Meningococcal Disease, Vaccines and Nevada School Requirements

What is Meningococcal Disease?

Meningococcal disease is a serious, life-threatening disease caused by bacteria that infect the bloodstream (bacteremia or septicemia) and the brain and spinal cord (meningitis). The disease is spread person-to-person through respiratory secretions (such as saliva, by kissing or coughing). It is easily spread during close or lengthy contact, especially among those who share rooms or live in the same household. Anyone is susceptible to meningococcal disease, however teens and young adults are at increased risk of infection. Even when treated, meningococcal disease kills 10 to 15 people out of every 100 infected. And of those who survive, about 10 to 20 out of every 100 will suffer disabilities such as hearing loss, brain damage, amputations, nervous system problems, or severe scars from skin grafts.

Meningococcal Vaccines

Vaccination is the best way to prevent meningococcal disease. There are different types of meningococcal vaccines: meningococcal conjugate vaccine (MCV4), meningococcal B vaccine (MenB, protects against serogroup B only), and meningococcal polysaccharide vaccine (MPSV4). MCV4 is a quadrivalent vaccine that provides protection against four types of meningococcal disease, including 2 of the 3 types most common in the United States. The first dose of MCV4 should be administered to preteens at age 11 or 12 years old and a booster dose is needed for teens at 16 years. Preteens and teens are vaccinated at these ages to ensure that they are protected when they are at highest risk of meningococcal disease exposure and infection.

Target Objectives for Vaccination

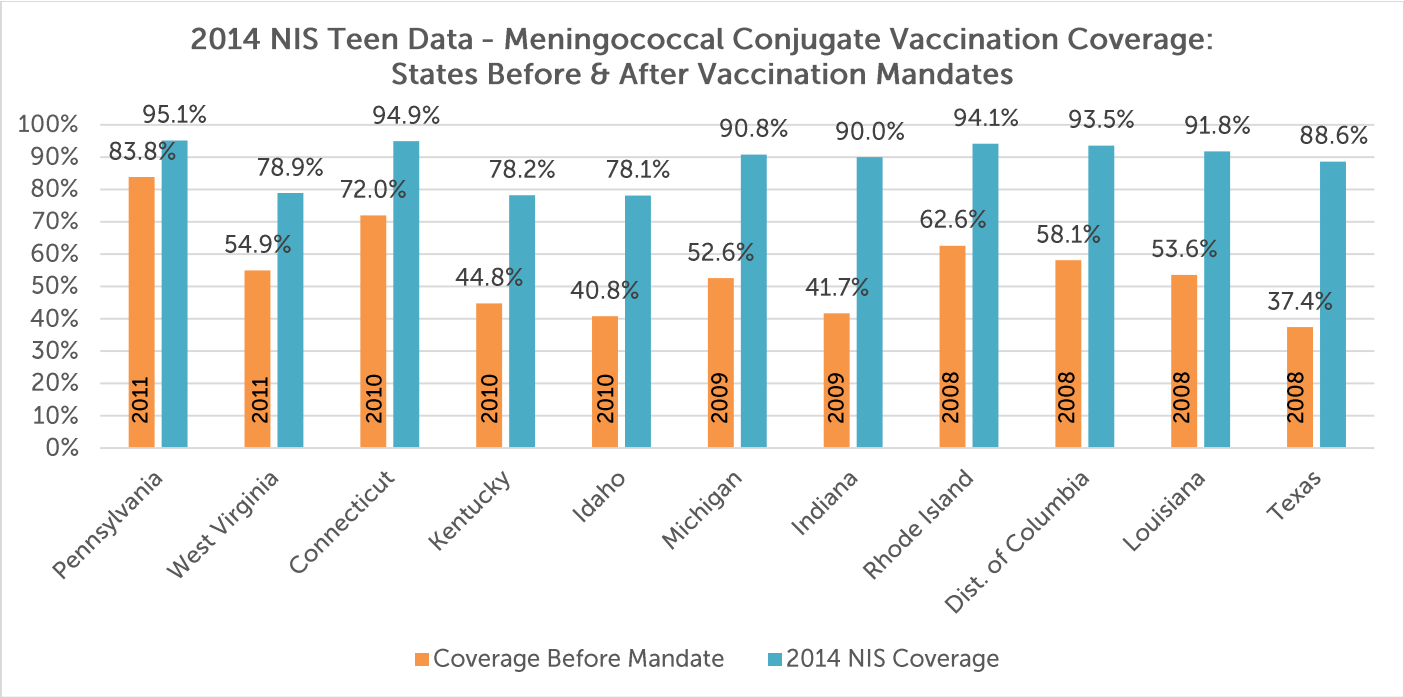
The Healthy People 2020 objective is to increase the vaccination coverage level of 1 dose of MCV4 to 80% for adolescents aged 13 to 15 years. Unfortunately, Nevada falls significantly below this goal. According to the 2014 National Immunization Survey (NIS) – Teen, only 66.5% of Nevada adolescents have received at least 1 dose of an MCV4 vaccine.

