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Current major event

Recommended Seasonal Influenza Vaccine for use in 2018-2019

In February 2018, WHO has recommended influenza viruses for inclusion in the seasonal influenza vaccines for the countries of northern hemisphere for 2018-19. These 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 to be an essential public health intervention to control both seasonal epidemic and pandemic influenza.

The WHO's recommendations provide guidance for the countries and the vaccine manufacturers on the seasonal influenza virus 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 influenza vaccine to be licensed in their country. In contrast to many other vaccines, influenza vaccine strains are updated frequently to contain representative circulating viruses as human influenza virus evolves continuously.

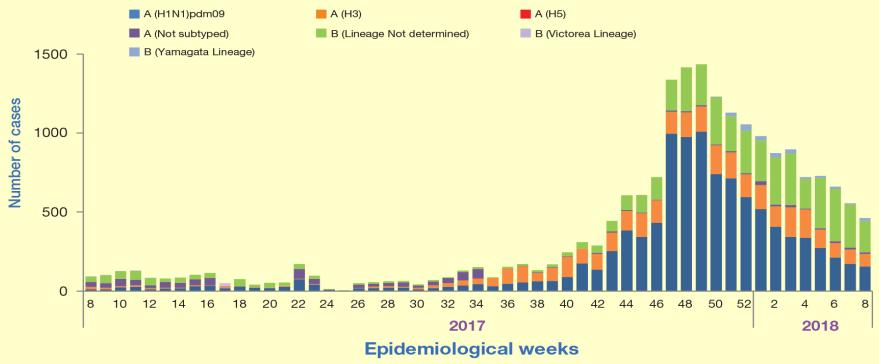
Many different sources of data and information are used to determine the recommended vaccine viruses, including surveillance data, antigenic and genetic characterization of viruses, human serology studies with inactivated influenza virus vaccines, antiviral resistance, vaccine effectiveness, etc. These data are evaluated during the WHO Consultations that are held in February/March and September of each year.

This year, WHO recommended four different viruses to be included in quadrivalent vaccine and three viruses for the trivalent vaccines for use in the 2018-2019 northern hemisphere influenza season. There has been some difference in the recommendation this year on the inclusion of specific influenza virus compared to the past. For example, the influenza B/Victoria lineage virus component and the A(H3N2) virus component have been updated compared to the viruses recommended for the 2017-2018 northern hemisphere influenza seasons. The H3 component of the vaccine for the 2018-19 northern hemisphere influenza season has also been changed to A/Singapore/INFIMH-16-0019/2016-like virus. Thus, the Quadrivalent vaccines include two type A viruses (an A(H3N2) and an A(H1N1)pdm09) and two type B viruses (one from each lineage). The trivalent vaccines, on the other hand, include three components, two type A viruses (an A(H3N2) and an A(H1N1) pdm09) and one type B virus.

Influenza viruses circulate at varying times throughout the year in tropical and sub-tropical 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 vaccination and whether to use the formulation recommended for the northern or southern hemisphere influenza season.

This necessitates enhancing influenza surveillance and use the data to guide decisions on the type of influenza vaccines to use. Vaccines will only be proven effective if it contains the right strains matching the virus circulating in that particular country.

Number of positive cases of influenza by subtype, Epidemiological week 8/2017 – 8/2018, Eastern Mediterranean Region



Recommended influenza virus to be included in the 2018-2019 seasonal influenza vaccine for northern hemisphere

Trivalent vaccine:

- an A/Michigan/45/2015 (H1N1)pdm09-like virus
- an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus
- a B/Colorado/06/2017-like virus of the B/Victoria/2/87-lineage

Quadrivalent vaccine:

- The above three viruses and
- a B/Phuket/3073/2013-like virus (B/Yamagata/16/88 lineage)

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **dengue** in Sudan.

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

Avian influenza: 2006-2017	
Egypt (A/H5N1)	[359 (122), 34%]
Egypt (A/H9N2)	[4 (0)]
Avian influenza A (H7N9): 2013-2017	
China	[1,565 (612), 39.1%]
Chikungunya: 2016-2018	
Pakistan	[8,498 (0)]
Cholera: 2017-2018	
Somalia (2018)	[1147 (8), 0.69%]
Yemen	[1,073,082 (2263), 0.21%]
Diphtheria: 2018	
Yemen	[1265 (73), 5.8%]
Bangladesh	[6,025 (38), 0.63%]
Dengue fever: 2017-2018	
Sudan	[197 (3), 1.5%]
MERS: 2012-2018	
Saudi Arabia	[1,807 (705), 39.01%]
Wild poliovirus: 2018	
Afghanistan	[3 (0)]
Yellow Fever: 2017-2018	
Brazil	[723 (237)] 32.7%