

## Malaria

### The Challenge

Malaria remains one of the world's deadliest diseases, claiming hundreds of thousands of lives each year. It robs families and communities of prosperity by removing millions of people from productive work and education.

- **About half the world's population – in more than 100 countries – is at risk of malaria.**<sup>1</sup>
  - Malaria is endemic in 97 countries, causing 214 million cases and 438,000 deaths per year.<sup>2</sup>
  - Malaria can be transmitted when an Anopheles mosquito bites an infected person and carries with it a small amount of blood containing microscopic malaria parasites. Transmission is more likely in warm and wet climates.
- **Sub-Saharan Africa is disproportionately affected by malaria, with 89 percent of the world's malaria cases and 91 percent of malaria deaths.** Approximately 278 million people in Africa live in households without an insecticide-treated net.<sup>3</sup>
- **Malaria places enormous strain on overstretched health systems in malaria-endemic countries.**
  - In malaria-endemic countries in Africa, an average of 25-35 percent of all outpatient clinic visits are for malaria; 20-45 percent of all hospital admissions are caused by malaria.<sup>4</sup>
- **The burden of malaria is overwhelmingly borne by children in poor countries; pregnant women are also at particular risk.**
  - Approximately 70 percent of malaria cases are children under the age of five.<sup>5</sup>
  - The disease is an important cause of illness and death during pregnancy. It can also cause miscarriage, low birth weight and premature birth.<sup>6</sup>

### The Opportunity

The trajectory of malaria infection is pointing down, a result of sustained impact against the disease over a 15-year period. A holistic approach including long-lasting insecticide-treated mosquito nets, indoor spraying, rapid testing, and artemisinin-based combination therapies (ACTs) has proven to be an effective way to combat the disease. Through committed partnership, the world has an opportunity to end malaria as a major public health threat by 2030.

- **Impact against malaria is a global health success story.**
  - Since 2000, there has been a 60 percent reduction in deaths associated with malaria. That means that 6.2 million deaths have been averted. New malaria cases are down 37 percent since 2000. The Millennium Development Goal of halting and reversing the spread of malaria by 2015 has been achieved.<sup>7</sup>
  - An increasing number of countries are moving towards elimination of malaria through effective malaria control. As of December 2014, 19 countries are in the pre-elimination or elimination phase, and seven are in the prevention of reintroduction of malaria phase. Four countries have been certified malaria-free since 2000.<sup>8</sup>

- **Malaria control efforts are reaching those most at risk, particularly children under the age of five, people in sub-Saharan Africa, and pregnant women.**
  - Mortality rates among children under five have fallen by 65 percent, resulting in an estimated 5.9 million deaths averted.
  - Almost 50 percent of all people at risk for malaria in sub-Saharan Africa had access to an insecticide-treated mosquito net in 2013, an increase from 3 percent in 2004.<sup>9</sup>
  - The Global Fund works with communities to ensure young children and pregnant women in particular are protected by mosquito nets.
  - In countries such as the Democratic Republic of Congo, deaths among children under the age of five have declined from 158 cases per 1000 in 2007 to 104 per 1000 in 2013. However, malaria remains the country's leading cause of illness and death.<sup>10</sup>
  
- **The world has stepped up its financial commitment to malaria control, but more is needed.**
  - The WHO Global Technical Strategy for Malaria, adopted in 2015, set a global target of a 90 percent reduction in malaria incidence and mortality by 2030.
  - International and domestic funding for malaria control and elimination totaled US\$2.7 billion in 2013, a threefold increase since 2005. However, international and domestic funding for malaria programs must triple to US\$8.7 billion if we are to meet the global target of a 90 percent reduction in malaria incidence and mortality by 2030. <sup>11</sup>
  - Previous experience demonstrates that when financial commitment to malaria control weakens, the disease makes a resurgence.<sup>12</sup>
  
- **The Global Fund has invested more than US\$7 billion in programs that prevent and treat malaria, using a comprehensive approach that combines education, prevention, diagnosis and treatment.**
  - The Global Fund is the world's biggest funder of malaria programs. Global Fund-supported programs have distributed 548 million mosquito nets, treated 515 million malaria cases, and provided indoor spraying for 58 million homes.<sup>13</sup>
  - A total of 219 million mosquito nets were distributed between 2012 and 2014 in sub-Saharan Africa, the region with the highest malaria burden and the lowest capacity to pay.
  - The Global Fund's procurement approach has achieved substantial cost savings, enabling partners to purchase more mosquito nets. Nets now cost as low as US\$3 per net, a 30 percent reduction from the price of 2013.
  
