

Important Information for Parents About Meningococcal Disease and Meningococcal Vaccines from the Oklahoma State Department of Education and the Oklahoma State Department of Health

What is meningococcal disease?

Meningococcal (men-IN-jo-kok-ul) disease is a rare but sometimes fatal disease caused by a bacterium called *Neisseria meningitidis*. The disease causes either meningitis, severe swelling of the brain and spinal cord, or meningococemia, a serious infection of the blood.

Who is at risk from meningococcal disease?

Although the risk is extremely low, disease does occur. Babies less than a year old have the highest risk for meningococcal disease, but no vaccine is available to protect them.

Teenagers and young adults, aged 15 to 22 years, are at increased risk because of behaviors that spread the disease. On average two to three people in this age group get meningococcal disease every year in Oklahoma. More than half of these could be prevented by vaccine.

College freshmen living in dormitories have a greater chance of contracting the disease than other persons their age. Others at increased risk are those with immune system problems, without a spleen, and traveling to parts of the world where the disease is more common.

How is the disease spread?

The disease is spread by droplets in the air and direct contact with someone who is infected. That includes coughing or sneezing, kissing, sharing a water bottle or drinking glass, sharing cigarettes, lipstick, lip balm—anything an infected person touches with his or her mouth.

Is meningococcal disease dangerous?

Yes, every year in the United States about 2,500 people are infected and about 300 people a year die, in spite of treatment with antibiotics. Of those who live, about 400 a year lose their arms or legs, become deaf, have problems with their nervous systems, become mentally retarded, or suffer seizures or strokes. This is why preventing the disease is important. If your child has symptoms of meningococcal disease contact your health-care provider immediately.

Signs and Symptoms of Meningitis

- Headache
- Fever
- Chills
- Stiff neck
- Extreme tiredness
- Vomiting
- Sensitivity to light
- Rash of small purplish black-red dots

How can meningococcal disease be prevented?

Vaccines can prevent many types of meningococcal disease, but not all types. There are two vaccines available in the United States that protect against four of the five most common strains of the meningococcal bacteria. The newest vaccine, called Menactra, or MCV4, is currently available for:

Adolescents entering high school (15 years of age),
College freshmen who live in dormitories,
Other people at high risk 11- through 55-years-of-age.

There is a shortage of both vaccines because the company that makes the vaccines has not been able to keep up with the demand; therefore, it may be difficult to get the vaccine. However, healthcare providers are saving the vaccine for these groups.

The earlier vaccine, called Menomune, or MPSV4, was effective in older children and teenagers but booster doses were needed every three to five years. The new vaccine protects against the same types of meningococcal bacteria and probably will not require booster doses. MPSV4 is still used for children 2- through 10-years-old and adults over 55 who are at risk.

Teenagers and young adults can also reduce their risk by taking good care of themselves, by eating a balanced diet, getting enough sleep and exercise, as well as avoiding cigarettes and alcohol.

Is the meningococcal vaccine safe?

Yes, both vaccines are safe; however, there are risks with any vaccine. About half of the people who get the vaccine will have pain and redness where the shot was given, but because the vaccine is not made from the whole bacteria, it cannot cause bloodstream infections or meningitis. A small percentage of people who get the vaccine develop a fever. Vaccines, like all medicines, carry a risk of an allergic reaction, but this risk is very small.

A few cases of Guillain-Barré Syndrome, a serious nervous system disorder, have been reported among people who got the new vaccine, MCV4 (meningococcal conjugate vaccine). At this time, there is not enough evidence to tell if the vaccine caused the disorder. Health officials are investigating these reports.

Does the meningococcal vaccine work?

Yes. The new meningococcal vaccine protects about 90 percent of the people who receive it from meningococcal disease caused by types A, C, Y, and W-135. These types cause almost two-thirds of all meningococcal disease in teenagers in the United States. It does not prevent type B, which causes about one third of the cases in teenagers.

Does the meningococcal vaccine prevent all cases of meningitis?

No. However, 63 percent of the meningitis cases in 18-22 year olds occurring in Oklahoma from 2000 through 2005 could have been prevented by vaccination. The meningococcal vaccine does not include type B. Scientists have not been able to make a vaccine that will protect against type B. Other bacteria and viruses can also cause meningitis. More information about these causes can be found at the National Meningitis Association Web site listed in the box in the next column.

Where can I get the vaccine for my son or daughter?

If your child has health insurance you can obtain the meningococcal vaccine from your health-care provider.

Local county health departments have the vaccine available now at no charge for all children who:

- Have no health insurance,
- Are Medicaid eligible,
- Are Native American,
- Or whose health insurance does not pay for vaccines,

and are either 15 through 18 years of age, or who do not have a spleen, have certain immune system problems, or who will be traveling to certain parts of the world.

Is this vaccine required to attend school in Oklahoma?

This vaccine is not required to attend kindergarten through the 12th grade in Oklahoma. However, it is required for students who are enrolling in colleges and other schools after high school who will live in dormitories or on-campus student housing.

Where can I get more information?

For more information contact your healthcare provider or local county health department or visit these Web sites:

National Meningitis Association at www.nmaus.org

Immunization Action Coalition at <http://www.vaccineinformation.org/menin/index.asp>

Institute for Vaccine Safety, Johns Hopkins Bloomberg School of Public Health at <http://www.vaccinesafety.edu/cc-mening.htm>

National Network for Immunization Information at <http://www.immunizationinfo.org/>



This information sheet was prepared with information obtained from the Oklahoma State Department of Health, the Centers for Disease Control and Prevention and the Children's Hospital of Philadelphia.