The TIMELINE OF THE NDIIS shows the evolution of the system:

- 1988: NDIIS immunization database first created.
- 1996: NDIIS upgrade.
- 2001: Fully web-based system.
- 2010: Forecaster and Reminder/Recall added.
- 2011: First provider EHR connected.
- 2012: Vaccine ordering added.
- 2013: NDIIS upgrade.
- 2014: Vaccine de-duplication & vaccine returns and wastages added.
- 2016: Enhanced client de-duplication.
- 2017: School module added.
- 2020: NDIIS updates for COVID pandemic response.
- 2021: Forecaster upgrade.
- 2022: NDIIS dose data entry change.

What does NDIIS look like now?

- There are more than 2 million patient records in the NDIIS.
- There are more than 19 million dose records in the NDIIS.
- There are more than 5,000 active NDIIS users.
- Lifespan system.
- 100% of adults in NDIIS.
- Mandatory reporting requirement for kids 18 and younger.
- 90% of doses entered within 30 days.
- 91% entered within 1 day.
- 471 individual provider sites submitting data via HL7.
- 75% connected through statewide HIE.
- 100% submitting data real-time.
- 86% fully bi-directional.
- 80% of data comes in electronically.

There are more than 19 million dose records in the NDIIS.
**NDIIS ACCESS AND LOGGING IN TO THE NDIIS**

**WHAT’S AVAILABLE**
- New users submit the Individual Request for Access form
- Site Administrator receives email from NDIIS Support Services to approve user
- If user is approved by Site Administrator, assigned usercode unique to NDIIS

**LOGGING IN TO NDIIS**

**WHAT’S COMING**
- All NDIIS users will login using an email address
- Usercodes will no longer be assigned
- New users will create their own NDIIS account and then request access to their provider site
- Site Administrator will still approve new users
- Users will be able to manage their own accounts (reset password, update name and email, etc.)

**IMPORTANT DATES TO REMEMBER**

- **March 14th**: Individual Request for Access form will be unavailable and there will be a temporary freeze on setting up new NDIIS users.
- **March 21st**: No changes can be made to current NDIIS user accounts.
- **March 24th**: NDIIS login will change from current usercode to email addresses.
- **March 28th**: Temporary freeze on new users will be lifted.

Additional details will be provided – watch your emails!
NDIIS BULLETIN BOARD

- Please watch the NDIIS bulletin board when you log in
- Important updates will be posted on the bulletin board
- New bulletins will pop up the first time users log in after it is posted

IMMUNIZATION RECORDS

- Accurate patient demographic information helps ensure the correct patients are included in county-level and state-wide coverage rates and improves the effectiveness of reminder/recall mailings
- Patient demographic information should be reviewed every time a record is opened in the NDIIS
  - Patient should have a first, middle and last name listed
  - Sex, race and ethnicity are required demographic data fields
- The immunization program uses the NDIIS to assess coverage rates by different demographics in an effort to identify immunization disparities in North Dakota. We cannot do this without this information being complete in the NDIIS.

PATIENT DEMOGRAPHICS
PATIENT DEMOGRAPHICS

- Address information should be complete and must include street address, apartment number or PO Box (when applicable), city, state, zip code and county
  - New patient records should not be created with "unknown" address information.
- Phone number is required and should not have a generic format (i.e. 999-9999, 000-000-0000 or 0123456789)
- Staff who enter demographic information in your EHR should be aware of the importance of this information being completed and the impact of missing information
- Notes about a patient’s record should not be entered on their demographics page

ADDING DOSES

- For an administered vaccine:
  - Provider
  - Dose Date
  - Vaccine Type
  - Lot Number
  - Funding Source
  - Expiration Date
  - Manufacturer
  - Dose Volume (in mL)
  - Administration Route
  - Administration Site
  - VFC Eligibility

- Lot number is no longer a drop-down populated from provider inventory
  - This means...no more dummy doses!
- Inventory will still decrement IF both the lot number AND funding source entered match a lot in NDIIS inventory
  - Funding source is identified as public (i.e. state) or private
  - Vaccines received through the ND VFC program or from Federal allocations (like some COVID vaccine) are public vaccine
  - Vaccines purchased from the vaccine manufacturers by your facility are private vaccine
BORROW/RETURN

