



Perinatal anxiety impacts 1 in 5 pregnant and postpartum people.¹



RISK FACTORS²⁻⁴

- History of anxiety or depression
- Unplanned pregnancy
- Exposure to childhood abuse, domestic violence, or sexual assault
- History of pregnancy complications or loss
- Low socioeconomic status
- Lack of social support

HEALTH DISPARITIES⁵⁻⁸

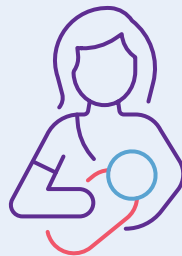
- Exposure to racism and inequities in social determinants of health likely contributes to increased stress and anxiety levels among minoritized women
- Hispanic and non-Hispanic black women report higher levels of stress and anxiety during pregnancy than non-Hispanic white women
- Indigenous women have higher odds of experiencing perinatal anxiety than non-Indigenous women
- Women of color are less likely to be diagnosed with and receive treatment for a perinatal anxiety disorder than white women

POTENTIAL CONSEQUENCES OF UNTREATED PERINATAL ANXIETY



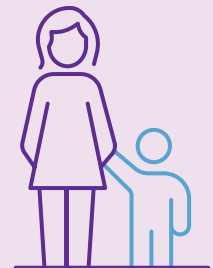
Obstetric^{9,10}

- Hypertensive disorders of pregnancy
- Preterm birth
- Low birth weight



Postpartum^{11,12}

- Poor infant bonding
- Lower likelihood of breastfeeding
- Postpartum depression



Childhood¹³

- Negative early temperament
- Behavioral problems
- ADHD, anxiety, and depressive symptoms

CLINICAL PRESENTATION¹⁴⁻¹⁵

Psychological Symptoms

- Excessive worry
- Feeling on edge
- Difficult to reassure
- Intrusive thoughts
- Sense of dread
- Insomnia

Physical Symptoms

- Fatigue
- Muscle tension
- Nausea or abdominal discomfort
- Palpitations, chest tightness, or shortness of breath
- Dizziness

Common Worry Themes

- Fetal wellbeing
- Infant health and safety
- Parenting abilities

"What if my baby stops breathing while they're sleeping? I feel like I need to check on them constantly to make sure they're okay."

"What if I accidentally do something to harm my unborn baby while I'm pregnant?"



IDENTIFYING PERINATAL ANXIETY

Pregnancy and postpartum worries are common and can be normal.

How does perinatal anxiety differ from “normal” worry?

In perinatal anxiety:

- Anxiety is persistent
- Worries are excessive, intense, or irrational
- Symptoms cause significant distress
- Symptoms interfere with day-to-day activities (might include difficulty caring for self and/or infant)

To make a diagnosis:

- ✓ Use a validated screening tool (see page 3)
- ✓ Rule out medical etiologies (consider **CBC, CMP, TSH, EKG**), including complications of pregnancy (e.g., preeclampsia, gestational hypertension, gestational diabetes, anemia, and hyperthyroidism, among others)

ACRONYM GUIDE:

- **CBC** = Complete Blood Count
- **CMP** = Comprehensive Metabolic Panel
- **TSH** = Thyroid-Stimulating Hormone
- **EKG** = Electrocardiogram

- ✓ Consider co-occurring or alternative psychiatric diagnoses:

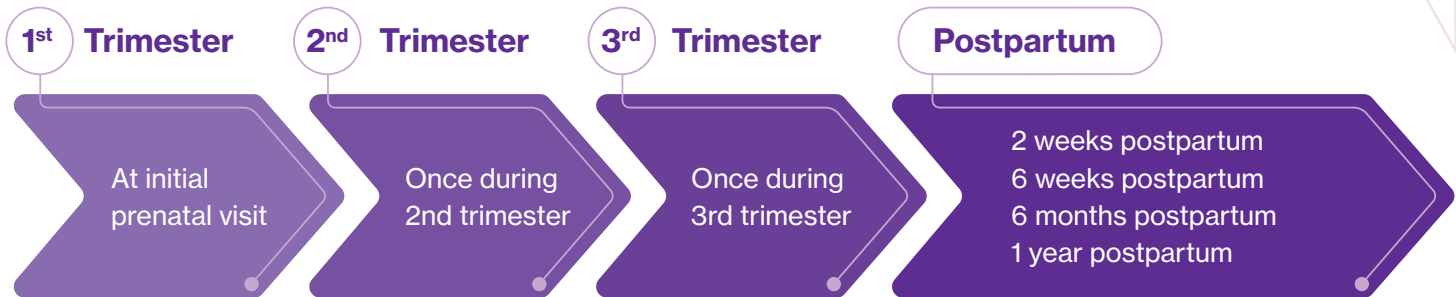
- Depression
- OCD
- PTSD
- ADHD
- Bipolar disorder
- Postpartum psychosis

