

## Help Prevent Medication Incidents

A component of the Canadian Medication Incident Reporting and Prevention System (CMIRPS).

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# Alert

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### Markings on Oral Syringes Can Be Confusing (Be Sure to Measure Liquid Medicines Accurately)

An oral syringe is a useful tool for measuring the correct dose of a liquid medicine.

Most oral syringes are marked with two scales. One scale is for measuring the dose in millilitres (mL). The second scale is for measuring the dose in teaspoons. One teaspoon is the same as 5 mL.

ISMP Canada has received a report about markings on an oral syringe that caused confusion and led to a medication error. A doctor prescribed a liquid antibiotic for a baby. The medicine came with an oral syringe for measuring the dose. The prescribed dose was 2 mL, but the child's caregiver mistakenly measured a dose of 2 teaspoons. As a result, the baby received 10 mL of the antibiotic—5 times the intended dose. After receiving this incorrect dose, the baby suffered vomiting and diarrhea over the next 24 hours.

If you must take a liquid medicine, or if you are giving a liquid medicine to someone else, be sure you know how to measure the dose accurately. The best time to start thinking about how to measure a liquid medicine is when you have the prescription filled. If a measuring device is provided with the medicine, take the time to examine it with the pharmacist before you leave the pharmacy. Show the pharmacist how you would measure the medicine. Repeat back any special instructions in your own words. This will help the pharmacist to know if you have understood the instructions correctly.

Never measure liquid medicines with household spoons or with measuring spoons designed for cooking. These utensils are not accurate enough to measure medicine. Using them could cause you to take (or give) a dose that is too high or too low. Instead of using your household spoons, always use the measuring device provided with your medicine. If a measuring device is not provided with your medicine, ask your pharmacist for help in selecting a suitable measuring device. You can also ask the pharmacist for a demonstration. Devices for accurately measuring medicine that are available from your pharmacy include oral syringes, medicine cups, and medicine spoons.

Measurement errors with medicine can have serious consequences. Protect yourself and your family by taking steps to measure liquid medicines accurately!



Oral syringe with scales for measuring teaspoons on the left and millilitres on the right.