

Improving the length and quality of life for all North Dakotans

The Good, the Bad and the Ugly: North Dakota Immunization Rates

November 9, 2022
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Virginia: Potential Measles Exposure in Fairfax County

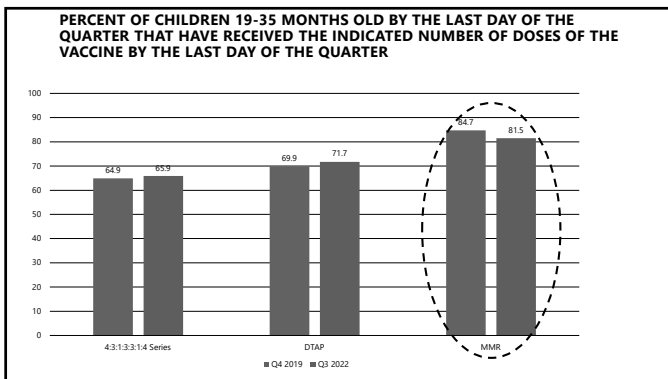
Hepatitis A expos King Soopers in V

Increase of reported diphtheria cases among migrants in Europe due to Corynebacterium diphtheriae, 2022

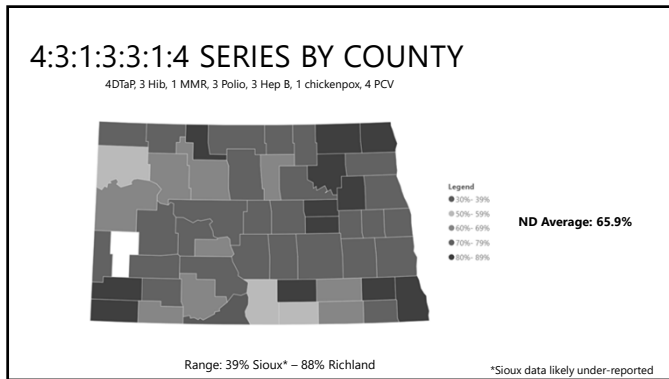
Israel back on WHO polio 'outbreak countries' list, following increase in cases

