

NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES



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Pete Ricketts, Governor

November 30, 2017

Patrick O'Donnell, Clerk of the Legislature
State Capitol, Room 2018
P.O. Box 94604
Lincoln, NE 68509-4604

Dear Mr. O'Donnell:

Nebraska Revised Statute §71-529 requires the Department of Health and Human Services, Division of Public Health to report on the activities of the statewide Immunization Program annually to the Legislature. Pursuant to this law, we are submitting our report for the time period of November 1, 2016 to October 31, 2017.

Please feel free to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Thomas L. Williams, MD".

Thomas L. Williams, MD
Chief Medical Officer
Director, Division of Public Health
Department of Health and Human Services

REPORT TO: Nebraska Legislature

REPORT DATE: November 30, 2017

STATUTE: 71-526 through 71-530

CONTACT PERSON: Rebecca Martinez, RN, BSN, Immunization Program Manager, 402-471-2139

General Information

NEB. REV. STAT. §§ 71-526 through 71-530 constitutes the Childhood Vaccine Act, and as such authorizes the Department of Health and Human Services (DHHS) to administer a statewide comprehensive program. Activities conducted as part of this program may include:

- Actively seeking the participation of stakeholders to ensure that children are appropriately immunized;
- Providing information and education to the public and other stakeholders to maintain a high level of awareness and demand for immunization;
- Assisting stakeholders in improving the availability and delivery of immunizations to ensure the adequacy of the vaccine delivery system;
- Evaluating the effectiveness of these statewide efforts, measuring children's immunization status, identifying children at risk for deficiencies, and reporting annually to the Legislature;
- Recognizing persons who volunteer efforts towards achieving the goal of providing immunization to children;
- Providing for immunization of children who are not otherwise eligible for immunization coverage with Medicaid or private third-party payment;

This report provides a summary of the progress that has been made in carrying out the duties prescribed above for the period of November 1, 2016 to October 31, 2017.

Immunization Program Overview

The Immunization Program is funded by federal grants from the Centers for Disease Control and Prevention (CDC) to implement and maintain an immunization program for eligible Nebraska children from birth through 18 years of age. Eligible children include those that are Medicaid eligible, uninsured, underinsured (their insurance specifically excludes vaccine coverage), and/or American Indian/Alaska Native children. Program activities include:

- distributing publicly funded vaccines to participating providers (currently numbering approximately 279 public and private clinics)
- providing immunization training on vaccines and vaccine management
- conducting quality assurance procedures with enrolled providers
- maintaining and enhancing the Nebraska State Immunization Information System (NESIIS)
- conducting surveillance of vaccine preventable diseases
- participating in activities related to perinatal hepatitis B prevention
- assessing immunization coverage levels

In addition, the CDC provides funding to conduct similar program activities as they relate to eligible adults. The Adult Immunization Program (AIP) currently maintains approximately 36 enrolled public clinics to assist in serving eligible adults. Eligible adults include persons 19 years of age and older who are uninsured or underinsured.

Total funding from the CDC to conduct the above activities is approximately \$2.3 million each year. This total does not include previously awarded additional funding from smaller, project-specific grants and no additional funding was awarded during this report period. In addition to the federal funds, the program has approximately \$286,143 in state general funds that can be used to purchase and distribute vaccines to eligible children.

Immunization Coverage Rates

There are a variety of mechanisms in place to monitor immunization coverage rates, at both the national and state level. Nationally, the National Immunization Survey (NIS) is a survey to monitor childhood and adolescent immunization coverage. The Behavioral Risk Factor Surveillance System (BRFSS), which is facilitated at the national level but administered at the state level, also routinely asks participants questions regarding immunization status. Finally, at the state level, two annual surveys are conducted to assess immunization status of children: one is the school survey which asks schools to report on enrolled children in kindergarten and seventh grade; the other is a survey of licensed child-care facilities asking for a report on children enrolled in care.

