

# **Texas Immunization Registry**

## **Electronic Data Exchange Resource Guide**

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**For All Data Exchange Stakeholders**



**TEXAS**  
Health and Human  
Services

Texas Department of State  
Health Services

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# Objectives

## Data Exchange Stakeholders

This document will assist data exchange stakeholders with the following:

- How to establish a data exchange connection with the registry,
- Understand and perform data exchange activities, and
- Understand the Texas Immunization Provider Summary (TIPS) Report.

## Regional and Local Health Departments

This document will assist Regional and Local Health Departments with the following:

- Identify newly registered organizations with the registry,
- Research the data exchange status of organizations,
- Connect with organizations to:
  - Educate organizations on the benefits of the registry,
  - Explain data exchange,
  - Explain the steps for establishing a data exchange connection with the registry, and
  - Assist organizations with data exchange activities.
- Explain the Texas Immunization Provider Summary (TIPS) Report, and
- Explain the Provider Activity Report (PAR).

## Tools/Resources

Data exchange stakeholders may need the following resources/tools:

- Access to ImmTrac2,
- Access to the Texas Immunization Registry Secure File Transfer Protocol (FTP) Web Transfer Client, and
- Texas Immunization Provider Summary (TIPS) Report.

Regional and Local Health Departments may need the following resources/tools:

- Access to ImmTrac2,
- Provider Activity Report (PAR), and
- Texas Immunization Provider Summary (TIPS) Report.

## Importance of Using the Registry

It is vital for organizations to understand the importance of using the Texas Immunization Registry (TIR) in their workflow and for reporting patient and immunization data through data exchange.

### Benefits of Utilizing the Registry

Using the ImmTrac2 system which is operated by the Texas Immunization Registry (TIR) benefits organizations as it:

- Allows organizations to electronically report patient and immunization information seamlessly,
- May decrease the burden of manual data entry of patient and immunization data into two systems:
  - The organization's electronic health records (EHR) system that can feed the data to the registry, and
  - ImmTrac2.
- Streamlines mandated (state/federal) reporting of patient and immunization information,
- Allows for patient's immunization records to be stored in one-centralized system which stores information securely,
- Assists organizations in providing continuity of care,
- Allows for faster access to patient data, and
- Increases data quality and accuracy.

### Patient Participation in the Registry

The Texas Immunization Registry (TIR) is a lifetime registry, meaning we accept individuals of all ages and their immunization records!

It is highly recommended that organizations identify if patients are registry clients as part of the in-take process, to increase patient participation in the registry statewide.

Does your organization:

- Inform its patients about the state registry and its benefits?
- Use registry publications (posters/pamphlets) in your offices?
- Identify if patients are registered in ImmTrac2?
- Use the most current version of the ImmTrac2 (Registry) Consent Forms?
- Add patients to the registry once they've consented using the appropriate ImmTrac2 Consent Form?

If you answered "No" to any of the above questions, contact the Texas Immunization Registry (TIR) for more information and assistance.

## What is Electronic Data Exchange?

Electronic data exchange is a connection between systems exchanging data with one another. For the purposes of the Texas Immunization Registry (TIR), the electronic data exchange occurs between organizations such as physician's offices, hospitals, and local health departments, utilizing their EHR systems to exchange patient and immunization information to the state registry.

### *Types of Data Exchange Processing*

The registry supports batch data exchange processing:

- A large volume of data is submitted at once to the registry in a single file at a set date and time. Example: ABC Pediatrics submits a file every Saturday containing data from Monday through Friday.
- Typically uses FTP to submit data to the registry.

### *Flow of Data Exchange*

The registry supports unidirectional flow of data exchange:

- Data is moving in a single direction,
- Organization sends data to the registry, and
- Uses FTP.

## Determine Readiness for Data Exchange

Organizations should review and complete the below qualifications to determine if they are ready to establish a data exchange connection with the registry (i.e. completing the registration of intent).

### *Registry Status Qualifications*

1. Ensure the organization's information is up to date with the registry.
  - a. The main headquarters or stand-alone facility is:
    - i. Registered with the registry and the site agreement has not expired; or
    - ii. Renewed (i.e. site agreement) with the registry. Renewals are required every two (2) years or when the local information, including the point of contact for the organization, changes.
  - b. All associated facilities are registered as sub-sites of the main organization (i.e. not as a separate or stand-alone facility) with the registry. If the organization has multiple facilities, each facility that administers immunizations must:
    - i. Be registered with the registry,
    - ii. Have an up to date (i.e. not expired) site agreement, and
    - iii. Be properly linked as a sub-site to the main organization.

- c. Organization's staff have active ImmTrac2 user accounts to login to the registry. Each facility within the organization must have designated staff who have an ImmTrac2 user account.
2. Identify staff at the organization who will be the lead contacts and/or team for establishing and overseeing the data exchange connection with the registry. Identified staff will collaborate with the registry throughout and after the data exchange connection is established. Suggested staff include, but are not limited to, staff who oversee other types of data exchange for the organization, senior or lead clinical staff, subject matter experts, trainers, or IT support staff.

For assistance with ImmTrac2 registrations, renewals or user accounts, contact the TIR Customer Service at 800-348-9158.

### *Data Exchange Qualifications*

1. To engage in electronic data exchange, the organization must have an EHR system that meets the registry standards and requirements.
  - a. The organization, through their EHR system, must submit patient and immunization information in Health Level Seven (HL7) 2.5.1 Release 1.5 files to the registry. Speak with the EHR vendor to confirm the organization's systems are upgraded to send data in this format.
  - b. The organization, through their EHR system, must be able to submit batch immunization files to the registry. Batch files means data is combined into one file that is submitted on a weekly, monthly, or yearly basis. Speak with the EHR vendor to confirm batch HL7 files can be configured.
  - c. The organization's patient and immunization data does not have data quality issues or errors. The organization must take and own responsibility of the patient and immunization data it submits as part of establishing a data exchange connection with the registry.

