



**NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE**
Mary T. Bassett, MD, MPH
Commissioner

June 5, 2017

Jane R. Zucker, MD, MSc
Assistant Commissioner
Bureau of Immunization

42-09 28th Street, CN21
Queens, NY 11101-4132

Dear Colleague:

This notice provides updates on important changes to the Vaccines for Children (VFC) program.

1) Launch of new Vaccine Inventory Management (VIM) module in the Citywide Immunization Registry (CIR)

The Bureau of Immunization is releasing a new VIM module in the CIR Online Registry in **June 2017**. VIM will change the way VFC vaccines are ordered. New VIM features include: (1) prepopulated vaccine lot numbers to make reporting VFC vaccine inventory easier, (2) reports to help manage vaccine inventory, and (3) an enhanced module to collect thermometer and vaccine storage information. Webinars introducing VIM were held in April and May, and two additional webinars are scheduled for June. It is strongly recommended that all VFC providers attend a VIM webinar. The upcoming webinar dates/times are:

- **Thursday, June 8th from 12:00pm-1:00pm**
- **Wednesday, June 21st from 3:00pm-4:00pm**

To register for one of these webinars, click [here](#).

2) Storage Unit and Thermometer Policy Update

As per Centers for Disease Control and Prevention (CDC) policy updates, as of January 1, 2018, the use of stand-alone or biologic/pharmaceutical-grade freezers and/or refrigerators will be required. These units are proven to better maintain stable, in-range temperatures and avoid vaccine spoilage compared to household storage units. The use of the refrigerator compartment of a combined household refrigerator-style unit may be allowed if it is able to demonstrate stable temperatures with a continuous digital data logger (DDL) thermometer. In instances where this applies, a separate stand-alone freezer should be used to store frozen vaccines.

Additionally, DDL thermometers with a temperature probe and active temperature displays will be required for all storage units effective January 1, 2018. The DDL must also have the capacity for continuous monitoring and recording. Once the thermometer policy goes into effect, VFC providers will be required to upload DDL temperature summary reports to the CIR Online Registry before placing VFC vaccine orders.

Please see the attached **VIM Quick Guide**, **VIM Frequently Asked Questions (FAQ)** document and the **VFC Vaccine Storage & Thermometer Guide** for further details on the new vaccine storage and thermometer policies.

Should you have questions please email nycimmunize@health.nyc.gov or call 347-396-2404.

We thank you for helping to protect NYC children from vaccine-preventable diseases.

Sincerely,

Jane R. Zucker, MD, MSc

Refrigerator and Freezer Requirements

Vaccines are expensive and sensitive to temperature and light. Appropriate vaccine storage management is essential to safeguard and optimize vaccine supply.

As required by the *Center of Disease Control and Prevention* (CDC) and the *New York City Department of Health and Mental Hygiene Bureau of Immunization's* (NYC DOHMH BOI) *Vaccines for Children* (VFC) program, any refrigerator or freezer unit storing VFC vaccine must have the following:

1. Enough room to store the year's largest inventory without crowding.
2. Enough room to store water bottles (in the refrigerator) and frozen coolant packs (in the freezer) to stabilize the temperature and minimize temperature excursions that can impact vaccine potency.
3. A certified, calibrated thermometer centrally located in each storage unit.
4. The ability to reliably maintain the appropriate vaccine storage temperatures year-round.
5. A unit dedicated to the storage of vaccines only. Food and beverages must NOT be stored in a vaccine storage unit. This practice results in frequent door opening and temperature destabilization.

Refrigerator and Freezer Storage Unit Options*

This is a sample list of vaccine storage unit options and features that meet or exceed CDC and NYC VFC requirements. Because there are plenty of options outside this list, help is available to discuss storage options you may be considering by contacting nycimmunize@health.nyc.org.

1 Full-Size, Stand-Alone Refrigerators and Freezers

Biologic/Pharmaceutical-grade refrigerators and freezers are the most secure option for vaccine storage and are considered best practice, most often found in health departments, laboratories and hospitals. Many of the biologic-grade manufacturers offer refrigerators and freezers in an array of sizes and prices.



