

The logo is a circular emblem on the left side of the slide. It features a central sun with rays, surrounded by various symbols including a mountain range, a cactus, a fish, a hand, and a gear. The entire logo is rendered in a light teal color against the darker teal background.

ARIZONA

— DEPARTMENT OF —
HEALTH SERVICES

Winning the Data Game: Navigating the Report Cards in Immunizations

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Financial Disclosures

- Danielle Falcone and Valentin Sostaric, faculty for this CE activity, have no relevant financial relationship(s) with ineligible companies to disclose.
- None of the planners for this activity have relevant financial relationships to disclose with ineligible companies.
- The Arizona Alliance for Community Health Centers is accredited by the Arizona Medical Association to provide medical education for physicians.
- The Arizona Alliance for Community Health Centers designated the 2025 Arizona Immunization Conference educational activity for a maximum of 11 hours AMA PRA Category 1 Credits Physicians should only claim credit commensurate with the extent of their participation in the activity.
- The Arizona Pharmacy Association is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education.

Arizona
STATE LINE

ADOPTE
&
JOURNEY

EMERGENCY
PARKING ONLY



2017'S
PHOTOGRAPHY
CONTEST

Background

Implementation

Reading the Report Card

Results and Impact

DAR DQ Assessment Reports

Arizona - ASIIS



1998 - State Mandate to report immunizations

Registry - Developed and hosted by STC

Sites reporting: \approx **4,000**

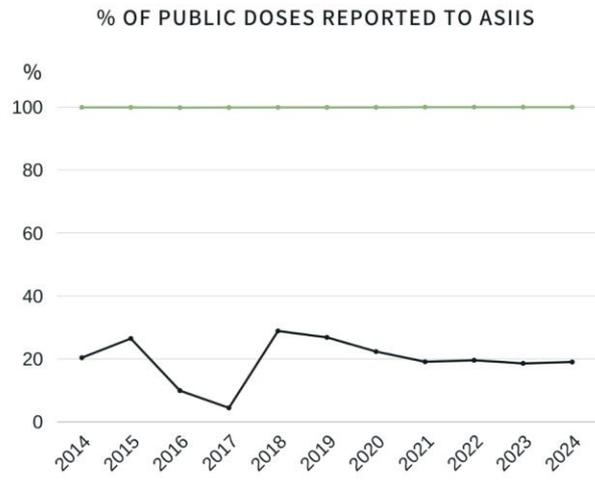
HL7 reporters: \approx **3,300**

Bi-directional HL7 reporters: \approx **3,000**

VFC Providers: \approx **650**

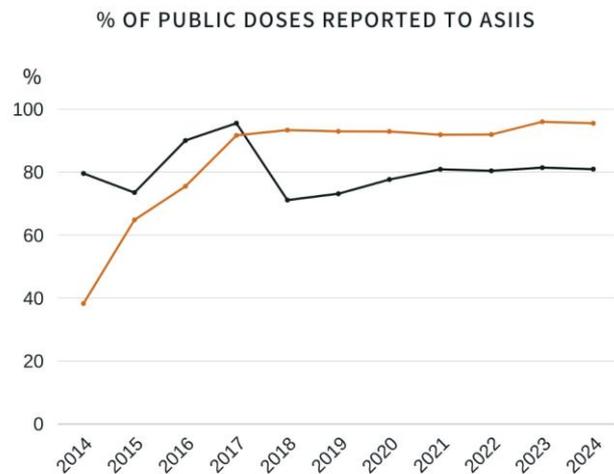
Public Vaccines shipped in 2024: \approx **1,660,000**