To ensure the organization is submitting great data quality it must identify any data quality errors and correct them timely.

Speak with the EHR vendor to confirm the organization's systems are configured to the federal and state requirements for data exchange to decrease the likelihood of data quality errors.

**Note:** The registry verifies that the qualifications have been completed prior to establishing a data exchange connection with the organization.

# Establishing a Data Exchange Connection with the Registry

The following steps must be completed by an organization to establish a data exchange connection with the registry.

## Step 1: ImmTrac2 Registration/Renewal Information

Organizations must:

- Have up to date ImmTrac2 renewal agreements for all facilities registered with ImmTrac2 within their organization, and
- Register all facilities not currently registered with ImmTrac2 by completing an ImmTrac2 Site Agreement.

Note: Organizations with expired ImmTrac2 site agreements will not be able to proceed with Step 2: Registration of Intent until the agreements are renewed.

### *How to Register/Renew Information*

Allow 7-14 business days for registration or renewals to be processed by the registry.

#### Registrations

If the organization is not currently registered with ImmTrac2:

1. Go to the ImmTrac2 website - <https://immtrac.dshs.texas.gov>.
2. Click the 'REGISTRATION' tab on the top menu of the site.
3. Click the 'Register' link in the middle of the site to register.
4. Fill in the initial information requested: Email address, and Texas Vaccine for Children (TVFC) Provider Identification Number (PIN) if applicable.
5. Complete the registration form.
6. Sign and submit for approval.

#### Renewals

If the organization is currently registered with ImmTrac2 and the information on file is outdated or expired:

1. Login to ImmTrac2.
2. Click the 'registration/renewal' tab from the top menu.
3. Click the 'Manage Renewals' link on the page.
4. Complete the renewal form.
5. Sign and submit for approval.

## Step 2: Registration of Intent

The registration of intent (ROI) allows organizations to inform the registry of their readiness to begin to data exchange. It is accessible through ImmTrac2 and must be submitted by users associated to the main headquarters (aka parent organization) or stand-alone facility. After being received by the registry, the ROI is processed within 2-5

business days, and the organization will receive an *Invitation to Onboard* (via email) with instructions for establishing connectivity and testing requirements with the registry.

### *How to Complete the ROI*

1. Login to ImmTrac2.
2. Click the 'registration/renewal' tab from the top menu.
3. Click the 'Registration of Intent' link from the options listed under the Manage Registration/Renewal information.
4. Respond to the questions.
  - Once the initial two questions have been responded to, additional questions will appear.
  - Select the method the organization will report data to the registry.
  - Select the EHR vendor and software used by the organization.
  - Add staff who will be the lead contacts and/or team for establishing and overseeing the data exchange connection with the registry.
  - Select how often the organization will submit data to the registry.
  - Review the organization information that is on file with the registry to ensure all the facilities are listed and accounted for.
5. Complete the ROI by clicking the 'Submit' button.

### Step 3: Gaining Access to Registry Data Exchange Methods

As part of establishing a data exchange connection with the registry, the organization is provided access (data exchange credentials) to the registry's data exchange methods which are used to send and receive data. The data exchange credentials are also known as FTP credentials.

The organization's point of contact, as indicated in ImmTrac2:

- Receives the data exchange credentials in a secure email, and
- Is responsible for sharing the data exchange credentials with the organization's EHR vendor.

#### ***Important Information***

*Data exchange credentials are:*

- *Completely different from the individual ImmTrac2 user accounts,*
- *Assigned to the registered organization, not an individual user, and*
- *To only be shared with persons responsible for establishing electronic connectivity between the organization and the registry, as authorized by the registered organization.*



## *Data Exchange Credentials – Password Changes*

If a password has been potentially compromised or an organization ceases to have a relationship with an EHR vendor, the organization must notify the Interoperability Team at ImmTrac immediately of these changes. The organization must also change the FTP password to ensure the security of the account.

In addition, FTP credentials are considered “Service Accounts” in which passwords do not expire and are not required to be changed. However, it is highly recommended that organizations work with their IT department and/or their EHR vendor to coordinate regular password changes.

Refer to the [\*\*How to Change the FTP Password\*\*](#) section of this guide on how to change the FTP password.

## *FTP Information*

The organization’s point of contact receives a secure email containing the organization’s assigned FTP information.

- FTP Username
- FTP Password
- Import Code
- Texas Immunization Information System (TX IIS) Identification (ID)
- FTP Specifications

## **Step 4: Testing**

The registry requires all organizations to perform and pass testing to ensure the data exchange is configured to state standards. Organizations should use test patients while testing the data exchange connection. Any data submitted during testing is not imported to the registry. If real patient data is sent it will not be imported and must be resubmitted once in production. Organizations must submit a batch test HL7 file every 30 days until they are promoted to production.

## *Organization’s Responsibilities for Data Exchange*

While in test, the organization must:

- Submit test files,
- Review the registry’s generated data quality reports on the submitted test files,
- Correct all data quality errors or issues,
- Submit subsequent test files verify that data quality error or issues were corrected, and
- Take and own responsibility of the patient and immunization data it submits as part of establishing a data exchange connection with the registry.

## *Testing Requirements*

### **Testing Phase 1: Connecting to the Registry**

- Connectivity test to ensure the organization properly uses the data exchange credentials to connect to the registry.
- Once successfully connected, the organization must perform user acceptance testing (UAT) of the patient and immunization information.

