

## UNIVERSITY STUDENT HEALTH SERVICES • Fact Sheet

**GASTROENTERITIS****WHAT IS IT?**

Gastroenteritis refers to inflammation of the stomach and intestines. Infectious causes are most commonly due to viruses, although bacteria and parasites may sometimes be responsible.

Viral gastroenteritis is a self-limited disease and is most commonly caused by the norovirus. Other viral agents include rotavirus, adenovirus, and astrovirus. Even though it is commonly referred to as the “stomach flu”, viral gastroenteritis is different from “the flu” and is not caused by the influenza virus.

**WHAT ARE THE SYMPTOMS?**

Symptoms of viral gastroenteritis usually begin abruptly 1-2 days following exposure to a virus and may last for up to 14 days, though a duration of 12-60 hours is more common. Symptoms often include abdominal pain, nonbloody diarrhea (at least 3 times/day), nausea, and/or vomiting. Other symptoms may include fever, body aches, headaches, cold symptoms, fatigue, and weight loss.

**IS IT CONTAGIOUS?**

Yes, viral gastroenteritis is very contagious! The viruses that cause gastroenteritis are spread by close contact with infected persons (ie. by sharing food, drinks, or eating utensils) and by consuming contaminated foods or beverages.

**HOW IS IT DIAGNOSED?**

Viral gastroenteritis is diagnosed based upon characteristic symptoms and physical exam findings. If a bacterium, parasite, or other cause is suspected, stool studies may be ordered for further testing.

- If you are instructed to collect stool samples at home, you will be given a kit with instructions. Keep the samples at room temperature, and submit them to the lab as soon as you can.
- If an antibiotic or antiparasitic medication is prescribed and stool studies are recommended, collect the stool sample prior to starting the medication.

**HOW IS IT TREATED?**

Most cases of viral gastroenteritis will resolve within 3-7 days without complications. Treatment is focused on supportive measures while the body fights off the virus on its own. The most important goal of treatment is preventing dehydration (fluid loss) and loss of important chemicals known as electrolytes from diarrhea and/or vomiting. Dehydration can be serious if left untreated. The best way to prevent and treat dehydration is by drinking fluids. Intravenous (IV) fluids may be necessary in patients with severe dehydration.

**❖ MAINTAINING HYDRATION**

Solutions containing a mixture of water, salt, and sugar should be used to replace lost fluids and electrolytes. These include **non-caffeinated fluids** and **oral rehydration solutions (ORS)** approved by the World Health Organization (WHO).

- **ORS products** contain specific mixtures of glucose and sodium formulated for optimal fluid replacement. A variety of ORS preparations are available over-the-counter:
  - Commercial ORS products include Pedialyte, Ceralyte, Normalyte, and others. Pedialyte powder is available for purchase at the Student Health Pharmacy.
  - WHO Oral Rehydration Salts can be purchased worldwide (Amazon, REI Outfitters, etc). Examples include Trioral and Adventure Medication Kits Oral Rehydration Salts.
- **For mild diarrhea**, most healthy adults can meet their fluid and electrolyte needs at home by drinking more fluids. ORS (such as Pedialyte) is the best first-line treatment if it's available. However, other fluids may be sufficient if symptoms are mild. Examples include broths, soups, sports drinks, diluted fruit juices or flavored soft drinks (Sprite, gingerale), and saltine crackers. Sports drinks can be helpful, but they are not equivalent to an ORS; the excess sugar in some sports drinks may worsen diarrhea.
- **For moderate to severe diarrhea**, an ORS is preferred. An ORS should also be used in those with underlying medical conditions, the elderly, and children.
- Drink enough fluids to satisfy thirst and to maintain a pale yellow urine.
- If diarrhea or vomiting persist, rehydrate with an ORS after each episode.