Public Vaccines Admin. in 2024: \approx **1,370,000**



Manual Entry
Decrementd from
inventory

Manual Entry
in ASIIS



HL7
Decrementd
from inventory

HL7

Provider workflows prior to 2016

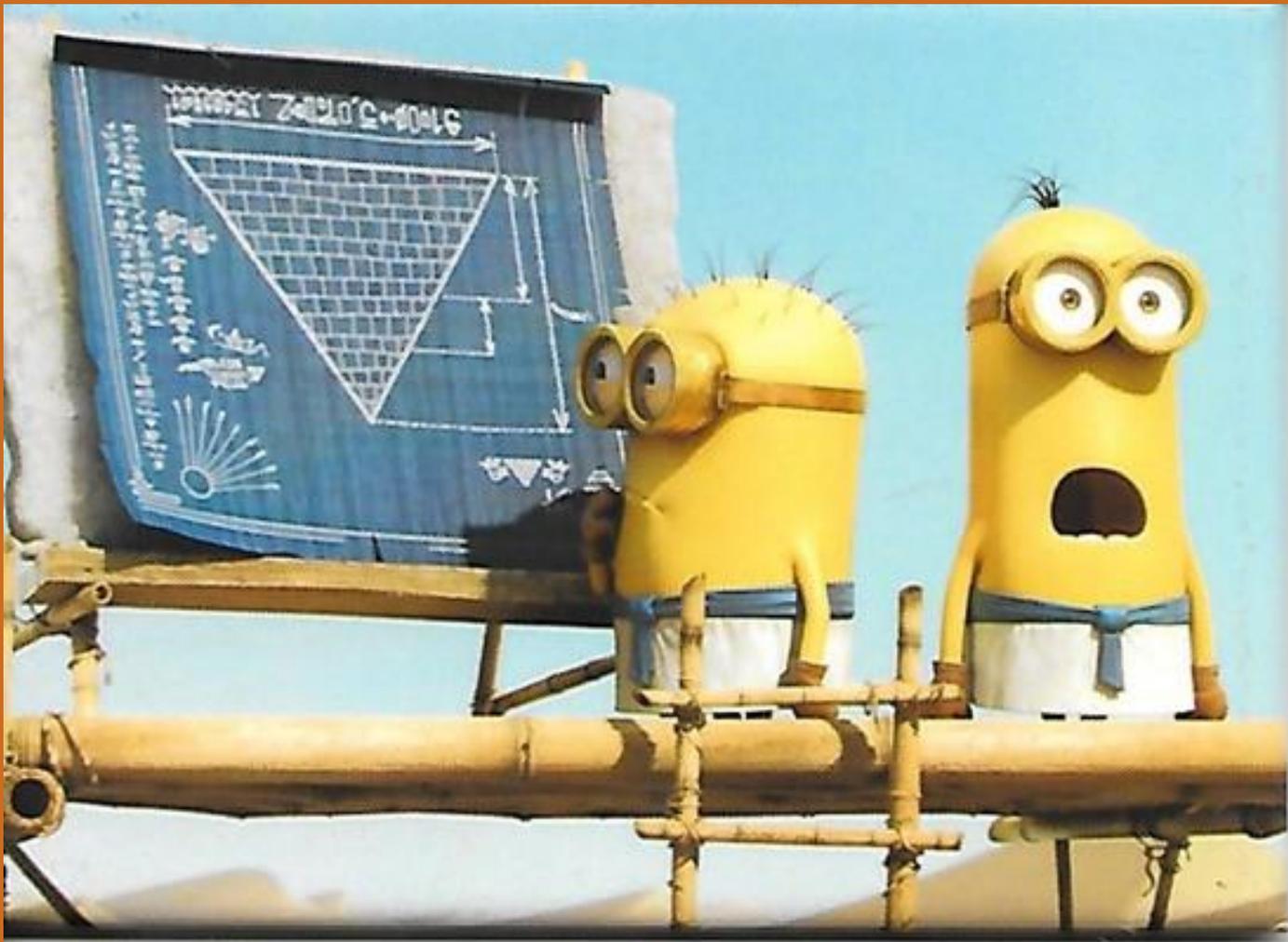
- ❌ Not receiving the orders in ASIIS
- ❌ Not reporting vaccinations at all
- ❌ Not reporting wasted/expired
- ❌ Writing off doses with non-acceptable reasons
- ❌ Transferring vaccines without records in ASIIS



