

LUNCH AND LEARN: NORTH DAKOTA SCHOOL REQUIREMENTS AND IMMUNIZATION RATES




NORTH DAKOTA STATE IMMUNIZATION LAW

23-07-17.1. Inoculation required before admission to school.

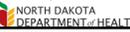
I. All students through grade 12 must meet a minimum number of required immunizations prior to school entrance.

- These apply to public, private, and homeschooled students, as well as child care facilities.
- According to ND Century Code, each institutional authority and district superintendent is legally responsible for excluding non-compliant students.
- The school district and individual school employees may be liable for harm to students injured if a non-compliant student is allowed to attend school and spreads a vaccine-preventable disease to compliant students as a result of the employees' failure to comply with state immunization laws.
- In addition, DPI can impose sanctions on schools that do not exclude non-compliant students (\$1000 penalty per occurrence).




SCHOOL IMMUNIZATION REQUIREMENTS

Vaccine Type	Number of Doses Required Per Grade	
	Kindergarten- 6 th grade	Grades 7-12
DTaP/DTP/DT/Tdap/Td ^s	5	5
Hepatitis B	3	3
IPV/OPV ^t	4	4
MMR	2	2
Varicella (Chickenpox)	2 ^s	2 st
Meningococcal	0	1
Tdap	0	1



NORTH DAKOTA STATE LAW: EXCLUSION

- Parents of students who are not up to date with required immunizations or do not have an immunization record on file should be notified of the missing record or of what immunizations their children need to receive at the start of school.
- Parents have a 30 calendar day grace period to comply with requirements after the first day of school.
 - After this, the child should be excluded from school.
- It is the school's responsibility to enforce the vaccination requirements and exclusion.



NORTH DAKOTA STATE LAW: EXCLUSION

- Students who have a valid exemption on file do not need to be excluded from school.
- A child does not need to be excluded if they are in the process of receiving their immunizations.
 - A child is considered to be in-process of receiving immunizations if:
 - A licensed physician or DOH representative provides written proof the child has begun receiving immunizations or
 - A parent provides written consent for local health department to administer missing immunizations.

EXEMPTIONS

- Students can be exempt from receiving vaccinations for personal beliefs (moral or philosophical), religious, medical reasons, or because they have a history of chickenpox disease.
- In order to claim a medical exemption, students must have documentation from their health care provider, stating that they are unable to receive the vaccine for medical reasons.
- If a child is claiming a history of disease exemption, the child must have documentation of a chickenpox diagnosis or a titer to confirm immunity.

HISTORY OF DISEASE EXEMPTION

- All providers asked to confirm chickenpox disease with a lab test.
 - PCR or culture of skin specimen
- Ensures child has chickenpox and will not need the vaccine.
 - If incorrectly diagnosed with chickenpox-student will likely claim a history of disease exemption and will believe they are immune, when in fact they are not.
- Also, makes it easier for child to claim a history of disease exemption because the lab results are available.

SCHOOL SURVEY

- Each year the North Dakota Department of Health gathers school immunization rates through the school survey.
- Determines the percent of children attending school who are up to date on school required vaccines.
- These rates are self reported by schools and participation is mandatory.
- North Dakota is required to report kindergarten results to the Centers for Disease Control (CDC.)



IMPORTANCE OF SCHOOL SURVEY

- Provide overall picture of vaccination status among interacting children.
 - May not be accurately assessed by looking at medical charts.
- Includes children who may not have primary care provider, change providers frequently, or have no contact with the primary care system.
- Gather patient level vaccination data on children when they are most vulnerable for vaccine preventable diseases.
- Basis for policy, law, and/or rule change.



