Sulfamethoxazole | Trimethoprim (Bactrim® or Septra®)

This sheet is about exposure to sulfamethoxazole/trimethoprim in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare providers.

What is sulfamethoxazole and trimethoprim?
Sulfamethoxazole and trimethoprim are medications that are used to treat bacterial infections. These two medications are usually given together and sold under the brand names Bactrim® or Septra®. The combination of these antibiotics is used to treat a variety of infections, including urinary tract infections (UTIs).

I take sulfamethoxazole/trimethoprim. Can it make it harder for me to get pregnant?
It is not known if sulfamethoxazole/trimethoprim can make it harder to get pregnant.

I just found out I am pregnant. Should I stop taking sulfamethoxazole/trimethoprim?
Talk with your healthcare providers before making any changes to how you take your medication. The benefits of taking your medication may outweigh the risks of untreated illness. It is important to treat most infections during pregnancy. Untreated UTIs could lead to severe kidney infection for the person who is pregnant, preterm delivery (delivery before 37 weeks of pregnancy) and preeclampsia (dangerously high blood pressure).

I am taking sulfamethoxazole/trimethoprim, but I would like to stop taking it before becoming pregnant. How long do these medications stay in my body?
People eliminate medication at different rates. In healthy adults, it takes up to 3 days, on average, for most of sulfamethoxazole/trimethoprim to be gone from the body.

Does taking sulfamethoxazole/trimethoprim increase the chance for miscarriage?
Miscarriage can occur in any pregnancy. Two studies have found an association with the use of sulfamethoxazole/trimethoprim in the first trimester and with miscarriage. However, one of these studies did not consider other factors that may have contributed to the chance of miscarriage.

Does taking sulfamethoxazole/trimethoprim increase the chance of birth defects?
Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. There are not many well controlled studies on the use of sulfamethoxazole only in human pregnancy. Sulfamethoxazole is part of a group of medications called sulfonamides. Some studies have suggested the use of sulfonamides during the first trimester may be associated with an increased chance for birth defects while other studies have not.

Concern has also been raised with the use of trimethoprim in pregnancy. There have been studies involving several hundred individuals using this medication at any time in pregnancy. Some studies have not found an increased chance for birth defects. However, a few studies looking at trimethoprim used with a sulfonamide during the first trimester have found an increased chance for birth defects, including heart defects, neural tube defects (opening in the spine), cleft lip or palate, and urinary tract defects.

Trimethoprim may lower the level of folic acid in your body. Folic acid is a B vitamin that helps the body make new healthy cells and may help reduce the chance of certain birth defects, like spina bifida, in the baby. It is recommended that people who are pregnant or planning a pregnancy consume between 400-800 micrograms of folic acid each day from foods or vitamin supplements. If sulfamethoxazole/trimethoprim is taken during the first trimester, your healthcare provider may suggest that you take more folic acid. You can talk with them about how much folic acid is right for you.

Use of sulfamethoxazole and trimethoprim after the first trimester is not associated with a higher chance of birth defects in the baby. Overall, if there is an increased chance for birth defects with use of sulfamethoxazole/trimethoprim during pregnancy, it appears to be small.
Could taking sulfamethoxazole/trimethoprim cause other pregnancy complications?  

One study has suggested that individuals who take medications that may lower levels of folic acid are at a greater chance for pregnancy complications such as pre eclampsia, placenta abruption (when the placenta breaks away from the wall of the uterus) and fetal growth restriction. Exposure to sulfamethoxazole/trimethoprim has been associated with preterm delivery and low birth weight. However, this medication is frequently used to treat UTIs, and people who are pregnant with UTIs are at a greater chance for some of the same complications. It is hard to determine whether it is the medication, the decrease in folic acid, the underlying infection, or other factors which are increasing the chance for these complications.

Can I take sulfamethoxazole/trimethoprim in the 3rd trimester?  

Some authors have recommended not taking sulphonamides such as sulfamethoxazole after 32 weeks of pregnancy. There is a theoretical concern that sulphonamide use near the end of pregnancy can increase the chance for severe jaundice (a problem with liver function) and related complications in the baby. Your healthcare provider can help to suggest a medication that is right for you.

Does taking sulfamethoxazole/trimethoprim in pregnancy cause long-term problems in behavior or learning for the baby?  

It is not known if sulfamethoxazole/trimethoprim can cause behavior or learning issues.

Can I breastfeed while taking sulfamethoxazole/trimethoprim?  

Sulfamethoxazole and trimethoprim pass into breast milk in small amounts. There is some concern about taking sulfamethoxazole and trimethoprim while breastfeeding if the baby is born before 37 weeks of pregnancy, has severe jaundice, or a condition known as glucose-6- phosphate dehydrogenase deficiency (G6PD deficiency). However, it is not always necessary to stop breastfeeding while taking these medications. Be sure to talk to your healthcare provider about all your breastfeeding questions.

I take sulfamethoxazole/trimethoprim. Can it make it harder for me to get my partner pregnant or increase the chance of birth defects?  

The combination of sulfamethoxazole and trimethoprim was found to lower sperm production in males who were taking it continuously for one month. A lowered sperm count may affect the ability to conceive a pregnancy.

There are no studies looking at chance for birth defects when the father or sperm donor takes sulfamethoxazole/trimethoprim. In general, exposures that fathers or sperm donors have are unlikely to increase 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.