2 Full-Sized, Biologic/Pharmaceutical-Grade Combined Refrigerator and Freezer

Biologic/pharmaceutical-grade combination units offer essential features required for responsible vaccine storage:

- Separate temperature control systems for the refrigerator and freezer.
- Improved cabinet insulation to avoid hot and cold spots.
- Built-in, digital temperature display.
- Built to industrial standards and warranted for industrial use.
- Fan-forced air circulation delivers quick temperature recovery.

Biologic/pharmaceutical-grade, combination units are ideal for clinics wanting a best-practice storage solution. Biologic/pharmaceutical-grade combination units are the only type of combination units recommended by the NYC VFC program



**Disclaimer: The NYC VFC program cannot endorse any specific brand or product.*

Refrigerator and Freezer Storage Unit Options* (cont'd.)

3 Under-Counter Refrigerators and Freezers

- Small and easy to relocate
- Useful for adding to existing refrigerator or freezer capacity. A single under-counter refrigerator or freezer may be added to supplement an approved unit.



Refrigerator and Freezer Storage Unit Options to Avoid

Dorm-style & Bar-style Storage Units - **Not allowed**

Small, single-door combined units should never be used for ANY type of vaccine storage. The freezer compartment is incapable of safely maintaining temperatures for varicella and zoster vaccine. Cold air from the freezer compartment vents down into the main compartment, causing unstable temperatures.



Combined Household Storage Units - **Not recommended**

If you are currently using a household combination refrigerator/freezer, we strongly recommend you upgrade to a stand-alone unit. If an upgrade isn't possible, we recommend purchasing a separate freezer and using only the main section of the refrigerator for vaccines.



A Note on Household vs. Biologic/Pharmaceutical-Grade Storage Units

According to studies conducted by the *National Institute of Standards and Technology* (NIST), household-style units are **not** capable of maintaining proper storage temperatures in both the refrigerator and freezer compartments. This is because cold air from the freezer blows directly into the refrigerator compartment and onto the vaccine. By far, the best practice is to choose separate refrigerator and freezers purposely- built for the precise storage of vaccines. **Biologic-grade** (“medical”; “purpose-built”; “vaccine”; “blood-bank”; “laboratory”) **refrigerators** are considered the best, most secure option for vaccine storage. These “gold-standard” vaccine units have:

- Electronic thermostat
- Small ports for the entry of a temperature probe wire
- Wire shelving for improved circulation
- Interior fans to equalize the temperature throughout

Vaccines should not be stored in front of air vents. Avoid storage units where the location of air vents will interfere with and limit the amount of space for optimal storage conditions.

Refrigerator and Freezer Manufacturers with Units that Meet Specifications

Fisher Scientific www.fishersci.com

Follett www.follettice.com

Helmer www.helmerinc.com

Lab Research Products www.labresprod.com

Migali Scientific www.migaliscientific.com

Panasonic Biomedical www.panasonic-healthcare.com/us/biomedical

Thermo Scientific www.thermo.com

VFC Thermometer Requirements

VFC providers must have a working thermometer with a current and valid **Certificate of Calibration Testing** (also known as a **Report of Calibration**) in each storage unit storing VFC vaccine. To meet VFC program requirements, the device must also be equipped with:

- 1 A temperature probe (preferably a buffered probe)
- 2 An active temperature display that can be easily read from the outside of the unit
- 3 The capacity for continuous temperature monitoring and recording, where the data can be routinely downloaded

Additional features recommended for thermometers:

- 4 Alarm for out-of-range temperatures with remote notification
- 5 Current, minimum, and maximum temperature display
- 6 Low-battery indicator
- 7 Accuracy of +/- 1°F (0.5°C)
- 8 Memory storage of at least 4,000 readings
- 9 User-programmable logging interval (or reading rate) recommended at a maximum time interval of every 30 minutes
- 10 Recommended calibration testing every one to two years, or based on manufacturer recommendation

New Requirements starting January 1, 2018

- All VFC providers will be required to use **continuous temperature monitoring devices (digital data loggers)** to monitor VFC vaccines, including during routine onsite storage of vaccine, during transport of vaccine, and during mass vaccination clinics. Back-up thermometers will be required.
- VFC providers will have to upload **digital data logger (DDL)** summary reports before placing VFC vaccine orders.
- Once daily min/max temperature checks (at the beginning of the day) will replace twice daily temperature checks.

