



## Developing Countries (reviewed August 2011)

Studies have shown that illness occurs in about 55% of all travellers (typically travellers diarrhoea) with 11% requiring to see a doctor whilst away. Less common serious diseases do occur, which can be life threatening.

### **TRAVELLERS DIARRHOEA**

Most episodes of diarrhoea are short-lived and require no particular treatment. It is caused mostly by contaminated food or water. Interestingly the use of oral cholera vaccine will reduce the incidence of common travellers diarrhoea by 60-70%. The WHO have an excellent pamphlet [see copy](#)

- Choose food which is freshly and thoroughly cooked and served steaming hot
- Eat fruit or vegetables that you can peel or cut open yourself, eg. banana, citrus fruits, papaya.
- Dry foods and Breads are generally safe. Canned and bottled drinks are safe.
- Avoid milk, ice cream, mayonnaise and other milk products unless made with pasteurised (or boiled) milk.
- Avoid smorgasbord even in 5 star restaurants (reheated foods & food sitting at room temperature)
- Avoid prawns, oysters, fish, unless thoroughly cooked. Hamburger meat can be dangerous as they are often precooked and stand at room temperature.
- Avoid uncooked leafy vegetables, eg. in salads.
- Ciguatera: At certain times of the year shellfish, reef fish (including shark) contain poisonous toxins. The risk of illness is reduced by washing the flesh. Cooking does not inactivate the toxins.
- Ice is only as safe as the water it is made from.

### **MALARIA**

The mosquito which spreads malaria is active between dusk and dawn. Malarial symptoms 1<sup>st</sup> appear some 8 days following an infected bite. The classic symptoms are fever, malaise, headache, chills and sweats but can be atypical (eg gastro).

#### **Cities, Resorts, Urban Areas & Day Trips:**

Minimal risk and antimalarial drugs not recommended. The use of insect repellents is recommended as this will also minimise the risk of other diseases from bites such as Dengue.

#### **Minimisation of exposure to mosquitoes**

Stringent measures to prevent mosquito contact reduce the risk of contracting malaria by ten fold. They include:

- Mosquito nets preferably impregnated with permethrin.
- Avoidance of night time outside activities. Clothing to cover arms and legs in the

evenings. NB. It is common for mosquitoes to attack leg/ankle region.

- Avoid dark coloured clothing as it attracts mosquitoes as do perfume, cologne & after-shave.
- Use of an insecticide aerosol, mosquito coils in the room to kill mosquitoes before retiring.
- Use of mosquito repellents. The most effective mosquito repellent is (DEET). eg "Rid" "Tropical Aeroguard" Roll-on preparations are recommended as spray cans may explode in luggage compartments. It needs to be spread evenly and completely over all exposed skin every 4 hours.
- DEET is absorbed through the skin. Preparations containing less than 50% DEET are almost free of side effects. Extensive & repeated application of DEET in children can lead serious side-effects
- DEET repellents should be kept well away from plastics, including cameras, as it will dissolve them.
- A large range of travel equipment including impregnated mosquito nets, wrist and ankle insect repellent bands (mosi-guards) can be obtained through some chemists & travel clinics.

#### **Business persons & Frequent Travellers:**

Travellers making frequent short stops to endemic areas, may choose to reserve taking anti-malarials, for high-risk areas only. Malarone may be the most useful malarial prevention drug here, as it only needs to be taken for 1 week after leaving the malarial area.

**Travellers with special needs:** see

[wwwnc.cdc.gov/travel/page/special-needs.htm](http://wwwnc.cdc.gov/travel/page/special-needs.htm)

Nb. Malaria and Hepatitis are significantly more life threatening to pregnant women as is altitude.

#### **Dengue & Dengue haemorrhagic fever**

Severe headache, bone & muscle pain, high fever usually occur 4-6 days after an infected bite. Seek medical assistance immediately if large bruises on skin, bleeding gums or blood from nose or bowel occur

**Rabies** (illness is 100% fatal to humans) - mostly acquired from dogs, cats & monkeys (even minor scratch or lick of graze). Incubation period 10 days to 10 years. **Be wary of all animals whether tame or not.**

#### **Rabies Treatment:**

You should wash the wound immediately with soap and water and disinfect with iodine (betadine). Seek medical attention if risk seems high. (unprovoked attack, irritable animal) and have post-exposure vaccine as soon as possible (preferably within 48 hours). Otherwise at least seek medical advice on return.

