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Vaccines and Pregnancy

This sheet talks about the risks that exposure to vaccines can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. This information should not take the place of medical care and advice from your health care provider.

What are vaccines?

Vaccines are medicines that can be given to help protect you from various diseases. They are made from killed or weakened bacteria or virus. In this form they act like the disease without actually causing the illness. Vaccines cause your body's immune system to make antibodies. Once these antibodies are made they protect you if you are exposed to that disease in the future.

What is the difference between a live and inactivated vaccine?

A "live vaccine" is made from a live virus or bacteria that have been weakened. This causes the body to make protective antibodies but does not usually cause the infection. Live vaccines generally provide long-lasting protection with a single dose. Given the slight possibility that a live vaccine could cause the disease itself, live vaccines are not routinely given to pregnant women.

An "inactivated vaccine" is made from a virus or bacteria that have been killed. An inactivated vaccine cannot cause the disease that it is given to prevent. Inactivated vaccines may require multiple doses and periodic boosters to provide protection.

Which vaccines can be given safely in pregnancy? Which vaccines should not be given in pregnancy?

Vaccination of a pregnant woman with inactivated vaccines has not been shown to cause an increase risk to the fetus. Live vaccines are usually not given in pregnancy due to the potential risk of causing the disease in the fetus. However, when the likelihood of disease exposure is high or when infection would pose a risk to the mother or fetus, then vaccination with a live vaccine is generally recommended.

What if a live vaccine is accidentally given during pregnancy? Does this mean that the pregnancy should be terminated?

No. This alone would not be considered a medical reason to end a pregnancy because the chance of the fetus being infected is generally very low. Counseling by a knowledgeable healthcare provider would be recommended.

Are there any vaccines that are recommended in pregnancy?

Yes. It is recommended that you get the inactivated flu vaccine (flu shot) if you will be pregnant during flu season. If you get the flu during pregnancy you are at a greater risk of flu-related complications. You can get the flu vaccine anytime during your pregnancy but it is

best to get the flu shot before the flu season begins for the best protection.

Flumist[®] is made from live virus and has not been studied for use in pregnancy. As discussed, live vaccines are not recommended during pregnancy.

Diseases such as rabies and tetanus are fatal. Clearly the benefit of vaccination in an exposed pregnancy would outweigh any risks that may be associated with the vaccine.

The need for vaccination with other vaccines during pregnancy will vary and the issue should be discussed with your doctor.

Is it safe for my child to be vaccinated while I am pregnant?

Yes. Inactivated vaccines cannot cause disease. Even if your child or other close contact has a vaccine reaction, there is no chance that you will get the disease that the vaccine was given to prevent. Though unlikely, live vaccines could cause the disease they are trying to prevent. Being in the same household with a healthy child who has been vaccinated with a live vaccine is still not likely to increase the risk to a pregnant woman or her fetus.

Is it safe to breastfeed if I have been vaccinated?

Yes. The use of most vaccines in breastfeeding women is generally considered safe.

Should men delay fathering a child after they have been vaccinated?

No. There is no evidence to suggest that inactivated or live vaccines affect the sperm or are transmitted to the developing embryo through the semen following vaccination in men.

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Selected References:

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Atkinson WL, et al. 2002. Recommendations of the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Family Physicians (AAFP). MMWR 51(RR-2):18-19.

*If you have questions about the information on this fact sheet or other exposures during pregnancy, call **OTIS** at 1-866-626-6847.*