Digital Data Loggers Piloted by the NYC VFC Program

DDL thermometers piloted by the NYC VFC program are listed below. Please note that while these DDLs were piloted, the NYC VFC program does not endorse any particular DDL brand. Each device has its own advantages and disadvantages, so choose devices that are appropriate for your facility. Make sure that the device's **Certificate of Calibration** is in accordance with the *National Institute of Standards and Technology* (NIST) or the *American Society for Testing and Materials* (ASTM) standards. For a certificate of calibration checklist, go to our website: <http://www1.nyc.gov/assets/doh/downloads/pdf/imm/thermo-checklist.pdf>

VFC 400 Vaccine Monitoring Data Logger Kit



Approximately \$145+, docking station required

Website: <http://www.vfcdataloggers.com/>

Training resources: <http://www.vfcdataloggers.com/support/vfc-400-faq/>

Berlinger FridgeTag2 & FreezerTag2



Approximately \$272

Website: <http://www.berlingerusa.com/fridgetag2/>

Training resources: <http://www.berlingerusa.com/support/>
<http://www.berlingerusa.com/fridgetag2/supportvideos/>
<https://www.youtube.com/watch?v=92S5i885F8E>
https://www.youtube.com/watch?v=9h_YsyrWA2Q

Dickson DWE



Approximately \$350+

Website: <http://www.dicksondata.com/products/DWE>

Training resources: <http://support.dicksonone.com/>

Dickson TWE



Approximately \$524+

Website: <http://www.dicksondata.com/products/TWE>

Training resources: <http://support.dicksonone.com/>

E-mail the NYC VFC program if you have any additional questions
nycimmunize@health.nyc.gov



Vaccine Inventory Management (VIM) QuickGuide



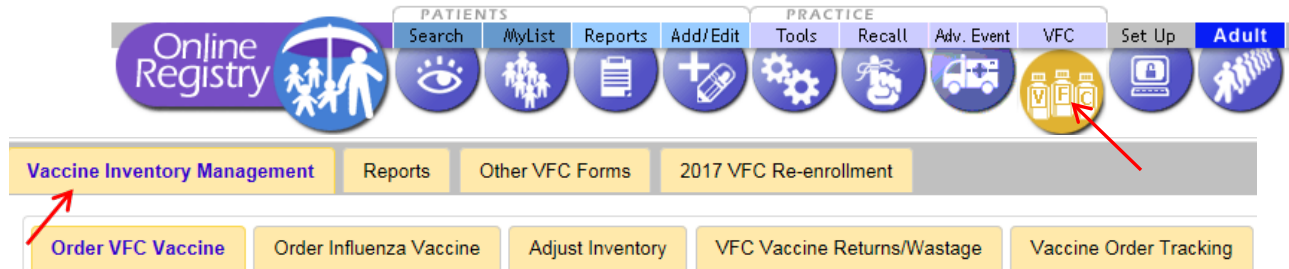
Phone: (347) 396-2400

www.nyc.gov/health/cir

Fax: (347) 396-2558/2559

Getting Started

- **Log-in** to the Citywide Immunization Registry (CIR) at www.nyc.gov/health/cir.
- **Navigate** to the VFC Menu by clicking the VFC bubble



- Click the **Vaccine Inventory Management (VIM)** tab (default tab)

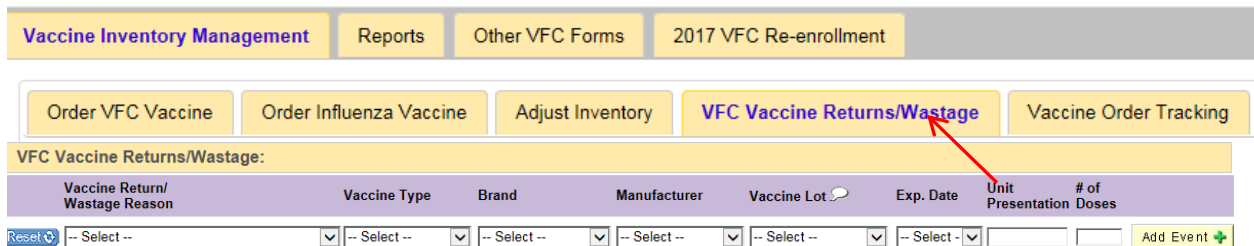
Order VFC Vaccine **Order VFC Vaccine tab**

There is now a new way to report and balance your vaccine inventory!

