

Consumers Can Help Prevent  
Harmful Medication Incidents

## SafeMedicationUse.ca Newsletter

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### Methotrexate Injections and Your Medication List

Some types of arthritis and psoriasis are treated with a medication called methotrexate. Taking the right dose is critical because serious harm, such as lung or liver damage and infections, can happen if your dose is too high. Methotrexate can be given as an injection, with the dose stated in milligrams (**mg**). Knowing your prescribed dose of injectable methotrexate and how to measure it correctly helps to prevent dose mistakes. Prefilled syringes containing premeasured doses are available to ensure you get the correct dose.

Methotrexate can also be measured from a vial into an empty syringe. Many syringes are marked in millilitres (**mL**). Insulin syringes (Figure 1) are often recommended by specialists because the needle causes little pain. However, insulin syringes are marked in **units** only. No matter which type of syringe you have, the numbers on the syringe are not the same as the methotrexate dose in milligrams (**mg**).



**Figure 1.** Example of an insulin syringe, which is often used to inject methotrexate.

SafeMedicationUse.ca learned about a person who was providing a medication history in hospital and mistook the number on the syringe for their methotrexate dose in milligrams (**mg**). The pharmacist questioned the dose because it was unusually high. Together, they figured out that the number shared represented units, not milligrams (**mg**). The misunderstanding could have led to an overdose if the wrong dose had been recorded on the medication list and given to the individual.

**SafeMedicationUse.ca has the following tips to help prevent mistakes with doses of injectable methotrexate and to help you keep your medication list accurate:**

- Ask your prescriber if prefilled syringes of methotrexate are an option for you.
- If prefilled syringes are not an option and you need to inject methotrexate from a vial, ask your pharmacist to explain the numbers and lines on your syringe and to show you how to measure the right dose.
- Keep your medication list accurate and prevent dosing errors by
  - including your prescribed dose in both milligrams (**mg**) and millilitres (**mL**); and
  - including a picture of your medication label and syringe that you can show to health care providers when asked about your dose.

For more information on using injectable methotrexate:

<https://rheuminfo.com/docs/living-with-arthritis/Methotrexate-Injection-Sheet-RheumInfo.pdf>

This newsletter was developed in collaboration with Best Medicines Coalition and Patients for Patient Safety Canada.

Recommendations are shared with healthcare providers, through the ISMP Canada Safety Bulletin, so that changes can be made together. This newsletter shares information about safe medication practices, is noncommercial, and is therefore exempt from Canadian anti-spam legislation.

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