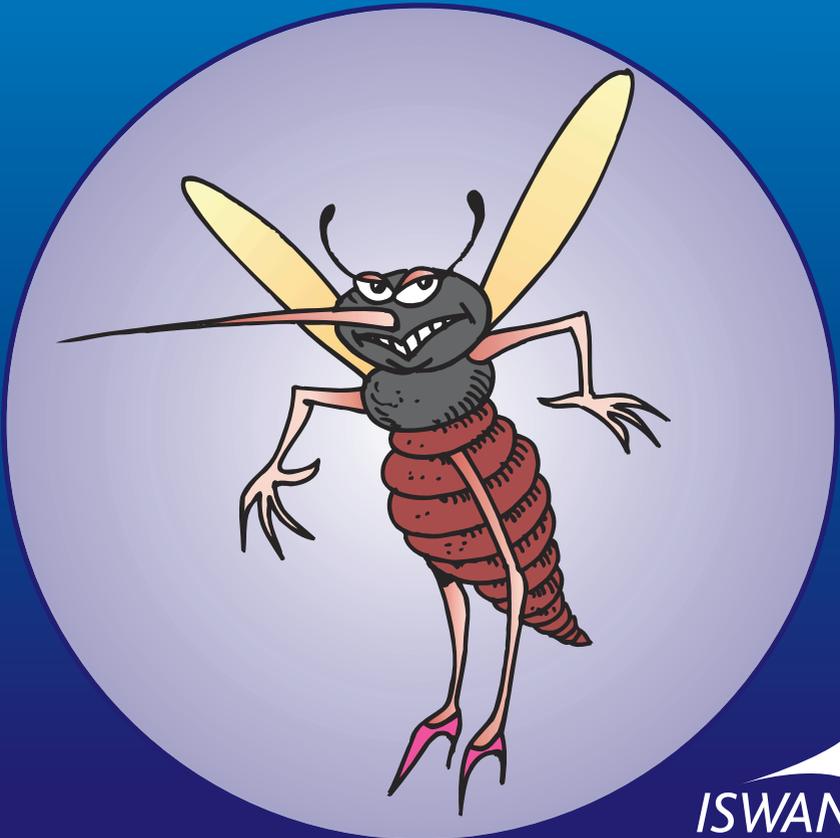


Malaria

You are part of it!
Healthier, fitter, safer.





Malaria is one of the world's most common and serious tropical diseases.

Malaria causes at least 1 million deaths every year, the majority of which occur in resource-poor countries.

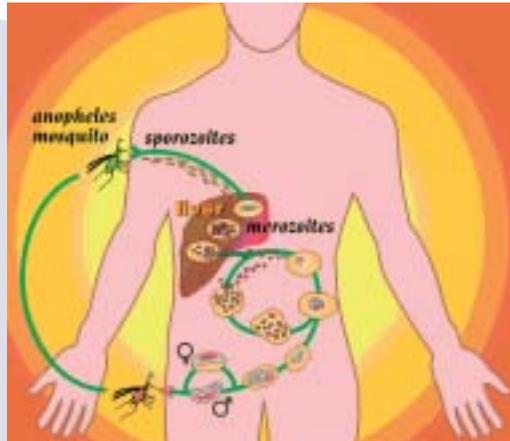
Malaria predominantly affects Africa, south and central America, Asia, and the middle east. The heaviest burden is in Africa, where around 90% of deaths from malaria worldwide occur each year. Nevertheless more than 1/3 of clinical malaria cases occur in Asia and 3% occur in the Americas.

Non-immune travellers are at a substantial risk of acquiring dangerous "falciparum" malaria. Each year as many as 30,000 travellers fall ill with the disease.

Malaria is also a maritime problem :

- Too many seafarers are unaware that malaria is serious and potentially fatal
- The real risk for seafarers is often miscalculated
- Seafarers are not familiar with the signs and symptoms of malaria
- Seafarers do not protect against malaria sufficiently and do not take appropriate protective medication

Malaria - the disease



Malaria is transmitted by mosquitoes.

