

Department of **Pharmacy**

Malaria Prevention Tips for Travellers



What is Malaria?

It is a disease caused by a parasite (Plasmodium species), which is transmitted/spread by the bite of an infected female Anopheles mosquito.



What are the Signs and Symptoms of Malaria?

- Fever
- Chills
- General muscle aches and weakness
- Tiredness
- Diarrhoea and vomiting
- Headache
- Cough

These symptoms may occur as early as a week after your initial exposure or as late as several months after departure from a malaria prone area and after anti-malaria medications have been stopped.

What is the Risk of Getting Malaria?

- The risk/likelihood of getting malaria varies from place to place and also within a country. For example, there may be zero or lower risks in the city areas but notable risks in the countryside. Travellers staying in air-conditioned hotels may be at lower risk as compared to backpackers or adventure travellers.
- Malaria commonly occurs in tropical and subtropical countries where the malaria-carrying mosquito grows well. Examples of such countries are Sub-Saharan Africa, Southeast Asia, India, Haiti, Papua New Guinea, Central and South America and the Dominican Republic.
- Inform your pharmacist or doctor of every city/state/region that you are visiting so that the risk can be accurately assessed/determined.

What Can I Do to Prevent Malaria?

 Protect yourself against mosquito bites by wearing longsleeved clothing and long trousers between dusk and dawn (after sunset until before sunrise).

For adults:

 Apply insect repellent containing more than 20% DEET (ingredient commonly found in insect repellent) onto exposed skin areas.

For children:

Apply insect repellent containing <u>not more than 10%</u>
 DEET onto exposed skin areas.



What Can I Do to Prevent Malaria?

- Use mosquito coils or electric inserts with synthetic pyrethroids in the room at night.
- Sleep with netting around your bed, with the edges tucked underneath your mattress, or sleep in a screened room (windows are guarded by mosquito screen).



What are Some Medications That I Can Take to Prevent Malaria?

- 1. Atovaquone with Proguanil (Malarone®)
- 2. Doxycycline
- 3. Mefloquine







You only need to take one of the medications listed above.

Discuss this with your pharmacist or doctor to find out which medication is the most suitable for you, depending on the country you visit.

1. Atovaquone-Proguanil (Malarone®)

(This medication is available at pharmacies for persons above 18 years old and weighing at least 40kg.)

How Do You Take it?

- Take one tablet once a day.
- Start one to two days before your departure, continue to take the medication every day during your trip and continue for one week after your return.

What are Some Possible Side Effects?

- Nausea
- Vomiting
- Abdominal pain
- Headache
- Diarrhoea

2. Doxycycline

(This medication is to be purchased with a doctor's prescription.)

How Do You Take it?

- Take 100mg once a day.
- Start one to two days before your departure, continue to take the medication every day during your trip and continue for four weeks after your return.

What are Some Possible Side Effects?

- Sunburn due to sunlight sensitivity (avoid prolonged exposure to sunlight and always use sunscreen).
- Nausea, diarrhoea (minimise this by taking your medication with a meal).
- Inflammation of the oesophagus/throat (avoid taking your medication before going to bed).
- Vaginal yeast infections (treat with antifungal preparations, as directed by your pharmacist or doctor).

What Precautions Should You Take Note of?

- Avoid pregnancy while taking this medication and for one week after the last dose.
- Do not take this medication if you are pregnant or breast-feeding.
- Children aged 8 years and below should not take this medication.

3. Mefloquine

(This medication is subject to availability at pharmacies.)

How Do You Take it?

- Take one 250mg tablet once a week, on the same day each week.
- Check with your pharmacist or doctor for the correct dose if your weight is 45 kg or below.
- Start two to three weeks before your departure, continue to take the medication once a week during your trip and continue once a week for four weeks after your return.

What are Some Possible Side Effects?

Most side effects from this medication usually occur before the second dose. Continue taking Mefloquine unless the following side effects become unbearable:

- Nausea
- Vomiting
- Abdominal pain

If you experience any of the following symptoms, stop taking Mefloquine and see your doctor for an alternative anti-malaria medication:

- Headache
- Insomnia
- Vivid dreams
- Dizziness
- Loss of balance
- Ringing in the ears

Rare side effects including acute anxiety, depression, restlessness and confusion.

3. Mefloquine

What Precautions Should You Take Note of?

- Avoid pregnancy while taking this medicine and for three months after the last dose.
- This medication should not be taken if you have a history of epilepsy or psychiatric disorders (including depression, generalised anxiety disorders, psychosis and schizophrenia) and heart conduction abnormalities.
- Do not take this medication if you are pregnant or breast-feeding.

What Should I Do After My Trip?

Following these guidelines and medications might not guarantee complete prevention of malaria.

If you have a fever and/or experience chills between one week and up to one year after your return, you should seek medical attention.

Inform your doctor that you have been to a malariaprone area. Malaria can be effectively treated if it is detected early. A delay in treatment may result in serious consequences. Traveller's Health & Vaccination Clinic (THVC)
TTSH Medical Centre, Level 4
Contact:
6357 7000 (Central Hotline)
6357 2222 (THVC Hotline)



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