BRFSS questions are somewhat limited in number and scope, so they do not give a complete picture of immunizations in Nebraska. The NIS and Nebraska school survey are used for this report.

National Immunization Survey (NIS)

The CDC began collecting data in April 1994 to monitor childhood immunization coverage via the NIS. The survey is conducted in the format of list-assisted random-digit-dialing telephone calls followed by a mailed packet to children's immunization providers to verify responses. Survey data is available annually, and trend data is available as well.

Nebraska has consistently had very high coverage rates, and the 2016 NIS data maintains this standard. Looking at children aged 19-35 months, Nebraska had higher coverage rates compared to the U.S. as well as compared to the region it belongs to for all of the recommended vaccines (see Attachment 1).

The National Immunization Survey also releases teen specific information. As shown in Attachment 2, the 2015-2016 NIS-Teen data indicates that for adolescents 13-17 years of age Nebraska consistently has very good coverage rates for HPV (both males and females) as well as varicella. Tdap, meningococcal, and MMR rates are slightly below the national rate. Nebraska has higher coverage rates than the region it belongs to for all teen recommended vaccines.

Nebraska School Survey

Each year the Nebraska Immunization Program conducts a survey of Nebraska schools to obtain summary information related to kindergarten and seventh grade students' immunization status. This survey gathers information on the number of children within a school who have been vaccinated for DTaP (diphtheria, tetanus, and pertussis), polio, MMR (measles, mumps, and rubella combined), varicella, and hepatitis B in the case of kindergarten aged children. School staff must report the number of seventh graders who have been vaccinated for Tdap (tetanus, diphtheria, and pertussis), MMR, varicella, and hepatitis B. In addition, schools report the

number of children who have medical or religious exemption documentation, or are provisionally enrolled while completing vaccination requirements.

The school survey conducted for the 2016-2017 school year shows a 94% or higher coverage rate for both kindergartners and seventh graders for the vaccines mentioned above.

Advisory Committee

The role of the Nebraska Immunization Advisory Committee (NIAC) is exclusively to make recommendations to the Nebraska Immunization Program on matters related to vaccine preventable diseases through immunization services. The NIAC met three times this past year, and has an organizational structure that has been formalized in a finalized charter. Topics of discussion thus far have included mandatory reporting to the state Immunization Information System (NESIIS), a program strategic plan, vaccine preventable disease outbreak response, current and proposed regulations, current immunization coverage rates, and activities related to increasing human papillomavirus (HPV) vaccination rates.

