

Weekly Epidemiological Monitor

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Current major events

Recommended viruses for influenza vaccines for use in 2010-2011, Northern Hemisphere

In February, 2010, WHO has recommended viruses for inclusion in influenza vaccines for the influenza season (2010-2011) 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 2009-January 2010, influenza was active worldwide including in the countries of the Eastern Mediterranean Region (EMR). The predominate circulating influenza virus in the EMR during this period was pandemic (H1N1) 2009. Although seasonal influenza A (H1N1), A (H3N2) and B viruses circulated at very low levels in many countries of the Eastern Mediterranean Region (Please see the table above). In Afghanistan, Iran, and in Morocco, seasonal influenza A (H1N1) viruses were detected by their National Influenza Centers (NICs) during various time period. Sporadic influenza activity caused by seasonal influenza A (H3N2) were reported from Iran,

Extent and type of influenza activity in the EMR, September 2009-January 2010

Country	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010
Afghanistan	H1 (pdm)	H1, H1 (pdm)	H1, B, H1 (Pdm)	H1, B, H1 (Pdm)	
Egypt	H1 (pdm), H5	H1 (pdm)	H1 (pdm), H5	B, H1(pdm), H5	H1 (pdm), H5
Iran	H1, H3, H1 (pdm)	H1 (pdm)	H1(pdm)	B, H1(pdm0	B, H1(pdm)
Iraq					H1(pdm)
Jordan					H1 (pdm)
Morocco	H1, H3, H1 (pdm)	H1,H3,B,H1 (pdm)	B, H1(pdm)	H1 (pdm)	B, H1(pdm)
Oman					H1(pdm)
Tunisia	H1(pdm)	H3,H1(pdm)	H1(pdm)	H3, B, H1(pdm)	H3,H1(pdm)
Pakistan	НЗ	H1(pdm)			

Recommended viruses for use in human influenza vaccines for the 2010-2011 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

and Pakistan during September 2009, Morocco between September to October 2009 and in Tunisia between October 2009 to January 2010. Influenza A (H5N1) continued to circulate in Egypt in September 2009 and again between November 2009 to January 2010. Influenza caused by seasonal influenza B virus were reported from Afghanistan, Egypt, Iran, Morocco and Tunisia amongst the EMR countries.

Based on the analysis, it is expected that Influenza A (H1N1) pandemic 2009, A (H3N2) and Influenza B viruses will cocirculate in the northern hemisphere in 20210-2011 with the likelihood that the pandemic (H1N1) 2009 virus will predominate. The big question now is to know whether the recommended influenza vaccine virus 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 current pandemic influenza virus. Whereas vaccines that contain the other two recommended viruses (H3N2 and B virus) are expected to protect against seasonal influenza viruses likely to be in circulation in 2010-2011 in the northern hemisphere.

Update on outbreaks

in the Eastern Mediterranean Region

Avian Influenza A(H5N1) in Egypt.

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

Avian influenza

[104 (30), **28.8%**] Egypt Vietnam [115 (58), **50.4%**] Global total [486 (287), 59%]

Meningococcal meningitis

Chad [167 (17), **10.1%**] CAR [24 (5), **20.**8%] Uganda [74 (4), **5.4%**] Burkina Faso [1596 (246), **15.4%**]

Dengue fever

Sudan [311 (4), **1.2%**]

Pandemic (H1N1) 2009

AFRO No of deaths: 167 **AMRO** No of deaths: At least 7539

No of deaths: 1018

EURO No of deaths: At least

4388

SEARO No of deaths: 1633 **WPRO** No of deaths: 1710

GLOBAL Total

EMRO

No of deaths: 16,455

CFR=Case-Fatality Rate