Moderne COVID-19 Vaccine
Standing Orders for Administering Vaccine to Persons 18 Years of Age and Older

Note: For more information/guidance, please contact the immunization program at your state or local health department or the appropriate state body (e.g., state board of medical/nursing/pharmacy practice).

Purpose
- To reduce morbidity and mortality from coronavirus disease 2019 (COVID-19) by vaccinating persons who meet the criteria established by the Centers for Disease Control and Prevention's Advisory Committee on Immunization Practices (ACIP).

Policy
- Where authorized under state law, standing orders enable eligible nurses and other healthcare professionals (e.g., pharmacists) to assess and vaccinate persons who meet the criteria in the "Procedure" section below without the need for clinician examination or direct order from the attending provider at the time of the interaction.

Procedure
- Assess persons 18 years of age and older for vaccination with Moderna COVID-19 Vaccine based on the following criteria:
  - Has not completed a COVID-19 vaccination series, regardless of brand. If 2 doses of an mRNA vaccine have been administered or a single dose of Janssen vaccine has been administered, no additional doses are recommended.
  - If the recipient has received 1 previous dose of Moderna COVID-19 Vaccine, administer the second dose at an interval of least 28 days (but preferably before 42 days).
  - If the vaccine product given as the first dose cannot be determined or is no longer available, any mRNA COVID-19 vaccine product may be administered at least 28 days after the first dose.
- For persons who received a COVID-19 vaccine that is not currently authorized in the United States, guidance can be found at: https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html#not-authorized-vaccines
- Moderna COVID-19 vaccine may be coadministered with other vaccines - on the same day, as well as within 14 days of each other.
- Defer vaccination with Moderna COVID-19 Vaccine for at least 90 days for persons who received passive antibody therapy (monoclonal antibodies or convalescent plasma) as part of COVID-19 treatment.
- Screen for contraindications and precautions.

Contraindications:
- Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a component of an mRNA COVID-19 vaccine (Moderna or Pfizer-BioNTech)
- Immediate allergic reaction of any severity to a previous dose or known (diagnosed) allergy to a component of the vaccine (see Table 1 in this document for a list of vaccine components)

Note: Persons who have a contraindication to an mRNA COVID-19 vaccine (Moderna or Pfizer-BioNTech) may be able to receive the Janssen COVID-19 Vaccine (see footnote). Prior to administration of Janssen COVID-19 Vaccine, inform women 18-49 years of the increased risk of thrombosis with thrombocytopenia syndrome (TTS) in their age group. Persons at risk for or with a history of other thrombosis not associated with thrombocytopenia can receive any FDA-authorized vaccine.

Precautions:
- Most people determined to have a precaution to a COVID-19 vaccine at their appointment can and should be administered vaccine.
- History of an immediate allergic reaction of any severity to any other vaccine or injectable therapy (i.e., intramuscular, intravenous, or subcutaneous vaccines or therapies)
  - This includes persons with a reaction to a vaccine or injectable therapy that contains multiple components, one of which is polyethylene glycol (PEG) or another vaccine component, but for whom it is unknown which component elicited the immediate allergic reaction.
  - People with a contraindication to Janssen COVID-19 Vaccine have a precaution to both mRNA vaccines (see footnote).

Moderate to severe acute illness

*Administer the second dose as close as possible to the recommended interval (28 days). If the second dose is not administered within 42 days of the first dose, the series does not need to be restarted. Doses inadvertently administered less than 28 days apart do not need to be repeated.

+When deciding whether to coadminister COVID-19 vaccine and other vaccines, providers should consider whether the patient is behind or at risk of becoming behind on recommended vaccines. They should also consider the patient's risk of vaccine-preventable diseases (e.g., during an outbreak) and the reactogenicity profile of the vaccines.

An immediate allergic reaction is defined as any hypersensitivity-related signs or symptoms such as urticaria, angioedema, respiratory distress (e.g., wheezing, stridor), or anaphylaxis that occur within 4 hours following exposure to a vaccine or medication.

Consider consultation with an allergist-immunologist to help determine if a patient with a contraindication to an mRNA vaccine can safely receive the Janssen COVID-19 vaccine.

Educational materials are available at: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/Update.html
Provide all recipients with a copy of the current federal Emergency Use Authorization (EUA) Fact Sheet for Recipients and Caregivers.

Prepare to administer the vaccine. Choose the correct needle gauge, needle length, and injection site for persons:
- 18 years of age:
  - Site: Deltoid muscle of arm.
- 19 years of age and older: See chart above.

Follow the manufacturer’s guidance for storing/handling punctured vaccine vials.

Administer 0.5 mL Moderna COVID-19 Vaccine by intramuscular (IM) injection.

Document vaccination.
- COVID-19 vaccination providers must document vaccine administration in their medical record systems within 24 hours of administration and use their best efforts to report administration data to the relevant system (e.g., immunization information system) for the jurisdiction as soon as practicable and no later than 72 hours after administration.
- 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 card: Date of vaccination, product name/manufacturer, lot number, and name/location of the administering clinic or healthcare professional. Give to the vaccine recipient.
  - Immunization information system (IIS): Report the vaccination to the appropriate state/local IIS.

Additional preparation and administration information is available on the manufacturer’s website at https://www.modernatx.com/.

