

# Immunization Data:

## Provider Detail Error Report Guide



### What is the Provider Detail Error Report (Warnings & Errors Report)?

This report shows warnings and errors produced by immunization data (HL7 messages) sent from an electronic health record (EHR) system to the Indiana State Immunization Information System (IIS).

The Provider Detail Error Report allows clinics to monitor the quality of their electronic data and identify issues to correct. This report looks at data sent for all ages, not just pediatric patients. It includes the message import date and issue type by medical record number, message ID and vaccination date. It is important to review this information as data that triggers Errors (E), are not accepted into the IIS and data that triggers Warnings (W) may have invalid or missing information.

### Who Receives this Report?

- Organizations that send HL7 messages to the IIS through Public Health Connection Hub (PHC-Hub) have access to this report. PHC-Hub evaluates HL7 messages to ensure they are complete and correctly formatted. PHC-Hub processes HL7 messages before the data shows up on patient records in the IIS. This report is provided during the testing phase of the EHR/IIS interface onboarding process and after the interface goes live as well as **part of on-going monitoring process**.
- The Provider Detail Error Report runs on a recurring basis (e.g., weekly) and is emailed to designated contacts in each organization. To request changes to this report, please email [CHIRPITHelp@Health.in.gov](mailto:CHIRPITHelp@Health.in.gov).

### How to Read the Report

The first section shows the report parameters. In this example, the report covers data:

|                                          |  |  |  |
|------------------------------------------|--|--|--|
| Start Date: November 06, 2023            |  |  |  |
| End Date: November 20, 2023              |  |  |  |
| Message Types: VXU                       |  |  |  |
| Providers: SAMPLE PEDIATRICS (123456789) |  |  |  |
| Display: Warnings and Errors             |  |  |  |
|                                          |  |  |  |

- **Submitted between:** Nov 6 – 20, 2023
- **By the:** Sample Pediatrics (123456789)
- **Includes:** Warnings and Errors

## Report Results Summary

| Provider  | Representative Facility ID | User          | Profile | # Messages | # unique MRN | # Errors | # Warnings |
|-----------|----------------------------|---------------|---------|------------|--------------|----------|------------|
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 45         | 39           | 23       | 11         |

- **Provider:** The ID of the organization that sent the data
- **Representative Facility ID:** The ID of the facility that sent the data
- **User:** HL7 account name that sent the data from the organization's EHR
- **Profile:** PHC-Hub Import Profile ID
- **# Messages:** Total number of messages received during the selected date range
- **# Unique MRN:** Number of messages received for unique patients during the selected date range
- **# Errors:** Number of messages that produced errors and were not accepted by the IIS
- **# Warnings:** Number of messages that produced warnings only
  - If a message produces both an error and a warning, it is only counted as an error.

## Message level issues and issues with demographic data

| Provider  | Representative Facility ID | User          | Profile | Import Log ID | Error / Warn | Date Sent       | MRN      | Issue                                                | Issue Location | Message Control ID                   |
|-----------|----------------------------|---------------|---------|---------------|--------------|-----------------|----------|------------------------------------------------------|----------------|--------------------------------------|
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 449326636     | E            | 11/7/2023 16:27 | 6.56E+14 | next of kin name first is invalid                    | NK1-2.2        | 8f3b326c-1234-5678-9101-86fac3900fa3 |
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 449326636     | E            | 11/7/2023 16:27 | 6.56E+14 | next of kin name first is invalid - Segment Rejected | NK1-2.2        | 8f3b326c-1234-5678-9101-86fac3900fa3 |
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 449326636     | E            | 11/7/2023 16:27 | 6.56E+14 | patient address city is missing                      | PID-11.3       | 8f3b326c-1234-5678-9101-86fac3900fa3 |
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 449326636     | E            | 11/7/2023 16:27 | 6.56E+14 | patient address city is missing - Message Rejected   | PID-11.3       | 8f3b326c-1234-5678-9101-86fac3900fa3 |
| 123456789 | SIISCLIENT987654           | SAMPLEPEDSHL7 | 1234    | 449326636     | E            | 11/7/2023 16:27 | 6.56E+14 | patient address state is missing                     | PID-11.4       | 8f3b326c-1234-5678-9101-86fac3900fa3 |

- **Issue:** Description of the error or warning
- **Error/Warning:**
  - **E = Error-** Data is not accepted into the IIS and will not display on patient records
  - **W = Warning-** The IIS accepts the data, but data may be missing or invalid
- **Date Sent:** Date the message was received by the IIS
- **MRN:** The medical record number (chart number) for the patient. This is the MRN sent by the organization's EHR.
- **Import Log ID:** Unique identifier assigned to each message by PHC-Hub
- **Message Control ID:** The ID assigned to the HL7 message by the organization sending the data



