

Perinatal Attention- Deficit/Hyperactivity Disorder (ADHD)

Laurel Pellegrino, MD



Perinatal ADHD

Prevalence: 3-4% of adults (prevalence unchanged during pregnancy and postpartum, but may worsen with increased demands of pregnancy and parenting))

Common Comorbidities: Mood disorder (38%), anxiety disorder (47%), substance use disorder (15%)

Medication Use: Roughly 20% of pregnant people choose to continue ADHD meds throughout the pregnancy. Individuals with comorbid depression who stopped their stimulant had worsening depression despite taking an antidepressant.

First, confirm the diagnosis:

- *Administer [Adult ADHD Self-Report Scale \(ASRS\)](#)—5 min, positive result warrants further consideration
- *Age of onset, school history
- *Impairment in two or more domains
- *Rule out other causes: sleep apnea, anxiety, depression, substance abuse

Possible pregnancy outcomes

associated with untreated ADHD:

- *miscarriage
- *preterm birth
- *NICU admissions
- *poor maternal nutrition & decreased prenatal vitamin use

Next, assess level of impairment:

- Have they ever been off medications in the past? What happened?
- Do they need medications to function at work or at home?
- Are comorbidities worse off of medication (e.g. substance use)?
- Are they more impulsive or accident-prone off meds (e.g. driving)?

Non-pharmacologic

strategies for mild, moderate, and severe ADHD:

- *Psychoeducation
- *Cognitive Behavioral Therapy (CBT) for ADHD
- *Strategies (routines, lists, calendars, timers, taking breaks)
- *Regular exercise
- *Coaching
- *Mindfulness-based interventions
- *ADHD Support groups
- *Reduce workload or other workplace accommodations if possible
- *Use public transportation if driving concerns

Mild	Discontinue medication Optimize non-pharmacologic strategies
Moderate	Assess for comorbidities Optimize non-pharmacologic strategies Consider bupropion vs prn/scheduled stimulant
Severe	Assess for comorbidities Continue stimulant at lowest effective dose (skip days when possible) Monitor maternal BP and weight gain Monitor fetal growth Optimize non-pharmacologic augmentation strategies

ADHD Medications in Pregnancy

	Early Pregnancy	Late Pregnancy	Breastfeeding?
Methylphenidate	No consistent association with overall defects (~6700 exposures); possible small increased risk of cardiac septal defects (NNH estimates range from 92-333); possible increased risk spontaneous abortions.	Small increased risk of preterm birth and preeclampsia. No consistent association with other major maternal or neonatal outcomes. Longer-term neurodevelopment and growth data are reassuring.	Low levels in breastmilk, undetectable in infant serum. Limited data without adverse effects. High doses may interfere with milk supply.
Prescribed amphetamines	No consistent association with malformations (~5600 exposures).	Small increased risk of preterm birth and preeclampsia. No consistent association with other major maternal or neonatal outcomes. Longer-term neurodevelopment and growth data are reassuring.	Infant dose 5-15% maternal dose. Very limited data without adverse effects. Monitor for irritability, insomnia, and feeding difficulties. High doses may interfere with milk supply.
Bupropion	No consistent association with malformations (~2300 exposures).	No adverse effects (small studies)	Nursing infant exposed to 2% maternal dose; 2 case reports of seizures at 6 months
Atomoxetine	No consistent association with malformations (~5450 exposures)	Mixed evidence (~700 exposures)	Unknown
Guanfacine	Too few exposures to say (~30)	Low birth weight (very small studies)	Unknown
Clonidine	No consistent association with malformations based on data from women with HTN	Reduced fetal growth	Excreted in breast milk. Adverse events reports (hypotonia, drowsiness, apnea, seizure)

Perinatal ADHD Resources

Scoten O, Tabi K, Paquette V, Carrion P, Ryan D, Radonjic NV, Whitham EA, Hippman C. Attention-deficit/hyperactivity disorder in pregnancy and the postpartum period. *Am J Obstet Gynecol*. 2024 Mar 1:S0002-9378(24)00376-4. doi: 10.1016/j.ajog.2024.02.297. Epub ahead of print. PMID: 38432409.

Baker AS, Freeman MP. Management of attention deficit hyperactivity disorder during pregnancy. *Obstet Gynecol Clin North Am* 2018; 45(3):495-509

Ornoy A. Pharmacological Treatment of Attention Deficit Hyperactivity Disorder During Pregnancy and Lactation. *Pharm Res*. 2018;35(3):46. Published 2018 Feb 6. doi:10.1007/s11095-017-2323-z