

~~MODERNA COVID-19 VACCINE~~
**FULL EMERGENCY USE
AUTHORIZATION (EUA) PRESCRIBING
INFORMATION**

MODERNA COVID-19 VACCINE

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*Sections or subsections omitted from the full prescribing
information are not listed

Commented [A1]: Moderna: Please use Section numbers
as specified in the template provided by FDA on November
10, 2020. Please do not reassign section numbers to
account for omitted sections.

FULL EMERGENCY USE AUTHORIZATION (EUA) PRESCRIBING INFORMATION

1 AUTHORIZED USE

Moderna COVID-19 Vaccine is authorized for use under an Emergency Use Authorization (EUA) for active immunization to prevent coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in individuals 18 years of age and older.

2 DOSAGE AND ADMINISTRATION

Storage and Handling

Storage Prior to Use

~~The Moderna COVID-19 Vaccine multiple-dose vials are stored frozen between -25° to -15°C (-13° to 5°F). Store in the original carton to protect from light. Do not store on dry ice or below -40°C (-40°F).~~

~~Remove the required number of vial(s) from storage and thaw each vial before use. Vials can be stored refrigerated between 2° to 8°C (36° to 46°F) for up to 30 days prior to first use. Do not refreeze.~~

~~Unopened vials may be stored between 8° to 25°C (46° to 77°F) for up to 12 hours. Do not refreeze.~~

Storage After First Puncture of the Vaccine Vial

~~After the first dose has been withdrawn, the vial should be held between 2° to 25°C (36° to 77°F). Discard vial after 6 hours. Do not refreeze.~~

2.1 Dosing and Schedule

The Moderna COVID-19 Vaccine is administered intramuscularly as a series of two doses (0.5 mL each). The second dose is administered 1 month after the first dose.

There are no data available on the interchangeability of the Moderna COVID-19 Vaccine with other COVID-19 vaccines to complete the vaccination series. Individuals who have received one dose of Moderna COVID-19 Vaccine should receive a second dose of Moderna COVID-19 Vaccine to complete the vaccination series.

2.2 Dose Preparation

- The Moderna COVID-19 Vaccine multiple-dose vial contains a frozen suspension that does not

~~contain preservative is preservative free~~ and must be thawed prior to administration.

- Thaw in refrigerated conditions between 2° to 8°C (36° to 46°F) for 2 hours and 30 minutes. Let vial stand at room temperature for 15 minutes before administering.
- Alternatively, thaw at room temperature between 15° to 25°C (59° to 77°F) for 1 hour.
- After thawing, do not return the vial to the freezer.
- Swirl vial gently after thawing and between each withdrawal. **Do not shake.** Do not dilute the vaccine.
- Moderna COVID-19 Vaccine is a white to off-white suspension. It may contain white or translucent product-related particulates. Inspect Moderna COVID-19 Vaccine vials visually for other particulate matter and/or discoloration prior to administration. If either of these conditions exists, the vaccine should not be administered.
- A maximum of 10 doses can be withdrawn from the multiple-dose vial.
- After the first dose has been withdrawn, the vial should be held between 2° to 25°C (36° to 77°F). Record the date and time for first use on the Moderna COVID-19 Vaccine vial label. Discard vial after 6 hours. Do not refreeze.

2.3 Administration Information

Visually inspect each dose of Moderna COVID-19 Vaccine in the dosing syringe prior to administration. During the visual inspection,

- verify the final dosing volume of 0.5 mL.
- confirm there is no discoloration.

If the visual inspection fails, do not administer the vaccine.

Administer the Moderna COVID-19 Vaccine intramuscularly, preferably in the deltoid muscle.

3 DOSAGE FORMS AND STRENGTHS

Moderna COVID-19 Vaccine is a ~~sterile~~ suspension for intramuscular ~~administration-injection. A single dose is available in multiple dose vials containing a maximum of 10 doses of 0.5 mL each.~~

4 CONTRAINDICATIONS

Do not administer the Moderna COVID-19 Vaccine to individuals with a known history of severe allergic reaction (e.g., anaphylaxis) to a previous dose of the Moderna COVID-19 Vaccine or any component of the Moderna COVID-19 Vaccine [see ~~Full EUA Prescribing Information, Product Description (11)~~].

