



# **RBM Partnership to End Malaria** World Malaria Report 2021 **Narrative and Messaging**

# **Overview**

This year's World Malaria Report published by the World Health Organization (WHO) shines new light on the heavy toll malaria continues to have on the world's poorest and most vulnerable people, particularly children in Africa. It also confirms that global investments and partnership in malaria prevention, control and elimination are essential if we are to continue saving millions of lives and strengthening health systems that can protect against malaria and new and emerging diseases.



Since 2000, global partnership and efforts cut malaria death rates by half, prevented 1.7 billion malaria cases and saved 10.6 million lives. However, new and more precise methodology used by the World Health Organization to report causes of death in children under five shows the impact of malaria in Africa is significantly higher than previous estimates, with 80% of annual deaths from this preventable and treatable disease in the region among children under five. This higher estimate signals that malaria also has an even greater burden on fragile health systems.

According to the report, in 2020, countries and partners averted what could have been a doubling of malaria deaths as a result of the COVID-19 pandemic. Longterm investments in fighting malaria, by the Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. President's Malaria Initiative (PMI) and other partners, also enabled malaria-endemic countries to be more resilient in their COVID-19 responses. The outcome modest disruption in the malaria fight - resulted from the combination of sustained and new investments, heroic efforts by countries, partners and community health workers using innovative strategies and strong political will. This combination of factors is also what drove the significant decline in malaria cases and deaths earlier this century and increased the number of countries approaching and reaching elimination.

However, history also makes clear that malaria is unforgiving and the fight against this disease is at a precarious juncture. Increasing population rates mean there are more people at risk of malaria, especially those living in remote and rural communities, who need to be reached with live-saving interventions. In addition, the ongoing reality of COVID-19 and humanitarian emergencies continue to threaten access to, and require innovations in, the delivery of malaria interventions. And, if not stopped in their tracks, emerging drug and insecticide resistance due to the constantly evolving malaria parasite and mosquito can quickly undo decades of progress.

With renewed urgency and increased investment, we can head off disaster. New investments in malaria, including Gavi, the Vaccine Alliance's recent decision to fund the first malaria vaccine programme, can replicate and even expand success while also strengthening pandemic preparedness and response capabilities. By strengthening health systems, optimizing the use of current malaria interventions and accelerating the development and introduction of transformative ones, we can once again achieve a rapid decline in malaria deaths and infections, improve countries' resilience against current and future pandemics and save millions more lives. By doing so, we will usher in the end of malaria within a generation.

The time to act is now.

# **Key Messages and Proof Points**

## 1) A more accurate scale of the malaria toll.

This year's World Malaria Report shines new light on the heavy toll malaria continues to have on the world's poorest and most vulnerable people, particularly children in Africa. It also confirms that global investments and partnership in malaria prevention, control and elimination are essential if we are to continue saving millions of lives and strengthening health systems that can protect against malaria and new and emerging diseases.

Since 2000, global partnership and efforts cut malaria death rates by half, prevented 1.7 billion malaria cases and saved 10.6 million lives. However, new and more precise methodology used by the World Health Organization to report causes of death in children under five shows the impact of malaria in Africa is significantly higher than previous estimates, with 80% of annual deaths from this preventable and treatable disease in the region among children under five. This higher estimate signals that malaria has an even greater burden on fragile health systems.

Whilst alarming, the revised figures provide a more accurate picture of the global burden and underscore the urgency for eradicating a disease that is preventable and treatable, yet still threatens half the world's population and has broader impacts for global economic and health security.

- This year's World Malaria Report applied a new statistical method to calculate the number of malaria deaths among children under five years of age since 2000.
  - This new methodology, described in detail in <u>The</u> <u>Lancet</u> on 7 November 2021, is being used across WHO and provides more precise cause-of-death estimates for young children for all diseases, including malaria.
  - Applying the new methodology reveals higher numbers of estimated malaria deaths across the entire period 2000–2020, compared with previous analyses. In 2020, there were an estimated 627,000 malaria deaths worldwide.
  - It shows that malaria accounts for a larger share (7.8%) of deaths among children under the age of 5 than previously recognized. The previous WHO methodology found that malaria accounted for 4.8% of deaths among children under five.
  - Even after applying the new methodology, the malaria death rate maintained an overall downward trend from 2000 to the present day.
    - The malaria mortality rate fell from 30.1 deaths per 100,000 population at risk in 2000, to 13.8 in 2019 and 15.3 in 2020.
- An estimated 10.6 million malaria deaths were averted globally in the period 2000–2020; most of these deaths (95%) were averted in the WHO African Region. An estimated 1.7 billion malaria cases were averted globally between 2000-2020.