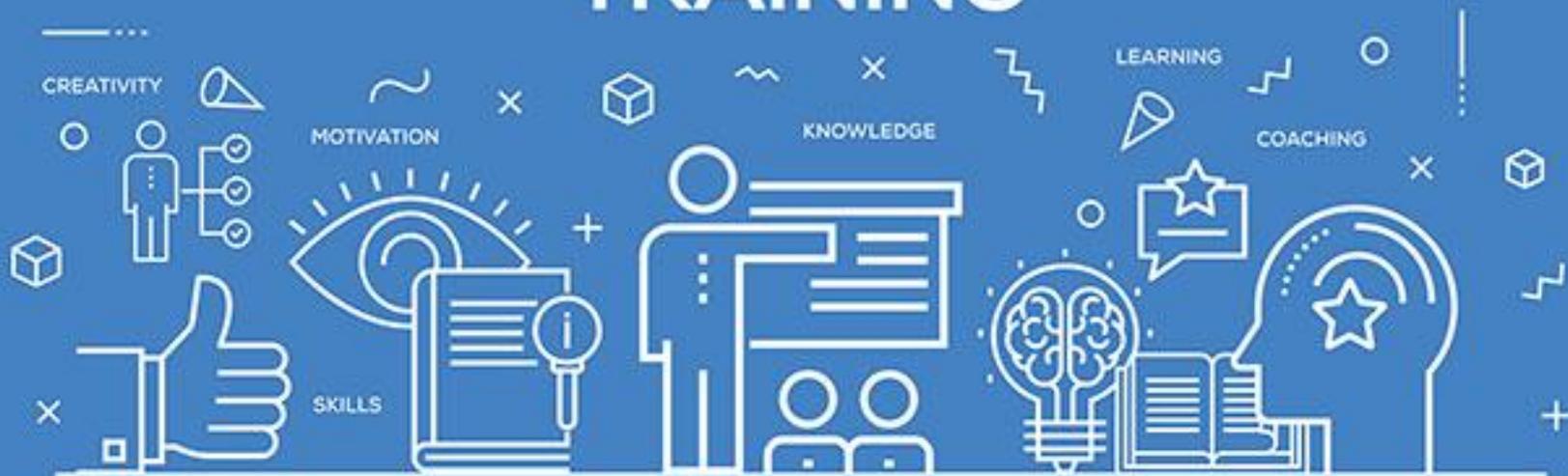
Implementation







TRAINING



VFC Pin

Organization (IRMS) ID

Organization (IRMS) Name

Facility ID

Facility Name

Vaccine Expiration Year	ASIS Inventory	Doses Used	Unaccounted Doses	Annual Utilization
2015	1473	1473	0	100.00%
2016	1501	1501	0	100.00%
2017	1991	1984	7	99.65%
2018	1617	1615	2	99.88%
2019	1646	1095	551	66.52%
2020	500	261	239	52.20%
2021	10	0	10	0.00%

Summary for VFC Pin

8738

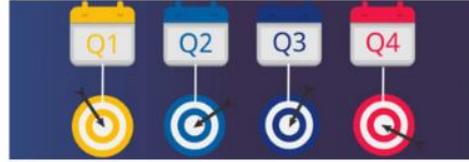
7929

809

Overall Utilization

74.04%





1

**November 26,
2018**



2

April 2019

2019 Q1 and CY 2019
report cards sent

3

Jan 2020

2019 report cards with
included Dose for Dose
Vaccine Replacement
Form (where applicable)

4

October 2021

Report card source
change to Lot Number
Summary Report



5

September 2022

Report card source
changed to SQL after
identified Lot Number
Summary Report
calculation errors



6

2024

Improvements in
delivery and
deployment of the
Arizona
Immunization
Provider Report
Suite featuring DQ
and HL7 reports

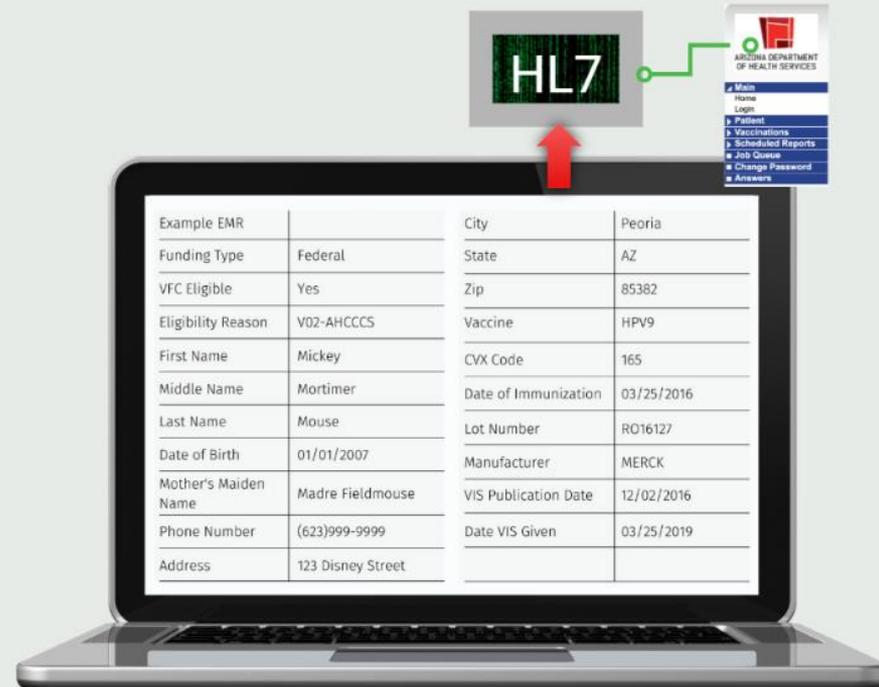


Reading the Report Card

Enter Record in ASIIS Transfer Data



Record in EMR &



- Providers should use a report card to determine if staff are correctly utilizing ASIIS for dose documentation
- Providers may enter data directly into the ASIIS website or send EMR records to ASIIS over an HL7 interface

Reading the Report Card

- The header shows the pin, and the date the report card was run
- Below the header is the body of the report card with the purpose, action for providers, and why.
- For each lot number you will see the description, expiration date, and usage numbers. As well as, Doses received, Doses wasted, Doses used, Doses Unused, and Unauthorized adjustments
- The summary shows category totals and percentages
- The wasted and unused combined shows what could be wasted at the end of the year





ARIZONA DEPARTMENT OF HEALTH SERVICES

Dose Accountability Report Card

Wednesday, March 6, 2024 9:12:23 PM

VFC Pin 7777

Organization (IRMS) ID 99999 Vaccine Expiration Year 2024 - CY

Organization (IRMS) Name The Example Clinic

Facility ID 99999

Facility Name The Example Clinic

The Purpose:
The report cards are a quarterly review of the accounting of VFC vaccinations in ASIS. The report cards show the number of VFC doses administered to patients as recorded in ASIS and can help the providers complete accurate reconciliation of the VFC inventory in ASIS.