- Doses being borrowed from and returned to your public and private supply are tracked using funding source AND VFC eligibility
  - Public funding source + NOT ELIGIBLE
  - Private funding source + AMERICAN INDIAN, MEDICAID, NO INSURANCE, UNDERINSURED, or OTHER STATE ELIGIBLE

COMING SOON...
- The NDIIS Borrow/Return reports will be updated to exclude COVID19 vaccines

ADDING DOSES

- For historical doses:
  - Provider
  - Dose Date
  - Vaccine Type
  - VFC eligibility
  - All other data can be entered if known but is not required

FORECASTER

- All doses are evaluated by the forecaster as soon as it is added to an NDIIS record
- The NDIIS forecaster was upgraded in April 2021
  - The new forecaster is much more intuitive. As kids age out of one vaccine schedule, it will automatically apply the next logical set of rules.
  - Vaccines that are not part of the standard, age-based routine immunization schedule for kids and adults will not be forecasted
  - The forecaster cannot recommend vaccines based on risk
FORECASTER

- Vaccination Summary
  - Lists all valid doses patient has received
- Vaccination Forecast
  - Lists all doses the patient is due for along with the recommended and minimum valid date
  - If a patient has an exemption in their NDIIS record, the forecaster will not recommend doses of that vaccine
- Comments
  - Includes all comments related to invalid doses

How are forecaster changes handled?

- The NDIIS forecaster relies on CDC’s clinical decision support for immunization (CDSi) materials
- When significant changes are made, NDIIS records are re-forecasted starting with youngest records

CERTIFICATE OF IMMUNIZATION

- All NDIIS users can print a certificate of immunization
- Certificate should be provided when needed by patient or parent/guardian and patients should not be referred to another facility for their certificate
- All vaccines in a patient’s NDIIS record and any documented vaccine exemptions will print on the certificate
- Data currently on the certificate includes:
  - Vaccine type
  - Dose Date
  - Dose Validity
Individuals can request their record from the NDDoH by:

- Submitting the immunization record request form to our office along with a copy of their driver’s license
- Individuals can access their own immunization records through MyIR mobile
  - Patient name, birthdate, and phone number must be an exact match between the NDIIS and MyIR in order for immunizations to be viewable in MyIR

https://www.health.nd.gov/immunize/immunization-record-request

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WHAT’S COMING

- Planned enhancements to the NDIIS certificate of immunization:
  - Add lot number and manufacturer to the certificate
  - The certificate will print with the Immunization Director’s signature and today’s date
  - Remove the vaccine exemption section from the certificate
    - Vaccine exemptions will be a separate form
    - Vaccine exemptions claimed by a parent/guardian before a child turns 18 will expire on their 18th birthday
The NDDoH will NOT be providing QR codes for proof of COVID-19 vaccination.

During the November 2021 special legislative session, language was added to North Dakota century code 23-01-05.3 that states the “department of health may not create, administer, provide, or contract for machine-readable code or a vaccine passport.”

All inventory for public vaccines provided through the NDDoH immunization program are entered in the NDIIS.

Providers can enter their private vaccine inventory in the NDIIS through Lot Management.
INVENTORY MANAGEMENT

- Inventory doses on hand will decrement each time a new vaccine dose is entered into an NDIIS record
- Inventory on hand is managed through the Lot Distribution
  - Doses on hand can be adjusted
  - Inventory can be transferred from one NDIIS provider site to another
- When inventory is transferred in the NDIIS, doses will be decremented from the sending provider’s inventory and added to the receiving provider’s inventory
- Public vaccine inventory cannot be transferred to a provider that is not enrolled in the VFC or COVID vaccine program

VACCINE ORDERING

- VFC-enrolled providers will order public vaccine using the Vaccine Ordering, Returns and Wastages module
- Providers must review their facility information and certify it is current before being able to place a vaccine order, return or wastage
VACCINE ORDERING