- 627,000 annual malaria deaths, with children under five accounting for 80% of all deaths in sub-Saharan Africa, is unacceptable for a preventable and treatable disease.
- 214,000 million malaria cases in 2020 burden fragile health systems and limit countries' ability to detect and fight other new and emerging diseases.
- Malaria also places a heavy burden on economies and health systems, leading to US\$12 billion in lost productivity annually. It also disproportionately impacts women and adolescent girls, resulting in significant and long-term health and economic costs for themselves, their families and communities.
- The African continent disproportionately carries the global malaria burden, accounting for 95% of all malaria cases and 96% of malaria deaths, with this figure expected to rise in the future.
- While overall estimates of the malaria burden between 2000 and 2019 are significantly higher than previously reported, the overall trend of malaria deaths declining by half remains the same with the malaria mortality rate falling from 30.1 deaths per 100,000 population at risk to 13.8 within the same period.
  - » Previous estimates of malaria deaths:
    - 2000 = 736,000
    - 2019 = 409,000
  - » Updated estimates of malaria deaths:
    - 2000 = 896,000
    - 2019 = 558,000

## 2) Global efforts avoided a worst-case scenario of a doubling of malaria deaths in 2020.

According to the report, in 2020, countries and partners averted what could have been a doubling of malaria deaths. Long-term investments in fighting malaria, by the Global Fund to Fight AIDS, Tuberculosis and Malaria, the U.S. President's Malaria Initiative (PMI) and other partners enabled countries to be more resilient in their COVID-19 responses.

The outcome – modest disruption in the malaria fight – resulted from the combination of long-term malaria investments, heroic efforts by countries, partners and community health workers using innovative strategies, strong political will, and new funding. This combination of factors is what also drove the significant decline in malaria cases and deaths earlier this century and increase in the number of countries marching toward elimination.

In 2020, with the stark reality of COVID-19 setting in, countries were pressed to balance their response to existing epidemics like malaria and COVID-19. Long-term and new investments and close collaboration with countries and partners were critical to helping minimize COVID-19's impact on the malaria fight. Still, there was an increase of 69,000 more malaria deaths, two thirds of which are attributed to service disruptions due to COVID-19, and an increase of 14 million more malaria cases in 2020.

#### COVID-19 response

- While estimated malaria deaths rose by 69,000 as a result of disruptions in malaria diagnosis and treatment due to COVID-19, malaria continues to kill more people in Africa than COVID-19.
- Long-term investments by countries, the Global Fund and PMI were critical to mitigate COVID-19's impact on the malaria fight, minimizing disruptions to the distribution of life-saving malaria prevention tools, securing personal protective equipment for frontline health workers, and increasing awareness of how families could continue to protect themselves from COVID-19 and malaria.
- Quick action by donor countries also unlocked new funding to do more to protect the gains made against malaria over the last 20 years and deploy malaria programmes and resources to fight COVID-19.
- Countries responded quickly to updated guidance from WHO, the RBM Partnership to End Malaria and other partners, created new best practices and introduced innovative solutions and tools. This ensured that ahead of the rainy season and by the end of 2020, nearly all planned malaria programmes were executed on time.
- Globally, countries and partners ensured that 72% of all life-saving insecticide-treated net distribution programmes went ahead in 2020.
- More children than ever before were reached with seasonal malaria chemoprevention, with these campaigns continuing in 2021.
- Close collaboration between national governments and global and bilateral partners the Global Fund, PMI and the RBM Partnership to End Malaria – used real-time data to avoid widespread stockouts of life-saving malaria medicines and rapid diagnostic tests.
- At the same time, malaria programmes and personnel including community health workers, the majority of which are women on the frontlines of the malaria fight were leveraged and re-deployed for the COVID-19 response. This included educating communities about safety measures and encouraging people to get tested at the onset of fevers, a shared symptom between malaria and COVID-19.