HEALTHY PEOPLE 2020 GOALS FOR KINDERGARTEN ENTRY

Vaccine	Doses	Coverage Goal
DTaP	4	95%
MMR	2	95%
Polio	3	95%
Hepatitis B	3	95%
Varicella	2	95%

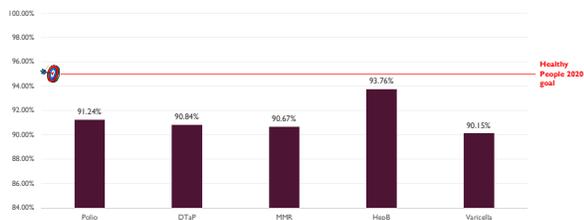


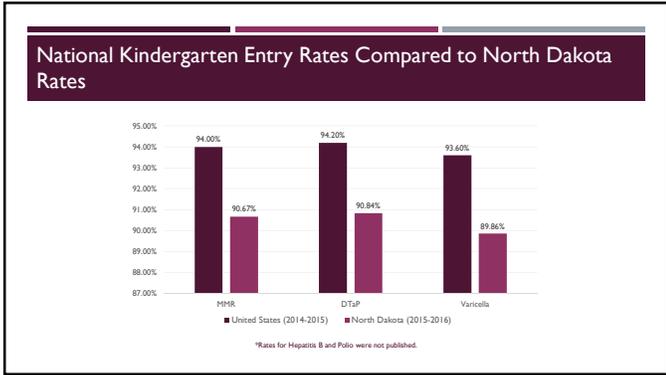
HEALTHY PEOPLE 2020 GOALS FOR ADOLESCENTS AGE 13-15 YEARS

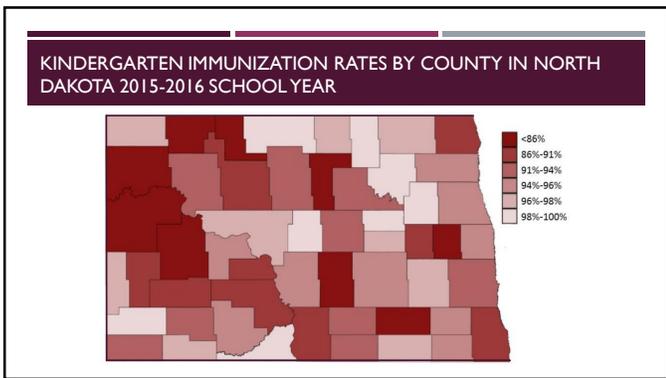
Vaccine	Doses	Coverage Goal
Tdap	1	80%
Varicella	2	90%
MCV4	1 or more	80%
HPV	3 or more	80%

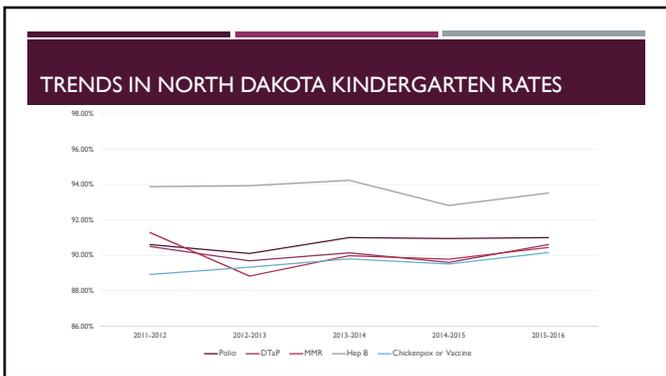


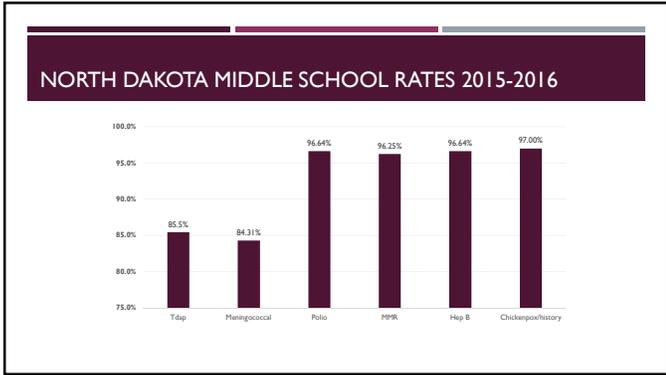
NORTH DAKOTA KINDERGARTEN ENTRY COVERAGE RATES 2015-2016

