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The deadly malaria

One bite from an infected mosquito can be deadly if no urgent diagnosis is made and proper treatment given.

Malaria is a disease of the blood that is transmitted to people when they are bitten by a mosquito that is infected by a parasite called plasmodium. There are four types of plasmodium parasites, namely vivax, ovale, falciparum, and malariae. Plasmodium falciparum, the most common and deadly type of malarial infection, accounts for the majority of malaria cases in Southern Africa.

Not all mosquitoes carry the plasmodium parasite – and humans can only be infected from the bite of an infected mosquito. The parasite is found in the mosquito's salivary glands; it is injected with the mosquito's saliva.

Once inside the human body, the malarial parasites travel through the bloodstream to the liver where they grow to their next stage of development. Within 6-9 days, they leave the liver and enter the bloodstream again, invade the red blood cells, and begin to multiply. The parasites multiply to a point where the red blood cells burst, releasing thousands more parasites back into the bloodstream. This cycle of infection continues as the released parasites invade more and more red blood cells. The results of these invasions are common signs and symptoms of malaria.

Malaria ranges from being mild and uncomplicated to severe. If it is not diagnosed and properly treated, the parasite can "lie low" in your body for months or even years, making comebacks in the form of malarial symptoms.

Uncomplicated malaria may rapidly progress to severe malaria if it is not treated appropriately.

Diagnosis

Malaria calls for urgent diagnosis, treatment and care as it is potentially life-threatening and can cause kidney and liver failure, induce a coma, and lead to death. Familiarise yourself with the symptoms of malaria, especially if you have visited a malaria area. Consult with your doctor immediately if you have any suspicions that you might have the disease.

The National Department of Health recommends that a conclusive diagnostic blood smear (blood test) be conducted to check for the possible infection with malaria. In addition, a rapid malaria antigen test is advisable if the illness proves to be of the severe kind; this test is also recommended depending on the pattern of blood resistance of the parasite in the geographical area where the malaria was acquired.

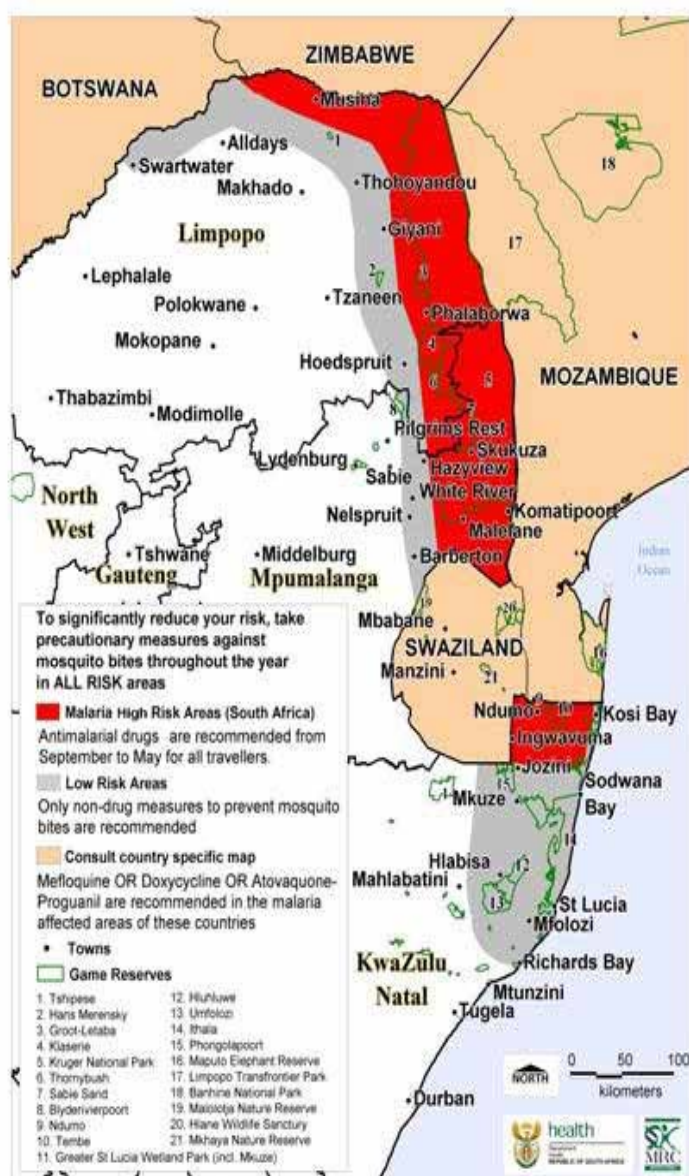
Malaria falls under the prescribed minimum benefit (PMB) 172S: *Malaria; trypanosomiasis (African sleeping sickness or Chagas' disease): other life-threatening parasitic disease*. The PMB entitlement includes diagnosis, medical management and care.