### **Testing Phase 2: User Acceptance Testing**

Organizations must submit at least three to five consecutive error free batch HL7 files. Failure to submit files within the 30-day time frame may result in removal from the data exchange process.

Files must be submitted using the required file naming convention: ImportCodeYYDDD.hl7

- Import Code – represents the provider and identifies the source of the file and is assigned by the registry.
- YY – identifies the two-digit calendar year.
- DDD – identifies the three-digit Ordinal Date of the date the file is submitted to the registry.
  - Example: February 4 ordinal date is 035.
  - Ordinal dates can be found here:  
[https://www.pps.noaa.gov/forms\\_guides/guides\\_aids\\_tools/julian-date-calendar.PDF](https://www.pps.noaa.gov/forms_guides/guides_aids_tools/julian-date-calendar.PDF)
- .hl7 – is the file extension.

#### Example of File Name

ABC Doctors assigned import code is ABCDOC and they are submitting a file on February 4, 2019. Their file is named: ABCDOC19035.hl7

### *How to Complete Batch File Testing*

1. Submit batch HL7 file containing patient and vaccination information.
2. Receive an acknowledgement email from the Texas Immunization Registry indicating the file was received. All staff added during the ROI for establishing and overseeing the data exchange connection will receive the acknowledgment email when a file has been sent to the registry.

3. File is analyzed by the registry for any issues.
  - a. Various stages of analysis are performed to identify any issues with the file:
    - i. Name
    - ii. Structure
    - iii. Contents - such as organization, patient or immunization information
  - b. If there is a major issue with the file, it will not be processed, and an email notification of a fatal error will be sent. Fatal errors include issues with the file naming convention, file structure or file containing no data. The fatal error(s) need to be addressed by the organization and their EHR. Once the fatal error(s) is addressed, start these steps over.
  - c. The registry no longer sends email notifications about errors for the contents within the batch file.
  - d. It is the responsibility of the organization to work with their EHR vendor on the review, correction and resubmission of the files to the registry.
4. File is processed. Files are typically processed within two business days of receipt.
5. Data quality reports are generated. The registry produces reports for the organization to review to identify data quality issues which include:
  - a. Error files; and
  - b. Consent notification files (CNF).
6. Organization and EHR review the data quality reports. These reports are found in the FTP account. If the error identified by the registry is a client, message or immunization rejected error the data did not get imported to the registry. Refer to the [Reviewing Data Quality Reports](#) section of this guide for more details on these reports.
7. Organization and EHR make corrections to data.

The organization and EHR repeats these steps aiming for files returned with no errors; and must achieve three to five (consecutive) error-free HL7 files to be considered for promotion to production.

## Step 5: Production

Once the organization has successfully met testing requirements, they will receive an email notification from the Texas Immunization Registry (TIR) regarding their promotion to production. The email contains instructions and requirements for ongoing data submission to the registry.

### ***Important Information***

*All data submitted after being promoted to production is processed as live. Organizations are required to submit data in accordance with their submission agreement during the registration of intent process (e.g. weekly, bi-weekly, monthly, annually or real-time). Organizations changing vendors and/or desiring to test while in production must contact the Interoperability Team for guidance and support. No additional connectivity or delivery changes are required.*

### *Historical Data*

Historical data is patient and immunization data that is contained within the EHR system for an organization and has not yet been shared with the registry. Organizations are encouraged to submit historical data to the registry. These questions will be asked by the registry when considering historical data submissions:

- Does your EHR support the submission of historical data?
- Does your EHR have limitations (i.e. can only submit 90 days back) for historical data?
- Will the organization submit historical data to the registry?
- Will the historical data be submitted prior to production data?
- What date range (i.e. how far back) will be included in the historical data?

Coordinate with the Interoperability Team for submission of historical data.

## Step 6: Ongoing Submission of Data

Organizations must utilize the data quality reports (dqa-reports and consent notification files provided to the them by the registry to meet the organization's responsibilities for data exchange.

### *Organization's Responsibilities for Data Exchange*

An organization in production must:

- Submit patient and immunization data regularly;
- Regularly review the registry's generated data quality reports for data;
- Correct any data quality errors or issues timely; and
- Take and own responsibility of the patient and immunization data it submits.

## Data Exchange Related Activities

The information in this section will assist organizations with data exchange related activities and improving their registry usage by explaining the following:

- Add patients as registry clients,
- Add immunizations,
- FTP account and processes, and
- Reviewing data quality reports.

### Add Patients as Registry Clients

The process of adding patients as registry clients is known as affirming consent or affirmation of registry consent. The organization should identify if patients are registered in ImmTrac2 prior to distributing the official registry consent form to add patients as registry clients.

#### **Important Information**

*State legislation requires individuals to give their written permission (via an official registry consent form) for their personal and immunization information to be stored in the registry. Parents or the legal guardian of a minor sign the registry consent form. Once the minor comes of age (18 years old) they must sign an adult registry consent form to maintain their information in the registry.*

*Once signed, the registry consent form is retained by the organization and saved in the patient's medical record. It is the responsibility of the organization to store and retain all original signed registry consent forms. These forms must never be sent (mail/fax) to the registry.*

#### *How to Add Patients as Registry Clients*

The below steps are a high-level explanation of how organizations add patients as registry clients. These steps are not all encompassing.

- Educate the patient on the benefits of the Texas Immunization Registry (TIR).
- Offer the patient the official registry consent form.
- Patient fills out and signs the official registry consent form. Consent to the registry is optional, not required. If signed, the signed registry consent form is archived in the patient's medical records.
- Add patients to the registry who have consented to be registry clients (*i.e. signed the official registry consent form*). There are two ways to add patients as registry clients:
  - Manual data entry into ImmTrac2. Video-based training is available under Instructional Videos for ImmTrac2 Users at <https://www.dshs.texas.gov/immunize/immtrac/User-Training/>. The video is titled "Adding Clients and Affirming Consent."

