

Traveller's diarrhea

Traveller's diarrhea is a common health concern affecting travellers to tropical countries. The travel destination and type of travel are the greatest risk factors for traveller's diarrhea. Depending on the destination, up to 50% of travellers who visit developing countries may get traveller's diarrhea. You may be at increased risk of complications from traveller's diarrhea if you:

- Have a weakened immune system
- Have chronic renal failure
- Have congestive heart failure
- Have insulin-dependent diabetes mellitus
- Have inflammatory bowel disease

What is traveller's diarrhea?

Traveller's diarrhea is frequent, loose or watery bowel movements. It results from eating or drinking contaminated foods or liquids. They can also develop from person-to-person contact due to poor hygiene. Other symptoms may include nausea, vomiting, stomach cramps, fever or in more severe cases, blood in stools. Symptoms can begin suddenly and usually last 3 to 4 days.

The most common cause of traveller's diarrhea is food or water contaminated with bacteria called *enterotoxigenic E. coli* (ETEC). These bacteria are found in the bowel movements (stool) of infected people. People who use the bathroom without properly washing their hands after can pass the bacteria on to others. This occurs through food preparation or hand-to-mouth contact. Untreated water, contaminated by sewage or animal manure can also be a source of disease. When this water is used for food preparation, drinking, swimming or other activities where it may be swallowed, people are exposed to ETEC.

For more information on hand washing, please visit [HealthLinkBC File #85 Hand washing: Help stop the spread of germs](#).

How do I prevent traveller's diarrhea?

An oral vaccine to help protect against traveller's diarrhea caused by ETEC is available but not routinely recommended. It is recommended if you are at increased risk of complications from traveller's diarrhea. The vaccine also protects against cholera. For more information, please visit [HealthLinkBC File #41k Traveller's diarrhea and cholera vaccine](#).

The current vaccine only protects against one type of bacteria that causes traveller's diarrhea. The best way to prevent traveller's diarrhea is to follow good personal hygiene (cleaning) practices. Be careful about what you eat and drink.

The following tips can help you stay healthy while travelling.

Do:

- Eat foods that are well cooked and served hot
- Use bottled or treated water for brushing teeth
- Drink bottled or boiled water, bottled beverages or drinks made with treated water. Check that bottled beverages are sealed
- Wash and peel your own fruits and vegetables with bottled or treated water
- Make sure dairy products, such as milk, cheese or yogurt, are pasteurized and refrigerated. If in doubt, avoid them

Do not:

- Drink spring water, surface water or standing water unless it has been treated
- Drink tap water or add ice to your beverages

- Eat leftovers or food at buffets that has been sitting unrefrigerated for a long time or not stored properly
- Eat at a buffet that does not use food covers
- Eat undercooked or raw meat, fish or shellfish
- Eat food sold by street vendors
- Eat raw vegetables, salads or fruits that cannot be peeled such as grapes or strawberries
- Eat fruits and vegetables if the skin is broken or bruised
- Eat watermelon as it may have been injected with local water to increase weight
- Eat creamy desserts, custards, mousses, mayonnaise or hollandaise sauce that may not have been properly refrigerated

How do I treat water for drinking?

There are several ways to treat water so it is safe to drink.

Heat treatment

Bring water to a full rolling boil for at least one minute to disinfect it. Cool to room temperature in a covered container. At elevations over 2,000 meters (6,500 feet), boil water for at least 2 minutes, as water boils at a lower temperature at elevation.

Household bleach (contains 4-6% Chlorine)

Add 2 drops per litre of clear water or 4 drops per litre of cloudy water. Strain cloudy water through a clean cloth before adding bleach. Mix well and let it stand for 30 minutes. This will be effective against most viruses and bacteria but is generally not effective against cryptosporidium.

Tincture of iodine (2.5%)

Add 5 drops per litre of clear water or 10 drops per litre of cloudy water. Let it stand for at least 30 minutes. Pregnant people, children, people with thyroid problems or known iodine sensitivity should not use iodine drops to disinfect water.

Commercially available water treatment devices, drops or tablets

Various treatment products utilizing combinations of chemical, mechanical or UV radiation treatment are available in Canadian pharmacies and sporting goods stores. Read the label to make sure it will treat bacteria, viruses, and parasites, and follow the instructions on the package.

For more information about disinfecting drinking water at home and when you travel, please visit [HealthLinkBC File #49b Disinfecting drinking water](#).

How do I treat traveller's diarrhea?

Fluids

The most important treatment for diarrhea is to replace the fluids your body loses. For healthy adults, these fluids can be replaced by drinking clear fluids, such as purified water, clear broth, diluted juices or sports drinks, for 24 to 48 hours.

In children, people with underlying medical conditions, and the elderly, dehydration from diarrhea is a concern. Oral rehydration salts (ORS) should be considered.

Oral rehydration salt (ORS)

If diarrhea is severe or does not improve after 24 hours, start drinking beverages that will replace the electrolytes or body salts being lost. Use a pre-packaged oral rehydration salt (ORS) drink such as Gastrolyte®. When planning a trip, buy ORS packets before leaving Canada and include them in your travel health kit.

If you do not have a pre-packaged ORS mix, you can make your own using the recipe below. Use only until you're able to get medical care:

- Glass #1 - 8 oz fruit juice, ½ tsp corn syrup, sugar or honey, pinch of table salt
- Glass #2 - 8 oz purified carbonated water and ¼ tsp baking soda

Drink some from glass #1 and some from glass #2. Repeat until you are no longer thirsty.

Do not give this homemade drink to children under 12 years of age. Pre-packaged oral rehydration solutions are available in most countries and can be used to prevent or treat dehydration in children under 12. Infants should continue to receive breastmilk or formula in addition to ORS.

Children and adults can continue to eat solid food in addition to fluids or ORS. If you are not hungry, drink fluids. When you feel better, slowly start eating small amounts of bland, easily digested food. These include:

- Bananas
- Applesauce
- Cooked carrots
- Crackers
- Rice
- Boiled potatoes
- Eggs
- Chicken
- Fish

Avoid food and drinks that might irritate your stomach. Food that can irritate your stomach include:

- Alcohol
- Coffee
- Strong tea
- Sugary drinks
- Spicy food
- Greasy food
- Dairy products

Medication

A number of medications may be recommended for treatment of traveller's diarrhea. For more information, speak with your health care provider.

When should I contact a health care provider?

Contact a health care provider if you have these symptoms:

- High fever
- Blood or pus in stools
- Signs of dehydration such as dry mouth, rapid pulse, reduced urine output or dark-coloured urine; or
- If the diarrhea does not stop within 48 to 72 hours