- ✓ Ask about substance use (alcohol, illicit substances, controlled medications)

SCREENING

Screening pregnant and postpartum patients for mood and anxiety disorders is recommended by the American College of Obstetricians and Gynecologists (ACOG)¹⁶, American Academy of Pediatrics (AAP)¹⁷, and US Preventative Services Task Force (USPSTF)¹⁸.

NC MATTERS recommends screening for perinatal anxiety at a minimum of 3 time points across pregnancy and postpartum. Consider screening at the first prenatal visit, in the 2nd and/or 3rd trimester, and after delivery at postpartum and well-child visits.



What do I say?



We screen all of our patients for anxiety because mental health changes and concerns are so common during pregnancy. These forms do not diagnose you with a mental health condition. They help us to talk with you about the best way to support you during your pregnancy, if you would like support. There are educational materials and resources available, too. Feel free to ask about them anytime, whether or not you choose to share your feelings or any symptoms you are experiencing.

**This script is just a suggestion and can be adapted as appropriate.*

SCREENING TOOLS

Perinatal Anxiety Screening Scale (PASS)¹⁹

- 31 items
- Most sensitive screening tool for perinatal population
- Quantifies anxiety severity
- Scoring:
 - 0-20: minimal anxiety
 - 21-41: mild-moderate anxiety
 - 42-93: severe anxiety



Available in
English

Generalized Anxiety Disorder-7 (GAD-7)^{20, 21}

- 7 items
- Not specific to perinatal population
- Quantifies anxiety severity
- Scoring:
 - 0-4: minimal anxiety
 - 5-9: mild anxiety
 - 10-14: moderate anxiety
 - 15-21: severe anxiety



Available in
Spanish and many
other languages

Edinburgh Postnatal Depression Scale-3A (EPDS-3A)^{21, 22}

- 3 items
- Items #3, 4, 5 of full EPDS
- Does not quantify anxiety severity
- Scoring:
 - 0-4: negative screen for anxiety
 - 5-9: positive screen for anxiety



Available in
Spanish and many
other languages

TREATING PERINATAL ANXIETY

Pharmacologic Treatment

Guiding principles for prescribing:

1. Use what has previously worked
2. Monotherapy is preferable
3. Be aware of need to increase dose due to physiological changes of pregnancy

Important points to discuss with patients:



1. No medication is FDA-approved in pregnancy or lactation
2. All psychiatric medications do cross the placenta and into breastmilk to some extent
3. The risks of exposing the fetus/infant to medication must be balanced with the risks of untreated maternal mental illness
4. Infants should be monitored for side effects of medications, especially sedation