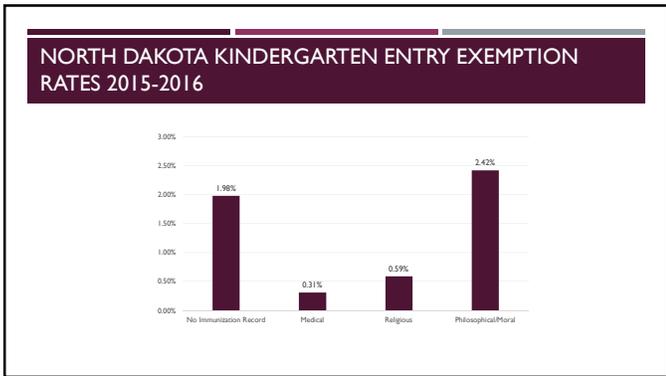


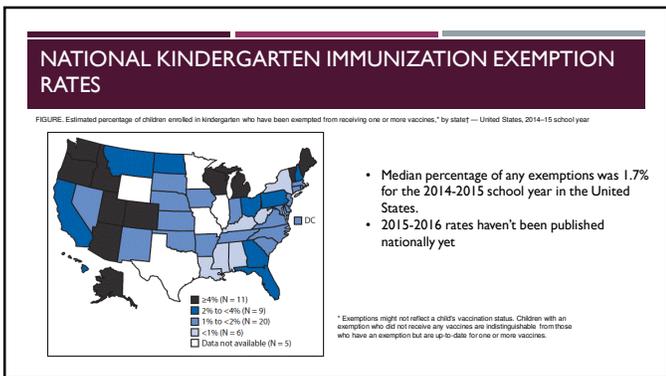




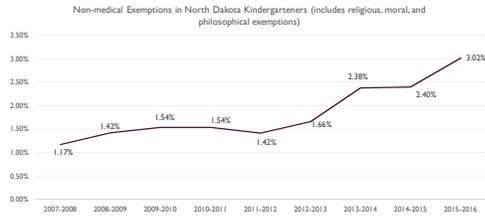




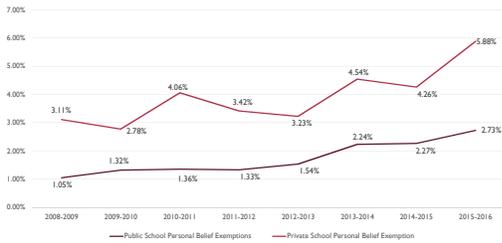




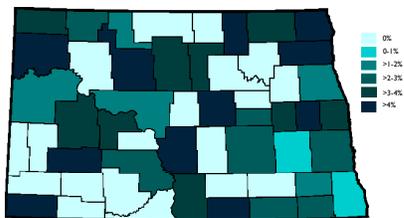
TRENDS IN NORTH DAKOTA EXEMPTION RATES THROUGH 2015-2016



NORTH DAKOTA PUBLIC VS PRIVATE SCHOOL IMMUNIZATION RATES



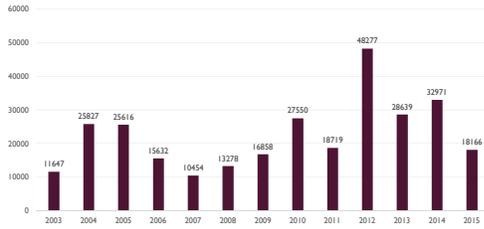
KINDERGARTEN PERSONAL BELIEF & RELIGIOUS EXEMPTION RATES BY COUNTY



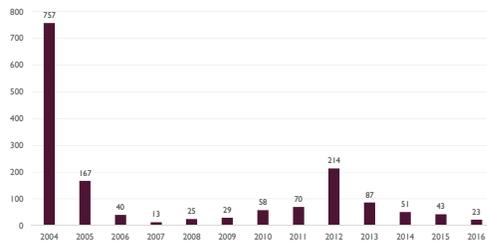
VACCINE PREVENTABLE DISEASE OUTBREAKS

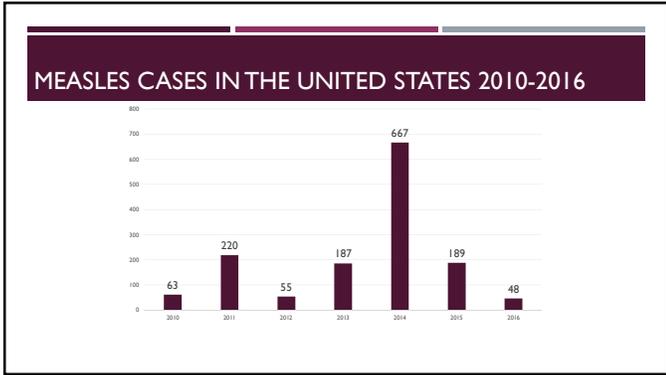
- Although some vaccine preventable diseases are rare, outbreaks of some disease, such as measles, pertussis, chickenpox, and others still occur in the United States today.
- 2016: Mumps outbreak in North Dakota: 42 cases
- 2016: Pertussis Cases in North Dakota: 23 cases
- 2014-2015: Measles outbreak in South Dakota: 14 cases

PERTUSSIS IN THE UNITED STATES 2003-2015

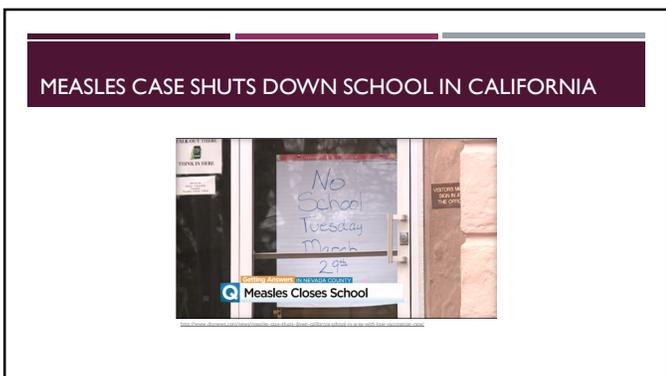


PERTUSSIS IN NORTH DAKOTA 2004-2016





- ### MEASLES IN THE UNITED STATES
- 2015: Large outbreak 189 cases from 24 states
 - Amusement park in CA
 - 2014: 23 outbreaks-667 cases from 27 states
 - Greatest number of cases since elimination-2000
 - Majority unvaccinated
 - Partially among unvaccinated Amish communities-Ohio.
 - 2013: 11 outbreaks-187 cases



NOT EXCLUDING NON-COMPLIANT STUDENTS MAY RESULT IN EVEN MORE ABSENCES:

Disease	Exclusion Period
Chickenpox	Until blisters have dried and no new blisters have started for 24 hours-usually takes about 5-6 days .
Measles	Until 4 days after rash appears.
Influenza	Until child is fever free for 24 hours without the use of fever reducing meds.
Meningococcal Meningitis	Until at least 24 hours after antibiotic therapy was started .
Mumps	Until five days after symptoms start.
Pertussis	Until five days after appropriate antibiotic therapy was started or 21 days after symptom onset.
Rubella	Until seven days after rash onset.

CHICKENPOX

- Elementary schools are the most common site for chickenpox outbreaks-they still occur in middle schools and child cares.
- In a school with low vaccination rates, outbreaks can last months.
- If an outbreak occurs in a school, children who are exempt or unvaccinated will need to receive the chickenpox vaccine.
- If they do not, they may need to be excluded from school for up to 21 days after the last case has been identified.

