Escherichia coli (E. coli)

This sheet talks about exposure to Escherichia coli (E. coli) in a pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

What is Escherichia coli?
Escherichia coli (E. coli) are a group of bacteria that live in the intestines and vagina. There are many different types (strains) of E. coli bacteria. Most strains of E. coli are harmless to humans, but some can cause severe illness and infection. The most common ways people can get infected with E. coli are by:

- Eating contaminated raw and unwashed fruits and vegetables
- Drinking unpasteurized milk and fruit juices or cider
- Eating soft cheeses made from unpasteurized milk
- Eating raw or undercooked meat
- Drinking or swimming in infected water
- Coming into contact with feces from infected farm or petting zoo animals

What are the symptoms of E. coli infection?
Eating or drinking contaminated products may cause some people to have stomach cramps, fever, diarrhea, and/or vomiting. In severe cases, there can be bloody diarrhea, which requires medical care right away. Rarely, people with E. coli infection can develop a form of kidney failure called hemolytic uremic syndrome. This condition is serious and can lead to kidney damage and death.

How is E. coli infection diagnosed and treated?
If you have symptoms of an E. coli infection, a healthcare provider will likely need a stool sample (feces) from you to test for E. coli. Most healthy people recover in a couple of days without the need for medications.

Does getting an E. coli infection increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. Having an E. coli infection would not likely cause a miscarriage. However, since having an E. coli infection can cause diarrhea, and diarrhea causes the body to lose a lot of fluids, pregnant women with an E. coli infection can become dehydrated. If you think you have an E. coli infection, you should see a healthcare provider right away so that you can be diagnosed and treated, if necessary.

Does getting an E. coli infection increase the chance for birth defects?
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. Data is limited, but E. coli infection in the mother has not been associated with a higher chance of birth defects in humans.

Would getting an E. coli infection in the second or third trimester cause other pregnancy complications?
There may be a risk for preterm rupture of membranes (a breaking of the amniotic sac, which holds the amniotic fluid around the developing baby), premature delivery (delivery before 37 weeks of pregnancy) or stillbirth with severe E. coli infection. There are also reports of E. coli causing low birth weight.

Does having an E. coli infection in pregnancy cause long-term problems for the baby?
It is unlikely that there would be long-term problems for the baby.

**How can I prevent getting an E. coli infection?**

- To help prevent eating or drinking contaminated food and/or drink products:
  - Always wash your hands with soap and water after using or cleaning the bathroom, changing diapers, handling dirty towels or linens, and touching animals or items in the animals’ setting.
  - Always wash your hands after handling raw meat.
  - Clean any surface touching raw meat with a disinfectant or bleach and water solution.
  - Cook meat thoroughly, especially ground beef, to 160°F.
  - Wash all vegetables and fruits before eating.
  - Drink only milk, juice and ciders that have been pasteurized.
  - Avoid swallowing water when swimming.

**Can I breastfeed while I have an E. coli infection?**

Yes. The E. coli bacteria do not get into the breast milk, so it is okay to continue breastfeeding. There are important immune factors in breast milk that can help protect your baby from infections. Having diarrhea and other symptoms of E. coli infection may cause a decrease in your milk supply, so drink plenty of fluids. Make sure that you wash your hands before you hold or breastfeed your baby. If your baby gets diarrhea or other symptoms of E. coli infection, contact your pediatrician immediately. Talk to your healthcare provider about all of your breastfeeding questions.

**If a man has an E. coli infection, could it affect his fertility (ability to get partner pregnant) or increase the chance of birth defects?**

Although E. coli is most often contracted through contaminated foods or animals, it can be passed from person to person. Wash hands often to help reduce the chance of passing the disease among people living in the house.

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/factsheets/paternal-exposures-pregnancy/pdf/.

Please click here for references.