Measles confirmed in four Minnesota counties; 21 cases in past five months

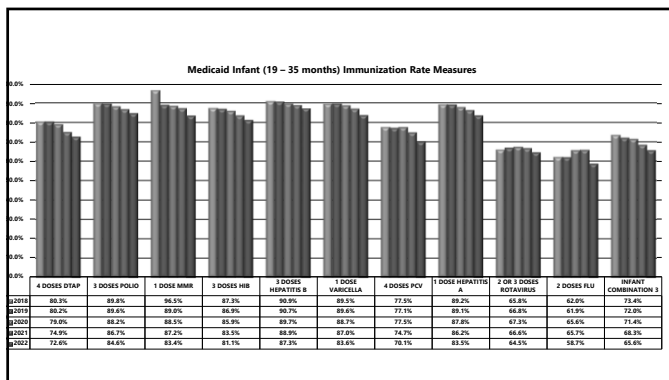
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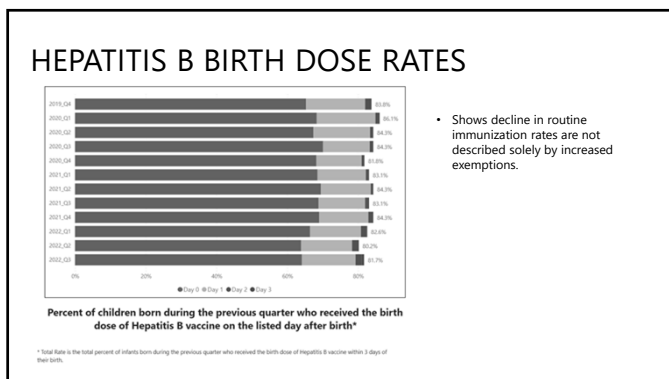
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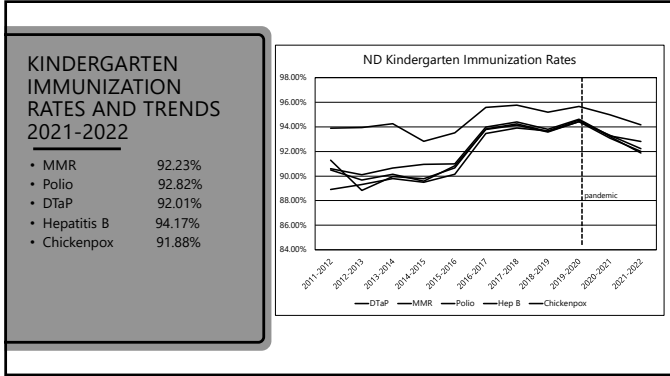
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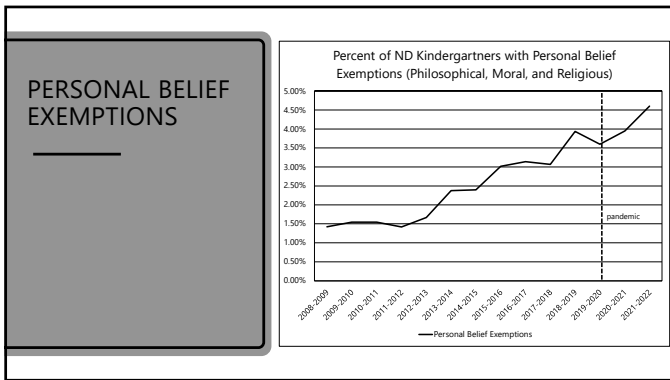
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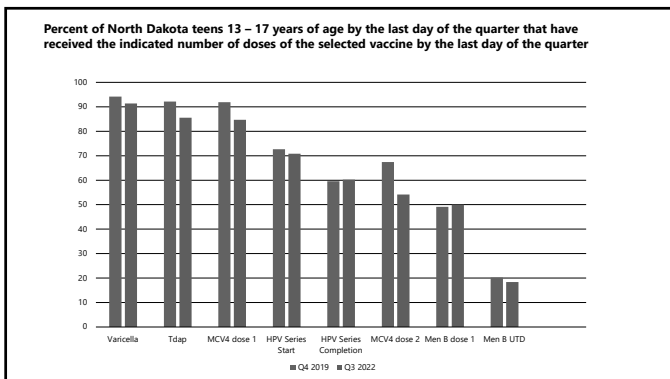
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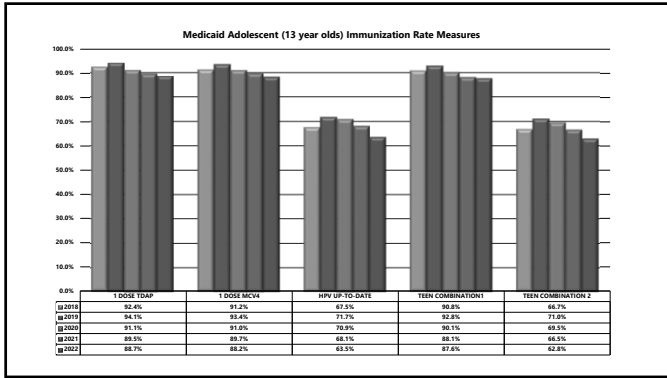
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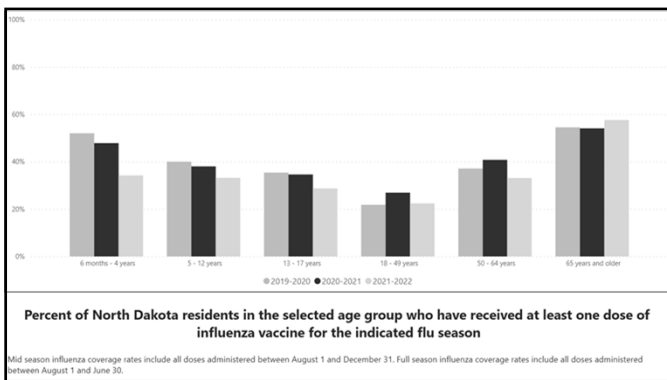
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WHAT CAN YOU DO TO INCREASE RATES?

- Know your rates!
 - NDDHHS website: [Coverage Rates](#)
 - Interactive dashboards
 - Quarterly rate reports
- Reminder/recall
- Collaborate with stakeholders
- Build trust in local communities
- Innovation...



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WHAT CAN YOU DO TO INCREASE RATES?