5 WARNINGS AND PRECAUTIONS

5.1 Managing Allergic Reactions

Appropriate medical treatment to manage immediate allergic reactions must be immediately available in the event an acute anaphylactic reaction occurs following administration of the

Moderna COVID-19 Vaccine.

5.2 Syncope

~~Syncope (fainting) can occur in association with administration of injectable vaccines, including Moderna COVID-19 Vaccine. Procedures should be in place to avoid falling and to restore cerebral perfusion following syncope.~~

Commented [A2]: We recommend deleting section 5.2 Syncope. We do not think it is necessary to include.

5.3 Altered Immunocompetence

Immunocompromised persons, including individuals receiving immunosuppressive therapy, may have a diminished response to the Moderna COVID-19 Vaccine.

Persons at Risk of Bleeding

~~As with other intramuscular injections, Moderna COVID-19 Vaccine should be given with caution in individuals with bleeding disorders, such as hemophilia or on anticoagulant therapy, to avoid the risk of hematoma following the injection.~~

Commented [A3]: This section is not typically included in labeling of approved products. We consider this consideration to be a part of standard medical practice.

Acute Illness

~~Consideration should be given to postponing immunization in persons with severe febrile illness or acute infection. Persons with moderate or severe acute illness should be vaccinated as soon as the acute illness has improved.~~

5.4 Limitations of Vaccine Effectiveness

The Moderna COVID-19 Vaccine may not protect all vaccine recipients.

6 OVERALL SAFETY SUMMARY

It is MANDATORY for vaccination providers to report to the complete a Vaccine Adverse Event Reporting System (VAERS) Form and to Moderna TX, Inc to report all vaccine administration errors, all serious adverse events, cases of Multi-inflammatory Syndrome (MIS) in adults, and hospitalized or fatal cases of COVID-19 that result in hospitalization or death following vaccination with the Moderna COVID-19 Vaccine. Please see the REQUIREMENTS AND INSTRUCTIONS FOR REPORTING ADVERSE EVENTS AND VACCINE ADMINISTRATION ERRORS REPORTING REQUIREMENTS AND INSTRUCTIONS (Section 7) section for details on reporting to VAERS reporting and Moderna TX, Inc.

In clinical studies, the adverse reactions in participants 18 years of age and older were pain at the injection site (91.6%), fatigue (68.5%), headache (63.0%), myalgia (59.6%), arthralgia (44.8%), chills (43.4%), gastrointestinal symptoms (22.2%), lymphadenopathy (19.2%), fever (14.8%), swelling at the injection site (14.4%), and erythema at the injection site (9.7%).

6.1 Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a vaccine cannot be directly compared with rates in the clinical trials of another vaccine and may not reflect the rates observed in practice. ~~There is the possibility that broad use of Moderna COVID-19 Vaccine could reveal adverse reactions not observed in clinical trials.~~

Overall, 15,419 subjects aged 18 years and older received at least one dose of Moderna COVID-19 Vaccine in three clinical trials (NCT04283461, NCT04405076, and NCT04470427).

The safety of Moderna COVID-19 Vaccine was evaluated in an ongoing Phase 3 randomized, placebo-controlled, observer-blind clinical trial conducted in the United States involving 30,350 subjects 18 years of age and older who received at least one dose of Moderna COVID-19 Vaccine (n=15,184) or placebo (n=15,165) administered according to a 0- and 1-month schedule (NCT04470427). At the time of vaccination, the mean age of the population was 51.4 years (range 18-95); 22,830 (75.2%) subjects were 18 to 64 years of age and 7,520 (24.8%) subjects were 65 years of age and older. Overall, 52.7% were male, 20.5% were Hispanic or Latino, and 10.2% were African American.

Solicited Adverse Reactions

Data on solicited local and systemic adverse reactions were collected using standardized diary cards for 7 days following each injection of vaccine or placebo (i.e., day of vaccination and the next 6 days) in a subset of subjects (n=15,176 receiving Moderna COVID-19 Vaccine, n=15,162 receiving placebo with at least 1 documented dose). Solicited adverse reactions were reported more frequently among vaccine subjects than placebo subjects. The percentages of subjects reporting each solicited local adverse reaction and each solicited systemic adverse reaction following administration of Moderna COVID-19 Vaccine (both doses combined) were pain at the injection site (91.6%), lymphadenopathy (19.2%), swelling at the injection site (14.4%), erythema at the injection site (9.7%); and fatigue (68.5%), headache (63.0%), myalgia (59.6%), arthralgia (44.8%), chills (43.4%), gastrointestinal symptoms (22.2%), fever (14.8%), respectively.