## ❖ DIET

- If you don't have an appetite, it's okay to drink only liquids for a short period of time.
- No specific dietary restrictions are necessary once you feel ready to try solid foods. Begin with small portions of foods that sound good to you. However, if diarrhea is severe, it may be best to avoid fatty foods until your gut function returns to normal.
- If you are unable to tolerate a regular diet, try foods that are easy on the stomach, like:
  - The BRAT diet (bananas, rice, applesauce, toast), crackers, oatmeal, yogurt, jello, etc.
  - Bland foods (noodles, rice, boiled/baked potatoes, boiled carrots/vegetables, boiled/baked skinless chicken, etc.) flavored with salt.
- Smaller meals are less likely to cause nausea or vomiting.
- After a significant diarrheal illness, some patients will experience a temporary period of lactose intolerance, which can last a few weeks to months. In these cases, it is best to avoid lactose products (except for yogurt) until your gut has fully recovered.

## ❖ MEDICATIONS

- **Acetaminophen (Tylenol)** can be taken for fever and muscle aches.
  - You may take up to a maximum of 1000mg every 8 hours if you do not have any known liver problems. Avoid alcohol when taking acetaminophen.
  - Ibuprofen (Advil or Motrin), naproxen (Aleve), and aspirin are best avoided as they can irritate the lining of the stomach.
- **Over-the-counter medications to reduce diarrhea** can be used with caution for 1-2 days as long as you do not have a fever ( $>100.4^{\circ}\text{F}$  or  $38^{\circ}\text{C}$ ) or blood in the stool. These medications can provide temporary symptom relief, but they do not treat the cause of diarrhea.
  - **Loperamide (Imodium):** Follow package directions for safe use; taking more than the recommended dose has led to serious heart problems in some people. Stop taking Imodium and seek medical care if your diarrhea lasts for more than 48 hours.
  - **Bismuth (Pepto-Bismol):** This medication is not as effective as loperamide but is a safe alternative in patients with bloody diarrhea. Follow package directions for safe use. Do not take bismuth with aspirin, if you are allergic to aspirin, or if you are pregnant.
- **Anti-nausea medications** may also be prescribed for a few days if needed.
- **Probiotics** may shorten the course of diarrhea. More research is needed before probiotics are routinely recommended as treatment.
- **Antibiotics** are not needed in most cases and may cause further complications when used unnecessarily. They may be prescribed if a bacterial cause is suspected or confirmed.

## TO AVOID SPREADING THE INFECTION TO OTHERS:

- **Stay home from work and school until symptoms have resolved.** If norovirus is suspected and you work in food service/childcare/healthcare, you may be advised to stay out of work until you have been symptom-free for 48 hours.
- **Wash your hands frequently with soap and water, especially after using the toilet and before touching food.** Proper technique is important! Rub your hands together with soap and water for 15-30 seconds (about the time it takes to sing "Happy Birthday" twice) before rinsing them off. If your hands are not visibly soiled and a sink is not available, alcohol-based hand sanitizers are a good alternative.
- Do not share food or drink with anyone. Avoid using a shared kitchen if possible. Have roommates or household members prepare meals and bring them to you.
- Avoid sharing bathrooms if possible. Disinfect surfaces with a chlorine bleach cleaner.
- Wash dirty clothing, towels, and linens promptly.

## CONSULT YOUR HEALTHCARE PROVIDER IF YOU:

- Cannot keep liquids down for  $> 24$  hours.
- Have bloody diarrhea or emesis.
- Have fever  $\geq 101.3^{\circ}\text{F}$  ( $38.5^{\circ}\text{C}$ ).
- Have more than 6 stools/day.
- Have symptoms lasting more than 2 days.
- Have severe abdominal pain.
- Have signs of dehydration (dry mouth, less need to urinate, feeling faint, muscle cramps, etc).
- Have used antibiotics in the last 3-6 months.
- Are pregnant.
- Have a weak immune system (HIV, chemotherapy, uncontrolled diabetes, etc)

**RECOMMENDED WEBSITES:** [www.cdc.gov](http://www.cdc.gov), [www.mayoclinic.org](http://www.mayoclinic.org), [travel.gc.ca/travelling/health-safety/rehydration](http://travel.gc.ca/travelling/health-safety/rehydration)