The malaria parasites travel through the bloodstream to the liver to grow and develop.

They leave the liver and enter the bloodstream again to invade the red blood cells, finish growing, and begin to multiply quickly.

The number of parasites increases until the red blood cells burst, releasing thousands of parasites into the blood.

The parasites then attack other red blood cells, and the cycle of infection continues, causing the common signs and symptoms of malaria.

Malaria - symptoms

The symptoms of the most life-threatening type of malaria are usually experienced between one week and two months after infection.

Symptoms are flu-like, including :

- fever (often exceeding 40°C)
- chills
- malaise
- nausea and vomiting
- fatigue
- myalgia (muscle pain)
- headaches
- sweating

A typical attack lasts 8-12 hours.



Three successive stages may be observed :



1. Cold stage

2. Hot stage



3. Sweat stage



These stages are often NOT observed in the life-threatening “falciparum” malaria.

A patient with severe falciparum malaria may present with confusion, drowsiness, extreme weakness and may develop cerebral malaria with convulsions, an unrousable coma and rapid death.

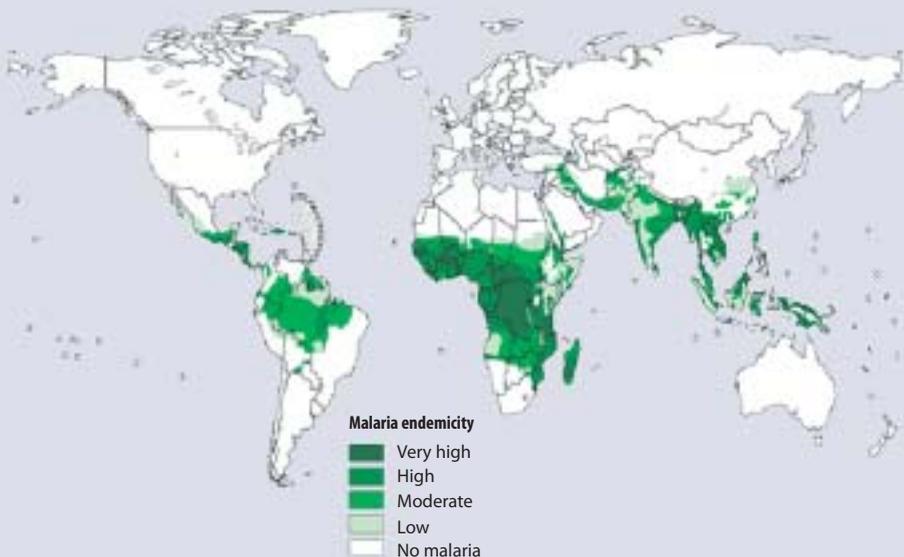
BE AWARE OF THE RISK,...

Review all the ports to be visited, and check the malaria risk.

Compare the overall risk in a country with the risk at the coast and where possible in the individual port.

The risk is influenced by :

- seafarers staying onboard, at anchor, or taking shore leave
- seafarers signing off, travelling inland, or joining the ship in that port
- the duration of stay, daytime or also at dusk or dawn (with higher risk)



...AVOID BEING BITTEN,...

Within 2 miles of a malaria shore it is important that :

- Doors and windows are kept closed after dusk
- Any mosquitoes entering compartments are killed
- Insect spray is used, also under tables and chairs and in dark corners
- Long sleeved shirts and trousers are worn
- Pools of stagnant water, dew or rain are removed
- Refuse bags and bins are sealed properly
- Portholes, ventilation and other openings are covered with fine wire mesh
- Lights are screened to avoid attracting mosquitoes

The mosquitoes are most active in low light hours after dusk and prior to dawn.

Air conditioning helps to keep the mosquitoes away, it is important that it is left on all day.

While sleeping, use undamaged impregnated mosquito nets, put under the mattress, fixed on the four corners of the bed.



...TAKE ANTIMALARIAL DRUGS,...