#### Key success factors

- Early in the 21st century, an influx of new funding drove the rapid rate of decline in malaria deaths and cases. Global efforts halved malaria deaths rates since 2000, saving 10.6 million lives and averting 1.7 billion malaria cases.
- Significant investments drove the research, development and delivery of transformative tools including long-lasting insecticide nets, rapid diagnostic tests and antimalarial drugs and, more recently, the first-ever malaria vaccine.
- These investments also enabled the scaling up of a community health workforce, which was instrumental in detecting, diagnosing and treating malaria and delivering life-saving malaria interventions to hundreds of millions of people at risk in remote and rural communities.
- More recently, the increased adoption of data-driven decision making and new surveillance tools are tracking malaria transmission and optimizing the use of current and newer tools – such as next generation nets and the forthcoming malaria vaccine – to local contexts.
- The High Burden High Impact approach has facilitated sub-national stratification and modeling, with countries using real time data to guide the targeting of the most impactful interventions to drive impact.





#### 3) We are at a precarious juncture in the fight against malaria.

However, history also makes clear that malaria is unforgiving and the fight against this disease is at a precarious juncture.

Increasing population rates mean there are more people at risk of malaria, especially those living in remote and rural communities, who need to be reached with live-saving interventions. In addition, the ongoing reality of COVID-19 and humanitarian emergencies, as well as the fact that malaria is disproportionately concentrated in low-income countries, continue to threaten access to, and require innovations in, the delivery of malaria interventions. And, if not stopped in their tracks, emerging drug and insecticide resistance due to the constantly evolving malaria parasite and mosquito, can quickly undo decades of progress.

- Insecticide and drug resistance is growing, with new signs of partial drug resistance showing up for the first time in East Africa.
- We are seeing rising malaria cases in urban regions that were previously malaria-free, with the invasive species Anopheles stephensi, usually found in the Middle East and South Asia, recently discovered in new areas of Africa.
- New gene mutations that threaten the effectiveness of rapid diagnostic tests are also emerging.
- Humanitarian emergencies due to factors such as climate change and political unrest – and the ongoing pandemic will continue to disrupt access to lifesaving malaria interventions and can lead a rapid surge in malaria cases and deaths.
- The population in Africa is increasing consistently, meaning we need to reach more people at risk with life-saving interventions, which requires increased funding and smarter use of tools.

# 4) Political will to end malaria remains strong and is delivering results.

A growing number of countries and regions have advanced towards elimination, with 23 countries achieving zero malaria cases since 2000 and the South East Asia region achieving global elimination targets for 2020.

- Countries on the verge of elimination weren't deterred by COVID-19. In 2021, China and El Salvador were certified malaria-free by WHO after achieving 3 consecutive years of zero malaria cases.
  - » Maintaining zero cases is a testament to their commitment to protect hard-won gains and keep the disease at bay (source).
  - » Between 2000 and 2020, the number of malariaendemic countries with fewer than 10 indigenous cases increased from 4 to 23; the number with fewer than 100 cases increased from 6 to 26; and the number with fewer than 1000 increased from 14 to 33.
- In 2020, countries in South East Asia achieved global targets of reducing malaria cases and deaths by 40% over levels in 2015.
  - India, one of 11 high burden countries, continued to bring innovative approaches and political will to further drive down malaria deaths and cases in 2020.
- Over the past two decades, the number of countries that have reduced the burden of malaria to under 1,000 annual cases has more than doubled from 14 to 33.

High burden malaria countries and donor countries have also taken steps to increase commitment and funding for the malaria fight.

- Since 2018, over 20 African countries have rolled out national 'Zero Malaria Starts with Me' campaigns with support from the RBM Partnership to End Malaria and the African Union Commission, to mobilize millions in additional domestic resources while reinvigorating existing political commitment and accelerating action towards eliminating malaria in Africa by 2030.
- Increasingly more African countries are establishing End Malaria Councils (EMC) and End Malaria Funds (EMF), vehicles to engage all stakeholders and mobilize in-kind and financial resources to close existing funding gaps. A total of 15 EMC/EMFs are projected to be established before the end of 2022.
- Commonwealth leaders made a commitment to halve malaria cases and deaths in member countries between 2018 and 2023, with almost one-third of malaria-endemic countries on track to achieve this goal.
- In 2020, the U.S. increased its allocation to the Global Fund, channeling approximately US\$1.4 billion and approximately 42% of total malaria investments. The U.S. also enabled increased investment of US\$15 million to support the U.S. President's Malaria Initiative (PMI) purchase and delivery of next generation insecticide nets to address growing insecticide resistance.



#### 5) Accelerating action to end malaria within a generation.

With renewed urgency and increased investment, we can head off disaster in the next few years.

