This document provides interim recommendations from the WHO Strategic Advisory Group of Experts (SAGE) on Immunization for influenza vaccination during the COVID-19 pandemic. It also provides programmatic considerations for national authorities planning and conducting their influenza vaccination programmes, as well as research considerations to address current knowledge gaps.

Introduction
Safe and effective influenza vaccines are part of broader influenza prevention and control efforts, which also include non-pharmaceutical interventions (NPIs) (e.g., hand hygiene, physical distancing, respiratory hygiene/etiquette) and antivirals. The current WHO influenza vaccine policy, which is outlined in the 2012 WHO vaccine position paper [1], identifies a number of risk groups for priority use of influenza vaccines, including pregnant women as the highest priority, with other priority groups being children, older adults, individuals with underlying medical conditions, and health workers in no particular order.

Influenza transmission may have been altered by the range of NPIs currently in place for COVID-19 or the limited influenza importation into countries due to travel restrictions and border closures, as observed by the dramatic reduction in influenza detections during the 2020 Southern Hemisphere influenza season. However, NPIs and travel restrictions vary by country, and as they are lifted, influenza transmission could also increase, leading to potential co-circulation of influenza and SARS-CoV-2 and additional burden on vulnerable populations and health systems. In view of these considerations, there is a need to reconsider the prioritization of risk groups for influenza vaccination during the COVID-19 pandemic for the following reasons:

- To ensure optimal control of influenza among groups at high risk of severe COVID-19 disease as well as influenza illness. Treatment in health-care settings could increase the risk of exposure to SARS-CoV-2 and subsequent development of severe COVID-19;
- To decrease the potential for additive burden on health care systems from patients with influenza seeking medical care or being hospitalized;
- To reduce absenteeism among health workers and other care providers essential to the COVID-19 response; and
- To ensure optimal management and use of potentially limited seasonal influenza vaccines—across the world but especially in low- and middle-income countries—as supplies are prepared nearly a year in advance.

It is important to note that the suggested prioritization in this document should be considered along with the 2012 position paper, national polices, local epidemiology, and the potential for increased demand for influenza vaccines. The interim change in risk groups proposed in this paper is only meant to ensure optimal control of influenza during COVID-19 and should not negatively impact influenza vaccination programmes and coverage of existing target groups, which are based on the national policies and epidemiological situation for both influenza and COVID-19.
Recommendations

Based on the considerations above, SAGE recommends the following prioritization of risk groups for seasonal influenza vaccination during COVID-19:

**Highest priority risk groups**

- **Health workers**: Health workers, including care workers, in hospitals, long-term care facilities (e.g., nursing homes, residential facilities, etc.), and the community are recommended as one of the highest priority groups for receipt of influenza vaccines during COVID-19 to minimize: absenteeism due to influenza and disruption to the workforce, spread of influenza from care providers to vulnerable patients, and burden on the broader health system. Where supply of vaccine permits, influenza vaccination should be expanded to all workers in health care settings, including outpatient staff, and support staff (e.g., cleaning and security staff). If vaccine supply is insufficient for such staff, health workers should be prioritized based on risk of infection among themselves and among those for whom they care [2].

- **Older adults**: Similar to influenza, COVID-19 severity is strongly associated with advanced age, and older adults are at much greater risk of severe disease and death than younger adults. This group is therefore recommended as one of the highest priority groups to receive influenza vaccine during the COVID-19 pandemic. While the 2012 position paper referred to adults over the age of 65 as being at higher risk of severe influenza, where supply permits, national authorities, including national immunization technical advisory groups (NITAGs), should carefully consider prioritizing older adults in long-term care facilities, in day-care hospitals or receiving home-care. Further, expanding this risk group to include adults over 50 years of age who are at higher risk of severe COVID-19 should be considered.

**Additional risk groups, in no particular order**

- **Pregnant women**: Pregnant women remain the highest priority group for influenza vaccination and, where supplies permit, should be prioritized to receive vaccine. Emerging data on infection with COVID-19 during pregnancy suggest a potential increased risk of severe COVID-19 disease in pregnant women, but data are still very limited; this will continue to be assessed as data emerge.

