Minimizing Vaccine Waste

BACKGROUND & PURPOSE
Vaccine availability has surpassed the demand, and this updated document clarifies guidance on wasting vaccines versus missing a vaccine opportunity.

Do not turn any person away over the risk of vaccine waste. Efforts should be made on the part of the practice to administer all viable doses of the COVID-19 vaccine before their beyond use date/time (BUD).

PRIORITIZATION
1. Minimize waste whenever possible, but the emphasis is on avoiding missed opportunities, and some wasted vaccine is inevitable and acceptable.
2. Offer the COVID-19 vaccine at every encounter to all eligible people.
3. Do not allow full vials of vaccine to expire. Closely monitor your COVID-19 vaccine inventory. If you have expiring vials, communicate with the Immunization Program to plan a transfer.
4. Plan only to have your anticipated need on hand and order accordingly.
5. In PCP offices, puncture only one vial at a time and make efforts to use as many doses out of a punctured vial as possible. A single open vial can be used for any dose (dose 1, dose 2, additional, booster) and any approved age according to the appropriate EUA.

PROTOCOL
FOR USE IN A VACCINE CLINIC SETTING
1. Review daily clinic/appointment schedule to calculate the number of vials needed that day. You can anticipate the below doses per vial.
   a. Adult Pfizer (purple cap, dilute): 6 doses/vial
   b. Adult Pfizer (grey cap, do not dilute): 6 doses/vial
   c. Pediatric Pfizer (orange cap, dilute): 10 doses/vial
   d. Moderna: 10 primary series doses/vial or 20 booster doses. Do not puncture the vial stopper more than 20 times.
   e. Janssen: 5 doses/vial
2. As a clinic or appointment day progresses, monitor appointments, no-shows, and inventory. Track the number of doses to ensure no unnecessary vials are punctured.
3. For vaccines administered to walk-in patients, sites should use relevant registration and reporting mechanisms and ensure that second dose appointments are scheduled for the appropriate timeframe at the same location.
4. Vaccine waste is expected. Ensure proper documentation in VIMS.
FOR USE IN A HOSPITAL (INPATIENT OR ED)
1. Make it part of your routine assessment to let patients know you have the COVID-19 vaccine and ask if they would like to receive it.
2. Before discharge, verify that eligible patients are offered a COVID-19 vaccine. You may use the Immunization Registry for verification of vaccine status.
3. Communicate with your pharmacy when you need a dose.

FOR USE IN A PCP OFFICE SETTING
1. During clinic prep, note those patients who have not received the COVID-19 vaccine. You may use the Immunization Registry for this purpose.
2. Make it part of your office flow to let patients know you have the COVID-19 vaccine and ask if they would like to receive it.
3. Keep track of the open vial. Communicate with providers and staff when a vial is open, the number of doses available, and the beyond use date/time.
4. Vaccine waste is expected. Ensure proper documentation in VIMS.

PROTOCOL FOR USING OPEN MULTIDOSE VIALS IN MULTIPLE LOCATIONS
Opened vials or pre-drawn syringes may not be transferred to another provider's office. Once a vial is punctured, all doses must be administered or wasted by the originating site. See beyond use times in the appropriate EUA.

Other circumstances may warrant transport outside of your clinic setting, but generally, this should be rare. Proper temperature monitoring and documentation are required even when transporting a short distance.

Each person administering vaccines should draw up no more than one multidose vial at one time.

Additional instructions for the use of open multidose vials:
- Pack vaccine in a temperature monitored cooler according to the guidelines found in Vermont’s Vaccine Storage and Handling for Off-site Clinics guidance document.
- Pack vaccine tightly in a cooler with additional stabilizing material to reduce movement.
- Protect the vaccine from exposure to light.
- Label the vaccine with the beyond-use date/time
- Include all appropriate vaccine documentation with every transported dose.
REVISION HISTORY

<table>
<thead>
<tr>
<th>DATE</th>
<th>SUMMARY OF REVISIONS</th>
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<tbody>
<tr>
<td>1/26/2021</td>
<td>Initial Creation</td>
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<tr>
<td>3/30/2021</td>
<td>Version 2; Background information, protocol for use of multidose vials, BUD definition, and resource links added.</td>
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<tr>
<td>5/12/2021</td>
<td>Revision of policy, supply now exceeds demand, CDC update on waste, adding PCP’s.</td>
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<tr>
<td>12/27/2021</td>
<td>Revision of policy, standby list no longer expectation, clarification on BUD</td>
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DEFINITIONS

Expiration Date:  Associated with a specific lot number. These dates may be extended and therefore, dates presented on the manufacture box/vial may not be accurate. Any change to the expiration date is reflected in VIMS.

Beyond Use Date (BUD): Each vaccine has unique storage parameters. Check vaccine EUA before storing COVID-19 vaccine at your practice. Tracking and adherence to a Beyond Use Date is the practice's responsibility and is not reflected in VIMS.

Beyond Use Time: Each vaccine must be used after the vial is punctured within a certain amount of time. Refer to the vaccines EUA for the most up-to-date information.

VIMS: The Vaccine Inventory Management System, or VIMS, is where all vaccine inventory is documented. Reconciliation of this inventory is required every Wednesday, when additional COVID-19 vaccine may also be ordered. Access to the VIMS system requires access to the Vermont Immunization Registry.

No shows – Scheduled appointments for which patients do not present at clinic/appointment.

RESOURCES

- Pfizer-BioNTech | CDC
- Pfizer-BioNTech EUA | FDA
- Moderna | CDC
- Moderna EUA | FDA
- Janssen | CDC
- Janssen EUA | FDA

- Resources for Health Care Professionals (Vermont Department of Health)
- Vaccine Inventory Management (VIMS) User Guide (Vermont Department of Health)