

What We Know About Anti-seizure Medications & Pregnancy

With proper care and planning, people with epilepsy can have safe, healthy pregnancies and deliver healthy babies. Recent research from the Maternal Outcomes and Neurodevelopmental Effects of Antiepileptic Drugs study (MONEAD) supports this.

Different anti-seizure medications (ASMs) are associated with different levels of risk when it comes to a baby's development. Several ASMs show evidence of little or no risk to babies during pregnancy.

Suitability of Anti-seizure Medications for Pregnancy

Below is an overview of the current research on safety of various ASMs during pregnancy. Note that babies exposed to the 'lowest risk' ASMs **showed no higher risk** of fetal malformations (e.g., birth defects) than babies born to people who did not take any ASMs during pregnancy.

Lowest Risk	Lamotrigine (Lamictal XR, Lamictal ODT, Lamictal) or levetiracetam (Spritam, Keppra XR, Keppra XR, Roweepra)*
Modestly Elevated Risk	Carbamazepine (Tegretol XR, Equetro, Tegretol), oxcarbazepine (Trileptal, Oxtellar XR)**, zonisamide (Zonegran)***
Moderately Elevated Risk	Phenytoin (Phenytek, Dilantin Infatabs, Dilantin Kapseal), phenobarbital (Luminal Sodium, Solfoton, Tedral), topiramate (Trokendi XR, Qudexy XR, Topamax)
Highly Elevated Risk	Valproic acid (Belvo, Depakote, Dyzantil, Convulex, Syonell)
Unknown Risk	Other ASMs including, but not limited to, brivaracetam (Briviact), cenobamate (Xcopri), eslicarbazepine (Aptiom), ethosuximide (Zarontin), lacosamide (Vimpat), and perampanel (Fycompa)

*When used alone; not combined with other medications.

Information available on **oxcarbazepine shows a minimal risk of birth defects (also called malformations), but we don't have sufficient information on effects on brain development.

***Limited information is available for **zonisamide** and its relation to birth defects and brain development.

Diagram of Anti-seizure Medication and Pregnancy Risk

Increasing Fetal Risk



Switching of Anti-seizure Medications

Consult with your neurologist or primary care doctor to understand the specifics of the ASM that you're on to make sure it's safe to take during pregnancy. Depending on your specific situation, they may recommend you switch ASMs prior to trying to become pregnant. Adjusting or switching ASMs can take 3-12 months, so it should ideally be done as a part of your pregnancy plan.



Use this QR code to visit the Epilepsy & Pregnancy Medical Consortium website for additional tools and resources to help you and your doctors plan for a safe and healthy pregnancy.