Methylphenidate

This sheet is about exposure to methylphenidate in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare provider.

What is methylphenidate?

Methylphenidate is a stimulant medication that has been used to treat attention deficit hyperactivity disorder (ADHD) and sleep disorders (narcolepsy). It has also been used to lower appetite. Methylphenidate is sold under brand names including Ritalin®, Metadate®, Cotempla®, and Concerta®. A transdermal (skin) patch called Daytrana® is approved for children and adolescents.

Sometimes when women 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 your 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 methylphenidate. Can it make it harder for me to get pregnant?

Studies have not been done in humans to see if the use of methylphenidate could affect fertility (ability to get pregnant). Animal studies did not show any harmful effects on fertility, even at doses up to 200 times higher than the maximum dose used in humans.

Does taking methylphenidate increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. One small study suggested a slight increased chance, but most studies have not found a higher chance of miscarriage. Because miscarriage can happen for many reasons, it is hard to know whether a medication, the condition being treated, or other factors such as age or health are the cause.

Does taking methylphenidate increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like methylphenidate, might increase the chance of birth defects in a pregnancy.

One large database study suggested a possible increase in heart defects, but other studies did not find this. Most studies, including one large study of about 3,000 pregnancies, have not found an increased chance of birth defects with methylphenidate use during pregnancy. The skin patch form of methylphenidate has not been studied in pregnancy.

Does taking methylphenidate in pregnancy increase the chance of other pregnancy-related problems?

It is not known if taking methylphenidate can increase the chance of other pregnancy-related problems, such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces at birth) when methylphenidate is taken as prescribed during pregnancy.

One study found a higher chance of high blood pressure and preeclampsia during pregnancy. Preeclampsia can cause serious problems, including seizures, early delivery, stillbirth, or babies smaller than expected. Another study did not find a higher risk of stillbirth or small babies, but it did report more preterm labor and preeclampsia. The authors noted that their results were limited and should not be used to recommend stopping ADHD treatment during pregnancy. A third study did not find an increased risk of pregnancy-related problems. Because many factors can affect pregnancy outcomes, it is hard to know whether the medication, the condition being treated, or other factors such as age or health explain these findings.

I need to take methylphenidate throughout my entire pregnancy. Will it cause withdrawal

symptoms in my baby after birth?

Some exposures during pregnancy can cause temporary symptoms in newborns soon after birth. These symptoms are sometimes referred to as withdrawal. Withdrawal symptoms have not been reported when methylphenidate was taken as directed by a healthcare provider.

One small study reported withdrawal symptoms in children exposed to methylphenidate and an opioid called pentazocine before birth. Many of the reports also included other factors, such as exposure to cocaine and lysergic acid diethylamide (LSD). Also, pentazocine and other opioid exposures during pregnancy can increase the chance of withdrawal symptoms after exposure in pregnancy.

Does taking methylphenidate in pregnancy affect future behavior or learning for the child?

Methylphenidate is not expected to increase the chance of behavior or learning issues for the child. Limited studies have shown typical growth in children up to one year of age and no changes in neurodevelopment in children after exposure to methylphenidate during pregnancy.

Breastfeeding while taking methylphenidate:

Methylphenidate passes into breast milk in small amounts. When taken as prescribed, methylphenidate is not expected to cause problems for a nursing infant. There are reports of infants exposed to methylphenidate through breast milk who did not have any side effects.

In some women, taking methylphenidate can lower the levels of a hormone called prolactin. Low levels of prolactin might lower the amount of milk that the body makes, especially at the start of breastfeeding. Studies have not been done to see if taking methylphenidate during breastfeeding will affect milk production. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man takes methylphenidate, could it affect his fertility or increase the chance of birth defects?

A study with 50 participants found that males who had been taking methylphenidate for at least 1 year had a decrease in motility (movement) of sperm and a decrease in the amount of sperm produced. This could affect fertility (ability to make healthy sperm). Studies have not been done to see if men taking methylphenidate can increase the chance of birth defects. In general, exposures that men have are unlikely to increase 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.

Disclaimer: MotherToBaby Fact Sheets are meant for general information purposes and should not replace the advice of your health care provider. MotherToBaby is a service of the non-profit Organization of Teratology Information Specialists (OTIS). Copyright by OTIS, February 1, 2026.