

FREQUENTLY ASKED QUESTIONS

Recommended composition of influenza virus vaccines for use in the northern hemisphere in the 2011-2012 influenza season

1. Which viruses are being recommended by WHO to be in influenza vaccines for use in 2011-2012 in the northern hemisphere?

WHO recommends that influenza vaccines for use in the 2011-2012 season in the northern hemisphere contain the following viruses:

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

2. What viruses are contained in current influenza vaccines?

Twice yearly, WHO recommends viruses for use in influenza vaccines, once each for the northern and southern hemisphere influenza seasons.

For the northern hemisphere 2010-2011 season, the WHO recommended composition included three viruses: an A/California/7/2009 (H1N1)-like virus, an A/Perth/16/2009 (H3N2)-like virus and a B/Brisbane/60/2008-like virus. For the southern hemisphere 2011 season, the WHO recommended the same viruses for inclusion in the vaccine.

For the viruses contained in the vaccines being used in a specific country, please check with relevant national vaccine regulatory agencies.

3. How is this recommendation made?

The recommendation has been made based on the continuous surveillance conducted by the WHO Global Influenza Surveillance Network (GISN) and the analyses of surveillance findings through a WHO Consultation from 14-16 February 2011. Participants included nine Advisers from relevant WHO Collaborating Centres (CCs) and Essential Regulatory Laboratories (ERLs); in addition, there were Observers from National Influenza Centres (NICs), WHO H5 Reference Laboratories, WHO CCs, ERLs, academia, the veterinary sector and other partners.

The Advisers provided a recommendation to WHO based on analyses of the antigenic and genetic characteristics of influenza viruses that have been shared with WHO through GISN. Serological results as well as available epidemiological and clinical information were also considered.

4. What is the purpose of the WHO influenza vaccine recommendations?

These recommendations provide a guide to national public health authorities and vaccine manufacturers for the composition of influenza vaccines for the next season.

In contrast to many other vaccines, the viruses in influenza vaccines are updated frequently because circulating influenza viruses continuously evolve.

5. What else do the Advisers in the WHO Consultation consider?

The Advisers also review the analyses of avian and swine influenza viruses with a focus on those that have caused sporadic infections of humans and pose a potential pandemic threat. These include avian A(H5N1), avian A(H9N2), swine A(H1N1) and swine A(H3N2) influenza viruses. The results of testing influenza viruses for resistance to anti-viral drugs are also reviewed.

6. What is the Global Influenza Surveillance Network?

GISN is a global public health laboratory network coordinated by WHO, currently consisting of 136 National Influenza Centres (NICs) in 106 Member States, 6 WHO Collaborating Centers for Influenza (CCs), 4 Essential Regulatory Laboratories (ERLs) and 11 WHO H5 Reference Laboratories.

This network conducts numerous public health activities including the collection and testing by the NICs of clinical specimens from patients as well as the further characterization of representative influenza viruses by WHO CCs and the ERLs, and assessment of influenza viruses of concern, such as potential pandemic viruses. This network also provides guidance to countries, and support for activities such as training, outbreak response, development of assays, testing for antiviral drug resistance and scientific interpretation of important findings.

7. What other actions are taken by WHO beyond the vaccine composition recommendations to facilitate development of influenza vaccines?

To support the development and production of influenza vaccines, new high-growth candidate vaccine viruses are developed by the WHO CCs, ERLs and other participating laboratories. These candidate vaccine viruses are provided to influenza vaccine manufacturers for vaccine production. In addition, reference reagents are prepared by ERLs with support from vaccine manufacturers to assess the potency of influenza vaccines.