MEASLES, MUMPS, RUBELLA

- If an outbreak occurs in a school, children who are exempt or unvaccinated from measles, mumps, or rubella would need to be excluded from school until they are vaccinated.
- If students are not vaccinated, they would need to be excluded from school for:
 - Measles: 21 days after the last case has been identified
 - Mumps: 26 days after the last case has been identified
 - Rubella: 23 days after the last case has been identified

NORTH DAKOTA STATE UNIVERSITY STUDY

- NDDoH enlisted the help of North Dakota State University (NDSU) Center for Immunization Research and Education (CIRE) to conduct a study to better understand immunization rates in the state of North Dakota.
 - Surveyed Immunization stakeholders
 - Focus groups and one-on-one interviews with:
 - Healthcare providers
 - Public health employees
 - School officials
 - Parents
 - Legislators
 - State government employees

NDSU STUDY RESULTS

- Obtaining an exemption in North Dakota is too easy!
 - Allow medical, religious, moral/philosophical, and history of disease exemptions.
 - Personal belief exemptions only require a parent's signature.
 - Recommended requiring science based immunization education from a healthcare provider or public health nurse for parent requesting a personal belief exemption.
 - If this is not possible, recommended limiting access to the immunization exemption form. The immunization exemption form would only be available by request from the NDDoH. The form should not be readily available at schools or on the internet.
 - The NDDoH should also create a new immunization exemption form, which is separate from the Certificate of Immunization.

NDSU STUDY RESULTS-EXEMPTIONS ALLOWED IN OTHER STATES

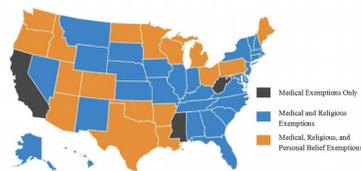


Figure 1. Immunization Exemptions Available by State, School-Aged Children, July 2016
 Source: Centers for Disease Control and Prevention Public Health Law Center: State School and Children Vaccination Laws and Morbidity and Mortality Weekly Report: Vaccination Coverage among Children in Kindergarten - United States, 2014-2015 School Year

NDSU STUDY RESULTS-EXCLUSION

- Most schools around the state are not excluding noncompliant children from school.
 - Schools that exclude have higher immunization rates.
 - Partnerships between schools and local public health units can alleviate barriers to excluding noncompliant students and improve immunization rates.
- **School enforcement has the greatest potential to increase immunization rates in North Dakota.**
 - 7% of students in the school survey were unaccounted for: not up to date and did not have an exemption on file.

NDSU STUDY-RATES OF ENFORCING VS NON-ENFORCING SCHOOLS

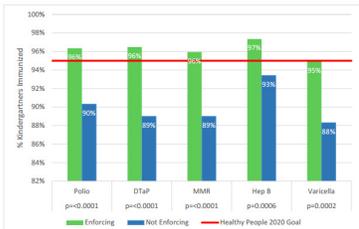


Figure 6. Kindergarten Immunization Rates in Schools Enforcing and Not Enforcing Immunization Requirements, Fall 2015
Source: North Dakota Department of Health

NDSU STUDY RESULTS-EXCLUSION

- October 2015-Assistant Attorney General of North Dakota addresses superintendents.
 - Reviewed North Dakota's immunization policies.
 - DPI's ability to withhold funds from schools not excluding non-compliant students.
 - Discussed legal liability of non-enforcing schools if an outbreak occurred.
- Historically, few schools in North Dakota enforced.
 - After the presentation, more schools decided to enforce.
 - Allowed for an opportunity to evaluate the impact of enforcement.
 - Results showed-schools enforcing immunization requirements had significantly higher immunization rates than schools that did not enforce.

NDSU STUDY RESULTS-BEFORE AND AFTER ASSISTANT ATTORNEY GENERAL'S OCTOBER PRESENTATION

Of note, significant increases were not seen in the number of parents filing nonmedical exemptions in schools that began to more strictly enforce immunization requirements. Additionally, schools noted that very few children were excluded because of noncompliance. One principal stated, "We ended up withholding two individuals for a short period of time, and then they were back in school. It was just a couple of days."