- Electronic entry through a data exchange connection. An EHR vendor is used to send data to the registry. More information on this method is provided in the [\*\*\*Adding Patients Through Data Exchange\*\*\*](#) section that follows.

Once added, the registry provides the organization the patient's ImmTrac2 Client ID. Organizations should store the ImmTrac2 Client ID in the patient's medical record.

### *Adding Patients Through Data Exchange*

Organizations use their EHR vendor to send registry consent to the registry with affirmation of registry consent files. These files are flat (non-hl7) files.

Registry consent is different from other types of consent that may be captured in an organization's EHR. The organization must contact the Interoperability Team for information on:

- How to determine if their EHR can differentiate registry consent from other types of consent, and
- The required affirmation of registry consent file specifications, known as the Electronic Standards for Affirmation of Registry Consent.

### *File Naming Convention*

The affirmation files must be named following this naming convention:  
Affirm.ImportCodeYYDDD.imp

- Affirm – represents that the file is an affirmation of registry consent.
- ImportCode – represents the provider and identifies the source of the file. The import code is assigned by the registry.
- YY – identifies the two-digit calendar year.
- DDD – identifies the three-digit Ordinal Date of the date the file is submitted to the registry. For example: February 4 ordinal date is 035. Ordinal dates can be found here: [https://www.pps.noaa.gov/forms\\_guides/guides\\_aids\\_tools/julian-date-calendar.PDF](https://www.pps.noaa.gov/forms_guides/guides_aids_tools/julian-date-calendar.PDF)
- .imp – is the file extension.

### *Data Quality Reports for Affirmation Files*

For affirmation of registry consent files, the data quality reports are the:

- Response file
  - Identified by the file extension ".response.txt".  
For example: *AFFIRM.ImportCode19001.response.txt*
  - Provides details on the data quality errors, and
  - Provides a summary of the number of patients:
    - Processed,
    - Accepted (new or updated),
    - Rejected, and
- Pending.  
Consent Notification Files (CNF)
  - Identified by the file extension ".cnf.txt".  
For example: *AFFIRM.ImportCode19001.cnf.txt*

- Provides the:
  - Registry client identification number, known as the ImmTrac2 Client ID, for patients added as registry clients or for patients who already exist as registry clients,
  - Patient demographics for the patients added or updated, and
  - Registry client indicators for each patient within the file in front of the patient's address.
- The consent notification files (CNF) for affirmations of registry consent are slightly different than the consent notification files (CNF) for HL7 batch files.

### *How to Resolve Data Quality Errors for Affirmation Files*

The below steps explain the processes organizations must follow for submitting and resolving any data quality errors that resulted while adding patients as registry clients through data exchange.

1. Submit an affirmation of registry consent file to the registry via FTP.
2. File is analyzed and processed by the registry to identify any issues.
3. Data quality reports are generated in the 'Receive' folder of the FTP account.
4. Organization and EHR review the affirmation of registry consent related data quality reports.
5. Open the affirmation response file (*For example: AFFIRM.ImportCode19001.response.txt*) to identify patients who were:
  - a. **Added as registry clients** by reviewing the DESCRIPTION table, specifically the row labeled as **New**. See *Figure 1 – New Patients Added* which shows that two of three patients submitted were added as registry clients.

***** FILES RECEIVED BY ImmTrac2 *****		
DESCRIPTION	CLIENT	IMMUNIZATION
Processed	3	0
Accepted	2	0
New	2	0
Updated	0	0
Already in ImmTrac2	0	0
Rejected	0	0
Pending	1	0

*Figure 1 - New Patients Added*

In the DETAIL portion of the response file, go to the "CLIENTS THAT WERE ACCEPTED, THOUGH HAD ONE OR MORE OPTIONAL FIELDS THAT WERE INVALID" section to identify data quality issues with these clients.

- b. **Already registered clients** by reviewing the DESCRIPTION table, specifically the row labeled as **Updated**. See *Figure 2 – Updated Registry Clients*, which shows an example file where one of the three patients submitted was an existing registry client so updates to that patient’s registry record were made.

```
*****
** FILES RECEIVED BY ImmTrac2
*****
```

DESCRIPTION	CLIENT	IMMUNIZATION
Processed	3	0
Accepted	2	0
New	1	0
Updated	1	0
Already in ImmTrac2	0	0
Rejected	0	0
Pending	1	0

*Figure 2 - Updated Registry Clients*

For updated registry clients, there is no information in the DETAIL portion of the response file.

- c. **Rejected as registry clients** by reviewing the DESCRIPTION table, specifically the row labeled as **Rejected**. See *Figure 3 – Rejected Patients*, which shows an example file where one of the three patients submitted was rejected.

```
*****
** FILES RECEIVED BY ImmTrac2
*****
```

DESCRIPTION	CLIENT	IMMUNIZATION
Processed	3	0
Accepted	1	0
New	1	0
Updated	0	0
Already in ImmTrac2	0	0
Rejected	1	0
Pending	1	0

*Figure 3 - Rejected Patients*

In the DETAIL portion of the response file, go to the “CLIENTS THAT WERE REJECTED” section to identify the data quality errors with these patients.



- d. **Flagged as a questionable match** by reviewing the DESCRIPTION table, specifically the row labeled as **Pending**. See *Figure 4 – Pending Client*, which shows an example file where one of the three patients submitted was pended.