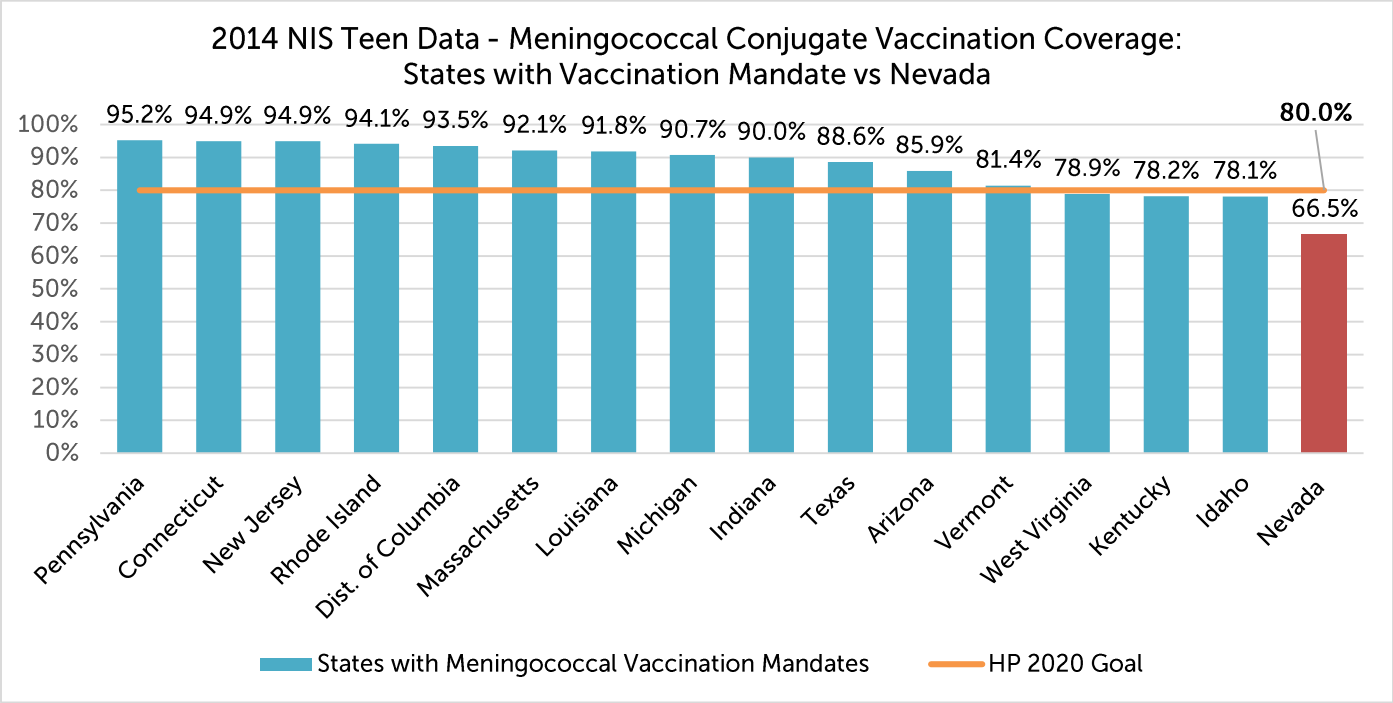
Cost of Vaccine

The Vaccines for Children (VFC) program covers the cost of MCV4 vaccine for eligible children under the age of 19 years. Data shows that roughly 74% of administered vaccines in Nevada were to VFC-eligible children. The CDC reports that the average price for privately purchased MCV4 vaccine is between $122.00-$117.00 per dose, and Nevada physicians and clinics billing for privately administered vaccine report they receive an average reimbursement of $120.00 per dose + an administration fee.