- Improve access to vaccination clinics through convenient settings:
 - After hours
 - Weekend clinics
 - Community events
 - Non-vaccination appointments
 - Vaccinate family members at appointments
 - School/workplace clinics
 - Partner with community organizations to increase access

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STRENGTHEN VACCINE COMMUNICATION

- Educate all staff who discuss immunizations, so they are prepared for questions
- Ensure all staff are providing strong recommendations to patients/families
 - "Your child is due for ..."
- Sandwich communication strategies
 - Tdap, HPV and Meningococcal vaccines

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WHAT IS THE NDDHHS DOING TO INCREASE RATES?

- Pay Attention to Prevention Campaign
- Reminder/recall letters sent to parents of infants, school children, adolescents and adults
 - www.hhs.nd.gov/immunizations/reminder-recall
 - Recall schedule
 - Template letters



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WHAT IS THE NDDHHS DOING TO INCREASE RATES?

- Grants:
 - Storage and handling
 - Local public health
 - NDSU Center for Immunization Research and Education
 - Health systems
 - Universities
 - Non-profits
- Collaboration with stakeholders
- Quality Improvement site visits with providers

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WHAT MORE CAN THE NDDHHS DO?

- What resources do facilities need?
 - More education
 - Access issues
 - More funding
- Email vaccine@nd.gov with ideas on how we can help your facilities/patients to increase vaccination rates.

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DATA CLEAN-UP ACTIVITIES

BECAUSE WE USE THE NDIIS POPULATION AS OUR DENOMINATOR WHEN CALCULATING COVERAGE RATES, MAINTAINING THE QUALITY OF DATA IN THE NDIIS IS CRITICAL.

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CLIENT DE-DUPLICATION

What the NDIIS Does:

- Automated client deduplication looks at all client records touched the previous day and scans the NDIIS for potential duplicate records.
 - Any potential duplicates are placed in queue for daily manual review by the immunization program.
- Run a weekly report to look for duplicate client records flagged by NDIIS users and merge duplicates.

What You Can Do:

- Flag any duplicate records in the NDIIS by typing the word "DUPLICATE" on an empty field of the Demographics page.
 - **DO NOT DELETE ANY DEMOGRAPHIC INFORMATION FROM THE NDIIS RECORD!**
- Make sure patient names are spelled the same in the NDIIS and in your EHR whenever possible.
- Do not use nicknames in first name field.

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FLAGGING DUPLICATE CLIENT RECORDS

- The word "DUPLICATE" must be spelled correctly
- Entering words such as "merge" or "wrong" will not flag duplicate records on the immunization program report and they won't be merged

The screenshot shows a 'Patient Information' form. The 'Address' field contains the word 'DUPLICATE'. Other fields include Last Name: BERNARD, First Name: TESTEIGHT, Middle Name: B, Race: WHITE, Birth Date: 09/28/2011, Gender: FEMALE, and Phone Number Type: HOME PHONE. There are checkboxes for 'Opt client in for text reminder recall' and 'Exclude client from reminder recall'.

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VACCINE DE-DUPLICATION

What the NDIIS Does:

- Automated vaccine deduplication evaluates every dose as it is being entered in the NDIIS and automatically removes obvious duplicates.
 - Removes approximately 85% of duplicate doses automatically and immediately.
 - Vaccine deduplication will also not allow two doses in the same vaccine family to be entered with the same dose date.
- Doses that cannot be easily identified as a duplicate are placed in a queue to be evaluated by immunization program staff.

What You Can Do:

- Delete duplicate historical doses and duplicate doses entered by your provider site.
- If doses left in a record after deleting a duplicate are invalid, contact the immunization program to have the doses set back to valid.
- If there are duplicate doses in a record you cannot delete, contact the immunization program to have the duplicates removed.

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DECEASED CLIENT RECORDS

What the NDIIS Does:

- ❑ NDIIS receives death record information from Vital Records for all individuals who died in North Dakota and checks those names against active NDIIS records. Any NDIIS records matched to the Vital Records information are automatically marked as deceased.
- ❑ Run a report after each death record file is processed to manually look for NDIIS records that did not match to Vital Records.
- ❑ After each birth record file, review the previous death records that were not matched to try and find any newborn records that need to be updated.
- ❑ Run a weekly report looking for deceased records flagged by NDIIS users.

What You Can Do:

- ❑ Flag any deceased records in the NDIIS by typing the word "DECEASED" on an empty field of the Demographics page.
 - **DO NOT DELETE ANY DEMOGRAPHIC INFORMATION FROM THE NDIIS RECORD!**
- ❑ Call the immunization program if there is a record that needs to be marked as deceased.

