

Methotrexate (MTX) Therapy for Inflammatory Bowel Disease (IBD)

MTX Therapy for IBD

Your health care provider feels that treatment with methotrexate (meth-oh-TREX-ate) might help your Crohn's disease or ulcerative colitis. These are both types of inflammatory bowel disease (IBD).

This pamphlet will help you decide if this medication is the right treatment for your condition. It describes what methotrexate is and how it works and some side effects it may cause.

What is methotrexate?

Methotrexate (MTX) is a medication that was first developed to treat cancer. Now it is used to treat a number of different problems in the body (such as rheumatoid arthritis, liver disease, and IBD) that cause an over-active immune response.

The cells in your body that fight infection and inflammation (swelling) are known as the immune system. When the immune system is too active, it causes inflammation and damage to the bowel.

MTX is an immunosuppressive drug. This means it suppresses (weakens) the strength of your immune response.

MTX helps to treat IBD by blocking an enzyme involved in the immune system. The immune system becomes less active. This helps with symptoms and fights IBD.

While MTX has good effects, it may have bad side effects. Some of these can be serious.

How well does MTX work? Will it work for me?

MTX can be helpful for most patients when used alone, but it can take 2 to 3 months before symptoms get better.

Researchers have found that MTX alone may **not** be as helpful as a treatment for ulcerative colitis. It is often prescribed in combination with another treatment.

Combination therapy in IBD

MTX is sometimes used with other medications, such as infliximab (Remicade®). MTX may help these medications work better to treat IBD.

What are the side effects of MTX?

Minor side effects

These side effects are less serious, but they may be upsetting or uncomfortable. These side effects will usually stop as soon as you stop taking the medication.

- › Dizziness
- › Mouth sores
- › Loss of appetite (do not feel like eating)
- › Nausea (feeling sick) and vomiting (throwing up)
- › Diarrhea (loose, watery poop)
- › Hair loss
- › Itchy skin and/or rash
- › For females, changes in your period
- › For males, tender breasts
- › For males, lowered sperm count
- › Sensitivity to light
- › Tired, achy muscles

Serious side effects

MTX can have some serious side effects that could cause your health care provider to lower the amount of medication you are taking, or tell you to stop taking it. If you notice any of the following side effects, tell your health care provider right away:

- › Weakness
- › Fever
- › Sore throat
- › Joint pain
- › Abnormal bleeding or bruising (such as bleeding or bruising easily)
- › Blood in your stool (poop), urine (pee) or vomit (throw up)
- › Swelling in your feet or lower legs
- › Liver fibrosis (scarring) — Your health care provider will request a liver scan if they think you might have fibrosis.
- › Pneumonitis (lung inflammation), dry cough, trouble breathing

Who should not take MTX?

People with certain conditions

Use of MTX can be a real risk for people who have conditions such as:

- › Chronic (lasts for a long time) liver disease
- › Alcohol addiction
- › Diabetes
- › Stomach ulcers
- › Anemia (low red blood cell levels)
- › Leukopenia (low white blood cell levels)
- › Thrombocytopenia (low blood platelet levels)
- › Ulcerative colitis (colon inflammation)
- › Repeated infections
- › Ascites (extra fluid in the stomach area) or pleural effusion (extra fluid in the lung)
- › Chronic disease of the nervous system
- › Chronic lung disease or fibrosis
- › Chronic kidney disease
- › Chickenpox (in the recent past) or herpes zoster virus (shingles)
- › Gout
- › Kidney stones

Talk to your health care provider if you have a history of any of these conditions.

People who are pregnant or who plan to get pregnant

MTX is very harmful to an unborn baby and can cause birth defects or miscarriage. Both men and women taking MTX should tell their health care provider if they are trying to or could have a baby before taking MTX.

If you and your partner (male or female) are trying to have a baby, do not take methotrexate.

MTX cannot be given to anyone who is pregnant or who may become pregnant. Talk to your health care provider about birth control before you start taking this medication.

Do not breastfeed while taking methotrexate.

MTX can be passed to your baby through breast milk and harm them severely (very badly). Tell your health care provider if you are breastfeeding or plan to breastfeed in the future.

What precautions are needed?

MTX can be very helpful in treating your IBD. Here are a number of steps you can take to lower the risk of side effects:

- **Limit alcohol** while taking MTX. Drinking alcohol while taking this medication can cause damage to your liver and lead to cirrhosis (scarring of the liver).
- **Do not try to get pregnant or get your partner pregnant while taking MTX. Do not take MTX while pregnant.**
- **Avoid live vaccinations** while taking MTX. If you are due for vaccinations or plan to be vaccinated while on MTX, tell your health care provider. **This does not include flu shots — everyone should get a flu shot every year.**
- **Do not start taking any new medications.** Some medications can create problems when taken at the same time as MTX. Ask your health care provider before taking any other medication.
- **Tell your health care provider about any allergies or infections.**

- **Take folate supplements.** Taking extra folate helps lower how severe and frequent the side effects are while taking MTX. It also helps protect the liver while taking this medication. Your health care provider will tell you how much folate to take.
- **Have regular blood testing** to check the effect of MTX on your body, and in the treatment of your disease.
- **Have a regular check-up with your primary health care provider at least 2 times a year.**

Concerns

MTX can cause problems but they are not common. There is less risk from the medication than there is from your disease.

