

# Methotrexate Injections

## *Steps to follow*

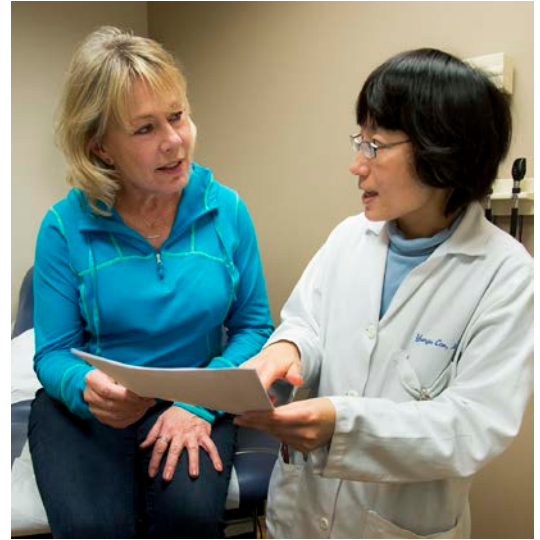
Your provider has prescribed that you receive methotrexate by injection. This handout explains the drug, its side effects, drug interactions, and how to give yourself a subcutaneous injection of methotrexate.

### **What is methotrexate?**

*Methotrexate* is a medicine used to treat chronic conditions such as arthritis. It slows down the immune system, which decreases inflammation and eases symptoms.

### **How do I take methotrexate?**

You will give yourself an injection of methotrexate under your skin. This is called a *subcutaneous* (SQ or SubQ) injection.



*Talk with your provider if you have any questions about how to give yourself your methotrexate injection.*

Methotrexate is injected 1 day a week, on the same day of the week. For instance, if you give yourself the first injection on a Saturday morning, you will repeat the injection the next Saturday morning, and every Saturday morning after that.

### **Folic Acid**

Your provider will also prescribe *folic acid*, a man-made version of the B vitamin *folate*. Methotrexate interferes with your body's ability to use folate. Taking folic acid helps reduce the side effects caused by methotrexate.

If you are not taking folic acid, please tell your provider.

### **What should I expect?**

When you start taking methotrexate, your provider may ask you to have a blood test after your first dose, then every 1 to 2 weeks. The results of

these blood tests help your provider watch for side effects. You may continue to have blood tests every 3 months while you are taking methotrexate. Follow the instructions you receive from the lab about monitoring for side effects.

## **Is methotrexate safe?**

All medicines, even naturopathic or homeopathic treatments, have possible side effects. Talk with your doctor who prescribed methotrexate about side effects. Methotrexate has been used for decades so we have a good idea of the common or rare side effects to watch for.

Talk with your provider first if you want to drink alcohol while you are taking methotrexate.

Rarely, methotrexate can cause serious liver damage. If this damage is not diagnosed early, it can be permanent. Your provider may recommend a liver biopsy after you have been on methotrexate for a few years.

## **Warning for Women**

**Methotrexate can cause miscarriage or birth defects.**

- **If you are pregnant or plan to become pregnant, stop taking methotrexate right away and call your provider.**
- **If you are of childbearing age, use reliable birth control while taking methotrexate.**

## **Side Effects**

The common side effects of methotrexate are:

- Stomach upset and nausea
- Low blood counts
- Decreased ability to fight infection
- Hair thinning

## **When to Call Your Doctor**

Call your doctor if you have any of these symptoms while you are taking methotrexate:

- Fever higher than 100.4°F (38°C)
- Painful rash
- Shortness of breath or a new cough
- Severe abdominal pain
- Yellowing of skin and eyes (*jaundice*)

## Preventing Drug Interactions

For your safety, while you are taking methotrexate:

- Do **not** take aspirin or nonsteroidal anti-inflammatory drugs (NSAIDs) such as ibuprofen (Advil, Motrin, and others) or naproxen (Aleve, Naprosyn, and others). Ask your healthcare provider what to take instead for pain.
- Tell every healthcare provider you see that you are taking methotrexate.
- If your provider prescribes trimethoprim/sulfamethoxazole (Bactrim/Septra) for infection, tell your provider that you are taking methotrexate.
- Bring all your medicines or a list of your current medicines to every clinic or hospital visit.

