Increasing COVID-19 Vaccination Uptake
An update on messaging, delivery strategies and policy recommendations

Information note: December 2023

In November 2023, the WHO Strategic Advisory Group of Experts on Immunization (SAGE) published an updated Roadmap for prioritizing the use of COVID-19 vaccines. The Roadmap recommends a simplified schedule in the context of high population immunity from vaccination and/or infection, with a focus on high priority-use groups.

Based on the recommendations in the WHO SAGE Roadmap, this information note provides immunization programme managers and partners with:
1) Key messages to support public communications
2) Questions and answers on the updated SAGE recommendations, and
3) Programme considerations for increasing COVID-19 vaccine uptake.

The suggested messages and interventions should be tailored to local contexts, taking into account programme considerations such as vaccine availability, service delivery platforms and resources, and the need for data-driven strategies for demand generation.

Use of terms. The updated Roadmap introduced the terms “initial doses” and “revaccination”, which can be used interchangeably with “primary series” and “booster doses”, respectively. The terms reflect today’s context in which most people have immunity from infection and/or vaccination.

1) Key messages to support public communications

- **COVID-19 continues to spread and endanger people’s lives**, particularly those who are older, have chronic diseases, are immunocompromised or pregnant.

- **Getting the COVID-19 vaccine lowers the risk of severe illness and death.** One dose is recommended for those who have never received any COVID-19 vaccine, especially those who are at high risk of severe illness, such as older persons, adults with chronic diseases, individuals with immunocompromising conditions, pregnant persons and health workers.

- **COVID-19 vaccines are safe and effective in preventing severe disease and deaths.**
  - More than 13 billion doses of COVID-19 vaccine have been administered globally since 2021, with careful monitoring of side effects.
  - Serious reactions to COVID-19 vaccines are extremely rare.
  - In 2021 alone, COVID-19 vaccines saved an estimated 14.4 million lives worldwide.

- **COVID-19 and influenza vaccines are recommended for the same high-risk groups**: older adults, people with chronic diseases, those with immunocompromising conditions and those who are pregnant, and for health workers. Where available, getting both vaccines is recommended.
• **Vaccination in every pregnancy safeguards the parent and the infant.** Pregnant persons with COVID-19 are at higher risk of severe disease and death, and/or adverse pregnancy outcomes such as preterm birth and low birth weight.

• **Those at high risk of severe COVID-19 – including older adults, adults with chronic diseases and people with immunocompromising conditions – need one dose if they have not yet been vaccinated, followed by an additional dose six months to 1 year later.** Consult your health worker regarding your specific vaccination schedule.

• **If you live in the Northern Hemisphere, now is the time to get vaccinated, especially for those at higher risk of severe disease from COVID-19 and influenza to receive both vaccines.**
  - The COVID-19 vaccine and influenza vaccine can be safely administered together.
  - Consult your health worker for information on COVID-19 and influenza vaccine schedules.

• **COVID-19 and influenza can be similar, ranging from no/mild symptoms (including cough, runny nose, sore throat, fever, headache and fatigue) to severe disease (pneumonia, difficulty breathing). Both illnesses can co-exist in a person, and both can be fatal. Protect yourself with vaccines.**

**SOCIAL MEDIA: SAMPLE CONTENT**
The following messaging may be used to develop locally tailored digital media content.

*Lead-in text:*
COVID-19 continues to spread and endanger people's lives. For those who never received a COVID-19 vaccine, at least one dose is recommended. For those who are older, have chronic diseases, are immunocompromised or pregnant, re-vaccination may be needed 6-12 months after your most recent dose. Consult your health worker.

