

Troubleshooting IRIS Public Vaccine Inventory Discrepancies Related to Data Exchange

All providers enrolled with the Idaho Immunization Program (IIP) are required to account for all doses of IIP-supplied vaccine in Idaho's Immunization Reminder Information System (IRIS), which includes:

- Doses received,
- Doses administered,
 - Anonymous doses
- Wasted doses,
- Doses returned to McKesson, and
- Vaccine replacement doses.

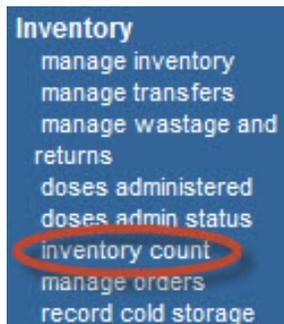
If a clinic's physical vaccine inventory count differs from doses indicated in IRIS Public inventory, then providers must research the whereabouts of each dose and accurately account for them in IRIS. Clinics may be required to replace each dose that is unaccounted for, as stated in the IIP's Provider Policies and Guidelines.

The following information will provide guidance on how to identify discrepancies and correct them.

There are three primary tools available for providers to help identify and research inventory discrepancies: IRIS *inventory count*, *Show Transactions* report, and non-deduct Ad Hoc report. All three are described in detail below.

IRIS INVENTORY COUNT

An effective tool to help identify when discrepancies arise is the *inventory count* reporting tool in IRIS. When placing a vaccine order, providers are required to submit a physical inventory count of all IIP-supplied vaccine doses that are on-hand. If an inventory count is not submitted, then IRIS will not allow a vaccine order to be placed.



Though required when placing a vaccine order, or at least quarterly, it is best practice to submit a monthly count. Providers may submit an inventory count as often as needed, not to exceed once daily, to get an overview of the clinic's vaccine accountability.

Once submitted, an inventory count may not be amended. If an inaccurate count is submitted, then an accurate count may not be submitted until the next calendar day or later.

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If accurate physical counts are submitted monthly, then providers and IIP staff can compare each month's count to identify when a discrepancy initially started. A discrepancy is indicated by a difference between the dose quantities referenced in the *IRIS Inventory Doses on Hand* and *Physical Count* columns. Submitting accurate on-hand counts provides clinics historical, date-stamped snapshots of what the physical inventory was on a specific date. These past submissions help identify how far back to look when researching inventory discrepancies.

Doses are required to be entered in IRIS within 28 days of administration. If a clinic reports a physical count that differs from the IRIS count for more than 28 days, then the lot number(s) with the dose quantity discrepancy(ies) must be researched and corrected.

Below is a sample inventory count submitted in IRIS:

Inventory Reconciliation for: 002 002 - IDA ROSE MEDICAL PRACTICE									
Inventory Count on: 03/13/2017									
State Supplied Vaccine									
Last Inventory Count was on: 06/30/2016									
Vaccine	Trade Name	Manufacturer	Package	NDC Number	Lot Number	Exp Date	Doses Given Since Last Count	IRIS Inventory Doses on Hand	Physical Count
9vHPV	Gardasil 9	Merck & Co, Inc (MSD)	HPV9 Gardasil 9; SDV; 10-PACK	00006-4119-03	1261AA	11/11/2019	0	158	140
DTaP-IPV/Hib	Pentacel	Sanofi Pasteur (PMC)	PENTACEL; SDV; 5-PACK	49281-0510-05	C4061AA	07/05/2017	0	87	74
Meningococcal-MCV4P	Menactra	Sanofi Pasteur (PMC)	MENACTRA; SDV; 5-PACK	49281-0589-05	U4043AD	06/06/2017	0	20	0
Polio-Inject	IPOL	Sanofi Pasteur (PMC)	IPOL-POLIOVIRUS VACCINE INACTIVATED 10 DOSE VIAL	14645-0860-10	L2345-1	08/01/2017	0	19	29
Polio-Inject	IPOL	Sanofi Pasteur (PMC)	IPOL-POLIOVIRUS VACCINE INACTIVATED 10 DOSE VIAL	14645-0860-10	M3325	07/16/2018	0	10	0

The above data indicates:

- The date the inventory count was submitted, 03/13/2017;
- The date the last inventory count was submitted, 06/30/2016;
- Doses given (administered) between 06/30/2016 and 03/13/2017;
- The doses IRIS indicates should physically be on-hand; and
- The physical count, as submitted by the provider.