• All public vaccines available for a provider to order are listed in the ordering grid
• Providers must enter current inventory on hand when ordering vaccine
• The ordering module will suggest an order minimum and maximum based on inventory on hand and doses administered
• If ordering above the suggested maximum, a comment is required

VACCINE ORDERING

• Temperature logs for the provider’s vaccine storage units must be submitted to the immunization program before vaccine orders will be processed
• Once a vaccine order is submitted, it is approved by the immunization program and submitted to CDC’s VTrckS system
• After the vaccine is shipped, the provider order history grid will populate with the vaccine shipment tracking number
VACCINE RETURNS

- Doses of public vaccine that need to be returned to the vaccine manufacturer must be entered in the NDIIS
- Vaccine can only be returned if there are more than zero doses on hand for the lot number
- Doses that are returned will decrement from the provider’s inventory
- Vaccine can be returned for CDC-specified reasons
  - If “other” is selected as a reason, a detailed comment is required

NOTE: COVID vaccine cannot be entered as a return

VACCINE WASTAGE

- Doses of public vaccine that need to be wasted (i.e. disposed of at the provider site) must be entered in the NDIIS
- Vaccine can only be wasted if there are more than zero doses on hand for the lot number
- Doses that are wasted will decrement from the provider’s inventory
- Vaccine can be wasted for CDC-specified reasons
  - If “other” is selected as a reason, a detailed comment is required
All NDIIS users have access to run coverage rate, pandemic preparedness, patient management, provider inventory, smallpox and other reports.

Only users with school access can run the school reports.

If a user has access to more than one provider site in the NDIIS, they can run reports for all of the providers.

The NDIIS reports are designed to help providers manage their patient populations and vaccine inventory, and monitor their facility’s immunization coverage rates.

Changes to the COVID19 dummy dose report to identify doses missing critical dose information now that there are no more dummy doses.

Patient Doses Administered Report
- This report will generate a line list of patients who received a selected vaccine(s) during a specified time frame.
- Will include patient demographic and dose information on the report.
- Will help providers identify patients who received vaccine as well as dose records that are missing required information.

There are detailed, step-by-step instructional tip sheets and videos available on the NDIIS trainings website:
https://www.health.nd.gov/immunize/ndiis/trainings
The NDIIS reminder/recall system can be used to identify patients who are either coming due or are past due for vaccines.

- A Reminder is a communication to an individual that he/she is due now or on a future date for immunization(s).
- A Recall is a communication to an individual that he/she is past due for immunization(s).

The reminder/recall list generates a list that can be exported to Excel or can be used to print labels or postcards.

All NDIIS users have access to the reminder/recall report.

Most providers will be able to run the report for only the provider number they are currently logged in to the NDIIS under.

- Patients are included in the report based on last provider visited excluding influenza vaccine.
- Local Public Health Units can run the report for their county or service area
  - When running by county or service area, patients are included in the report based on their address.
- The NDDoH recommend leaving the other report criteria set to the standard defaults.
Reminder Recall can be run for different age cohorts which can be determined by:
- minimum and maximum age range
- pre-set age range

Select the vaccines for the report to look for using the check boxes.
- If no vaccines are selected, then all forecasted vaccines will be included
- If the patient is due/past due for more vaccines, all vaccines will be accommodated in a single notification
- Users can also indicate if they want the report to look for a specific dose number in a series by entering a number in the box to the right of the vaccine name.

After all criteria have been selected, click Run Reminder Recall for the list of patients meeting the selection criteria.

Users can print labels or postcards, or select Download List to have the report detail downloaded into an Excel spreadsheet.
- If choosing to print postcards, make sure the address information in the Reminder/Recall report is updated to ensure the correct return address information is on the postcards.

The report can be set to run for reminders (looking for patients coming due for vaccines) and/or recalls (looking for patients past due for vaccines).

Users can print labels or postcards, or select Download List to have the report detail downloaded into an Excel spreadsheet.