Six-step VFC Vaccine ordering:

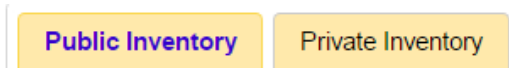
1. Review vaccine order history
2. Confirm Shipping and Refrigerator/Freezer information*
3. **Balance your VFC vaccine inventory*** NEW!
4. Enter VFC order quantities
5. Confirm order
6. Receive confirmation number

Reporting VFC vaccine Returns/Wastage (R/W) events (expired, spoiled or wasted vaccines) prior to ordering helps to ensure an accurate vaccine count when balancing your inventory.



- **Balance your VFC vaccine inventory**

On Step 3 of the ordering process, you will see your pre-populated VFC vaccine inventory under the **Public Inventory** tab.



- **Public Inventory** tab is for managing publicly funded (VFC) vaccine inventory
- **Private Inventory** tab is for managing privately purchased vaccine inventory

Steps to balancing your Public Inventory:

- VFC vaccine lots shipped to your site are displayed in the dashboard.
- a. **Count** your inventory and enter it in the *On-Hand Inventory* column.
- b. **Compare** the *On-Hand Inventory* column to *CIR Expected Inventory* column.

CIR Expected Inventory = VFC doses shipped - [VFC doses given + doses reported as R/W* + any other inventory adjustments]

*R/W= Returns/Wastage (expired, spoiled or wasted vaccines)

Vaccine Type	Brand / Mfr	Lot# / Exp.Date	Presentation	CIR Expected Inventory	On-Hand Inventory	Difference	Adjust CIR Expected Inventory by Dose			Add / Remove Reason
							Adjust Direction	Adjust Quantity	Adjustment Reason	
VAR	Varivax Merck	M046926 11/28/2018	SDV, 10-Pack	45		45			-- Select an Option --	+
MMR	M-M-R III Merck	L032181 08/25/2017	SDV, 10-Pack	100		100			-- Select an Option --	+
Hib	PedvaxHIB Merck	L006545 11/16/2017	SDV, 10-Pack	49		49			-- Select an Option --	+


If there is a mismatch between the on-hand inventory and the CIR expected inventory:

- c. **Adjust** the *CIR Expected Inventory* column so that it matches *On-Hand Inventory* column.
 - Adjust the *CIR Expected Inventory* by selecting Decrease (-) or Increase (+) from the *Adjust Direction* column.
 - Enter the number of doses in the *Adjust Quantity* column, and select the reason for the adjustment from the drop-down menu in the *Adjustment Reason* column to account for discrepancies (e.g., a borrowing event, EMR reporting issue, etc.)
 - To add another reason for a dose of the same lot, or remove a previously added reason, use the + or - icon from the *Add/Remove Reason* column.
 - If applicable, you may add additional quantities and reasons for the same lot by clicking the "+" in the *Add/Remove Reason* column.
 - Once your inventory is balanced, the *Difference* column will be 0 and highlighted in green.

Vaccine Type	Brand / Mfr	Lot# / Exp.Date	Presentation	CIR Expected Inventory	On-Hand Inventory	Difference	Adjust CIR Expected Inventory by Dose			Add / Remove Reason
							Adjust Direction	Adjust Quantity	Adjustment Reason	
VAR	Varivax Merck	M046926 11/28/2018	SDV, 10-Pack	45		45			-- Select an Option --	+
MMR	M-M-R III Merck	L032181 08/25/2017	SDV, 10-Pack	80	80	0	Decrease(-)	10	EMR reporting issue	+
							Decrease(-)	10	Amount Received Different from Invoice	-
Hib	PedvaxHIB Merck	L006545 11/16/2017	SDV, 10-Pack	49		49			-- Select an Option --	+

- Once the *CIR Expected Inventory* is adjusted, the new number displayed in red.
- Once all vaccine dose accounting has been completed, click Save and Continue → to place your VFC order on the next screen.




When to use the Find & Add Lot button:


- If you do not see one or more of your vaccine lots in your VIM dashboard, click **Find & Add Lot** 
- In the box that appears, select the vaccine type, brand, lot, and the number of doses you would like to add.

