

Influenza vaccination for the 2003–04

season - recommendations in the context of concern about SARS

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Concerns about a recurrence of SARS

The recent global outbreak of SARS has heightened concern about the occurrence of respiratory diseases having symptoms similar to those seen in SARS. Although the global outbreak of SARS has been contained throughout the summer, considerable uncertainty surrounds the question of whether SARS might recur, perhaps according to a seasonal pattern. Several respiratory illnesses occur much less frequently when temperature and humidity are high and then return when the weather turns cooler.

Currently, SARS has no vaccine, no effective treatment, and no reliable point-of care diagnostic test. As the recurrence of SARS during the influenza season cannot be ruled out, some health authorities are concerned that cases of influenza and other respiratory diseases, particularly when they occur as clusters in health care facilities, could raise suspicions of SARS, resulting in disruption of health services as well as costly precautionary measures and investigations.

Transmission of SARS within the health care setting, involving a large number of health care workers, was a striking feature of the global outbreak. Symptoms of fever and lower respiratory tract infection (cough, difficulty breathing, shortness of breath) in two or more health care workers in the same health care unit, with onset of illness in the same 10-day period, are regarded by WHO as cause to suspect a possible outbreak of SARS and to conduct further radiographic and laboratory investigations ([Alert, verification and public health management of SARS in the post-outbreak period](#)).

Influenza and influenza vaccination

Influenza is one of several diseases causing fever and respiratory symptoms that might raise suspicions of SARS. However, influenza is of particular concern because of the potential for institutional and community outbreaks and regional epidemics. Influenza typically infects 10% to 20% of the total population during seasonal epidemics, resulting in from three to five million cases of severe illness and at least 250 000 to 500 000 deaths each year worldwide.

Most cases of severe illness and deaths associated with influenza occur in certain groups at high risk for developing secondary complications, including pneumonia. Such groups include the elderly, the immunocompromised, and persons with underlying chronic cardiopulmonary, renal, or metabolic disease.

A safe and effective vaccine against influenza is available and is recommended annually for persons in these high-risk groups. Annual administration of influenza vaccine is the most

effective means for preventing influenza. In addition, influenza vaccination in high-risk groups and health workers caring for them will reduce the number of pneumonia cases which could be confused with SARS.

For more information on vaccine efficacy

For example, in elderly persons cared for in institutions, influenza vaccine is effective in preventing 80% of deaths, 50-60% of hospitalizations or pneumonia and 30-40% of influenza illnesses.

- [WHO recommendations on the use of inactivated influenza vaccines](#)
- [Recommendations of the Advisory Committee on Immunization Practices \(United States of America\)](#)

Because of SARS-related concerns, health authorities in some countries are giving higher priority to the vaccination of groups known to be at high risk of severe illness and mortality associated with influenza. Some countries are also considering the vaccination of health care workers who can transmit the disease to vulnerable groups and thus amplify influenza outbreaks in facilities caring for the elderly or other high-risk groups. Vaccination of health care workers in close contact with such groups can reduce the likelihood of influenza outbreaks in facilities caring for the elderly or other high-risk groups.

As influenza vaccines have been underutilized, WHO welcomes these initiatives, which are in line with [current recommendations](#). An estimated 1 billion persons worldwide belong to groups at high risk of severe illness, including pneumonia, and excess mortality associated with influenza. Only around 250 million are vaccinated each year against influenza, mainly in industrialized countries. Vaccination coverage of health workers in contact with high-risk persons has likewise remained low in most countries. WHO has recently set goals of attaining vaccination coverage of the elderly population of at least 50% by 2006 and 75% by 2010([see Prevention and control of influenza pandemics and annual epidemics](#)).

At present, a key limiting factor to reaching these global goals is the finite nature of influenza vaccine supplies. Vaccine manufacturers cannot greatly increase vaccine supplies for 2003 but would be able to produce more vaccine for 2004.

Given these considerations, WHO continues to recommend that priority for influenza vaccination be given to those groups at highest risk of developing serious complications from influenza and to those health workers caring for them. Such targeted use of influenza vaccine provides the most effective strategy for reducing the health burden of influenza and maximizing the effective use of available vaccine supplies. It can also reduce cases of respiratory disease that could be mistaken for SARS or raise suspicions requiring costly investigations.

On 6 October, WHO will issue its annual recommendations for the composition of influenza vaccines effective against the virus strains currently circulating in human populations. Such recommendations are issued twice each year in anticipation of the annual seasons of influenza epidemics in the northern and southern hemispheres.

WHO will be reviewing its recommendations for influenza vaccination in line with both experiences during the coming seasonal epidemics, when suspicions of SARS are expected, and prospects for increased vaccine supplies in the near future.