



oregon
vaccines for children



VACCINE MANAGEMENT GUIDE

Brought to you by Oregon Immunization Program

As a Vaccines for Children clinic you must designate primary and backup staff to manage routine and emergency vaccine handling.

Primary responsible staff: _____

Backup responsible staff: _____

Oregon Immunization Program Health Educator:

Name: _____

Telephone: _____

Fax: 971-673-0278 or 971-673-2401

Email: _____

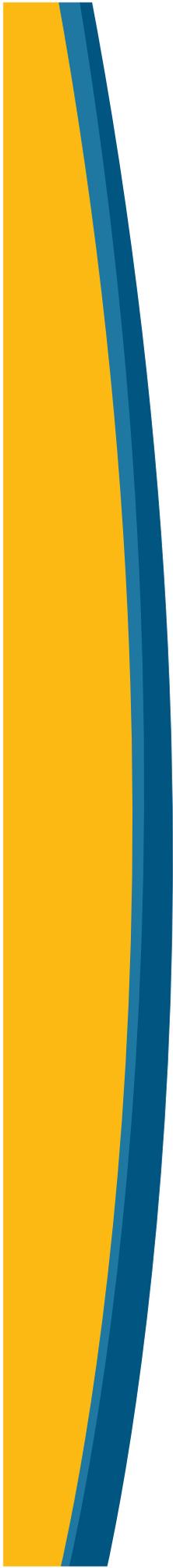
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Section 1: Program Participation Requirements

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Program Participation Requirements

To meet Oregon Vaccines for Children (VFC) Program participation requirements you must:

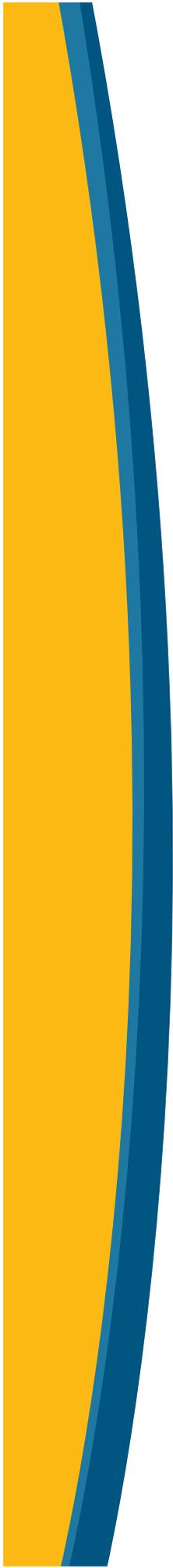
- Screen patients for vaccine eligibility at every immunization visit, and document eligibility in the patient's permanent record
- Administer VFC vaccine only to children and adolescents through age 18 who meet VFC eligibility criteria
- Keep all records related to VFC for a minimum of three years
- Comply with current Advisory Committee on Immunization Practices (ACIP) immunization schedule
- Provide current Vaccine Information Statements (VIS) in the patient's primary language at every immunization visit
- Maintain records in accordance with the National Childhood Vaccine Injury Act with full documentation in the patient's medical chart
- Not impose a charge for the cost of state-supplied vaccine
- Not collect an administration fee in excess of \$21.96 from patients receiving state-supplied vaccine
- Waive administration fees on state-supplied vaccine if patient is unable to pay
- Comply with standards outlined in Oregon Revised Statute (ORS) 433.103
 - » Report all doses administered to ALERT IIS with a valid vaccine eligibility code within 14 days
 - » Use the ALERT IIS Inventory and Ordering modules to manage your private and state-supplied vaccine stocks
 - » Ensure at least two clinic employees complete the three Oregon VFC online training modules on vaccine management at least once every other year
- Comply with VFC standards for vaccine management including:
 - » Have a written plan for vaccine management. **This guide, once customized for your clinic and signed by clinic staff, fulfills this requirement**
 - » Use a refrigerator, freezer, and thermometer that meet VFC requirements
 - » Document temperatures twice daily and review continuous tracking data on a routine basis

- » Notify the Oregon Immunization Program when state-supplied vaccine has been stored outside the appropriate temperature range
- » Provide the Oregon Immunization Program with temperature logs, when requested
- » Comply with VFC Transfer and Vaccine Return policies and agree to replace vaccine purchased with state or federal funds (VFC, 317) that are deemed non-viable on a **dose-for-dose** basis
- » Comply with Oregon Immunization Program's policy on vaccine borrowing
- Review and update the VFC Provider Agreement and Profile every year, and whenever there is a significant change in the number of patients immunized or change in Responsible Provider
- Participate in VFC program compliance site visits including unannounced visits
- Providers with a signed deputization Memorandum of Understanding between a FQHC or RHC and the Oregon Immunization Program to serve underinsured VFC-eligible children, agree to:
 - » Include "underinsured" as a VFC eligibility category during the screening for VFC eligibility at every visit
 - » Vaccinate "walk-in" VFC-eligible underinsured children
 - » Report required usage data

Note: "Walk-in" in this context refers to any underinsured child who presents requesting a vaccine; not just established patients. "Walk-in" does not mean that a provider must serve underinsured patients without an appointment. If a provider's office policy is for all patients to make an appointment to receive immunizations then the policy would apply to underinsured patients as well.

