



Travelers' diarrhea

Travelers' diarrhea is the most common health issue travelers face. It is defined as 3 or more loose or watery bowel motions in a 24 hour period, occurring during or shortly after travel abroad.

The illness usually results in mild symptoms, lasting three to four days, during which drinking adequate fluids is usually all that is required. However it is best to seek medical advice when more severe or persistent symptoms occur, or in individuals who are immunocompromised or more susceptible to complications from dehydration.

Symptoms

Travelers' diarrhea typically develops during the first week of arrival abroad and it is usually a mild illness, lasting three to four days, without disruption of normal activities. The diarrhea is defined as three or more loose or watery bowel motions in a 24 hour period. Other symptoms are uncommon, but can include nausea and vomiting, fever, tummy cramps or blood in the stools (known as dysentery).

Symptoms occasionally last longer and may be more severe in young children and the elderly. This can also be the case in those with chronic health problems or when the immune system is not working as well, such as those undergoing chemotherapy, on steroid treatment or living with HIV.

Diagnosis

Traveler's diarrhea is usually diagnosed based on symptoms and typically resolves without treatment. Travelers with ongoing or severe symptoms, may require further tests. This may involve a stool sample for microscopy and culture and blood tests to look at the full blood count and biochemistry.

It is best to seek medical advice in any of the following cases:

- High temperature (fever)
- Blood in the stool
- If there is difficulty in keeping hydrated due to frequent vomiting or frequent watery stools
- In the elderly or those with underlying health problems
- If the diarrhea lasts more than three to four days
- In pregnancy
- In children under six months
- In those that are immunocompromised for any reason

Treatment

It is important to keep well hydrated when experiencing symptoms of travelers' diarrhea. For those with mild illness drinking enough fluids is often all that is necessary. As a guide, at least 200mls of fluid should be drunk after each watery stool, in addition to what you would normally drink. The usual fluid intake for an adult is about 2 liters a day, but this would be more in hotter climates. The fluid should mainly be safe drinking water (bottled, boiled, or treated water). Drinks that contain a lot of sugar can make the diarrhea worse and alcohol, tea and coffee should be avoided due to their diuretic effect.

If you vomit, wait 5-10 minutes before taking in fluid and take regular small sips, ensuring that the total intake is as above.

For those with more severe symptoms, or at increased risk of severe disease, oral rehydration powders can be used with safe drinking water. If this is not available, a salt and sugar solution of 6 level teaspoons of sugar and 1 level teaspoon of salt to a liter of safe drinking water can be used.

Bismuth subsalicylate (such as Pepto-Bismol®) is recommended for 1-2 days for mild diarrhea and can help reduce nausea. This is available over the counter for use in adults and children over 16 years of age. It is not suitable for those with an aspirin allergy, poor kidney function, gout, or those on blood-thinning medication (anticoagulants) such as warfarin.

Loperamide is an antimotility agent, so slows down bowel activity and reduces the frequency of diarrhea. It can be used when rapid control of symptoms is required, for example during travel or for business meetings. However it should not be used where the traveler has active inflammatory bowel disease, a fever or bloody diarrhea. It is available over the counter for use in adults and children over 12 years of age and should not be used for more than two days.

Antibiotics can be considered for treatment of moderate or severe travelers' diarrhea, under medical advice. The World Health Organization recommends that stand-by antibiotics should be considered if travelling to locations where medical care is poor or unavailable, and for travelers at higher risk of severe disease.

Prevention and control

Travelers' diarrhea can be difficult to prevent as often travelers do not prepare their own food and drink. However there are sensible measures to take:

- Hands should be washed regularly. Alcohol gel can be used where hand-washing facilities are unavailable
- Food must be thoroughly cooked and must remain steaming hot before serving. Food from buffets, markets and street vendors should be avoided
- Avoid raw seafood, raw and undercooked eggs.
- Eat fruits and raw vegetables that can be peeled or shelled and without damaged skins
- Avoid ice unless made from safe water
- Unpasteurized milk should be boiled before consumption
- Only drink bottled water with no tampering of the seal, or sealed bottled carbonated drinks
- Water should be boiled if its safety for drinking is in doubt. Other options include micropore filtering or chlorine tablets.

There are no vaccines available for the specific use of preventing travelers' diarrhea. A vaccine used in the UK to prevent cholera has been shown to provide some protection against certain E. coli bacteria strains. However there is currently insufficient evidence to support the use of this vaccine routinely to protect individuals from travelers' diarrhea.

Cause

There are a variety of organisms that cause travelers' diarrhea. Often the casual organism is not found despite stool testing. Bacteria are the most common cause of travelers' diarrhea, including E.coli, Campylobacter, Salmonella and Shigella.

Viruses are the next most common and include norovirus and rotavirus.

Giardia, Cryptosporidium and Entamoeba histolytica are parasites, which are a less common cause.

Transmission

Travelers' diarrhea is caused by eating food or drinking water containing certain organisms or their toxins. Water-borne infections can also be transmitted through swimming pools, the sea and freshwater rivers and lakes, although this is less frequent.

Some organisms causing travelers' diarrhea can be transmitted from person to person through contaminated hands. Therefore, thorough handwashing is of particular importance after visiting the toilet and before preparing and eating food.

Travelers can experience a change in bowel habit due to travel-related stress, change in diet and increased alcohol consumption.

General Information

The travel destination is regarded as the most important risk factor for travelers' diarrhea.

Locations with a warm climate and poor standards of hygiene pose a greater risk.

The Health Protection Agency states that based on the studies available, the world can be divided into three zones;

- Low risk (7% or less) zones include western Europe, USA, Canada, Japan, Australia and New Zealand
- Intermediate risk zones (up to 20%) include southern Europe, Israel, South Africa, some Caribbean islands and the Pacific
- High risk zones (20% or more) include Africa, Latin America, the Middle East and most parts of Asia.

In a small proportion of people, an episode of traveler's diarrhea can lead to irritable bowel syndrome. Lactose intolerance can sometimes occur following travelers' diarrhea, which leads to bloating, abdominal pain, and watery stools after drinking milk. The condition gradually improves as the damaged intestinal lining heals.

Always call the Everbridge Assistance line if help is required with medications or any medical issues during travel.

References

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This factsheet has been developed for educational purposes and is correct at the time of production. It is not designed as a replacement for professional medical advice. Please consult your medical professional for any concerns or queries regarding traveller's diarrhoea.