



For the Patient: Methotrexate

Other names: MTX

BC Cancer Agency

- Methotrexate (meth oh trex´ ate) is a drug that is used to treat many types of cancers. It is a clear yellow liquid that is injected into a vein.
- Tell your doctor if you have ever had an unusual or **allergic reaction** to methotrexate before taking methotrexate.
- A **blood test** may be taken before each treatment. The dose and timing of your chemotherapy may be changed based on the test results and/or other side effects.
- Your doctor may tell you to **drink** plenty of liquids e.g., 8-12 cups (2000-3000 mL or 70-100 oz) a day. This helps prevent kidney problems.
- Other drugs such as acitretin (SORIATANE®), cyclosporine (NEORAL®), digoxin (LANOXIN®), nonsteroidal anti-inflammatory drugs e.g., ibuprofen (ADVIL®), some antibiotics e.g., penicillins (APO-PEN VK®), sulfonamides (APO-SULFATRIM®), and trimethoprim (APO-TRIMETHOPRIM®), phenytoin (DILANTIN®), probenecid (BENURYL®), and salicylates (ASPIRIN®), may **interact** with methotrexate. Tell your doctor if you are taking these or any other drugs as you may need extra blood tests or your dose may need to be changed. Check with your doctor or pharmacist before you start taking any new drugs.
- **Alcohol** may increase the risk of liver problems with methotrexate and should be avoided.
- Methotrexate may cause **sterility** in men and **menopause** in women. If you plan to have children, discuss this with your doctor before being treated with methotrexate.
- Methotrexate may damage sperm and may harm the baby if used during pregnancy. It is best to use **birth control** while being treated with methotrexate. Tell your doctor right away if you or your partner becomes pregnant. Do not breast feed during treatment.
- **Tell** doctors or dentists that you are being treated with methotrexate before you receive any treatment from them.

Changes in blood counts

This drug may cause temporary changes in your blood counts. Your doctor will be following these changes carefully by performing blood tests. Adjustment of your treatment may be needed in certain circumstances.

BLOOD COUNTS	MANAGEMENT
<p>Normal white blood cells protect your body by fighting bacteria (germs) that cause infection. When they are low, you are at greater risk of having an infection.</p>	<p>To help prevent infection:</p> <ul style="list-style-type: none"> • Wash your hands often and always after using the bathroom. • Take care of your skin and mouth. • Avoid crowds and people who are sick. • Call your doctor immediately at the first sign of an infection such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, or burning when you pass urine.
<p>Normal platelets help your blood to clot normally after an injury (e.g., cut). When the platelet count is low you may be more likely to bruise or bleed.</p>	<p>To help prevent bleeding problems:</p> <ul style="list-style-type: none"> • Try not to bruise, cut, or burn yourself. • Clean your nose by blowing gently. Do not pick your nose. • Avoid constipation. • Brush your teeth gently with a soft toothbrush as your gums may bleed more easily. Maintain good oral hygiene. <p>Some medications such as ASA (e.g., ASPIRIN®) or ibuprofen (e.g., ADVIL®) may increase your risk of bleeding.</p> <ul style="list-style-type: none"> • Do not stop taking any medication that has been prescribed by your doctor (e.g., ASA for your heart). • For minor pain, try acetaminophen (e.g., TYLENOL®) first, but occasional use of ibuprofen may be acceptable.

Side effects are listed in the following table in the order in which they may occur. Tips to help manage the side effects are included.