- Pharmacies, urgent care, or school located vaccine clinics agree to:
 - » Vaccinate all "walk-in" VFC-eligible children and not refuse to vaccinate VFC-eligible children based on a parent's inability to pay the administration fee

Note: "Walk-in" refers to any VFC eligible child who presents requesting a vaccine; not just established patients. "Walk-in" does not mean that a provider must serve VFC patients without an appointment. If a provider's office policy is for all patients to make an appointment to receive immunizations then the policy would apply to VFC patients as well.



Section 2: Employee Training

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Employee Training

All staff who handle and administer vaccines must receive training regarding your clinic's storage and handling policies and procedures.

Training should occur upon hire, and whenever there are updates to recommendations. At a minimum, training must include reviewing your clinic's vaccine management plan.

Your Clinic Training Plan



Use the space below to document your clinic training plan.

What topics will you cover?

Our vaccine management plan:

How will trainings be conducted (i.e., in person, review of written materials, webinars)?

How will completion of trainings be documented?

Training Links

Oregon Immunization Program's Online Training page:

bit.ly/oregonVFCtraining

ALERT IIS Training Page:

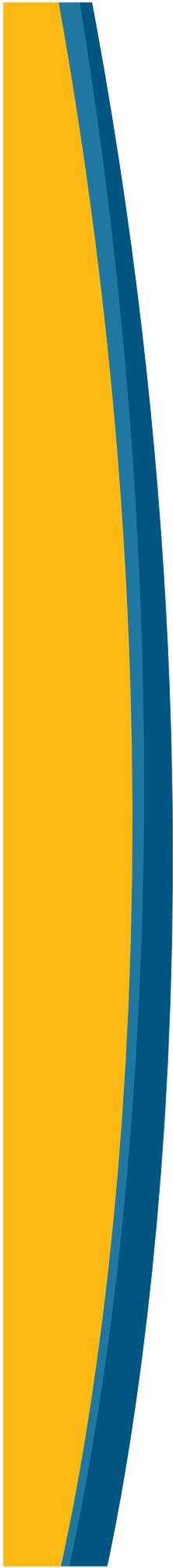
<http://public.health.oregon.gov/PreventionWellness/VaccinesImmunization/alert/Pages/index.aspx>

CDC's Storage and Handling Resources:

www.cdc.gov/vaccines/recs/storage/default.htm

CDC's General Recommendations on Immunization:

www.cdc.gov/mmwr/pdf/rr/rr6002.pdf



Section 3: Inventory Management

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Managing Your Inventory

Accurate inventory management means ensuring vaccine is available for patients, preventing vaccine waste, and monitoring inventory in ALERT IIS.

Inventory Management Fundamentals

- Have enough vaccine stock on hand while not overstocking
- Order vaccines based on your clinic's physical inventory and the amount of vaccine you expect to administer before the receipt of your next order
- Store and rotate vaccines according to expiration date. Use vaccines that expire earliest first
- Occasionally, you might have more vaccine on hand than you can use before it will expire. Refer to the **Short-Dated Vaccine section** for steps you can take so vaccine is used before expiration



TIP ALERT IIS can help.

In ALERT IIS, set automatic notifications that will alert you when you are running low on vaccines, or when vaccines are nearing expiration.

Track Your Inventory in ALERT IIS

Clinics must maintain their inventory in ALERT IIS:

- Entering all vaccine stock into ALERT by accepting vaccine shipments and transfers as well as entering private stock on the add inventory screen
- Report all doses to ALERT IIS with a valid eligibility code within 14 days of administration
- Use the Modify Quantity screen to adjust vaccine inventory when vaccine is wasted or spoiled or is unaccounted for
- Reconcile inventory on a routine basis
- Submit monthly vaccine reports (public clinics only)

Clinics are required to submit an accurate and complete inventory in ALERT IIS within the 14 days prior to ordering. Refer to the **How To: Manage your Inventory in ALERT IIS** on the Oregon Immunization Program's website at <http://1.usa.gov/ImmunizationProviderResources> for instructions on maintaining an accurate inventory and submitting inventory counts prior to ordering.

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Ordering Vaccine

Order vaccines according to your assigned ordering schedule.



My clinic's ordering schedule is:

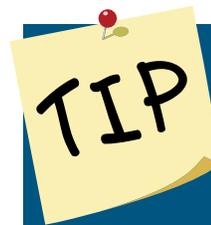
(i.e., monthly, quarterly, beginning of month, end of month)

Take an Inventory of your Vaccine Prior to Ordering

To determine the number of vaccines to order, consider:

- The number of each vaccine your clinic currently has on hand, and
- The amount of vaccine you expect to administer before the receipt of your next order

An accurate inventory must be submitted in ALERT IIS within 14 days prior to placing a vaccine order. Refer to the **How To: Manage your Inventory in ALERT IIS** on the Oregon Immunization Program's website at <http://1.usa.gov/ImmunizationProviderResources> for instructions on submitting an inventory count prior to ordering.