## What else should I know about methotrexate?

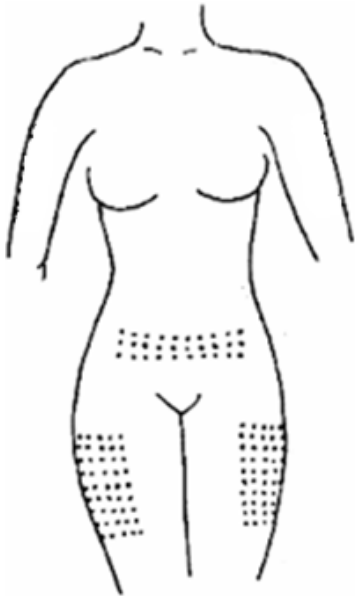
- **Form:** Injectable methotrexate is a clear, yellow liquid. Methotrexate comes as 50 mg in a 2 ml vial. You should also receive needles and syringes with your prescription.
- **Opening the vial:** New vials come with a protective cap. Remove and discard this cap before you use the vial for the first time.
- **Reusing the vial:** Check the label on your vial to see if it contains a preservative.
  - If the methotrexate contains a preservative, you can use the vial for more than 1 dose. The preservative stops bacteria from growing.
  - If it does not contain a preservative, it can only be used once. After you draw up your dose, discard the vial.
- **Storage:** Always protect methotrexate from light and moisture. Store it in a dark, dry place. An opened vial can be stored for up to 4 weeks (28 days) and then should be discarded.
- **Discarding:** Do **not** place the vial or any unused methotrexate in your usual trash. They must be discarded in a “sharps” container. See page 7 of this handout for instructions.



The label on the methotrexate bottle shows the medicine strength in milligrams (mg) per milliliter (ml).

## How do I give myself an injection?

An SQ injection delivers the medicine into the fatty layer of tissue just under your skin. Pages 4, 5, and 6 give the steps to follow to give yourself an SQ injection.



Step 2: Shaded areas show where you can inject the methotrexate.

### Step 1

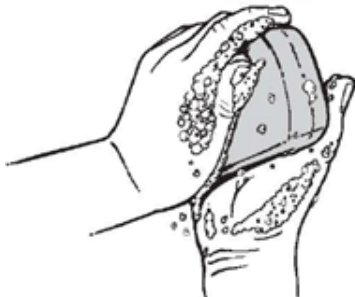
#### Gather your supplies.

- You will need the methotrexate vial, syringe, needle, alcohol wipes, sharps container, and a Band-aid (if needed after the injection).
- Check the prescription vial for the correct amount to inject. If you are unsure, call your provider or pharmacy.

### Step 2

#### Select your injection site.

- Choose an area on the right or left side of your abdomen, at least 2 inches from your belly button.
- Or, choose an area of your thigh 1 hands-width below your hip and 1 hands-width above your knee. (See drawing at left.)



Step 3

### Step 3

#### Wash your hands well and dry them.

- Also wash the injection area and dry it well, or clean it using an alcohol swab. Allow the alcohol to dry before injecting.

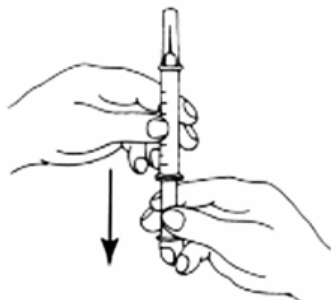


Step 4

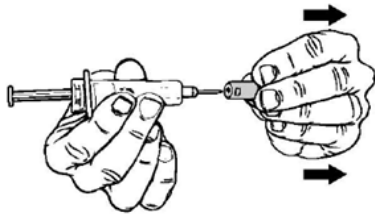
### Step 4

#### Prepare the methotrexate vial.

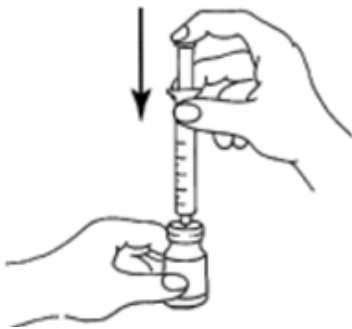
- **New vial:** Pop off the plastic cap and throw it away. Clean the top of the vial with an alcohol swab. Swipe 3 times in the same direction.
- **Used vial:** Before you draw the medicine, clean the top of the vial with an alcohol swab. Wipe 3 times in the same direction.



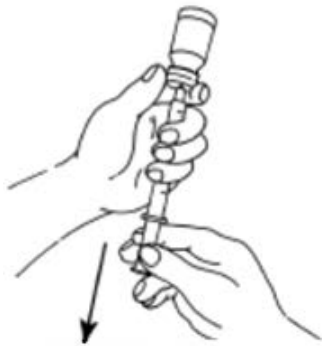
Step 5



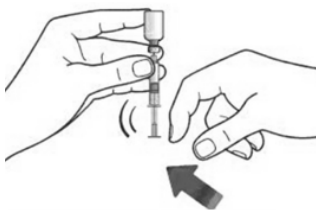
Step 6



Step 7



Step 8



### Step 5

#### Prepare the syringe and needle.

- Unwrap and attach needle and syringe, if needed.
- Hold the syringe in your *non-dominant* hand (the hand you do **not** use for writing).
- Pull back the plunger end, drawing air to the \_\_\_\_ ml mark on the syringe. Adding air to the vial helps the medicine flow into the syringe easier.

