

Meth & Your Baby

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Methamphetamine use has increased in the United States since the 1980s¹, and today is the most commonly used drug behind alcohol and marijuana in a large number of states¹. One of the reasons meth is so prevalent is because it can be made with relative ease from legal (yet toxic) ingredients, such as Freon[®] and paint thinner³.

As a stimulant, meth is extremely potent⁷. When a person uses this substance, they may experience a range of feelings, such as⁸:

- Euphoria (extremely elevated mood)
- Heightened alertness
- Increased energy levels
- Irritability
- Aggressive behavior

The negative health effects that may occur from meth use include^{1,8}:

- Tachycardia (abnormally rapid heart rate)
- Diaphoresis (sweating)
- Hypertension (high blood pressure)
- Hyperthermia (high body temperature)
- Seizures

To date, the medical community's knowledge of meth's effects on a baby in the womb is limited. Conclusive evidence about the potential effects of methamphetamine use during pregnancy is lacking, as much of it comes from animal research or from studies with difficult to control variables such as the presence of other substance abuse in the maternal population being examined. **While we cannot draw definite conclusions about how meth affects a baby's development, there is evidence to suggest that meth is harmful to a developing fetus⁹.**

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Effects of Methamphetamine on the Mother

Meth is a dangerous substance that can harm a woman's body and put her at risk for maternal complications. For example, women who abuse meth tend to have a **significantly lower body mass index (BMI)**. This can make her pregnancy riskier. One study found that lower BMI increased a woman's chance for pregnancy complications, including **more frequent hospitalizations and longer hospital stays**¹⁰. These effects of meth can also result in **intrauterine growth restriction** (poor growth of the fetus in the womb)¹¹.

Using meth during pregnancy can also reduce a woman's placental blood flow. This can cause **fetal hypoxia**, an insufficient amount of oxygen to the fetus¹².

Since 2003, meth has been the most common substance that women are admitted with for treatment at US federally funded health centers. To complicate matters, meth is often used in combination with other substances⁶, such as prescription painkillers, marijuana, cigarettes and alcohol¹¹. These substances can have additional devastating effects on the fetus. For example, alcohol consumption can lead to **fetal alcohol syndrome**, which is irreversible.



Effects of Methamphetamine on the Baby

Meth use during pregnancy can harm the way a child develops in utero. Meth use can put a woman at risk for having a baby that has¹:

- A low birth weight
- Small size for gestational age (poor growth)
- An increased risk for brain and behavior problems

Most of what we know about the effects of meth on a developing fetus come from animal studies. In rats, prenatal exposure to meth caused^{11,13}:

- Increased mortality (death) in the mother and her child
- Retinal (vision) defects
- Cleft palate
- Malformations of the ribs
- Slowed physical growth
- Delayed motor (physical movement) development

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One study found that only 4% of babies exposed to meth were treated for withdrawal after birth. However, the study was unable to control for a mother's use of drugs other than meth⁷.

There are reports that meth can lead to long-term adverse health outcomes. These include negative impacts on a child's behavior, cognitive skills, and physical dexterity.

In a Swedish study, children who were exposed to meth in utero were tested at birth, at 1 year, and at 4 years. Researchers found that females exposed to meth were significantly shorter and lighter than the males.

There are few studies on humans that allow us to draw conclusions about the effects of meth on a fetus. However, from the handful of studies available, meth is associated with adverse health outcomes.

These include^{11,14}:

- Higher rates of preterm birth (born early)
- Placental abruption (separation of the placenta from the womb)
- Cardiac (heart) abnormalities
- Smaller head size (brain development)
- Fetal distress (lack of oxygen to brain and organs)
- Fetal growth restriction (poor growth) at rates similar to those for pregnant women who use



At age 8, there was a significant correlation between how much meth a fetus was exposed to in utero and the level of **aggressive behavior and poor social skills**. When the children were tested at age 14 and 15 years old, they performed significantly worse than their peers on math tests. However, this study was also complicated by variables outside of the researchers' control, such as mothers' abuse of other substances, stress levels, environment, number of siblings, and foster care placements¹¹.

When babies are exposed to meth for at least two-thirds of the pregnancy, certain brain structures were more likely to be smaller than those in non-exposed fetuses⁸.

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Some studies suggest that the use of meth during pregnancy can result in fetal abnormalities⁸. Other studies have reported that meth use during pregnancy can increase the risk of cleft lip in babies⁸. A case control study found that mothers who used drugs during the first trimester had over 3 times the risk of having a baby with **gastroschisis**⁸. Gastroschisis is a birth defect in which the baby's intestines stick outside of the body from a hole near the belly button¹⁵.

Quitting Meth While Pregnant

There is a common trend of women experiencing “turning points” during pregnancy. Being responsible for the life of another human helps many women stop using drugs. If you are currently using meth and you are pregnant or thinking about getting pregnant talk to your doctor about your options for meth addiction treatment. Your doctor may recommend entering a treatment facility.

The two main types of treatment you will encounter are outpatient and inpatient treatment:

Outpatient treatment is an option for women who have less severe addictions and who aren't additionally contending with serious medical or mental health issues. In outpatient treatment, you will periodically check in with your doctor and counselor for medications and therapy, while still being able to live at home.

Inpatient treatment programs offer an immersive treatment environment, with 24/7 supervision and access to medical services, when needed. In inpatient treatment, you will be free of distractions and able to focus fully on your journey to recovery. As a pregnant woman, you will be monitored closely to ensure the health of you and your baby.

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In treatment, you may participate in group and individual counseling. Some examples of therapy may include:

- **Group and individual counseling.** You can engage in group and/or individual counseling as part of your treatment. Counseling can offer you support throughout your recovery.
- **Cognitive-behavioral therapy (CBT).** CBT can help you understand the triggers and situations that contribute to your use meth. People who struggle with addiction often have underlying issues that drive their addictions. CBT can help you address these issues in a healthy and productive way. In CBT, you can learn how to cope with life's challenges without meth.

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- **Family involvement.** Family is important to the recovery process. As a pregnant woman, you may or may not have a partner with whom you would like to engage in therapy with. No matter what your situation is, involving your family in your recovery can help you get sober. Family members can offer invaluable support, often providing encouragement and motivation. Note that some individuals do not have healthy relationships with members of their family, so it's important to do whatever feels right to you and invite those who are positive forces in your life to be part of your treatment.
- **Addiction support groups.** 12-step programs are available to help you receive peer support. Groups can help you create a community of people going through the same situation as you. Having this type of support can help prevent relapse. Attending support groups can help ensure a woman's long-term success.
- **Contingency-management.** This is a strategy used to enforce positive and healthy behavior change. When you meet treatment goals, your therapist may give you a tangible reward in exchange for maintaining sobriety. Incentives could include money, vouchers, or special privileges.

Overall, there are many tools that can help you turn your life around. Pregnancy can present a window of opportunity to improve the health of you and your baby. Talk to your provider today to learn more about available treatment programs.

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