Run a Vaccine Eligibility report in ALERT IIS to understand how many doses of each vaccine your clinic will likely use before your next ordering window.

Orders for state-supplied vaccine are placed in ALERT IIS

1. Click **Manage Orders** under the Inventory section of the menu
2. Click the **Create Order** button
3. At the top of the Create Order screen, **verify that the delivery address and hours are correct.** If they need to be updated, your Super User has access to make changes in the Edit Org section by clicking the manage access/account button at the top of the page
4. Scroll down and enter the number of doses of each vaccine you wish to order in vials and/or pre-filled syringes



The ALERT IIS vaccine ordering table displays the number of doses given of each vaccine since your last order, and the number of doses on hand. Use this to check that you're ordering a reasonable amount of each vaccine.

5. When you have completed your vaccine order, click the **Submit Order** button at the top of the page
6. The Order Confirmation page will display. From this page, you can **Print Order** and **Modify Order**
7. Click the **Okay** button to return to the Manage Orders page

For additional instructions on ordering vaccines, refer to the **ALERT IIS: How to Order Vaccine** on the Oregon Immunization Program's website at <http://1.usa.gov/ImmunizationProviderResources>.

Vaccines typically arrive 10 to 14 business days after ordering. Shipments are delivered Tuesday through Friday via express carrier from McKesson. Varicella and MMR-V are shipped directly from Merck and can take more than four weeks to arrive. Notify your front office staff when a vaccine shipment is expected.

Receiving Vaccine

Providers must be on site with appropriate staff to receive vaccine at least one day a week other than Monday, and for at least four consecutive hours on that day. Deliveries will only be made during the days and hours you designate in ALERT IIS.

Your clinic may be financially responsible for vaccine if:



- Delivery is attempted during your designated shipping days and hours, but the delivery cannot be completed
- Vaccine is mishandled after the delivery has been accepted



Our clinic delivery days and hours are:

(Days of week, times of day)

Receiving Your Vaccine Shipment

1. Open your vaccine shipment immediately
2. Check the temperature indicators in the shipping container to ensure vaccines remained in the recommended temperature range during shipment. If the temperature indicators show that vaccines may have been exposed to out-of-range temperatures:
 - » For vaccines received from McKesson, call McKesson's Customer Service number immediately at 1-877-822-7746
 - » For vaccines received as a transfer from another clinic or shipped from Oregon Immunization Program, call your Immunization Health Educator immediately at 971-673-0300
 - » For Varicella, MMR-V, or Zoster vaccine call Merck immediately at 1-800-637-2579
3. Check vaccine brands, expiration dates, lot numbers, and quantities to be sure your delivery matches the packing slip. Occasionally, orders are filled in more than one shipment, but each packing slip should accurately reflect what is in each box
4. Remove vaccine from the shipping container and place the vaccine into your refrigerator or freezer. Ensure that vaccines with the shortest expiration dates are placed in a position to be used first



Use this space to write instructions for how vaccines are received at your clinic. Include where deliveries are made, who is responsible for checking in shipments, and any other relevant information.

Add Doses Received to Your Inventory in ALERT IIS

1. When an order shows a status of “Shipped” in ALERT IIS, and you have received the shipment, go to **manage transfers** in ALERT IIS
2. You will see your order as an Inbound Transfer. Click on the **vaccine order date** hyperlink
3. Click the **Accept Transfer** button to add the entire order to your inventory. Click the **Reject Transfer** button to reject the entire order
 - » Partially Accept allows you to accept part of the shipment, and give reasons for rejecting the rest

For additional instructions on adding vaccine to your inventory in ALERT IIS, refer to the **ALERT IIS: How to Transfer Vaccine** and the **Manually Adding and Adjusting Inventory in ALERT IIS** on the Oregon Immunization Program’s website at <http://1.usa.gov/ImmunizationProviderResources>.

Short-Dated Vaccine

When your clinic orders state-supplied vaccine, it is your responsibility to make sure it is used before expiration. Your clinic may be billed for expired vaccine.

If you have more vaccine than you think you can use before it expires, take one or more of the following steps:

- Use data to determine the number of doses you expect to be able to use by the expiration date
- Contact and arrange appointments for patients who are due or past due for the vaccine
- Transfer vaccine to another VFC provider. If that provider is not able to use the vaccine before expiration, your clinic will be charged for the unused doses



TIP Run a reminder/recall report in ALERT IIS to identify and contact patients who are due or past due for immunizations.

