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Current major event

Recommended composition of influenza virus vaccines for use in 2011-2012, Northern Hemisphere

In February, 2011, WHO has recommended viruses for inclusion in influenza vaccines for the influenza season (2011-2012) in the northern hemisphere.

These recommendations are based on the annual antigenic and genetic analyses of circulating influenza viruses shared with WHO through the Global Influenza Surveillance Network (GISN).

Editorial note

The WHO's recommendations on influenza virus provide a guide to national public health authorities and vaccine manufacturers on the viruses to be included in human influenza vaccines for the next influenza season in the northern hemisphere. 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 are updated frequently to contain representative circulating viruses, because human influenza virus continuously evolve.

Usually, influenza vaccines for seasonal influenza vaccines contain three different viruses (i.e., are trivalent) and include influenza A(H1N1), A (H3N2) and B viruses considered representative of those that are in circulation.

Between September 2010-January 2011, influenza was active worldwide including in the countries of the Eastern Mediterranean Region (EMR). The predominant circulating influenza virus in the EMR during this period was H1pdm09 (Influenza H1N1/2009). However, seasonal influenza A(H1N1), A (H3N2) and B viruses co-circulated at low levels in many countries of the Eastern Mediterranean Region as well. (Please see the table above). The former seasonal influenza A (H1N1) viruses was very rarely detected in the Eastern Mediterranean Region (EMR). The National Influenza Center Extent and type of influenza activity in the EMR, September 2010-January 2011

Country	Sep 2010	Oct 2010	Nov 2010	Dec 2010	Jan 2011
Egypt	В	B, H1(pdm09)	B, H1(pdm09)	H1(pdm09), H5	H1(pdm09), H5
Iran	В	B, H1(pdm 09)	Н3, В	H3, B, H1 (pdm09)	B, H1 (pdm09)
Iraq			H1(pdm09)	H1(pdm09	
Kuwait				Н3	H1 (pdm09)
Morocco	Н3		H1(pdm09)	H3,B, H1(pdm09)	H3,B, H1 (pdm09)
Oman	H1(pdm09)	H3,B, H1 (pdm09)	H3,B,H1(pdm09)	B,H1(pdm09)	B,H1(pdm09)
Tunisia			H1, H3	H3, B, H1 (pdm09)	B, H1 (pdm09)
Pakistan	Н3,В	Н3,В	H1(pdm09)	B,H1(pdm09)	H1(pdm09)

Recommended viruses for use in human influenza vaccines for the 2011-2012 influenza season of northern hemisphere

- An A/California/7/2009 (H1N1)-like virus
- An A/Perth/16/2009 (H3N2)-like virus
- A B/Brisbane/60/2008-like virus

(NIC) in Tunisia detected this virus in November 2010 only. Whereas, sporadic influenza activities caused by seasonal influenza A (H3N2) were reported from Iran, Kuwait, Morocco, Oman, Tunisia and Pakistan. Influenza A (H5N1) continued to circulate in Egypt in December 2010 and again during January 2011. Influenza caused by seasonal influenza B virus were reported from Egypt, Iran, Morocco, Oman, Tunisia and Pakistan.

Based on the current trend, it is expected that Influenza A (H1N1) pdm09, A (H3N2) and Influenza B viruses will cocirculate in the EMR countries in 2011-2012 with the likelihood that the pandemic (H1N1) 2009 virus will predominate. The big question now is to know whether the recommended influenza vaccine virus for the northern hemisphere will protect against both pandemic and seasonal influenza. It is expected that vaccines containing the A/ California/7/2009 (H1N1)-like virus will protect against the pdm09 influenza virus. Whereas vaccines that contain the other two recommended viruses (H3N2 and B virus) are expected to protect against seasonal influenza viruses only.

Update on outbreaks

in the Eastern Mediterranean Region

Chikungunya in Yemen, Cutaneous Anthrax in S. Sudan, A(H5N1) in Egypt

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian influenza

[133 (45), **33.8%**] Egypt Indonesia [174 (144), **82.8 %**] Viet Nam [119(59), 49.6% China [40(26), 65%] Global total [537 (317), 59%]

Cholera

Haiti [243197*(4626), 1.9 %] Chad [2508 (111), 4.4%]

Cutaneous Anthrax

S. Sudan [19(0)]#

Meningococcal disease

[923(57), **6.1** %]#

Chikungunya fever

Yemen [15000(104), **0.6** %]#

Yellow fever

Uganda [226(53), **23.4 %**] Sierra Leone [2(0),]

CFR=Case-Fatality Rate; * Number of hospital visits; # Suspected cases only