

# TRAVELLERS' DIARRHOEA

## WHAT IS TRAVELLERS' DIARRHOEA?

Travellers' diarrhoea (TD) is the most common illness of travellers to developing countries, causing illness in up to 70% of western travellers staying for two weeks or more.

Characterised as loose, watery, frequent bowel movements and sometimes associated with vomiting, TD is generally a short, mild illness lasting an average of 3 - 5 days. However, it can be more severe and debilitating, especially among younger travellers.

Most cases of diarrhoea are caused by a specific organism, usually toxin-producing bacteria (70-80%), a virus or a parasite (10-12%).

Whatever the cause, the infection is always contracted the same way: by consuming contaminated food or water.

#### **INCIDENCE**

Diarrhoea is the most common travel-related illness. Up to 50% of all international travellers (to any destination) will experience a diarrhoeal illness.

## **SYMPTOMS**

Regardless of how careful they are, many travellers experience at least one episode of diarrhoea when travelling to a developing country. It is notoriously difficult to diagnose the course of a diarrhoeal illness, but there are general patterns:

Mild - Symptomless, nuisance diarrhoea usually disappears without treatment within a day or two.

Classic Traveller's Diarrhoea - watery diarrhoea often associated with, abdominal cramps, nausea and vomiting.

Dysentery - any diarrhoea containing blood or mucous. Usually caused by bacteria, but may also be caused by an amoeba (amoebic dysentery). This form will generally require treatment with antibiotics and a medical review.

Giardia - explosive diarrhoea with bloating and rotten egg gas-like burping and flatulence. Specific treatment is required.

#### **PREVENTION**

As with most issues in travel health, prevention is the best option. Pay particular attention to safe eating and drinking practices, as well as maintaining a high level of sanitation and hygiene.

## **TRFATMENT**

Most cases are resolved spontaneously with fluid replacement within 3 - 4 days. Persistent or complicated diarrhoea may require further drug treatment. Replacing lost fluids and salts is crucial in treating diarrhoea.

#### **DFHYDRATION**

Dehydration is the most serious consequence associated with most forms of traveller's diarrhoea. Traveller's experiencing TD should drink small amounts of clean water frequently to maintain good urine output (urinating twice a day, preferably more). The use of commercially available rehydration salts, such as Gastrolyte or Pedialyte is also recommended. An alternative is adding six teaspoons of sugar and one teaspoon of salt to one litre of water. Fluids with too much sugar, such as fruit juices and soft drinks can worsen dehydration. It is preferable to dilute these with four parts of boiled (and cooled) water to one part fruit juice or soft drink.

## **ONE SIP AT A TIME**

Fluid lost through vomiting or persistent diarrhoea must be replaced to facilitate recovery. The best way to replace fluids is not by the glassful, but with small, regular sips. This process allows for continual rehydration. Drink at least two glasses for every bowel movement. Urine colour is a good indicator of your fluid levels. Aim to maintain clear-coloured urine. Small amounts of dark-coloured urine may indicate the need to increase fluid intake.

## **DIET AND TRAVELLERS' DIARRHOEA**

Food is important to maintain energy and help the bowel to heal. Multiple small meals may be better tolerated. Try to match food consistency to stool consistency. Light foods are easiest to tolerate. Eating rice may assist early recovery. Avoid dairy products, fatty foods and spicy foods until diarrhoea has settled. Breast-feeding infants should continue being breastfed and solids should not be discontinued for more than 24 hours if possible.

## ANTIBIOTIC REGIME

Emergency antibiotics can be carried to treat dysentery if fever is present or blood/mucous in stools. Azithromycin is effective against bacterial infections (Norfloxacin can be used when there is known allergy to azithromycin or where azityhromycin is unavailable and antibiotic treatment of TD is required). Metronidazole is usually effective against giardia. Antimotility drugs ('stoppers'): Loperamide (Gastrostop, Imodium), Diphenoxylate (Lomotil) and Codeine may control bowel movement but do not kill bowel infections. Their use is considered dangerous for young children and pregnant women, and should not be used if diarrhoea is associated with a high fever or with blood or pus in the stool. They are useful in emergencies when a toilet is unavailable. Use for longer than 24 hours should be avoided.

## **GUIDELINES TO EATING AND DRINKING SAFELY**

## **EATING**

When choosing food the golden rule is: "BOIL IT, COOK IT, PEEL IT OR FORGET IT"

## Foods to avoid:

- Unpasteurised dairy products: unpasteurised milk, yoghurt or cheese.
- Raw or undercooked meat, seafood (especially shellfish and prawns) and processed meats, such as salami.
- · Reheated or cold foods.
- Ice cubes.
- Salads.
- Any food in contact with flies.
- Food handled by dirty hands.

#### Safer foods:

- Fruit with skin or peel intact remove skin or peel before eating.
- Fruit or vegetables pre-soaked in an iodine or permanganate solution.
- Recently-cooked meals made from fresh ingredients and served piping hot. Look for food outlets with a high turnover of clients.
- Tinned food.
- Freshly-baked bread.

## Keep clean:

- Cover food to protect it from flies.
- Wash and dry hands before preparing or eating food.
- Avoid hand contact with the mouth.

- Maintain strict hygiene habits after toileting.
- Use an antibacterial hand wash or wipes with ?60% alcohol content before eating.
- Ensure cutlery and crockery are clean.

## **DRINKING**

In general, it is safer to assume that all tap water is contaminated.

There are several ways to purify water if safe, bottled water is not available:

- Boiling. This is the most effective form of water purification. Bringing water to the boil will kill all bacteria. However, to ensure that parasitic cysts, eggs and larvae are killed, boiling water for five minutes is recommended. At higher altitudes, longer boiling times may be needed in general allow one minute for every 300 metres above sea level.
- Water purification devices such as Fill2pure® use microfiltration membrane technology to remove more than 99.9% of water-borne bacteria and protozoan cysts. Steripen products use ultraviolet light technology to purify water and work without the introduction of chemicals to water.lodine tablets and solution.
- Add eight drops of iodine antiseptic (1% available iodine) per litre of water and allow it to stand for 30 minutes; use iodine tablets as per the manufacturer's recommendations. Do not use iodine if allergic to iodine, with thyroid conditions or during pregnancy.
- Chlorine tablets and solution. These are less effective than iodine but may be more appropriate in certain situations, such as for a traveller with thyroid condition.
- Micropur tablets combine chlorine and silver nitrate (one tablet per litre) and offer a safe, cheap, effective and palatable option.
- Bottled carbonated drinks are a good source of uncontaminated fluid and are generally available worldwide. The carbonation process kills most bacteria.
- Remember, ice is only as safe as the water from which it is made; neither alcohol nor cordial render contaminated ice or water safe.

More information on Travellers' Diarrhoea is available during your pre-travel consultation with Travelvax. Call 1300 360 164 for the location of the clinic nearest to you.