- **Progress is threatened by new strains of malaria that are resistant to commonly used malaria treatment.**
  - Nations such as Viet Nam have seen a 90 percent decline in malaria cases and deaths, due to the spread of mosquito nets and treatment. However in the broader Mekong sub-region, emerging mosquito resistance to insecticides, combined with parasite resistance to antimalarial medicines such as artemisinin, could trigger a rise in global malaria mortality. If this were to spread across India and into Africa, the consequences could create new challenges in reducing and eliminating malaria.<sup>14</sup>

### **Country Example – Democratic Republic of Congo**

Malaria is the leading cause of sickness and death in the Democratic Republic of Congo. Together with Nigeria, DRC accounts for 40 percent of malaria deaths globally. Among children under five, who are most vulnerable to the disease, malaria cases dropped from 158

cases for every 1,000 people in 2007 to 104 cases for every 1,000 people in 2013. The single most important factor in reducing the morbidity and mortality of malaria was the distribution of insecticide-treated nets. Between 2004 and 2013, approximately 300,000 lives were saved, but much remains to be done. Work continues, with a primary focus on children under five and pregnant women.

### **Country Example – Viet Nam**

In Viet Nam, the number of new cases of malaria and of malaria-related deaths have decreased by more than 90 percent since 2000. The cumulative number of lives saved by malaria prevention and treatment has risen steadily, with the spread of mosquito nets and artemisinin-based treatment. Yet progress has slowed in recent years, as resistance to existing medications has spread. After reducing the number of infections to around 20,000 in 2008, that number rose and declined again slightly in the years that followed. In Vietnam's Tay Ninh province, a mosquito net distribution campaign is giving more children the chance of a malaria-free life. The nearby rubber plantations are a breeding ground for malaria. Making sure there are enough nets – and that they are being used properly – is an enduring challenge.

---

<sup>1</sup> WHO World Malaria Report 2014

[http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830_eng.pdf?ua=1)

<sup>2</sup> WHO World Malaria Report 2014

[http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830_eng.pdf?ua=1)

<sup>3</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>4</sup> Lantos-Hyde United States Government Malaria Strategy 2009-2014

<sup>5</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>6</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>7</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>8</sup> WHO World Malaria Report 2014

[http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/144852/2/9789241564830_eng.pdf?ua=1)

<sup>9</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>10</sup> Global Fund – Results 2015

[http://www.theglobalfund.org/documents/publications/annual\\_reports/Corporate\\_2015ResultsReport\\_Report\\_en/](http://www.theglobalfund.org/documents/publications/annual_reports/Corporate_2015ResultsReport_Report_en/)

<sup>11</sup> World Health Organization and UNICEF - Achieving the Malaria MDG Target – WHO/UNICEF

[http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442\\_eng.pdf?ua=1](http://apps.who.int/iris/bitstream/10665/184521/1/9789241509442_eng.pdf?ua=1)

<sup>12</sup> Malaria resurgence: a systematic review and assessment of its causes – Malaria Journal

<http://www.malariajournal.com/content/11/1/122>

<sup>13</sup> Global Fund – Results 2015

[http://www.theglobalfund.org/documents/publications/annual\\_reports/Corporate\\_2015ResultsReport\\_Report\\_en/](http://www.theglobalfund.org/documents/publications/annual_reports/Corporate_2015ResultsReport_Report_en/)

<sup>14</sup> Global Fund – Results 2015

[http://www.theglobalfund.org/documents/publications/annual\\_reports/Corporate\\_2015ResultsReport\\_Report\\_en/](http://www.theglobalfund.org/documents/publications/annual_reports/Corporate_2015ResultsReport_Report_en/)