Escherichia coli (E. coli)

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 E. coli 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 Escherichia coli (E. coli)?

Escherichia coli (E. coli) are a group of bacterium that live in your colon (gut / 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. Some ways people can get infected with E. coli are:
- Eating contaminated raw and unwashed fruits and vegetables;
- Drinking unpasteurized milk and fruit juices;
- 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?

Many people will not become sick after exposure to E. coli. Some people will have stomach cramps, fever, diarrhea, and/or vomiting. In severe cases, there can be bloody diarrhea, which requires prompt medical care. Rarely people with E. coli infection can develop a form of kidney failure called hemolytic uremic syndrome. This condition is a serious health concern and can lead to kidney damage and death.

How is E. coli infection diagnosed and treated?

If you have symptoms of E. coli infection, a health care provider will test a sample of your bowel movement (feces). Most healthy people recover in a couple of days without the need for medications.

Does E. coli infection cause birth defects or pregnancy complications?

Data is limited but E. coli infection in the mother has not been associated with a higher chance of birth defects in humans. Because diarrhea causes the body to lose a lot of fluids, pregnant women with an E. coli infection can easily become dehydrated. In rare cases, they may start to bleed heavily. There may be a risk for miscarriage, preterm rupture of membranes (the amniotic sac, which hold the amniotic fluid around the developing baby tears), premature delivery or stillbirth with severe E. coli infection. There are also reports of E. coli causing low birth weight. If you think you have an E. coli infection, you should see a health care provider right away so that you can be diagnosed and treated, if necessary.

How can I prevent getting an E. coli infection?

- 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.

I have an E. coli infection. Can I breastfeed my baby?
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. Be sure to talk to your health care provider about all your choices for breastfeeding.

What if the father has E. coli? Could that harm our pregnancy?
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/fact-sheets/paternal-exposures-pregnancy/pdf/.

References Available Upon Request