

WOMEN WITH EPILEPSY: DRUG RISKS AND SAFETY DURING PREGNANCY

This fact sheet may help you understand which drugs are safest for treating epilepsy during pregnancy. It also gives information on how safe pregnancy is for you now or in the future.

Neurologists from the American Academy of Neurology are doctors who identify and treat diseases of the brain and nervous system. The following evidence-based information* is provided by experts who carefully reviewed all available scientific studies concerning women with epilepsy who are pregnant or plan to become pregnant.

The strongest evidence found in these studies shows the risks of valproate (VPA). For this reason, the drug risks discussed in this fact sheet relate to VPA use. The risks of taking other AEDs are not discussed here.

If you have epilepsy, it is important to know the risks of taking antiepileptic drugs (AEDs) during pregnancy—especially VPA. But you should also know that pregnancy is relatively safe for you and your baby.

I have epilepsy and plan to become pregnant. Will taking an AED during pregnancy put me at risk for a difficult pregnancy?

Taking an AED during pregnancy is not likely to lead to a difficult pregnancy. There is good evidence that taking AEDs while you are pregnant will not put you at an especially high risk of late-pregnancy bleeding. There is weak evidence that AED use raises your risk of Cesarean section, but good evidence shows the risk is not very high. Good evidence also shows that you will not be at very high risk of early contractions or early labor and delivery. There is not enough evidence to know if taking AEDs during pregnancy raises your risk of having pregnancy-related high blood pressure.

If I take VPA while I'm pregnant, will my baby be at risk for health problems?

Taking VPA during the first trimester of pregnancy is related to three major birth defects: neural tube defects, facial clefts, and hypospadias. This last defect occurs in boys. It causes the urinary opening to form below the tip or on the side of the penis. There is good evidence that avoiding VPA use in the first trimester lowers the risk of neural tube defects and facial clefts. The evidence is weak that avoiding VPA use in the first trimester lowers the risk of hypospadias. VPA use can also lead to poorer thinking ability in children. There is good evidence for avoiding VPA use during pregnancy to lower this risk.

How risky is taking VPA during pregnancy compared to taking other AEDs?

Some studies compared the risks of using VPA during pregnancy to the risks of using certain other AEDs. The evidence points to avoiding VPA use in the first trimester to lower the risk of birth defects. It also suggests avoiding VPA use throughout pregnancy to decrease the risk of poorer thinking ability in your child.

How risky is taking more than one AED at a time during pregnancy?

Good evidence shows that women with epilepsy should consider taking one AED instead of more than one during their first trimester to lower the risk of major birth defects. If you cannot avoid taking more than one AED, be aware that there is some evidence for avoiding VPA in particular as part of your therapy during your first trimester. This is because multidrug therapy with VPA is related to birth defects.

In addition, there is good evidence for taking one AED instead of more than one during pregnancy to decrease the risk of the child developing poorer thinking ability.

How is my baby exposed to AEDs during pregnancy? Will my baby be exposed to my AED during breastfeeding?

Several AEDs are able to pass through the umbilical cord from the pregnant woman to her fetus. However, doctors don't know how this affects the baby's health. There is some evidence that VPA might pass through breastfeeding to your baby in smaller amounts than some other AEDs.

I have epilepsy and plan to become pregnant. What is the risk that my baby will die because of my epilepsy? Does taking an AED during pregnancy change the risk?

There is good evidence that the babies of women with epilepsy are not at any higher risk of dying in the first month after birth than the babies of women without epilepsy. It is not known if AED use during pregnancy changes the risk level. There is not enough evidence to show whether taking AEDs during pregnancy raises the chance of miscarriage.

What can I do to lower the risks to my baby's health?

It may be possible to lower your baby's risk of birth defects. Doctors typically recommend that all women who are planning pregnancy take folic acid (vitamin B9) to lower the risk of birth defects. There is weak evidence that taking folic acid before pregnancy will help women with epilepsy in particular. Keep in mind that taking folic acid before you become pregnant will not harm your baby and might help.

I have epilepsy and plan to become pregnant. What can I do to lower my chance of health problems during my pregnancy?

If you have epilepsy and smoke cigarettes, you may want to avoid smoking while you are pregnant. Weak evidence shows that smoking during pregnancy may lead to an especially high risk of early contractions and early labor and delivery—even if you are not taking AEDs while pregnant. Talk with your doctor about what to do if you smoke and are pregnant or are planning pregnancy. Health habits other than smoking were not covered in these studies.

How do I know if I should stay on medication when I'm pregnant?

AED use during pregnancy—especially VPA use—has some risks. But there are many good reasons to consider staying on AEDs during pregnancy. Seizures can be dangerous to both you and your fetus. So working toward being free of seizures is important. Good evidence shows that women who are seizure-free for nine months or more before pregnancy are likely to remain seizure-free throughout pregnancy. Also, AED levels can drop during pregnancy, so be sure to work closely with your doctor to maintain the right AED level for you.

There is not enough evidence to show if pregnancy increases the rate of seizures or other epilepsy-related problems like status epilepticus (prolonged or back-to-back seizures).

It is important to work with your doctor when deciding if you will stay on AEDs during pregnancy. Keep in mind that some AEDs are safer than others. Stopping AED use—whether before or during pregnancy—might not be best for you. Also, if you are pregnant and taking an AED, switching to another AED now might bring on other health problems. Whatever your situation, talk to your doctor about making the right choice for you.

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

*After the experts review all of the published research studies, they describe the strength of the evidence supporting each recommendation:

Strong evidence = more than one high-quality scientific study

Good evidence = at least one high-quality scientific study or two or more studies of a lesser quality

Weak evidence = the studies, while supportive, are weak in design or strength of the findings

Not enough evidence = either different studies have come to conflicting results or there are no studies of reasonable quality

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