

Data Exchange Error Report: FAQs

Q1: I have inventory errors on the data exchange report does that mean I have a data exchange problem?

A1: No. If the data exchange report has informational errors, such as “lot number not found” or “incoming Immunization vaccine lot number has reached a zero-inventory available for deduction” and/or other similar notifications regarding lot number this indicates an inventory management concern. This should be investigated, but this does not necessarily mean that there is a data exchange problem. Data exchange is system-to-system sharing of information between the electronic health record and ALERT IIS, so communication is happening, and data is flowing as expected.

Q2: I need assistance with running or understanding the results produce by this report. What resources are available to me?

A2: Training modules, step-by-step instructions and a report guide is available on the [OIP Training Portal](#) for the data exchange report.

For technical assistance with understanding the data exchange report or with concerns about their data exchange errors, contact the ALERT IIS Data Exchange team directly at: ALERT_DataExchange@odhsoha.oregon.gov.

For assistance with your clinic’s vaccine inventory in ALERT IIS contact the Oregon Immunization Program Help Desk at 800-980-9431 or alertiis@odhsoha.oregon.gov

Q3: What do the report labels “error”, “warning”, and “informational” mean? What are some examples of these?

A3: The next three tabs, labeled ‘Errors’, ‘Warning’, and ‘Info only’ are individual sheets listing details for every error in that category type. Including a description of the HL7 segment where in the message the error was found, appropriate follow-up action, and the name and date of birth of the patient associated with each error message.

The three categories indicate the level of severity of the error and are defined as follows:

- **E (error) level category** – This level indicates that one or several required and essential data elements in the received HL7 message were either missing, not formatted correctly, or violated

an IIS business rule. Messages are rejected entirely by ALERT IIS and data is not added to the patient record. Errors are commonly triggered by HL7 code formation that doesn't comply with ALERT IIS specifications for the part of the message that identifies the patient or describes the vaccine details.

For example, the CVX code for the vaccine doesn't match the English language description of the vaccine. These errors are typically addressed by the technical support team for the EHR. In addition, some technical errors need both the EHR technical support team and the ALERT IIS Data Exchange to work together. Clinic staff are encouraged to report these messages to their EHR technical support team for follow up and resolution.

An example of an error that can be corrected by clinic staff would be an immunization reported as given on a future date. Clinic staff can correct and resend message immediately without the need for technical assistance.

- **W (warning) level category** – Warning errors indicate an issue with a non-essential element in the message, usually due to inaccurate or missing data or the HL7 message format not complying with ALERT IIS specifications. Data in the messages are usually successfully consumed by ALERT IIS, but the messaging format should be addressed for future reporting, if possible.

An example of a warning errors that can be corrected by clinic staff would be “Invalid SSN. SSN either starts with 000 or ends with 0000.” This warning indicates that the Social Security Number, which is not considered an essential data element, is inaccurate within the message sent to ALERT IIS.

- **I (Informational) level category** – Informational errors are the least serious notification and describe where data is inaccurate or could be improved upon. Portions of the data may be ignored but the overall message is consumed by ALERT IIS.

Many of these notifications are related to discrepancies between the vaccine lot number and the vaccine inventory in ALERT IIS. This can result in vaccine doses not deducting from the ALERT IIS inventory as expected. These messages are meaningful for clinics that participate in Oregon's state-supplied vaccine programs and thus use the ALERT IIS inventory for managing state-supplied vaccine as required by the program. Clinic staff can use these informational messages to correct their ALERT IIS inventory as directed by the message.

Q4: What if this report shows that my organization only has a couple of errors or there just isn't very much information on the report?

A4: The data exchange report only includes items where ALERT IIS has generated a notification with one or more of the three severity levels (error, warning or informational) in the returned

acknowledgment message when the HL7 submission was processed. So, if the data exchange report does not have a lot of error messages included that is an indicator of good data quality and there are little to no errors occurring with the being data submitted.

However, if the report only includes the error: “The “SENDING FACILITY” in MSH-4 is not identified as a parent or vendor of the “SENDING RESPONSIBLE ORGANIZATION” in MSH-22” please contact the ALERT IIS Data Exchange team at:

ALERT_DataExchange@odhsoha.oregon.gov.

This error is generated when there is a problem with the configuration for data exchange and data is not being accepted.

Q5: Why don't I see the immunizations and patients I entered through the ALERT IIS website on the data exchange report?

A5: The Data Exchange Report only evaluates HL7 submissions received through data exchange via an Electronic Health Records (EHR) system. The report does not include patients or immunizations that have been manually added through the user interface by an authorized ALERT IIS end user. The Ad Hoc list Report can be used to examine all immunization records received by ALERT IIS whether by manual entry in the ALERT IIS website or by data exchange. When running the Ad Hoc list report, including the filter 'Source of Last Update' will allow you to distinguish which of the two methods was used to enter an immunization record into ALERT IIS.

Q6: Why don't I see all my immunizations reported by data exchange in the Data Exchange Error Report?

