

# Protect against mosquito borne disease

## MALARIA

**Symptoms:** appear 7 days or more (usually 10-15 days) after the bite of an infected mosquito. The first symptoms are fever, headaches and chills and may be mild and difficult to recognise as malaria.

**Comment:** The most dangerous type, P. Falciparum malaria, can progress rapidly to severe forms of the disease, especially in people with weakened immunity system.

**Treatment:** Antimalarial medicines can be used to prevent and treat malaria. No vaccine is currently available for seafarers. As severe falciparum malaria is almost always fatal without treatment, access to early diagnosis and treatment is critical.

## DENGUE

**Symptoms:** Flu-like symptoms occur 4-10 days after the bite of an infected mosquito; high fever accompanied by severe headaches, pain behind the eyes, muscle and joint pains, nausea, vomiting, swollen glands or a rash may occur.

**Comment:** In its most severe form dengue develops into a potentially lethal complication known as Dengue Haemorrhagic Fever (DHF). DHF is a leading cause of serious illness and death in some Asian and Latin American countries. Symptoms of DHF include a drop in temperature, severe abdominal pain, persistent vomiting, rapid breathing, bleeding gums, fatigue, restlessness and blood in the vomit or stool.

**Treatment:** Professional medical care is critical for the next 24-48 hours after symptoms are recognised to avoid complications and risk of death. There is no specific treatment for the disease and no vaccine currently available for seafarers. Early detection and access to proper medical care radically lower the fatality rate.

## YELLOW FEVER

**Symptoms:** fever, muscle pains/backache, headaches, loss of appetite, and nausea or vomiting, appear 3-6 days after the bite of an infected mosquito, and typically last 3 to 4 days. Some patients, however, enter a second, more toxic phase within 24 hours of recovering from initial symptoms. High fever returns and several body systems are affected, usually the liver and the kidneys with patients likely to develop jaundice (yellowing of the skin and eyes), dark urine and abdominal pain with vomiting. Bleeding can occur from the mouth, nose, eyes or stomach.

**Comment:** Half of the patients who enter the toxic phase die within 7-10 days.

**Treatment:** An effective and affordable vaccine is available. A single dose of yellow fever vaccine provides sustained immunity and life-long protection against the disease.

## CHIKUNGUNYA

**Symptoms:** fever and severe joint and muscle pains, headaches, nausea, fatigue and a rash. Joint pain is often debilitating and can vary in duration. The onset of illness usually occurs between 4 and 8 days after a mosquito bite, but can range from 2 to 12 days. Often symptoms are mild and the infection may go unrecognised, or be misdiagnosed in areas where dengue also occurs.

**Comment:** Most patients recover fully, but in some cases joint pains may persist. Occasional cases of eye, neurological and heart complications have been reported, as well as gastrointestinal complaints. Serious complications are uncommon, but in older people with other medical conditions, the disease can lead contribute to the cause death.

**Treatment:** No specific treatment for the disease and no vaccine currently available.

## ZIKA

**Symptoms:** Normally last for 2-7 days and are generally mild and can include mild fever, skin rash, inflammation of the eyes (conjunctivitis), muscle and joint pain, malaise or headaches.

**Comment:** Zika infection during pregnancy causes microcephaly, i.e. babies born with small heads, and other fetal brain malformations. Zika is also a cause of Guillain-Barré Syndrome - a neurological condition that can lead to paralysis and death.

**Treatment:** No specific treatment for the disease and no vaccine currently available.

