



MINISTRY OF HEALTH
SINGAPORE

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All Registered Medical Practitioners
Licensees, Clinical Governance Officers and Principal Officers of Outpatient Medical Services
Licensees and Principal Officers of Acute Hospital Services
Licensees and Principal Officers of Community Hospital Services

ADDENDUM TO CIRCULAR 76/023 - UPDATE IN DOSAGE FOR PRIMARY SERIES AND BOOSTER/ADDITIONAL DOSE OF MODERNA/SPIKEVAX XBB.1.5 VACCINE IN AGES 6-11 YEARS

This addendum updates that the dosage of the Moderna/Spikevax XBB.1.5 vaccine for ages 6 years to 11 years has been standardised to 25mcg per dose for the primary series as well as booster / additional doses, under the national COVID-19 vaccination programme, as recommended by the Expert Committee on COVID-19 Vaccination (EC19V).

2. Previously, the dosage adopted by the national COVID-19 vaccination programme for this age group was 50mcg per dose, as per Moderna/Spikevax's product authorisation by HSA.
3. The recommendation from the EC19V is based on the following:
 - a) There is evidence that a 25mcg dosage is sufficient to produce good immune protection for this age group, whether as a two-dose primary series or as booster / additional doses.
 - b) Given the current COVID-19 situation and based on local data, many children in this age group have been exposed to infection and this population has a high level of population hybrid immunity.
 - c) The reduction in dose to 25mcg may also reduce reactogenic side effects, such as myalgias and fever after vaccination.

4. There is no safety concern if children aged 6-11 years had received a 50mcg vaccine dose previously. It is within the HSA-approved dosage for this age group and has good safety profile.

5. Please see **Annex A** for an overview of the dosages of Moderna/Spikevax XBB.1.5 and Pfizer-BioNTech/Comirnaty XBB.1.5 vaccines. **Annexes B and C** are an updated tabulation of COVID-19 vaccination recommendations and an updated diagrammatic summary respectively.



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This circular is an addendum to MOH Circular 76/2023 - COVID-19 VACCINATION UPDATES: RECOMMENDATIONS ON THE USE OF THE UPDATED PFIZER-BIONTECH/COMIRNATY AND MODERNA/SPIKEVAX VACCINES.

Annexes

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| ANNEX A | DOSAGE FOR MODERNA/SPIKEVAX XBB.1.5 AND PFIZER-BIONTECH/COMIRNATY XBB.1.5 VACCINES |
| ANNEX B | COVID-19 VACCINATION RECOMMENDATIONS |
| ANNEX C | DIAGRAM OF COVID-19 VACCINATION FOR IMMUNOCOMPETENT ADULTS AND CHILDREN |

ANNEX A

Dosage for Moderna/Spikevax XBB.1.5 and Pfizer-BioNTech/Comirnaty XBB.1.5 vaccines

| S/N | Vaccine | Age | Primary Series | Booster/Additional Dose |
|-----|---------------------------|---------------------|-------------------------|-------------------------|
| 1 | Pfizer-BioNTech/Comirnaty | 6 months to 4 years | Three 3 mcg doses | One 3 mcg dose |
| 2 | Pfizer-BioNTech/Comirnaty | 5 to 11 years | Two 10 mcg doses | One 10 mcg dose |
| 3 | Pfizer-BioNTech/Comirnaty | 12 years and above | Two 30 mcg doses | One 30 mcg dose |
| 4 | Moderna/Spikevax | 6 months to 5 years | Two 25 mcg doses | One 25 mcg dose |
| 5 | Moderna/Spikevax | 6 years to 11 years | Two 25 mcg doses | One 25 mcg dose |
| 6 | Moderna/Spikevax | 12 years and above | Two 50 mcg doses | One 50 mcg dose |