***** FILES RECEIVED BY ImmTrac2 *****		
DESCRIPTION	CLIENT	IMMUNIZATION
Processed	3	0
Accepted	2	0
New	2	0
Updated	0	0
Already in ImmTrac2	0	0
Rejected	0	0
Pending	1	0

*Figure 4 - Pending Client*

In the DETAIL portion of the response file, go to the “CLIENTS THAT ARE PENDING” section to identify the data quality issues with these clients.

To resolve pending clients (i.e. questionable matches):

1. Contact the registry’s Interoperability Team.
  2. Provide the filename and patient in question.
  3. A review of the patient information is performed to determine if a client ID merge or unpending of the clients is needed. If the questionable matches are unique clients, they must be upended. Client ID merges and unpending of clients are performed by registry staff only.
  4. Client ID merge or unpending of the clients is completed.
  5. Resubmit the patient and immunization data to have it processed again.
6. Open the affirmation Consent Notification File  
(Ex: *AFFIRM.ImportCode19001.cnf.txt*) to identify the ImmTrac2 Client ID for patients added as registry clients. Refer to the [\*\*\*How to Review the Consent Notification File \(CNF\)\*\*\*](#) section of this guide for more information on where to locate the ImmTrac2 Client ID in the Consent Notification File.
7. Organization and EHR make corrections for the patients found having data quality issues and errors.
  8. Resubmit the corrected data to the registry for reprocessing. Remember the file name must be unique.
  9. Repeat these steps for each file submitted.

## Add Immunizations

There are two ways to add immunization information, whether recently administered (new) or historical, to the registry. Immunization information can only be added for patients who are registry clients.

1. Manual data entry into ImmTrac2

Video-based training is available under Instructional Videos for ImmTrac2 Users at <https://www.dshs.texas.gov/immunize/immtrac/User-Training/>. The videos are titled Managing Immunizations and Adding Immunizations.

2. Electronic through a data exchange connection

Uses an EHR vendor and software to send data to the registry. More information on this method can be provided by the registry's Interoperability Team.

## File Transfer Protocol Account Overview

The registry's FTP is a tool that allows for organizations to store, share and review data between the organization and the registry.

### *Account Access*

The FTP account is created by the registry and has an associated username and password used to access the account. The FTP username and password are emailed securely to the organization's point of contact. The organization's point of contact must share this information with staff who are responsible for data exchange:

- Within their organization, and
- At the organization's EHR vendor.

### *FTP Account Folders*

The FTP account contains folders within it to allow for sharing of data. The folders are: accepted, dqa-report, hl7-dropoff and receive.

#### Accepted

This folder contains an archive of all files submitted by the organization to the registry.

#### DQA-report

This folder contains DQA reports for the files uploaded by the organization. The DQA report contains an analysis of the data within each file and identifies data quality issues (also known as errors) that require the organization to address and fix.

The analysis may contain various types of errors such as informational or rejection errors.

- Informational errors identify areas that needs to be updated or corrected to improve data quality. The informational error does not prevent data from being imported to the registry.

- Rejection errors identify areas that are required to be updated to ensure the information reported is imported to the registry. Rejection errors prevent data from being imported to the registry. The registry identifies client, message and immunization rejected errors.

#### *HL7-dropoff*

This folder is used to upload patient and immunization data from the organization to the registry using health level seven (HL7) files.

#### *Receive*

This folder contains the files returned to the organization from the registry after the patient and immunization data is imported or validated by the registry.

- The Consent Notification File (CNF) identifies whether the patient reported is a registry client or not with the use of the registry consent indicator. The Consent Notification File (CNF) is the most important file within the folder.
- The HL7 response file contains a raw analysis of the data submitted by the organization.
- The affirmation of registry consent response file contains details on the data quality errors identified and a summary of the number of patients submitted.

## FTP Processes

### *Accessing the FTP Account Online*

The FTP account can be accessed one of two ways: Online at the registry's FTP website, or by a third-party application installed on computers.

#### *How to Access the Registry's FTP Website*

1. Go to the Texas Immunization Registry (TIR) Secure FTP Web Transfer Client link: <https://immtrac-ftp1.dshs.texas.gov/ThinClient>.
2. Enter in the assigned FTP Username and Password and click the 'Login' button. The organization's point of contact was previously emailed the login information and is responsible for keeping the information secure.
3. Once successfully logged in, the Home page of the FTP account and FTP folders are viewable.
4. To log out, select the 'Logout' link located at the top right of the website.

#### *How to Change the FTP Password*

The FTP password must meet the below requirements when creating a new password, including changing the password:

- Minimum of eight characters long;
- Include two numbers; and
- Include one special character.

## Instructions:

1. Select the 'Change Password' link located at the top right of the website.
2. The Change Password information is displayed allowing the change for the password to take place.
3. The FTP Username is pre-populated in the 'Username' field.
4. Enter in the current FTP password in the 'Old Password' field.
5. Enter in the new FTP Password in the 'New Password' field.
6. Enter in the new FTP Password in the 'Re-enter new Password' field.
7. Click the 'OK' button to finalize the changing of the password.

You are returned to the Home page and the password is changed successfully.

## *Password Resets*

An FTP password reset should be requested when:

- The FTP password is not known;
- There has been a change in the EHR vendor; or
- There has been a change in the point of contact for the organization.

FTP password reset requests are made by contacting the registry's Interoperability Team. Resets are only processed if the organization's point of contact confirms or approves the request.

## *Uploading Files*

Organizations can upload files only in the **hl7-dropoff** folder. The FTP account displays an error stating permissions do not exist and to contact the administrator when uploads occur in other folders. Please see the following sections of this guide for the required file naming convention for:

- HL7 files - [Testing Phase 2: User Acceptance Testing](#) section, or
- Affirmation files - [Adding Patients Through Data Exchange](#) section.