The reported frequencies of the solicited local and systemic adverse reactions (overall per subject), by age group, are presented in [Table 1](#).

Table 1. Percentage of Subjects with Solicited Local and Systemic Adverse Reactions within 7 Days* of either Dose of Vaccine/Placebo by Age Group (Total Vaccinated Cohort with Diary Card)

	Aged 18-64 Years		Aged ≥65 Years		Overall	
	Moderna COVID-19 Vaccine (N=11,410) n (%)	Placebo† (N=11,412) n (%)	Moderna COVID-19 Vaccine (N=3,766) n (%)	Placebo† (N=3,750) n (%)	Moderna COVID-19 Vaccine (N=15,176) n (%)	Placebo† (N=15,162) n (%)
Local Adverse Reactions						
Pain	10,590 (92.8)	3,224 (28.3)	3,311 (87.9)	751 (20.0)	13,901 (91.6)	3,975 (26.2)
Pain, Grade 3‡	760 (6.7)	42 (0.4)	141 (3.7)	48 (1.3)	901 (5.9)	90 (0.6)
Lymphadenopathy	2,447 (21.4)	858 (7.5)	467 (12.4)	216 (5.8)	2,914 (19.2)	1,074 (7.1)

Commented [A4]: Moderna: Please present two separate tables of frequency of solicited local reactions and systemic reactions with in 7 days by dose (dose1 and then dose 2) for each of the two age cohorts.

Lymphadenopathy, Grade 3	78 (0.7)	23 (0.2)	30 (0.8)	21 (0.6)	108 (0.7)	44 (0.3)
Swelling (hardness)	1,715 (15.0)	65 (0.6)	468 (12.4)	30 (0.8)	2,183 (14.4)	95 (0.6)
Swelling (hardness), Grade 3	232 (2.0)	6 (<0.1)	86 (2.3)	10 (0.3)	318 (2.1)	16 (0.1)
Erythema (redness)	1,145 (10.0)	82 (0.7)	325 (8.6)	32 (0.9)	1,470 (9.7)	114 (0.8)
Erythema (redness), Grade 3 (>100 mm)	236 (2.1)	22 (0.2)	83 (2.2)	5 (0.1)	319 (2.1)	27 (0.2)
Systemic Adverse Reactions						
Fatigue	7,986 (70.0)	4,279 (37.5)	2,407 (63.9)	1,191 (31.8)	10,393 (68.5)	5,470 (36.1)
Fatigue, Grade 3 [§]	1,181 (10.4)	155 (1.4)	270 (7.2)	42 (1.1)	1,451 (9.6)	197 (1.3)
Fatigue, Grade 4 [¶]	1 (<0.1)	0 (0)	0 (0)	0 (0)	1 (<0.1)	0 (0)
Headache	7,585 (66.5)	4,453 (39.0)	1,981 (52.6)	1,074 (28.6)	9,566 (63.0)	5,527 (36.5)
Headache, Grade 3 [§]	686 (6.0)	273 (2.4)	147 (3.9)	64 (1.7)	833 (5.5)	337 (2.2)
Myalgia	7,125 (62.4)	2,378 (20.8)	1,914 (50.8)	674 (18.0)	9,039 (59.6)	3,052 (20.1)
Myalgia, Grade 3 [§]	1,087 (9.5)	76 (0.7)	215 (5.7)	19 (0.5)	1,302 (8.6)	95 (0.6)
Arthralgia	5,315 (46.6)	1,945 (17.0)	1,488 (39.5)	661 (17.6)	6,803 (44.8)	2,606 (17.2)
Arthralgia, Grade 3 [§]	640 (5.6)	64 (0.6)	131 (3.5)	15 (0.4)	771 (5.1)	79 (0.5)
Arthralgia, Grade 4 [¶]	1 (<0.1)	0 (0)	0 (0)	0 (0)	1 (<0.1)	0 (0)
Chills	5,388 (47.2)	1,177 (10.3)	1,192 (31.7)	262 (7.0)	6,580 (43.4)	1,439 (9.5)
Chills, Grade 3 [§]	167 (1.5)	22 (0.2)	32 (0.8)	8 (0.2)	199 (1.3)	30 (0.2)
Gastrointestinal symptoms [#]	2,813 (24.7)	1,410 (12.4)	553 (14.7)	269 (7.2)	3,366 (22.2)	1,679 (11.1)
Gastrointestinal symptoms, Grade 3 ^{§#}	14 (0.1)	16 (0.1)	13 (0.3)	7 (0.2)	27 (0.2)	23 (0.2)
Gastrointestinal symptoms, Grade 4 [¶]	0 (0)	0 (0)	1 (<0.1)	0 (0)	1 (<0.1)	0 (0)
Fever ^{**}	1,880 (16.5)	76 (0.7)	372 (9.9)	12 (0.3)	2,252 (14.8)	88 (0.6)
Fever, Grade 3 ^{††}	178 (1.6)	2 (<0.1)	18 (0.5)	1 (<0.1)	196 (1.3)	3 (<0.1)
Fever, Grade 4 ^{‡‡}	14 (0.1)	6 (<0.1)	1 (<0.1)	3 (<0.1)	15 (<0.1)	9 (<0.1)