Antidepressants	<ul style="list-style-type: none"> • Medication classes: SSRIs, SNRIs, atypical antidepressants • First line for moderate to severe perinatal anxiety • How to choose: <ul style="list-style-type: none"> • When possible choose medication with prior efficacy • If no prior effective medications, start with SSRI (e.g. sertraline) • How to start: <ul style="list-style-type: none"> • Start at low dose and titrate gradually to therapeutic dose • Sample titration schedule for sertraline: <ul style="list-style-type: none"> - Start at 25 mg daily (or 12.5 mg if severe anxiety) - Increase by 25-50mg if tolerating and symptoms persist, every 4-6 weeks to a maximum dose of 200mg • Time to response: <ul style="list-style-type: none"> • Can take 4-6 weeks from time of reaching therapeutic dose to see benefit • If no benefit after 4-6 weeks on a therapeutic dose, consider changing to another medication • Counseling on the risk of Poor Neonatal Adaptation (PNA) in pregnancy: <ul style="list-style-type: none"> • PNA is associated with antidepressant exposure in late pregnancy and may impact up to 30% of infants exposed to SSRIs and SNRIs in the third trimester • Common symptoms include jitteriness, restlessness, irritability, increased muscle tone, and rapid breathing • Symptoms are usually mild, typically present within the first 24-48 hours after birth, and usually resolve within 3-4 days • In rare cases, symptoms may persist longer, but no definitive links to serious long-term outcomes have been established • Discontinuing or tapering antidepressants in the third trimester to avoid PNA is not recommended
Brexanolone and Zuranolone	<ul style="list-style-type: none"> • Medication class: Neurosteroid • FDA-approved for postpartum depression only, but may be helpful when perinatal anxiety is comorbid with this diagnosis • Short treatment course may be attractive to patients who prefer to avoid daily medications • Available as IV infusion or oral medication: <ul style="list-style-type: none"> • Brexanolone (Zulresso) is a 60-hour inpatient infusion that requires referral to a Zulresso Treatment Center • Zuranolone (Zurzuvae) is an oral medication that is dispensed by certain specialty pharmacies • Call NC MATTERS for more information on how to help your patient access brexanolone or zuranolone in North Carolina
Adjunctive medications	<ul style="list-style-type: none"> • Medication classes: Benzodiazepines, Antihistamines, Antihypertensives, Antipsychotics, Anxiolytics (buspirone), Anticonvulsants (gabapentin) • May be used as adjunct to antidepressant medications in moderate to severe perinatal anxiety • Notes on PRN medications: <ul style="list-style-type: none"> • Can be helpful for targeting occasional severe anxiety symptoms (panic attacks) or for supporting sleep • Ideally used short-term while titrating antidepressant to therapeutic dose • Rarely effective alone

TREATING PERINATAL ANXIETY (CONT'D)

Non-pharmacologic Treatment

Psychotherapy ²³⁻²⁵	<ul style="list-style-type: none">• First line for mild to moderate perinatal anxiety• Recommended in combination with medication for moderate to severe perinatal anxiety• Types of therapy for perinatal anxiety:<ul style="list-style-type: none">• Cognitive-behavioral therapy• Interpersonal psychotherapy• Behavioral activation• Acceptance and commitment therapy
Complementary treatments ²⁶⁻³⁰	<ul style="list-style-type: none">• May be used as add-on to medication and/or psychotherapy• Not stand-alone treatments for perinatal anxiety• Examples:<ul style="list-style-type: none">• Sleep protection• Physical activity• Yoga• Massage• Relaxation exercises



* Bupropion (Wellbutrin) is generally not recommended as a first-line treatment for anxiety, as it may increase anxiety in some patients. It is typically used to address comorbid depressive symptoms or as an alternative when SSRIs or SNRIs are not well-tolerated.