If choosing to print postcards, make sure the address information in the Reminder/Recall report is updated to ensure the correct return address information is on the postcards.
The immunization program sends infant (19-35 months), pediatric (6 years), and adolescent (13-17 years) coverage rate reports to VFC-enrolled providers quarterly.

Adult (19 and older) coverage rate reports are sent to all NDIIS providers with an adult population of >= 5 quarterly.

Influenza coverage rate reports are sent to VFC-enrolled providers three times per flu season.

Infant, pediatric, adolescent, and influenza reports are sent to the primary and secondary VFC contacts (as indicated on enrollment) and the provider site’s medical director.

Provider-level coverage rates
- NDIIS records included in provider-level coverage rates have the selected provider set as their last provider visited excluding influenza, meaning the provider was the last one to enter a non-influenza/non-COVID vaccine in the patient’s NDIIS record.
- Patients are included regardless of their state or county of residence.
- Also look at NDIIS record status to include only those whose status is set to CURRENT CLIENT.
- When running coverage rates in the NDIIS, we use the NDIIS population as the denominator.
Patients that should no longer be associated with your facility or that you know have moved out of North Dakota need to have their MOGE status updated in the NDIIS.

In order to change a patient’s status in the NDIIS, a provider must be the last provider visited for that patient. This means you have to be the last provider site to enter a non-influenza/non-COVID vaccine in the patient’s NDIIS record. Local public health units and the NDDoH can change the status for any record in the NDIIS.

If a patient’s status is set to MOGE or Lost to Follow-up and a provider enters a new immunization in the NDIIS record, the status is automatically updated back to Current Client for that provider site.

Patient MOGE status is updated on the Maintenance page of the NDIIS record.
**MANAGING PATIENT STATUS**

- To be considered Moved or Gone Elsewhere (MOGE) the provider must have proof that:
  - the patient has moved out of North Dakota,
  - that the patient has moved out of the immediate area,
  - that the patient has moved, even if no forwarding address was provided,
  - or that the patient has transferred care to another provider.

**IMMUNIZATION DASHBOARDS**

- The immunization program publishes quarterly updates to the infant, adolescent and adult immunization data dashboards.
- Influenza immunization data dashboard updates are done twice per season for mid-season and complete season coverage rates.
State-wide coverage rates
- NDIIS records included in state-wide coverage rates must have North Dakota set as the state of residence in their NDIIS demographics
- If state is set to ND, they are included regardless of county
- Also look at NDIIS record status to include those whose status is set to:
  - CURRENT CLIENT
  - MOGE, with a reason of “Documentation of a forwarding address out of the immediate area”
  - MOGE, with a reason of “Received notification or a request for records indicating the child has transferred to another provider”
- When running coverage rates in the NDIIS, we use the NDIIS population as the denominator

HOW ARE NDIIS COVERAGE RATES CALCULATED?

Dashboards all open on Methodology page that provides details on how the coverage rate data are calculated

Dashboards all end on a vaccination page that provides details about each vaccine included in the dashboard and the vaccine schedule

Percent of North Dakota children 19-35 months of age by the last day of the quarter who are up-to-date with the selected vaccine by the end of the quarter
WHAT’S COMING

- Enhancements to the current immunization data dashboards:
  - Adding the ability to see coverage rate data over time by county
  - Adding a page to show state-wide and county coverage rates by sex, race and ethnicity
  - Adding vaccine exemptions by exemption type and vaccine
  - Changing the infant dashboard to include data for kids 4-6 years old
  - Adding doses administered data to the influenza dashboard

THANK YOU

For login assistance NDIIS Support Services 1-800-544-8467
For NDIIS questions or to report an issue NDDoH NDIIS Team NDIIS@nd.gov
NORTH DAKOTA IMMUNIZATION PROGRAM

North Dakota Immunization Program Staff

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POST-TEST

- Post-test
  - Nurses interested in continuing education credit, visit https://ndhealth.co1.qualtrics.com/jfe/form/SV_SuaeOCltZuGdIA2
  - Successfully complete the five-question post-test to receive your certificate
  - Credit for this session available until April 12, 2022
  - This presentation will be posted to our website: www.ndhealth.gov/immunize