*Brief messages for tiles:*
- COVID-19 is still a threat: for any adult who never received a COVID-19 vaccine, at least one dose is recommended.
- If you are at risk or an older adult, revaccination against COVID-19 may be needed 6-12 months after your most recent dose. For pregnant persons, revaccination is recommended every pregnancy.
- Living in the Northern hemisphere? Get your COVID-19 and influenza vaccines at the same time.
- Lower your risks of COVID-19: keep a safe distance, wear a mask, clean your hands regularly, cover your coughs and sneezes, and check your vaccine status.
- COVID-19 is not over. It’s still circulating: check your vaccination status.
2) Questions and answers on the updated SAGE Roadmap

• What's new in the updated SAGE Roadmap?
The following are the new recommendations in the updated SAGE Roadmap:
  o A simplified single-dose schedule\(^1\) for persons who never received a COVID-19 vaccine
  o A revaccination interval of 6 to 12 months for most high priority-use groups

• What is the rationale for the updated recommendations?
The updated recommendations address the evolving public health context:
  o High population immunity from past COVID-19 infection and/or vaccination,
  o Current COVID-19 variants causing milder disease and fewer hospitalizations and deaths,
  o Continuing need to protect high-risk groups from potential surges in infection.

The simplified recommendations consider the need for ease in programme implementation, importance of community acceptance, and the cost-effectiveness of COVID-19 vaccination.

• Who are the COVID-19 vaccine high priority-use groups? Which sub-populations have special considerations for vaccination?
The oldest adults\(^2\), older adults\(^3\) (including those with comorbidities) and other adults with severe obesity or multiple significant comorbidities belong to the high priority-use groups. Significant comorbidities include diabetes, chronic lung diseases, heart, liver and kidney diseases.

Sub-populations with special vaccination considerations include persons with immunocompromising conditions, pregnant persons and health workers with direct patient contact.

Influenza vaccines are also recommended for the same population groups listed above.

Refer to the SAGE Roadmap (page 4) or to Table 1 for recommendations for these groups.

• What are the updated SAGE recommendations for COVID-19 vaccination?
Table 1 below helps health workers decide on how many vaccine doses are needed based on a person’s (1) vaccination history, and (2) age and health condition.

The new recommendations replace those in the March 2023 Roadmap. If a person has already started their vaccination schedule with the previous recommendations, follow the new recommendations for any future doses.

• What is the recommendation for pregnant persons?
WHO recommends a single dose of COVID-19 vaccine during each pregnancy.
  o The COVID-19 vaccine can be safely given at any time during pregnancy to avoid missing opportunities to vaccinate.
  o Vaccination between the fourth to sixth month of pregnancy is preferred to optimize the protection of the pregnant person, the foetus and the infant.
  o COVID-19 vaccines can be safely administered with other vaccines recommended during pregnancy, such as influenza vaccine.

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\(^1\) Inactivated COVID-19 vaccines require 2 doses as initial doses
\(^2\) Age cut-off to be decided by countries; often it is 75 or 80 years
\(^3\) Age cut-off to be decided by countries; often it is 50 or 60 years
• **Who are not prioritized for COVID-19 vaccination?**
Healthy children and adolescents ages 6 months to 17 years belong to the low-priority group for COVID-19 vaccination. Vaccinating this group has limited public health impact. Countries could consider vaccinating healthy children and adolescents based on their assessment of disease burden, cost-effectiveness and other public health priorities and costs.

• **Is there a recommendation for annual COVID-19 vaccination in the longer term?**
There is insufficient evidence to recommend annual revaccination, although countries with established seasonality for other respiratory infections (like influenza) could consider revaccination prior to the colder season. Where available, WHO recommends co-administration of COVID-19 vaccine with influenza vaccine. WHO will continue to monitor the situation and update its recommendations accordingly.