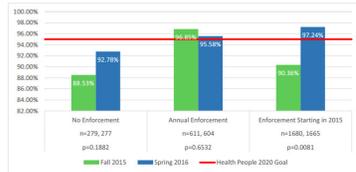


Figure 2. MMR Immunization Rates for Kindergartners in School Districts Before and After Assistant Attorney General's Notification in October 2015, Grouped by Enforcement Practices

NDSU STUDY: ADDITIONAL RULE OR POLICY CHANGE RECOMMENDATIONS

- North Dakota Century Code language should combine moral and philosophical belief into a "personal belief" exemption
- North Dakota Administrative Rule states Tdap and MCV4 are required for seventh grade entry. This should be changed to include the next higher grade each subsequent year.

NDSU STUDY: ADDITIONAL PRACTICE/PROCESS CHANGE RECOMMENDATIONS

- The NDDPI, working closely with the NDDoH, should mandate the enforcement of school immunization requirements. NDDoH and NDDPI should work to increase immunization training opportunities, modify the state immunization manual, and provide more guidance to schools on the management of immunization compliance and exclusion for homeschooled children.
- The NDDPI and school administrators should review the processes for determining average daily membership and the distribution of foundation aid to assure that schools are not financially penalized if children are absent from school because of noncompliance with state immunization requirements.
- The NDDPI and NDDoH should encourage all schools to track immunization status and compliance through the use of an electronic system.
- The NDDoH should develop and target educational strategies for schools with persistently high immunization exemption rates, particularly private schools.

NDSU STUDY: ADDITIONAL PRACTICE/PROCESS CHANGE RECOMMENDATIONS

- Schools should follow the 30-day grace period and exclude noncompliant students 30 calendar days after the start of the school year or after enrolling in a school system. Schools must follow-up with students in the process of receiving a series of immunizations every 30 days.
- The NDDoH should continue to work with other states on data sharing agreements to ease the process of accessing immunization records from out-of-state children.
- Local immunization stakeholders should meet yearly to discuss best practices, immunization clinics, potential collaborations, and concerns.
- The NDDoH should work closely with Lutheran Social Services, New Americans, healthcare centers providing care to New Americans, translators, and local public health units to develop culturally competent immunization materials and practices for New Americans to increase knowledge and help them overcome barriers to achieve immunization compliance.

NDSU STUDY: RECOMMENDATIONS INVOLVING LOCAL PUBLIC HEALTH UNITS

- All schools should work closely with local public health units to improve immunization rates and compliance.
- Local public health units should create a memorandum of understanding with local schools so they can assist with immunization requirements and reporting.
- Local public health units should attend school registration events to provide and interpret immunization records, answer parent questions, and give missing immunizations.
- Schools should work with local public health units to enter out-of-state immunization records into the North Dakota Immunization Information System (NDIIS).
- Schools should consider hosting immunization clinics to achieve high immunization rates and full immunization compliance.

WHY VACCINATED INDIVIDUALS MAY GET VACCINE PREVENTABLE DISEASES

- No vaccine is 100% effective.
 - Most childhood vaccines are 85% to 95% effective. Some people will not develop immunity.
- In the United States, the number of people who have been vaccinated vastly outnumber those who have not.
 - In an outbreak situation, the number of vaccinated cases may outnumber unvaccinated cases. However, the **percentage** of vaccinated ill individuals will be much lower than the percentage of unvaccinated individuals.

IMPORTANCE OF HERD IMMUNITY AKA "COMMUNITY IMMUNITY"

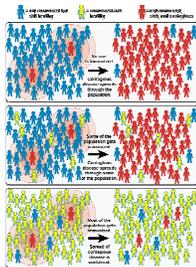
- Because vaccines are not 100% effective, the more people who are vaccinated, the better chance that the disease will not spread.
- 95% coverage rates ensure that if a Vaccine Preventable disease is introduced into a population, it will not spread.
- Community Immunity protects non-responders and those who cannot receive vaccine due to a contraindication.



