Misoprostol (Cytotec®)

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

What is misoprostol?

Misoprostol is a medication that is approved to lower the risk of getting gastric ulcer (sores in the stomach lining, also known as peptic ulcer or stomach ulcer) in people at risk for these ulcers when taking nonsteroidal anti-inflammatory drugs (NSAIDs). It has also been approved for use, in combination with other medications, for medical termination of pregnancy. Misoprostol has also been used for cervical ripening (softening and opening the cervix), constipation, treatment of miscarriages that do not pass on their own, and treatment of serious postpartum hemorrhage (large amount of blood loss).

Misoprostol is sold under the brand name (Cytotec®). The product label for misoprostol recommends that people who are pregnant or planning to become pregnant should not use this medication. In general, NSAIDS should also be avoided in pregnancy. However, it is important to talk with your healthcare providers before making changes to how you take a medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

I am taking misoprostol, but I would like to stop taking it before becoming pregnant. How long does the drug stay in my body?

People eliminate medication at different rates. In healthy adults, it takes 2 to 4 hours, on average, for most of the misoprostol to be gone from the body. However, the manufacturer has recommended to wait at least 1 month or through 1 menstrual cycle after stopping misoprostol before trying to get pregnant.

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

There are studies that suggest the use of misoprostol does not make it harder to get pregnant.

Does taking misoprostol increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Misoprostol can cause uterine contractions and has been used to treat miscarriages (help pass tissue from a pregnancy that is no longer viable). Therefore, an increased chance of miscarriage is expected. The chance for misoprostol to increase miscarriage depends on multiple factors such as dose, timing, and use of other medications.

Does taking misoprostol 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. Most infants born after exposure to misoprostol do not have birth defects. However, misoprostol use during early pregnancy can increase the chance for birth defects. Misoprostol can affect blood flow through the uterus, which could increase the chance for birth defects related to poor blood flow to the fetus (called vascular disruption). Birth defects related to misoprostol exposure in pregnancy are poor growth of limbs (missing parts of finger/toes, or parts of arms/legs), Moebius syndrome (weakness or paralysis of the facial muscles), cleft lip and/or cleft palate (lip and or roof of mouth formed with a split), arthrogryposis (stiff joints), muscle weakness, and club foot (foot points downward and inward).

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

Misoprostol use in pregnancy might increase the chance for preterm delivery (birth before week 37), poor growth (baby smaller than expected) uterine rupture, and meconium passage in the uterus. Meconium is the name for the first bowel movement that a newborn has. Meconium passage in the uterus, instead of after delivery, might cause the developing baby to get meconium in their lungs (meconium aspiration), which might need treatment after delivery.

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

It is not known if misoprostol increases the chance for behavior or learning issues. Some of the reported birth defects associated with misoprostol could affect brain development. If those birth defects are present, then learning or
behavior might be affected.

**What screenings or tests are available to see if my pregnancy has birth defects or other issues?**

Prenatal ultrasounds can be used screen for some birth defects, such as a limb growth, cleft lip, and club foot. They can also be used to monitor the growth of the pregnancy. Talk with your healthcare provider about any prenatal screenings or testing that are available to you. There are no tests available during a pregnancy that can tell if there has been any effect on behavior or ability to learn.

**Breastfeeding while taking misoprostol:**

If a person is taking misoprostol, amounts of the medication that could get into breastmilk are expected to be very small. There are no reported concerns if a person takes misoprostol while nursing an infant. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

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

Studies have not been done to see if misoprostol could affect fertility or increase the chance of birth defects. 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.