A close-up photograph of a woman with blonde hair kissing a newborn baby on the forehead. The baby is wrapped in a blue blanket and has its eyes closed. The background is softly blurred, suggesting a hospital or home setting. The overall mood is tender and caring.

Neonatal Abstinence Syndrome Guide



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Neonatal Abstinence Syndrome: a Guide for Families

What is NAS?

Neonatal Abstinence Syndrome, or NAS, occurs when a baby withdraws from substance exposure after birth. It is also sometimes called Neonatal Opioid Withdrawal Syndrome (NOWS).

- Most babies experience symptoms of withdrawal one to three days after birth, but some may not show signs until day four or five.
- Withdrawal symptoms can last a few days to a few weeks, with even some minor symptoms lasting a few months.



Medications and Drugs That Can Cause Withdrawal Symptoms

Not all babies exposed to medications and drugs experience withdrawal symptoms. It's hard to know for certain how they will impact your baby because they are special individuals just like you. Below shows a list of drugs and medications that may cause an infant to experience withdrawal symptoms. Next to each substance you can see how quickly symptoms may appear and how long they may last. Once you recognize symptoms, contact your doctor immediately. If untreated, they can lead to life-threatening conditions for your baby.

DRUG	ONSET OF SYMPTOMS	DURATION OF SYMPTOMS
OPIOIDS		
Heroin	24 hours - 2 days	8 - 10 days
Methadone	2 - 3 days	30 or more days
Buprenorphine (Subutex)	24 hours - 3 days	28 or more days
Prescription opioids (oxycodone/hydrocodone)	24 hours - 4 days	10 - 30 days
NON-OPIOIDS		
SSRIs (Celexa, Lexapro, Zoloft, Paxil, Prozac, Luvox)	24 hours - 2 days	2 - 6 days
Tricyclic antidepressants (Elavil, Sinequan, Vivactil, Pamelor, Anafranil, Surmontil, Amoxapine)	24 hours - 2 days	2 - 6 days
Methamphetamines	24 hours	7 - 10 days
Inhalants/nicotine	24 hours - 2 days	2 - 7 days
Caffeine	24 hours - 2 days	1 - 7 days

Kratom has also shown to have opioid like activity with potential withdrawal effects in newborns.



What are the Most Common Signs of NAS?

- Sweating
- Tremors, jitteriness or shaking of arms and legs
- Tight muscles in arms and legs
- Fussiness
- Problems eating or sleeping
- Hard to console or calm down
- Need for sucking when not hungry
- Frequent spit ups or vomiting
- Loose or watery stools (poops)
- Trouble losing too much or not gaining enough weight (after day four)

Caring for Your Baby

Once symptoms appear, you and your nurse will begin watching and recording how these symptoms affect their ability to eat, sleep, or be calmed down. Our goal for your baby is that they are able to eat well, sleep for one hour undisturbed and be able to be calmed down when upset within 10 minutes. A newborn care diary is included in this book to help monitor your baby's needs. Your baby will benefit from you, or another family member, being with them at all times.

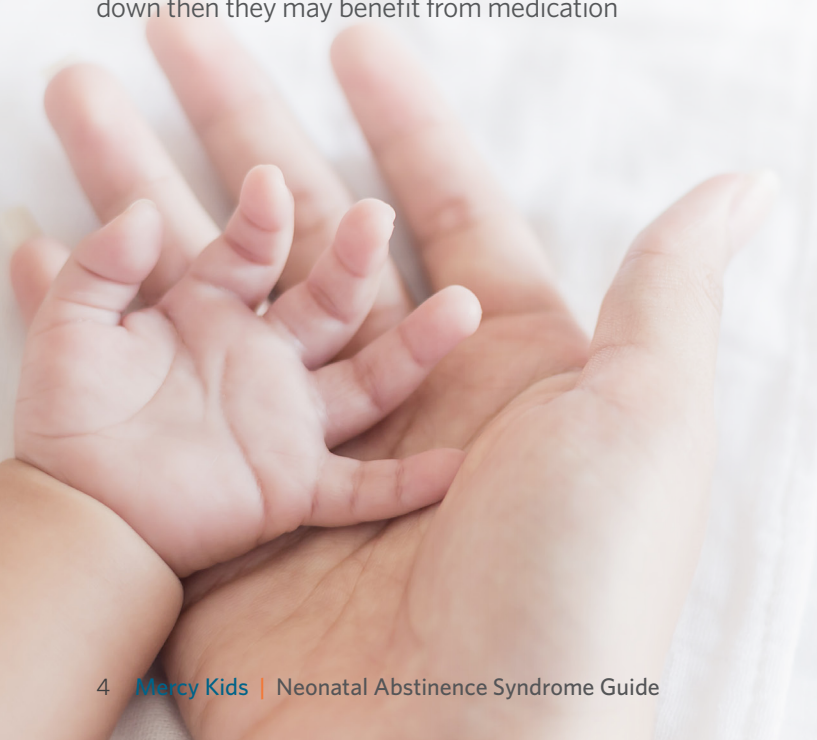
If withdrawal symptoms continue to get in the way of your baby's ability to eat, sleep, or be calmed down then they may benefit from medication

to help control their symptoms. If the symptoms become more severe, then your baby may need to be transferred to a specialized unit where they can be monitored more closely.