## The final section shows issues with vaccination data

Most of the columns are the same as described above for message level issues with a few additions.

| Provider  | Facility ID      | User          | Profile | Import Log ID | Error / Warn | Date Sent        | MRN      | Issue                        | Issue Location | Historical | Message Control ID                        | Vaccination Date | Vaccination                   |
|-----------|------------------|---------------|---------|---------------|--------------|------------------|----------|------------------------------|----------------|------------|-------------------------------------------|------------------|-------------------------------|
| 123456789 | SIISCLIENT987654 | SAMPLEPEDSHL7 | 1234    | 449326636     | W            | 11/7/2023 16:27  | 6.56E+14 | vaccination lot unrecognized | RXA-15         |            | 8f3b326c-1234-5678-9101-86fac3911/7/2023  | 11/7/2023        | varicella (3028409)           |
| 123456789 | SIISCLIENT987654 | SAMPLEPEDSHL7 | 1234    | 449329278     | W            | 11/7/2023 16:37  | 6.56E+14 | vaccination lot unrecognized | RXA-15         |            | 8f3b326c-1234-5678-9101-86fac3911/7/2023  | 11/7/2023        | MMR (3028350)                 |
| 123456789 | SIISCLIENT987654 | SAMPLEPEDSHL7 | 1234    | 452976033     | W            | 11/20/2023 15:01 | 6.56E+14 | vaccination lot unrecognized | RXA-15         |            | 8f3b326c-1234-5678-9101-86fac3911/20/2023 | 11/20/2023       | rotavirus, monovalent (302... |
| 123456789 | SIISCLIENT987654 | SAMPLEPEDSHL7 | 1234    | 452976038     | W            | 11/20/2023 15:01 | 6.56E+14 | vaccination lot unrecognized | RXA-15         |            | 8f3b326c-1234-5678-9101-86fac3911/20/2023 | 11/20/2023       | DTaP-Hep B-IPV (3028369)      |

- **Vaccination Date:** The date the vaccine was administered
- **Vaccine Family:** The type of vaccine administered



Tip: The issues that trigger errors and warnings may also result in inventory decrementing issues for clinics who manage vaccine inventory in the IIS. See the appendix below for errors and warnings related to patient and vaccination data.

| Patient Demographic Issue                                                                                                                                          | Error                                                                                                                                                                                                                     | Severity | HL7 segment field    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------|
| Processing error prevented the completion of this request:<br>Unable to save vaccination info:<br>IRMS sys-pat ID combo blocked.<br>Patient deleted from Registry. | This error means the patient was adopted or opted out of the registry. Please email IZInterop@health.in.gov if you receive this error.<br>MRN number is blocked so provider needs to update MRN and resubmit patient data | high     | PID -3               |
| Patient first name or last name are invalid                                                                                                                        | Name fields can only contain the characters: A-Z, a-z, single quote, dash, period, and space. Cannot be a bogus name (e.g., Unknown or Test). Names must be 48 characters or fewer.                                       | high     | PID - 5.1, PID - 5.2 |
| Patient gender is missing                                                                                                                                          | All patients must have a gender indicated.                                                                                                                                                                                | high     | PID -8               |



| Patient gender is invalid or unrecognized                              | The only valid gender codes are M (male), F (female), and UN (unknown/undifferentiated).                                                                                                   | high                              | PID -8                   |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|--------------------------|
| Patient address street, city, state, or ZIP code is missing or invalid | All patient addresses must include a street or a PO Box number, a city, a state abbreviation, and a zip code. ZIP code must be numeric and at least 5 characters in length.                | high                              | PID - 11                 |
| Patient address county/state is invalid or unrecognized                | Only active county codes and state abbreviations are considered valid. The state abbreviation must be the 2-letter United States Postal Service code.                                      | high for state, medium for county | PID 11.9                 |
| <b>Patient Demographic Issue</b>                                       | <b>Warning</b>                                                                                                                                                                             | <b>Severity</b>                   | <b>HL7 segment field</b> |
| Patient SSN is unwanted                                                | Do not enter social security numbers. SSNs are not accepted by the IIS.                                                                                                                    | high                              | PID-3, PID-19            |
| Patient race is missing, invalid, or unrecognized                      | All patients must have a race indicated unless they decline. Only active race codes are considered valid.                                                                                  | high                              | PID -10                  |
| Patient address street is invalid                                      | Address field cannot contain "anywhere, nowhere, address, address 1 or address 2."                                                                                                         | high                              | PID - 11                 |
| Patient address street2 is unwanted                                    | Patient's street address should be entered on one line (e.g., 123 Apple Street Apt A should all be on one line. The "Apt A" piece of the address should not be included on a second line). | high                              | PID - 11                 |
| Patient phone number is                                                | All patients must have a primary contact phone number that is properly formatted (must be 7 or 10 characters).                                                                             | high                              | PID - 13                 |



