Updated (2023–24 Formula) 
Moderna COVID-19 Vaccine 
At-A-Glance

Guidance below summarizes basic storage, preparation, scheduling, administration, and dosage for all 2023–24 Moderna COVID-19 Vaccine products.

**Distributed in:**

<table>
<thead>
<tr>
<th>Ages: 6 months through 11 years</th>
<th>Ages: 12 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Single-dose vial:</strong></td>
<td><strong>Single-dose vial:</strong></td>
</tr>
<tr>
<td>Dark blue cap and green label</td>
<td>Dark blue cap and blue label</td>
</tr>
<tr>
<td><strong>Manufacturer-filled syringe</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Storage and Handling**

Find additional guidance on storing vaccine properly at:
- CDC Vaccine Storage and Handling Toolkit
- Spikevax | FDA
- Moderna COVID-19 Vaccine | FDA
- Moderna COVID-19 Vaccines | Modernatx.com

**Ages 6 months through 4 years**
- 12 years and older

<table>
<thead>
<tr>
<th>Supplied in:</th>
<th>6 months through 4 years</th>
<th>12 years and older</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cap and/or label color:</td>
<td>Single-dose vial (SDV)</td>
<td>Single-dose vial (SDV)</td>
</tr>
<tr>
<td>Dark blue cap and green label</td>
<td>Manufacturer-filled syringe (MFS)</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**Storage temperature before puncture**
- -50°C and -15°C (-58°F and 5°F) until the expiration date
- 2°C and 8°C (36°F and 46°F) for up to 30 days
- 8°C and 25°C (46°F and 77°F) for a total of 24 hours. Discard vial or syringe and unused vaccine after 24 hours.

**NOTE:** The beyond-use date (30 days) replaces the manufacturer’s expiration date but NEVER extends it. Always use the earliest date. Do NOT use vaccine after the expiration date or beyond-use date.

**Thawing frozen vaccine**
- 2°C and 8°C (36°F and 46°F) for 45 minutes. Let stand at room temperature (between 15°C and 25°C [59°F and 77°F]) for 15 minutes.
- OR
- 15°C and 25°C (59°F and 77°F) for 15 minutes

**Between:**
- 2°C and 8°C (36°F and 46°F) for 1 hour. Let stand at room temperature (between 15°C and 25°C [59°F and 77°F]) for 15 minutes.
- OR
- 15°C and 25°C (59°F and 77°F) for 45 minutes.
Preparation and Administration Basics

Find additional guidance on preparing and administering vaccine properly at:
- Interim Clinical Considerations for Use of COVID-19 Vaccines | CDC
- Vaccine Administration Resource Library | CDC
- Moderna COVID-19 Vaccines | FDA
- Moderna COVID-19 Vaccine | cvdvaccine.com

Preparation

If the vaccine is frozen, allow to thaw. Before preparing the vaccine, let vaccine stand at room temperature for 15 minutes. Do NOT refreeze thawed vaccine.
- Check the vial label to ensure the expiration date has not passed.
  - Use Moderna expiration date tool at https://modernacovid19global.com/vial-lookup
- Do not shake.
- If using an SDV, gently swirl prior to withdrawing vaccine.
- Refer to package insert or EUA Fact Sheet for detailed instructions.

Administration

- COVID-19 vaccines may be administered at the same clinical visit as other routinely recommended vaccines.
- If using an SDV, withdraw 1 dose. After withdrawing the dose, discard the vial and any residual vaccine. Do NOT save used SDVs.
- Administer intramuscularly.

<table>
<thead>
<tr>
<th>Recipient’s Age</th>
<th>Dosage</th>
<th>Route</th>
<th>Needle gauge and length</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 months through 11 years of age</td>
<td>0.25 mL/25 ug</td>
<td>IM injection</td>
<td>22–25 gauge, 1”*</td>
<td>6 months–2 years of age: Vastus lateralis muscle in the anterolateral thigh†</td>
</tr>
<tr>
<td>12 years of age and older</td>
<td>0.5 mL/50 ug</td>
<td>IM injection</td>
<td>22–25 gauge, 1–1.5”**</td>
<td>3–11 years of age: Deltoid muscle in the upper arm†</td>
</tr>
</tbody>
</table>

* A 5/8 inch needle may be used if administering the vaccine in the deltoid muscle AND the skin is stretched tightly and the subcutaneous tissue is not bunched for children and adolescents ages 1–18 years and adults ages 19 years and older who weigh less than 130 pounds.
† The deltoid muscle in the upper arm may be used if the muscle mass is adequate in children ages 1–2 years.
‡ The vastus lateralis muscle in the anterolateral thigh may be used as an alternate site.
**Scheduling Doses**

The number of recommended 2023–24 COVID-19 vaccine doses varies by age, vaccine, vaccination history, and the presence of moderate or severe immune compromise. Review CDC’s *Interim Clinical Considerations for Use of COVID-19 Vaccines in the United States* for detailed clinical guidance when scheduling doses, and the *Interim COVID-19 Immunization Schedule* for summary information.

**Contraindications, Precautions, and Post-Vaccination Observation**

Screen for contraindications and precautions before administering EACH dose — even if the vaccine was previously administered.

**Contraindications**

History of a severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of the COVID-19 vaccine

**Precautions**

History of:

- A diagnosed non-severe allergy to a component of the COVID-19 vaccine
- Non-severe, immediate (onset less than 4 hours) allergic reaction after administration of a previous dose of one COVID-19 vaccine type, if receiving the same vaccine type
- Moderate to severe acute illness, with or without fever
- Multisystem inflammatory syndrome in children (MIS-C) or adults (MIS-A)
- Myocarditis or pericarditis within 3 weeks after a dose of any COVID-19 vaccine

**Consider observing persons after vaccination to monitor for allergic reactions and syncope:**

- 30 minutes for persons with:
  - A history of a non-severe, immediate (onset within 4 hours) allergic reaction after a previous dose of one COVID-19 vaccine type, if receiving the same vaccine type
  - A history of a diagnosed non-severe allergy to a component of the COVID-19 vaccine, if receiving the same vaccine type
- 15 minutes: All other persons

**Documentation**

Document each recipient’s vaccine administration information:

- **Medical record:** The vaccine and the date it was administered, manufacturer, lot number, vaccination site and route, name and title of the person administering the vaccine
- **Vaccination record for recipient:** Date of vaccination, product name/manufacturer, lot number, and name/location of the administering clinic or health care professional
- **Immunization information system (IIS):** Report the vaccination to the appropriate state/local IIS.

**Report Adverse Events to the Vaccine Adverse Event Reporting System (VAERS)**

- Adverse events that occur in a recipient following administration of any licensed or authorized COVID-19 vaccine should be reported to VAERS, including:
  - Vaccine administration errors, whether or not associated with an adverse event
  - Serious adverse events, irrespective of attribution to vaccination
  - Cases of Multisystem Inflammatory Syndrome (MIS) in adults and children
  - Cases of myocarditis
  - Cases of pericarditis
  - Cases of COVID-19 that result in hospitalization or death

Reporting is also encouraged for any other clinically significant adverse event, even if it is uncertain whether the vaccine caused the event. Information on how to submit a report to VAERS is available at [https://vaers.hhs.gov](https://vaers.hhs.gov) or by calling 1-800-822-7967.