**Table 1: Summary of the updated SAGE recommendations for COVID-19 vaccination**

<table>
<thead>
<tr>
<th>Vaccination status</th>
<th>Population</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never received a COVID-19 vaccine</td>
<td>All adults</td>
<td>1 dose[^4]</td>
</tr>
<tr>
<td></td>
<td>Children and adolescents with comorbidities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health workers with direct patient contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pregnant persons</td>
<td>1 dose</td>
</tr>
<tr>
<td></td>
<td>Any individual who is immunocompromised</td>
<td>2 to 3 doses[^5]</td>
</tr>
<tr>
<td>Previously received at least 1 dose of a COVID-19 vaccine</td>
<td>Adults over 75 or 80 years old[^3]</td>
<td>Revaccination 6 to 12 months after the most recent dose</td>
</tr>
<tr>
<td></td>
<td>Adults over 50 or 60 years old[^4] with comorbidities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any individual who is immunocompromised</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Adults over 50 or 60 years old[^3]</td>
<td>Revaccination 12 months after the most recent dose</td>
</tr>
<tr>
<td></td>
<td>Adults with comorbidities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health workers with direct patient contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pregnant persons</td>
<td>Single dose in each pregnancy</td>
</tr>
<tr>
<td></td>
<td>Healthy adults</td>
<td>Revaccination not routinely recommended</td>
</tr>
<tr>
<td></td>
<td>Children and adolescents</td>
<td></td>
</tr>
</tbody>
</table>

*For further details, see the [SAGE Roadmap](#) (page 4) for prioritizing the use of COVID-19 vaccines.*

**Legend:**

- **High priority-use groups**
- **Sub-populations with special considerations**

[^4]: 2 doses required for inactivated vaccines
[^5]: In consultation with a health worker
[^6]: Age cut-off depending on countries
• **Which vaccines can be used for initial doses and revaccination?**

All WHO Emergency Use Listing (EUL) COVID-19 vaccine platforms – inactivated vaccines, vectored vaccines and mRNA vaccines (bivalent and monovalent XBB vaccines) – are recommended for initial dose and revaccination.

A person may be revaccinated with a vaccine of a different platform from the initial/previous dose. Vectored and mRNA vaccines are preferred for revaccination when the initial dose was with an inactivated vaccine. Refer to the [SAGE Roadmap](#) (page 15) for specific recommendations on combining different vaccine platforms for initial doses and revaccination.

• **Can COVID-19 vaccines be co-administered with other vaccines?**

Yes. COVID-19 vaccines can be given with, or at any time before or after, other vaccines for adults and adolescents. Co-administration with influenza vaccine is encouraged. When administered concomitantly, the vaccines should be injected in separate sites, preferably in different extremities.

• **Should countries wait for newer vaccines to be available (e.g., monovalent, variant-containing XBB-based vaccines)?**

Vaccination should not be delayed in anticipation of newer versions of the COVID-19 vaccine. For people at a high risk of getting severe COVID-19, a dose of any available vaccine is more beneficial than delaying vaccination.

Any WHO EUL or prequalified COVID-19 vaccine should be used for the initial dose or as revaccination when the monovalent XBB vaccines are unavailable.

• **Should persons who already have had COVID-19 disease be vaccinated?**

Yes. WHO recommends vaccination according to the recent SAGE Roadmap (summarized in Table 1), even if an individual has already had COVID-19.

Hybrid immunity (the protection one receives from vaccination and COVID-19 infection), enhances protection against the severe outcomes of future COVID-19 infections and confers longer protection.

3) **Programme considerations for increasing COVID-19 vaccine uptake**

WHO recommends that countries consider transitioning COVID19 vaccination delivery from mass vaccination campaigns to integrating COVID-19 vaccine into primary health-care services and other approaches specifically designed to reach high priority-use groups.