SIDE EFFECTS	MANAGEMENT
<p>Pain or tenderness may occur where the needle was placed.</p>	<p>Apply cool compresses or soak in cool water for 15-20 minutes several times a day.</p>

SIDE EFFECTS	MANAGEMENT
Nausea and vomiting may occur after your treatment.	You may be given a prescription for antinausea drug(s) to take before your chemotherapy treatment and/or at home. It is easier to prevent nausea than treat it once it has occurred , so follow directions closely. <ul style="list-style-type: none"> • Drink plenty of liquids. • Eat and drink often in small amounts. • Try the ideas in <i>Food Choices to Help Control Nausea</i>.*
Skin rashes may occur.	To help itching: <ul style="list-style-type: none"> • You can use calamine lotion. • If very irritating, call your doctor during office hours. • Otherwise make sure to mention it at your next visit.
Fever and chills may occur shortly after treatment with methotrexate. Fever should last no longer than 24 hours.	<ul style="list-style-type: none"> • Take acetaminophen (e.g., TYLENOL®) every 4-6 hours, to a maximum of 4 g (4000 mg) per day. • Fever which occurs more than a few days after treatment may be the sign of an infection.
Diarrhea may occur.	To help diarrhea: <ul style="list-style-type: none"> • Drink plenty of liquids. • Eat and drink often in small amounts. • Avoid high fibre foods as outlined in <i>Food Ideas to Help with Diarrhea During Chemotherapy</i>.*
Sore mouth may occur a few days after treatment. Mouth sores can occur on the tongue, the sides of the mouth, or in the throat. Mouth sores or bleeding gums can lead to an infection.	<ul style="list-style-type: none"> • Brush your teeth gently after eating and at bedtime with a very soft toothbrush. If your gums bleed, use gauze instead of a brush. Use baking soda instead of toothpaste. • Make a mouthwash with ½ teaspoon baking soda or salt in 1 cup warm water and rinse several times a day. • Try the ideas in <i>Food Ideas to Help with Sore Mouth during Chemotherapy</i>.*
Muscle or joint pain may rarely occur a few days after your treatment.	You may take acetaminophen (e.g., TYLENOL®). Tell your doctor if the pain interferes with your activity.

SIDE EFFECTS	MANAGEMENT
Loss of appetite and weight loss are common and may persist long after discontinuation of methotrexate.	Try the ideas in <i>Food Ideas to Help with Decreased Appetite</i> .*
Tiredness , lack of energy and sometimes dizziness may occur.	<ul style="list-style-type: none"> • Do not drive a car or operate machinery if you are feeling tired. • Try the ideas in <i>Your Bank of Energy Savings: How People with Cancer Can Handle Fatigue</i>.
Hair loss is rare with methotrexate. Your hair will grow back once you stop treatment with methotrexate. Colour and texture may change.	<ul style="list-style-type: none"> • Use a gentle shampoo and soft brush. • Care should be taken with use of hair spray, bleaches, dyes, and perms.
Your skin may darken in some areas.	This will slowly return to normal once you stop treatment with methotrexate.
Your skin may sunburn easily.	To help prevent sunburn: <ul style="list-style-type: none"> • Avoid direct sunlight. • Wear a hat, long sleeves and long pants or skirt outside on sunny days. • Apply a sunscreen with an SPF (sun protection factor) of at least 30.

*Please ask your chemotherapy nurse or pharmacist for a copy.

SEE YOUR DOCTOR OR GET EMERGENCY HELP IMMEDIATELY IF YOU HAVE:

- Signs of an **infection** such as fever (over 100°F or 38°C by an oral thermometer), chills, cough, pain or burning when you pass urine.
- Signs of **bleeding problems** such as black tarry stools, blood in urine, pinpoint red spots on skin, extensive bruising.
- Signs of an **allergic reaction** (rare) soon after a treatment including dizziness, fast heart beat, face swelling, or breathing problems.
- Signs of **lung problems** such as shortness of breath or difficulty in breathing.
- **Seizures** or **loss of consciousness**.
- Sudden **abdominal pain** or tenderness.

SEE YOUR DOCTOR AS SOON AS POSSIBLE (DURING OFFICE HOURS) IF YOU HAVE:

- Signs of **anemia** such as unusual tiredness or weakness.
- Signs of **liver problems** such as yellow eyes or skin, white or clay-coloured stools.
- Signs of **kidney problems** such as lower back or side pain, swelling of feet or lower legs or markedly decreased urine output.
- **Changes in eyesight**.
- Signs of **gout** such as joint pain.