Transferring short-dated vaccine:

- Contact other VFC providers in your area to set up a vaccine transfer
- Once a receiving site has been established, contact your VFC Health Educator and inform them of the vaccine transfer
- Pack vaccine according to the **Vaccine Transport Instructions section**
- Document the transfer in ALERT IIS. Refer to **ALERT IIS: How to Transfer Vaccine** on the Oregon Immunization Program's website at <http://1.usa.gov/ImmunizationProviderResources>



TIP Resources for locating other VFC providers in your area are available at <http://1.usa.gov/OregonVFCclinics>



Notify your Immunization Health Educator if you have spoiled or expired vaccine. Your Health Educator will arrange to have the doses picked up and returned to McKesson.

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Refrigerated Vaccine Transport Instructions

Instructions are for: DTaP, Hepatitis A, Hepatitis B, Hib, HPV, Influenza, IPV, Meningococcal, MMR, PCV13, PPV23, Rotavirus, Td, Tdap.

The transferring site is responsible for:

- Properly shipping or transporting vaccine and all associated costs
- Vaccines damaged during shipment

Shipping Days

Ship only on Monday, Tuesday, or Wednesday to guarantee delivery that week.

Shipping Options

Express carrier, next day air, or ground delivery are some options. Ground is about as fast as, and more affordable than, other options.

How to pack refrigerated vaccines:



Never use frozen cold packs to ship refrigerated vaccine, instead use cold packs that have been "conditioned". To condition cold packs leave them at room temperature for 1 to 2 hours until the edges have thawed and the packs look like they've been sweating. Frozen cold packs that are not "conditioned" may freeze vaccine.

1. Notify the receiving clinic when you are sending the vaccine and corresponding diluents to ensure they will be prepared to receive the vaccine shipment
2. Use a Styrofoam container at least 2 inches thick designed for transporting vaccines
3. Place a layer of conditioned cold packs in the bottom of the transport container. Do not use frozen cold packs, they may freeze vaccine
4. Cover cold pack with 1-2 inches of filler material (e.g., bubble wrap or crumpled paper) to ensure that vaccines do not touch cold packs, and do not shift during transport
5. Cover the filler material with a layer of cardboard
6. Place the vaccine in a plastic bag with a calibrated continuous tracking thermometer, and place the bag on top of the cardboard
7. Place a layer of cardboard on top of vaccines and another layer, 1-2 inches, of filler material

8. Place another layer of conditioned cold packs on top of filler layer and add another filler layer on top of the cold packs
9. Add a packing slip listing vaccines included in the shipment. Also, note your name, your clinic's name, address, and phone number. One option is to print the packing slip from the ALERT IIS
10. Secure any gaps in the container with filler material and seal with packing tape
11. Be sure the shipping instructions include the days and times the clinic is open to receive their vaccine shipment
12. Affix "Rush!! Vaccine Perishable" and "Do Not Freeze" stickers to the shipping container.

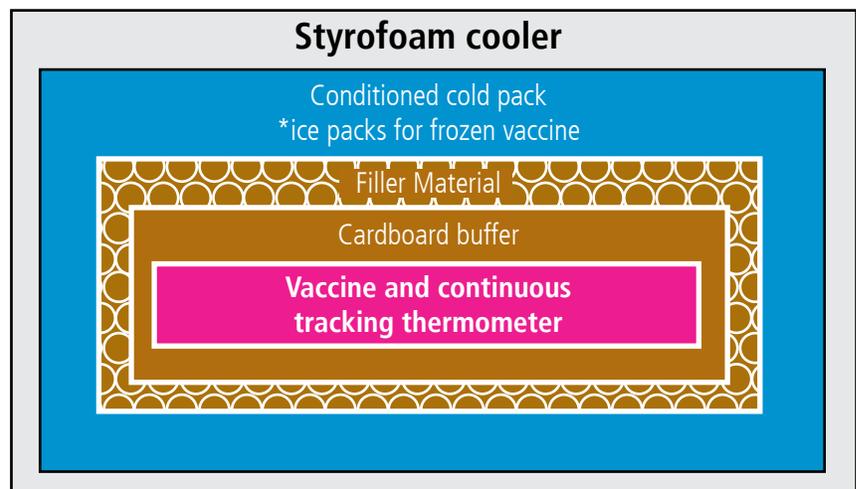


When external temperatures are below 20°F or above 85°F, only ship if absolutely necessary. Before doing so, contact your Health Educator.

When personally transporting vaccine:

- Keep the insulated container in appropriate temperature conditions
- Do NOT transport or store vaccine in the trunk of a vehicle
- Do NOT leave insulated container in an unheated or overly heated location
- Drive directly to the receiving site to minimize transport time
- When possible, place a continuous tracking thermometer in the cooler so temperatures can be monitored during transport

The vaccine transport sandwich



Frozen Vaccine Transport Instructions

Instructions are for: MMR, MMR-V, Varicella, Zoster.

