

Intranasal Midazolam (Versed): How to Prepare and Give for Seizures

A video showing how to prepare and give intranasal midazolam (vials) can be found at https://tinyurl.com/INmidazolam.

What is intranasal midazolam and when is it used?

Midazolam, also called Versed, is a medicine used to stop a seizure that has lasted too long. It's also used if many seizures happen in a short period of time. You give it to your child by spraying it on the skin inside the nose (intranasal injection) using a syringe and atomizer. The atomizer is the little, white, mushroom shaped button placed on the end of the syringe. It turns the liquid into the mist that goes into the nose.

What you need to know before using midazolam:

Before using this medicine be sure you know **how much** medicine you'll give your child and **when** to give it. It's a good idea to keep this paper with the medicine.

Midazolam Dose

Based on 5mG/mL concentration.

TOTAL Dose (mg) prescribed	TOTAL Amount (mL) to give	Amount (mL) to give in each nostril
2 mg	0.4 mL	0.2 mL
3 mg	0.6 mL	0.3 mL
4 mg	0.8 mL	0.4 mL
5 mg	1 mL	0.5 mL
6 mg	1.2 mL	0.6 mL
7 mg	1.4 mL	0.7 mL
8 mg	1.6 mL	0.8 mL
9 mg	1.8 mL	0.9 mL
10 mg	2 mL	1 mL

Keep in mind, mG and mL are not the same.
mG measures the dose or strength of the medicine. mL measures the amount or volume of the medication to give.

Your neurology team will highlight your child's dose in the chart above. For doses 5 mG and under, the pharmacy will give you a **1 mL** size vial or prefilled syringe. For doses over 5mG, you will be given a **2 mL** size vial or prefilled syringe.

Follow your Neurologist's instructions on WHEN to give your child intranasal midazolam.

You should NEVER give more than 1mL per nostril.

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Midazolam Preparation

Your pharmacy will give you midazolam either in a vial or a prefilled syringe. Follow the below preparation instructions depending on what the pharmacy gives you.

Vial Preparation

Step 1: Gather your supplies. Your supplies, medication, and instructions should be kept all together.

- Medication (vial)
- Syringe
- Atomizer (white mushroom shaped device)
- Plastic or metal needle



Step 2: Pop the protective cap off the vial of midazolam.



Step 3: Connect the syringe and needle by twisting or pushing together. Poke the needle into the middle of the rubber seal.



Step 4: Tip the vial up-side down so the syringe is on the bottom and the vial's rubber seal faces down. Ensure the tip of the needle is in the liquid.



Step 5: Pull the plunger back and let the syringe fill with medicine. Look inside the bottle to makes sure the tip of the needle is in the liquid the whole time. Pull the plunger back until the syringe fills to the total dose prescribed for your child. Make sure the syringe doesn't have any large air bubbles.



Step 6: Disconnect the needle from the syringe by twisting.



Step 7: Attach the atomizer by twisting it on the end of the syringe.



Prefilled Syringe Preparation

Step 1: Gather your supplies. Your supplies, medication, and instructions should be kept all together.

- Medication (prefilled syringe)
- Atomizer (white mushroom shaped device)



Step 2: Twist off the protective plastic cap



Step 3: Push the plunger to the **total** prescribed dose. The prescribed dose may be less than the amount in the entire syringe. As you move the plunger the excess will squirt out. This is expected.



Step 4: Attach the atomizer tip by twisting it on the end of the syringe.



Giving Midazolam

Step 1: Use your free hand to hold your child's head still. Put the tip of the atomizer tightly against the nostril aiming slightly up and outward toward the top of the ear.



Step 2: Quickly push the syringe plunger to deliver half the medication into one nostril.



Step 3: Move the syringe over to the other nostril and give the rest of the medication into that nostril.

Note the time you gave the medicine.



Helpful Tips

- **Practice.** Practice using the equipment with water. Practice drawing up the correct amount and attaching the atomizer. Don't open the vial or prefilled syringe until you need to use it. Don't practice on your child. Practice as many times as you need to so you know what to do next.
- Once opened, the vial or prefilled syringe is good for 28 days. Write the expiration date on it
 with a permanent pen. Throw it away after the expiration date and make sure you have a
 refill from the pharmacy.
- Not all pharmacies have midazolam or the supplies to give it. Consider picking this up at the pharmacy here at Children's on the 1st floor.
- You, your doctor, or nurse can use a permanent marker to draw a line on the syringe to show the total amount to give. That way you don't make a mistake when you are scared or nervous.

PLEASE CALL THE NEUROLOGY DEPARTMENT AT 720-777-6895 FOR ANY QUESTIONS OR CONCERNS.