



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

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Meningococcal Disease (Bacterial Meningitis) Vaccine

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether the exposure to meningococcal disease vaccine may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care provider.

What is meningitis?

Meningitis is an infection of the lining around the brain and spinal cord. Meningitis can be caused by viruses, bacteria, fungus, or parasites. The seriousness of the illness and treatment differs depending on the type of meningitis. Bacterial meningitis is usually a very severe condition but there are vaccines to help prevent some kinds of bacterial meningitis.

Symptoms of meningococcal disease can include a sudden onset of headache, fever, and stiff neck. A person may also seem confused or have increased sensitivity to light. Even with appropriate antibiotic treatment, meningococcal disease can cause death or result in life-long disability. Fortunately, meningococcal disease is not common and preventative vaccines are available.

Is bacterial meningitis contagious?

Yes. While bacterial meningitis is not as contagious as a cold or the flu, it can be passed on through contact with a sick person's saliva or spit. For example, it can be passed from person to person through coughing or kissing. Individuals living close together, like students in a college dorm, are at increased risk for getting bacterial meningitis.

What is the meningococcal vaccine?

The meningococcal vaccine provides protection against the common types of bacterial meningitis. These vaccines are divided into two categories: the meningococcal conjugate vaccines or MCV4 for short (brand names include Menveo® and Menactra®) and meningococcal polysaccharide vaccine or MPSV4 for short (brand name: Menomune®). There is also Serogroup B meningococcal vaccines (brand names: Bexsero® and Trumenba®).

The MCV4 vaccines protect against four types of meningococcal disease, giving high but not 100% protection. The vaccines are noninfectious and cannot give a person bacterial meningitis.

The Centers for Disease Control and Prevention (CDC) recommends the MCV4 vaccine for individuals age 11-18. It is recommended that the first dose of this vaccine be given at the 11-12 year old checkup and then a booster dose at age 16. Other individuals may be recommended to get the vaccine based on their work, travel, or health conditions. Your health care provider will determine if you are a candidate for the serogroup B meningococcal vaccine, which is recommended for people 10 years or older who are at high risk.

I just got the meningococcal vaccine. How long should I wait until I get pregnant?

Since the meningococcal vaccine is noninfectious, there is no recommended waiting period before attempting to get pregnant.

I didn't know I was pregnant when I got the meningococcal vaccine; is there a risk to my baby?

Noninfectious vaccines in general are considered to be a low risk during pregnancy. Specific to the meningococcal vaccines, six studies that included 335 women who received the older MPSV type vaccines during pregnancy found no related harmful effects. Most of these women were vaccinated after the first trimester.

Voluntary reports to a vaccine database also found no unusual pattern of outcomes in 103 reports about

pregnancies with the Menactra type MCV4 vaccine exposure. This vaccine had been most often given in the first trimester in these reports. Additional studies are being done to confirm the initial reassuring information.

There is an outbreak of meningococcal disease in my area – should I get the vaccine even though I am pregnant?

Meningococcal disease is a very serious condition. If you are at risk to get the disease, it is recommended that you get the vaccine, regardless of whether or not you are pregnant.

Can I receive the meningococcal vaccine while breastfeeding?

Yes. Noninfectious vaccines like the meningococcal vaccine are compatible with breastfeeding. Be sure to talk to your health care provider about all your choices for breastfeeding.

The father of the baby received the meningococcal vaccine around the time that I got pregnant. Is there a risk to the baby?

No. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

Selected References:

- Adam I and Abdalla MA. 2005. Is meningococcal polysaccharide vaccine safe during pregnancy? *Ann Trop Med Parasitol* 99(6):627-628.
- Centers for Disease Control and Prevention (CDC). <https://www.cdc.gov/meningitis/index.html> and <https://www.cdc.gov/vaccines/vpd/mening/index.html> [Accessed 8/2017].
- Cohn AC, et al. 2013; Centers for Disease Control and Prevention (CDC). Prevention and control of meningococcal disease: recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep*. 22;62(RR-2):1-28.
- Letson GW, et al. 1998. Meningococcal vaccine in pregnancy: an assessment of infant risk. *Pediatr Infect Dis J* 17:261-263.
- Makris, M.C. et al. 2012. Safety of hepatitis B, pneumococcal polysaccharide and meningococcal polysaccharide vaccines in pregnancy: a systematic review. *Drug Saf.* 35(1):1-14.
- O’Dempsey TJD, et al. 1996. Immunization with a pneumococcal capsular polysaccharide vaccine during pregnancy. *Vaccine* 14(10):963-970.
- Shahid NS, et al. 2002. Placental and breast transfer of antibodies after maternal immunization with polysaccharide meningococcal vaccine: a randomized, controlled evaluation. *Vaccine* 20:2404-2409.
- World Health Organization. 2015. Meningococcal A conjugate vaccine: updated guidance, February 2015. *Weekly epidemiological record*. No. 8, 90: 57-62.
- Zheteyeva Y, et al. 2013. Safety of meningococcal polysaccharide-protein conjugate vaccine in pregnancy: a review of the Vaccine Adverse Event Reporting System. *Am J Obstet Gynecol.*; 208(6):478.e1-6.

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