The 2023 CY Report Card includes VFC doses that expired in 2023.
The 2024 CY Report Card includes VFC doses that are expiring in 2024.

Actions for providers:
Providers should use the Report Card to determine if staff are correctly utilizing ASIS for VFC dose documentation. The discrepancies between your records and ASIS should be corrected. Also, if the potential year-end wastage is increased, the provider should take immediate action as this indicates a need for change to ensure data is submitted correctly and VFC vaccines are not wasted.

Why:
Providers are responsible for using ASIS to account for all doses of VFC vaccine shipped to them. When doses are not linked to a VFC eligible patient in ASIS, which decrements the dose from the ASIS inventory, the BIZS looks at the data to determine VFC vaccine wastage, including unused doses.

Description	DTaP	Lot Number	Expiration Date	Doses	Doses	Doses	Doses	Unauthorized Adjustments
				Received	Used	Wasted	Unused	
		4L9E4	2/7/2023	30	8	22	0	0
		7EC55	4/29/2023	4	0	4	0	0
DTaP (2 lot numbers)				34	8	26	0	0

Summary for VFC Pin 7777

660	507	28	125	0
	76.82%	4.24%	18.94%	0%

Wasted and Unused: 4.24% + 18.94%

Potential Year End Wastage: 23.2%

Reading the Report Card

Description		DTaP						
Lot Number	Expiration Date	Doses Received	Doses Used	Doses Wasted	Doses Unused	Unauthorized Adjustments		
N0000000	4/15/2025	10	9	1	0	0		
N0000000	8/15/2025	10	9	0	1	0		

Summary for VFC Pin 7777	20	18	1	1	0
		90%	5%	5%	0%

Wasted and Unused: 5.00% + 5.00%

Potential Year End Wastage: 10.0%

Viewing the Lot Usage & Recall Report

Lot Usage and Recall Report

Report Criteria

Report Date: April 15, 2025

Organization:

Vaccinating Facility: All

Date Range: All

District/Region: All

Vaccine:

Manufacturer:

Lot Number:

Lot Facility:

Funding Source:

Last Name	First Name	Birthdate	SIIS Patient ID	Vaccination Date	Organization	Vaccinating Facility	Dose Size
-----------	------------	-----------	-----------------	------------------	--------------	----------------------	-----------

Total Patients Selected: 0 Total Vaccinations Administered: 0

The Lot Usage and Recall Report will generate a list of patients who are already attached (decremented) from the lot. The Report will display:

- the **search criteria used** (I.e. vaccine type, lot number, date range)
- the **patient's last name, first name, DOB, and SIIS Patient ID**
- the patient's **vaccination date**
- the total # of **vaccines administered** & the total # of **patients selected** based off search criteria

Tip: The report also shows **dose size**; if you are having dose accountability issues, look at the dose size and ensure each patient was administered the correct dose size.

Report Setting

Patient Detail Report

Run By

By Ownership

By Service

By Service (official vaccination record)

Limit Report By

Vaccination Date Range From: Through:

Birth Date Range From: Through:

- By **Ownership** shows patients with active status for your organization (patients your practice “owns”) and **ALL** vaccinations reported in the **Vaccination Date Range** for that patient (given outside your organization)
- By **Service** shows patients vaccinated in your facility and **ALL** changes for the given vaccines in the **Vaccination Date Range** (multiple entries for one vaccine, some decremented some not)
- By **Service (official vaccination record)** shows patients vaccinated in your facility and last version of the reported vaccines in the **Vaccination Date Range**

Lot History in Search/Add Inventory -> Lot Maintenance

Lot Number Maintenance

Vaccine: Varicella (Varivax®), NDC: 00006-4827-00 - 10 VIALS

Facility:

Funding Source: VFC

Lot #: X021282

Exp Date: 08/20/2025

Vaccine Display ID: VARI-137

Total Doses	Available	Wasted And Returned	Wasted And Disposed	Outbound	Used	Corrected (+)	Corrected (-)
20	0	0	0	0	20	0	0

Inactivated:

Inactive Reason: Other

[VIEW LOT HISTORY](#)

[BACK](#)

[EDIT](#)

Lot History in Search/Add Inventory -> Lot Maintenance

- **Doses Received** - The date, order/transfer number, and total number of doses received.
- **Undecrement Doses Administered** - The administration date, vaccine, and lot number of any administered undecrement doses.
- **Doses Administered** - The administration date, patient ID, and vaccine eligibility category for any administered doses.
- **Reconciliation Adjustments** - The date, description, and dose change for any inventory adjustments that have occurred.

Note: Dates will need to be adjusted to the complete information for the lot number

LOT HISTORY ✕

Dtap | Daptacel®
Lot #:##### | Exp Date: 09/30/2021 | Funding: VFC

From: ✕ To: REFRESH PRINT

Doses Received: 100

Date	Order/Transfer #	Doses Received
#####	Order #123456	100

Undecrement Doses Administered: 0

Import Date	Vaccine	Lot Number
No undecrement doses were found for this date range.		