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FLAGGING DECEASED CLIENT RECORDS

- ❑ The word "DECEASED" must be spelled correctly
- ❑ Entering words such as "dead" or "remove" will not flag deceased records on the immunization program report
- ❑ Do NOT enter "DECEASED" in the Mother Information fields if the patient's mother is deceased.

The screenshot shows the 'Demographics' form for a patient named 'JACQUELYN TEST'. The 'Address' field contains the word 'DECEASED'. Other fields include 'City' (TEST), 'State' (NORTH DAKOTA), 'Zip' (50000), 'Birth Date' (04/21/2007), 'Gender' (FEMALE), and 'Primary Phone Type' (MOBILE PHONE). The 'Mother Information' and 'Responsible Person' sections are also visible.

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PATIENT DEMOGRAPHICS

- ❑ 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
 - Race and ethnicity are required demographic data fields
 - The immunization program uses the NDIIS to assess coverage rates by race in an effort to identify immunization disparities in North Dakota. We cannot do this without this information being complete in the NDIIS.

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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. 999-999-9999, 000-000-0000 or 012-345-6789).
- 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.

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MANAGING YOUR PATIENT POPULATION

MAKING SURE THE RIGHT PATIENTS BELONG TO YOUR PROVIDER SITE IN THE NDIIS HELPS ENSURE THAT YOUR COVERAGE RATES ARE ASSESSING THE CORRECT PATIENT POPULATION.

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PATIENT STATUS

- 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.

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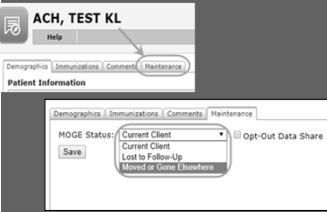
PATIENT STATUS

- ❑ 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.
- ❑ To be considered Lost to Follow-up the provider must have proof that the patient has not responded or provided adequate contact information in response to at least three attempts at contact.
- ❑ The NDIIS does not get notified when a patient leaves the state. We have to rely on help from our users to manage the patient population in the NDIIS.

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PATIENT STATUS

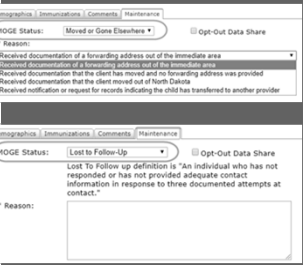
- ❑ Patient MOGE status is updated on the Maintenance page of the NDIIS record.



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PATIENT STATUS

- ❑ MOGE
 - When setting a patient's status to MOGE, you must select a reason from the drop-down list.
 - If the MOGE reason indicates the patient has moved, make sure the address information is also updated.
- ❑ Lost to Follow-Up
 - When setting a patient's status to Lost to Follow-up, you must enter detailed information about the attempts to contact the patient.



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PROVIDER PATIENT LIST REPORT

- ❑ The Provider Patient List is designed to help providers manage their patient population in the NDIIS.
- ❑ The report pulls a list of all the NDIIS clients associated with the selected provider site and shows their NDIIS patient status.
 - Providers can opt to pull the list of only current, active patients or all patients (those that have already had their status changed to MOGE or Lost to Follow-Up).
- ❑ Providers should use the report to identify any patients that should no longer be associated with their practice or who should no longer be part of the ND population in the NDIIS.
- ❑ Managing your patient population using this report will help ensure the correct patients are included when coverage rates are calculated using NDIIS data.

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PROVIDER PATIENT LIST REPORT

- ❑ Report will list patients in alphabetical order.
- ❑ Report data includes patient first and last name, birthdate, date of their last vaccination in the NDIIS, and current status.
- ❑ Report also provides a total number of patients and total number of current patients.

Provider Patient List Report				
Printed on 11/10/2018 12:17:08 PM				
Provider:	DR. M. TEST PROVIDER			
AgeRange:	24-100			
Starting Birthdate:	12/13/2015			
Ending Birthdate:	11/13/2016			
Patients:	CURRENT PATIENTS			
LAST NAME	FIRST NAME	BIRTHDATE	LAST VAC DATE	STATUS
CLIENT1	TEST	10/01/2016	6/10/2018	CURRENT CLIENT
CLIENT2	TEST	10/20/2016	6/10/2017	CURRENT CLIENT
CLIENT3	TEST	10/20/2016	7/31/2018	CURRENT CLIENT
CLIENT4	TEST	2/10/2016	10/10/2018	CURRENT CLIENT
				Total Patients: 03
				Total Current: 03

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ARE YOUR PATIENTS UP-TO-DATE?