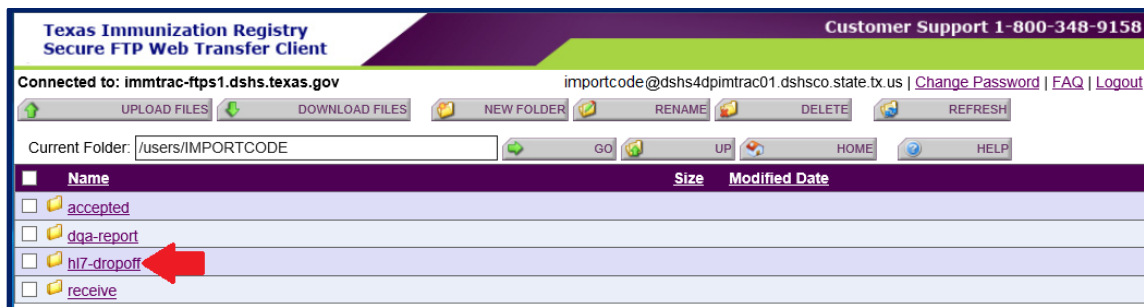
### ***Important Information***

- File size capacity is 25 megabytes per file.
- Files names must be unique to not be flagged as a duplicate file.
- If a file needs to be resubmitted or if more than one file must be submitted simply add an alphabet letter after the ordinal date (DDD).
- Files are considered invalid and rejected from processing if:
  - Not submitted with the correct file naming convention, or
  - Marked as a duplicate file – files with the same filename.

An example of a resubmitted file name is: \_ABC Doctors identified issues with the file ABCDOC19035.hi7 and need to resubmit the file with corrections. They upload the revised file as ABCDOC19035A.hi7.

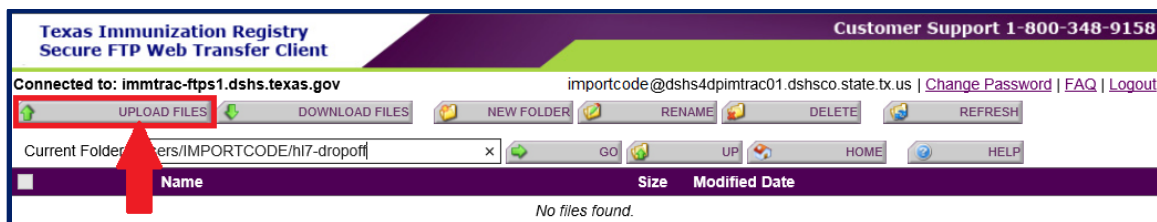
### How to Upload Files to the FTP Website

1. Once logged into the TIR's Secure FTP Web Transfer Client, select the 'hi7-dropoff' folder. See *Figure 5 - Logged into FTP Account*.



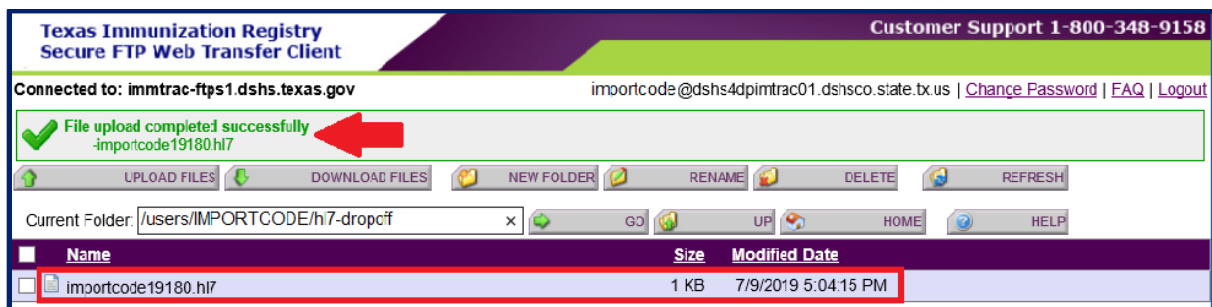
*Figure 5 - Logged into FTP Account*

2. Once this folder is open select the tab titled 'Upload Files'. See *Figure 6 - Upload Files button in the hi7-dropoff folder*.



*Figure 6 - Upload Files button in the hi7-dropoff folder*

3. The 'Upload Files' information is displayed, select the 'Browse...' button to browse the computer to locate the desired file(s)
4. Once the file is selected, click the 'Upload' button.
5. The file is uploaded to the hi7-dropoff folder. See *Figure 7 - File Successfully Uploaded*. A successful upload message is displayed on the screen.



*Figure 7 - File Successfully Uploaded*

## Reviewing Data Quality Reports

For the organization to meet its responsibilities set forth by the registry for data exchange they must complete the processes described in the following sections. The processes explain how to review and process the data quality reports generated by the registry for the organization. Data quality reports are available three to five days after a file is submitted.

### Error Files

The error files are found in the **DQA-Report** folder of the FTP account and must be used to find and correct errors within the organization's files identified by the registry.

Recall the dqa-reports contain various types of errors such as informational or rejection errors.

- Informational errors identify areas that need to be updated or corrected to improve data quality. The informational error does not prevent data from being imported to the registry.
- Rejection errors identify areas that are required to be updated that would otherwise prevent data from being imported to the registry. The registry identifies client, message and immunization rejected errors. A client rejected error is related to the patient information and results in the patient and immunization information being rejected.