The following are examples of why it is best practice to submit an inventory count at least monthly:

1. Menactra lot #U4043AD has a discrepancy of 20 doses. Since the previous inventory count was submitted over eight months ago, this provider may have to research clinic records dated back eight months to determine which patients received a dose of Menactra. If this provider submitted monthly inventory counts, then it would be easier to identify when the discrepancy began because the clinic may have to review only the last months' records to identify which patient record(s) is incorrect (i.e. dose administered not documented or incorrect lot number referenced).
2. There are two possible scenarios for the discrepancy between both IPOL lots, either:
 - a. Ten (10) patient records have the incorrect lot number documented or
 - b. The provider combined both lots when submitting the inventory count.

Tip: If this occurs, then it is strongly recommended that the lot numbers and dose quantities are confirmed before submitting an inventory count.

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3. The *Doses Given Since Last Count* indicate zero for all vaccines, which is not probable since the previous count was submitted more than eight months ago.

Consider the following when submitting an inventory count and comparing any discrepancies between *IRIS Inventory Doses on Hand* and *Physical Count*:

- How current is the clinic's doses administered in IRIS (i.e. have all immunizations administered to patients been entered in IRIS)?
- If doses administered to patients are not entered in IRIS in real-time, then:
 - How often are doses administered entered?
 - If possible, then coordinate conducting a physical inventory count immediately following the upload of doses administered into IRIS to ensure up-to-date information is available.
 - What is a reasonable tolerance for discrepancies for the clinic? Consider the frequency of doses administered being entered in IRIS along with patient volume.
 - Example: Gardasil 9 lot #1261AA has a discrepancy of 18 doses (the difference between *IRIS Inventory Doses on Hand* and *the Physical Count*). If the clinic enters doses administered only weekly, then is it feasible that 18 doses have been administered since the last time doses were entered in IRIS?

IRIS Public Inventory and Data Quality

A large portion of inventory discrepancies arise from poor data quality. Therefore, verifying data quality when researching and correcting IRIS Public inventory discrepancies plays a large role. Below are data quality factors to consider when researching errors.

Whether the clinic enters doses in IRIS through data exchange or hand entry, confirm that:

- Lot numbers are received in IRIS before doses administered are entered in the clinic's E.H.R. and/or IRIS,
 - For instructions about how to receive vaccines into IRIS, please refer to the [Accepting Vaccine Orders in IRIS](#) resource that is posted on the IIP's website at www.immunizeidaho.com.
- The lot number is in the clinic's E.H.R. correctly (exactly as it is in IRIS Public inventory and on the outer packaging of the vaccine),
- The lot number has doses available in IRIS Public inventory, and
- The vaccine type documented in the clinic's E.H.R. patient record is correct.

SHOW TRANSACTIONS REPORT

The *Show Transactions* report, when run with the correct parameters and filters, will indicate each transaction to support the dose quantities that IRIS indicates are in Public inventory.

When researching discrepancies, run the *Show Transactions* report in IRIS to determine the:

- Date lot received,
- Dose quantities received,
- Doses administered,
- Doses wasted,
- Doses returned, and/or
- Other historical transactions.

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It is recommended that this report be utilized in conjunction with the non-deduct Ad Hoc report to research and resolve IRIS Public inventory discrepancies, as further explained in the **Non-Deduct Ad Hoc Report** section of this document.

For instructions about how to run a *Show Transactions* report, please refer to the [Show Transactions in IRIS](#) resource that is posted on the IIP's website at www.immunizeidaho.com.

IRIS Patient Records: How to Determine if a Dose Deducted from IRIS Public Inventory

When viewing a patient's immunization history in IRIS, the details of a vaccine received by the patient may be viewed by clicking on the pencil and paper icon in the *Edit* column, as shown in the example below. The details also include whether a dose administered deducted from IRIS Public inventory.

Patient Information		IRIS ID: 97373			VFC Eligible: Yes			
Patient Name (First - MI - Last)	DOB	Gender	Mother's Maiden	Tracking Schedule	Patient ID			
TATER TOT	03/03/2011	M	TOT	ACIP				
Address		P.O. Box 83720, BOISE, ID 83720 (208) 334-4949						
Patient Notes (0) view or update notes								
History		Add Immunization	Edit Patient	Reports	Print	Print Confidential		
Vaccine Group	Date Administered	Series	Trade Name	Dose	Owned?	Reaction	Hist?	Edit
DTP/aP	04/15/2011	1 of 5	Pentacel®	Full				
	05/13/2011	2 of 5	Pentacel®	Full				
	09/24/2011	PARTIAL DOSE	Pentacel®	Full				
	06/26/2012	3 of 5	Pentacel®				Yes	

When the Edit icon is clicked to view the Pentacel dose administered on 04/15/2011, the user is redirected to the Edit Immunization screen, as shown below. This screen indicates whether a vaccine lot number has deducted from IRIS Public inventory, which is further explained below.

