

Preventing COVID-19 Vaccine Errors



COVID-19 Vaccine Error Prevention

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This is information for preventing, addressing, and reporting COVID-19 vaccine administration errors (preventable events that may lead to inappropriate use of vaccine and/or patient harm) related to:

[Vaccine Storage](#) | [Vaccine Selection](#) | [Vaccination Timing](#) | [Vaccine Preparation](#) | [Vaccine Administration](#)

VACCINE STORAGE

When storage errors are made, they tend to be:

- Vial out of freezer or cold storage too long
- Filled syringe too long before use
- Not checking that both 1) the vial is in date and 2) the vial storage time has not expired

Prevention tips:

- 1) Store separately each type of COVID-19 vaccine (this includes separate storage for different age-specific vaccines and boosters from the same manufacturer).
Note: Always have the relevant vaccine storage chart (see below) posted in the vaccine storage/preparation area.
- 2) Check the expiration date against the current expiration date list for that lot number.
Note: Before disposing a vial, check for expiration date extensions (<https://bit.ly/C19VaxExtensions>)
- 3) Draw up one syringe at a time.
Note: If at a large-scale community vaccination clinic, track number of individuals waiting to avoid drawing up more syringes than would be used in next half hour.
- 4) Discard vaccine when necessary; there is no penalty for doing so, and there is plentiful supply.

VACCINE SELECTION

When selection errors are made, they tend to be:

- Person given wrong vaccine (e.g., wanted Moderna, got Pfizer; wanted a non-COVID-19 vaccine)
- Wrong vaccine type given to pediatric patient (e.g., under age 12 years received Novavax not Pfizer)
- Wrong vial chosen for primary series dose or booster dose (e.g., used original/monovalent instead of Omicron/bivalent for booster for eligible age group)

Prevention tips:

- 1) Do not assume the individual wants to use the same vaccine brand as they got for the primary series again for their booster dose(s). Double check vaccine desired prior to administration.
- 2) Double check which vaccine a person wants (e.g., may be there for a different vaccine than COVID-19).
- 3) For pediatric patients, ask their age prior to administration to avoid miscalculations.
Note: Especially at large-scale community vaccination sites, it is easy to just look at the year and not the birth month and day. *Also note:* There are considerations for children transitioning between age groups. See those for Moderna: <https://bit.ly/ModernaKidAgeT> and for Pfizer: <https://bit.ly/PfizerKidAgeT>
- 4) Keep a vaccine-by-age chart available and double check prior to vaccination.
- 5) Double check the vial, age, and dose prior to vaccination. (e.g., for ages 12+ years, bivalent is for booster)

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VACCINATION TIMING

When timing errors are made, they tend to be:

- Vaccine dose given too early.

Prevention tips:

- 1) Check COVID-19 Vaccination Card and/or WVSIS to verify vaccination history (and calculate next dose accordingly), rather than relying on patient verbal history alone.

Note: The **WV COVID-19 Vaccination Due Date Calculator** (available at vaccinate.wv.gov) allows input of birthday, previous COVID-19 vaccine type, immunocompromised status, and date of last vaccination to provide the due date and type(s) of vaccine for which an individual is eligible. The “Medical Info” button at the bottom of the last page gives more information about dosing schedules and clinical considerations.

VACCINE PREPARATION

When preparation errors are made, they tend to be:

- Instructions not followed
- Vaccinator assumes someone else already diluted the vial
- Incorrect quantity of diluent used for dilution
- Too many doses drawn up from a single vial
- Pfizer Gray Cap diluted (does not require dilution), resulting in too small of a dose given

Prevention tips:

- 1) After vial to be used is selected, always double check preparation instructions.

Notes:

Remember that Pfizer has different instructions based on cap color:

Gray cap = do NOT dilute (remember: “**Gray is Good to go**”)

Orange cap = yes dilute (remember: “**Orange requires Other step**”)

Moderna is not diluted.

Janssen is not diluted.

Novavax is not diluted.

Do not assume you remember! Double check with each new vial.

- 2) Follow provided dilution instructions; never use more or less diluent than recommended.
Note: There is plenty of vaccine available and no need to withdraw more doses from a vial than instructions allow.
- 3) The first person to draw up a dose should be the person who prepared the vial.
Note: This practice helps avoid the first dose being drawn up by someone who assumed another person diluted the vial already.
- 4) If vial requires dilution, clearly mark vial as diluted once dilution is complete.
- 5) For each vial prior to first use, set out a total number of syringes equal to the maximum doses that can be withdrawn from the vial (this practice allows visual tracking of doses remaining in the vial).

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VACCINE ADMINISTRATION

When administration errors are made, they tend to be:

- Dose not correct for patient age (pediatric versus adult)
- Dose not correct for booster dose

Prevention tips:

- 1) If Moderna is used for booster dose, double check proper dose is administered (e.g., adult Moderna booster dose is $\frac{1}{2}$ of the full dose used for the primary series and is from a different vial, i.e. bivalent-Omicron BA.4/BA.5 only for booster shots ages 18 years and older).
- 2) If Moderna is used and patient meets the strict definition of immunocompromised, check that the full dose is used for the additional primary dose (3rd dose in the primary series for moderately to severely immunocompromised).
- 3) Keep a list of criteria for being considered immunocompromised posted in the vaccine area.
Note: While this is based on patient's history, not formal documentation, the vaccinator must still ensure that the reported history meets the criteria
- 4) For pediatric individuals, ensure correct dose is given for age at time of vaccination (double check age and pediatric vaccination dosing schedule).

If An Error Occurs:

If an error occurs, **immediately call** the WV COVID-19 Hotline 1-800-887-4304. This will enable you to double check the recommended response to the error and compliance with required reporting. Vaccine administration errors should be reported at vaers.hhs.gov.

Be sure to **notify the person (and/or parent/guardian) of the error along with the recommended response** to the error (e.g., revaccination if needed).

Follow TED to Avoid COVID-19 Vaccine Errors



TYPE

- ✓ Are you using the recommended COVID-19 vaccine for this person?

EXPIRATION

- ✓ Did you check the vial's expiration date?
- ✓ Is the vaccine within the usable time frame for the storage conditions?

DOSE

- ✓ Is this the correct amount for the person's age, dose number, and vaccine type?
- ✓ Was the vaccine prepared correctly for the product type (diluted or not)?

For brand-specific COVID-19 vaccine info, visit the FDA:

