

## GRF Fact Sheet on Malaria

*“From Thoughts to Action”*

### Malaria

Malaria is one of the most dangerous and widest spread tropical diseases. It causes around 300 million illnesses and one million deaths every year. Most affected are young children under five and pregnant women with (transitory) weak immune systems. 91% of malaria-related fatalities take place in Sub-Saharan Africa. Besides weakening public health, the disease has strong economic and social impacts on those developing countries most affected, hindering socio-economic development, reinforcing poverty and putting an immense burden on the country's health system with health expenditures that account for up to 40% of a country's health expenditure.<sup>1</sup>

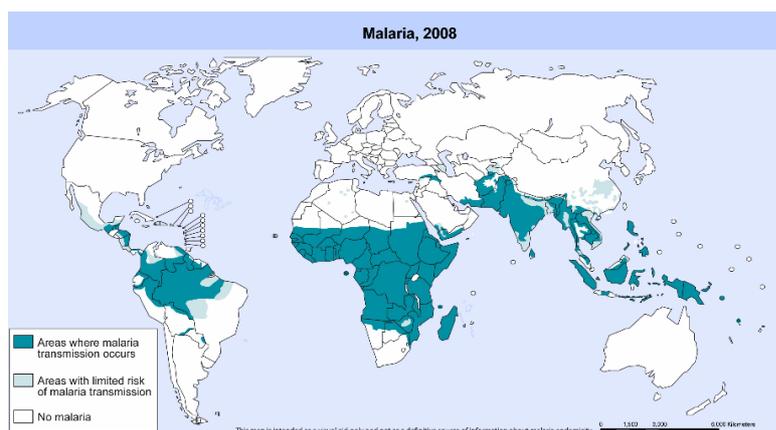
Malaria is transmitted by infected female mosquitoes. There are 4 different types of germ, which evoke different forms of human malaria. An uninfected mosquito that bites an infected person becomes a transmitter of the disease. There is no human to human transmission.<sup>1</sup>

“The common first symptoms – fever, headache, chills and vomiting – usually appear 10 to 15 days after a person is infected. If not treated promptly with effective medicines, malaria can cause severe illness and is often fatal.”<sup>2</sup>

### Malaria Regions

“Large and devastating epidemics can occur when the mosquito-borne parasite is introduced into areas where people have had little prior contact with the infecting parasite and have little or no immunity to malaria, or when people with low immunity move into areas where malaria cases are constant. These epidemics can be triggered by wet weather conditions and further aggravated by floods or mass population movements driven by conflict.”<sup>2</sup>

“Factors which may precipitate a malaria epidemic fall into two categories: natural (climatic variations, natural disasters), and man-made (conflict and war, agricultural projects, dams, mining, logging). Most of these factors modify the physical environment, and increase the capacity of mosquitoes to transmit malaria. Some factors also result in massive population movements that expose non-immune populations to malaria infection.”<sup>6</sup>



Source: [http://gamapserver.who.int/mapLibrary/Files/Maps/Global\\_Malaria\\_ITHRiskMap.JPG](http://gamapserver.who.int/mapLibrary/Files/Maps/Global_Malaria_ITHRiskMap.JPG)

- Sub-Saharan African countries are by far the most malaria-prone. 91% of all 881 000 malaria-related deaths in 2006 register on the African Continent.<sup>5</sup> “109 countries were endemic for malaria in 2008, 45 within the WHO African region.”<sup>5</sup>
- “The risk of dying from malaria is considerably higher in Sub-Saharan Africa than other parts of the world for several reasons: transmission of the disease is more intense, the more lethal form of the malaria parasite – *Plasmodium falciparum* – is more abundant, and the region tends to have weak health systems.”<sup>7</sup>

## People at Risk

- Malaria is the ninth most significant cause of death and disability globally.”<sup>3</sup>
- “There were an estimated 247 million malaria cases (...) in 2006, causing nearly a million deaths, mostly of children under 5 years.”<sup>5</sup>
- “About 3.3 billion people - half of the world's population - are at risk of malaria. Every year, this leads to about 250 million malaria cases and nearly one million deaths. People living in the poorest countries are the most vulnerable.”<sup>4</sup>
- “In areas of high and stable transmission people develop immunity following repeated infections, so that the populations at greatest risk of becoming sick with malaria are young children, who have not yet had multiple infections.”<sup>6</sup>
- “One in five (20%) of all childhood deaths [children >5 years] in Africa are due to malaria. It is estimated that an African child has on average between 1.6 and 5.4 episodes of malaria fever each year. Every 30 seconds a child dies from malaria in Africa.”<sup>4</sup>
- “An estimated 10 000 pregnant women and up to 200 000 infants die each year as a result of malaria during pregnancy. Pregnant women living in places where malaria is highly prevalent are four times more likely than other adults to get malaria and twice as likely to die of the disease. Once infected, pregnant women risk anaemia, premature delivery and stillbirth. Their babies are likely to be of low birth weight, which makes them unlikely to survive their first year of life.”<sup>8</sup>
- “In areas of lower or irregular transmission all age groups fall ill when infected and are vulnerable to severe disease.”<sup>6</sup>
- “Up to 30% of malaria deaths in Africa occur in the wake of war, local violence or other emergencies. Malaria deaths often far exceed those caused by the conflict or problem. Displaced people living in makeshift housing are vulnerable to malaria because they are more likely to be bitten by mosquitoes, are often ill with other infections and lack access to health care.”<sup>8</sup>