|                                                              |                                                                                                                                                        |                    |                     |
|--------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------|
| missing or invalid                                           |                                                                                                                                                        |                    |                     |
| Patient immunization registry status is missing              | All patients must have a valid patient status code (e.g.active, inactive, and deceased).                                                               | medium             | PID -16             |
| Patient multiple birth indicator is unrecognized             | The only valid entries are (Y) Yes and (N) No to indicate whether the patient was born as a multiple birth (e.g. twin).                                | high               | PID - 24            |
| Patient birth order is unrecognized                          | Patient birth order must be 1 or higher (e.g., if the patient is part of a multiple birth and was the first born, the birth order for the patient = 1) | high               | PID - 25            |
| Patient birth order and birth indicator are inconsistent     | These values are considered inconsistent if the multiple birth indicator is documented as no and a birth order greater than 1 is documented.           | high               | PID -24 and PID -25 |
| Next of kin first name or last name are invalid              | Name fields can only contain A-Z, a-z, single quote, dash, period, and space. Cannot be a bogus name (e.g., Unknown or Test).                          | high               | NK1 - 2             |
| Eligible for VFC but no guardian was submitted               | All patients younger than 19 must have a guardian listed.                                                                                              | high               | NK1                 |
| Next of kin first or last name are missing                   | All patients younger than 19 must have a guardian first and last name documented.                                                                      | high for pediatric | NK1                 |
| Next of kin relationship is missing, invalid or unrecognized | All patients younger than 19 must have a valid code indicating the guardian's relationship to the patient (e.g., MTH for mother) documented.           | high for pediatric | NK1 - 3             |



| Next of Kin/Guardian SSN is unwanted                     | Do not submit social security numbers. SSNs are not accepted by the IIS.                                                                                                     | high            | NK1 -33            |
|----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
| <b>Vaccine Issue/HL7 segment field</b>                   | <b>Error</b>                                                                                                                                                                 | <b>Severity</b> | <b>HL7 Field</b>   |
| Vaccination date is invalid                              | Dates must be formatted as YYYYMMDD. Any other format is considered invalid.                                                                                                 | high            | RXA -3             |
| Vaccination date is after the lot expiration date        | The date of administration cannot be after the date the vaccine lot expires.                                                                                                 | high            | RXA -3             |
| Vaccination date is after the patient's death date       | The date of administration cannot be after the patient's date of death.                                                                                                      | high            | RXA -3             |
| Vaccination CVX code is missing, invalid or unrecognized | All administered vaccines must include an active CVX code indicating which type of vaccine was given. Inactive CVX codes are only valid for historical immunization records. | high            | RXA-5.1, RXA 5.4   |
| Vaccination CVX and CPT codes are inconsistent           | The CVX and CPT codes must be from the same vaccine group established by the CDC.                                                                                            | low             | RXA-5.1, RXA 5.4   |
| Vaccination information source is missing                | All immunization records must indicate if the vaccine is new or historical.                                                                                                  | high            | RXA - 9            |
| **Vaccination facility ID is unrecognized                | All administered vaccines must include an active facility ID. The facility ID will be considered unrecognized if it does not match any of the                                | high            | RXA 11.1, RXA 11.4 |



|                                                                                                                           | sending organization's active facility IDs.                                                                                                                                                                                                  |                 |                    |
|---------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------|
| Vaccination facility ID is missing or exceeds character limit                                                             | All immunization records must include the facility ID of the clinic that documented the vaccine. The facility ID must be active and must be 25 characters or less. Inactive facility IDs are only valid for historical immunization records. | high            | RXA 11.1, RXA 11.4 |
| <b>Vaccine Issue/HL7 segment field</b>                                                                                    | <b>Warnings</b>                                                                                                                                                                                                                              | <b>Severity</b> | <b>HL7 Field</b>   |
| Vaccination entering organization is missing                                                                              | All administered and historical vaccinations must include the facility ID that documented the vaccine. This must be an active facility ID that matches RXA-11.4.                                                                             | low             | ORC -17            |
| **Vaccination VFC status is missing, invalid or unrecognized                                                              | All administered vaccines must include VFC eligibility status (e.g., Medicaid, insured) of the patient at the time of vaccination. Only active VFC codes are valid.                                                                          | high            | OBX -5             |
| Vaccination funding source is missing, invalid, unrecognized, or VFC eligibility code and funding source are inconsistent | All new immunization records must include a valid funding source code for VFC eligible patients. The funding source must also be consistent with the VFC eligibility status.                                                                 | high            | OBX -5             |



