

## **Fentanyl**

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

### What is fentanyl?

Fentanyl is an opioid medication. Opioids are sometimes called narcotics. Fentanyl is used to treat pain and is often given during and after surgery. Brand names of fentanyl include Abstral®, Actiq®, Duragesic®, Fentora®, Ionsys®, Lazanda®, Sublimaze®, and Subsys®.

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 this medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

If you have been taking fentanyl regularly or have a dependency or opioid use disorder, you should not just stop taking the medication suddenly. Stopping an opioid medication suddenly could cause you to go into withdrawal. It is not known if or how withdrawal might affect a pregnancy. It is suggested that any reduction in fentanyl be done slowly, and under the direction of your healthcare provider.

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

Studies have not been done to see if taking fentanyl can make it harder to get pregnant.

## Does taking fentanyl increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Studies have not been done to see if fentanyl increases the chance for miscarriage. Miscarriage is one of the risks of surgery during pregnancy, so it is hard to tell if a miscarriage following surgery is due to the underlying condition that required surgery, the surgical procedure, or medications (like fentanyl) used during or after surgery.

#### Does taking fentanyl increase the chance of birth defects?\*

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. The majority of studies have not found that fentanyl would significantly increase the chance of birth defects above the background risk.

There is one small case series on 10 infants born to women who had fentanyl use disorder (using fentanyl without a prescription) who were born with similar birth defects, such as: small head size (microcephaly), smaller body size than expected, similar facial features (short nose, small chin, thin upper lip, drooping of upper eyelid (ptosis), cleft palate (an opening in the roof of the mouth), feet abnormalities (foot turns inward (club foot) or rounded bottom of foot (rocker bottom feet), toes fused together (syndactyly)), and short, broad thumbs. These features are similar to those seen in another medical condition called Smith-Lemli-Opitz syndrome. Smith-Lemli-Opitz syndrome is caused by a gene change that lowers cholesterol in the body. Cholesterol is very important for a fetus to grow and develop in pregnancy. This case review suggested that fentanyl misuse might affect levels of cholesterol and might explain the similar features noted. This case series has limitations, which does not allow a firm connection to be linked to fentanyl misuse and the findings in these 10 infants. For example, the authors did not report how much fentanyl was used or timing of exposure in pregnancy; or if the fentanyl was contaminated or laced with other ingredients. In addition, fentanyl was not the only drug exposure reported for these infants. This means it is not known if fentanyl, other exposures, or a combination of factors were the reason for the physical features discussed in the case series.

When looking at studies that focused on any opioid exposure, some studies have suggested that opioids in general might be associated with birth defects. However, these studies have not found a specific pattern of birth defects.

#### Does taking fentanyl in pregnancy increase the chance of other pregnancy-related

Fentanyl July 1, 2023



## problems?

It is not known if fentanyl 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).

Studies involving women who often use some opioids during their pregnancy have found an increased chance for pregnancy-related problems, including poor growth of the baby, low levels of amniotic fluid (fluid that surrounds baby in uterus), stillbirth, preterm delivery, and C-section. This is more commonly reported in those who are taking heroin or who are using prescribed opioid medication in greater amounts or for longer than recommended by their healthcare provider. Use of an opioid close to the time of delivery can result in withdrawal symptoms in the baby (see the section of this fact sheet on Neonatal Abstinence Syndrome).

# Will my baby have withdrawal (neonatal opioid withdrawal syndrome) if I continue to take fentanyl?\*\*

Temporary problems with breathing or heart rate have been reported in some newborns following the use of fentanyl for pain at delivery. Longer exposure to fentanyl during pregnancy may result in neonatal opioid withdrawal syndrome (NOWS). Because information about longer exposure to fentanyl in pregnancy is limited, it is not known if the chance for NOWS is higher or lower with fentanyl than with other, better studied opioids.

Neonatal opioid withdrawal syndrome (NOWS) is the term used to describe withdrawal symptoms in newborns from exposure to opioid medication(s) during pregnancy. NOWS symptoms can include irritability, crying, sneezing, stuffy nose, poor sleep, extreme drowsiness (very tired), yawning, poor feeding, sweating, tremors, seizures, vomiting, and diarrhea. Most often, symptoms of NOWS appear 2 days after birth and might last more than 2 weeks. The chance that NOWS will occur depends on the length of time and/or the dose of opioid taken during pregnancy, if other medications were also taken, if baby was born preterm, and/or size of the baby at birth. If opioids were taken in pregnancy, it is important to let your baby's healthcare providers know so that they can check for symptoms of NOWS and provide the best care for your newborn.

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

Short-term use of fentanyl during surgery or for pain after surgery is not expected to cause learning or behavior problems. It is not known if longer use of fentanyl in pregnancy increases the chance for behavior or learning issues. Some studies on opioids as a general group have found more problems with learning and behavior in children exposed to opioids for a long period of time during pregnancy. It is hard to tell if this is due to the medication exposure or other factors that may increase the chances of these problems.

#### What if I have an opioid use disorder?

Studies find that women who are pregnant and take opioids in higher doses or for longer than recommended by their healthcare providers (misuse opioids) have an increased chance for pregnancy problems. These include poor growth of the baby, stillbirth, preterm delivery, and C-section.

#### Fentanyl and breastfeeding:

Speak to your healthcare provider about your pain and medications that may be used while you are breastfeeding. Fentanyl can get into breast milk. Babies might have problems with the amounts of fentanyl in the breast milk. Talk with your healthcare provider or a MotherToBaby specialist about your specific situation, as information on breastfeeding might change based on the age of your baby, the dose of medication, and other factors.

Use of some opioids in breastfeeding might cause babies to be very sleepy and have trouble latching on. Some opioids can cause trouble with breathing. If you are using any opioid, talk to your healthcare provider about how to use the least amount for the shortest time and how to monitor (watch) your baby for any signs of concern. Contact the baby's healthcare provider immediately if your baby has any problems such as increased sleepiness (more than usual), trouble feeding, trouble breathing, or limpness. Be sure to talk to your healthcare provider about all your breastfeeding questions.

## If a man takes fentanyl, could it affect fertility (ability to get a woman pregnant) or increase the chance of birth defects?

Studies have not been done to see if fentanyl could affect a man's fertility or increase the chance of birth defects above the background risk. However, the use of opioids, in general, has been shown to lower fertility in men. In

Fentanyl July 1, 2023



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/.

\*Section updated 4/2024

\*\*Section updated 1/2025

Please click here for references.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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, July 1, 2023.