HERD IMMUNITY THRESHOLDS

Immunization	R ₀	Herd Immunity Threshold	Kindergarten Immunization Rate	Private School Rates	Public School Rates
Diphtheria	6-7	85%	90.84%	91.95%	90.75%
Measles	12-18	83-94%	90.67%	91.09%	90.64%
Mumps	4-7	75-86%	90.67%	91.09%	90.64%
Pertussis	12-17	92-94%	90.84%	91.95%	91.95%
Polio	5-7	80-86%	91.24%	89.80%	91.35%
Rubella	6-7	83-85%	90.67%	91.09%	90.64%

HERD IMMUNITY IN PICTURES



7TH GRADE SHOTS AND SPORTS PHYSICALS

- Be sure to give MCV4, Tdap, HPV, and any other necessary vaccines at sports physicals!
- This is a great way to catch students that may not have an appointment to get vaccinated.



ENTER VACCINATIONS INTO NDIIS AND PRINT OUT CERTIFICATE FOR STUDENTS AND PARENTS

- State law requires all doses given to kids be entered into NDIIS.
- After giving kindergarten or 7th grade vaccines, a certificate of immunization should be given to the student/parent.
 - Remind them to bring to school at the start of the year.
- It is a huge help to schools when they are determining up to date status of their students if the students bring in the immunization records at the start of school.

MANDATORY REPORTABLE VACCINE PREVENTABLE DISEASES

- | | |
|-----------------------------|-------------------------------------|
| ▪ Pertussis/Whooping Cough* | ▪ Tetanus |
| ▪ Chickenpox | ▪ Invasive Streptococcus pneumoniae |
| ▪ Meningococcal disease* | ▪ Invasive Haemophilus influenzae |
| ▪ Influenza | ▪ Hepatitis A* |
| ▪ Measles* | ▪ Hepatitis B |
| ▪ Mumps* | ▪ Polio* |
| ▪ Rubella* | |
| ▪ Diphtheria* | |

* Case must be reported to NDDoH by phone call immediately

MANDATORY REPORTABLE VACCINE PREVENTABLE DISEASES

- All mandatory reportable diseases should be reported to Disease Control within 7 days.
- Reporting can be done by:
 - Calling 1.800.472.2180 or 701.328.2378
 - Reporting online: <https://www.ndhealth.gov/disease/reportcard>
 - Fax 701.328.0355
- In addition to health care facilities and labs, schools and child cares are also required to report conditions to the NDDoH

SCHOOL LOCATED IMMUNIZATION CLINICS

- Local Public Health Units and private providers throughout North Dakota hold immunization clinics in schools.
 - Great way to get students in school up to date on immunizations!
 - Usually offer flu and seventh grade immunizations.
 - Some offer kindergarten immunizations.
- Nurses from Local Public Health Units or local clinics come to the schools.
- Often the best way to reach children in rural areas.
- Many times during flu clinics adults can be vaccinated there as well.

INITIATIVES TO INCREASE RATES

- Recall letters for children who are not up to date on immunizations.
- Reminders for children who will need immunizations.
- Yearly rates letters to schools with individual rates for the last 3 years.
- Immunization Rates for each county posted to our website along with state-level data.



THANK YOU!

Thank you to Kylie Hall and Dr. Paul Carson and the NDSU Center for Immunization Research and Education for conducting this study and for putting the report together!

Type your question in the chat window to the right.

This presentation will be posted to our website: www.ndhealth.gov/immunize

After the presentation, questions may be sent to:

- Molly Howell mahowell@nd.gov
- Lexie Barber abarber@nd.gov
- Abbi Berg aberg@nd.gov
- Miranda Baumgartner mlbaumgartner@nd.gov
- Mary Woinarowicz marywoinarowicz@nd.gov
- Dominick Fitzsimmons dfitzsimmons@nd.gov

For any immunization questions, call 701-328-2378 for the Immunization Program

POST-TEST

- Nurses interested in continuing education credit, visit <http://www.ndhealth.gov/disease/post/default.aspx?PostID=131>
- Successfully complete the five-question post-test to receive your certificate.
- Credit for this session available until October 11th.