

NEBRASKA

Good Life. Great Mission.

DEPT. OF HEALTH AND HUMAN SERVICES



Jim Pillen, Governor

March 23, 2023

Brandon Metzler, Clerk of the Legislature
State Capitol, Room 2028
P.O. Box 94604
Lincoln, NE 68509-4604

RE: Immunization Program Annual Report

Dear Mr. Metzler:

In accordance with Neb. Rev. Stat. 71-529, the Division of Public Health in the Department of Health and Human Services submits this report on the activities of the statewide Immunization Program. This report covers the time period of November 1, 2021, to October 31, 2022

Sincerely,

A handwritten signature in blue ink that reads "Charity Menefee".

Charity Menefee
Director of Public Health
Nebraska Department of Health and Human Services

2021-2022 Nebraska Immunization Program Report

General Information

Neb. Rev. Stat. 71-526-71-530 constitutes the Childhood Vaccine Act and authorizes the Department of Health and Human Services (DHHS) to administer a statewide comprehensive immunization 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, 2021, to October 31, 2022.

Immunization Program Overview

The Immunization Program is funded by federal funds 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 301 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, and
- 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 41 enrolled public clinics to assist in serving eligible adults. Eligible adults include people 19 years of age or older who are uninsured or underinsured.

Total funding from the CDC to conduct the above activities is approximately \$3.9 million each year. This total does not include previously awarded additional funding from smaller, project-specific grants, and no additional funding of this type was awarded during this report period. In addition to the federal funds, the program has approximately \$272,293 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. The National Immunization Survey (NIS) is a survey that monitors 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 the immunization status of children: one is a survey of licensed childcare facilities asking for a report on children enrolled in care; the other is the school survey, which asks schools to report on enrolled children in kindergarten and seventh grade.

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

The National Immunization Survey (NIS)

In April 1994, the CDC began collecting data 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.

NIS also releases teen-specific information. As shown in the data provided, the 2021 NIS-Teen data indicates that for adolescents 13–17 years of age, Nebraska consistently has very good coverage rates and is noted for significantly increasing HPV series completion rates. Nebraska has higher coverage rates than the U.S. for all teen recommended vaccines, except for meningococcal vaccination, where Nebraska is slightly lower. Nebraska has higher coverage rates than the region it belongs to for all teen recommended vaccines.

Human papillomavirus vaccines (HPV) 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 latest HPV vaccination coverage estimates in the [2021 National Immunization Survey-Teen](#) show that HPV vaccination rates are increasing as more adolescents are up to date on HPV vaccination (Pingali et al., 2022). The vaccine works best when girls and boys receive all the doses in the vaccine series and have time to develop an immune response before being exposed to the common virus. The Advisory Committee for Immunization Practices (ACIP) and CDC both recommended HPV for preteen girls and boys at age 11 or 12 but can be given as early as age 9. In addition to early screening, HPV immunization is a complimentary tool that offers cancer prevention for young adults.

Despite the cancer-prevention benefits, HPV vaccination rates have historically lagged other adolescent vaccines. The data provided, 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 the other two vaccines, though it is trending upwards. The CDC and the DHHS Immunization Program strongly recommend all adolescent vaccines when first eligible to avoid missed opportunities to vaccinate. This focus also extends to highly encouraging the scheduling of the follow-up HPV vaccination appointment prior to leaving the office, along with implementing a reminder-recall process for all patients who are not up to date.

Because this is the case nationwide, the 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.

Nebraska Child Care Survey (NCCS)

Each year, the Nebraska Immunization Program conducts a survey of licensed childcare programs in Nebraska to obtain the age-appropriate immunization status of children in their care. This survey gathers information on who has been vaccinated for DTaP (diphtheria, tetanus, and pertussis), polio, MMR (measles, mumps, and rubella combined), varicella, Hib (haemophilus influenzae type b), hepatitis B, and pneumococcal disease. In addition, programs submit parental, medical, or religious exemption documentation.

The childcare survey conducted for 2021 shows that by 19–72 months of age, immunization coverage rates vary between 94% and 96% depending upon the vaccine. Promotion of on-time vaccination remains a priority and collective coverage results were shared with all childcare programs in 2021 along with education reinforcing the importance of immunization (see Attachment).

Nebraska School Survey (NSS)

Each year, the DHHS 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 2021–2022 school year shows a 95% or higher coverage rate for both kindergartners and seventh graders for each of the vaccines mentioned above.

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.