How to pack frozen vaccines:



Never use dry ice to transport frozen vaccines. It is important to ship frozen vaccine in the coldest conditions possible using gel freezer packs. Document the vaccine transit time on an excursion tracking sticker or equivalent. Your Health Educator can provide excursion tracking stickers.

Instructions for packing frozen vaccine are the same as for refrigerated vaccine, except cold packs should be frozen rather than conditioned. Pack with a heat indicator or continuous tracking thermometer.



When external temperatures are above 85°F, only ship if absolutely necessary. Before doing so, contact your Health Educator.

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Returning Spoiled and Expired Vaccine

The Oregon Immunization Program requires providers to be good stewards of state-supplied vaccines. Providers may be billed for spoiled or expired vaccines.

State-supplied spoiled and expired vaccine must be returned to McKesson Distributors within six months of spoilage or expiration.



If you have spoiled or expired state-supplied vaccine, do not throw it away. Remove spoiled or expired vaccine from your storage units so it is not administered.

To return state-supplied vaccine:

1. Fax or email a completed **Nonviable Vaccine Return Form** (available at <http://1.usa.gov/ImmunizationProviderResources>) to your Immunization Health Educator. Public clinics report all wasted, spoiled and expired vaccine on their Monthly Vaccine Report (MVR).
2. The Oregon Immunization Program will request a call tag from an express carrier, which will arrive via U.S. mail. Instruct your front desk staff to watch for this envelope to arrive in the mail
3. Nonviable vaccine does not need to be packed in coolers or refrigerated. However, vials must be packed to protect from breakage
4. Include a copy of the Nonviable Vaccine Return Form with the vaccine
5. When the call tag arrives, contact the carrier for pick-up

To return privately purchased vaccine:

Contact your private vaccine supplier for guidance on return or disposal of spoiled or expired private vaccine.

To correct your inventory in ALERT IIS:

On the Show Inventory screen, use Modify Quantity to adjust your inventory. Refer to the **ALERT IIS: How to Manually Add and Adjust Inventory** and **Interpreting the Options: ALERT IIS Modify Quantity Screen** on the Oregon Immunization Program's website at <http://1.usa.gov/ImmunizationProviderResources> for instructions on adjusting your inventory in ALERT IIS.

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Borrowing Vaccine Between VFC and Private Stock

In rare circumstances, VFC providers are permitted to borrow between their state-supplied and private stock of vaccines. Borrowing should occur only when extenuating circumstances arise.

Extenuating circumstances may include:

- Vaccine delivery delays
- Vaccine delivery wasted in transit
- A national vaccine shortage
- New staff responsible for vaccine orders
- Unanticipated increase in demand



Routine borrowing due to improper inventory management is not permitted.

Seasonal Influenza

Providers may use private stock seasonal influenza vaccine to vaccinate VFC eligible children if VFC seasonal influenza stock is not yet available. Those private stock doses used on VFC eligible children can later be replaced when VFC stock becomes available. State supplied influenza vaccine may not be used for privately insured patients. This one directional borrowing exception is unique to seasonal influenza vaccine.

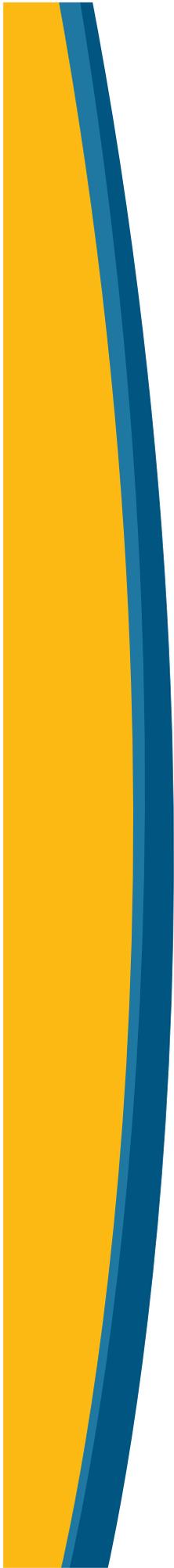
Important borrowing requirements:

- Do not borrow vaccine from VFC stock to give to a non-VFC patient if this will result in vaccine not being available for VFC patients
- Document every instance of borrowing on the **Oregon Vaccines for Children Borrowing Report**, available at <http://1.usa.gov/ImmunizationProviderResources>
- Replace all doses within 90 days
- Keep borrowing reports for at least three years, and make reports available for review at VFC site visits or upon request
- Submit completed borrowing reports to your health educator



If borrowing is an ongoing issue at your clinic, your Health Educator can help you identify inventory management issues and a long-term solution.

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Section 4: Storage and Handling

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Storage and handling

Proper storage and handling ensures that vaccine given to patients will protect them from disease.

Vaccine Refrigerator and Freezer Requirements



Providers must have equipment that can maintain proper temperature conditions for storing vaccine. Providers with storage equipment that fails may be billed for the cost of spoiled vaccine.