Find and Add Lot for Public Inventory

- 1. Find a lot by making your selections below.
- 2. Enter the quantity of doses in your inventory for the lot.
- 3. Click the 'Add' button.
- 4. Click 'Reset' to clear selections or entries. Click 'Close' to return to the Adjust Inventory screen.

Note: If you are unable to find the lot number you are looking for, please call the CIR Hotline at 347-396-2400 for assistance.

Type	Brand / Manufacturer	Lot Number/ Exp. Date	Presentation	Quantity	Reset	Add	Close
-- Select --	-- Select --	-- Select --	-- Select --	0			



- If the lot currently exists in your list, a message will appear in the dashboard stating: *"This lot already exists on the Adjust Inventory screen. To adjust the CIR Expected Inventory for this lot, click Close and use the Adjust CIR Expected Inventory by Dose fields on the Adjust Inventory screen."*
- If the lot does not exist in your list, it will be added to your list and highlighted in **yellow**.

Hep A	Havrix(Smithkline	2XE3A 06/16/2018	0.5ml SYR, 10-Pack	24		24			-- Select an Option --
Hep A	Havrix(Smithkline	4LR45 11/30/2018	0.5ml SYR, 10-Pack	10		10			-- Select an Option --

- Having trouble finding a lot that already exists? Try sorting your dashboard by **Vaccine Type**, **Brand/Manufacturer**, or **Lot Number/Expiration Date** to make finding your lots easier!

Adjust Inventory


Adjust Inventory tab

The **Adjust Inventory** tab allows you to adjust your *CIR Expected Inventory* at any time, even if you are not placing an order. Keeping you inventory current helps to save time and ensure an accurate vaccine count when balancing your inventory.

To reach the **Adjust Inventory** screen, click the VFC bubble, which defaults to the **Vaccine Inventory Management** tab, then choose the **Adjust Inventory** tab.

(**Adjust Inventory** continued on next page)



- Change your *CIR Expected Inventory* in between orders by selecting Decrease (-) or Increase (+) from the drop-down menu in the *Adjust Direction* column, entering the number of doses in the *Adjust Quantity* column, and selecting the reason for the adjustment from the drop-down menu in the *Adjustment Reason* column.
- Once the *CIR Expected Inventory* is adjusted, the new number displayed in **red**.
- When you are finished, click  .

					Adjust CIR Expected Inventory by Dose			
Vaccine Type	Brand / Mfr	Lot# / Exp.Date	Presentation	CIR Expected Inventory	Adjust Direction	Adjust Quantity	Adjustment Reason	Add / Remove Reason
VAR	Varivax Merck	M046926 11/28/2018	SDV, 10-Pack	40	Decrease(-)	5	EMR reporting issue	+
MMR	M-M-R II Merck	L032181 08/25/2017	SDV, 10-Pack	100			-- Select an Option --	+
Hib	PedvaxHIB Merck	L006545 11/16/2017	SDV, 10-Pack	49			-- Select an Option --	+



The Citywide Immunization Registry
 42-09 28th Street, 5th Fl, CN 21
 LIC NY 11101-4132
 Phone |347| 396-2400
 Fax |347| 396-2559
 Email: cir@health.nyc.gov

Frequently Asked Questions

Online VFC Vaccine Inventory Management (VIM) Module

1. How can I access the Vaccine Inventory Management Module (VIM)?

You can access the VIM module by going to www.nyc.gov/health/cir. Click on the “Online Registry GO” icon on the right side of the screen to access the log-in screen. Once you log in, click on the “VFC” bubble on the navigation bar. Next, click on the **Vaccine Inventory Management** tab.

2. Why don't I see the Vaccine Inventory Management tab when I log onto the Online Registry?

If your facility is a school, or you have “Read-Only” access, you may not be able to access the VIM module. For additional questions, please email us at nycimmunize@health.nyc.gov. In your email please include your 1) facility name and 2) CIR facility code or VFC PIN number.

3. What is my CIR Expected Inventory?

The *CIR Expected Inventory* is calculated by the CIR:

CIR Expected Inventory=

VFC doses shipped - [VFC doses given + doses reported as Returns/Wastage + any other inventory adjustments]

Ideally, your *CIR Expected Inventory* and *On-Hand Inventory* should match. In the event that it does not, you must balance your inventory and account for discrepant doses using the *Adjustment Reasons*.

