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# GERD & Reflux

## What is reflux?

When you eat, food moves from your mouth down your esophagus and into your stomach. Once your stomach starts digesting the food, it moves to your small intestine.

Gastroesophageal reflux (GER) is when food in the stomach moves back up into the esophagus.

Gastroesophageal reflux disease (GERD) is when continued movement of those stomach contents causes damage to the esophagus or interferes with sleeping, eating, development, or growth.

GER (reflux) and GERD are often used interchangeably, but they are different.

## How common is reflux?

GER occurs in most otherwise healthy infants. Up to 50% of infants will show some sign of GER such as spitting up daily. Most of those children do not have GERD.

GERD is more common in infants who were born early, have a condition that affects their breathing such as cystic fibrosis or bronchopulmonary dysplasia, have an opening in their diaphragm called a hiatal hernia, have a neurologic impairment, or have had a repaired birth defect in their esophagus called an esophageal atresia.

## What are the common symptoms of reflux?

- Spitting up or vomiting
- Fussiness
- Back arching
- Crying

These are non-specific symptoms, especially in children younger than six months of age. This means the symptoms can be due to various sources and not only from reflux.

## What are the symptoms of GERD?

- Any of the symptoms of reflux listed above and/or any of the following:
- Failure to thrive (the baby is not gaining weight and growing as expected)

- Feeding refusal (the baby will not take either the bottle or breast)
- Blood in the vomit (blood can be bright red, or digested blood can look like coffee grounds)
- Noisy breathing either when inhaling or exhaling
- Chronic cough
- Recurrent ear infections
- If your baby is fussy, failing to gain weight, or showing other signs of GERD, talk to your pediatrician.

## What are “red flag” symptoms that suggest something other than GERD?

Call your pediatrician immediately if you notice any of the following “red flag” symptoms:

- Fever
- Lethargy
- Weight loss
- Rounded or firm soft spot on the head
- Seizures
- Persistent forceful vomiting
- Vomiting at night (when not being fed)
- Green or yellow color to the vomit
- Chronic diarrhea
- Abdominal distention
- Blood noted in diaper
- Breathing problems

## How is reflux diagnosed?

- A doctor diagnoses reflux by asking questions to obtain a complete history of the child and by completing a physical examination to rule out “red flags” and signs of GERD.

## How is GERD diagnosed?

- GERD also is primarily diagnosed based on a complete history and physical exam.
- Other tests may be used to evaluate the amount of reflux or rule out other issues.
  - These tests may include:
    - *Upper endoscopy.* This test is done under anesthesia, which means your child will receive medications to put them to sleep. A gastroenterologist uses a flexible tube with a camera on the end to look at your child’s esophagus and stomach for signs of damage. They may also take small amounts of tissue (called biopsies) to look at under a microscope.

- *pH or impedance probe*: This test is usually done together with an upper endoscopy but can be done on its own. The test takes 18–24 hours, so you may need to stay in the hospital overnight. A thin, flexible tube is passed through your child’s nose and down to where the esophagus and stomach meet. The tube is then hooked up to a monitor to measure how often reflux happens. You will be asked to keep track of your child’s feedings and symptoms to help interpret the test results.
- *Upper GI*: In this test, your child will be given a liquid to drink via bottle. This liquid can be imaged to allow a radiologist to examine the esophagus, stomach, and beginning of the small intestine.

## How can I help my baby with GER?

- Establish a feeding routine.
  - Provide smaller, more frequent feedings.
  - Burp more frequently.
  - Stick to a regular feeding schedule.
  - Separate feedings by at least 2–2:30 hours from the beginning of one feeding to the beginning of the next.
  - Stop feeding once your baby has spit up.
- Avoid tight diapers or waistbands to help reduce spitting up.
- Keep your baby away from secondhand smoke.
- Keep your baby upright for at least 30 minutes after a meal.
- Avoid using your baby’s car seat while at home.
- Discuss using a thickening formula with cereal with your pediatrician to reduce spitting up.
  - *Note*: Breast milk cannot be thickened. It contains enzymes that digest the cereal.

## How is GERD treated?

- We recommend treating GERD in a stepwise fashion:
  - First-line treatment includes avoiding overfeeding (reduce the amount at each feeding), feeding more often, and/or using thickening formula with rice cereal.
    - *What about arsenic in rice—should I use oatmeal?* Since 2016, the FDA has set limits on the amount of arsenic allowed in infant rice cereal. Rice cereal dissolves thoroughly, is affordable, and does not clog the bottle. Using rice cereal with low or no arsenic is recommended.
    - Carob bean (also called locust bean) thickeners are approved for use in infants after 42 weeks gestation and can be used in breast milk.
  - Second-line treatment includes removing cow’s milk from your baby’s diet (or from mom’s diet if the baby is breast-fed). This is usually done with a protein hydrolysate or amino acid-based formula for 2–4 weeks.

- Third-line treatment is referral to a pediatric gastrointestinal provider for further evaluation. If this is not possible, a 4–8-week trial of acid suppression is recommended. If symptoms improve, medication is then slowly stopped to see if symptoms return.

## Where can I find support for myself and my family to help cope with GER and GERD?

- Know you are not alone.
- All babies cry. The average 6-week-old baby fusses or cries for more than 1 hour per day, with up to 35% of babies fussing for more than 2 hours per day. This improves as babies get older. By three months of age, most babies cry less than 1 hour per day. Not all crying or fussing is related to GER or GERD.
- Establish good sleep habits for you and your baby. If possible, nap when they nap. Talk to your pediatrician to find sleep strategies that will work for you and your family.
- Ask for help. While help may not always be available, if you have someone who can help, consider asking them to relieve you for a few hours or help with a night feeding.
- No one is a perfect parent. There may be times when you cannot figure out how to comfort your child. Parenting is about trial and error. What works for one family may not work for yours. It's okay to put your baby down for 5–10 minutes to see if they can calm themselves.
- Make time for your family. Coping with reflux is a team effort, and everyone in the family needs to feel seen and heard. Spend time with older children, and let them express their feelings about having a new baby who may need more attention. Spend time with your partner (or friends).
- Take care of yourself. Try to find 30 minutes a day when you can focus on you.
- If you have any of the following symptoms, please talk to your provider or a mental health professional about postpartum depression:
  - Tearfulness, fatigue, insomnia (trouble sleeping), and feelings of loss that last for more than 10 days after your child's birth
  - Two weeks or more of any of the following:
    - Crying more
    - Having little energy to care for yourself or your baby
    - Feeling down and/or hopeless
    - Having little interest in previously enjoyed activities

## Quick facts

- GER (reflux) is normal in infants. The muscle that prevents GER continues to mature as babies get older. Spitting up tends to peak at 4 months of age, and most infants stop by 12 months of age.
- GERD occurs when reflux causes symptoms that interfere with growth, development, or sleep.

## Sources

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*March 2023*

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