**What are your questions?
Please ask. We are here to help you.**

MTX can be given orally (by mouth), but many patients with IBD are prescribed MTX injections. MTX is only taken once a week, on the same day every week.

MTX injection instructions

If you are prescribed MTX by injection, ask your health care provider about learning how to give self-injections.

Ask your health care provider to go over these instructions with you.

Give yourself your injection **once a week**. If you forget to inject a dose, remember that there should be **at least 5 days** between injections.

Before injections

- Have a clean, well-lit work area on a table or desk.
- Gather all of your supplies:
 - › 1 vial of MTX (fluid should be a clear yellow colour)
 - › Alcohol swabs
 - › A syringe
 - › Needle bucket for disposal of syringe

Preparing your injection

- Wash your hands.
- Place the vial of MTX on a flat surface. Do not touch the rubber stopper.
- Wipe the rubber stopper with an alcohol swab.
- Take the cap off the syringe.
- Pull back the plunger of the syringe to 1 cc. This pulls air into the syringe.
- Insert the needle of the syringe into the rubber stopper of the vial and push down the plunger to inject the air into the vial. This will make it easier to draw out the fluid.
- With the syringe still in the vial, turn the vial upside down.
- With the tip of the needle in the medicine, draw out 1 cc of fluid (for a 25 mg dose). You may need to pull the needle out of the vial a little bit to get the last of the fluid out.
- If there is some air in the syringe, you can push it back into the vial and continue to draw the fluid out.
- When you have 1 cc of fluid (for 25 mg dose), remove the needle from the vial and replace the cap on the needle before you lay it down.



Where to inject MTX

- Choose an area of the body that has a layer of fat between the skin and the muscle. This is the subcutaneous (under the skin) tissue.
 - › **Top of the thighs:** put a hand on your groin and a hand on your knee. Use the space in between for the injection. Do not inject into the groin or the knee. Avoid any area where you can see a blood vessel.
 - › **Abdomen: do not inject near the waistline.** Do not use the abdomen area if you are very thin.
- Change the places where you do your injections, staying about 1½ inches away from the last injection site.

To give the injection

- Clean about 2 inches around the spot you have chosen with an alcohol swab.
- Wait about a minute for the area to dry.
- Take the cap off the syringe.
- Make a fold of skin between your thumb and index finger.
- Quickly insert the needle at a 45 or 90 degree angle to the folded skin. The needle should be completely covered by skin.

- Let go of the folded skin and move this hand to hold the syringe in place.
- Slowly push the plunger all the way to the bottom to inject your MTX. **Do not inject if you see blood.** Withdraw the syringe and start again with a fresh vial of medication and a new syringe.
- Put the alcohol swab on the site where the needle is in the skin and withdraw the syringe. Do not rub, just gently hold the area for about 30 seconds. If there is any bleeding, apply a bandage, like a Band-Aid®.
- Do not worry about a small air bubble that may be in the syringe. You are in no danger if a small amount of air enters the skin.
- **Do not put the cap back on the syringe.** Put the syringe in your needle bucket and the cap in the trash.
- When your needle bucket is full, you can return it to your pharmacy and get a new one.
- You may notice some slight bruising from time to time at the injection site. Do not worry about this, it is not serious.
- If you get MTX on your skin, wash the area right away with warm soapy water to prevent irritation.

- If you spill MTX on the work area, put on rubber gloves and wash the area with warm soapy water and a paper towel. **Throw away the paper towel in a needle bucket, not in the regular trash.**
- If you get MTX in your eye, wash your eye with lots of water. If there is any redness or irritation, call your health care provider or go to the nearest Emergency Department right away.

This pamphlet is just a guide. If you have questions, please talk to your health care provider. We are here to help you.

Notes:

Looking for more health information?

Find this pamphlet and all our patient resources here: <https://library.nshealth.ca/PatientEducation>

Contact your local public library for books, videos, magazines, and other resources.

For more information, go to <http://library.novascotia.ca>

Connect with a registered nurse in Nova Scotia any time: call 811 or visit <https://811.novascotia.ca>

Learn about other programs and services in your community: call 211 or visit <http://ns.211.ca>

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If you have any questions, please ask your health care provider.

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The information in this pamphlet is to be updated every 3 years or as needed.