

I have IBD, how does IBD affect pregnancy?

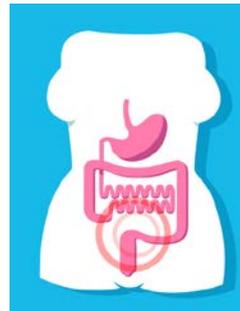
IBD and pregnancy

Background

IBD onset typically occurs during the reproductive years. Therefore, women and their families often have concerns regarding how IBD and IBD medications affect their pregnancy and offspring. Many women with IBD who wish to have children are often on medications that may need to be adjusted. Zelinkova (2010) conducted a study on IBD patients with active plans for conception and found that a large proportion of patients are taking IBD medications, especially immunosuppressants¹.

How does IBD affect pregnancy?

IBD is associated with a slight increased risk of preterm delivery, small for gestational age infants, and miscarriages or spontaneous abortions compared to the general population^{2,3}. These risks are increased even more in women who have active IBD.



Active disease



Risk for adverse neonatal outcomes

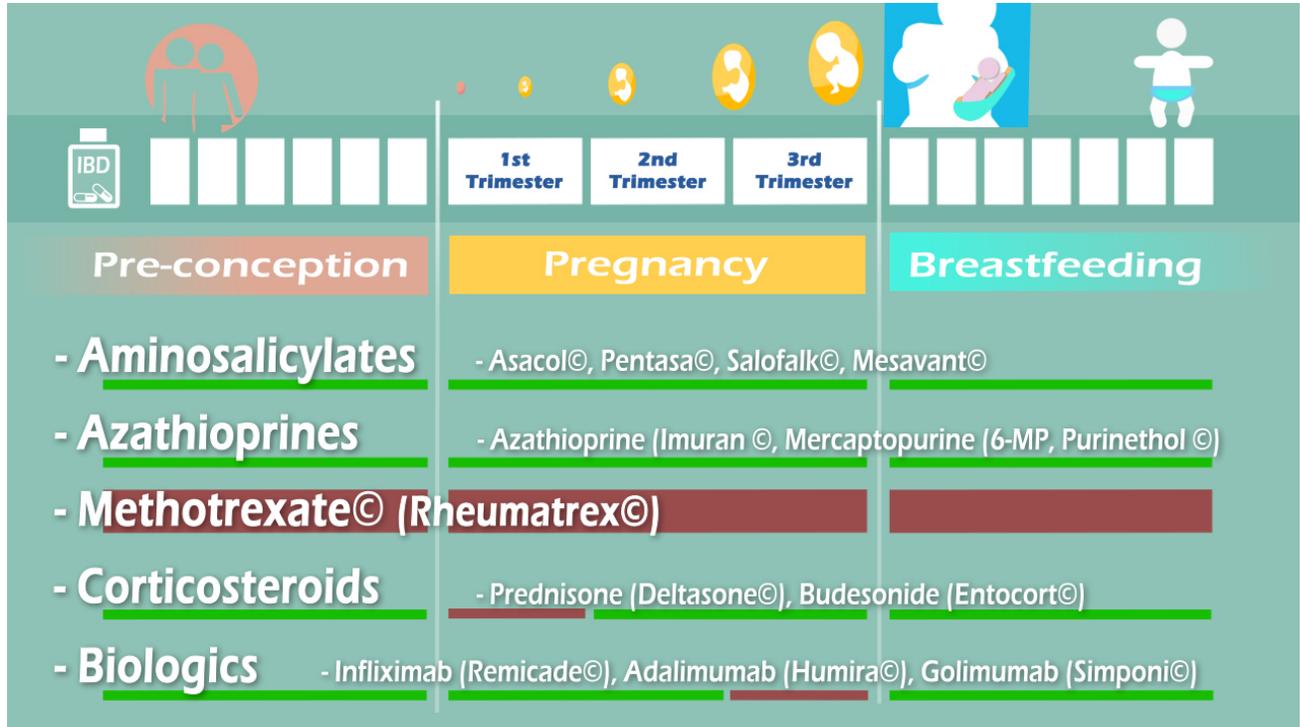
Active IBD increases risk of adverse outcomes . . .

Women with IBD should aim to be in remission before attempting to become pregnant. Women who had active IBD within 3 months of conception are at risk of having active disease during pregnancy⁴. On the other hand, women who were in remission at time of conception will be more likely to stay in remission during pregnancy. They should continue the IBD medications that they need to stay in remission (the exception being methotrexate, which should be stopped 6 months prior to conception).