### How to Review Error Files

1. Log in to the Texas Immunization Registry (TIR) Secure FTP Web Transfer Client: <https://immtrac-ftp1.dshs.texas.gov/ThinClient>.
2. Select the 'dqa-report' folder.
3. Once open, a list of the dqa-reports for the files submitted by the organization are visible. See *Figure 8 - DQA Report File*. The dqa-reports are identified by their file extension ".hl7.Report.txt".

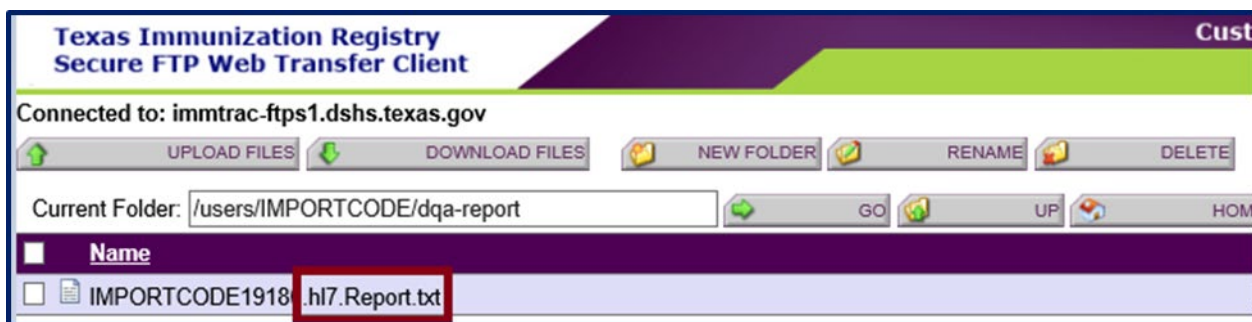


Figure 8 - DQA Report File

4. Select a dqa-report file to review errors identified by clicking the filename.
5. A pop-up window appears asking to open or save the file. Click the 'Open' button to review the file. To retain a copy of the dqa-report file, click the 'Save' button and then click the 'Open folder' button to locate where the file was saved.
6. Open the file using Notepad.
7. Review the file to identify errors which are located at the bottom of each message (block of data) with asterisks (\*\*). Example of error -  
Error: Client Rejected \*\* CLR-103::Client rejected. Client Identifier Type of PI or PN or PRN or PT required.
8. Review the errors and contact your electronic health records vendor for resolving the errors. If the error is a client, message, or immunization rejected error, then the data in the effected message did not get imported to the registry. Error data must be resubmitted to the registry after its corrected by the EHR and organization.
9. Make corrections to the data in the EHR.
10. Resubmit the corrected data to the registry for reprocessing. Remember the file name must be unique.
11. Repeats these steps for each file submitted.

### *Consent Notification File (CNF)*

Organizations must review the Consent Notification Files located in the '**Receive**' folder to identify whether the patient is a registry client or not. In addition, the Consent Notification File (CNF) is used to find and correct errors with the registry client indicator of a patient. The Consent Notification File contains registry client indicators which assist to identify if the:

- Immunization information reported by the organization was imported in the registry,
- Patient is a registry client,
- Patient is not a registry client, and
- Patient might be a registry client, but the registry cannot determine this without human intervention.

### **Registry Client Indicators**

The Consent Notification File (CNF) contains the registry client indicators for each patient within the file in front of the patient's address.

The registry client indicators are:

- **Y** – meaning “Yes” the patient was found in the registry as a registry client and immunizations reported by the organization for the patient were imported.
- **N** – meaning “No” the patient was not found in the registry as a registry client and immunization reported by the organization for the patient were not imported.
- **Q** – meaning the patient was flagged as a “Questionable Match” due to registry client data like the patient data reported by the organization was identified. The system cannot determine if the registry client found is a true match for the patient, therefore, human intervention and updates are required. Immunization reported by the organization for the patient were not imported.

#### *How to Review the Consent Notification File (CNF)*

1. Log in to the TIR’s Secure FTP Web Transfer Client:  
<https://immtrac-ftp1.dshs.texas.gov/ThinClient>.
2. Select the ‘receive’ folder.
3. Once open a list of files are visible. The consent notification files are identified by their file extension “.cnf.txt”.
4. Select a Consent Notification File (CNF) to review by clicking the filename.
5. A pop-up window appears asking if you want to open or save the file. Click the ‘Open’ button to review the file. If you want to retain a copy of the file, click the ‘Save’ button and then ‘Open folder’ to locate where the file was saved.
6. Open the file using Notepad.
7. Review the file to identify the consent information for the patients as shown in *Figure 9 - Example of a Consent Notification File (CNF)*.

C	147893215	CHRISTMAS	NICHOLAS	A	MW	20180418	Y1236	HISTLETOE LANE
C		BUNNY	EASTER		MW	20100728	N2007	CHOCOLATE
C		SHAMROCK	PATRICK		MW	20121105	Q1807	EDEN DR

*Figure 9 - Example of a Consent Notification File (CNF)*



- a. If the patient was:
  - i. Found in the registry, the ImmTrac2 Client ID is listed before the patient's name and the registry client indicator "Y" is found in front of the patient's address. Save the ImmTrac2 Client ID in the patient's medical record.
  - ii. Not found in the registry, there is no ImmTra2 Client ID listed and the registry client indicator "N" is found in front of the patient's address.
  - iii. Flagged as a questionable match, there is no ImmTra2 Client ID listed and the registry client indicator "Q" is found in front of the patient's address.
8. Resolve the patients flagged as questionable matches.
  - a. Contact the registry's Interoperability Team.
  - b. Provide the filename and patient in question.
  - c. A review of the patient information is performed to determine if a client ID merge or unpending of the clients is needed. If the questionable matches are unique clients, they must be upended. Client ID merges and unpending of clients are performed by registry staff only.
  - d. Client ID merge or unpending of the clients is completed.
9. Resubmit the patient and immunization data to have it processed again.
10. Repeat these steps for each file submitted.