USING THE NDIIS TO ASSESS IMMUNIZATION COVERAGE CAN HELP YOU TRACK PROGRESS TOWARDS ACHIEVING YOUR GOALS

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ENTERING COMPLETE IMMUNIZATION HISTORIES

- ❑ Immunization histories for patients who move to North Dakota from out-of-state should be entered into the NDIIS.
- ❑ Whenever possible, complete immunization histories for adults should be entered from older paper records
 - The immunization program receives more and more requests from adults for their pediatric immunization records needed to go back to school or change careers.
- ❑ The two Air Force Bases (AFB) in North Dakota do not report immunizations to the NDIIS. Any provider who receives a record for someone who has been vaccinated on the AFB should enter that record in the NDIIS.
 - Because these federal facilities do not enter into the NDIIS, individuals may have incomplete records and can look like they are not up-to-date when they may have received all recommended immunizations.

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IMMUNIZATION FORECASTER

- ❑ A patient's immunization forecast should be reviewed at every visit for patients of all ages.
 - Immunization status and the forecast should be reviewed in all settings, including walk-in clinics, oncology, OB-GYN, and at sports physicals
 - Facilities that have WIC visits in the same location should work with WIC staff to check the immunization status for individuals coming in to collect their WIC benefits.
- ❑ The immunization forecast shows all immunizations a patient is due for and when the vaccine should be given based on the standard, age-based immunization schedules for kids and adults.
 - It is important to make sure that providers are not sharing NDIIS forecast data with parents of kids 14-17 years of age who received any doses of HPV or hepatitis B vaccine without parental consent. These doses do not print on the official certificate of immunization but do still show on the immunization forecast.
 - Immunizations that are given based on a patient's medical history or high-risk health condition will not be included in the NDIIS forecast and may show as invalid in their record.

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COVERAGE RATE REPORT

- ❑ The NDIIS coverage rate report is available for all users to assess up-to-date immunization coverage for their patients or patients in their county.
- ❑ This report uses the NDIIS forecast to determine up-to-date.
- ❑ The coverage rate report can be run for patients of all ages and will allow the user to run the report for infants up-to-date as of 24 months of age and for adolescents up-to-date as of 13 years of age.
 - This is the same report that will be used to assess your provider coverage for IQIP (formally AFIX) site visits.
- ❑ Users can run this report to prepare for IQIP visits, assess coverage more frequently than the quarterly rate reports sent by the immunization program, and to assess progress being made on QI projects.

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COVERAGE RATE REPORT

☐The report will show:

- the selection criteria
- a summary with the total number of clients up-to-date with all of the selected vaccines
- a break-down of coverage by individual provider or county and by vaccine

Coverage Rate			
Report Criteria			
Compliance BY:	10/11/2022		
Starting Birthdate:	10-11-1995		
Ending Birthdate:	10-11-1994		
Last Provider Filtered:			
Dates:			
UFD PCV3			
UFD PPV13			
Summary Report			
	Clients	Up-to-date	% Up-to-date
Provider:	802	510	63.6 %
Detail Report			
Provider:	Total No. Of Clients: 1022	% Up-to-date Clients: 63.6 %	Up-to-date Clients: 650
Vaccine:	Up-to-date	% Up-to-date	
UFD PCV3	727	78.4 %	
UFD PPV13	876	88.4 %	

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INFLUENZA COVERAGE RATE REPORT

- ☐Coverage rates for influenza vaccination are run using a separate NDHS report that allows the user to enter a specific date range for the flu season they would like to assess.
- ☐Influenza coverage rates can be run for individuals of all ages and can be assessed for up-to-date with one or two doses of flu vaccine

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INFLUENZA COVERAGE RATE REPORT

☐The report will show:

- the selection criteria
- a break-down of coverage by individual provider or county