It can be hard to know how to make your baby feel better. Many parents feel this way and we are here to help. Providing support during this time is very important.

To make your baby's transition into the world easier, you can:

- **Skin-to-Skin.** Hold your baby skin-to-skin as much as possible which is the best medicine for you and your baby.
- **Quiet, dimly lit room.** Bright lights, loud voices and television can overstimulate new eyes and ears making it difficult for your baby to sleep, eat and grow.
- **Limit visitors.** To help your baby stay calm and healthy, limit who comes to visit.
- **Breastfeed.** Breastmilk is gentle on your baby's belly and may help with spitting up and fussiness. If your doctor determines your medications are safe in breast milk, breastfeed your baby or pump to supply milk. Tell your doctor about all medications, drugs or supplements you are taking.
- **Small, frequent feedings.** Your baby might prefer to eat smaller meals every two to three hours. It is important to follow your baby's cues.
- **Swaddle.** Provide containment by swaddling in a light blanket or swaddle sack. Decrease the room temperature if your baby is getting too warm.





Positive Touch and Infant Massage

If your baby has any withdrawal symptoms that affect how they eat or sleep, you and your health care team will decide how to best support your baby. A special diet, care plan or medication may be needed. In addition, studies show babies experiencing withdrawal get better faster and with fewer symptoms when cared for by their primary caregivers in partnership with their health care team.

Ways to Support Your Baby

Creating a comfortable environment for your baby and recognizing and responding to your baby's stress cues, will give your baby the help they need.

Learn your baby's "I'm upset" (stress) cues:

- Crying
- Yawning
- Sneezing
- Hiccups
- Shivering or tremors
- Frowning, looking away from you or closing eyes
- Increased muscle tone: it may feel like he's pushing you away or his muscles may be stiff
- Skin color changes: pale, mottled/blotchy or deep red (ruddy)

If you see these stress cues:

- Stop what you're doing and support your baby.
- Babies going through withdrawal can't "cry it out" or self-soothe.
- Your baby needs help to calm down, feel safe and have their needs met.

Skin is the largest organ in the body and shares the same cells as our nervous system. Touch is our most powerful means of communication. Massage and positive touch can have a great impact on your baby.

Massage helps improve your baby's circulation and decreases muscle tightness. It also helps your baby relax by decreasing stress hormones released in their body and increasing anti-stress "feel-good" hormones. This can help your baby sleep better, cry less and improve bottle or breastfeeding.

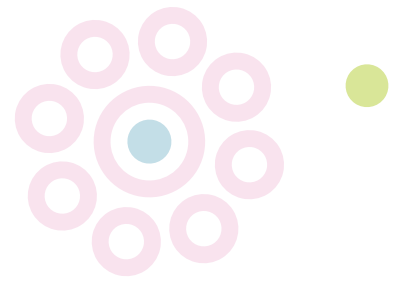
Babies experiencing withdrawal symptoms may be oversensitive to touch and may not tolerate massage right away. Beginning skin-to-skin holding as soon as possible after birth is the best way to introduce your baby to positive touch. Physical and/or occupational therapists may be able to assess your baby's responses to positive touch and massage. A therapist or RN maybe available to demonstrate the positive touch and/or massage techniques with you and your baby and give you a chance to practice. As parents, you'll help your baby experience positive touch that leads to massage when your baby is ready.

