



Gastroenteritis Symptoms and Management

Definition and Symptoms

Gastroenteritis is the medical term for a stomach virus. In this handout we will discuss its common symptoms, including diarrhea and vomiting, and their treatment.

Causes and Symptoms

- **Stomach virus:** This is usually contracted from another child. It starts with vomiting and then within 12-24 hours you can expect loose or watery stools.
- **Food poisoning:** This is often caused by a refrigerated food being left out on the counter too long, allowing bacteria to grow. Typically, within hours of eating the food, your child will have rapid onset of both vomiting and diarrhea.
- **Cough and cold:** It's not uncommon for a child who either coughs hard repetitively, or who has mucus in nasal passages from a cold, to vomit phlegm with coughing and have slightly looser stools.
- **More serious causes:** The most often cause of vomiting and diarrhea in kids is a stomach virus; however, when a child is experiencing vomiting alone (without diarrhea), that does not greatly improve or stop within about 24 hours, we want to talk to you to rule out more serious causes.

Expected duration

During the 'typical' stomach virus, vomiting usually lasts about 24 hours, though it can occur longer in children than adults. Often mild vomiting and or nausea may persist for up to 3 days. It's not uncommon for children to vomit again, even 2 days after vomiting has stopped, if they drink a large volume of liquid all at once or eat more solids that their body is ready for.

Diarrhea typically lasts longer than vomiting and can last as long as 1-2 weeks, which feels like forever!

Dehydration

The management of vomiting and diarrhea is focused on prevention of dehydration. Dehydration symptoms vary slightly by age and below are some general rules of thumb. See next page for tips to manage vomiting and diarrhea and to learn when it's okay to return to school and when it's important to call our office.

Dehydration symptoms by age

Birth until 2 years: less than 4-5 wet diapers in 24 hours, no tears with crying, dry tongue and inside mouth
2 years and up: urinating 3 times or less in 24 hours, no tears with crying, dry tongue and inside mouth

An infant/child that is alert, happy, and playful is *very unlikely* to be dehydrated.

Management of symptoms and spread of illness

Management of Vomiting:

- Infants under 1 year who are breastfed:
Stop all solid foods until it's been 8 hours without vomiting, then gradually add them back. We recommend continuing to breastfeed as tolerated. If not tolerated, you can offer small sips of pumped breastmilk, water, or oral rehydration solution (such as Pedialyte) every 5 minutes – Pedialyte really isn't needed until vomiting has been present 12 hours or more. Offer 2-3 teaspoons of liquid (10-15 ml) every 5 minutes or try putting a small amount of a Pedialyte popsicle in a mesh teething bag. Once it's been 4 hours without vomiting, it's okay to increase the amount of fluids. Once it's been 8 hours without vomiting, you can return to usual amounts of fluids and slowly add starchy foods (see diarrhea guide below).
- Infants under 1 year who are formula-fed AND Infants/children over age 1 year:
Stop all solid foods until it's been 8 hours without vomiting, then gradually add them back. We recommend small sips of water or oral rehydration solution (such as Pedialyte) every 5 minutes – Pedialyte really isn't needed until vomiting has been present 12 hours or more. Offer 2-3 teaspoons of liquid (10-15 ml) every 5 minutes or try putting a small amount of a Pedialyte popsicle in a mesh teething bag or offering a popsicle (older kids). Once it's been 4 hours without vomiting, it's okay to increase the amount of fluids. Once it's been 8 hours without vomiting, you can return to his/her usual amount of fluids and slowly add starchy foods (see diarrhea guide below for starchy foods).

Management of Diarrhea:

- Infants under 1 year who are breastfed: Diarrhea is typically less severe in those who are exclusively breastfeed, and we generally recommend continuing to breastfeed. You can also offer water or an oral electrolyte solution, such as Pedialyte until they are drinking their regular quantity of usual fluids. It's okay to offer starchy foods that are easy to digest such as cereals, rice, crackers, bread, applesauce, pears, bananas, potatoes, and flavored gelatin. Many infants won't eat well until diarrhea starts to improve; at that point, slowly proceed to typical diet as tolerated.
- Infants under 1 year who are formula fed: You can either continue formula at regular strength or mix the formula with twice as much water as usual to make half-strength formula. **Diluting formula in this way is only recommended for a few feeds until the diarrhea seems to be improving and then you can mix formula as usual.** You can also offer water or an oral electrolyte solution, such as Pedialyte until they are drinking their regular quantity of usual fluids. It's okay to offer starchy foods that are easy to digest such as cereals, rice, crackers, bread, applesauce, pears, bananas, potatoes, and flavored gelatin. Many infants won't eat well until diarrhea starts to improve; at that point, slowly proceed to typical diet as tolerated.
- Infants and children over 1 year of age: Keep on a regular diet and offer extra fluids. It may help to stop milk for 1-2 days until diarrhea starts to improve. You can also offer water or an oral electrolyte solution, such as Pedialyte until they are drinking their regular quantity of usual fluids. Initially, starchy foods may be easier to digest such as cereals, rice, crackers, bread, applesauce, pears, bananas, potatoes, and flavored gelatin. Many children won't eat well until diarrhea starts to improve; at that point, slowly proceed to typical diet as tolerated.

Medication:

Children rarely need medication when recovering from gastroenteritis since the condition is self-limited. The following ingredients in kids over the counter (OTC) medications are okay to try, though generally don't provide much relief: calcium carbonate and simethicone (often found in Pepto Kids, Alka Selzer Kids Tummy Relief, or Mylicon). For those with only diarrhea, offering a probiotic supplement such as Florastor Kids, Culturelle Kids, or Gerber Soothe, may be helpful. **Be sure to avoid any OTC containing salicylates or oil of wintergreen** (often found in regular Pepto Bismol and Kaopectate) because they can cause Reye's syndrome, a progressive brain disorder.

How to prevent illness and prevent spread to others

- Wash hands often with soap and water (some viruses can survive hand sanitizer)
- Clean surfaces well and often. "With some highly infectious viruses that cause vomiting, even 10 viral particles can cause illness. So in addition to soap and water, consider using a dilute **bleach solution** to clean hard surfaces."
- Wash all fruits and vegetables thoroughly before eating
- Refrigerate meat products as soon as possible after purchase and cook until they're no longer pink.
- Put leftovers in the refrigerator within 2 hours and throw away prepared foods after they've been in the refrigerator 3 to 4 days (or put in freezer).
- Set your refrigerator temperature to 40°F or below

Return to school

Your child can return to school and be around others once:

- fever free for 24 hours
- no longer vomiting, and is feeling better
- without diarrhea for the past 24 hours, and is feeling better

Call our office If...

- Vomiting clear fluids for more than 8 hours or vomiting lasts for more than 24 hours
- Vomit is green-colored, has blood present, or appears like coffee grounds
- Diarrhea is not slowly improving, becomes severe, or contains blood
- Your child is showing signs of dehydration (see page 1)
- Stomach Pain occurs that is worsening and worsening or becoming constant
- Fever occurs and lasts longer than 24-48 hrs.
- You are worried and think your child needs to be seen or his/her symptoms are worsening