NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES

Pete Ricketts, Governor

December 15, 2016

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

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, 2015 to October 31, 2016.

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

Sincerely,

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, 2016

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; and
- 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, 2015 to October 31, 2016.

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 300 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 39 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 $2.5 million each year, not including additional funding from smaller, project-specific grants. In addition to the federal funds, the program has approximately $370,000 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, adolescent, and adult 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. Therefore, the NIS, Nebraska school survey and Nebraska childcare facility 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 2015 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 most of the recommended vaccines (see Attachment 1).

The National Immunization Survey also releases teen specific information. As shown in Attachment 2, the 2014-2015 NIS-Teen data indicates that Nebraska consistently has very good coverage rates for the vaccines that are recommended for adolescents 13-17 years of age – above the national rate for all vaccines other than MenACWY.

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 combined), 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 combined), 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 2015-2016 school year shows a 95% 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 meet three times each 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, and activities related to increasing human papillomavirus (HPV) vaccination rates.

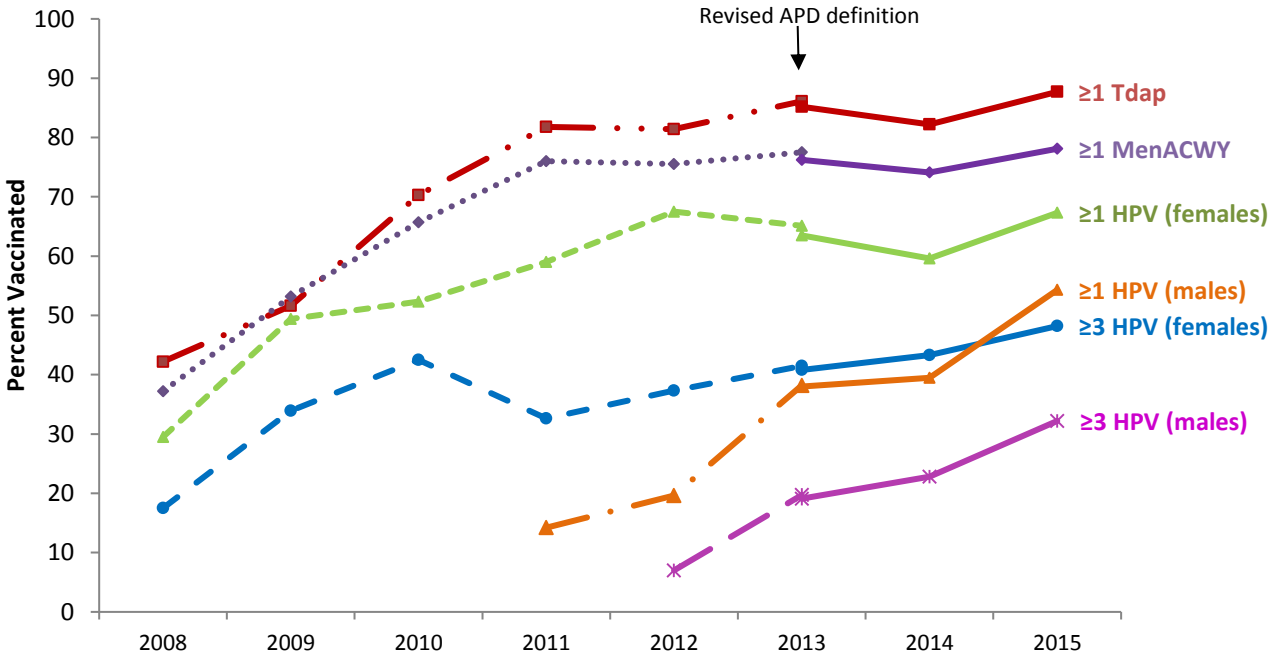
The NIAC remains an engaged, enthusiastic, committed resource for the Immunization Program.

HPV

HPV vaccines offer 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 three vaccine doses and have time to develop an immune response before being sexually active 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 – 2015, Nebraska



APD: Adequate provider data. A revised APD definition was implemented in 2014, retrospectively applied to 2013 data and revised estimates were calculated for purposes of comparability to 2014 data. Figures includes two sets of estimates for 2013. Estimates from 2008-2013 connected with dashed lines are previously published estimates using the previous APD definition. Estimates from 2013-2015 connected with solid lines use the revised APD definition. NIS-Teen Estimates from 2008-2013 connected with dashed lines are previously published estimates using the previous APD definition. Estimates from 2013-2015 connected with solid lines use the revised APD definition.

UNMC/DHHS Collaboration

A collaboration between the University of Nebraska Medical Center (UNMC) College of Public Health (CoPH) and the DHHS 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. Thus, a small group of stakeholders convened and began meeting every two weeks. 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 is planned to continue into 2017.