Refrigerators and freezers used for vaccine storage must comply with the following requirements:

- Able to maintain required vaccine storage temperatures
 - Refrigerator: 2° – 8° Celsius (35° – 46° Fahrenheit)
 - Freezer: -15° – -50° Celsius (5° – -58° Fahrenheit)
- Large enough to hold the largest number of doses expected at one time without overcrowding (typically during school exclusion and influenza season)
- Dedicated to the storage of vaccines (and other pharmaceuticals only as necessary)

The Oregon Immunization Program urges providers to use pharmacy- or biologic- grade storage units. Equipment specifically designed for vaccine storage is more likely to be able to maintain the appropriate temperature range and reduce the risk of vaccine loss.

Clinics should use stand-alone refrigerators and stand-alone freezer units only (meaning a self-contained unit that only refrigerates or only freezes).

Household refrigerator/freezer combination units are discouraged and may not be allowed in the future. Clinics may opt to use the refrigerator compartment of a combined unit and store their frozen vaccine in a separate, stand-alone freezer.



CDC does NOT allow dorm-style refrigerators to be used for vaccine storage under any circumstances. Dorm-style refrigerators are no longer allowed for temporary, day storage.

Vaccine Thermometer Requirements

Thermometers used for vaccine storage must meet the following requirements:

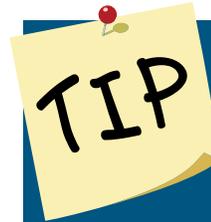
- Be continuous tracking
- Have an NIST traceable certificate of calibration
- Oregon Immunization Program and CDC recommend using digital data loggers with glycol-encased probes or a similar temperature buffered probe. This may be required in the future
- You may opt to have an alarm system in addition to continuous tracking thermometer

If purchasing a digital data logger, look for the following functions:

- Hi/Lo alarm for out-of-range temperatures
- Minimum and maximum temperatures
- Reset button
- Low battery indicator
- Accuracy of +/- 1°F (0.5°C)
- Memory storage of at least 4,000 readings, and device stops recording when full
- User can select the recording interval



The CDC requires clinics have at least one back-up continuous tracking thermometer with a current, valid certificate of calibration.



For more information about selecting vaccine storage units and thermometers, refer to the Oregon VFC Refrigerator and Freezer Guide, and the Oregon VFC Thermometer Guide at <http://1.usa.gov/ImmunizationProviderResources>

Setting Up Your Vaccine Refrigerators and Freezers

- Determine where to store vaccines based on storage unit type

Biologic- or pharmacy- grade
Vaccine may be stored throughout the units
Leave 2 to 3 inches between the vaccine and the walls, ceiling, and floor
Household-style
Store vaccine on the middle shelves
Do not store vaccine in the door, on the floor, or in crisper bins
Do not store vaccine near the cold air vent

- Ensure refrigerator and freezer doors close properly and the unit is in good working order
- Store only vaccines and other medications in vaccine storage units
- Store vaccine in trays that allow good air circulation. Trays should be clearly labeled with the name of the vaccine
- Store vaccine in original box to prevent exposure to light
- Ensure separate stocks of privately purchased and state-supplied vaccine are clearly distinguishable
- Do not use outlets that are controlled by a wall switch or with built-in circuit switches
- Place “Do Not Unplug” stickers near the outlet and on storage equipment circuit breakers. Your Immunization Health Educator can provide you with these stickers
- Advise maintenance and cleaning personnel to keep vaccine storage units plugged in at all times
- Do not store food, drinks, or specimens (such as urine) in the vaccine refrigerator or freezer
- In refrigerators, fill up empty space with water bottles
- In freezers, fill up empty space with cold packs
- Do not place vaccine directly on cold packs

TIP

Additional tips to protect your vaccine supply:

- Limit access to vaccine refrigerators to key staff
- Install locks on storage units
- Install plug guards or locks on outlets
- Provide a backup power source, like a generator
- Periodically clean the storage unit interior and exterior

Setting up Your Temperature Monitoring Equipment

- Thermometer must be placed in a central location near the vaccine stock
- Follow manufacturer guidelines for setting up your thermometer
- If using a digital thermometer:
 - » Set high and low alarm
 - » Set recording intervals at 5 minutes or less



The Oregon Immunization Program recommends that clinics monitor temperatures for a full week before moving vaccines into a new storage unit to ensure they are within range. After vaccines are added, continue to monitor temperatures closely.