MEDICATION TABLES

Antidepressant medications*

TYPE	NAME	DOSAGE RANGE	STARTING DOSE	TITRATION INCREMENTS	PREGNANCY / BREASTFEEDING CONSIDERATIONS
SSRIs	Sertraline (Zoloft)	50–200 mg	12.5 or 25 mg	25–50 mg	<ul style="list-style-type: none"> • Good safety data in pregnancy • Low breastmilk transmission
	Fluoxetine (Prozac)	20–80 mg	10 mg	10–20mg	<ul style="list-style-type: none"> • Higher breastmilk transmission than other SSRIs given longer half-life
	Citalopram (Celexa)	20–40 mg	10 mg	10–20mg	<ul style="list-style-type: none"> • Good safety data in pregnancy
	Escitalopram (Lexapro)	10–20mg	5 mg	5–10mg	<ul style="list-style-type: none"> • Safety in pregnancy comparable to citalopram
	Paroxetine (Paxil)	20–60mg	10 mg	10–20mg	<ul style="list-style-type: none"> • May increase risk of CV malformations • Low breastmilk transmission
	Fluvoxamine (Luvox)	50–200 mg	50 mg	25mg	<ul style="list-style-type: none"> • Less safety data in pregnancy
SNRIs	Venlafaxine (Effexor)	75–375mg	37.5 or 75 mg	37.5–75 mg	<ul style="list-style-type: none"> • Less safety data in pregnancy, but most of all SNRIs • Avoid in women with hypertensive disorders
	Duloxetine (Cymbalta)	30–120 mg	30 mg	30 mg	<ul style="list-style-type: none"> • Limited safety data in pregnancy • May also help with comorbid neuropathic pain
	Desvenlafaxine (Pristiq)	50–100 mg	25 mg	25 mg	<ul style="list-style-type: none"> • Limited safety data in pregnancy, but comparable to venlafaxine
Atypical antidepressants	Mirtazapine (Remeron)	15–45 mg	7.5 or 15 mg	7.5–15 mg	<ul style="list-style-type: none"> • Less safety data in pregnancy • May be helpful with nausea and vomiting in pregnancy
Anticonvulsants	Gabapentin (Neurontin)	100–2400 mg in 2-3 divided doses	100–300 mg	100–300mg	<ul style="list-style-type: none"> • Limited safety data in pregnancy • Folic acid supplementation recommended • May also consider PRN use
Anxiolytics	Buspirone (Buspar)	10–60 mg in 2-3 divided doses	10–15 mg in 2-3 divided doses	5–10 mg	<ul style="list-style-type: none"> • Limited safety data in pregnancy

