November 17, 2014

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

Dear Mr. O'Donnell:

Nebraska Revised Statutes §§ 71-526 through 71-530 requires the Department of Health and Human Services, Division of Public Health, Immunization Program to report annually to the Legislature. Pursuant to this law, we are submitting our report for the time period of November 1, 2013 to October 31, 2014.

In addition to various successes in terms of increased rates of childhood vaccinations described here, we are also pleased to report that the Nebraska Immunization Program was the recipient of awards from the federal Centers for Disease Control and Prevention this year.

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

Sincerely

Joseph M. Acierno, M.D., J.D.

Chief Medical Officer

Director, Division of Public Health

Department of Health and Human Services

REPORT TO: Nebraska Legislature

REPORT DATE: November 15, 2014

STATUTE: 71-526 through 71-530

CONTACT PERSON: Sara Morgan, 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 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, 2013 to October 31, 2014.

#### **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 Centers for Disease Control (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 2013 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. In this area as well, Nebraska has very good coverage rates for the vaccines that are recommended for adolescents 13-17 years of age. As shown in Attachment 2, the 2013 NIS-Teen data shows that Nebraska consistently has higher coverage rates for recommended vaccines as compared to the U.S. as a whole.

#### Nebraska School Survey

Each year the Nebraska Immunization Program conducts an online 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), 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.

The school survey conducted for the 2013-2014 school year shows a 96% or higher coverage rate for kindergartners, and a 95% or higher coverage rate for seventh graders for the vaccines mentioned above.

#### Nebraska Childcare Facility Survey

The survey for childcare facilities gathers information on enrolled, pre-kindergarten aged children who have been vaccinated for the recommended childhood series. The full series recommended for children prior to age two includes  $\geq 4$  doses of DTP/DT/DTaP,  $\geq 3$  doses of poliovirus vaccine,  $\geq 1$  doses of measles-containing vaccine, full series of Hib (*Haemophilus influenzae* type B) vaccine (3 or 4 doses, depending on product type),  $\geq 3$  doses of hepatitis B vaccine,  $\geq 1$  dose of varicella vaccine, and  $\geq 4$  doses of pneumococcal conjugate vaccine (PCV).

The childcare facility survey conducted for the 2013-2014 year shows a 55% coverage rate for children enrolled in licensed programs.

#### Recognition of the Nebraska Immunization Program

The Nebraska DHHS Immunization Program recently received three Healthy People 2020 Target Awards from the CDC, which were presented at the 2014 National Immunization Conference in Atlanta, GA. The awards received were:

- Childhood Influenza Immunization Coverage Award: This award was presented in recognition of outstanding accomplishment in achieving 62.7% influenza vaccination during the 2013-2014 season among children age 6 months to 17 years
- Toddler Vaccination Coverage Award: This award was presented in recognition of extraordinary accomplishment in achieving outstanding coverage for 9 vaccinations among children age 19-35 months. These vaccines constitute the main childhood series, including MMR (Measles, Mumps, Rubella combined), Polio, and DTaP (Diptheria, Tetanus, and Pertussis combined) among others.
- Adolescent Vaccination Coverage Award: This award was presented in recognition of extraordinary accomplishment in achieving outstanding coverage for 3 vaccinations among 13-17 year olds. These

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vaccines are TDaP (Tetanus, Diptheria, and Pertussis combined), Meningococcal, and HPV (Human Papillomavirus).

#### 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 among children aged 19-35 months, by selected individual vaccines and vaccination series\*, by state and local area – National Immunization Survey, United States, 2013<sup>†</sup>

	MMR (≥	MMR (≥1 doses)		DTaP (≥4 doses)		Hep B (birth) <sup>§</sup>		HepA (≥2 doses) <sup>¶</sup>		Rotavirus**		Combined Vaccine series*	
	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	%	(95% CI)	
US National	91.9	(±0.9)	83.1	(±1.3)	74.2	(±1.4)**	54.7	(±1.6)	72.6	(±1.5)**	70.4	(±1.5)	
HHS REGION VII	91.1	(±2.7)	84.5	(±3.3)	79.1	(±3.5)	54.9	(±4.5)	73.5	(±4.0)	71.9	(±4.0)	
Nebraska	92.5	(±4.1)	88.3	(±4.7)	81.3	(±5.3)	69.5	(±6.5)	76.2	(±6.2)	79.0	(±5.9)	

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

<sup>\*</sup>Includes ≥4 doses of DTP/DT/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 hepatitis B vaccine, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

<sup>&</sup>lt;sup>†</sup>Children in the 2013 National Immunization Survey were born during January 2010-May 2012.