Patient Information		IRIS ID: 97373			VFC Eligible: Yes		
Patient Name (First - MI - Last)	DOB	Gender	Mother's Maiden	Tracking Schedule	Patient ID		
TATER TOT	03/03/2011	M	TOT	ACIP			
Address		P.O. Box 83720, BOISE, ID 83720 (208) 334-4949					
Edit Immunization							
Vaccine Group: DTP/aP - Hib - Polio					Save		
Vaccine Display Name: DTaP-IPV/Hib					Cancel		
Trade Name: Pentacel					Delete		
Vaccine Lot Number: C4061AA / public							
Dose Size: 0.5 ml							
Dosage From Inventory: Full							
Partial Dose: <input type="checkbox"/>							
Date Provided: <input type="text" value="04/15/2011"/>							
VFC Eligibility: <input type="text" value="Ineligible"/>							
Insurance Provider: <input type="text" value="Blue Cross of ID Hlth Serv Inc"/>							

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Review the **Vaccine Lot Number** field to determine if a dose deducted from inventory. Because lot number C4061AA in the example below is followed by “ / public”, this indicates the dose deducted from inventory.

Edit Immunization

Vaccine Group: DTP/aP - Hib - Polio

Vaccine Display Name: DTaP-IPV/Hib

Trade Name: Pentacel

Vaccine Lot Number: C4061AA / public

Dose Size: 0.5 ml

Dosage From Inventory: Full

Below are two examples of how to determine from a patient’s IRIS record if a dose did not deduct from inventory.

1. Lot number P-1619701 in the **Vaccine Lot Number** field is not followed by “ / public”; this indicates that the dose did not deduct from inventory.

Edit Non-Owned Immunization (Owner information shown below...)

Vaccine Group: Influenza

Vaccine Display Name: Influenza (IV3)

Trade Name: Unknown

Vaccine Lot Number: P-1619701

Dosage From Inventory: Full

Partial Dose: No

Date Provided: 11/04/2016

2. Lot number L008269 in the **Vaccine Lot Number** field is editable; however, manually adding “ / public” after the lot number and clicking the *Save* button will not deduct the dose.

Edit Immunization

Vaccine Group: Varicella

Vaccine Display Name: Varicella

Trade Name: Varivax

Vaccine Lot Number: L008269

Funding Type:

Dosage From Inventory: Full

Guidance for how to make corrections will be addressed later in this document.

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NON-DEDUCT AD HOC REPORT

A non-deduct Ad Hoc report is a tool to assist providers with identifying doses administered that did not deduct. The report lists immunizations supplied by the IIP that were sent by a clinic's electronic data exchange to IRIS as administered by the clinic but did not deduct from inventory.

To obtain a copy of a non-deduct Ad Hoc report, please contact the IRIS Help Desk at IRIS@dhw.idaho.gov and specify that you are requesting a non-deduct Ad Hoc report. Please include the clinic name, contact person, and Vaccines for Children (VFC) pin number in the request.

There are many reasons why an IIP-supplied vaccine will not deduct from IRIS Public inventory. Below are the most common reasons, including non-deduct Ad Hoc report screen shot examples.

1. Doses were not received/accepted into IRIS Public inventory before they were administered.

The *Vaccination date* in the example below indicates 04/12/16; however, the **Show Transaction** report indicates the doses were not received in IRIS Public inventory until 04/15/16.

Birth date	Last name	First name	Vaccination date	Trade name	Vaccine	Vaccine Lot Other Inv	Historical Org Name/POD ID	VFC pin
08/18/04	RUSSET	BABY	04/12/16	FluMist Quadrivalent	Influenza, live, nasal, quadrivalent	FN2125	IDIMMSPRO&998	123

2. IRIS Public inventory indicates zero doses on-hand.

IRIS Public inventory indicates zero doses of Prevnar 13 lot H88962, which means all doses have been administered. To determine what date the last dose administered was deducted in IRIS, run the **Show Transaction** report.