N=Total vaccinated cohort for safety included all subjects with at least 1 documented dose.

* 7 days included day of vaccination and the subsequent 6 days.

EUA Fact Sheet for Healthcare Providers and Full EUA Prescribing Information
MODERNA COVID-19 VACCINE

Draft November 26, 2020

† Placebo was a saline solution.

‡ Grade 3 pain: Defined as significant pain at rest; prevents normal everyday activities.

§ Grade 3 fatigue, headache, myalgia, arthralgia, chills, gastrointestinal symptoms: Defined as preventing normal activity.

¶ Grade 4 fatigue, arthralgia: Defined as requires emergency room visit or hospitalization

Gastrointestinal symptoms = Gastrointestinal symptoms including nausea, vomiting, diarrhea, and/or abdominal pain.

|| Grade 4 gastrointestinal symptoms: Defined as requires emergency room visit or hospitalization for hypotensive shock.

** Fever defined as $\geq 37.5^{\circ}\text{C}/99.5^{\circ}\text{F}$ for oral, axillary, or tympanic route, or $\geq 38^{\circ}\text{C}/100.4^{\circ}\text{F}$ for rectal route.

†† Grade 3 fever: Defined as $>39.0^{\circ}\text{C}/102.2^{\circ}\text{F}$.

‡‡ Grade 4 fever: Defined as $>40^{\circ}\text{C}/104^{\circ}\text{F}$.

The majority of solicited local and systemic adverse reactions seen with Moderna COVID-19 Vaccine had a median duration of 2 to 3 days.

There were no differences in the proportions of vaccine subjects reporting any or Grade 3 solicited local reactions between Dose 1 and Dose 2. Solicited systemic adverse reactions were more frequently reported by vaccine subjects after Dose 2 than after Dose 1, including fatigue (65.2% and 37.2%, respectively), myalgia (57.6% and 22.7%, respectively), chills (43.7% and 8.3%, respectively) and arthralgia (42.6% and 16.6%, respectively). Grade 3 solicited systemic adverse reactions (fatigue, myalgia, arthralgia, and headache) were reported more frequently by subjects after Dose 2 (9.7%, 8.8%, 5.2%, and 4.5%, respectively) than after Dose 1 (1.1%, 0.5%, 0.4%, and 1.8%, respectively).

Commented [A5]:

Moderna: Please see our comment above for presentation of two tables for frequency of solicited local reactions and systemic reactions. This paragraph will not be needed once those tables are presented. We recommend deleting this paragraph.

Unsolicited Adverse Events

Unsolicited adverse events that occurred within 28 days following each vaccination were reported by 21.9% of subjects (n=3,325) who received Moderna COVID-19 Vaccine and 19.4% of subjects (n=2,949) who received placebo (total vaccination cohort). ~~Unsolicited adverse events that occurred in $\geq 1\%$ of subjects who received the Moderna COVID-19 Vaccine and at a rate at least 1.5-fold higher than placebo included injection site pain (1.0% vs 0.3%).~~

Serious Adverse Events

Serious adverse events were reported ~~at similar rates in subjects by 0.5% of subjects~~ who received Moderna COVID-19 Vaccine ~~(0.5%)~~ and ~~0.6% of subjects who received~~ placebo ~~(0.6%)~~ from the first administered dose up to 28 days following the last injection. Serious adverse events were at similar rates in subjects who received Moderna COVID-19 Vaccine (0.7%) and placebo (0.8%) from the first administered dose until last observation.