Monitoring Temperatures

- Maintain proper temperatures for vaccine storage at all times:
 - Refrigerator: 2° – 8° Celsius (35° – 46° Fahrenheit)
 - Freezer: -15° – -50° Celsius (5° – -58° Fahrenheit)

- Check and document temperatures twice daily using your continuous-tracking thermometer
- Twice daily temperature logs must include the time the temperature was checked and the initials of the recorder
- If your clinic has more than one thermometer in your storage unit, make sure to always record twice daily temperature from the same continuous tracking thermometer
- Clinics using digital data loggers, or similar devices, should download data every week, preferably Monday mornings, or when returning to the clinic after a weekend or day of closure
- Keep temperature monitoring documentation for three years. This includes continuous tracking data, twice-daily logs, data from alarm systems, and incident log
- Have the calibration of your thermometers tested annually, or according to manufacturer recommendations
- If temperatures are outside the recommended range, restrict access and take immediate action to correct the problem. See **Out-of-Range Temperatures section**



If your clinic uses an alarm system, test your system on a routine basis to make sure it functions as expected. One way to test your alarm system is to wrap your hand around the probe, or place the probe in ice water, to intentionally trigger the alarm.



CDC recommends that, in addition to documenting temperatures twice daily, clinics also document the high and low temperatures once per day. This is likely to become a requirement in the future.

Out-Of-Range Temperatures

Quick action can prevent vaccine loss.

If temperatures are currently out-of-range:

1. **Restrict use of the refrigerator and/or freezer.** Place a “DO NOT USE” sign on the unit and notify your clinic’s primary responsible staff
2. **Determine the cause and take action.** The following table provides examples of how you might handle different types of excursions

<p>If there is a slight temperature fluctuation due to inventory or the door being left ajar:</p>
<ul style="list-style-type: none"> • Close the door. Recheck temperatures in 30 minutes to make sure they have returned to the recommended temperature range.
<p>If there is a slight temperature excursion due to an unknown cause:</p>
<ul style="list-style-type: none"> • Make a slight adjustment to the thermostat. Recheck temperatures in 30 minutes. • If temperatures have returned to normal range, continue to monitor temperatures closely until you are confident you have not over-adjusted and your storage unit can maintain the appropriate temperature. • If temperatures have not returned to the recommended temperature range, consider moving vaccine to a functioning unit, or implementing your vaccine emergency plan. See Vaccine Emergency Plan section
<p>If your refrigerator or freezer appear to be malfunctioning:</p>
<ul style="list-style-type: none"> • Move vaccine to a functioning storage unit, or implement your vaccine emergency plan. See Vaccine Emergency Plan section • At your clinic, it might be appropriate to contact your maintenance, risk management, or quality control team to investigate. You may also want to contact the manufacturer of your vaccine storage equipment for guidance.

If there is a power outage:

- Contact your power company. They may be able to tell you how long the power outage is expected to last.
- If the power outage is not expected to last longer than a couple of hours, do not move your vaccine. Most storage units will maintain their temperatures for a couple of hours as long as the door remains closed.
- If the power outage is expected to last longer than a couple of hours, implement your vaccine emergency plan. See **Vaccine Emergency Plan section**



Use the space below to document any additional information about how your clinic will manage out-of-range temperatures.

3. **Notify your Health Educator.** (You do not need to notify your Health Educator for brief fluctuations due to conducting inventory)
4. **Document the Incident.** Include length of excursion and minimum and maximum temperatures, steps you took to address the excursion, and the outcome on your incident log



The decision about how long to wait before moving vaccine depends on many factors and may vary clinic-to-clinic. Consider the following:

- How warm or cold temperatures are
- Whether your thermometer measures ambient or buffered air
- How long it will take you to transport vaccine

Your Health Educator can help you think through these issues for your clinic.

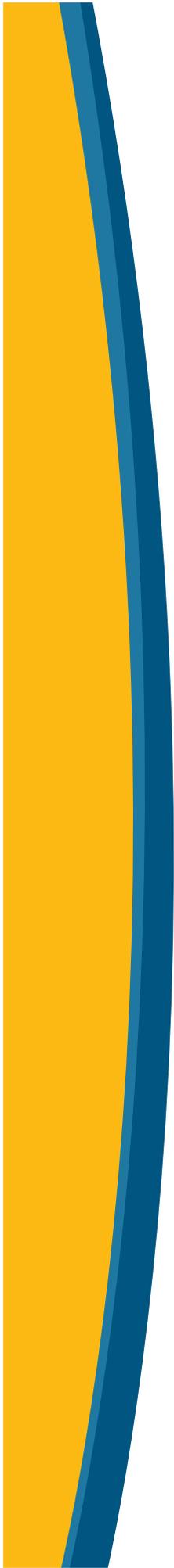
If you discover an excursion while reviewing your continuous tracking data:

1. **Restrict use of the refrigerator and/or freezer.** Place a “DO NOT USE” sign on the unit and notify your clinic’s primary responsible staff
2. **Determine the extent of the excursion,** and, if possible, the cause
3. **Contact your Health Educator** for anything more than a brief fluctuation due to conducting inventory
4. **Document the incident.** Include length of excursion, minimum and maximum temperatures reached, steps you took to address the excursion, and outcome on your incident log

If you suspect the excursion is due to a malfunctioning thermometer (rather than a true excursion):

1. **Restrict use of the refrigerator and/or freezer.** Place a “DO NOT USE” sign on the unit and notify your clinic’s primary responsible staff
2. **Place backup thermometer in the storage unit** to confirm the temperature reading
3. **Note the reason** you suspect the issue is due to a malfunctioning thermometer.
4. **Contact your Health Educator**
5. **Document the incident** on your incident log

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Section 5: Vaccine Emergency Plan Template

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Vaccine Emergency Plan Overview

The Oregon Immunization Program requires your clinic to develop a vaccine emergency plan in advance of an emergency situation. Having a plan in place and implementing it during an emergency will protect vaccine and save money.