### Step 6

#### Remove the protective cap covering the needle.

### Step 7

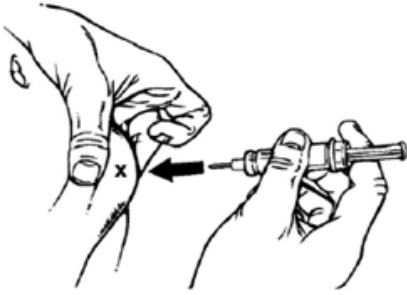
#### Insert the needle into the vial and inject the air you drew up in Step 5 into the vial.

- Hold the syringe like a pencil and hold the vial flat against a surface.
- Insert the needle straight through rubber stopper.
- Push down on the plunger until air is injected into the vial.
- Holding the vial and syringe, turn them upside down, keeping the needle in the vial.

### Step 8:

#### Draw up the methotrexate into the syringe.

- Make sure the tip of the needle is covered by yellow liquid.
- Pull the plunger down to draw the liquid into the syringe.
- Draw up more liquid than the dose needed. Push the extra liquid back into the vial to get the correct dose.
- Be careful not to touch the needle with your hand while drawing up a dose. It is important to keep the needle sterile.
- Expel the air from the syringe by tapping the syringe and pushing the plunger back up so air goes into the vial.
- Remove the syringe from the vial.



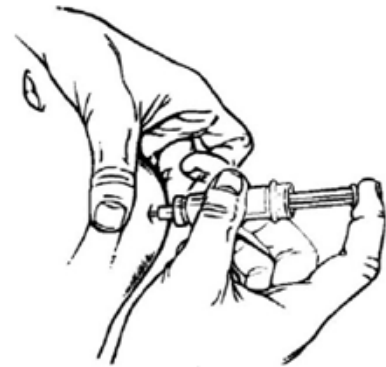
Steps 9 and 10

### Step 9

Hold the syringe like a pencil in your *dominant* hand (the hand you use for writing).

### Step 10

With your other hand, gently pinch the skin and fat tissue between your thumb and middle finger.



Step 11

### Step 11

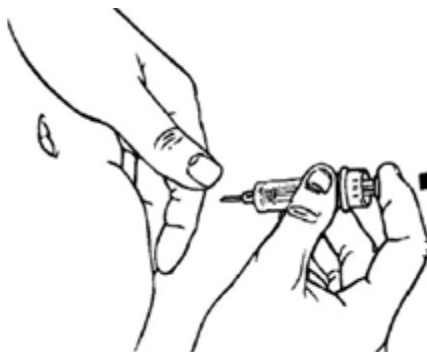
Put the needle straight into the pinched skin (not sideways or at an angle). Push the needle in all the way.



Step 12

### Step 12

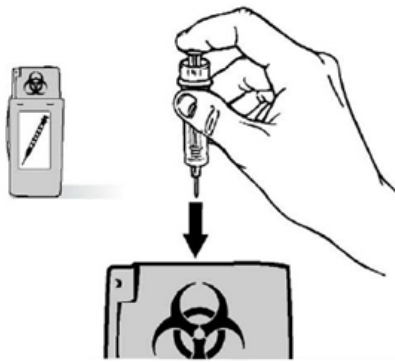
Inject the medicine by slowly pushing the plunger down, while counting slowly to 30.



Step 13

### Step 13

After you push the plunger in all the way, count slowly to 5, then remove the needle. Pull it straight out (not sideways or at an angle).



Step 14

## Step 14

**Throw away the syringe, needle, and methotrexate vials in a “sharps” container.**

All syringes, needles, methotrexate vials, alcohol swabs, and bandages that have come in contact with this medicine or with blood or body fluid are *biomedical waste*. **They cannot be disposed of in your regular garbage or dumpster.** You must place them in a special sharps container for disposal.

## How to Dispose of “Sharps” (Needles) Safely

- **It is illegal to dispose of used needles (sharps) or syringes in your regular garbage can or recycling containers.** If your trash collector finds needles or syringes in your trash, they will not pick up your trash. You could also be fined.
- Do **not** flush needles or syringes down the toilet.
- If you do not have a sharps container at home, ask your pharmacy about getting a sharps container.
- Safely place all used syringes in a sharps container or other plastic container, such as an empty juice bottle. Leave the needles attached to the syringes.
- Store your used sharps container out of reach of children and pets.
- Check the laws in your area about how to dispose of used sharps containers.

### Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Pharmacy Services:  
206.598.4363