Escherichia coli (E. coli)

This sheet is about exposure to Escherichia coli (*E. coli*) in pregnancy or while breastfeeding. This information is based on published research studies. It 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 naturally 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 raw and unwashed fruits and vegetables that are contaminated with *E. coli*
- Drinking unpasteurized milk, fruit juices, or cider (pasteurization involves heating liquids to kill any bacteria contamination)
- 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 might 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. If you are very ill your healthcare provider might prescribe medications including antibiotics.

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

E. coli might increase the chance of inflammation in the reproductive tract and intestines, blockages in the fallopian tubes, or endometriosis (when tissue that usually lines the uterus grows outside the uterus). It might also affect fertilization (when the egg and sperm join to create an embryo). These issues can make it harder to get pregnant.

Does getting an E. coli infection increase the chance of miscarriage?

Miscarriage is common can occur in any pregnancy for many different reasons. Having an *E. coli* infection in the stomach or urine would not be likely to directly cause a miscarriage. An *E. coli* infection in the uterus might increase the chance of miscarriage. 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 needed.

Does getting an E. coli infection increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like *E. coli*, might increase the chance of birth defects in a pregnancy.

Studies have not been done to see if an *E. coli* infection can increase the chance of birth defects.

Would having an E. coli infection increase the chance of other pregnancy-related problems?

An *E. coli* infection in the vagina or uterus might increase the chance of pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

There might be an increased chance for bleeding, preterm rupture of membranes (a breaking of the amniotic sac, which holds the amniotic fluid around the fetus), or stillbirth with severe *E. coli* infection. Sepsis (serious widespread bodily infection) during pregnancy has also been reported. Babies born with *E. coli* infections are sometimes very sick.

Does having an E. coli infection in pregnancy affect future behavior or learning for the child?

Studies have not been done to see if *E. coli* in pregnancy can increase the chance of behavior or learning issues for the child.

How can I prevent getting an E. coli infection?

To help prevent eating or drinking contaminated food and/or drink products:

– Wash your hands with soap and water often. Always wash your hands after handling raw meat, using or cleaning the bathroom, changing diapers, handling dirty towels or linens, and touching animals or items in the animals' setting.

– 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 pasteurized (not raw) milk, juice and ciders.

– Avoid swallowing water when swimming.

Breastfeeding with 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 might 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 your breastfeeding questions.

If a man has an E. coli infection, can it affect fertility or increase the chance of birth defects?

E. coli can be passed from person to person. Wash your hands often to help lower the chance of passing the infection to others in your home. *E. coli* infections of the genital tract might cause inflammation and problems with sperm. This could affect men's fertility (ability to get a partner pregnant). For more information on paternal exposures in pregnancy, please see the MotherToBaby fact sheet here https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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