Table 2 provides suggestions on leveraging platforms and partner collaborations to increase demand and uptake among the high priority-use groups. To assist with local planning and resource mobilization, proposed objectives and activities are shown. For further guidance, refer to the resources listed after the table.
**Table 2: Strategies to increase COVID-19 vaccine uptake**

<table>
<thead>
<tr>
<th>OBJECTIVES</th>
<th>ACTIVITIES (examples)</th>
</tr>
</thead>
</table>
| Collect and use behavioural and social data to understand the drivers of  | • Gather and analyze social and behavioural data through applicable BeSD quantitative and qualitative tools and other sources (e.g., social media analysis, community feedback).  
• Use the insights gathered to prioritize and plan for interventions. Data can also be used to evaluate interventions and guide continuous improvements.                                                                                           |
| demand and improve uptake, especially among the high-risk groups          |                                                                                                                                                                                                                                                                                                                                                        |
| Coordinate and plan for updated interventions, with focus on improving     | • Reconvene/reactivate partners and coordination mechanisms at the national and subnational levels to agree on implementation plans following the updated recommendations.                                                                                                                                                                                                 |
|     uptake among high-risk groups                                          |                                                                                                                                                                                                                                                                                                                                                        |
| Partner with local and community actors for targeted improvement of        | • Engage with community groups who have established and trusted linkages with high-risk groups, such as:  
  o Older adult/senior citizen groups  
  o Patient groups (for persons with chronic diseases including but not limited to hypertension, diabetes, heart disease)  
  o Community-based health clinics for persons living with HIV  
  o Civil society organizations (CSOs) and community-based organizations  
  o Community health workers, community midwives  
• Provide opportunities for conversations with these groups to:  
  o Listen to and address concerns or hesitancy  
  o Amplify updated messages  
  o Encourage peer support and raise vaccination champions                                                                 |
|     vaccination uptake among high-risk groups                              |                                                                                                                                                                                                                                                                                                                                                        |
| Design service delivery to meet community needs                           | • Conduct microplanning with the appropriate community groups and CSOs, and co-design people-centered interventions to improve vaccination access and service delivery, such as packaged services that include COVID-19 vaccination and co-administration with other relevant vaccines, such as influenza (e.g., during ART pick-up, follow-up visits during pregnancy, NCD check-ups, among others).  
• Ensure a feedback mechanism is in place to capture and inform the response to any evolving community needs.                                                                                                        |
| Advocate for social and political commitment in reaching high-risk groups | • Use local evidence (e.g., epidemiological data such as disease burden and risk, and behavioural and social insights) to advocate for the support of local leaders.  
• Support community groups and CSOs in advocating for resources to increase vaccination uptake among high priority-use groups in their respective communities.                                                                                     |
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| Disseminate updated, tailored messages broadly to the public | - Identify trusted information sources, channels, and target audiences for locally tailored messaging.  
- Broadly amplify key updated messages through available channels (e.g., mass media, social media, SMS, community chat groups). |
| Improve the confidence and capacity of health workers to recommend COVID-19 vaccination and co-administration with other scheduled vaccines (e.g., influenza vaccine) | - Support health workers to actively recommend COVID-19 vaccination and where available, influenza vaccination, to high-priority groups at various health service delivery points (NCD clinic, HIV/TB/ANC clinics, long-term care facilities) via:  
  o Training on interpersonal engagement  
  o Providing visual reminders  
  o Offering vaccine doses on site, where possible  
  o Offering vaccine doses by appointment and by walk-in, where possible  
- Conduct activities to increase vaccination uptake among health workers (e.g., addressing vaccination concerns through dialogue or targeted vaccination sessions). Promote vaccination of health workers as part of occupational health. |
| Conduct monitoring and evaluation, and document learning | - Establish and use community feedback to gather evidence and insights for improving the interventions.  
- Track trends on priority indicators of behavioural drivers and improve interventions as needed.  
- Update COVID-19 vaccination program monitoring frameworks to reflect latest monitoring recommendations, notably to shift to an annual monitoring of uptake (i.e. xx number of individuals have received one dose during the year). |

**Additional guidance**

- WHO and UNICEF (2023). *Considerations for integrating COVID-19 vaccination into immunization programmes and primary health care for 2022 and beyond*


- WHO (2022). *Behavioural and social drivers of vaccination: tools and practical guidance for achieving high uptake*