When a ship is bound for a malaria port, in addition to taking all possible measures to prevent mosquito bites, medication has to be given to the whole crew systematically.

Preventative medication, combined with other measures against mosquitoes, strongly reduces the chance of disease, if taken correctly.

Most medication is taken for a set period before entering a malaria zone, continued while you are in a malaria zone and for a set period after leaving.

Resistance of the parasite against some kinds of malaria medication exists and is high in several regions.

The World Health Organisation advises on the type of prevention to be used in a particular region (www.who.int).

TABLE 1

	Malaria Risk	Type of prevention
Type I	Very limited risk of malaria transmission	Mosquito bite prevention only
Type II	Risk of <i>P. vivax</i> malaria or fully chloroquine-sensitive <i>P. falciparum</i> only	Mosquito bite prevention plus chloroquine chemoprophylaxis
Type III	Risk of malaria transmission and emerging chloroquine resistance	Mosquito bite prevention plus chloroquine+proguanil chemoprophylaxis
Type IV	High risk of falciparum malaria plus drug resistance, or moderate/low risk falciparum malaria but high drug resistance	Mosquito bite prevention plus either atovaquone/proguanil, doxycycline or mefloquine, (take one that no resistance is reported for in the specific areas to be visited)

For more details see SHIP "Guidelines for Malaria Prevention Onboard Merchant Ships"

TABLE 2

Preventative treatment recommended per country, specific for seafarers.

() Type of Prevention between brackets = in many areas seafarers may drop their chemoprophylaxis after a detailed discussion of their itinerary with a specialist doctor and careful evaluation of the malaria risk in relation to shipping, on condition that strict anti-mosquito measures are taken from sunset to sunrise and that malaria emergency treatment and full instructions are on hand.

Countries in BOLD have ports		Type of Prevention	*
East Europe			
ARMENIA	I	*	
AZERBAIJAN	none (I)	*	
GEORGIA	I	*	
KYRGYZSTAN	I	*	
TAJIKISTAN	III	*	
TURKMENISTAN	none (I)	*	
UZBEKISTAN	I	*	
Central Africa			
ANGOLA	IV		
CAMEROON	IV		
CENTRAL AFRICAN REPUBLIC	IV		
CHAD	IV		
CONGO	IV		
DEMOCRATIC REP. OF THE CONGO	IV		
EQUATORIAL GUINEA	IV		
GABON	IV		
SUDAN	IV		
ZAMBIA	IV		
East Africa			
BURUNDI	IV		
COMOROS	IV		
DJIBOUTI	IV		
ERITREA	IV	*	
ETHIOPIA	IV		
KENYA	IV		
MADAGASCAR	IV		
MALAWI	IV		
MAURITIUS	none		
MAYOTTE (FRENCH TERRITORIAL COLLECTIVITY)	IV		
MOZAMBIQUE	IV		
RWANDA	IV		
SOMALIA	IV		
TANZANIA	IV		
UGUNDA	IV		
South Africa			
BOTSWANA	IV	*	
NAMIBIA	(IV)	*	
SOUTH AFRICA	(IV)	*	
SWAZILAND	IV		
ZIMBABWE	IV	*	
West Africa			
BENIN	IV		
BURKINA FASO	IV		
CAPE VERDE	none (I)	*	
GAMBIA	IV		
GHANA	IV		
GUINEA	IV		
GUINEA-BISSAU	IV		
IVORY-COAST	IV		
LIBERIA	IV		
MALI	IV		
MAURITANIA	III	*	
NIGER	IV		
NIGERIA	IV		
SAO TOME AND PRINCIPE	IV		
SENEGAL	IV		
SIERRA LEONE	IV		
TOGO	IV		
North Africa			
ALGERIA	none (I)	*	
EGYPT	none		
MOROCCO	none (I)	*	