Deaths

~~From the first administered dose up until the last observation, four deaths ($<0.1\%$) have been reported in subjects who received Moderna COVID-19 Vaccine and four deaths ($<0.1\%$) in subjects who received placebo. The causes of death were similar to the types of events typically reported in an adult and elderly population.~~

7 REQUIREMENTS AND INSTRUCTIONS FOR REPORTING ADVERSE EVENTS AND VACCINE ADMINISTRATION ERRORS

See Overall Safety Summary (Section 6) for additional information.

The vaccination provider enrolled in the federal COVID-19 Vaccination Program is responsible for the MANDATORY reporting of the listed events following Moderna COVID-19 Vaccine to the Vaccine Adverse Event Reporting System (VAERS) and to Moderna Tx, Inc:

- 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
- Cases of COVID-19 that results in hospitalization or death

* Serious Adverse Events are defined as:

- Death;
- A life-threatening adverse event;
- Impatient hospitalization or prolongation of existing hospitalization;
- A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions;
- A congenital anomaly/birth defect;
- An important medical event that based on appropriate medical judgement may jeopardize the individual and may require medical or surgical intervention to prevent one of the outcomes listed above.

Instructions for reporting to VAERS

The vaccination provider enrolled in the federal COVID-19 Vaccination Program should complete and submit a VAERS form to FDA using one of the following methods:

- Complete and submit the report online: <https://vaers.hhs.gov/reportevent.html>, or
- If you are unable to submit this form electronically, you may fax it to VAERS at 1-877-721-0366. If you need additional help submitting a report, you may call the VAERS toll-free information line at 1-800-822-7967 or send an email to info@vaers.org.

IMPORTANT: When reporting adverse events or vaccine administration errors to VAERS, please complete the entire form with detailed information. It is important that the information reported to FDA be as detailed and complete as possible. Information to include:

- Patient demographics (e.g., patient name, date of birth)
- Pertinent medical history
- Pertinent details regarding admission and course of illness
- Concomitant medications
- Timing of adverse event(s) in relationship to administration of Moderna COVID-19 Vaccine
- Pertinent laboratory and virology information

- Outcome of the event and any additional follow-up information if it is available at the time of the VAERS report. Subsequent reporting of follow-up information should be completed if additional details become available.

The following steps are highlighted to provide the necessary information for safety tracking:

1. In **B**ox 17, provide information on Moderna COVID-19 Vaccine and any other vaccines administered on the same day; and in Box 22, provide information on any other vaccines received within one month prior.
2. In **B**ox 18, description of the event:
 - a. Write “Moderna COVID-19 Vaccine EUA” as the first line
 - b. Provide a detailed report of vaccine administration error and/or adverse event. It is important to provide detailed information regarding the patient and adverse event/medication error for ongoing safety evaluation of this unapproved vaccine. Please see information to include listed above.
3. Contact information:
 - a. In **B**ox 13, provide the name and contact information of the prescribing healthcare provider or institutional designee who is responsible for the report.
 - b. In **B**ox 14, provide the name and contact information of the best doctor/healthcare professional to contact about the adverse event.
 - c. In **B**ox 15, provide the address of the facility where vaccine was given (NOT the healthcare provider’s office address).

OTHER REPORTING REQUIREMENTS

Instructions for reporting to Moderna Tx, Inc

In addition, you must report the events described in Adverse Events and Vaccine Administration Errors Reporting Requirements and Instructions (Section 7) Report to Moderna (contact information below) by calling 1-866-MODERNA (1-866-663-3762) or by providing a copy of the VAERS form to Moderna Tx, Inc.:

Moderna

Phone: 1-866-MODERNA (1-866-663-3762)

Fax: 1-866-599-1342

E-mail: ModernaPV@modernatx.com

Other Reporting Instructions

The vaccination providers may report to VAERS and Moderna Tx, Inc other adverse events that are not required to be reported using the contact information above.

8 DRUG INTERACTIONS

~~Co-Administration with Other Vaccines~~

There ~~is are~~ no ~~data information~~ to assess the concomitant -administration of the Moderna COVID-19 Vaccine with other vaccines.