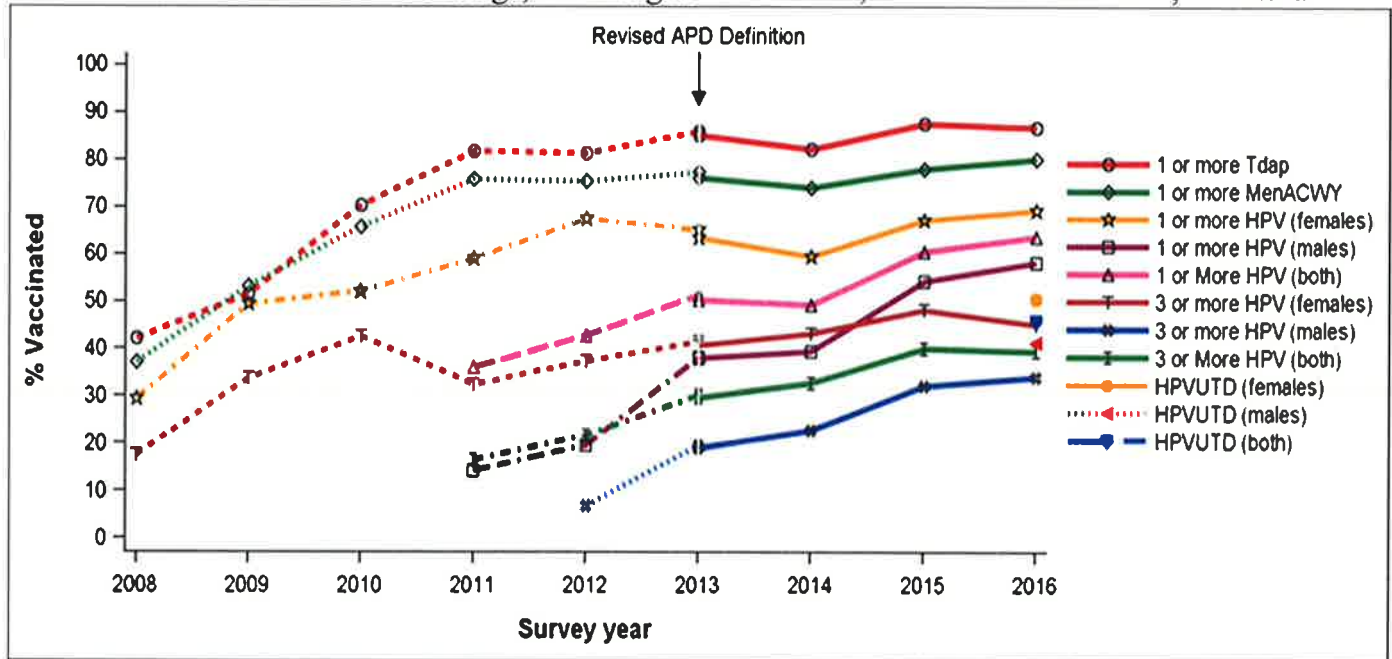
The NIAC remains an engaged, enthusiastic, committed resource for the Immunization Program.

HPV

HPV vaccines offer the best protection against many forms of cancer (cervical, vulvar, vaginal, anal, and oropharyngeal) as well as genital warts and other pre- or non-cancerous lesions. The vaccine works best when girls and boys receive all doses in the vaccine series and have time to develop an immune response before being exposed to the common virus, most contact occurs through sexually activity with another person. That's why HPV vaccination is recommended for preteen girls and boys at age 11 or 12 years. The President's Cancer Panel Annual Report released in February 2014 stated that increasing the rate of HPV vaccinations is one of the most profound opportunities in cancer prevention today.

Despite the cancer-prevention benefits, HPV vaccination rates have historically lagged behind other adolescent vaccines. The below graph compares Nebraska rates for HPV with Tdap (a vaccination required for entry into 7th grade) and MenACWY (a quadrivalent meningococcal vaccine). While all three vaccines could and should be administered to an adolescent presenting for a school physical, HPV clearly lags behind the other two vaccines, though is trending upwards.

Estimated Vaccination Coverage, Teens Aged 13-17 Years, NIS-Teen 2008 – 2016, Nebraska



NIS-Teen Estimates from 2008-2013 connected with dashed lines are previously published estimates using the previous APD definition. Estimates from 2013-2016 connected with solid lines use the revised APD definition.

Because this is the case nationwide, CDC has focused many resources on increasing HPV rates and this has resulted in valuable partnerships and initiatives. These include the National HPV Roundtable, an American Academy of Pediatrics (AAP) initiative, a National Area Health Education Center initiative, and revision of the state’s cancer plan.

UNMC/NDHHS Collaboration

A collaboration between the University of Nebraska Medical Center (UNMC) College of Public Health (CoPH) and the NDHHS Division of Public Health (DPH) grew in the spring of 2016 from a shared desire to make Nebraska the Healthiest State in the Nation. As part of this collaboration, leadership encouraged a renewed focus on adolescent vaccines (HPV, Tdap, and Meningococcal) and increasing coverage rates. Work accomplished to date includes data analysis, creation of maps, an environmental scan of existing efforts, policy analysis, and outreach to other partners to extend efforts. This work has continued throughout 2017 and has included analyzing immunization rates under the new HPV vaccination schedule, communicating with state policy makers regarding reporting, and implementing new quality improvement projects in participating clinics.

