

Intranasal midazolam (Versed)



Patient and Family Education

This teaching sheet contains general information only. Talk with your child's doctor or a member of your child's healthcare team about specific care of your child.

What is midazolam?

Midazolam is an emergency medicine used to stop seizures. It can be given into the nose (intranasal). The brand name is called Versed.

Why is intranasal midazolam used?

Intranasal midazolam:

- Is a fast way to give medicine to a child who cannot swallow.
- Works faster than oral medicines (those that must be swallowed).
- Is more reliable than rectal medicines (those given in the rectum, the body opening where stool comes out). This is because it gets absorbed through the small blood vessels of the nose.

When should intranasal midazolam be used?

Use the medicine only as directed by your child's doctor. Some treatment guidelines include:

- It may be used when someone is having an active seizure, lasting 5 minutes or longer.
- It may be used when someone has 3 or more seizures in 1 hour.
- It should NOT be used as a maintenance medicine to prevent seizures.

What dose of intranasal midazolam does my child need?

- Your child's doctor will prescribe the dose that is right for him. Follow your doctor's directions carefully.
- Your child's dose is based on his age and weight.
- You will prepare the dose when you need to treat your child.
- Sometimes 1 dose of midazolam is not enough. Your child's doctor may prescribe more than 1 dose.

How do I prepare and give the dose of intranasal midazolam?

Your child's doctor, nurse or pharmacist can teach you how to give the medicine to your child. You will use an MAD device. MAD stands for Mucosal Atomizer Device. It allows you to spray the medicine into the nose.

1. Gather your supplies. You will need:
 - Alcohol swabs
 - 3 mL (milliliter) syringe
 - A needle
 - Bottle of midazolam
 - MAD device
2. Remove the cap from the bottle. Clean the top of the midazolam bottle well with an alcohol swab, and let it dry.

In case of an urgent concern or emergency, call 911 or go to the nearest emergency department right away.

Intranasal midazolam (Versed), continued

To draw up the correct dose:

3. Place the needle on the syringe. Remove the cap from the needle.
4. Pull air into the syringe equal to the amount of medicine you will give. Insert the needle into the top of the medicine bottle.
5. Push the air into the medicine bottle.
6. Turn the bottle upside down, and pull back slowly on the plunger. Fill the syringe with the amount of medicine needed. If there is an air bubble:
 - Pull back a little more medicine.
 - Then, tap the side of the syringe so that the air goes to the top. Push the air out.
 - Check the syringe again to make sure the dose is correct.
7. Place the cap on the needle. Remove the needle from the syringe.
8. Attach the MAD nasal tip to the top of the syringe.
9. Be sure the dose does not exceed 1 mL per nostril.

To give the dose:

10. Hold the syringe with the MAD nasal tip between your first 2 fingers. Rest your thumb on the plunger end of the syringe.
11. Place the MAD nasal tip in one nostril. Press the plunger, and give half the amount of medicine in the syringe.
12. Place the MAD nasal tip in the other nostril. Press the plunger, giving the other half of the medicine in the syringe.
13. Take note of the time you gave the medicine, and keep watching your child.

If your child's seizure continues, your doctor may tell you to give a second dose of midazolam 5 to 10 minutes after the first dose. **Only do this if your child's doctor tells you to do so.** If you give a second dose, throw the bottle away afterwards – even if there is medicine left in the bottle. Once opened, the bottle must be used within a short time and cannot be saved.

See page 4 for step-by-step pictures of how to give intranasal midazolam.

What are some possible side effects?

Your child may have one or more of these:

- Feel sleepy or light-headed
- Have some slight irritation in the nose
- May cough, sneeze or have a bitter taste in the mouth. This comes from giving the medicine in the nose.

Call 911 right away if:

- Your child has any breathing problems that need taken care of **right away**.
- Your child has chest retractions (skin pulling in around the ribs and chest when breathing).
- Your child has a blue or dark purple color to the nail beds, lips or gums.
- You have to give a second dose of midazolam or if you need to use diazepam rectal gel (Diastat).

Call your child's doctor if:

- You have any questions or concerns about how your child looks or feels.

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Intranasal midazolam (Versed), continued

Where do I get the medicine and an MAD device?

Your child's doctor will give you a prescription for midazolam and a MAD device. Talk to your nurse or doctor about what drugstores carry these supplies.

How do I care for the MAD device and supplies?

- Once your child is OK, clean the MAD device so you can reuse it. Clean it with hot, soapy water, rinse it well, and let it dry completely before storing.
- Put used medicine bottles, needles and syringes in an FDA-cleared sharps container. If you cannot locate one, use an empty household container, such as a laundry detergent container with these features:
 - Made of heavy-duty plastic
 - Stays upright
 - Tight-fitting lid that cannot be punctured
 - Does not leak
- Close the lid, and tape it shut. Label the container.
- Take the container to a sharps disposal program. To locate one, you may:
 - Check with your local trash removal service or health department.
 - Search the internet for safe sharps disposal programs available in your area.
- You may also go to the FDA website at www.fda.gov/safesharpsdisposal for more details on safe sharps disposal.

When should I avoid using intranasal midazolam?

Do not use intranasal midazolam if your child:

- Has a bloody nose or stuffy nose. A bloody or stuffy nose can prevent the medicine from absorbing well.
- Has a nose injury that causes a blockage.

What general safety tips should I know about giving a medicine?

- Always read the label before you give the medicine to your child.
- Keep all medicines in their labeled container where your child cannot get to them. If possible, store all medicines in a locked cupboard. Return all medicines to the pharmacy to dispose of after their expiration date on the container.
- Tell your child's doctor, dentist or the emergency room about any medicines your child is taking. Take the medicines with you.
- Call the Georgia Poison Control Center at 800-282-5846 or call 911 at once if your child takes too much medicine or has a bad reaction to his medicine.

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Intranasal midazolam (Versed), continued

How to give intranasal midazolam

1



Gather your supplies:

- Alcohol swabs
- 3 mL (milliliter) syringe
- A needle
- Bottle of midazolam
- Mucosal Atomizer Device- MAD

2



- Remove the cap from the bottle.
- Clean the top of the bottle with an alcohol swab.
- Let dry.

3



- Place the needle on the syringe.
- Remove the cap from the needle.

4



- Pull air into the syringe.
- Insert the needle into the top of the medicine bottle.
- Push the air into the medicine bottle.

5



- Turn the bottle upside down, and pull back slowly on the plunger.
- Fill the syringe with the amount of medicine needed.

6



- Place the cap on the needle.
- Remove the needle from the syringe.

7



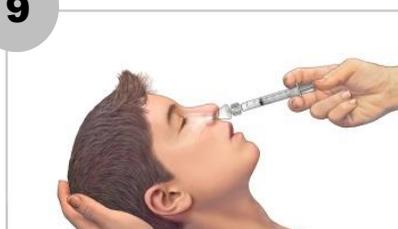
Attach the MAD nasal tip to the syringe.

8



Hold the syringe between your first 2 fingers. Rest your thumb on the plunger end of the syringe.

9



- Place the MAD nasal tip in one nostril.
- Press the plunger, and give half the amount of medicine.

10



- Place the MAD nasal tip in the other nostril.
- Press the plunger, giving the other half of the medicine.

11



Take note of the time, and keep watching your child.

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