## TREATMENT OF ILLNESS

### Management of Diarrhoea

Bottled or canned beverages (eg carbonated mineral water), tea, broth & foods such as rice, bananas, papaya (pawpaw), potatoes and dry biscuits are tolerated best. Take gastrolyte sachets for children. When diarrhoea is prolonged and with fever seek medical attention

- Antimotility drugs ('stoppers'): eg. Imodium (loperamide) - helpful in relieving diarrhoea and cramps. Do not use if high fever or blood in motions. Do not use in children under 6, and be cautious in children under 12.
- Antibiotics. Diarrhoea with high fever, distressing symptoms or blood in motions: eg (single dose Norfloxacin 800mg or Azithromycin 1 Gm ). Nb Azithromycin safe for children >12 months and in pregnancy.
- Prolonged diarrhoea greater than 10 days and without fever: A bowel parasite "giardiasis" is the commonest cause. Usually treated with tinidazole (Fasigyn) - 4 x 500mg tablets (2g) in a single dose

### **MALARIA:**

Any fever developing after 8 days from entering a malarial area or upon return, (particularly within the first 3 months), may be due to malaria. You should consult a doctor, voice your suspicion of malaria, and ask for a blood film to be done. You should do so within 48 hours of onset of fever, or earlier if you are more than moderately unwell.

### **Common drugs used and side-effects:**

**Malarone:** Probably the best tolerated but expensive.

**Doxycycline:** (the cheapest) Thrush, heartburn, bowel upsets and sunlight sensitivity are common, the latter minimised by taking the drug in the evening. Drinking copious quantities of water after swallowing the drug is recommended to reduce heartburn. Using Doxycycline may make the Contraceptive pill unreliable. Discuss this matter with your doctor.

**Mefloquine:** ('Lariam') Minor side effects such as nausea, heartburn and loose stools occur in about 20% of users. Taking ½ tab twice a week with food, and drinking copious water with medication will help reduce these.

Unfortunately mefloquine frequently produces insomnia, vivid dreams, dizziness, mental clouding, anxiety & coordination problems. These are sufficient to interfere with daily activities in up to 10% of users and are probably aggravated by use of drugs & alcohol.

Travellers to high altitude and definitely those contemplating aqualung (scuba) diving should avoid mefloquine. Women are advised to use contraceptives during and for 3 months after administration of mefloquine.

## OTHER CONSIDERATIONS

**Medical Kit:** discuss with your doctor

**Heat and Humidity:** loose cotton clothing and talcum powder will reduce heat rash. drink fluids rich in mineral salts

### **Bathing, Bare Feet & Shoewear:**

Skin penetrating parasites abound in fresh water lakes and rivers of Africa, south-east Asia and western pacific countries. Parasites in soil and can penetrate the soft skin of tourists walking barefoot. ... Check shoes and clothing before use - particularly in the morning - as snakes and scorpions tend to rest in them.

**Accident Prevention:** Traffic accidents are a leading cause of accidents among travellers. Vehicles are often unroadworthy. Unfamiliarity with roads, poor condition of roads and drunk drivers add to the dangers.

**Plane Trip:** Drink plenty of fluids, exercise legs, avoid excessive alcohol & coffee.

**Prolonged Travel:** Extra pair of spectacles. Dental Check prior to travel advisable

**Travel Insurance:** Travel insurance should cover not only medical & hospital expenses but also costs due to general accidents, medical evacuation, loss of luggage & money, as well as delays due to strikes.

**Sexually Transmitted Disease:** There is a high risk of HIV in developing countries. Also most travellers contracting STD had not planned to have sexual contact whilst away (coerced by the culture and or alcohol). Local condoms are unreliable.

**Medical Examination after travel:** It is advisable (if not essential) to visit your local doctor *promptly* if you

- suffer from a chronic disease, such as cardiovascular disease, diabetes mellitus, chronic respiratory disease;
- experience illness in the weeks following their return home, particularly if fever, persistent diarrhoea, vomiting, jaundice, urinary disorders, skin disease or genital infection.
- consider that they have been exposed to a serious infectious disease while travelling;
- have spent more than 3 months in a developing country.

### **Further Weblinks for information**

- CDC Travel planner: <http://wwwnc.cdc.gov/travel>
- WHO year book : <http://www.who.int/ith/en/>
- Australian consular advice: [www.smarttraveller.gov.au](http://www.smarttraveller.gov.au)

This leaflet cannot be completely comprehensive and is intended as a guide only. The information may change in the future. Visit relevant website for updates. If you have further questions you should raise them with your own doctor.

**Website:** [www.nevdgp.org.au/info/travel](http://www.nevdgp.org.au/info/travel)