DHHS 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 2011-2016, and the next plan (2017-2022) is currently in development. HPV vaccination has a place in the current plan under the screening section, however there are no specific activities or goals included to increase rates. The DHHS Immunization Program Manager has worked with CCC program staff to move HPV vaccination to the prevention section and adding data, activities and goals to make that section more robust.

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 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. 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, nationally and by U.S. Department of Health and Human Services (HHS) region, state, and local area – National Immunization Survey, United States, 2015†

US, HHS region, state, and local area	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 Overall	**91.9**	**(±0.8)**	**84.6**	**(±1.1)**	**72.4**	**(±1.4)**	**59.6**	**(±1.5)**	**73.2**	**(±1.4)**	**72.2**	**(±1.4)**
HHS REGION VII	**93.2**	**(±2.1)**	**85.5**	**(±3.0)**	**77.2**	**(±3.6)**	**63.5**	**(±4.0)****	**75.7**	**(±3.6)**	**73.8**	**(±3.7)**
Nebraska	95.6	(±3.0)	86.9	(±5.0)	72.5	(±6.8)	72.8	(±6.5)	73.0	(±6.4)	73.8	(±6.3)

Abbreviations: MMR = measles, mumps, and rubella vaccine; DTaP = diphtheria, tetanus toxoids and acellular pertussis vaccine (includes children who might have been vaccinated with diphtheria and tetanus toxoids vaccine, or diphtheria, tetanus toxoids and pertussis vaccine); HepB = hepatitis B vaccine; HepA = hepatitis A vaccine; CI = confidence interval; Hib = *Haemophilus influenzae* type b 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 doses 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 2015 National Immunization Survey were born January 2012-May 2014.

§ 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 2014 (p<0.05).

†† Statistically significant decrease in coverage compared to 2014 (p<0.05).

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), 2014-2015

			Females			Males				
	≥1 Tdap[§]	≥1 MenACWY[¶]	≥1 HPV[**]	≥2 HPV[††]	≥3 HPV[§§]	≥1 HPV[**]	≥2 HPV[††]	≥3 HPV[§§]	≥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										
2014	87.6(±0.9)	79.3(±1.1)	60.0(±1.9)	50.3(±1.9)	39.7(±1.9)	41.7(±1.8)	31.4(±1.7)	21.6(±1.6)	90.7(±0.8)	81.0(±1.2)
2015	86.4(±1.0)	81.3(±1.0) [†††]	62.8(±1.8) [†††]	52.2(±1.8)	41.9(±1.8)	49.8(±1.8) [†††]	39.0(±1.7) [†††]	28.1(±1.6) [†††]	90.7(±0.8)	83.1(±1.1) [†††]
HHS Region VII										
2014	82.1(±2.8)	65.4(±3.6)	49.8(±5.2)	40.6(±5.0)	31.6(±4.6)	31.0(±4.7)	23.8(±4.3)	16.3(±3.5)	87.7(±2.7)	70.7(±4.0)
2015	86.3(±2.6) [†††]	70.7(±3.4) [†††]	60.2(±5.1) [†††]	49.3(±5.3) [†††]	37.9(±5.1)	44.8(±5.0) [†††]	34.6(±4.8) [†††]	24.4(±4.5) [†††]	89.0(±2.5)	76.8(±3.5) [†††]
Nebraska										
2014	82.2(±5.4)	74.1(±5.8)	59.6(±9.1)	51.2(±9.4)	43.3(±9.5)	39.5(±9.1)	31.0(±8.8)	22.8(±7.8)	94.5(±3.2)	83.5(±5.8)
2015	87.7(±4.1)	78.1(±4.8)	67.3(±7.9)	55.5(±8.5)	48.2(±8.6)	54.3(±7.9) [†††]	46.9(±7.8) [†††]	32.2(±7.2)	92.2(±3.0)	88.7(±4.3)

Abbreviations: CI = confidence interval; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis; MenACWY = quadrivalent meningococcal conjugate; HPV = human papillomavirus; MMR = measles, mumps, rubella vaccine; VAR = varicella vaccine; HHS = US Department of Health and Human Services

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

[†] Adolescents in the 2015 NIS-Teen were born January 1997 through February 2003.

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

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

[**] ≥1 dose of HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV) or bivalent (2vHPV). Percentages are reported separately for females only and for males only.

[††] ≥2 doses of HPV vaccine, 9vHPV, 4vHPV or 2vHPV.

[§§] ≥3 doses of HPV vaccine, 9vHPV, 4vHPV or 2vHPV. Some adolescents might have received more than the 3 recommended HPV vaccine doses.

[¶¶] ≥2 doses of MMR.

*** ≥2 doses VAR among adolescents with no varicella disease history (by parent/guardian report or provider records).

[†††] Statistically significant ($p<0.05$) percentage point increase from 2014 estimates.

[§§§] Statistically significant ($p<0.05$) percentage point decrease from 2014 estimates.