# Texas Immunization Provider Summary (TIPS)

## Overview

Each registered organization with the Texas Immunization Registry receives a Texas Immunization Provider Summary (TIPS) Report. This report contains an organization's summary of user activity, online activity, and data exchange activity (if applicable) for the previous month.

## Contents of the Texas Immunization Provider Summary (TIPS) Report

Each item in the Texas Immunization Provider Summary (TIPS) Report is described in the Texas Immunization Provider Summary (TIPS) Guide under IQIP Resources at <https://www.dshs.texas.gov/immunize/immtrac/User-Training/>.

## Regional and Local Health Departments

The information in the following sections pertains strictly to Regional and Local Health Departments.

### Provider Activity Report (PAR)

#### Overview

The Provider Activity Report (PAR) is generated at the beginning of the month and reflects data for the previous month. The Provider Activity Report is used by local and regional health department staff to assist organizations with various registry related items. For the purposes of this guide, we will be focusing on the data exchange related registry items.

#### **Important Information**

The Provider Activity Report Quick Guide offers additional information on the Provider Activity Report not covered in this guide.

#### *Inactive Providers*

Identify providers who are registered with the registry but have inactive users by performing these steps:

1. If the **% Active Users** is less than 75%:
  - a. Contact the provider for additional support and training.
  - b. Provide support and training on how to use the registry website and ensure all necessary clinical staff are trained.
2. If the provider's **Number of Active Provider Supervisors** is zero:
  - a. Contact the provider for additional support and training.
  - b. Provide support and training on how to use the registry website and ensure all necessary clinical staff are trained.

#### *How to Support and Train Inactive Providers*

Inform providers who are inactive that:

- Video-based trainings on how to use ImmTrac2 are found under Instructional Videos for ImmTrac2 Users at <https://www.dshs.texas.gov/immunize/immtrac/User-Training/>, and
- ImmTrac Program Outreach Specialists (IPOS) can provide on-site trainings to their organization for free.
  - To setup up on-site training the provider must contact their local or regional health department.

## *Newly Registered Organizations*

Identify providers who are newly registered with the registry by performing these steps:

1. Review the organization's **Site Registration Date** column.
2. If the site is registered within the reporting period, contact the organization for additional support and training.
3. Connect with the organization.
4. Provide support and training on how to use the registry and ensure all necessary staff are trained.

## *Connecting with Organizations*

During your interactions with organizations use the subsequent information to help them understand:

- Ways to improve patient's participation with the registry,
- The benefits of utilizing the registry,
- What is electronic data exchange,
- Determine readiness for data exchange, and
- The steps for establishing a data exchange connection with the registry.

## *Ways to Improve Patient Participation in the Registry*

- Strongly recommend that the organization identify whether patients are registry clients as part of the patient in-take process.
- Stress the importance of the registry in helping patients keep track of their records.
- Review the [\*\*Add Patients as Registry Clients\*\*](#) section of this guide with the organization.
- Review and teach the organization how to search for patients using the Client Smart Search feature in ImmTrac2.

## *Support and Training for Newly Registered Organizations*

Complete the following items with the organization:

1. Ask the organization to review their patient in-take processes with you to identify ways to improve patient participation in the registry.
2. Use the information included in the [\*\*Importance of Using the Registry\*\*](#) section of this guide to:
  - a. Explain the benefits of utilizing the Registry,
  - b. Explain what electronic data exchange is, and
  - c. Determine the organization's readiness for data exchange.

3. Identify if the organization is interested in establishing a data exchange connection with the registry. Ask if:
  - a. They have an EHR system,
  - b. Their EHR can send immunization data electronically, and
  - c. They are interested in establishing a data exchange connection with the registry.
4. Explain how to establish a data exchange connection with the registry by referring to the **[Establishing a Data Exchange Connection with the Registry](#)** section of this guide.
5. Review and teach how to use ImmTrac2:
  - a. Log into ImmTrac2,
  - b. Search for clients,
  - c. Update client demographics,
  - d. Add new clients,
  - e. Add or edit immunization information, and
  - f. Run and/or view reports.
6. Explain to organizations that video-based trainings on how to use ImmTrac2 are found under Instructional Videos for ImmTrac2 Users at <https://www.dshs.texas.gov/immunize/immtrac/User-Training/>. IPOS can provide on-site trainings to their organization for free.

## Identifying Data Exchange Status

To determine if the organization has begun the initial step for establishing a data exchange connection (i.e. submitted the ROI) with the registry:

- Log into ImmTrac2,
- Soft access into the organization (only modified access sub-state users will have this ability),
- Once soft accessed in, select the 'registration/renewal' tab from the top menu,
- Select the 'Registration of Intent' link from the options listed under the Manage Registration/Renewal information, and
- If the organization has:
  - Completed the registration of intent, the system will indicate that the organization has previously submitted a registration of intent.
  - Not completed the registration of intent, the system will display two questions.

It is best to focus your efforts on organizations who have not completed the registration of intent to assist them in establishing a data exchange connection with the registry. For information on how to assist organizations reference the **[Establishing a Data Exchange Connection with the Registry](#)** section of this guide.

## Registry Contact Information

For more information and support with data exchange, contact the Texas Immunization Registry Interoperability Team.

Email: [ImmTracMU@dshs.texas.gov](mailto:ImmTracMU@dshs.texas.gov)

Phone: 800-348-9158, press option 3

Website: <https://www.dshs.texas.gov/immunize/immtrac/>