The template in the following pages, once completed for your clinic, can be used to fulfill this requirement.



This plan was last updated on:

Your vaccine emergency plan must include the following items:

1. Primary and backup staff responsible for packing and moving vaccine to a safe location
2. Alternate storage facility
3. Instructions for staff to access the office and vaccine storage units after hours
4. If your clinic has a backup generator, instructions for operating and maintaining your generator
5. Description of appropriate packing materials on hand and their location within your office
6. Instructions for packing vaccines for transport
7. Specifications of vaccine storage units (type, brand, model number, and serial number)
8. A list of emergency phone numbers for local utility companies, repair technician, alarm monitoring company, etc



Keep a copy of your vaccine emergency plan in an envelope attached to your vaccine storage unit so it's easily accessible by all staff.

Primary and Backup staff should keep a copy of this plan off-site in case they respond after hours.

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Alternate Vaccine Storage Facility

Your alternate vaccine storage facility must have proper refrigerator and freezer units, temperature-monitoring capabilities, and a backup generator. A safe location might be:

- Local health department
- Local hospital or pharmacy
- Local jail or fire station
- Other clinic with backup emergency power



Use the **OPTIONAL** Vaccine Relocation Agreement Template, available on the next page.

Call to notify of intent to transfer vaccines:

Facility Name: _____

Facility Address: _____

Contact(s): _____

Phone number: _____

Email: _____

Special instructions: _____

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Optional Alternate Vaccine Storage Agreement

_____ [Site A] and _____ [Site B] have agreed that during a power outage or equipment failure, Site A may store its vaccine and other refrigerated pharmaceuticals in Site B's refrigerator and/or freezer with backup generator.

Site A will contact Site B prior to transporting vaccine.

This agreement is effective as of _____ and will remain until modified or terminated as agreed upon by both sites.

(Signature of Site A Administrator or Manager)

Date

(Signature of Site B Administrator or Manager)

Date

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After-Hours Building Access

Use the space below for instructions for entering your building and vaccine storage location when the building is closed. Primary and backup staff should keep a copy of the vaccine emergency plan off-site, along with building keys and alarm codes if necessary.

Alarm codes and instructions: _____

Doors, locks, and keys: _____

Light switches and flashlights: _____

Circuit breaker location and instructions: _____

Generator Instructions

Location of generator and fuel: _____

Operating instructions: _____

Routine maintenance and generator testing instructions: _____

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Packing Materials Checklist

Keep the following materials on hand. A sufficient amount should be available to pack your entire vaccine supply.

Packing materials:

- Insulated containers
- Cold packs or ice packs
- Packing tape
- Cardboard (use as buffer layer between vaccines and cold packs)
- Protective material (crumpled paper or bubble wrap to protect vaccine from damage during transport)
- Backup continuous tracking thermometer

Location of packing materials: _____

Location of backup thermometer: _____

Special instructions: _____

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Emergency Transport Procedures



Do not open refrigerator until you are ready to take an inventory and pack vaccine for transport.

Emergency Transport Procedures Checklist:

- Contact alternate storage facility with estimated time of arrival, and approximate length of needed storage assistance
- Collect and prepare packing materials and containers
- Prepare to take an inventory
- Remove vaccine from storage unit, and take inventory.
Include:
 - a. Vaccine type/brand
 - b. Number of doses
 - c. Lot number
 - d. Expiration date
- Pack vaccines according to transport guidelines. Include:
 - a. Inventory sheet in shipping container
 - b. Continuous tracking thermometer
- Transport to: _____
(Site B)
- Exchange contact information with staff at receiving site. Include name/title and phone numbers



If you have a written agreement, bring a copy to give to the receiving site



If you use the ALERT IIS inventory module and you have power, you can print your inventory from ALERT IIS.

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Vaccine Storage Unit Information

Name/Location	Brand	Model	Serial Number

Local Utilities, Equipment Repair, Alarm Monitor, etc.:

Type	Company	Contact Name	Phone Number
Oregon Immunization Program main line			971-673-0300
VFC Health Educator			
Power company			
Refrigeration repair			
Thermometer repair/ calibration			
Temperature alarm monitoring			
Perimeter alarm monitoring			
Generator repair			
Alternate storage site			
Other			

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This document can be provided upon request in an alternate format for individuals with disabilities or in a language other than English for people with limited English skills. To request this publication in another format or language, contact Oregon Immunization Program at 971-673-0300 or 711 for TTY.