**Updates highlighted in grey*

COVID-19 Vaccination Recommendations

| S/N | Recommendations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1. | <p>Primary Vaccination Series</p> <p>Persons aged 6 months and above are recommended to receive one of the following primary vaccination series, with doses received 8 weeks apart:</p> <table border="1"> <thead> <tr> <th></th> <th>Vaccine</th> <th>Age</th> <th>Doses</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Pfizer-BioNTech/Comirnaty</td> <td>6 months to 4 years</td> <td>Three 3mcg doses</td> </tr> <tr> <td>2</td> <td>Pfizer-BioNTech/Comirnaty</td> <td>5 to 11 years</td> <td>Two 10mcg doses</td> </tr> <tr> <td>3</td> <td>Pfizer-BioNTech/Comirnaty</td> <td>12 years and above</td> <td>Two 30mcg doses</td> </tr> <tr> <td>4</td> <td>Moderna/Spikevax</td> <td>6 months to 5 years</td> <td>Two 25mcg doses</td> </tr> <tr> <td>5</td> <td>Moderna/Spikevax</td> <td>6 to 11 years</td> <td>Two 25mcg doses</td> </tr> <tr> <td>6</td> <td>Moderna/Spikevax</td> <td>12 years and above</td> <td>Two 50mcg doses</td> </tr> <tr> <td>7</td> <td>Novavax/Nuvaxovid</td> <td>12 years and above</td> <td>Two 5mcg doses</td> </tr> </tbody> </table> <p>Persons aged 18 years and above who are medically ineligible to complete the primary vaccination series with the mRNA vaccines or Novavax/Nuvaxovid vaccine may receive the Sinovac-CoronaVac vaccine to complete their primary series. These persons should receive a total of 3 doses of vaccines (inclusive of the mRNA vaccines or Novavax/Nuvaxovid vaccine) to complete their primary vaccination series.</p> <p>The recommended interval between the doses of the primary vaccination series is eight weeks. Individuals, particularly those who are at risk for exposure to COVID-19 or severe disease, may receive the second dose earlier than eight weeks after the first dose but not less than the minimum intervals (21 days for the Pfizer-BioNTech/Comirnaty and Novavax/Nuvaxovid vaccines and 28 days for Moderna/Spikevax and Sinovac-CoronaVac vaccines).</p> | | Vaccine | Age | Doses | 1 | Pfizer-BioNTech/Comirnaty | 6 months to 4 years | Three 3mcg doses | 2 | Pfizer-BioNTech/Comirnaty | 5 to 11 years | Two 10mcg doses | 3 | Pfizer-BioNTech/Comirnaty | 12 years and above | Two 30mcg doses | 4 | Moderna/Spikevax | 6 months to 5 years | Two 25mcg doses | 5 | Moderna/Spikevax | 6 to 11 years | Two 25mcg doses | 6 | Moderna/Spikevax | 12 years and above | Two 50mcg doses | 7 | Novavax/Nuvaxovid | 12 years and above | Two 5mcg doses |
| | Vaccine | Age | Doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Pfizer-BioNTech/Comirnaty | 6 months to 4 years | Three 3mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Pfizer-BioNTech/Comirnaty | 5 to 11 years | Two 10mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Pfizer-BioNTech/Comirnaty | 12 years and above | Two 30mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Moderna/Spikevax | 6 months to 5 years | Two 25mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Moderna/Spikevax | 6 to 11 years | Two 25mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Moderna/Spikevax | 12 years and above | Two 50mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Novavax/Nuvaxovid | 12 years and above | Two 5mcg doses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | <p>First Booster Dose to Achieve Minimum Protection</p> <p>Persons aged 5 years and above are recommended to receive a booster dose about five months after completion of their primary series. Booster doses do not need to be of the same vaccine brand as that received for the primary series.</p> <p>The recommendation applies to persons who, as part of their primary series, have:</p> <ol style="list-style-type: none"> Completed two doses of the mRNA COVID-19 vaccines (Pfizer-BioNTech/Comirnaty or Moderna) or two doses of the Novavax/Nuvaxovid vaccine taken at the recommended intervals, OR, Completed three doses of a primary COVID-19 vaccination series that incorporated two or three doses of the Sinovac-CoronaVac or Sinopharm vaccines, taken at the recommended intervals, OR, Completed a vaccination regime with other WHO EUL vaccines not mentioned above (and not including Sinovac-CoronaVac or Sinopharm), including combinations of WHO-EUL taken 21 days or more apart. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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| | <p>However, for (b), those who received the Sinovac-CoronaVac or Sinopharm vaccine as their third vaccine dose should receive the mRNA or Novavax/Nuvaxovid booster dose at three months after the third dose, due to lower antibody levels generated by the third vaccine dose.</p> |
| <p>3.</p> | <p>Enhanced Primary Series for Immunocompromised</p> <p>Persons with moderate to severe immunocompromise are recommended to receive a total of four doses of the mRNA vaccines (but see S/N 5 below). This comprises a third primary vaccine dose two months after the second dose as part of an enhanced three-dose primary series, and a booster vaccine dose at about five months after the third dose. This includes persons with the following conditions:</p> <ol style="list-style-type: none"> a. Transplant patients on immunosuppressive therapy, including solid organ and allogenic stem cell transplants b. Cancer patients on active treatment with chemotherapy and immunosuppressive therapy c. Haematological cancers d. Immunosuppressive treatment for non-cancer conditions e. End-stage kidney disease f. Advanced or untreated HIV <p>Persons with moderate to severe immunocompromise who had received a two-dose primary series and a booster dose as a third dose [based on time intervals] are also recommended to receive a second booster dose of either mRNA vaccines as a fourth dose, about five months after the third dose.</p> <p>Children aged 6 months to 4 years who are immunocompromised are recommended to receive an enhanced primary series comprising three doses of the Moderna/Spikevax vaccine or four doses of the Pfizer-BioNTech/Comirnaty vaccine.</p> |
| <p>4.</p> | <p>Additional Dose for Year 2023/2024</p> <p>After having completed the recommended doses above and any other additional doses previously (where applicable), persons aged 6 months and above may receive in 2023/2024, an additional dose of COVID-19 vaccine at an interval of around 1 year (minimally 5 months) after their last dose. The additional dose is:</p> <ol style="list-style-type: none"> a. Recommended for all persons aged 60 years and above, medically vulnerable individuals and residents of aged care facilities; b. Encouraged for all individuals aged 6 months and above, in particular, healthcare workers, as well as household members / caregivers of medically vulnerable individuals |

5. **Persons who Have Recovered from COVID-19**

Recovered persons who were unvaccinated, or partially vaccinated before their infection can proceed to complete the standard primary vaccination series. They are recommended to receive remaining vaccine doses from 3 months or more after the date of infection to reduce their risk of reinfection.

Recovered persons who are recommended to receive an additional COVID-19 vaccine dose after their last vaccine dose should do so at the recommended interval thereafter, and at least **28 days** after the infection although an interval of three months from the infection is recommended for better effectiveness.

COVID-19 Vaccination for Immunocompetent Adults and Children