Be prepared to manage medical emergencies.
- Vaccination providers should observe patients after vaccination to monitor for the occurrence of immediate adverse reactions, including syncope:
  - 30 minutes: Persons with a:
    - History of an immediate allergic reaction of any severity to a vaccine or injectable therapy
    - Contraindication to Janssen COVID-19 Vaccine who receive Moderna COVID-19 Vaccine
    - History of anaphylaxis due to any cause
  - 15 minutes: All other persons
- Syncope may occur in association with injectable vaccines, in particular among adolescents. Procedures should be in place to avoid falling injuries and manage syncopal reactions.
- Have a written protocol to manage medical emergencies following vaccination, as well as equipment and medications, including at least 3 doses of epinephrine, H1 antihistamine, blood pressure monitor, and timing device to assess pulse.
- Healthcare personnel who are trained and qualified to recognize the signs and symptoms of anaphylaxis as well as administer intramuscular epinephrine should be available at the vaccination location at all times.
- For more information, please see:
  - CDC’s General Best Practice Guidelines for Immunization, “Preventing and Managing Adverse Reactions,” at https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/adverse-reactions.html
  - Immunization Action Coalition’s “Medical Management of Vaccine Reactions in Adults in a Community Setting” at https://www.immunize.org/catg.d/p3082.pdf

<table>
<thead>
<tr>
<th>Sex and Weight of Patient</th>
<th>Needle Gauge</th>
<th>Needle Length</th>
<th>Injection Site¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female or male fewer than 130 lbs</td>
<td>22–25</td>
<td>½₅⁄₈ – 1”</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Female or male 130–152 lbs</td>
<td>22–25</td>
<td>1”</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Female 152–200 lbs</td>
<td>22–25</td>
<td>1–1½”</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Male 152–260 lbs</td>
<td>22–25</td>
<td>1½”</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Female 200+ lbs</td>
<td>22–25</td>
<td>1½”</td>
<td>Deltoid muscle of arm</td>
</tr>
<tr>
<td>Male 260+ lbs</td>
<td>22–25</td>
<td>1½”</td>
<td>Deltoid muscle of arm</td>
</tr>
</tbody>
</table>

¹Alternately, the anterolateral thigh can be used. A 1.5-inch needle may be used if administering vaccine in this site.

²Some experts recommend a 5/8-inch needle for men and women who weigh less 130 pounds. If used, skin must be stretched tightly (do not bunch subcutaneous tissue).
- Report adverse events to the Vaccine Adverse Event Reporting System (VAERS).
  - While this vaccine is under Emergency Use Authorization (EUA), healthcare professionals are required to report to VAERS:
    - Vaccine administration errors (whether associated with an adverse event [AE] or not)
    - Serious AEs (irrespective of attribution to vaccination)
    - Multisystem inflammatory syndrome (MIS) in adults or children

**Table 1: Ingredients included in COVID-19 vaccines**

The following is a list of ingredients for the Pfizer-BioNTech, Moderna, and Janssen COVID-19 vaccines reported in the prescribing information for each vaccine.

<table>
<thead>
<tr>
<th>Description</th>
<th>Pfizer-BioNTech (mRNA)</th>
<th>Moderna (mRNA)</th>
<th>Janssen (viral vector)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active ingredient</td>
<td>Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2</td>
<td>Nucleoside-modified mRNA encoding the viral spike (S) glycoprotein of SARS-CoV-2</td>
<td>Recombinant, replication-incompetent Ad26 vector, encoding a stabilized variant of the SARS-CoV-2 Spike (S) protein</td>
</tr>
<tr>
<td>2[(polyethylene glycol)-2000]-N, N-ditetradecylacetamide</td>
<td>PEG2000-DMG: 1, 2-dimyristoyl-rac-glycerol, methoxypolyethylene glycol</td>
<td>Polysorbate-80</td>
<td></td>
</tr>
<tr>
<td>1,2-distearyl-sn-glycero-3-phosphocholine</td>
<td>1,2-distearyl-sn-glycero-3-phosphocholine</td>
<td>2-hydroxypropyl-β-cyclodextrin</td>
<td></td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Cholesterol</td>
<td>Citric acid monohydrate</td>
<td></td>
</tr>
<tr>
<td>(4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyli)bisis(2-hexyldecanoate)</td>
<td>SM-102: heptadecane-9-yl-8-(2-hydroxyethyl) (6-oxo-6-(undecyloxy) hexyl) amino octanoate</td>
<td>Trisodium citrate dihydrate</td>
<td></td>
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<tr>
<td>Sodium chloride</td>
<td>Tromethamine</td>
<td>Sodium chloride</td>
<td></td>
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<tr>
<td>Monobasic potassium phosphate</td>
<td>Tromethamine hydrochloride</td>
<td>Ethanol</td>
<td></td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>Acetic acid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dibasic sodium phosphate dihydrate</td>
<td>Sodium acetate</td>
<td></td>
<td></td>
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<tr>
<td>Sucrose</td>
<td>Sucrose</td>
<td></td>
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</tbody>
</table>

* None of the vaccines contain eggs, gelatin, latex, or preservatives.

Note: Both the Pfizer-BioNTech and Moderna COVID-19 vaccines contain polyethylene glycol (PEG). PEG is a primary ingredient in osmotic laxatives and oral bowel preparations for colonoscopy procedures, an inactive ingredient or excipient in many medications, and is used in a process called "pegylation" to improve the therapeutic activity of some medications (including certain chemotherapeutics). Additionally, cross-reactive hypersensitivity between PEG and polysorbates (included as an excipient in some vaccines and other therapeutic agents) can occur. Information on active or inactive ingredients for vaccines and medications can be found in the package insert, CDC’s vaccine excipient summary and the National Institutes of Health DailyMed database can also be used as resources.