



MotherToBaby

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

For more information about us or to find a service in your area,  
call **(866) 626-6847**. Visit us online at **www.MotherToBaby.org**.

Find us! Facebook.com/MotherToBaby or @MotherToBaby on Twitter

## **Acyclovir (Zovirax®)|Valacyclovir (Valtrex®)**

This sheet talks about exposure to acyclovir or valacyclovir in a pregnancy or while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

### ***What is acyclovir?***

Acyclovir is sold under the brand name Zovirax®. It is an antiviral medication used to treat cold sores and genital herpes caused by the herpes virus. It is also prescribed to treat chickenpox and shingles. It is given as a cream or ointment (topical use), oral tablets, or intravenous liquid. Acyclovir can help relieve the pain and help the healing of sores or blisters. It is not a cure for herpes and infections can return at a later time.

### ***Is valacyclovir the same as acyclovir?***

Valacyclovir is very similar to acyclovir and is often used to treat the same types of infections. It is sold under the brand name Valtrex®. Valacyclovir is changed to acyclovir once in a person's body.

### ***I take acyclovir/valacyclovir as needed to treat herpes. Should I stop using it before I try to get pregnant?***

It is recommended that you speak with your healthcare providers before starting or stopping this medication.

### ***Will taking acyclovir/valacyclovir increase the chance for miscarriage?***

Studies in pregnant women have not found an increased chance for miscarriage following acyclovir use.

### ***I have been taking acyclovir/valacyclovir for genital herpes and just found out that I am pregnant. Could it cause birth defects?***

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. Acyclovir/valacyclovir is not thought to increase the risk for birth defects. The manufacturer, in combination with the Centers for Disease Control (CDC), looked at the effects of acyclovir on the developing baby. No increase in birth defects was seen in over 500 births. Also, a separate study found no increase in birth defects in over 1,500 infants exposed to acyclovir and over 200 infants exposed to valacyclovir during the first trimester.

### ***I have a cold sore on my lip. Could acyclovir ointment cause birth defects?***

Topical use of acyclovir ointment is not suspected of causing birth defects. When applied on the skin, acyclovir does not enter the body in large amounts. Also, oral doses of acyclovir have not been associated with birth defects.

### ***Can acyclovir/valacyclovir cause other problems during pregnancy?***

The use of acyclovir/valacyclovir in the third trimester has not been well studied. However, clinical experience has been reassuring.

### ***Are there situations in which using acyclovir/valacyclovir during pregnancy is necessary for the health of the mother and baby?***

Yes. These medications have been prescribed during pregnancy when the mother has a primary genital herpes infection. A "primary" infection means it is the first time for the infection. Primary infection can be life threatening or lead to complications in a pregnancy. A rare but serious infection called varicella pneumonia might also require treatment with these medications.

### ***Can I use acyclovir/valacyclovir while breastfeeding my baby?***

Yes. Acyclovir enters breast milk, but the amount of medication the baby receives is low. Acyclovir is commonly given to newborns and does not typically cause problems for babies. If you are applying acyclovir cream or ointment directly on your breast, clean the area before nursing. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

### ***What if the father of the baby takes acyclovir/valacyclovir?***

Possible effects on sperm have not been well studied in men. One study in 20 men did not find lower sperm production when they were given high doses of acyclovir for six months. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at <https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

### **Selected References:**

- Ahrens KA, et al. 2013. Antitherpetic Medication Use and the Risk of Gastroschisis: Findings From the National Birth Defects Prevention Study, 1997-2007. *Paediatric and Perinatal Epidemiology*. 27(4):340-345.
- Braig S, et al. 2001. Acyclovir prophylaxis in late pregnancy prevents recurrent genital herpes and viral shedding. *Eur J Obstet Gynecol Reprod Biol* 96:55-58.
- Centers for Disease Control. 1993. Pregnancy outcomes following systemic prenatal acyclovir exposure – June 1, 1984-June 30, 1993. *MMWR*. 42:806-809.
- Drake AL, et al. 2012. Infant Safety During and After Maternal Valacyclovir Vherapy in Conjunction with Antiretroviral HIV-1 Prophylaxis in a Randomized Clinical Trial. *PLoS One*. 7(4):e34635.
- Drake AL, et al. 2012. Valacyclovir Suppressive Therapy Reduces Plasma and Breast Milk HIV-1 RNA Levels During Pregnancy and Postpartum: A Randomized Trial. *The Journal of Infectious Diseases*. 205(3):366-375.
- Kimberlin DF, et al. 1998. Pharmacokinetics of oral valacyclovir and acyclovir in late pregnancy. *Am J Obstet Gynecol*. 179(4):846-51.
- Pasternak B, Hviid A. 2010. Use of acyclovir, valacyclovir, and famciclovir in the first trimester of pregnancy and the risk of birth defects. *JAMA* 304(8):859-866.
- Prober CG. 2001. Management of the neonate whose mother received suppressive acyclovir therapy during late pregnancy. *Pediatr Infect Dis J* 20:90-91.
- Ratanajamit C, et al. 2003. Adverse pregnancy outcome in women exposed to acyclovir during pregnancy: a population-based observational study. *Scand J Infect Dis* 35:255-9.
- Sheffield JS, et al. 2002. Acyclovir concentrations in human breast milk after valaciclovir administration. *Am J Obstet Gynecol* 186:100-102.
- Stone KM, et al. 2004. Pregnancy outcomes following systemic prenatal acyclovir exposure: Conclusions from the international acyclovir pregnancy registry, 1984- 1999. *Birth Defects Res A Clin Mol Teratol* 70(4):201- 207.
- Tyring SK, et al. 2002. Valacyclovir for herpes simplex virus infection: long-term safety and sustained efficacy after 20 years' experience with acyclovir. *J Infect Dis* 186 Suppl 1:S40-S46.

November, 2018