Doses Administered: 1

Admin Date	Patient ID	Vaccine Eligibility
#####	#####	Unknown Health Plan

Reconciliation Adjustments: 1

Date	Description	Dose Change
#####	Expired	-81

Common errors preventing decrementing

- ❖ 5 or S | 2 or Z | 4 or A | G or 6 | 1 or I | 0 or O
- ❖ Creative receiving of multiple lot numbers in one shipment (/,- ,.) Lot number 1/ Lot number 2
- ❖ Transposed numbers and letters
- ❖ Extra numbers or letters
- ❖ Writing NDC number instead of lot number
- ❖ Writing lot number from the vial or syringe instead of the box
- ❖ Writing lot number from the diluent instead of the vaccine box

Common errors that prevent decrementing

Mfg. Code (MVX code)

- Unknown manufacturer code
- Incorrect manufacturer code

Vaccine type

e.g. Lot number is for DTaP-HepB-IPV (Pediarix)
yet it was reported as DTaP-IPV (Kinrix)

VFC eligibility and Funding

- Unknown
- Blank
- Required to screen for eligibility prior to administering vaccine

List of Vaccine Names, Best ASIIS Selection and CPT/CVX Codes

This list matches the vaccine name or codes in Arizona State Immunization Information System (ASIIS) with the brand name or other common names of the vaccines you use most often.

Vaccine trade name or common name	Fund	Best ASIIS Selection	Age (Range)	Dose	Route	Manufacturer/ NDC Number	CPT Code	CVX Code
Commercialized COVID-19 Vaccine (2024-2025 Formula) - NEW								
COMIRNATY® Pfizer COVID-19 Vaccine (2024-2025 Formula)	VFC VFA	COVID-19, mRNA, LNP-S, PF, tris-sucrose, 30 mcg/0.3 mL (12+)	12+ years	0.3 ml	IM	Pfizer, INC – PFR NDC: 00069-2432-10 (10 pack, 1 dose syringe)	91320	309
Pfizer COVID-19 Vaccine (2024-2025 Formula)	VFC	COVID-19, mRNA, LNP-S, PF, tris-sucrose, 10 mcg/0.3 mL (5- <12y)	5 yr to < 12 yr EUA	0.3 ml	IM	Pfizer, INC – PFR NDC: 59267-4438-02 (10 pack, 1 dose vial)	91319	310
	VFC	COVID-19, mRNA, LNP-S, PF, tris-sucrose, 3 mcg/0.3 mL (6m- <5y)	6 mo to < 5 yr EUA	0.3 ml	IM	Pfizer, INC – PFR NDC: 59267-4426-02 (10 pack-3 dose vials) (30 doses)	91318	308
Spikevax™ Moderna COVID-19 Vaccine (2024-2025 Formula)	VFC VFA	COVID-19, mRNA, LNP-S, PF, 50 mcg/0.5 mL (12+)	12+ years	0.5 ml	IM	Moderna – MOD NDC: 80777-0110-93 (10 pack, 1 dose syringe)	91322	312
Moderna COVID-19 Vaccine (2024-2025 Formula)	VFC	COVID-19, mRNA, LNP-S, PF, 25 mcg/0.25 mL (6m-<12y)	6 mo to < 12 yr	0.25 ml	IM	Moderna – MOD NDC: 80777-0291-80 (10 pack, 1 dose syringe)	91321	311
Novavax COVID-19 Vaccine (2024-2025 Formula)	VFC VFA	COVID-19, subunit, rS- nanoparticle, adjuvanted, PF, 5 mcg/0.5 mL (12+)	12+ years	0.5 ml	IM	Novavax – NVX NDC: 80631-0107-10 (10 pack, 1 dose syringe)	91304	313

