

# Midazolam

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This sheet is about exposure to midazolam in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare providers.

## ***What is midazolam?***

Midazolam is a medication that has been used to treat seizures and anxiety. It has also been used with other medications for anesthesia in surgeries. Two brand names for midazolam are Versed® and Seizalam®. Midazolam is in a class of medications called benzodiazepines. MotherToBaby has a general fact sheet on anxiety at <https://mothertobaby.org/fact-sheets/anxiety-fact/>.

Sometimes when people find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

## ***I take midazolam. Can it make it harder for me to get pregnant?***

Midazolam has not been studied to see if taking it could make it harder to get pregnant. In an experimental animal study, midazolam did not affect fertility.

## ***Does taking midazolam increase the chance for miscarriage?***

Miscarriage can occur in any pregnancy for many different reasons. Studies have not been done to see if midazolam could increase the chance for a miscarriage.

## ***Does taking midazolam increase the chance of birth defects?***

Every pregnancy starts out with a 3-5% chance of having a baby with a birth defect. This is called the background risk. Human studies have not been done on midazolam use in pregnancy. Animal studies did not find a higher chance for birth defects with exposure to midazolam.

## ***I've heard that taking a benzodiazepine can cause birth defects like cleft lip and palate. Is this true?***

Probably not. Some of the first studies that looked at benzodiazepine use in pregnancy suggested a slight increase in the chance for cleft lip and/or cleft palate (the top lip and/or roof of the mouth do not form correctly and can need surgery) if taken during the first trimester. Since these early reports, there have been other studies and reviews that have not found an increase in the chance for birth defect with the use of a benzodiazepine during the first trimester.

## ***Does taking midazolam in pregnancy increase the chance of other pregnancy related problems?***

Based on the studies reviewed, it is not known if midazolam can cause other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

## ***If used near the end of a pregnancy, will midazolam cause withdrawal symptoms in my baby after birth?***

When used during the time of c-section, there have been some reports of newborns having difficulty breathing. However, there have also been reports of use during c-section without problems for the newborn. C-section itself can cause temporary breathing problem in the baby.

## ***Does taking midazolam in pregnancy cause long-term problems in behavior or learning for the baby?***

Midazolam has not been studied to see if taking it during a pregnancy would affect the child's behavior or development. Animal studies have reported that midazolam, in combination with other medications for general anesthesia, might affect the developing brain. Based on this, the US Food and Drug Administration (FDA) has suggested that midazolam be avoided for use as general anesthesia and sedation during the third trimester of pregnancy for surgeries not related to delivery of the baby. If needed for a c-section, the baby would be exposed only for a short period of time; and this has not been associated with learning difficulties. For more general information on

anesthesia, please see the MotherToBaby fact sheet General Anesthesia at <https://mothertobaby.org/fact-sheets/general-anesthesia-pregnancy/>.

**Breastfeeding while taking midazolam:**

Midazolam has not been well studied for use while breastfeeding. Small amounts of midazolam can get into breast milk after single intravenous (IV) doses. If midazolam is given as part of general anesthesia (including for c-section), or as a single dose, breastfeeding can be restarted as soon as the mother is ready to nurse (after any side effects, such as feelings of sleepiness, have passed). If more than one IV dose is given during breastfeeding, watch the baby for sleepiness (hard to wake for feeding), low energy, or poor suckling. If any of these symptoms are seen, discuss them with your child's healthcare provider. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

**If a male takes midazolam, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?**

Midazolam has not been well studied for its effect on sperm. In general, exposures that fathers or sperm donors have are unlikely to increase the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/>.

**Please click here for references.**

**North American Antiepileptic Drug (AED) Pregnancy Registry:** There is a pregnancy registry for people who take antiepileptic medications, such as midazolam. Please see the registry website for more information: <https://www.aedpregnancyregistry.org/introduction/>.

**National Pregnancy Registry for Psychiatric Medications:** There is a pregnancy registry for women who take psychiatric medications, such as midazolam. For more information you can look at their website: <https://womensmentalhealth.org/research/pregnancyregistry/>.

**Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at [MotherToBaby.org](https://mothertobaby.org).**

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