Baby's Behavior	How You Can Help
Prolonged Crying	<ul style="list-style-type: none"> ▪ React quickly to your baby crying to help prevent them from becoming more upset. ▪ Hold baby skin-to-skin or swaddled in a light blanket close to your body. ▪ Lower the lights, and turn off loud noises. ▪ Use purposeful firm touch that avoids stroking or tickling. This type of touch provides comfort rather than stimulation. ▪ Hold your baby swaddled in a "C" or fetal position with baby's back to you facing outward at a blank wall. Gently sway from side to side. ▪ Hum and gently rock from side to side. ▪ Watch for prolonged crying, which may cause your baby to vomit. Respond promptly if vomiting occurs. ▪ If you're overwhelmed by the crying, ask someone safe to help you.
Easily Upset or Bothered	<ul style="list-style-type: none"> ▪ Keep the room quiet and dim. Avoid loud music, TV/screen-time, texting, phone calls and conversations. ▪ When your baby is sleeping, it's helpful to avoid waking them. ▪ Swaddle your baby in a light blanket, but help them stay contained with hands close to their face. ▪ Hold your baby close to your body, and comfort them if they are upset.
Difficulty Sleeping or Staying Asleep	<ul style="list-style-type: none"> ▪ Limit visitors, and keep the room quiet. ▪ Soft, gentle music and rocking may help. ▪ Keep diaper area clean and dry. Use diaper cream to prevent diaper rash (ask your pediatrician).
Difficult or Poor Feeding	<ul style="list-style-type: none"> ▪ Feed small amounts often. If breast milk supply is low, supplement with formula to help your baby feel satisfied. ▪ Your baby might prefer to be swaddled while fed, to avoid becoming over distracted. ▪ Focus on baby. Avoid being on your phone, watching TV or having conversations while your baby eats. ▪ Feed your baby when he's hungry (small/ frequent feedings may be needed).
Excessive Rooting or Sucking	<ul style="list-style-type: none"> ▪ Offer a pacifier if your baby has just eaten but still wants to suck. ▪ Keep your baby's hands clean, and don't use lotions or creams. ▪ Keep your baby swaddled and comforted. ▪ Offer a small feeding.
Spitting Up or Vomiting	<ul style="list-style-type: none"> ▪ Use a bulb syringe to clean out your baby's mouth. ▪ Change bedding and clothes to keep baby clean and comfortable. ▪ If your baby was crying prior to feeding, they may need to be burped to avoid spitting. ▪ Offer smaller feedings more often. When babies eat large volumes in one feeding, it can cause vomiting. ▪ Respond to crying, and offer comfort.
Sneezing, Stuffy Nose or Breathing Problems	<ul style="list-style-type: none"> ▪ Keep your baby's mouth and nose clean. Note any spit-up or mucous. Stuffiness is often swelling/edema and cannot be suctioned. ▪ Dress baby in a light T-shirt or onesie, and swaddle in a non-fleece blanket. ▪ Feed your baby slowly. Allow for rest breaks and burping with each feeding. ▪ Always place your baby on their back to sleep. ▪ When awake, hold your baby upright while fully supporting their head. ▪ If you have concerns about your baby's breathing, please notify your nurse. Your baby should not have color changes during feeding.

Your Baby's Care Plan

You and your baby's doctor and caregivers will develop a care plan based on your baby's individual needs and symptoms.

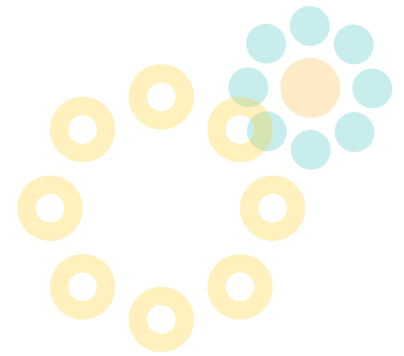
Special Care Plan for <i>(baby's name):</i>	
More Common Symptoms and Stress Cues:	
Breast Milk/Formula:	
Diaper Care:	
Medication Schedule:	
Effective Calming Interventions:	
Primary Nursing Staff:	
Social Work Support:	
Supportive Therapy: <i>(if needed/available)</i>	
Occupational Therapy: <i>(Optional)</i>	
Physical Therapy: <i>(Optional)</i>	
Speech Therapy: <i>(Optional)</i>	
Family Support Team: <i>(Optional)</i>	