Vaccination Detail Add

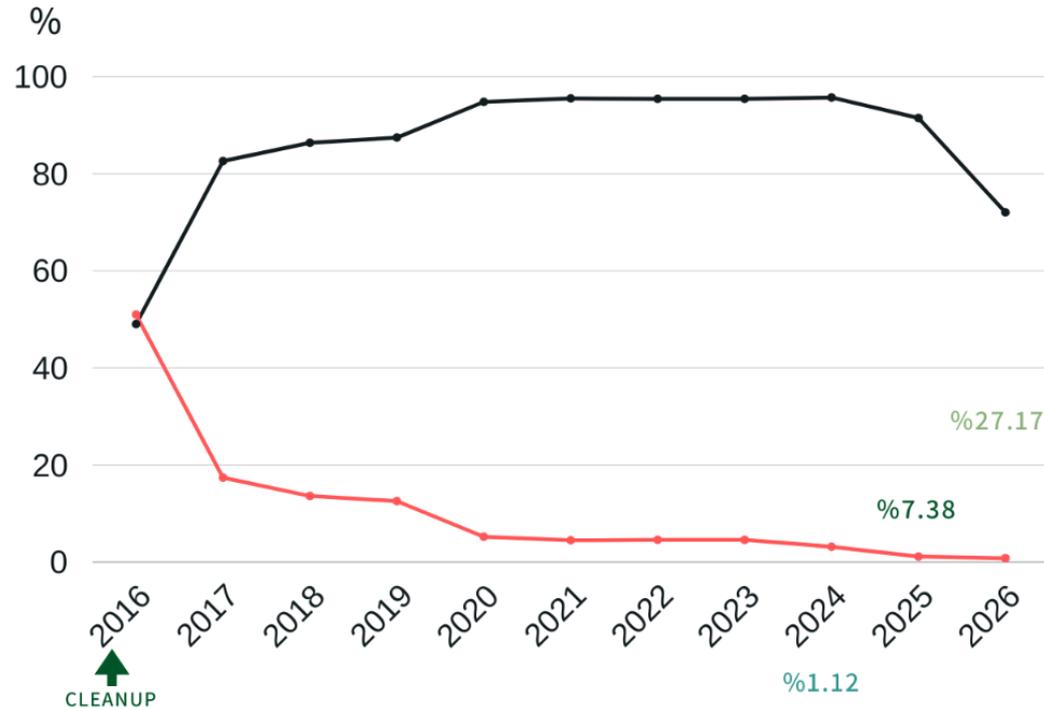
Vaccine 1:	HPV9
Date Administered:	03/14/2024
Historical:	<input type="radio"/> YES <input checked="" type="radio"/> NO
Manufacturer:	MERCK Click to select
Lot Number:	TEST00001LOT
Lot Facility:	TEST FACILITY
Funding Source:	VFC
Provider Noted on Record:	
Lot Noted on Record:	
Manufacturer Noted on Record:	
Facility:	TEST FACILITY x ▾
Vaccinator:	SMITH, JOHN MD/TEST FACILITY x ▾
Anatomical Site:	Right Arm x ▾
Anatomical Route:	Intramuscular x ▾
Dose Size:	Full ▾
Volume (CC):	
VFC Status:	AHCCCS 'VFC Status' will be ignored if lot number is not VFC eligible.
District/Region:	
VIS Publications Dates:	1. <input type="text"/> 2. <input type="text"/> 3. <input type="text"/> 4. <input type="text"/>
Date VIS Form Given:	03/14/2024
Ordering Provider:	DR, MD MD (1501815018) x ▾
Comments:	

Cancel

Save

Results and Impact

PUBLICLY SUPPLIED DOSES



Utilization Rate

Wastage



CONGRATULATIONS

ASIIS
DOSE
ACCOUNTABILITY
CHAMPIONS

2024

BUREAU OF IMMUNIZATION SERVICES

Why?



DAR DQ Assessment Reports

2024 Data at Rest DQ Assessment Reports

Background:

In 2016, The American Immunization Registry Association (AIRA) convened the Measurement for Assessment and Certification Advisory Workgroup (MACAW) to develop and propose measures for IIS Assessment. The Data at Rest (DAR) content area within the Measurement and Improvement (M&I) Initiative focuses on the data residing in an IIS database.

The MACAW defined the scope, measures, tests, outcomes, and testing methods for measuring data quality of the data at rest within an IIS. This work was informed by the IIS Functional Standards, CDC's IIS Data Quality Blueprint, and IIS Data Quality Practices – To Monitor and Evaluate Data at Rest.

Purpose

This assessment report DOES NOT evaluate the data quality of HL7 messages, coverage reports or inventory management.

Actions for providers

Definitions:

- **Completeness • Validity • Timeliness**
- **Completeness and Timeliness Evaluation Criteria**
- **Validity Evaluation Criteria: Percentage Less Than Threshold**

2024 Data at Rest DQ Assessment Reports

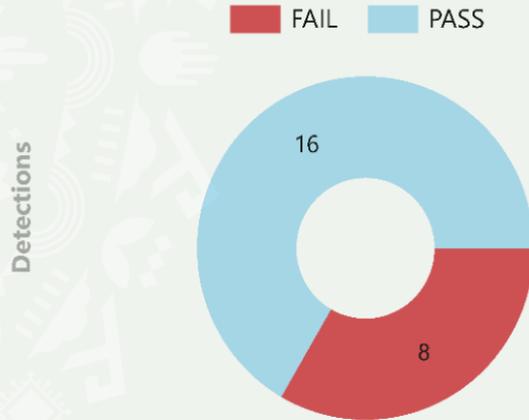


Data at Rest Data Quality Assessment Report

Evaluated Cohort
Patients born:
01/01/2022 - 12/31/2023
Assessment Date:
December 2024

Evaluated 193986 patient record(s) and 2428982 vaccination record(s) in ASIIS.

