

FREQUENTLY ASKED QUESTIONS

Recommended composition of influenza virus vaccines for use in the southern hemisphere in the 2010 influenza season

1. What viruses are WHO recommending be put in influenza vaccines for use in 2010 in the southern hemisphere?

WHO recommends that influenza vaccines for the 2010 southern hemisphere season 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. Does this group of recommended influenza vaccine viruses cover both pandemic and seasonal influenza?

Yes. The A/California/7/2009 (H1N1)-like virus covers current pandemic influenza viruses. The other two recommended vaccine viruses cover seasonal influenza viruses expected to be in circulation in 2010 in the southern hemisphere.

3. Is WHO recommending that all three viruses should be contained in a trivalent influenza vaccine for the southern hemisphere for 2010?

At this time, WHO is not in a position to advise whether there should be one trivalent influenza vaccine containing all 3 viruses, or whether there should be separate vaccines for pandemic and seasonal influenza. WHO will be in a position to provide guidance on this issue after the Strategic Advisory Group of Experts (SAGE) meets in late October and deliberates on this issue.

4. Does WHO expect the current seasonal influenza A (H1N1) viruses to disappear?

The available data suggest that the pandemic influenza A (H1N1) viruses are becoming much more common than the current seasonal influenza A (H1N1) viruses. Although it is impossible to know whether the seasonal influenza A (H1N1) viruses will be completely replaced by the pandemic influenza A (H1N1) virus, the group of experts convened by WHO for this consultation consider it likely that seasonal influenza A (H1N1) will not pose a major public health risk in 2010 in the southern hemisphere.

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

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

6. How is this recommendation made?

During the year, the Directors and representatives of the WHO Collaborating Centres (WHO CCs) for Reference and Research on Influenza and representatives of the Essential Regulatory Laboratories (ERLs) and Cambridge University periodically review by

telephone conferences the antigenic and genetic analyses of influenza viruses provided to WHO through the Global Influenza Surveillance Network (GISN). In addition, this expert committee meets face to face twice a year (in February and September) with additional representatives from National Influenza Centres (NICs) and WHO H5 Reference Laboratories to review the most recent information on influenza viruses and epidemiological disease trends. Data from serological studies also are reviewed to determine how well antibodies induced by current vaccines cover new emerging influenza viruses. Based on all of these analyses, the consultation provides advice to WHO on which viruses should be contained in influenza vaccines for the southern and northern hemispheres.

7. What is the Global Influenza Surveillance Network?

GISN is a global public health network coordinated by WHO consisting of 128 NICs in 99 countries¹; five WHO CCs for Influenza located in Atlanta, United States of America; London, United Kingdom of Great Britain and Northern Ireland; Melbourne, Australia; Memphis, United States of America; and Tokyo, Japan; and the four Essential Regulatory Laboratories located at the Food and Drug Administration/Center for Biologics Evaluation and Research (FDA/CBER), Rockville, United States of America; the National Institute for Biological Standards and Control (NIBSC), Potters Bar, United Kingdom of Great Britain and Northern Ireland; the National Institute of Infectious Diseases (NIID), Tokyo, Japan; and the Therapeutic Goods Administration (TGA), Symonston ACT, Australia². This network conducts numerous public health activities one of which is the collection and testing by the NICs of clinical specimens from patients and the further testing and characterization of representative isolates by the WHO CCs.

8. What other actions are taken by WHO beyond the vaccine strain recommendations to facilitate development of influenza vaccine?

To support the development and production of influenza vaccine, the new candidate vaccine viruses are provided to influenza vaccine manufacturers by the WHO CCs, ERLs and other participating laboratories. These new vaccine viruses are used as the starting material by companies for the production of influenza vaccines and to prepare specific reagents for vaccine standardization and quality control.

9. What viruses are contained in current pandemic influenza vaccine?

Currently, monovalent pandemic vaccines contain A/California/07/2009 (H1N1) -like virus antigens. Pandemic vaccines are being produced by many vaccine manufacturers world- wide and are monovalent vaccines (i.e., they contain one type of virus).

¹ <http://www.who.int/csr/disease/influenza/centres/en/index.html>

² <http://www.who.int/csr/disease/influenza/collabcentres/en/index.html>