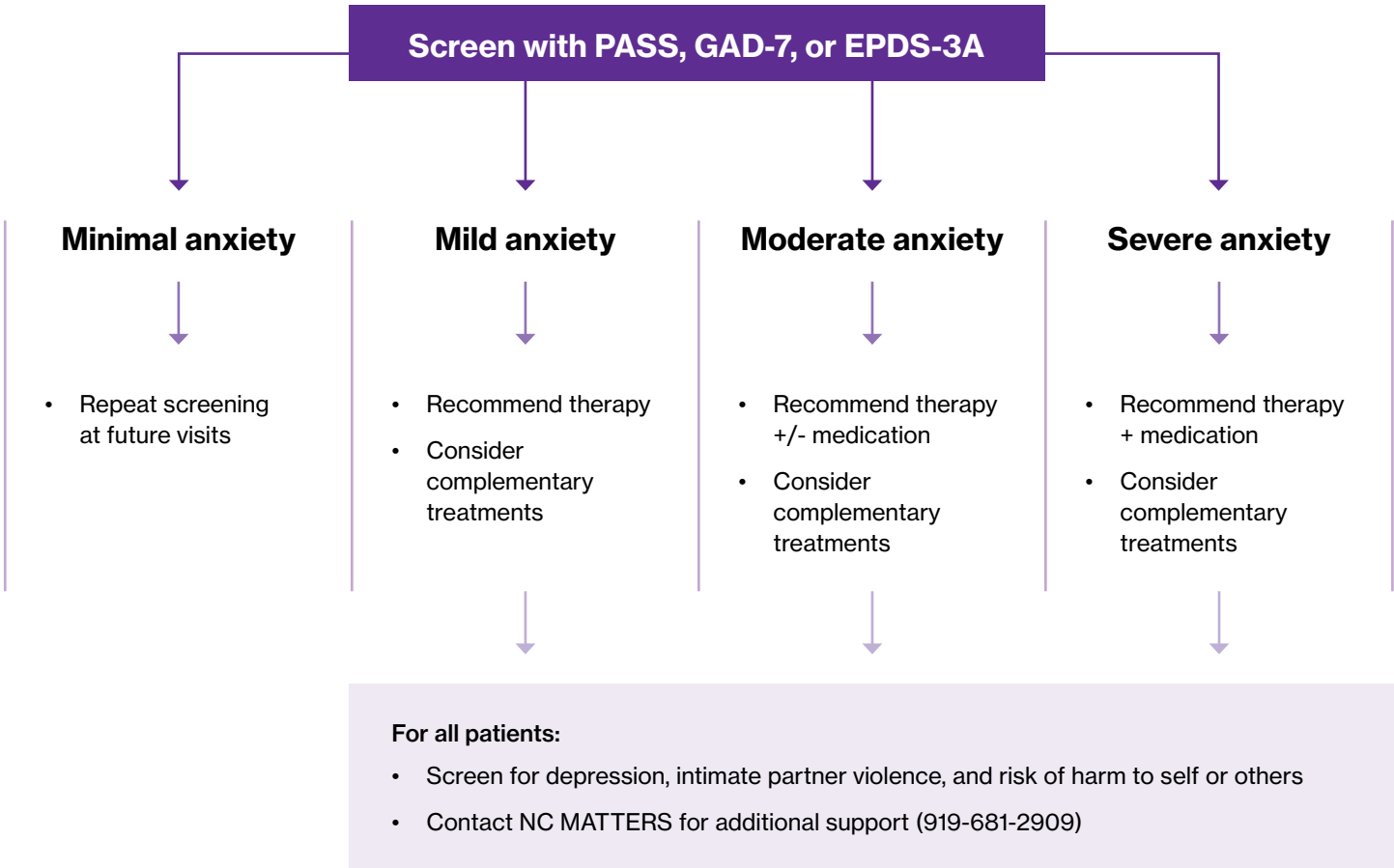
As-needed medications

TYPE	NAME	DOSAGE RANGE	PREGNANCY / BREASTFEEDING CONSIDERATIONS
Benzodiazepines	Lorazepam (Ativan)	0.5–1 mg	<ul style="list-style-type: none"> • Should not be used in patients with substance use disorders given risk of abuse/overdose
	Clonazepam (Klonopin)	0.5–1 mg	<ul style="list-style-type: none"> • Infant side effects more strongly associated with longer half-life benzodiazepines
Antipsychotics	Quetiapine (Seroquel)	12.5–100 mg	<ul style="list-style-type: none"> • Lower placental passage and breastmilk transmission than other antipsychotics • Also helpful for insomnia
Antihistamines	Hydroxyzine (Atarax)	25–50 mg	<ul style="list-style-type: none"> • Limited data but no evidence of major malformations • May decrease milk supply
	Doxylamine (Unisom)	25–50 mg	<ul style="list-style-type: none"> • Also used for treatment of nausea and insomnia • May decrease milk supply
Antihypertensives	Propranolol (Inderal)	10–20 mg	<ul style="list-style-type: none"> • Avoid in pregnancy if possible given adverse effects on fetal growth, neonatal heart rate, and blood sugar • Likely compatible with breastfeeding



TREATMENT ALGORITHM

PASS: Perinatal Anxiety Screening Scale, **GAD-7:** Generalized Anxiety Disorder-7, **EPDS-3A:** Edinburgh Postnatal Depression Scale-3A



RESOURCES

For patients



POSTPARTUM SUPPORT
INTERNATIONAL

Postpartum Support International

A confidential helpline that provides basic information, support, and resources for pregnant and postpartum individuals

- Call or Text 24/7: 1-800-944-4773
- Text en español: 971-203-7773
- postpartum.net



MotherToBaby®

Mother to Baby – Information about Medication & Other Exposures during Pregnancy and Breastfeeding

- Get easy-to-read information on the safety or risk of medications, drugs, or other exposures from experts
- Call: 866-626-6847
- Text: 855-999-3525
- mothertobaby.org



MGH
CENTER for
Women's Mental Health

MGH Center for Women's Mental Health Blog

- Blog posts focused on topics related to reproductive and maternal well-being
- womensmentalhealth.org/blog/recent-posts

For clinicians

Free Provider Consultation with NC MATTERS

NC MATTERS is a free consultation service for North Carolina healthcare professionals working with pregnant and postpartum women with mental health concerns. A perinatal psychiatry provider can answer your questions about patient care and help connect you to local resources.



Call
919-681-2909 x 2



Learn more at
ncmatters.org



Information on medication use during pregnancy and infant feeding

Mother to Baby mothertobaby.org

- English and Spanish language fact sheets summarizing information about common exposures during pregnancy and breast/chest-feeding
- Chat with an exposure expert, enroll your patient in observational studies, or schedule a patient consult

Lactmed ncbi.nlm.nih.gov/books/NBK501922

- Database which provides evidence-based information on drugs and other chemicals to which a breast/chest-feeding parent may be exposed

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