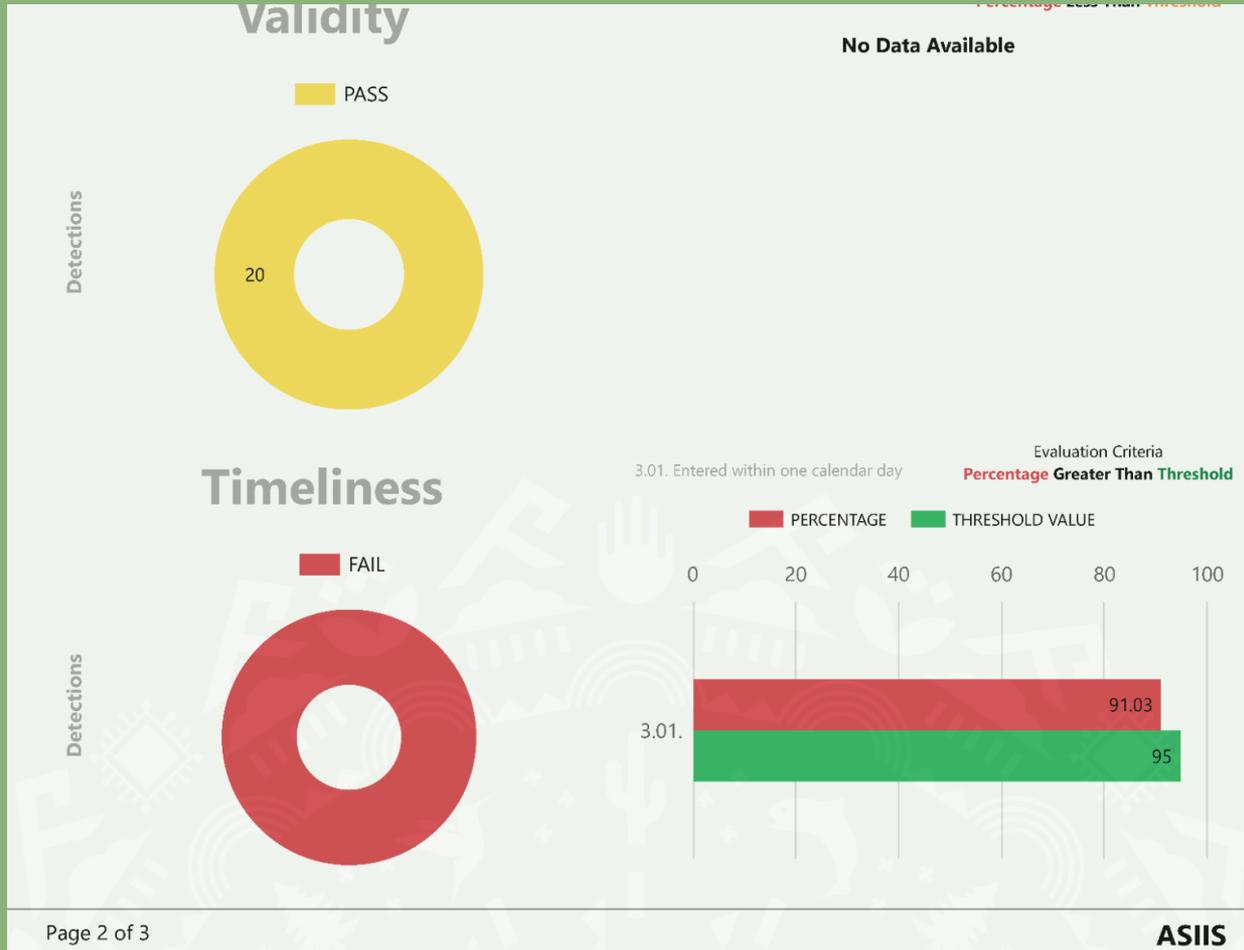
Completeness

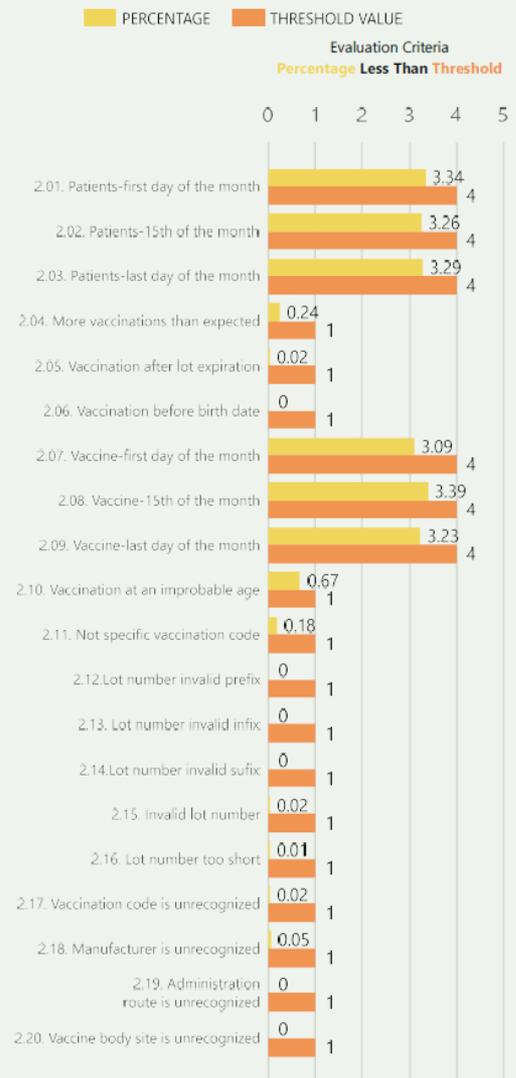


Evaluation Criteria
Percentage Greater Than Threshold



2024 Data at Rest DQ Assessment Reports





2024 Data at Rest DQ Assessment Reports

I took some time to look at the report and honestly this is something a data person would love....I can see the value in it for someone who has a lot of time to look at and evaluate it.

