Inhaled Corticosteroids (ICSs)

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

What are inhaled corticosteroids?

Inhaled corticosteroids (ICSs) are medications to prevent and control the symptoms of asthma. ICSs are taken using an inhaler, pump, or nebulizer. ICSs can have fewer side effects than corticosteroids pills since most of the inhaled medication goes directly to the lungs instead of traveling throughout the body.

ICSs help control the swelling of the airways in the lungs and reduce mucus production so that asthma attacks are less likely. ICSs are not effective in stopping immediate symptoms when you are having an asthma attack. Some examples of ICSs are beclomethasone dipropionate (Qvar®), budesonide (Pulmicort®), fluticasone propionate (Flovent®), mometasone furoate (Asmanex®), or triamcinolone acetonide (Azmacort®).

This fact sheet will focus on corticosteroids that are inhaled (breathed into lungs), and not corticosteroids taken in other ways (such as pills). Information on prednisone/prednisolone (a corticosteroid taken in pill form) can be found at https://mothertobaby.org/fact-sheets/prednisone-prednisolone-pregnancy/. Information on topical corticosteroids can be found at https://mothertobaby.org/fact-sheets/topical-corticosteroids-pregnancy/.

Sometimes when people 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. For more information about asthma and pregnancy, see the MotherToBaby fact sheet at https://mothertobaby.org/fact-sheets/asthma-and-pregnancy/

ICSs are considered preferred asthma treatments during pregnancy because they usually control asthma well. They are absorbed into the body in lower amounts compared to pill / tablet forms of the medication. It is unknown how much, if any, of the medication reaches the developing baby. However, research suggests that the amount is likely small.

Does taking an ICS increase the chance for miscarriage?

Miscarriage can occur in any pregnancy. There is some data to suggest that the use of ICSs may slightly increase the chance of miscarriage. However, that chance may be different depending on the exact medication. For questions about the medication you are taking, contact a MotherToBaby specialist at 866.626.6847.

Does taking ICSs 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. High doses of ICSs (doses that could be closer to the doses found in corticosteroid pills) have not been well studied during pregnancy. However, the studies that have been done on ICSs have found no overall increased chance for birth defects.

Could taking ICSs in pregnancy increase the chance of other pregnancy related problems?

ICSs are not associated with pregnancy complications. However, untreated asthma can cause low birth weight and other pregnancy complications. It is important to work with your healthcare team to make sure your asthma is well-controlled during pregnancy.

Breastfeeding while taking an ICS:

Most ICSs have not been studied during breastfeeding. However, the amount of medication that would be in the breast milk following inhalation is likely too small to cause problems for a breastfeeding infant. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male takes an ICS, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?
There is no evidence to suggest that ICSs affect sperm or are in some way harmful to a pregnancy. 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/.

MotherToBaby is currently conducting a study looking at asthma and the medications used to treat asthma in pregnancy. If you are interested in taking part in this study, please call 1-877-311-8972 or sign up at https://mothertobaby.org/join-study/.

Please click here for references.