Escherichia coli (E. coli)

This sheet is about exposure to Escherichia coli (E. coli) in a pregnancy or 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, 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

How can I find out if I am infected with E. coli?

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.

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.

I have E. coli. Can it make it harder for me to become pregnant?

E. coli may be a cause of inflammation in the reproductive tract and intestines. It may be associated with endometriosis (a condition in which tissue that usually lines the uterus grows outside the uterus) in some people. E. coli has also been linked to blockages in fallopian tubes. Blockages may prevent pregnancy by keeping the egg from reaching the uterus.

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, a person who is pregnant with an E. coli infection can become dehydrated. If you think you have an E. coli infection, talk with 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?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Based on studies reviewed, it is not known if E. coli increases the chance for birth defects above the background risk.

Does having an E. coli infection in pregnancy increase the chance of other pregnancy related problems?

There may be an increased chance for preterm rupture of membranes (a breaking of the amniotic sac, which holds the amniotic fluid around the developing baby), preterm delivery (delivery before 37 weeks of pregnancy) or stillbirth with severe E. coli infection. There are reports of E. coli causing low birth weight. Sepsis (serious widespread bodily infection) during pregnancy has also been reported.

Does having an E. coli infection in pregnancy affect future behavior or learning for the child?
Based on the studies reviewed, it is not known if E. coli in pregnancy causes long-term problems for a child.

**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.

**Breastfeeding while having an E. coli infection:**

The E. coli bacteria do not get into the breast milk, so breastfeeding can be continued. 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 well before you hold or breastfeed your baby. If your baby gets diarrhea or other symptoms of E. coli infection, contact your pediatrician right away. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

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

E. coli can be passed from person to person. Wash hands often to help reduce the chance of passing the disease among people living in your home. E. coli infections of the genital tract may case infection and inflammation. This may stop or block sperm from moving through the genital track properly and could make conception more difficult in some people. In general, exposures that fathers or sperm donors have are unlikely to increase the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.