell- or recombinant-based vaccines** should contain the following:

- an A/Hawaii/70/2019 (H1N1)pdm09-like virus (Clade 6B.1A5A+187A);
- an A/Hong Kong/45/2019 (H3N2)-like virus (Clade 3C.2a1b+T135K-B);
- a B/Washington/02/2019 (B/Victoria lineage)-like virus (Clade 1A( $\Delta$ 3)B); and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus (Clade 3).

It was recommended that the influenza B virus component of **both trivalent vaccine types** for use in the 2020–2021 northern hemisphere influenza season should be a B/Washington/02/2019-like virus of the B/Victoria-lineage.

The [full report](#) and [Frequently Asked Questions](#) for the 28 February 2020 decision are available on the [WHO website](#).

**On 25 September 2020, WHO published recommendations for the components of influenza vaccines for use in the 2021 southern hemisphere influenza season:**

### Egg-based Vaccines

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- an A/Hong Kong/2671/2019 (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/Hong Kong/45/2019 (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 southern hemisphere influenza season should be a B/Washington/02/2019-like virus of the B/Victoria-lineage. 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, Ole Heuer, Favelle Lamb) and the WHO Regional Office for Europe (Margaux Meslé, Piers Mook and Richard Pebody). It was reviewed by experts from the network (Adam Meijer, National Institute for Public Health and the Environment (RIVM), the Netherlands); Rod Daniels and John McCauley, WHO Collaborating Centre for Reference and Research on Influenza, Francis Crick Institute, United Kingdom.

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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