Which IBD medications can be continued before and during pregnancy?

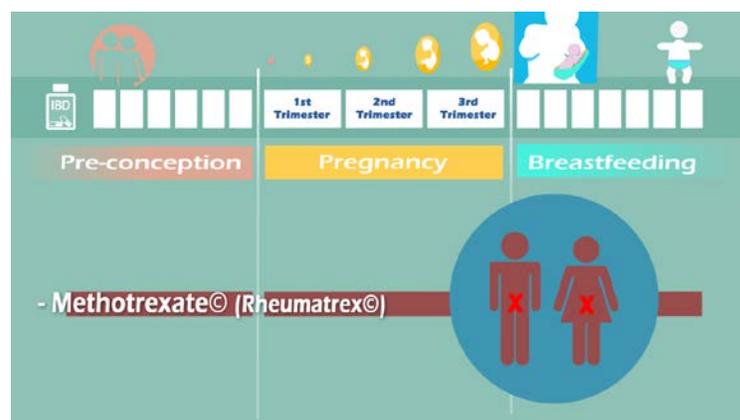
Most IBD medications are safe for use while trying to conceive and to continue during pregnancy but certain medications may need to be adjusted.



Pre-conception	1st Trimester	2nd Trimester	3rd Trimester	Breastfeeding
- Aminosalicylates	- Asacol®, Pentasa®, Salofalk®, Mesavant®			
- Azathioprimines	- Azathioprine (Imuran®), Mercaptopurine (6-MP, Purinethol®)			
- Methotrexate® (Rheumatrex®)				
- Corticosteroids	- Prednisone (Deltasone®), Budesonide (Entocort®)			
- Biologics	- Infliximab (Remicade®), Adalimumab (Humira®), Golimumab (Simponi®)			

- **Aminosalicylates:** Most formulations of 5-ASA are considered safe to continue into pregnancy⁵. Studies have found no significant association between 5-ASA drugs and poor pregnancy outcomes⁶. The coating of one 5-ASA medication (Asacol®) contains dibutyl phthalate (DBP) which has been associated with abnormal development in animal models. However, there has been no significant findings among humans^{5,7,8}.
- **Sulfasalazine** (Salazopyrin®) is considered safe to use before and during pregnancy⁷. However, since sulfasalazine inhibits folate synthesis, women taking this medication should also be taking folic acid supplements^{5,7}. Men taking sulfasalazine should be switched to another oral mesalamine because sulfasalazine has been associated with oligospermia (low sperm concentration)⁹.

- **Thiopurines:** Azathioprine (Imuran©) and 6-mercaptopurine (6-MP) (Purinethol©) can be continued during preconception and during pregnancy if needed for maintenance therapy. Although studies have reported abnormalities in animal models, and older studies reported some risk of adverse outcomes among pregnant women taking these medications, recent larger studies on women with IBD taking thiopurines suggest no significant adverse outcomes¹⁰⁻¹².
- **Corticosteroids:** Steroids, such as budesonide (Entocort©) and prednisone (Deltasone©) can be used to treat active IBD before and during pregnancy¹³. However, there is a small risk of cleft palate in neonates exposed to corticosteroids in the first trimester^{14,15}.
- **Biologics:** Adalimumab (Humira©) and infliximab (Remicade©) are also considered safe to continue into pregnancy. However, studies have shown that these proteins cross the placenta to the neonate after 22 weeks of gestation. Therefore, physicians often administer the last dose of biologics before the third trimester to minimize fetal exposure to the medication. However, women with IBD who require biologic anti-TNF therapy during pregnancy may continue the medications if the risks of having uncontrolled IBD outweigh the risks of fetal exposure^{5,7,11,12,16}.
- **Methotrexate** (Rheumatrex©) is contraindicated to use in women who are trying to become pregnant and during pregnancy^{5,7}. Methotrexate can cause malformation of the embryo and fetal death¹⁴. Furthermore, because it can remain in the body for an extended time period, physicians recommend that both men and women with IBD who are on Methotrexate discontinue use for 3 to 6 months prior to trying to conceive, and remain off it during pregnancy and breastfeeding¹⁵.



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If you have IBD and are contemplating pregnancy or are already pregnant . .

- discuss with your physician the use of medication to remain in remission
- discuss with your physician the use of your medication throughout your pregnancy
- discuss with your physician any necessary changes to your medications

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