Influenza Coverage Rate Report			
Report Criteria			
Age Range:	0 - 174		
Age As Of Date:	09/01/2019		
Starting Birthdate:	09/01/2019		
Ending Birthdate:	09/01/2019		
Start Date Range:	09/01/2019		
End Date Range:	10/01/2019		
State:	1-1001202020		
County of Residence:			
County			
	Total No. Of Clients: 1022		
No. Of Clients Up-To-Date:	% Up-To-Date Clients		
1027	80.9 %		

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ASSESSING MISSED OPPORTUNITIES

- ❑ A missed opportunity is counted when a patient receives a vaccine but does not get everything they were due for that same day.
 - For example – A patient is due for DTaP, Hib, polio, MMR and varicella but only receives the DTaP, Hib and polio. A missed opportunity would be counted for this patient for the MMR and varicella.
- ❑ This report should be used to educate staff on ways to make sure patients are getting all doses they are recommended to receive when they are due.
- ❑ The NDHS Missed Opportunities report looks for missed opportunities on the patient's last vaccination date.
 - When the report is run for non-influenza vaccines, the last vaccination date is based on the date they received their last non-flu vaccine.
 - If influenza is one of the vaccines selected for the report, the last vaccine date is based on the date they received their last vaccine, regardless of the vaccine type.

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MISSED OPPORTUNITIES REPORT

- ❑ The report will show:
 - the selection criteria
 - the overall percent of clients with a missed opportunity
 - the percent of missed opportunities by vaccine
- ❑ The report will also produce a list of individual clients (in alphabetical order) that have a missed opportunity, including their last vaccination date and which vaccines were missed.

Missed Opportunities Report			
Printed on: 11/13/2019 4:42:28 PM			
Evaluation Date:	10/30/2019		
Last Provider Review:			
Starting Birthdate:	10/30/2016		
Ending Birthdate:	10/30/2017		
Vaccine Series:	MMR DTaP/DTaP POLIO HIB VARICELLA		
Provider		Total No. of Clients: 8	
% Missed Opportunities: 40%		Clients With Missed Opportunity: 2	
Vaccine	Clients With Missed Opportunity	% Missed Opportunities	
MMR	2	25%	
DTaP	1	12.5%	
POLIO	1	12.5%	
HIB	1	12.5%	
VARICELLA	1	12.5%	
Detail Report			
Client Name (Last, First Middle)	Birthdate	Last Vaccination Date	Missed Opportunities

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REMINDER AND RECALL

SENDING REMINDER/RECALL NOTICES TO YOUR PATIENTS IS AN EFFECTIVE WAY TO INCREASE IMMUNIZATION RATES. NOTICES FROM PROVIDER OFFICES HAVE BEEN PROVEN TO BE MORE IMPACTFUL THAN NOTICES SENT FROM A STATE HEALTH DEPARTMENT.

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REMINDER/RECALL

- 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.

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RECOMMENDATIONS

- The immunization program recommends that providers run the reminder/recall report regularly for infants 19-35 months of age who are 30 or more days past due for the complete 4:3:1:3:3:1:4 vaccine series and hepatitis A

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RECOMMENDATIONS

- The immunization program also recommends that providers run the reminder/recall report regularly for adolescents 12-17 years of age who are 30 or more days past due for the Tdap, MCV4, HPV, varicella and hepatitis A vaccines

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WHAT ELSE CAN WE DO?



- ❑ Run your NDIIS reports monthly or quarterly.
- ❑ Run the NDIIS reminder/recall report and have staff contact patients during downtime.
- ❑ Update your provider site's contact information to make sure the correct contacts are receiving reports and updates from the immunization program.

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WHAT TO DO WITH REPORTS FROM NDDHHS?



- ❑ The NDIIS team sends:
 - quarterly provider-level coverage rate reports for infants, kids, adolescents and adults
 - Influenza coverage rate reports three times per flu season
- ❑ Providers should:
 - share these reports with staff (i.e. in staff meetings) and leadership
 - use these reports to set goals for their facility
 - use the NDIIS reports to review patient lists, update patient population, monitor coverage rates and progress towards achieving immunization goals set

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PROVIDER DISCUSSION ON INNOVATIVE WAYS TO INCREASE RATES



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POST-TEST

- Post-test
 - Nurses interested in continuing education credit, visit https://ndhealth.co1.qualtrics.com/jfe/form/SV_2uH9WssbngAjCwS
 - Successfully complete the five-question post-test to receive your certificate
 - Credit for this session will not expire until December 6, 2022.
- This presentation will be posted to our website: www.hhs.nd.gov/immunizations

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