NDHHS Comprehensive Cancer Control Program

The Comprehensive Cancer Control (CCC) Program develops a state Cancer Plan which describes objectives, goals, and activities. The current plan covers the time period of 2017-2022, and includes specific activities to increase female and male HPV vaccination rates. Strategies to accomplish this include: 1) conducting a social marketing campaign emphasizing cancer prevention, 2) using quality improvement projects with enrolled clinics to reduce missed vaccination opportunities, 3) supporting the Nebraska HPV Roundtable, 4) supporting efforts to require reporting vaccinations to a vaccination registry, and 5) continuing to disseminate knowledge and best practices around vaccination.

Nebraska State Laws

Current state laws in most cases assist the Nebraska Immunization Program in ensuring widespread vaccination of target populations, by requiring immunization and reporting to the state. However, Nebraska does allow exemptions to the immunization requirements in the form of medical and religious exemptions.

NEB. REV. STAT. §79-217 requires that schools ensure all students are protected against measles, mumps, rubella, poliomyelitis, diphtheria, pertussis, and tetanus by immunization prior to enrollment. Further, the school must ensure that every student entering the seventh grade has a booster immunization containing diphtheria and tetanus toxoids as well as an acellular pertussis vaccine.

NEB. REV. STAT. §71-1913.01 through 71-1913.03 requires that licensed childcare programs obtain from the parent or guardian of enrolled children proof that the child is protected by age-appropriate immunization against measles, mumps, rubella, poliomyelitis, diphtheria, pertussis, tetanus, haemophilus influenzae type B, and invasive pneumococcal disease. The statute allows the department to specify other reportable diseases, therefore varicella and hepatitis B documentation is also requested. This statute further allows parents to submit documentation of either a medical exemption or a personal belief exclusion.

NEB. REV. STAT. §§71-467 through 71-469 requires that certain health care facilities offer influenza, pneumococcal and Tdap vaccinations to all residents, inpatients and employees, although an employee may elect to not be vaccinated. Hospitals must also keep records of employee vaccinations and refusals.

NEB. REV. STAT. §85-902 requires that postsecondary educational institutions give newly enrolled students residing in on campus housing and their parent or guardian information on the risks associated with meningococcal disease, as well as a recommendation that each student receive a meningococcal vaccination. This statute further requires these institutions to request a confirmation that the information has been received and reviewed.

NEB. REV. STAT. §§71-539 through 71-544 provides for the exchange of immunization information between certain health care facilities and professionals.

Attachment 1

Estimated vaccination coverage with selected individual vaccines and a combined vaccine series* among children aged 19-35 months, by U.S. Department of Health and Human Services (HHS) region, state, selected local area, or territory – National Immunization Survey-Child, United States, 2016†

	MMR (≥1 dose)		DTaP (≥4 doses) [§]		Hep B (birth dose) [¶]		HepA (≥2 doses)		Rotavirus ^{**}		Combined vaccine series	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)
US National	91.1	(±1.0)	83.4	(±1.3)	71.1	(±1.6)	60.6	(±1.6)	74.1	(±1.5)	70.7	(±1.5)
HHS REGION VII	93.6	(±2.1)	84.4	(±3.3)	74.4	(±3.7)	61.8	(±4.2)	75.2	(±3.8)	72.4	(±3.9)
Nebraska	93.7	(±4.5)	89.4	(±5.1)	79.3	(±6.2)	70.5	(±6.9)	78.1	(±6.5)	80.6	(±6.1)

Abbreviations: CI = confidence interval; DTaP = diphtheria, tetanus toxoids and acellular pertussis vaccine; HepA = hepatitis A vaccine; HepB = hepatitis B vaccine; Hib = *Haemophilus influenzae* type b vaccine; MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine.

* The combined seven-vaccine series (4:3:1:3*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, full series of Hib vaccine (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

† Children in the 2016 National Immunization Survey were born January 2013-May 2015.