4. When CIR launches VIM, what inventory will be shown?

VIM will display your last reported inventory. Additionally, your **VIM** inventory will be updated with **VFC** vaccine shipment data after your last inventory was submitted to CIR.

5. How do I adjust my vaccine inventory within VIM?

You may adjust your vaccine inventory in **VIM** while you are in either the (1) **Order VFC Vaccine** tab, where you place orders and balance inventory, or in the (2) **Adjust Inventory** tab, in between orders. From either tab you can manage both your public and private vaccine inventory. The first time you use the module your **VFC** lot numbers should be populated with your most recently received shipment and with the inventory you reported during your last order.

The first time you use you use the module for your private inventory you will need to manually add lots using the “Find & Add Lot” button. To adjust the inventory, select **Decrease (-)** or **Increase (+)** from the *Adjust Direction* column, enter the number of doses in the *Adjust Quantity* column, and select the reason for the adjustment from the *Adjustment Reason* column. To add another reason, or remove a previously added reason, use the + and – icons from the *Add/Remove Reason* column.

6. I have vaccines from a lot that are not displayed in VIM. How can I account for these doses?

When balancing your inventory, in either the stand-alone **Adjust Inventory** screen or while placing your **VFC** vaccine order, click the “Find & Add Lot” button located right above the dashboard. A box will appear for you to enter the vaccine type, brand, lot, and the number of doses to add to the inventory. You can use the “Find & Add” Lot functionality to add vaccine doses to both your public and private inventory.

Note: Since the **CIR** does not know the details of your private vaccine orders, you will have to manually add lots when using this screen for your private inventory,

7. Can I create reports with VIM?

Yes, you can generate, view and filter reports under the **Reports** tab. The Doses Administered Report (DAR) and the VFC Eligibility Report exist here. New reports include, Vaccine Returns/Wastage, Vaccine Transactions, Order History and Aging Inventory. Please see the **VIM QuickGuide** for details.

8. How will the system know if I borrowed a dose?

When you administer a **VFC** dose to a private patient or a private dose to a **VFC**-eligible patient, the system will generate an eligibility-dose fund type mismatch. You can run a Vaccine Transaction Report to identify these borrowed doses.

9. How can I replace borrowed doses?

You can account for borrowing by using the *Adjust CIR Expected Inventory by Dose* columns on the dashboard. **Example:**

- During patient's visit, there are no more private DTaP doses
 - VFC DTaP Lot Number: I23ABC was administered instead
- You run the Vaccine Transaction Report to identify the borrowing event
- When a new private shipment is received, in the **Private Inventory** tab, select a DTaP lot
- Then select "Decrease (-)" from the *Adjust Direction* column.
- Enter "1" in the *Adjust Quantity* column
- Select "Replace borrowed Public dose" from the *Adjustment Reason* column
- Your *CIR Expected Inventory* column will decrease by 1

10. Where do I account for my returned/wasted vaccine within VIM?

You can account for your returned/wasted vaccines by clicking on the "**VFC**" icon in the header of the Online Registry and then navigating to the **VFC Vaccine Returns/Wastage** tab in VIM.

11. Can I also order my flu vaccines through VIM?

You can order your flu vaccines by clicking on **Order Flu Vaccine** tab in VIM.

12. Can I track my VFC order?

Yes. VFC vaccines are shipped to your site via UPS. You can track your **VFC** orders by clicking on the **Vaccine Order Tracking** tab.

13. Who should I contact if there is a problem with an order that was placed online?

If you have a problem with an order that was placed, please email us at nycimmunize@health.nyc.gov. In your email please include your facility name, your CIR facility code or VFC PIN number, and the vaccine order confirmation number generated when you placed your order.

14. How can I learn more about VIM?

BOI will hold regular webinars pre- and post-deployment. We encourage attendance! Training materials will be available.

Help

If you have any questions, please call **(347) 396-2400**, Monday through Friday, 9 am to 5 pm, to request additional support and/or training.

Abbreviations:

BOI Bureau of Immunization

CIR Citywide Immunization Registry

OLR Online Registry

VFC Vaccines for Children (VFC) Program

VIM Vaccine Inventory Management (VIM) Module