A6: If an administered immunization has been submitted and accepted by the ALERT IIS with no error(s) it will not show on the Data Exchange Error Report. The report only provides detailed information for submissions that generated an error, warning, or informational message when processed by ALERT IIS. These submissions should be considered high priority for review. The summary tab of the report will show a complete count of all HL7 submissions within the specified time-period and will be categorized by accepted, rejected, and pending submissions.

Q7: Why do I still see an error message in the Data Exchange Report after I corrected the issue?

A7: The Data Exchange Report summarizes all errors in messages as they were initially sent through electronic data exchange. When a new message is sent to correct an error from a previous submission, if the corrected message is now accurate it will not generate an error, but

the original message that generated the error remains in the report. For this reason, the Data Exchange Error Report should be used as a guide to the errors that have been generated within a given time frame, and not a checklist of errors that are currently present in the data.

Q8: Can my submissions still have problems if they were accepted by the ALERT IIS?

A8: Yes. Message submissions accepted by ALERT IIS may still include errors that render the data incomplete, inaccurate or degrade the quality and function of ALERT IIS data. For this reason, all error, warning, and informational messages should be reviewed and addressed.

Q9: Why are error messages generated for some missing fields and not others?

A9: In the Data Exchange process some data elements are required while others are optional and can be left empty. The Data Exchange Error Report will generate errors regarding missing data for the fields that are required data elements. If non-required data elements are missing, this will not be shown on the report. However, if data is presented in the non-required fields, it will be evaluated and must adhere to the defined IIS business rules or there may be an error generated. For this reason, the Data Exchange Report should be used in conjunction with the Ad Hoc list report to evaluate overall data quality.

Q10: The immunization record I submitted to ALERT IIS was accurate. Why is there an error message?

A10: ALERT IIS cannot distinguish between errors in vaccination reporting (i.e. – clinic staff enters the wrong date of vaccination), clinical practice errors (i.e. – clinic staff gives a dose of vaccine on the wrong date but reports the date given accurately) , and valid events (i.e. - vaccines given at the right time for a patient’s medical history and reported accurately but outside of the standard vaccination schedule timeframe) that deviate from what is expected by the ALERT IIS algorithms that calculate the recommended vaccination schedule. Submissions that are accurate but that generate an error message should not be changed and should always reflect the vaccination event as it occurred, regardless of whether the report generated an error message.

Q11: Why did I get an error message for the lot number I sent, even though it was correct?

A11: If your organization participates in state-supplied vaccine programs, ALERT IIS expects that any vaccine you report will have a lot number that corresponds with a lot number in the ALERT IIS inventory module. If you report a vaccine lot number that is not entered in the ALERT IIS inventory module, or if the lot number you report is associated with a vaccine inventory item that is at zero doses or is set to an inactive status in the inventory module, an informational level error message will be triggered. When the vaccine event is submitted to the ALERT IIS it compares the lot number provided in the HL7 submission against lot numbers in the ALERT IIS inventory module. If there isn't a match to the lot number in the inventory, an informational level error message will be generated to call attention to the fact that no vaccine inventory exists in ALERT IIS for that lot number or can be used (if no quantity is available or lot number is inactive status). ALERT IIS inventory management is required for all organizations that use state-supplied vaccine and real-time inventory management webinar trainings are available on the [ALERT IIS training web pages](#).

Q12: How frequently should I run the Data Exchange Error Report?

A12: Organizations without access to an error report from their Electronic Health Record (EHR) or their own HL7 response messages (passed over through the EHR) are recommended to run this report weekly to ensure that there are no systematic issues preventing accurate and valid submissions from entering the ALERT IIS. Other organizations are recommended to run this report as needed or as an investigative tool. Organizations that submit large amounts of data to the ALERT IIS may wish to run this report on a more frequent schedule.

Q13: The data exchange report has a lot of errors of all three severity levels, should I involve my electronic health system?

A13: Errors on the data exchange report can either mean that there is an issue with the data exchange process or with the data contained in the message that was entered by clinic staff. Error messages are returned to the electronic health system when the HL7 submission is processed by ALERT IIS. Electronic health record administrators and support teams receive these error messages from ALERT IIS and should be monitoring to make corrections in cases where the errors are related to EHR system configuration. As a client of an electronic health system, your organization should also be receiving assistance with any correction and resubmissions from the electronic health record when needed. If in doubt as to whether the errors in the report are related to EHR system configuration or data content entered by clinical staff, contacting your EHR system support is a recommended first step.

Q14: How do I know when I should contact my electronic health record system versus contacting ALERT IIS?

A14: Contact both! The ALERT IIS Data Exchange team is available to help organizations that send data to the ALERT IIS by providing support, answering questions, and troubleshoot any problems or concerns related to the data exchange process. However, the process requires coordination and collaboration with the electronic health record (EHR) system, as the two systems must work together. Organizations that use an electronic health system are highly encouraged to contact their support department when there is a concern. They may also provide the ALERT IIS Data Exchange contact information (ALERT_DataExchange@odhsoha.oregon.gov) to their electronic health system. Both agencies should be involved and work together.