



Traveler's Diarrhea

PATIENT EDUCATION SERIES

What is traveler's diarrhea and how do I get it?

Traveler's diarrhea is usually caused by toxin-producing bacteria that you get by consuming contaminated food or water. Risky foods and drinks include:

- Tap water
- Ice
- Raw vegetables, salads, raw meat, raw seafood (such as ceviche)
- Fruits that cannot be peeled by the consumer
- Food that has been sitting out, such as a buffet or reheated food on a steam table, or cold foods
- Unpasteurized milk or other dairy products, especially soft cheeses, cream-filled desserts, sauces.
- Mixed drinks containing alcohol.

Is it common?

Twenty to sixty percent of people traveling to a foreign country will develop diarrhea during or shortly after the trip. The risk is highest when traveling to developing countries of Latin America, Africa, the Middle East and Asia.

Are there foods that are safe to eat when travelling?

Items that are generally safe include:

- Bottled carbonated beverages, beer and wine
- Hot (or boiled) coffee or tea
- Water that has been boiled for 3 minutes
- Steaming hot foods
- Fruits and vegetables that you can peel yourself right before you eat them
- Breads, crackers, cookies and hard candy
- Fully cooked fish and shellfish, still hot.

How long do symptoms last?

An episode of traveler's diarrhea usually lasts 1 to 5 days. About 10% of episodes last longer than one week. The diarrhea may be accompanied by abdominal cramps, nausea, vomiting, bloating, headache or low grade fever.

Note: fewer than 5% of people will have high fever (over 101 degrees F/38.3 degrees C) and /or bloody stools. Travelers with these additional symptoms do not have simple traveler's diarrhea and may need to see a physician if treatment (to be described) does not help the symptoms.

How is it treated?

If you do develop traveler's diarrhea, there are a number of things you can do to reduce the severity and the duration of the episode, and to avoid dehydration.

- Drink safe water, broth made with boiled water, bottled fruit juices or caffeine-free soft drinks (you need to keep liquid in your body)
- The ideal thing to drink is powdered oral rehydration salts (available at drug stores) mixed with safe water or bottled juice. You can make your own solution using 1 liter boiled water, 4 tablespoons sugar, 1/2 teaspoon salt and 1/2 teaspoon baking soda.
- Eat some salted crackers (you need salt and water), toast or clear soup. As tolerated, without an increase in diarrhea, you may slowly add bananas, cooked applesauce, rice, baked potato or plain noodles over the next 1 to 3 days.
- Avoid alcohol and caffeine-containing beverages (both will only dehydrate you more)
- Avoid dairy products (which may make the diarrhea worse), spicy foods and red meat, most vegetables and some fruits (citrus, tomato)
- If diarrhea is severe, drink only clear liquids.

Above all, do not take any locally-available over-the-counter medicines because of differences in, or lack of, government medication controls. Local medicines often contain very dangerous prescription drugs.

Specific treatment directions:

For **mild to moderate diarrhea** (less than or equal to 4 loose stools in 24 hours):

1. You may opt to use no medication if symptoms are very mild, but rather to follow dietary and rehydration measures described earlier.
2. Pepto Bismol (bismuth subsalicylate) may shorten the duration of the episode – take 2 ounces or 4 tablets every 30 minutes for eight doses. Kaopectate probably will have no effect. Avoid Pepto Bismol if you cannot tolerate salicylates (aspirin), if you have kidney problems, or if you are taking salicylates on a regular basis for some other reason. Be aware that Pepto Bismol can turn your tongue and stools black, a harmless and transient side effect.
3. Imodium AD (loperamide) is available over the counter, and will provide some symptom relief if it is necessary to be on a long car or bus trip. Follow bottle directions: 4 mg after the first loose stool, then 2mg after each subsequent stool; not

over 8 mg/day; not for more than two days. It should not be used as treatment for mild/moderate diarrhea.

Loperamide will not cure diarrhea, but acts more like a chemical cork. To avoid dehydration, drink plenty of water if using this medicine as water continues to be pulled from the body into the intestine by the diarrheal illness. (We do not recommend Lomotil, another commonly prescribed anti-spasmodic drug, because of the dangers associated with using this for bloody diarrhea with fever.)

For **severe diarrhea** (more than 4 unformed stools in 24 hours along with fever and/or bloody stools):

1. Antibiotics should be used as prescribed, and medical attention should be sought if there is not prompt improvement. Antibiotics may be stopped after 24 hours if symptoms have improved significantly.

Antibiotics used include:

- Norfloxacin 400 mg twice daily for 3 days
- Ciprofloxacin 500 mg twice daily for 3 days
- Ofloxacin 200 mg twice daily for 3 days
- Azithromycin 1000 mg single dose

2. Loperamide (Imodium AD) should not be used for severe diarrhea unless one is also taking antibiotics. Loperamide should be stopped if abdominal pain, diarrhea, or other symptoms increase. Loperamide should not be used for more than 2 days.

3. Single dose Azithromycin 1000 mg maybe prescribed if traveling to South East Asia where quinolone (Cipro, etc) resistance is high.

You should seek medical attention if the episode of diarrhea is not alleviated by one of the above treatments in 2 days.

Can I prevent it?

To prevent traveler's diarrhea, you should avoid the high-risk items listed above and avoid buying food or beverages from street vendors. Remember, don't use tap water out of the faucet for brushing your teeth if you are in a high-risk area. If using tap water is necessary, do not swallow it. Most toothpastes contain antibacterial agents. Also remember that food prepared for the plane ride home requires the same precautions.

Be prepared:

- You may want to carry a liter of purified water and several packets of oral rehydration salts.
- You may want to carry along a means to purify water such as chlorine or iodine tablets. If you are filtering the water, the filter should be able to remove small organisms (giardia, cholera, amoebae). Boiling water for 3 minutes will kill bacteria, parasites, and viruses.

- You may want to carry a few Imodium tablets with you for emergencies (to prevent toilet accidents when bathroom access may be difficult - especially on plane trips).
- Bismuth subsalicylate (Pepto Bismol) 30 ml or 2 tablets 4 x/day can prevent a significant number of cases of travelers diarrhea. (Do not take if you have kidney disease or are already on aspirin.)

Before travel, discuss with your provider whether it is appropriate to prescribe an antibiotic for you to take with you, in the event that you become ill with traveler's diarrhea.

9/11