* more details see SHIP Guidelines for Malaria Prevention Onboard Merchant Ships

Countries in BOLD have ports	Type of Prevention	*
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East Asia		
CHINA	none (II) (IV)	*
KOREA, DEMOCRATIC PEOPLE'S REPUBLIC OF	none (I)	*
KOREA, REPUBLIC OF	none (I)	*
South East Asia		
CAMBODIA	(IV)	*
EAST TIMOR	(IV)	*
INDONESIA	(IV)	*
LAOS	IV	*
MALAYSIA	none (IV)	*
MYANMAR, (FORMERLY BURMA)	(IV)	*
PHILIPPINES	none (IV)	*
THAILAND	none (IV)	*
VIETNAM	(IV)	*

Indian Subcontinent		
AFGHANISTAN	IV	*
BANGLADESH	(IV)	*
BHUTAN	IV	*
INDIA	(III) (IV)	*
NEPAL	III	*
PAKISTAN	(IV)	*
SRI LANKA	III	*

Australia and the Pacific		
PAPUA NEW GUINEA	IV	*
SOLOMON ISLANDS	IV	*
VANUATA	III	*

Mexico and Central America		
BELIZE	none (II)	*
COSTA RICA	none (II)	*
EL SALVADOR	none (II)	*
GUATEMALA	none (II)	*
HONDURAS	none (II)	*
MEXICO	none (II)	*
NICARAGUA	none (II)	*
PANAMA	none (II) (IV)	*

South America		
ARGENTINA	none	*
BOLIVIA	II	*
BRAZIL	(IV)	*
COLOMBIA	(III) (IV)	*
ECUADOR	(IV)	*
FRENCH GUYANA	(IV)	*
GUYANA	(IV)	*
PARAGUAY	II	*
PERU	(II) (IV)	*
SURINAME	(IV)	*
VENEZUELA	(II) (IV)	*
Caribbean		
DOMINICAN REPUBLIC	(II)	*
HAITI	(II)	*

* more details see SHIP Guidelines for Malaria Prevention Onboard Merchant Ships

Early diagnosis and treatment for a febrile illness

Fever occurring in a seafarer 1 week or more after entering a malaria risk area, and up to 3 months after departure, is a medical emergency that should be investigated urgently.

If the diagnosis of malaria is suspected onboard, call radio medical advise immediately.

In case of probable malaria treat the patient first and then arrange for definitive diagnosis.

A definitive diagnosis can be made by microscopy of stained blood films.



Standby Emergency Treatment

Standby emergency treatment has an important place in the prevention of death by malaria in seafarers.

Standby emergency treatment is indicated for seafarers, who make frequent short stops in endemic areas over a prolonged period of time.

Standby emergency treatment is started when fever and flu-like symptoms occur after being in an area with a malaria risk and where it is not possible to obtain medical attention within 24 hours.

Call radio medical advise when standby emergency treatment is considered.

A full course of effective treatment should always be given once a decision to give anti-malarial treatment has been reached.

Several kinds of malaria medication can be used for standby emergency treatment, often in combination. Guidance can be found at www.who.int and in the SHIP "Guidelines for Malaria Prevention Onboard Merchant Ships".

A person who is developing an attack of "probable malaria" onboard, is best assisted and controlled by a colleague constantly.

All seafarers who were treated on board for "probable malaria" have to consult a doctor upon arrival (if possible with blood slides).

Contact SeafarerHelp by SMS / Skype / Live chat

SMS: +44 (0)762 481 8405

Skype: info-seafarerhelp.org

Live chat: www.seafarerhelp.org

For countries where there is no freephone:

Call collect on +44 (0) 207 323 2737

Alternatively ask us to call you straight back.

Email SeafarerHelp:

help@seafarerhelp.org

If you would like more information and materials, go to www.seafarershealth.org where you can download guidelines, posters and leaflets on other health topics for seafarers: Food Safety, Fit on board, Safe Travel, Healthy Food, Malaria, Overweight and HIV/AIDS.

Find us on:



International Seafarers' Welfare
and Assistance Network

E iswan@iswan.org.uk

W www.seafarershealth.org

