

Gastroesophageal Reflux Disease (GERD)

What is gastroesophageal reflux disease (GERD)?

- Gastroesophageal reflux (GER) is a condition in which stomach contents can *reflux*, or go from the stomach back up into the esophagus (the tube that connects the mouth to the stomach). This reflux occurs commonly in babies and tends to improve as the baby gets older, but sometimes it is severe or does not improve with time.
- When GER causes symptoms in babies other than spitting up, it is called *gastroesophageal reflux disease* (GERD). Worrisome symptoms include
 - Forceful vomiting
 - Vomiting blood or green-tinged bile
 - Excessive irritability with feedings
 - Breathing problems associated with feedings
 - Failure to gain weight
 - Recurrent pneumonia or asthma that does not respond to medications

How common is it?

- Spitting up by infants is very common, but most infants do not have complications and will outgrow the condition by 6 to 12 months of age.
- When the symptoms do not improve over time and become a problem, spitting up is considered to be a disease. It is difficult to estimate how many children have the official diagnosis of GERD.

What are some common characteristics of children who have GERD or of GERD as children present with it?

- Symptoms of GERD could include abdominal or chest pain, breathing problems, vomiting, irritability, unexplained anemia, difficulty swallowing, and hoarse voice, especially in the morning.
- In older children and adults, these symptoms prompt people to seek medical attention, and, by definition, they have GERD.

- Gastroesophageal reflux disease peaks at 2 to 4 months of age and usually starts improving at 6 to 12 months of age, as the infant learns to sit alone. Sometimes older children and adults have GERD as well. Older children may be able to express these symptoms, but babies cannot.
- Babies tend to have symptoms such as back arching, irritability, spitting up, nasal congestion, and cough or wheezing. Some babies can even stop breathing (apnea) or have a slow heart rate because of GERD.

Who might be on the treatment team?

- Primary care provider in the medical home
- Pediatric gastroenterologist

What adaptations may be needed?

Medications

- Different kinds of medications may be used to block the stomach acid from causing irritation to the esophagus.
- Some medications block the production of stomach acids.
- Some of these medications are available over the counter, and some are prescribed. A primary care provider or specialist (eg, pediatric gastroenterologist) should be supervising any of these treatments in babies and toddlers.
- Antacids are used less commonly but usually have no serious side effects if used.
- All staff who will be administering medication should have medication administration training (see Chapter 6).

Gastroesophageal Reflux Disease (GERD) *(continued)*

Dietary Considerations

- To keep the stomach from being full and triggering the backflow of food, feeding smaller meals on a 3-hour schedule can help.
- Some people find that thickening a baby's formula or expressed breast milk (human milk) with rice cereal helps. Sometimes, the nipple will need to be enlarged a little to allow the flow of the formula, but it should not be wide enough to allow the baby to gulp the formula too quickly.
- Upright positioning of the baby for 30 minutes after feedings can also help prevent GERD.

Physical Environment and Other Considerations

- Positioning the baby on a 30° slope for 30 to 60 minutes after feedings; burping before, halfway through, and after the meal; and keeping diapers snug but not too tight can help babies with GERD.
- Research shows that all babies, including those with GERD, are safer if they sleep on their backs. They do not usually spit up or choke on food that they bring up when placed on their backs for sleep, and they should never be placed to sleep on their stomachs or sides.
- Older children should avoid clothing that puts pressure on the abdomen and should not lie down for a nap immediately after eating.

What should be considered an emergency?

Babies with GERD can choke; a bulb syringe should be immediately available to help clear the airway if necessary. If the baby is coughing, nothing should be done, because the cough is the most effective way to clear the airway. If the baby stops breathing or stops making any sound, CPR techniques for infants (babies) should be used. These maneuvers are covered in pediatric first aid with CPR courses such as the American Academy of Pediatrics course *Pediatric First Aid for Caregivers and Teachers* (www.pedfactsonline.com/about.aspx).

What types of training or policies are advised?

- First aid to clear the airway for choking.
- Feeding techniques, including upright positioning and frequent burping.
- Nutrition consultation if thickened feedings are prescribed.
- Feeding therapy consultation may be helpful.
- Medication administration if medications are to be administered while the baby is in care.

What are some resources?

American Academy of Pediatrics: www.healthychildren.org, <https://shop.app.org>, 1-866-843-2271

- *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*, 3rd Edition (book), <http://cfoc.nrckids.org/CFOC—Standard 4.3.1.8, Techniques for Bottle Feeding>
- HealthyChildren.org, “Gastroesophageal Reflux and Gastroesophageal Reflux Disease: Parent FAQs” (Web page), www.healthychildren.org/English/health-issues/conditions/abdominal/Pages/GERD-Reflux.aspx