PMBs do **not** include medicine treatment for members who plan to travel to a known malaria area. Cover for preventative treatment is dependent on each individual scheme option. Contact your medical scheme for more information.

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In most cases, it will be uncertain whether the fever chills are as a result of malaria until the diagnostic tests have been completed. This therefore means that your scheme must provide cover for the consultation(s) and appropriate investigation(s) necessary to make the diagnosis retrospectively. If your scheme initially paid for these costs from your savings account, you have to request them to review the claims and allocate the costs to the risk pool; PMB-related services may never be paid from the savings account. If your funds were depleted and you had to pay for it yourself, the scheme must once again be notified and requested to re-process the claims accordingly.

Malaria areas in South Africa (courtesy of [Malaria in Southern Africa website](#))



Symptoms of malaria

- Periodic attacks of chills, fever and sweating, with no apparent cause, that recur every one, two or three days
- Headaches
- Cold shivers and hot sweats
- Weakness
- Dizziness
- Muscle aches
- Abdominal pain
- Loss of appetite
- Diarrhoea
- Nausea and vomiting
- Sore throat and/or coughing
- Jaundice (yellowing of the skin and/or whites of the eyes) and anaemia, which are caused by the destruction of red blood cells

Treatment

Once you have been diagnosed with malaria and its severity has been established, you need proper treatment using the most effective treatment method(s) available. The severity of malaria is often underestimated; careful monitoring of all patients – suffering from both uncomplicated and severe malaria – should be conducted by making clinical follow-ups and repeated blood smear tests. Patients with severe malaria need urgent care and management of the condition, comprising of a clinical assessment, specific anti-malarial treatment, adjunctive therapy, and supportive care. This could also include the admission to a medical ward, and high care and/or intensive care units, depending on the clinical condition of a patient.

Prevention is better than cure

Malaria poses a risk to travellers to, and residents in, malaria areas. Appropriate advice and the use of drug and non-drug prophylactic measures can prevent most travellers from contracting the disease.

Use DSPs for your malaria

Schemes are allowed to use designated service providers (DSPs) to provide PMB-related services such as medication, consultations, investigations, and hospitalisation. DSPs could be radiology and pathology practices, doctors, pharmacists, hospitals and other healthcare providers where you can obtain your PMB-related services without having to co-pay for them.

Remember! A medical scheme:

- ❖ can apply co-payments if you voluntarily choose not to use its DSPs; and
- ❖ may never pay your medical bill from your savings account, malaria is a PMB and should be covered from the total risk pool (all the contributions of all the members) of the scheme.

Going somewhere?

Find out whether your destination is malaria-free or not. The risk of malaria is lower during the cold and dry seasons. Take precautionary measures to prevent mosquito bites in all risk areas.

If recommended, take appropriate medication (as directed). No prophylaxis is 100% effective, but the correct medicine will reduce your risk of developing the severe form of the illness. Seek immediate medical attention if you suspect you may have contracted malaria.

The ABC of malaria prevention

- A. Awareness** and assessment of malaria risk – know the areas affected by malaria
- B. Avoid mosquito Bites**
- C. Comply** with medication prophylaxis, when indicated – discuss the medicine prophylaxis options with your general practitioner
- D. Early Detection** of malaria – know the symptoms of malaria and act early
- E. Effective** treatment

How to avoid mosquito bites (courtesy of [National Department of Health](#))

- ❖ Remain indoors between dusk and dawn.
- ❖ Wear long-sleeved clothing (preferably light-coloured), long trousers, and socks.
- ❖ Apply a mosquito repellent to exposed skin; repeat as recommended on the container label. Avoid the eyelids, lips, and sun-burnt or damaged skin; do not spray it on the face and do not overdose young children.
- ❖ Stay in well-constructed and well-maintained buildings in the best-developed part of town.
- ❖ Cover doorways and windows with screens, but if they are not available, windows and doors should be closed at night.
- ❖ Ceiling fans and air conditioners are very effective.

- ❖ Use a mosquito-proof net over the bed, with the edges tucked in. Ensure that the net is not torn and that there are no mosquitoes inside. Protection will be increased by periodically treating the net with an insecticide registered for this purpose.
- ❖ Spray inside the house with an aerosol insecticide (for flying insects) at dusk, especially the bedrooms, after closing the windows.
- ❖ Use mosquito mats impregnated with an insecticide (heated electrically or by a non-electric lamp), or burn mosquito coils in living and sleeping areas during the night.
- ❖ Treat clothes with an insecticide registered for this purpose.

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Contacted sources

Department of Health: <http://www.doh.gov.za/docs/factsheets/guidelines/malaria/prevention.pdf>,

Pictures: courtesy of www.flickr.com & Microsoft Clip Art