## Malaria Hinders Socio-Economic Development

- “Malaria is both a root cause and consequence of poverty; it puts a heavy economic burden on endemic countries and contributes to the cycle of poverty.”<sup>6</sup>
- “Malaria takes an economic toll - cutting economic growth rates by as much as 1.3% in countries with high disease rates.”<sup>2</sup>
- “In Africa alone, the total economic burden is estimated at US\$ 12 billion annually.”<sup>8</sup>
- “Malaria’s health costs include both personal and public expenditures on prevention and treatment. In some heavy-burden countries, the disease accounts for up to 40% of public health expenditures (...).”<sup>2</sup>
- “[Malaria] traps families and communities in a downward spiral of poverty, disproportionately affecting marginalized and poor people who cannot afford treatment or who have limited access to health care.”<sup>4</sup>
- “People faced with a high threat of malaria spend as much as a quarter of their incomes on medical visits, mosquito nets, medicines, laboratory tests and funerals for victims. They are less productive and lose income because of absences from work or being too sick to plant and harvest crops. Children lose out on educational opportunities too.”<sup>8</sup>

## Malaria Control and Prevention

Having halted Malaria by 2015 and begun to reverse the incidence of malaria is a target of the UN Millennium Development Goal Nr. 6. Malaria control and complete elimination over time is further faced by the WHO Global Malaria Programme<sup>9</sup> and the Global Malaria Action Plan<sup>10</sup>.

Prevention and treatment rely mainly on the use of insecticide-treated nets, anti-mosquitoes sprays and anti-malarial prophylactic or counterfeit drugs. Vaccine for malaria and methods of vector control (eliminate/control malaria by eradicating/controlling the malaria-bearing mosquito) are under development.

- “Across Sub-Saharan Africa, the use of insecticide-treated bed nets among children jumped from 2 per cent in 2000 to 20 per cent in 2006. In fact, 19 of 22 sub-Saharan African countries with trend data showed at least a threefold increase during this time period; 17 of them saw at least a fivefold increase.”<sup>7</sup>
- “Indoor residual spraying is the most effective means of rapidly reducing mosquito density. Its full potential is obtained when at least 80 % of premises with malaria vectors are sprayed.”<sup>4</sup>
- “Inappropriate use of antimalarial drugs in the past century contributed to widespread resistance in the malaria parasite to drugs such as chloroquine, leading to rising rates of sickness and death.”<sup>4</sup> “[This] (...) hinders malaria control and is therefore a major public health problem.”<sup>9</sup>
- “Recent data shows that large-scale use of WHO recommended strategies could rapidly reduce malaria, especially in areas of high transmission such as Africa. WHO and Member States have made significant gains in malaria elimination efforts.”<sup>2</sup>

## References

The information provided in this fact sheet on malaria is based on the following references:

<sup>1</sup> Sprechzimmer. <http://www.sprechzimmer.ch/sprechzimmer/Krankheitsbilder/Malaria.php>

<sup>2</sup> WHO (2009): Fact Sheet Nr. 94. Malaria.  
<http://www.who.int/mediacentre/factsheets/fs094/en/index.html>

<sup>3</sup> Malaria Atlas Projekt. <http://www.map.ox.ac.uk/>

<sup>4</sup> WHO. Fact File. 10 Facts on Malaria. [http://www.who.int/features/factfiles/malaria/malaria\\_facts/en/](http://www.who.int/features/factfiles/malaria/malaria_facts/en/)

<sup>5</sup> WHO (2008). World Malaria Report 2008. Geneva.  
<http://www.who.int/malaria/publications/atoz/9789241563697/en/index.html>

<sup>6</sup> Malariaconsortium. Malaria: <http://www.malariaconsortium.org/pages/malaria.htm>. About Malaria: [http://www.malariaconsortium.org/pages/about\\_malaria.htm](http://www.malariaconsortium.org/pages/about_malaria.htm)

<sup>7</sup> United Nations (2009): The Millennium Development Goals Report 2009. New York.

<sup>8</sup> WHO. Roll Back Malaria Department (2005): Malaria (Brochure). Geneva.

<sup>9</sup> WHO Global Malaria Programme: <http://www.who.int/malaria/en/>

<sup>10</sup> The Global Malaria Action Plan: <http://www.rollbackmalaria.org/gmap/>