- **Individuals with underlying health conditions**: An additional risk-group, also identified in the 2012 position paper, are individuals with underlying health conditions, such as individuals living with diabetes, hypertension, HIV/AIDS, asthma and other chronic heart- or lung diseases. Because these populations are likely at a higher risk of COVID-19 severe illness, individuals with underlying health conditions, where they can be identified, should continue to be prioritized for influenza vaccination to protect them against influenza and also to minimize their risk of SARS-CoV-2 infection through seeking treatment for influenza and hospital admissions for influenza, which could further stress the health care system.

- **Children**: Although current data indicate that children, particularly those less than 5 years of age, are not at increased risk of severe COVID-19, children remain a priority group for influenza vaccination because of their risk of severe influenza, particularly those aged 6 months to two years. Countries that have procured specific formulations of influenza vaccines targeted for use in children (e.g., live attenuated influenza vaccines) should continue these.
Programmatic considerations
When implementing their national influenza vaccination programmes during the COVID-19 pandemic, national authorities should carefully consider the following:

- Due to envisaged influenza vaccine supply shortages, which may extend to the 2021-2022 influenza season, the ability to procure influenza vaccines, especially for countries which have no established influenza programme in place, may be challenging. As such, governments, especially those of low- and middle-income countries, are encouraged to promote and strengthen efforts for sustainable supply or production of influenza vaccines.
- For countries that do not have an existing platform for immunization of health workers or older adults, establishing such a platform to deliver influenza vaccines will likely benefit planning for future immunization of these populations with COVID-19 vaccines.
- For countries with an existing platform, the COVID-19 pandemic affords an opportunity to strengthen their influenza programme beyond the pandemic and establish a pathway for adult vaccination programmes.
- National influenza vaccination programmes should be based on national policies and the influenza and COVID-19 epidemiological situation. Once risk assessments are conducted, national authorities may identify other relevant populations and settings, which might include indigenous populations and ethnic minorities as well as individuals in institutional settings, that would benefit from seasonal influenza vaccination. However, priority should be given to the risk groups (i.e. health workers, older adults, individuals with underlying health conditions, pregnant women and children) to ensure equity among the additional populations and settings identified.
- The conduct of routine influenza vaccination for all groups needs to take into account the risk of increasing exposure to COVID-19. Appropriate NPIs should be adopted to minimize the risk of COVID-19 infection [3].

Research considerations
- COVID-19 vaccine developers should be encouraged to evaluate concomitant use of COVID-19 vaccines with influenza vaccines, and other vaccines administered in the priority groups outlined above, such as pneumococcal vaccines, to inform future policy. National regulatory authorities are also encouraged to monitor the concomitant impact of these interventions.
- Studies capturing data on the impact of co-infection with influenza and COVID-19 disease and risk of pneumococcal disease with or post COVID-19 would be valuable.

Methods
SAGE proposes these interim recommendations based on the ethical considerations for prioritizing access to resources in the 2020 WHO guidance on Ethics and COVID-19: resource allocation and priority-setting [4], including prioritizing those tasked with helping others and those at greatest risk of infection and serious illness.

SAGE applies the principles of evidence-based medicine and has set in place a thorough methodological process for issuing or updating recommendations [5], which are ultimately reflected in the WHO vaccine position papers. Within these interim recommendations, SAGE proposes no change to the influenza risk group prioritization as outlined in the 2012 WHO influenza vaccine position paper which would warrant an in-depth review of the evidence.
Plans for updating
These interim recommendations will apply until the end of the COVID-19 public health emergency of international concern (PHEIC) or until WHO issues recommendations reflected in an update of the 2012 WHO influenza vaccine position paper. However, SAGE and its working groups [6][7] will continue to monitor the situation and may propose adjustments to the recommendations if new evidence emerges.

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Declaration of interests
Declarations of interests were collected from all external contributors and assessed for any conflicts of interest. No reported interest was judged as being significant. Summaries of the reported interests can be found on the SAGE and SAGE Working Group website.

References


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