

Help Prevent Compounding Errors in Pediatrics

You'll see **more focus on preventing pediatric compounding errors.**

Infants and children often need compounded products when there's no child-friendly formulation, such as oral liquids, dispersible tabs, or sprinkles.

But compounded products pose some challenges. For example, they often have a shorter shelf life compared to commercially available products, and caregivers may need to travel to a specialized pharmacy.

Plus compounded products may lead to drug errors. For instance, they're not evaluated for safety, batch-to-batch consistency, or durability before dispensing...unlike commercially available products.

These differences may result in concentration- and dose-related errors...unpleasant tastes or textures that may affect adherence...or dosing errors due to the use of nonstandardized compounding recipes.

Use these tips to help prevent med errors.

Stock commercially available products for pediatric patients when they're available...to avoid the need for compounding.

If a compounded med is needed, stick to standard compounding recipes, so that a consistent concentration is used each time the med is compounded. For example, the recommended concentration of atenolol oral liquid is 2 mg/mL.

Check that the child's height and weight are current and in metric units so that the pharmacist can verify the dose calculations.

Stay alert for mix-ups between units, such as mg/kg/DAY and mg/kg/DOSE. Have your pharmacist check the dose and calculations, especially if they're complex, before you compound the med.

Follow NAPRA compounding standards and save a compounding record for each prep, including ingredients, lot numbers, and the staff member who prepared it.

If an error is suspected with a compounded product, be prepared to help conduct an audit and review the compounding record...and help compound a new product.

Ensure an appropriate measuring device is dispensed with compounded liquids...and try to pick a device that's the correct size to measure the dose just once. For example, if a dose is 15 mL, dispense a device that holds at least 15 mL.

See our resource, Keeping Pediatric Patients Safe, for more tips on preventing med errors.

Key References:

-Canadian Paediatric Society. Paediatric compounding and formulations in Canada: A primer for prescribers and call to action for government. May 5, 2025. <https://cps.ca/en/documents/position/paediatric-compounding-and-formulations> (Accessed June 2, 2025).

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