§ Includes children who might have been vaccinated with diphtheria and tetanus toxoids vaccine, or diphtheria, tetanus toxoids and pertussis vaccine.

¶ One dose HepB administered from birth through age 3 days.

** Either ≥2 or ≥3 doses of rotavirus vaccine, depending on product type received (≥2 doses for Rotarix [RV1] or ≥3 doses for RotaTeq [RV5]).

†† Statistically significant increase in coverage compared to 2015 (p<0.05).

‡‡ Statistically significant decrease in coverage compared to 2015 (p<0.05).

¶¶ No comparison was made to coverage in 2015; Dallas County was not sampled in 2015 and "rest of state" is not comparable between the two years.

*** Children from Guam (n=492), Puerto Rico (n=841), and the U.S. Virgin Islands (n=498) were excluded from the national estimates.

Attachment 2

Estimated vaccination coverage* with selected vaccines and doses among adolescents aged 13–17 years† United States, HHS Region VII and Nebraska -- National Immunization Survey–Teen (NIS-Teen), United States, 2015-2016 .

	Females and Males				Females		Males		Females and Males	
	≥1 Tdap§	≥1 MenACWY†	≥1 HPV**	HPVUTD††	≥1 HPV**	HPVUTD††	≥1 HPV**	HPVUTD††	≥2 MMR§§	≥2 VAR¶¶
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
US overall										
2015	86.4(±1.0)	81.3(±1.0)	56.1(±1.3)		62.8(±1.8)		49.8(±1.8)		90.7(±0.8)	83.1(±1.1)
2016	88.0(±0.9)***	82.2(±1.0)	60.4(±1.2)***	43.4(±1.3)	65.1(±1.7)	49.5(±1.9)	56.0(±1.7)***	37.5(±1.7)	90.9(±0.7)	85.6(±1.0)***
HHS REGION VII										
2015	86.3(±2.6)	70.7(±3.4)	52.3(±3.6)		60.2(±5.1)		44.8(±5.0)		89.0(±2.5)	76.8(±3.5)
2016	86.2(±2.4)	70.8(±3.3)	55.3(±3.5)	39.3(±3.4)	60.7(±4.9)	43.7(±5.0)	50.2(±4.9)	35.2(±4.7)	89.6(±2.2)	79.7(±3.3)
Nebraska										
2015	87.7(±4.1)	78.1(±4.8)	60.6(±5.7)		67.3(±7.9)		54.3(±7.9)		92.2(±3.0)	88.7(±4.3)
2016	86.8(±4.6)	80.2(±5.1)	63.7(±6.3)	45.9(±6.6)	69.4(±9.0)	50.6(±9.5)	58.3(±8.8)	41.3(±9.1)	89.7(±4.2)	86.7(±5.2)

Abbreviations: HHS = U.S. Department of Health and Human Services; CI = confidence interval; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; MenACWY = quadrivalent meningococcal conjugate vaccine; HPV = human papillomavirus; HPVUTD = HPV Up-To-Date; MMR = measles, mumps, rubella vaccine; VAR = varicella vaccine; NA = not available (estimate not reported because unweighted sample size for the denominator was <30 or (95%CI half width / estimate) > 0.6)

* Estimates with 95% CI half-widths >10 might not be reliable.

† Adolescents (N=20,475) in the 2016 NIS-Teen were born January 1998 through February 2004.

§ ≥1 dose Tdap vaccine at or after age 10 years.

¶ ≥1 dose of MenACWY or meningococcal-unknown type vaccine.

** HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV). For ≥1 dose measures, separate percentages are reported among females only (N=9,661), among males only (N=10,814), and among females and males combined (N=20,475).

†† HPV UTD - Includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years and there was at least five months minus four days between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi).

§§ ≥2 doses of MMR vaccine

¶¶ ≥2 doses of VAR vaccine among adolescents without a reported history of varicella disease.

*** Statistically significant (p<0.05) percentage point increase from 2015.