Solution to Increase Rates

There is an urgent need to increase vaccination coverage of the meningococcal conjugate vaccine in Nevada. Requiring vaccines as a prerequisite for school enrollment is an efficient method of ensuring herd immunity and increasing vaccination rates. Herd immunity can only be established when a high percentage of the community has been immunized against a disease to ensure that the disease cannot be spread within the community. Adding proof of immunity against meningococcal disease to Nevada's 7th grade entry requirements would ensure higher coverage rates. For example, when Texas added an MCV4 vaccine requirement, they had a 50% increase in their adolescent immunization rates for MCV4.





Meningococcal vaccination mandates are proven to be an effective method in increasing coverage rates. Nevada currently has a school requirement for Tdap vaccination before 7th grade entry. As reported in the 2014 NIS Teen data, Nevada has an 87.6% coverage rate for Tdap while meningococcal vaccine coverage is only at 66.5%. Pairing the Tdap requirement with a meningococcal requirement may significantly increase the rates for all recommended vaccines for preteens and teens: their yearly flu vaccine, as well as 3 doses of HPV, 2 doses of MCV4, and 1 dose of Tdap. Our Nevada teens need to be fully vaccinated to keep them healthy and ensure they are protected before they are exposed to these preventable diseases.

For more information about immunizations and Nevada, please visit **ImmunizeNevada.org**, like us on **Facebook** or follow us on **Twitter**

State	MCV Mandate?	Education Mandate?	Who is covered?	Implementation Date	Vaccination mandate?	For whom is single dose required?	Booster required?	Implementation Date
Arizona	yes				yes	Gr 6 if age ≥11 yrs		SY 2008-09
Arkansas					yes	Gr 7	Age 16 yrs	SY 2014–15
Connecticut	yes				yes	Gr 7		8/1/11
Dist. of Columbia	yes				yes	Age ≥11 yrs & enrolling in Gr 6--12		SY 2009-10
Georgia	yes	yes	Gr 6-12	SY 2009-10	yes	DOB ≥1/1/02 & in Gr 7; new enrollees Gr 8-12		SY 2014-15
Idaho	yes				yes	Gr 7		SY 2011-12
Illinois	yes				yes	Gr 6	Gr 12	SY 2015-16
Indiana	yes	yes	Gr 1-12	7/1/05	yes	Gr 6-11		SY 2010-11
							Gr 12	SY 2014-15
Kentucky	yes	yes	Gr 6-12	7/1/06	yes	Gr 6		7/1/11
Louisiana	yes				yes	Gr 6		SY 2009-10
Maryland	yes				yes	Gr 7		9/1/14
Massachusetts	yes	yes	Kg & students in secondary schools	8/1/05	yes	Newly enrolled full-time residential students		8/1/05
Michigan	yes	yes	Gr 6, 9, 12	1/1/10	yes	Gr 7		1/1/10
Minnesota	yes				yes	Gr 7	Age-appropriate	SY 2014-15
New Jersey	yes	yes	Public schools	Unk	yes	DOB ≥1/1/97 & in Gr 6		9/1/08
New York	yes	yes	Gr 7–12	8/1/03	yes	Gr 7	Gr 12	SY 2016-17
North Carolina	yes	yes	Gr 5	SY 2004-05	yes	Gr 7		7/1/15
							Gr 12	7/1/20
North Dakota	yes				yes	Gr 7		SY 2014-15
Oklahoma	yes	yes	Gr 6–12	SY 2006-07				
Pennsylvania	yes				yes	Gr 7		SY 2011-12
Rhode Island	yes				yes	Gr 7	Gr 12	8/1/09
Tennessee	yes	yes	Kg–Gr 12	SY 2005-06				
Texas	yes	yes	Kg–Gr 12	6/23/05	yes	Gr 7		SY 2009-10
Utah					yes	Gr 7		SY 2015-16
Vermont	yes				yes	Gr 7–12 in residential schools		8/1/08
Washington	yes	yes	Gr 6–12	7/1/05				
West Virginia	yes				yes	Gr 7, 12	Gr 12	SY 2012-13