Moderna COVID-19 Vaccine Booster Dose Key Points

Key Points

Volume of the Moderna booster dose is 0.25mL.

- This is half the dosage recommended in the primary series and for the additional dose for those moderately to severely immunocompromised. A primary series and the additional dose are 0.5 mL dosage.

Heterologous (mix-match) Booster Dose

- People have the option to receive any of the FDA-approved or FDA-authorized COVID-19 booster products (Pfizer-BioNTech, Moderna [half dose] or Janssen).
    - People may consider the benefits and risks of each product and discuss with their healthcare provider.
- When a heterologous or "mix and match" booster dose is administered, the eligible population and dosing intervals are those of the vaccine used for primary vaccination.
- A single booster dose of the Moderna vaccine (0.25 mL) may be administered as a mix-match booster dose following completion of primary vaccination with another authorized or approved COVID-19 vaccine. When using Moderna vaccine for the booster, the dose is 0.25mL regardless of what vaccine was used for the primary vaccination.

Populations Eligible for Booster

The following groups who received an mRNA COVID-19 primary vaccine (Moderna or Pfizer) are eligible and should receive a single COVID-19 booster dose at least 6 months after their initial primary mRNA vaccine series:

- 65 years and older
- Age 18+ who live in long-term care settings
- Aged 50-64 years with certain underlying medical conditions

The following groups who received an mRNA COVID-19 primary vaccine (Moderna or Pfizer) are eligible and may receive a single COVID-19 booster dose based on their individual benefits and risks at least 6 months after their initial primary mRNA vaccine series

- Age 18 -49 years with certain underlying medical conditions
- Age 18-64 years and at increased risk for COVID-19 exposure and transmission because of occupational and institutional high-risk settings

Immunocompromised recommendation

Please note the difference between a "booster" dose and an "additional/3rd" dose of mRNA vaccine. The recommendation for an additional dose of mRNA vaccine for moderately to severely immunocompromised patients involve administration of a (full) 0.5 mL dose at least 28 days after the second dose.

Documentation
CDC requires COVID Immunizing Providers to report doses to the MCIR within 24 hours of administration for all ages receiving COVID vaccines. Document in the patient's paper or electronic medical record.

The booster dosage for Moderna is 0.25 mL. The MCIR will accept Moderna 0.25 mL booster doses. However, this may not be reflected as a 0.25 mL dose in the MCIR as we have not been provided updated codes (CVX or NDC) specific to this dosage. It will be reflected as a 0.5 mL dose in the MCIR when you report it as a booster dose. MCIR enhancements are in progress regarding dosage.

Storage and Handling
The same, current Moderna product is used for both primary and booster dose vaccination, overall storage and handling guidance remains the same except for the following key points:

A maximum of 20 doses (booster and/or primary doses) may be withdrawn from the vial.

- When 20 doses have been withdrawn, the vial and any residual vaccine should be discarded appropriately.
- Do not pool excess vaccine from multiple vials.
- Do not puncture the vial stopper more than 20 times.
- As a reminder, once punctured, a vial may be stored between 2° to 25°C (36° to 77°F) for up to 12 hours. Record the date and time of first use on the Moderna vaccine vial label.

Vial sizes
The Moderna COVID-19 Vaccine is supplied in two multi-dose vial presentations:

- A multi-dose vial containing 5.5 mL (Moderna 10)
- A multi-dose vial containing 7.5 mL (Moderna 14)

When extracting only booster doses or a combination of primary series and booster doses, the maximum number of doses that may be extracted from either vial presentation should not exceed 20 doses. Do not puncture the vial stopper more than 20 times.

Moderna Outbreak Inventory & Waste Reporting

Terminology
Moderna products should continue to be referenced as "Moderna 10" and "Moderna 14".

- Moderna 10 – There is very little product in the field, but we recognize it could be available for booster vaccination.
- Moderna 14 – most boosters will be pulled from this product line.

Outbreak Inventory Reporting

- Only report **unopened product** in whole doses
    - *Example: Moderna 14 x 10 unopen vials on the shelf = 140 doses reported through inventory channels*
- Do **NOT** count opened/punctured product. Do not count half doses or whole doses from opened/punctured product

Wastage Reporting

- Report waste based on doses administered (shots in arms), NOT discarded volume. Report wastage only as whole doses. **Do NOT count half doses** as waste when reporting.
- Report waste only when fewer than 14/10 doses are administered from a vial, regardless of whether it is a full dose (primary) or half dose (booster).
    - Each dose administered, whether it is a full or half dose, counts against the total possible wastage of 10 doses (for 10-dose vial) or 14 doses (for 14-dose vial).

When waste needs to be reported, count the **total** number of **doses** administered (shots in arms), **regardless of volume or series** and subtract this from the total number of identified doses in the vial.

Formula: Vial size (doses) MINUS number of doses administered = waste

Example - During a clinic day, 1 primary (full) dose is administered, and 5 booster (half) doses are administered from a Moderna 14 vial. The clinic should report as follows:

- 6 people vaccinated (1 primary dose and 5 booster doses)
- 8 doses wasted (14 doses available in the vial minus 6 administered doses)

Once 10 or 14 administrations occur in any combination of dose sizes, no wastage should be reported.

- For a Moderna-14 vial—wastage should only be reported up to 14 doses; do not report wastage over 14 doses even though you can administer up to 20 booster doses from one vial.

See attached: ***Moderna 14 and 10 Booster Wastage Tables****—CDC developed to a*ssist in determining the amount of waste that may be reported.

Moderna Updates – Inventory & Expiration Information

All Moderna orders will receive double ancillary shipments with each order.

Moderna 10/Moderna 14 orders approved by MDHHS from October 22nd and on will have double ancillary supplies. Orders created prior to that time, even if they have not been delivered yet, will contain a 1:1 ratio of vaccine to ancillary supplies.

You may use all unexpired vaccine that is currently in the field to support primary and booster dose vaccinations.

Reminders for Reporting Waste in the MCIR

COVID-19 Vaccine Providers **must report all wastage in the MCIR** (doses which are broken, expired, drawn not used, etc.).

Enter transactions in the MCIR Outbreak inventory and record wasted doses.
Refer to How to Record No Longer Viable COVID-19 Doses from a Multi-Dose Vial in MCIR

Create & Submit a COVID Return/Waste Report in the MCIR
How to Create and Submit a COVID Return/Waste Report

Sources: The updated EUAs for Moderna can be found here. A copy of the letter is attached and may also be found at Moderna COVID-19 Vaccine DHCP Letter-Fact Sheet 10.20.21.pdf