|                                                                   |                                                                                                                                                                                                         |                                    |                  |
|-------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|------------------|
| Patient VFC status is invalid or unrecognized                     | If a VFC status is included in the patient demographics (PV1-20.1), it must be an active code. To comply with HL7 v2.5.1, the VFC status should be sent in a different part of the HL7 message (OBX-5). | high                               | OBX -5           |
| Deferral substance refusal date is missing or invalid             | If a patient refusal reason is documented, a refusal date must be documented in the proper format YYYYMMDD.                                                                                             | medium                             | RXA - 3          |
| Deferral substance refusal date is after the lot expiration date  | The documented refusal date is after the lot expiration date                                                                                                                                            | medium                             | RXA - 3          |
| Deferral substance refusal date was more than 30 days ago         | The documented refusal date is more than 30 days ago.                                                                                                                                                   | medium                             | RXA - 3          |
| Deferral substance refusal date is after the patient's death date | The documented refusal date is after the patient's date of death.                                                                                                                                       | medium                             | RXA - 3          |
| Vaccination CPT code is invalid or unrecognized                   | If CPT codes are submitted, all administered vaccines must include an active code. Inactive CPT codes are only valid for historical immunization records.                                               | medium                             | RXA-5.1, RXA 5.4 |
| Vaccination NDC code is invalid or unrecognized                   | If an NDC code is included, it must be correctly formatted, and match an active NDC code in the IIS.                                                                                                    | medium                             | RXA 5.1, RXA 5.4 |
| Vaccination administered units are missing                        | All new immunization records must contain a unit of measurement (e.g., mL).                                                                                                                             | medium                             | RXA -6, RXA -7   |
| **Vaccination lot is missing, invalid or unrecognized             | All administered vaccines must include a lot number. The lot number must match                                                                                                                          | high for VFC<br>ignore for private | RXA -15          |





|                                                                   |                                                                                                                                                                                  |                                    |         |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|---------|
|                                                                   | an active lot number in the documenting facility's IIS inventory. Inactive lot numbers are only valid for historical immunizations.                                              |                                    |         |
| **Vaccination lot does not match manufacturer code                | The manufacturer (MVX) code submitted must match the manufacturer listed for the lot in the facility's IIS inventory.                                                            | high for VFC<br>medium for private | RXA -15 |
| Vaccination lot does not match expiration date                    | The expiration date submitted must match the expiration date listed for the lot in the facility's IIS inventory.                                                                 | high for VFC<br>medium for private | RXA -15 |
| Vaccination lot expiration date is missing or invalid             | All administered vaccines must include an expiration date formatted as YYYYMMDD.                                                                                                 | high for VFC<br>medium for private | RXA -16 |
| **Vaccination manufacturer is missing, invalid or unrecognized    | All administered vaccines must contain an active manufacturer (MVX) code. Inactive MVX codes are only valid for historical immunization records.                                 | high for VFC<br>medium for private | RXA -17 |
| Deferral substance refusal reason is unrecognized                 | If a patient refusal reason is documented, it must be a valid code (e.g., 00 for parent refusal).                                                                                | medium                             | RXA -18 |
| Vaccination completion status is missing or unrecognized          | All vaccinations must include a valid completion status code. Completion status indicates if the vaccination was successfully administered to the patient.                       | medium                             | RXA -20 |
| Vaccination completion status is inconsistent with refusal reason | The completion status must be consistent with the patient refusal reason documented in RXA-18 (e.g., if a refusal is documented, the completion status should = RE for refused). | medium                             | RXA -20 |



|                                                       |                                                                 |        |        |
|-------------------------------------------------------|-----------------------------------------------------------------|--------|--------|
| Vaccination route is missing, invalid or unrecognized | All administered vaccines must contain an active                | medium | RXR -1 |
| Vaccination site code (e.g., IM for intramuscular).   | Vaccination anatomical site is missing, invalid or unrecognized | medium | RXR -2 |

