Current major event

Recommended composition of seasonal influenza vaccine for use in 2014-2015, Northern Hemisphere

In February 2014, WHO has recommended influenza viruses for inclusion in the seasonal influenza vaccines in the northern hemisphere for 2014-15. These recommendations are based on the antigenic and genetic analysis of the circulating 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 epidemics and pandemic influenza.

The WHO’s recommendations on influenza virus provide guidance for the countries and the vaccine manufacturers on the viruses to be included in the human influenza vaccines for seasonal influenza during the winter in the countries of the northern hemispheres. The regulatory agencies make the final decision about which influenza strains may be used in influenza vaccines to be licensed in their country. In contrast to many other vaccines, influenza vaccines strains are updated frequently to contain representative circulating viruses as human influenza virus evolve continuously.

Usually, seasonal influenza vaccine comprise three different virus types (i.e., are trivalent) and include influenza A (H1N1), A (H3N2), and B viruses. In the period between September 2013 and the 1st week of February 2014 (please see above), influenza virus circulation was active globally including in the Eastern Mediterranean Region.

In the countries of the Eastern Mediterranean Region (EMR), the circulation of influenza viruses were variable– low and sporadic in certain countries while high in some other countries. All the seasonal influenza A (H1N1) viruses detected in the region were subtype A (H1N1)pdm09 and remained antigenically homogenous and related to virus A/California/7/2009 (H1N1)pdm09-like virus. It has been locally reported active from Egypt and sporadic activities were reported from Bahrain, Iran, Iraq, Jordan, Oman, Pakistan, Qatar and Tunisia. Sporadic influenza activities caused by influenza A (H3N2) were reported from Bahrain, Egypt, Iran, Iraq, Jordan, Oman, Pakistan, Qatar and Tunisia. Influenza B activity was sporadically reported from Bahrain, Egypt, Iran, Iraq, Pakistan, Qatar and Tunisia.

As per the current season, it is expected that influenza A (H1N1)pdm09 would likely be the predominant in the next winter as well. Based on these circulating patterns observed this year, the three subtypes of influenza viruses– influenza A (H1N1), influenza A (H3N2) and influenza B viruses are recommended to be included (as per above box) for the trivalent vaccine. Furthermore, it is recommended that the quadrivalent vaccines contain the three subtypes of the above viruses and additionally a B/Brussels/60/2008-like virus.

Recommended influenza viruses to be included in the 2014-2015 seasonal influenza vaccine:

- Trivalent vaccines:
  - An A/California/7/2009 (H1N1)pdm09-like virus
  - An A/Texas/50/2012 (H3N2)-like virus
  - A B/Massachusetts/2/2012-like virus

- Quadrivalent vaccines:
  - The above three viruses and
  - A B/Brussels/60/2008-like virus

H3: Influenza A (H3N2); H1N1: Influenza A (H1N1) pdm09; B: Influenza B virus

Update on outbreaks in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia, and UAE.

Current public health events of international concern [cumulative No of cases (deaths), CFR %]

Avian Influenza A (H5N1)

- Egypt [173 (63), 36.4%]
- Indonesia [195 (163), 83.6%]
- Viet Nam [125 (62), 49.6%]
- Cambodia [47 (33), 70.2%]
- Global total [650 (386), 59.4%]

Novel Coronavirus (MERS-CoV)

- Saudi Arabia [156 (63), 40%]
- Jordan [4 (3), 75%]
- Oman [3 (3), 100%]
- UAE [14 (6), 42.9%]
- Kuwait [2 (0), 0%]
- Tunisia [3 (1), 33%]
- Qatar [10 (6), 60%]

Yellow fever

- Sudan [49 (15), 32%]

Crimean-Congo Haemorrhagic Fever

- Pakistan [100 (20),20%]

Wild poliovirus

- Syria [25 (0)]
- Somalia [194 (0)]

CFR=Case-Fatality Rate; # Suspected cases