The Quality Assessment Report did take me a minute to digest there is a LOT of information here but as I pondered it and understood it better it's very easy to read and help me figure out where I might need to focus in to help teams be more successful.

I do think initially people are not going to read the first page - I will tell you that I looked past it initially just because it has a lot of words. However as I started having questions I found that I could go back up to that page and read about that section and get my questions answered. So again I'm not sure that there is much you can change there but initially people will not necessarily like that first page.

2024 Q4 HL7 Data Quality Score Card for VFC PIN

Prepared by ASIIS Interoperability Team (ASIIS_Electronic_Reporting@azdhs.gov)

Generated on 2025-01-04

Table 1: Timeliness of New Vaccination Submission

Report Time	Message Count	Percentage
within 1 day	1467	93.92
within 2 days	12	0.77
within 7 days	58	3.71
within 30 days	3	0.19
more than 30 days	22	1.41

HL7 Data Quality

Table 2: Child Immunization Data Quality (Core Data Elements)

Data Element	Total Value	Complete Value (%)	Valid Value (%)
Admin Date	2218	100	100
CVX Code	2218	100	100
Funding Source	2218	100	100
Guardian First Name	2235	2.15	100
Guardian Last Name	2235	2.15	100
Lot Number	1601	100	100
Manufacturer	1601	100	100
Patient Address - City	2218	100	100
Patient Address - State	2218	100	100
Patient Address - Street	2218	100	100
Patient Address - Zip code	2218	100	100
Patient DoB	2218	100	100
Patient Ethnicity	2218	84.81	100
Patient First Name	2218	100	100
Patient Gender	2218	100	100
Patient Last Name	2218	100	100
Patient Mother's Maiden Name	2218	0	0
Patient MRN	2218	100	100
Patient Phone	2218	100	100
Patient Race	2218	79.26	100
Relationship of Guardian	2235	2.15	100
Reporting Facility	2218	100	100
VFC Eligibility	2218	100	100



Table 3: Child Immunization Data Quality (Additional Data Elements)

Data Element	Total Value	Complete Value (%)	Valid Value (%)
Admin Amount	2218	100	100
Admin Route	1601	100	100
Admin Site	1600	93.81	100
CPT Code	2218	0	0
Expiration Date	1600	100	100
Guardian Email	2235	0	0
Guardian Phone	2235	0	0
NDC Code	2218	0	0
Patient Email	2218	2.39	100

Arizona Immunization Provider Report Suite



AAA



Arizona Immunization Provider Report Suite

Bureau of Immunization Services (BIZS)

Email: ArizonaVFC@azdhs.gov | Phone: (602) 364-3642 | Fax: (602) 364-3276

VFC PIN

The Arizona Immunization Provider Report Suite allows providers to review VFC vaccinations recorded in ASIIS, data quality, and HL7 Interface reports, with quarterly updates.

Select the report you would like to review

[Dose Accountability Report Cards](#)

[Data Quality Reports](#)

[HL7 Interface Reports](#)

[reset](#)

ANY
QUESTIONS
?

Take Away Moment

Write two things you can do or use from what you just learned.

Circle the one you plan to do first.



Conclusion





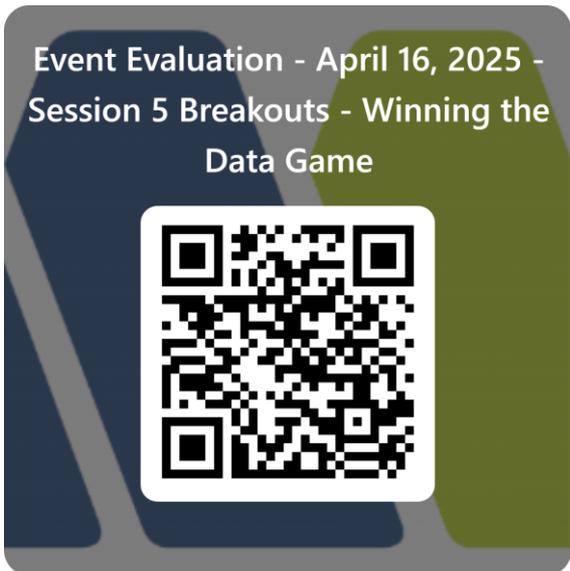
THANK
YOU!



Valentin Sostaric | Immunization Data Systems Chief
Arizona Department of Health Services



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Pharmacy CEs pick up your QR code at the registration desk to Claim your CEs!

