



AMERICAN ASSOCIATION
OF MEDICAL ASSISTANTS

CMA Today

Quick Clinic

May/June 2017 (Issue 3/Volume 50)

GI woes

Gastroenteritis affects patients at home and abroad

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We expect patients to come into the office a few times a year with “that bug that’s going around.” The one they or the people they take care of picked up at home, at school or at work. The one that has them running to the bathroom and longing for bed.

That “bug” is usually one of many gastrointestinal (GI) infections caused by viruses, bacteria, or parasites. Each one leads to some form of gastroenteritis, an inflammation of the lining of the stomach and small and large intestines.¹

Gastroenteritis used to be a much more dangerous illness—and still is in some parts of the world—but advancements in health care and sanitation have helped make it more uncomfortable than life-threatening.²

The symptoms often arrive suddenly and abate in three to five days. Although the symptoms can be hard to bear, patients can take comfort in knowing that the end is in sight.

Viral gastroenteritis

Gastrointestinal infections caused by viruses are the most common and the most contagious.³

Anywhere people congregate—workplaces, dormitories, nursing homes—is a potential breeding ground for viral gastroenteritis.¹ It is spread from person to person through contaminated surfaces, food, and drinks.¹

Four main types of viruses can be the culprit for gastroenteritis:

- Norovirus, the most common cause of gastroenteritis, affects both children and

adults who experience vomiting, diarrhea, headache, and muscle aches. A patient is contagious from the moment symptoms arise up to about three days after recovery.³

- Rotavirus is the leading cause of viral gastroenteritis in infants and young children.³ Severe diarrhea, fever, and vomiting are common in babies with rotavirus.⁴ Vaccines administered when infants are 2, 4 and 6 months old can help mitigate the risk.
- Astrovirus infects all ages—primarily infants and young children, however—and is most active during the winter. Symptoms (vomiting and watery diarrhea) usually appear three to four days after exposure and last two to seven days.¹
- Adenovirus infects children 2 years and younger year-round, especially in the summer.² Symptoms (vomiting and diarrhea) usually appear eight to 10 days after exposure and last five to 12 days.¹

Bacterial gastroenteritis

Bacterial gastroenteritis is less common than viral, but is spread by similar means (person-to-person and through food and drink). Such GI infections are sometimes referred to as food poisoning or traveler's diarrhea.^{2,5}

The latter term describes what happens when travelers visit countries and ingest water that has not received adequate purification. Even travelers who avoid drinking local water can become infected by brushing their teeth with a toothbrush rinsed in contaminated water or eating food that has been washed with contaminated water—a point to emphasize with any patients planning international trips.⁶

Several types of bacteria can cause bacterial gastroenteritis:

- *Campylobacter* comes from undercooked poultry or unpasteurized milk. People can also get it through close contact with infected people or animals.^{2,5}
- *E. coli* includes several different strains, but only a few cause people to become ill. Common sources include fresh produce, unpasteurized fruit juices and milk, and raw or undercooked hamburger.^{2,5}
- *Salmonella* is frequently caused by eating raw and undercooked poultry, seafood, dairy products or eggs.⁵ Transmission is also possible through contact with birds, reptiles, or amphibians.²
- *Shigella* is spread person-to-person and through ingesting food contaminated by infected people who didn't wash their hands thoroughly enough before preparing or handling food.⁵
- *Staphylococcus aureus* grows in food and produces an exotoxin that results in staphylococcal food poisoning when eaten. Typical contaminated foods include milk, cream-filled pastries, processed meats, and fish.⁷

Parasitic gastroenteritis

Some forms of gastroenteritis are caused by parasites rather than bacteria or viruses.¹ *Giardia* and *Cryptosporidium* infections are the leading common causes of waterborne disease in the United States.^{8,9}

The parasites live in the intestines of humans and animals and are expelled through their feces and spread through contaminated water sources, which includes anything from ground water and wells to swimming pools and hot tubs.⁸ Infection can also spread through person-to-person transmission because of unwashed or incomplete hand washing.²

A gut healing

Most of the time, gastroenteritis will go away on its own.¹⁰ But it still can cause serious problems for infants and young children, older adults, and people with compromised immune systems or long-term medical conditions—including asthma and diabetes.¹¹

The gastroenteritis may come from a variety of sources, but the initial treatment for patients is the same^{1,2}:

- Oral or IV rehydration
- Rest
- Antibiotics (only in select cases)
- Gradual reintroduction of food that is easily digestible (e.g., rice, bread, lean meat, applesauce, and bananas)

Over-the-counter antidiarrheal medications, such as loperamide (Imodium) and bismuth subsalicylate (Pepto-Bismol), can help relieve symptoms in adults and children over the age of 2.

However, these medications should not be used to relieve bloody diarrhea—a sign of bacterial or parasitic infection—because they may prolong the problem. Additionally, antidiarrheal medications meant for adults can be dangerous for infants and children.^{2,5}

Most gastroenteritis symptoms start to go away on their own in three days. But certain worsening symptoms may be cause for more serious medical care^{1,5}: Dehydration is a common and potentially dangerous complication of gastroenteritis.¹⁰

- Signs of increased dehydration:
 - Excessive thirst
 - Dark-colored urine
 - Dry skin or mouth
 - Lethargy or dizziness
 - Sunken eyes, cheeks, or fontanel in infants
 - Inadequate urine production
 - Bloody stool
 - Any fever higher than 101 F

The types and sources of GI infections are varied enough that nearly all patients will experience one or another at some point. Diarrhea is the most usual symptom.

Because GI infections are so common, health care professionals need to give patients and care givers good information about causes and treatment. Informed patients and caregivers may be able to avoid GI infections. Equally important, however, is giving patients and caregivers the information they need to recognize and treat the symptoms.

Most important? Teach and encourage proper handwashing and explain why it is vital to good health.

END OF ARTICLE

[SIDEBAR]

Sick to your stomach

Gastroenteritis, often referred to as the stomach flu, is not a flu. Influenza affects the respiratory system—the nose, throat, and lungs—while gastroenteritis attacks the intestines.

- Gastroenteritis symptoms¹²
 - Abdominal pain
 - Diarrhea
 - Nausea
 - Vomiting
 - Low-grade fever
 - Muscle pain and headache
- Influenza symptoms¹³
 - High fever
 - Runny nose
 - Sore throat and cough
 - Muscle pain and headache
 - Fatigue

END OF SIDEBAR

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