Birth date	Last name	First name	Vaccination date	Trade name	Vaccine	Vaccine Lot Other Inv	Historical Org Name/POD ID	VFC pin
01/13/14	TOT	TATER	01/15/15	Prevnar 13	Pneumo-Conjugate 13	H88962	IDIMMSPRO&998	123

3. The wrong vaccine type was selected in the clinic's E.H.R.

The *Vaccine* and *Trade Name* in the example below are incorrect as this is not a vaccine offered by the IIP. Additionally, the lots are similar which prompted a review of lot numbers in IRIS Public inventory which confirmed the correct Trade Name and lot number is Menveo M14030. The correct vaccine type for Menveo is Meningococcal-MCV40.

Therefore, the dose administered to Curly Fry contains a compound issue: both the vaccine type and lot number are incorrect. Both errors must be fixed to accurately account for the dose in IRIS Public inventory.

Birth date	Last name	First name	Vaccination date	Trade name	Vaccine	Vaccine Lot Other Inv	Historical Org Name/POD ID	VFC Pin
08/21/03	POTATO	SWEET	09/09/14	MENOMUNE	Meningococcal-MPSV4	A14030	IDIMMSPRO&998	123
07/12/96	FRY	CURLY	08/18/14	MENOMUNE	Meningococcal-MPSV4	M14030	IDIMMSPRO&998	123

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4. The incorrect lot number† was selected in the E.H.R. and/or the lot number was not entered correctly into the E.H.R.

†The lot numbers referenced in IRIS Public inventory are obtained from the outer packaging of the vaccine because it includes all packaging components (i.e. vaccine component(s) and diluent).

IRIS Public inventory does not reflect IPOL lot number J1382; however, lot number J1382-1 is indicated.

Birth date	Last name	First name	Vaccination date	Trade name	Vaccine	Vaccine Lot Other Inv	Historical Org Name/POD ID	VFC Pin
01/12/15	POTATO	CHIP	05/23/15	IPOL	Polio-Inject	J1382	IDIMMSPRO&998	123

Upon receipt of a non-deduct Ad Hoc report there are a few basic steps that can be taken to begin identifying why a dose did not deduct. Please note that the following is not an all-inclusive list.

1. Verify that the lot number referenced in the *Vaccine Lot Other Inv* column on the report is one in the clinic's IRIS Public inventory. This can be done by either:
 - a. Viewing the Non-Expired or Expired lists in manage inventory or
 - b. Running a Show Transactions report for the lot number on the report.
2. If the lot number is in IRIS Public inventory, then verify:
 - a. The lot was received in IRIS prior to the date it was administered; refer to example 1 above.
 - b. That IRIS indicates doses on-hand; refer to example 2 above.
 - c. The vaccine type is correct; refer to example 3 above.
3. If the lot number is not in IRIS Public inventory, then look in the Non-Expired and Expired lists for similar lot numbers.
 - a. See example 3 above; the *Vaccine Lot Other Inv* column references lot number A14030, however, the correct lot number is M14030.
 - b. See example 4 above; the *Vaccine Lot Other Inv* column references lot number J1382, however, the correct lot number is J1382-1.
 - c. If the *Vaccine Lot Other Inv* lot number referenced on the non-deduct Ad Hoc contains an uppercase "O", then consider that the correct lot number in IRIS contains a zero ("0").
 - d. Consider if the lot is a private dose that was administered.

How to Make Corrections

After an error has been identified, it must be corrected to be accurately accounted for in IRIS Public inventory. Depending on the functionality of the clinic's E.H.R., corrections may be made by:

1. Correcting in the E.H.R. and the correction will automatically be sent to IRIS (real-time),
2. Correcting in the E.H.R. and the correction will be added to the next batch file upload, or
 - a. The correction will be made in IRIS when the file is uploaded
 - b. If unsure whether your E.H.R. sends corrections, then contact your E.H.R. vendor for confirmation

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3. Correcting in the E.H.R. and then manually make the correction in IRIS, if the E.H.R. does not send corrections to IRIS.
 - a. To ensure the dose deducts from IRIS Public inventory, the correction in IRIS requires the vaccine to be deleted then re-entered correctly.
 - b. Please refer to the Adding Immunizations IRIS training video posted on the IIP's website at www.immunizeidaho.com.

Using the IRIS inventory count that indicates when discrepancies began, coupled with the non-deduct Ad Hoc and Show Transactions reports, will help providers effectively and efficiently research and identify errors so they can be corrected in a clinic's IRIS Public inventory.