<sup>§ 1</sup> or more doses of hepatitis B vaccine administered between birth and age 3 days.

<sup>&</sup>lt;sup>¶</sup> ≥2 doses hepatitis A vaccine and measured among children aged 19-35 months.

<sup>\*\*≥2</sup> or ≥3 doses of rotavirus vaccine, depending on product type received (≥2 doses for Rotarix [RV1] and ≥3 doses for RotaTeq [RV5]).

<sup>&</sup>lt;sup>††</sup> Statistically significant increase in coverage compared to 2012 (p<0.05).

#### Attachment 2

# Estimated vaccination coverage with selected vaccines and doses\* among adolescents aged 13–17 years<sup>†</sup> by HHS Regions/state/area -- National Immunization Survey–Teen (NIS-Teen), United States, 2013

		≥2 VAR¹	≥1 Tdap <sup>"</sup>	≥1 MenACWY <sup>††</sup>	Females (N=8,264)			Males (N= 9,554)			
	≥2 MMR§				≥1 HPV⁵⁵	≥2 HPV <sup>¶¶</sup>	≥3 HPV***	≥1 HPV⁵⁵	≥2 HPV <sup>¶¶</sup>	≥3 HPV***	
	% (95% CI) <sup>†††</sup>	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	
US National	91.8(±0.8)	78.5(±1.3) <sup>§§§</sup>	86.0(±0.9) <sup>§§§</sup>	77.8(±1.1) <sup>§§§</sup>	57.3(±1.9) <sup>§§§</sup>	47.7(±2.0) <sup>§§§</sup>	37.6(±1.9) <sup>§§§</sup>	34.6(±1.9) <sup>§§§</sup>	23.5(±1.7) <sup>§§§</sup>	13.9(±1.4) <sup>§§§</sup>	
Nebraska	92.3(±3.2)	84.6(±5.5)	86.1(±4.7)	77.5(±5.2)	65.1(±9.2)	55.3(±9.3)	41.5(±9.1)	38.2(±8.7) <sup>§§§</sup>	26.4(±7.8) <sup>§§§</sup>	19.7(±7.2) <sup>§§§</sup>	

Abbreviations: CI = confident interval; MMR = measles, mumps, and rubella; VAR = varicella; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis; MenACWY = meningococcal conjugate; HPV = human papillomavirus vaccine; NA = not available (estimate not reported because unweighted sample size for the denominator was <30 or 95%CI half width/estimate > 0.6)

<sup>\*</sup> Vaccination estimates for additional measures, including ≥3 doses hepatitis B, and ≥1 dose varicella vaccines are available at: http://www.cdc.gov/vaccines/stats-surv/nis/default.htm#nisteen.

<sup>&</sup>lt;sup>†</sup> Adolescents (N=18,264) in the 2013 NIS-Teen were born January 11, 1995 through February 13, 2001.

<sup>§ ≥2</sup> doses of MMR vaccine.

<sup>&</sup>lt;sup>¶</sup> ≥2 doses of VAR vaccine among adolescents without a reported history of varicella disease.

<sup>\*\* ≥1</sup> dose Tdap vaccine on or after age 10 years.

<sup>&</sup>lt;sup>††</sup> ≥1 dose of MenACWY or meningococcal-unknown type vaccine.

<sup>§§ ≥1</sup> dose of HPV vaccine, either quadrivalent or bivalent may be used for females, and only quadrivalent may be used for males. For ≥1, ≥2, and ≥3 dose measures, separate percentages are reported among females only (N=8,710) and among males only (N= 9,554).

<sup>11 ≥2</sup> doses of HPV vaccine, either quadrivalent or bivalent may be used for females, and only quadrivalent may be used for males.

<sup>\*\*\*\* ≥3</sup> doses of HPV vaccine, either quadrivalent or bivalent may be used for females, and only quadrivalent may be used for males.

<sup>†††</sup> Estimates with 95% CI half-widths >10 might not be reliable.

<sup>\$\$\$</sup> Statistically significant (p<0.05) percentage point increase from 2012.

<sup>111</sup> Statistically significant (p<0.05) percentage point decrease from 2012.