

# **Toxoplasmosis**

This sheet is about exposure to toxoplasmosis in pregnancy and while breastfeeding. This information is based on available research studies. It should not take the place of medical care and advice from your healthcare provider.

## What is toxoplasmosis?

Toxoplasmosis is an infection caused by the parasite **Toxoplasma gondii**. **Toxoplasma gondii** can be found in raw or undercooked meat, raw eggs, and unpasteurized (raw) milk. Rodents or cats that eat raw meat can get infected. Once infected, the animal can shed the parasite in the feces (poop) for up to two weeks. **Toxoplasma gondii** eggs can live in cat feces or buried in soil for up to 18 months.

People can get toxoplasmosis by eating infected meat that has not been cooked properly, drinking water that is contaminated, or handling soil or cat feces that contain the parasite. Some studies suggest that toxoplasmosis can be passed to others during unprotected sex, including oral sex. People who have recently gotten a cat or have outdoor cats, eat undercooked meat, garden without gloves, or who have had a recent mononucleosis-type illness have an increased chance of getting toxoplasmosis.

Most adults who are infected with toxoplasmosis have no symptoms. Some people might have swelling of the lymph nodes, fever, headache, or muscle pain. In most cases, once you have gotten toxoplasmosis, you cannot get it again. There have been reports of people who have gotten infected more than one time. For example, people with a weakened immune system could develop another active toxoplasmosis infection.

## How can I find out if I am infected with toxoplasmosis?

Blood tests can be used to diagnose toxoplasmosis infections. Talk with your healthcare provider about your risk for toxoplasmosis and available screening, testing, and treatment options.

# What are some things I can do to lower the chance of a toxoplasmosis infection?

- Cook meat until it is no longer pink and the juices run clear. Use a food thermometer to measure the internal (inside) temperature to make sure the meat is cooked all the way through. A detailed list of temperatures and foods can be found here: https://www.foodsafety.gov/food-safety-charts/safe-minimum-internal-temperatures.
- Freeze meat for several days at sub-zero (below 0° F/-18°C) temperatures before cooking to greatly lower the chance of infection.
- Do not eat raw or undercooked oysters, mussels, or clams.
- Wash cutting boards, dishes, counters, and utensils with hot soapy water after any contact with raw meat, seafood, or unwashed fruits or vegetables.
- Wash hands carefully after handling raw meat, fruits, and vegetables.
- Wash all fruits and vegetables. Peeling fruits and vegetables also helps to lower the chance of exposure.
- Avoid drinking untreated water.
- Do not drink unpasteurized milk.
- Wear gloves when gardening and during contact with soil or sand. Wash hands with soap and water after gardening or contact with soil or sand.
- Do not touch cat feces directly; wear gloves if you change cat litter & immediately wash hands.
- Do not feed cats raw or undercooked meat.
- Avoid stray cats, especially kittens.
- Keep outdoor sandboxes covered.

I had toxoplasmosis in the past. Can that increase the chance of birth defects or other pregnancy-related problems?

Toxoplasmosis April 1, 2024



If you had toxoplasmosis in the past, you are likely immune. In general, increased risks to a pregnancy are not expected when a woman is infected with toxoplasmosis more than 6 months before getting pregnant.

# Does having toxoplasmosis make it harder to get pregnant?

It is not known if having toxoplasmosis can make it harder to get pregnant.

## Does having toxoplasmosis increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. An increased chance of miscarriage has been reported with active toxoplasmosis infection during pregnancy.

# Does having toxoplasmosis 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 toxoplasmosis, can increase the chance of birth defects in a pregnancy.

Toxoplasmosis infection can be passed to the fetus when the woman who is pregnant has an active infection during pregnancy. When a woman is pregnant and passes an infection to the fetus, it is called vertical transmission. Vertical transmission can happen at any time in pregnancy but is more likely to happen when a woman gets the infection close to delivery.

If toxoplasmosis is passed to the pregnancy, the fetus has an increased chance of certain birth defects and developmental problems known as "congenital toxoplasmosis". Some infants with congenital toxoplasmosis can have problems with the brain, eyes, heart, kidneys, blood, liver, or spleen. When the infection starts during the first trimester, the fetus has a higher chance of severe problems.

# Does having toxoplasmosis increase the chance of other pregnancy-related problems?

One study suggested that toxoplasmosis 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). When toxoplasmosis infection starts late in pregnancy, the chance that the fetus will have severe problems is lower. However, the chance of passing the infection to the fetus is higher when infection happens later in pregnancy. An increased chance of stillbirth has been reported in women with active toxoplasmosis infection during pregnancy.

# Does having toxoplasmosis in pregnancy affect future behavior or learning for the child?

Infants with congenital toxoplasmosis (up to 90%) can develop problems over time, such as vision loss, seizures, hearing loss, or developmental delays. These symptoms can occur months or years after birth. Infants with congenital toxoplasmosis should be treated for infection during the first year of life and then should be checked regularly for problems. Your healthcare team can talk with you about what screenings, tests, and treatments are right for your baby.

#### Breastfeeding while I have toxoplasmosis:

**Toxoplasma gondii** passes into breast milk. The Centers for Disease Control and Prevention (CDC) recommends that women with an active toxoplasmosis infection continue to breastfeed unless they have broken skin or bleeding in the nipple area. If you suspect the baby has any symptoms (fever or flu-like symptoms), contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

#### If a man has toxoplasmosis, can it affect fertility or increase the chance of birth defects?

Studies in humans have not been done to see if toxoplasmosis could affect a man's fertility (ability to get a woman pregnant). In animals, male fertility was affected for up to 70 days after a toxoplasmosis infection.

Some studies suggest that toxoplasmosis can be passed to others during unprotected sex, including oral sex. In a woman who is pregnant, an active toxoplasmosis infection can increase risks to the pregnancy. Talk with your healthcare provider if you have had sexual contact with someone who has toxoplasmosis. For more information on paternal exposures, please see the MotherToBaby fact sheet at

https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

#### Please click here for references.

Toxoplasmosis April 1, 2024



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

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, April 1, 2024.