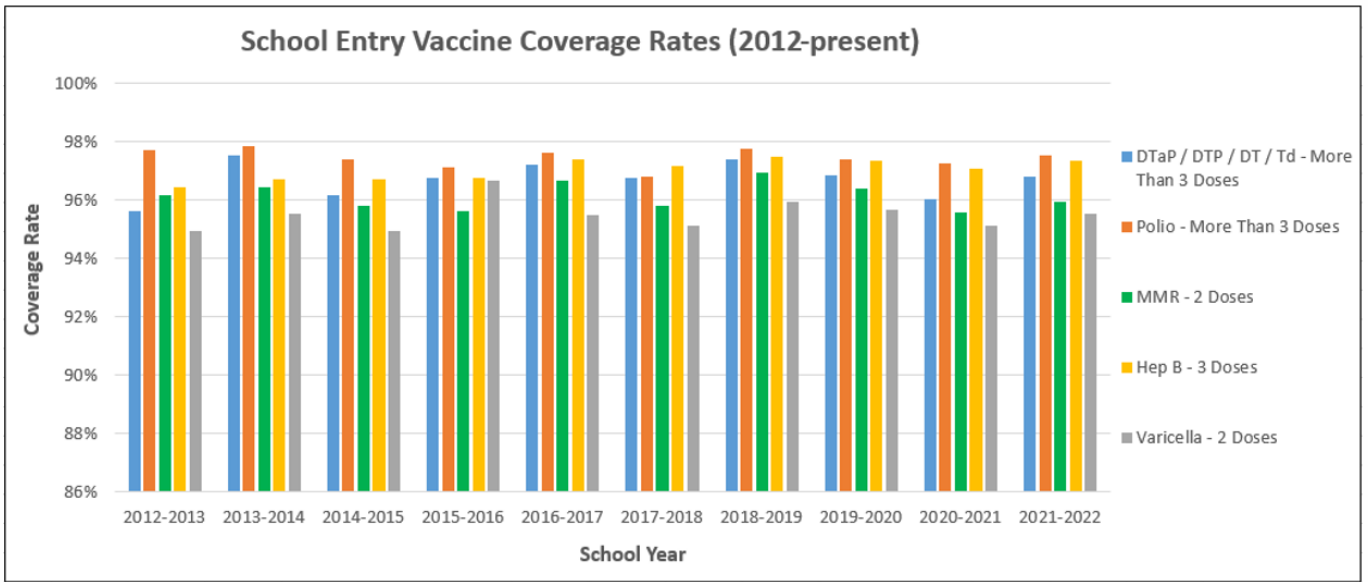
Neb. Rev. Stat. 71-1913.01 through 71-1913.03 requires that licensed childcare programs obtain from the parent or guardian of enrolled children proof that the child is protected by age-appropriate immunization against measles, mumps, rubella, poliomyelitis, diphtheria, pertussis, tetanus, haemophilus influenzae type B, and invasive pneumococcal disease. The statute allows the department to specify other reportable diseases; therefore, varicella and hepatitis B documentation are 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 parents or guardians' 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.

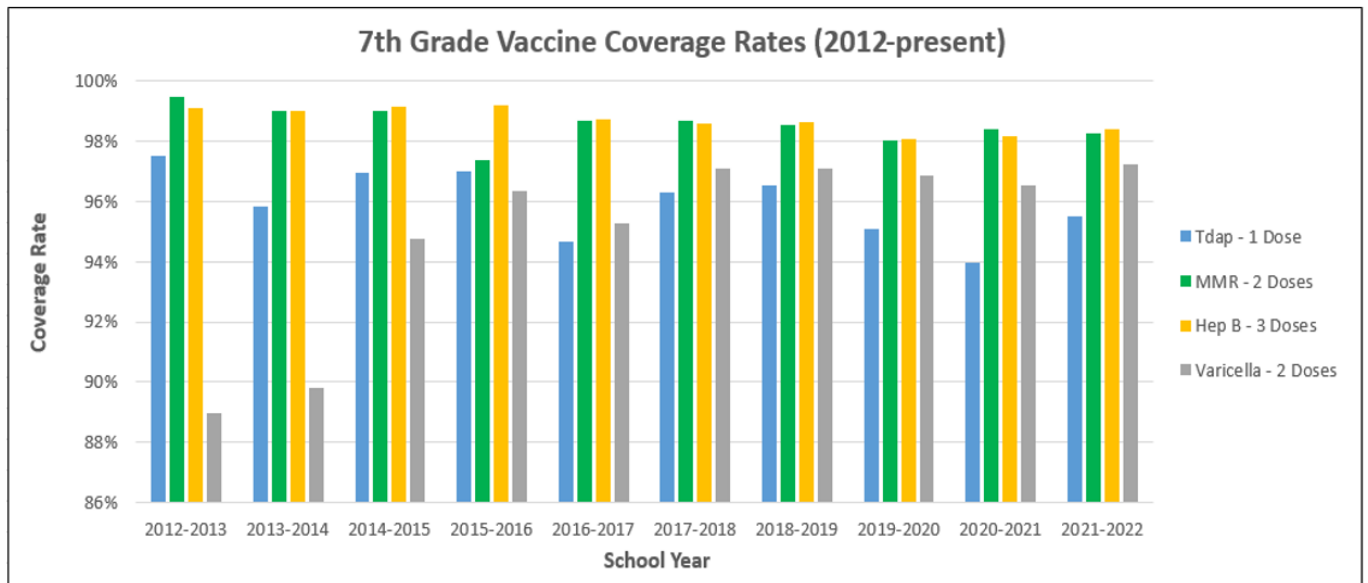
Neb. Rev. Stat. 71-539 through 71-544 provides for the exchange of immunization information between certain health care facilities and professionals.

