

# **General Anesthesia**

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

#### What is general anesthesia?

General anesthesia is used for medical procedures that require you to be "put to sleep". It involves the use of a medication (either through breathing in gases through a mask or intravenously (IV)), which produces unconsciousness and an inability to feel pain. General anesthesia often uses a combination of inhaled gases and intravenous medications.

Anesthesia given by inhalation might include halothane, enflurane, isoflurane or nitrous oxide. Some commonly used IV medicines include fentanyl, propofol and ketamine. General anesthesia is given by expert healthcare providers and the patient is carefully monitored throughout the procedure. It is estimated that about 1 in 50 (2%) of people require surgery during pregnancy. There are different types of anesthesia used for surgery or during labor and delivery.

## Can exposure to general anesthesia make it harder for me to get pregnant?

Studies have not been done to see if general anesthesia could make it harder to get pregnant.

### Does general anesthesia increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. Some studies suggest there may be a small increase in miscarriage in people who had surgery in the first half of pregnancy. It is unclear whether this is due to the anesthesia, or a response of the body to surgery in an affected organ, illness in the person who is pregnant, or another reason.

## Does general anesthesia 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. Studies that have looked at the risk for birth defects in people who had surgery and anesthesia in the first and early second trimester of pregnancy did not show an increased chance for birth defects.

## Does general anesthesia increase the chance of other pregnancy related problems?

Some studies have noticed a chance for premature delivery (delivery before 37 weeks of pregnancy) after a surgical procedure later in pregnancy. Other studies have not shown an increased chance for pregnancy complications, including premature delivery.

#### Does general anesthesia in pregnancy affect future behavior or learning for the child?

A single, relatively short procedure with exposure to general anesthesia is unlikely to have negative effects on behavior or learning. Some studies in young children have suggested that long surgical procedures might affect the brain. However, it is not clear if these findings are due to the anesthesia, the condition for which the child needed surgery, or other factors. People who are pregnant and need surgery, especially for life-threatening conditions should not be discouraged from the use of general anesthesia. Talk with your healthcare providers about the benefits, risks, and appropriate timing of surgery or procedures requiring general anesthesia.

#### I work in an office that uses general anesthesia. Would that affect the baby?

Different work settings can result in different exposures. MotherToBaby fact sheets talk about possible exposures in the workplace. For more information on working as a veterinarian or veterinary technician during pregnancy, please see the fact sheet at https://mothertobaby.org/fact-sheets/vet-vettech/. Another fact sheet with general tips on working safely while pregnant, which can be found at

https://mothertobaby.org/fact-sheets/reproductive-hazards-workplace/. For more information on your specific risks, contact a MotherToBaby specialist.

#### Breastfeeding if I've had general anesthesia:

Most anesthetic medications get out of the body quickly. While there are not many studies looking at breastfeeding

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after a procedure, most experts suggest that breastfeeding can be restarted as soon as the person who is breastfeeding recovers from the anesthesia and is feeling well enough to breastfeed. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male has general anesthesia, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

There are no studies looking at possible risks to a pregnancy when the father has anesthesia. In general, exposures that fathers or sperm donors 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 to view references.

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

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