Safe Sleep and Your Baby

Safe Sleep and Your Baby | What you can do

- Place your baby to sleep on their back for every sleep. Babies up to one year of age should always be placed on their backs to sleep during naps and at night. If your baby falls asleep in a car safety seat, stroller, swing, infant carrier, or infant sling, they should be moved to a firm sleep surface as soon as possible.
 - Place your baby to sleep on a firm sleep surface.
 - Crib, bassinet, portable crib or play yard should meet all current safety standards.
 - Check for recalls.
 - Do not use if broken, missing parts or has drop-side rails.
 - Cover the mattress with a fitted sheet, do not use pillows or blankets.
 - Never put your baby to sleep on a chair, sofa, water bed, cushion or sheepskin.
 - More crib safety information: www.cpsc.gov
 - Keep soft objects, loose bedding or any objects that could increase the risk of entrapment, suffocation or strangulation out of the crib.
 - Pillows, quilts, comforters, sheepskins, bumper pads, and stuffed toys can cause your baby to suffocate.
 - Place your baby to sleep in the same room where you sleep but not in the same bed.
 - Keep the crib or bassinet within an arm's reach of your bed.
 - Babies who sleep in the same bed as their parents are at risk of SIDS, suffocation or strangulation.
 - Parents can roll onto babies during sleep or babies can get tangled in the sheets or blankets.
 - Breastfeed as much and for as long as you can.
 - Studies show that breastfeeding your baby can help reduce the risk of SIDS.
 - Schedule and go to all well-child visits
 - Your baby will receive important immunizations and recent evidence suggest that immunizations may have a protective effect against SIDS.
 - Keep your baby away from ALL smoke, including second- and third-hand smoke.
 - Don't let your baby get too hot.
 - Keep your baby's room at a comfortable temperature.
 - Dress your baby in no more than one extra layer than you would wear.
 - If you are worried that your baby is cold, infant sleepers designed to keep babies warm without the risk of covering their heads can be used.
 - Offer a pacifier at nap time and bedtime
 - Helps reduce the risk of SIDS
 - If breastfeeding, wait until breastfeeding is going well before offering a pacifier (usually 3-4 weeks)
 - It's OK if your baby doesn't want to use a pacifier – some babies don't like to use pacifiers.
 - If your baby's pacifier falls out after they fall asleep, you don't have to put it back in.
 - Do not use home cardiorespiratory monitors to help reduce the risk of SIDS.
 - Home cardiorespiratory monitors may be helpful for babies with breathing or heart problems but have not been found to reduce the risk of SIDS.
 - Do not use products that claim to reduce the risk of SIDS.
 - Products* such as wedges, positioners, special mattresses and specialized sleep surfaces have not been shown to reduce the risk of SIDS.
- * Some infants have suffocated while using these products.



Caring for You

Finding the balance of caring for yourself and your baby is hard for any parent with a newborn. It can be very difficult for parents of babies experiencing withdrawal symptoms. Doing a few simple things to take care of yourself can make your time with your baby special and nurturing. Ask your nurse to help you create a plan for you and your baby during your stay and when you go home.

- **Sleep.** Sleep when baby sleeps. Being rested is the best way to help your baby.
- **Eat well.** Try to find foods that are healthy, and eat when you're hungry.
- **Stay hydrated.** Be sure to drink enough water to stay hydrated.
- **Take your medication.** If a doctor has prescribed medication to help you, take it as directed.
- **Take a bath or a long shower.** Good hygiene and grooming can help you feel refreshed.
- **Get outside.** Take a walk or sit outside.
- **Take a break.** Take a moment to get a cup of coffee or visit with a supportive friend. Read a book or watch a movie.
- **Watch for mood changes.** Mood changes can be common in the first few weeks postpartum. If the feelings of anxiousness or depression last for more than 2 weeks after your baby is born, then further evaluation is needed. When left untreated, these feelings can lead to an increased risk of relapse.
- **Be gentle with yourself.** You may experience a variety of strong emotions. This is normal. Let people know how you're feeling and how they can help.
- **Pray or meditate.** Even if you don't consider yourself religious or spiritual, sometimes taking a moment to catch your breath can make things more manageable.
- **Ask for help.** Find someone safe to give you a break.

Breastfeeding Support

If breastfeeding or providing breast milk is important to you, we encourage you to breastfeed or pump especially while your baby is experiencing withdrawal symptoms. Breastmilk is gentle on baby's stomach and may help your baby recover more quickly. If you're not under a doctor's care, have used multiple medications or have used street drugs, breast milk may not be safe for your baby. Talk with your nurse and healthcare provider to make the best and safest feeding plan for your baby.

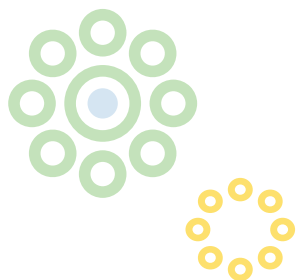
While at Mercy, you'll have access to lactation consultants to help you along the way. Your nurse can help arrange and provide resources for a consultation.

Newborn Crisis Assessment

All babies born exposed to illegal drugs or substances that can cause withdrawal will have a Newborn Crisis Assessment. You may have already been contacted by a hospital social worker or a county social worker. This is a normal part of your baby's care at Mercy. A crisis assessment is a chance to identify how you might get additional support and resources as your baby heals and prepares to go home.

Before Your Baby is Discharged

- Choose your baby's pediatrician (PCP, primary care provider)
- Schedule your baby's first appointment



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