Vaccination Coverage Rates since 2012



Source: Nebraska School Survey (NSS) 2012-2022

Vaccination Coverage Rates since 2012



Source: Nebraska School Survey (NSS) 2012-2022

NIS-Teen 2021 Results

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, 2019–2021.

	Females and Males				Females		Males		Females and Males		
	≥1 Tdap [‡]	≥1 MenACWY [§]	≥1 HPV ^{**}	HPV UTD ^{††}	≥1 HPV ^{**}	HPV UTD ^{††}	≥1 HPV ^{**}	HPV UTD ^{††}	≥2 MMR ^{§§}	≥2 VAR ^{¶¶}	≥2 HepA ^{***}
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
US overall											
2019	90.2(±1.0)	88.9(±0.9)	71.5(±1.3)	54.2(±1.5)	73.2(±1.9)	56.8(±2.2)	69.8(±1.9)	51.8(±2.1)	91.9(±1.0)	90.6(±1.1)	77.1(±1.3)
2020	90.1(±0.9)	89.3(±0.9)	75.1(±1.2)	58.6(±1.3)	77.1(±1.6)	61.4(±1.9)	73.1(±1.7)	56.0(±1.9)	92.4(±0.8)	91.9(±0.9)	82.1(±1.0)
2021	89.6(±1.0)	89.0(±1.1)	76.9(±1.3) +++	61.7(±1.5) +++	78.5(±1.9)	63.8(±2.2)	75.4(±1.9)	59.8(±2.1) +++	92.2(±1.0)	91.5(±1.0)	85.0(±1.2) +++
HHS REGION VII											
2019	88.3(±2.6)	86.1(±2.6)	70.4(±3.5)	55.6(±3.9)	71.5(±4.9)	55.5(±5.6)	69.4(±5.0)	55.8(±5.4)	91.8(±2.3)	90.3(±2.6)	74.4(±3.3)
2020	87.9(±2.5)	86.4(±2.5)	71.3(±3.2)	56.6(±3.6)	73.7(±4.7)	59.7(±5.2)	69.0(±4.4)	53.7(±4.8)	92.9(±1.7)	91.7(±2.0)	76.6(±3.0)
2021	90.2(±2.4)	90.4(±2.3) +++	77.9(±3.3) +++	62.2(±3.9) +++	81.3(±4.4) +++	66.2(±5.4)	74.6(±4.9)	58.5(±5.4)	92.5(±2.2)	92.3(±2.3)	82.6(±3.0) +++
Nebraska											
2019	91.2(±4.5)	86.3(±5.5)	73.9(±6.8)	60.5(±7.2)	74.0(±9.7)	62.1(±10.3)	73.9(±9.4)	59.0(±10.0)	91.4(±4.4)	89.5(±4.8)	71.5(±6.6)
2020	91.3(±3.4)	87.3(±4.2)	82.6(±4.6)	64.8(±5.7)	82.3(±7.1)	62.2(±8.5)	82.9(±6.0)	67.3(±7.6)	91.1(±3.5)	87.7(±4.3)	76.9(±5.0)
2021	92.3(±3.5)	89.7(±4.0)	82.7(±5.2)	61.9(±6.9)	85.9(±6.8)	63.2(±10.2)	79.7(±7.7)	60.7(±9.5)	94.0(±3.1)	94.0(±3.0) +++	83.8(±4.8)

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

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

[†] Adolescents (N=18,002) in the 2021 NIS-Teen were born January 2003 through January 2009.

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

[§] Includes percentages receiving MenACWY or meningococcal vaccine of unknown type.

^{**} HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV). For ≥1 and HPV UTD dose measures, percentages are reported among females and males combined (N = 18,002) and for females only (N = 8,423) and males only (N = 9,579).

^{††} HPV UTD includes those with ≥ 3 doses, and those with 2 doses when the first HPV vaccine dose was initiated at age <15 years and at least five months minus four days elapsed between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi). This update to the HPV recommendation occurred in December of 2016.

^{§§} ≥2 doses of MMR vaccine.

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

^{***} ≥2 doses of HepA vaccine. In July 2020, ACIP revised recommendations for HepA vaccination to include catch-up vaccination for children and adolescents aged 2–18 years who have not previously received HepA vaccine at any age. MMWR Recomm Rep 2020;69(No. RR-5):1–38.

⁺⁺⁺ Statistically significant (p<0.05) percentage point increase from 2020.

Resources:

Pingali, C., Yankey, D., Elam-Evans, L. D., Markowitz, L. E., Valier, M. R., Fredua, B., Crowe, S. J., Stokley, S., & Singleton, J. A. (2022). National vaccination coverage among adolescents aged 13–17 years — National Immunization Survey-Teen, United States, 2021. *MMWR. Morbidity and Mortality Weekly Report*, 71(35), 1101–1108. <https://doi.org/10.15585/mmwr.mm7135a1>