



Salmonella

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 exposure to salmonella 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 salmonella?

Salmonella is a bacteria. There are many different types of salmonella bacteria that can cause anyone to get sick. People who have weakened immune systems, along with young children and older adults are more likely to get sick with a salmonella infection.

Symptoms of an infection can include diarrhea, fever, and stomach cramping. These symptoms typically appear 12 to 72 hours after being infected. People who get salmonella could feel sick for 4 to 7 days. An infection may be serious enough that treatment in a hospital is necessary. There is no vaccination that will prevent a salmonella infection.

How can I become infected with salmonella?

There are many ways to become infected with salmonella; however, foods are most often the source of an infection. To avoid this type of infection, it is important that eggs and meat are fully cooked. Raw fruits and vegetables, as well as unpasteurized milk and dairy products, can also be a source of salmonella. Fruits and vegetables should be always thoroughly washed whether cooked or eaten raw.

Products contaminated by salmonella are listed on several websites including

<https://www.cdc.gov/salmonella/index.html> and <https://www.fda.gov/Safety/Recalls/default.htm>

Handling or coming into contact with animals such as amphibians, reptiles and birds is another way salmonella bacteria is spread to humans. These animals also leave behind the bacteria that can potentially infect humans who clean their aquariums or terrariums. The infectious bacteria can be found on healthy animals and doesn't usually make the animals sick. It's best to be cautious. Thoroughly wash your hands after handling these animals. Proper handling of animals and their living spaces will significantly reduce your chance of becoming infected with salmonella.

Information on animals that carry salmonella bacteria can be found at the following source which is frequently updated. <https://www.cdc.gov/healthypets/diseases/salmonella.html>

How is a salmonella infection tested for and treated?

Salmonella is treated with antibiotics. A culture can predict which antibiotic would be best to use. Your health care provider will help order these tests and medicines.

Can a salmonella infection lead to a pregnancy loss?

There are case reports of salmonella bacteria causing an infection of the amniotic fluid. Amniotic fluid is the fluid that surrounds the baby during pregnancy. These infections are rare, but they can be serious and lead to miscarriage. If you feel you have an infection you should contact your healthcare provider right away.

I had salmonella during my pregnancy. Can this cause a birth defect in my baby?

There are insufficient studies on salmonella to know if there is a higher chance of birth defects.

If I have salmonella can I continue to breastfeed my baby?

Breastfeeding allows maternal antibodies to pass through breast milk, which can protect a baby from illness. However, there is a report suggesting that salmonella may have been passed from a nursing mother to her baby. For most nursing mothers, breastfeeding does not need to stop if they acquire salmonella. It is important to talk to your

healthcare provider and your child's pediatrician to discuss your questions about breastfeeding during a salmonella infection and treatment.

What if the father has salmonella? Could that harm our pregnancy?

Although salmonella is most often contracted through contaminated foods or animals, it can be passed from person to person. If infected, wash your hands thoroughly and often to help reduce the possibility of passing a salmonella infection to others.

In general, most exposures that a father has are unlikely to increase risks to mother and baby during 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:

- Craig-McFeely PM, Acharya NV, Shakir SAW: 2001. Evaluation of the safety of fexofenadine from experience gained in general practice use in England in 1997. *Eur J Clin Pharmacol* 57(4):313-320.
- Diav-Citrin O, et al. 2003. Pregnancy outcome after gestational exposure to loratadine or antihistamines: a prospective controlled cohort study. *J Allergy Clin Immunol* 111(6):1239-1243.
- Gilboa SM, et al. 2009. National Birth Defects Prevention Study: Use of antihistamine medications during early pregnancy and isolated major malformations. *Birth Defects Res A Clin Mol Teratol* 85(2):137-150.
- Ito S, et al. 1993. Prospective follow-up of adverse reactions in breast-fed infants exposed to maternal medication. *Am J Obstet Gynecol.* 168:1393-9.
- Kallen B. 2002. Use of antihistamine drugs in early pregnancy and delivery outcome. *J Matern Fetal Neonatal Med* 11:146-152.
- Loebstein R, et al. 2000. Pregnancy outcome after gestational exposure to terfenadine: A multicenter, prospective controlled study. *Immunology and Allergy Clinics of North America* 20(4):807-30.
- Lucas BD Jr, et al: 1995. Terfenadine pharmacokinetics in breast milk in lactating women. *Clin Pharmacol Ther.* Apr;57(4):398-402.
- Schatz M, Petitti D. 1997. Antihistamines and pregnancy. *Ann Allergy Asthma Immunol* 78:157-159.

February, 2018