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Current major event

Recommended influenza virus strains to be used for seasonal vaccine in 2022–2023

In February 2022, WHO has released the recommended influenza virus strains for inclusion in the 2022–2023 seasonal influenza vaccines for northern hemisphere countries. These annual recommendations are based on the antigenic and genetic analysis of the circulating seasonal influenza viruses shared by the countries with WHO through the Global Influenza Surveillance and Response System. (GISRS).

Editorial note

Immunization against influenza is considered as an essential public health intervention to control both seasonal epidemic and pandemic influenza.

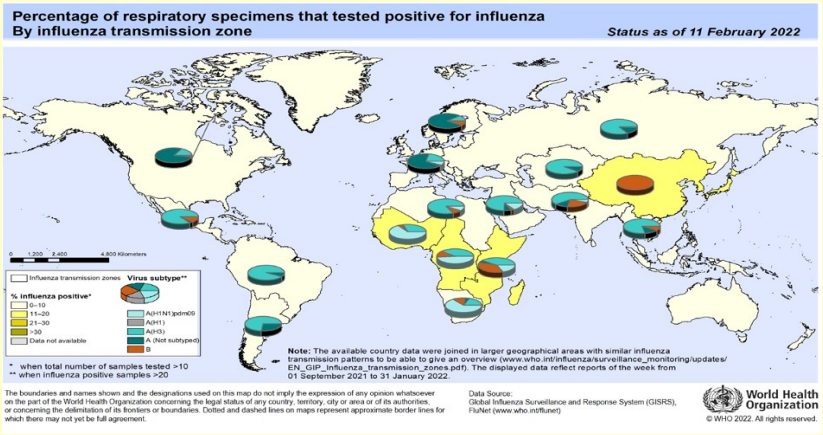
The WHO's annual recommendations provide guidance for countries and vaccine manufacturers on the seasonal influenza virus strains to be included in the human influenza vaccines against seasonal influenza (*See table*). The regulatory agencies make the final decision about which influenza strains may be used in the influenza vaccine to be licensed in their country. In contrast to many other vaccines, influenza vaccine strains are annually reviewed and updated to ensure representative circulating viruses as human influenza virus evolves continuously, based on global influenza surveillance.

Many different sources of data and information are used to determine the recommended vaccine virus strains. This includes, surveillance data, antigenic and genetic characterization of viruses, human serology studies with inactivated influenza virus vaccines, antiviral resistance, vaccine effectiveness, etc. These data are evaluated during the WHO's consultations that are held annually in February, March and September.

The responses to the COVID-19 pandemic disrupted the influenza surveillance and/or reporting activities to varying extents in many countries. SARS-CoV-2 mitigation strategies including restrictions on travel, use of respiratory protection and social-distancing measures in most countries continue to result in decreased influenza transmission. Between September 2021 and January 2022, low numbers of influenza detections were reported and fewer viruses have been available for characterization in comparison to similar times pre-COVID-19 pandemic. Nevertheless, epidemics were reported by a number of countries and regions, with higher detections of influenza activity in the 2021–2022 season than in the 2020–2021 influenza season.

This year there are some differences in the inclusion of specific influenza virus strains recommendation compared to the previous formulations. Influenza viruses circulate at varying times throughout the year in different countries. In selecting which vaccine formulation to use, the countries should consider their surveillance information, in particular epidemiological and virological data to decide when to start the vaccination and whether to use the formulation recommended for the northern or southern hemisphere influenza season.

This necessitates enhances influenza surveillance and use of country-specific data to guide decisions on the type of influenza vaccines to use. Vaccine effectiveness is affected by the matching of influenza virus strains in the vaccine and those circulating in the community. Therefore, it is important to have strong influenza surveillance systems in the country to support this investment.



Source: https://www.who.int/publications/m/item/recommended-composition-of-influenza-virus-vaccines-for-use-in-the-2022-2023-northern-hemisphere-influenza-season

Recommended influenza virus strains to be included in the 2022–2023 seasonal influenza vaccine for northern hemisphere

Trivalent vaccine:

- **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

Quadrivalent vaccine:

- **Egg-based vaccines**
  - The above three viruses and
  - a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.
- **Cell culture- or recombinant-based vaccines**
  - The above three viruses and
  - a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern
[cumulative N° of cases (deaths), **CFR %**]

Coronavirus disease 2019 (COVID-19): 2019-2022	
Afghanistan	[182 149 (7717), 4.2%]
Bahrain	[616 588 (1492), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[514 088 (24 723), 4.8%]
Iran (Islamic Republic of)	[7 236 064 (141 383) 2%]
Iraq	[2 338 109 (25 229), 1.1%]
Jordan	[1 699 197 (14 068), 0.8%]
Kuwait	[641 985 (2555), 0.4%]
Lebanon	[1 107 602 (10460), 0.9%]
Libya	[502 138 (6430), 1.3%]
Morocco	[1 202 461 (16 098), 1.3%]
occupied Palestinian territory (oPt)	[659 853 (5660), 0.9%]
Oman	[390 728 (4628), 1.2%]
Pakistan	[1 533 888 (30 388), 2%]
Qatar	[379 277 (678), 0.2%]
Saudi Arabia	[790 957 (9198) 1.2%]
Somalia	[26 803 (1361), 5.1%]
Sudan	[62 623 (4951), 7.9%]
Syrian Arab Republic	[55 921 (3150), 5.6%]
Tunisia	[1 052 180 (28 691), 2.7%]
United Arab Emirates	[937 037 (2311), 0.2%]
Yemen	[11 824 (2149), 18.2%]