

Spitting Up (Gastroesophageal Reflux)

“Spitting up” is a very common issue in infants. It involves food and acid from the stomach flowing backwards into the swallowing tube (esophagus). In most babies, spitting up is normal—it usually stops around 12 months of age. When spitting up results in harm to the baby, such as pain or not gaining weight, it is called gastroesophageal reflux disease (GERD).

What is spitting up?

Babies normally spit up breast milk or formula. Milk, along with acid made by the stomach, comes up from the stomach and out through the baby’s mouth. Spitting up can happen often and the amount can be large. It’s a messy problem, but it’s usually normal. Nearly all babies outgrow spitting up by age 1, certainly by age 2.

Uncommonly, babies can develop a problem called gastroesophageal reflux disease (GERD), in which milk and stomach acid regularly move up from the stomach and into the esophagus, causing harm to the baby. When stomach acid is in contact with the esophagus for a long time, it can cause irritation, pain, and tissue damage.

Babies who have symptoms when spitting up, such as arching the back or refusing feedings, are more likely to have GERD. If there’s a lot of reflux, it can result in your baby’s not gaining enough weight or in coughing and choking. If these symptoms are present, the doctor may recommend testing for GERD.

What does it look like?

Every experienced parent knows what normal spitting up looks like.

- Milk comes out of the baby’s mouth, often with burping.
- The effect is usually not too forceful; milk runs down the baby’s chin.
- Spitting up is most common in the first 4 months of life. Babies usually outgrow it after age 1, almost always by age 2.
- Spitting up can be frequent and messy.
- In normal spitting up, no other symptoms are present: no pain, fussiness, choking, or coughing.

If your baby has other symptoms when spitting up, these may be an indication of problems:

- Frequent, forceful vomiting; milk goes a good distance away (projectile vomiting).

- Spitting up seems uncomfortable or painful for your baby. He or she may be fussy or cry or struggle during feeding or after spitting up.
- Hoarseness, coughing, wheezing (noisy breathing), choking, apnea (not breathing for a period of time).

What causes spitting up?

- Spitting up is related to a structure called the lower esophageal sphincter (LES), which acts like a valve separating the stomach and esophagus. Usually, the LES lets food flow from the esophagus into the stomach but not “backwards” from the stomach into the esophagus.
- Normal spitting up in babies happens because the LES hasn’t started functioning normally yet. This occurs as your baby continues to grow and mature.
- In babies with GERD (as well as in older children and adults), many factors may contribute to reflux. Once the pattern of reflux has started, it can cause damage that tends to make the reflux worse.

What are some possible complications of spitting up?

- Normal spitting up has no complications, besides the mess! Almost all babies outgrow it eventually.
- Babies with GERD can have problems such as:
 - Difficulty feeding, not gaining enough weight.
 - Choking or coughing; uncommonly, *apnea* (interrupted breathing).
 - Stomach contents can be inhaled (aspirated) into the lungs, causing pneumonia.
 - GERD may also cause or contribute to breathing-related symptoms, including laryngitis (hoarseness) and wheezing.
 - GERD seems to be common in children with asthma and may even be one of the factors triggering asthma attacks.

How are reflux problems and GERD diagnosed?

- Generally, the doctor will recognize GERD by the symptoms.
- Sometimes x-rays of the esophagus and stomach (upper gastrointestinal [GI] tract) are done to make sure there

is not another reason for the spitting up and vomiting. The baby drinks a dye, usually barium, that shows up on x-rays.

- In some complicated cases, a test called a pH probe is done. A small device (probe) is placed into the esophagus. This lets the doctor measure how long stomach acid stays in the esophagus.

How are reflux problems and GERD treated?

Especially before age 12 months, reflux in infants generally doesn't need any treatment if it's not causing any of the problems discussed earlier.

If problems related to GERD are present, the doctor may make a number of recommendations:

- *Position changes.* Avoid leaving the baby in the car seat when not traveling. Although babies have less reflux when placed on their stomachs, they should still generally sleep on their backs to reduce the risk of sudden infant death syndrome. When the baby is awake and being watched, he or she can be placed on the stomach.
- *Acid-reducing drugs.* Several different types of acid-reducing drugs, including cimetidine and omeprazole, may be used.

- *Thickening the formula* with cereal may help to reduce the amount of spit up. The opening in the nipple of the bottle has to be made larger to let the milk flow easily. Enfamil AR ("added rice") is a special formula that thickens when it reaches the stomach. If you're using this type of formula, it's not necessary to add cereal.

If none of these treatments helps, we may recommend a visit to a doctor specializing in stomach and intestinal problems (a gastroenterologist).



When should I call your office?

Call our office if your child continues spitting up past age 1.

If your child has GERD, call our office if reflux and other symptoms continue or return, in particular:

- Frequent vomiting, especially projectile vomiting. This could be a sign of a problem other than reflux.
- Fussiness when feeding; not wanting to eat much.
- Frequent coughing, choking, or hoarseness with feeding.
- Apnea—may be related to reflux, especially if it occurs with spitting up or choking.