New investments in malaria – including Gavi, the Vaccine Alliance's recent decision to fund a first malaria vaccine program – can replicate and even expand success while strengthening countries' pandemic preparedness and response capabilities. By strengthening health systems, optimizing the use of current malaria interventions and accelerating the development and introduction of transformative ones, we can achieve a rapid decline in malaria deaths and cases, improve countries' resilience against current and future pandemics and save millions more lives.

#### Introducing and optimizing current tools

- In the last few years, using the High Burden to High Impact strategy, countries shifted from one-size-fits-all to datadriven programming at sub-national levels that maximize the impact and cost-effectiveness of available resources to each local context. This approach also strengthens countries' resilience to unexpected obstacles in fighting malaria. Action has been facilitated across the four key strategy areas of political will, strategic information to drive impact, better guidance, policies and strategies, and coordinated national malaria response.
- Countries and partners must stay committed to tailoring and optimizing the current set of effective tools –including
  newer tools such as the recently approved malaria vaccine and next generation insecticide-treated nets -- to their
  local context.
- This year, WHO recommended the first-ever vaccine for malaria, RTS,S/ASO1, for widespread use among children under 5 at risk of the disease and Gavi, the Vaccine Alliance just approved funding for a malaria vaccine programme that will support RTS,S rollout in sub-Saharan Africa. Adding this tool as a complement to existing effective tools has the potential to save additional tens of thousands of children from malaria.
  - » Gavi's decision to invest in the malaria fight adds a new funding source for the first global malaria vaccine program, enabling the rollout of RTS,S and future vaccines as they become available.
  - » Tailoring the use of RTS,S to local contexts and complementing it with existing proven interventions will ensure it can have the greatest impact.
  - » A second vaccine candidate, R21, also delivered promising results in Phase 2 trials and 2nd generation vaccines and other more effective tools such as monoclonals and mRNA vaccine are in the pipeline.
  - Despite this breakthrough, there is no silver bullet for malaria. Until we eradicate malaria, we need constant innovation to stay one step ahead of evolving mosquito and parasite, with interventions deployed strategically in combination with existing malaria prevention and treatment measures.
- Investments in case management and surveillance are also critical for staying ahead of the evolving malaria parasite and mosquito and identifying and tracking the emergence of new diseases.
  - We must invest in new modes of surveillance, like genomic and molecular surveillance, and further scale up and equip community health workers with digital tools. These actions will increase early detection, diagnosis and treatment of malaria and emerging diseases at community levels.
  - » These innovations and investments will also benefit the ongoing fight against COVID-19 as the systems, tools and technologies are transferable.

#### Accelerating transformative action

- Years of research and development have created the most robust malaria innovation pipeline ever that aims to tackle emerging challenges and deliver more effective, longer duration preventive and treatment tools that benefit all ages to accelerate malaria elimination.
- Accelerating the research, development and introduction of these tools has the potential to be transformative and can take us to the brink of eradication.
  - » Improved vector control and gene drive can address growing insecticide resistance and reduce the number of mosquitoes carrying malaria.
  - » Next generation vaccines, monoclonal antibodies and mRNA can be more effective and offer longer durability than 1st generation vaccines to increase protection against malaria transmission.
  - » New antimalarials can address growing drug resistance, provide optimized treatment regiments and a potential radical cure treatment.
  - » New rapid diagnostic tests (RDTs) will be able to detect multiple malaria parasite species with higher sensitivity than current tests.
- New investments from BioNTech bring new funds, energy and promise.
  - » BioNTech committed their own funding to research, develop and manufacture a malaria mRNA vaccine, with plans to go into clinical trials by the end of 2022.



## 6) Increased investment will help bring about an end game for malaria.

The time to act is now. As we head towards the Global Fund's Seventh Replenishment in 2022 and as countries continue to make critical funding decisions, leaders must mobilize new funding for the malaria fight to save millions more lives, accelerate much-needed progress and facilitate an earlier end to malaria.

By significantly increasing investments to end malaria we can accelerate the malaria fight:

- Continue to minimize COVID-19's impact on malaria prevention and treatment.
- Drive another era of rapid decline in malaria cases and deaths in highest burden countries.
- Support countries to reduce the burden on health systems, increasing capacity to prevent, detect and respond to pandemics and future health threats.
- Enable countries to use the latest data and surveillance tools to increase access to and optimize the current set of malaria interventions, including the malaria vaccine and next generation insecticide-treated nets.
- Scale up community health workers and their use of digital tools and innovative delivery strategies to improve community case management and access the hardest-to-reach communities.
- Strengthen countries' ability to prevent, diagnose and detect malaria and emerging diseases in remote and rural communities, while protecting the most vulnerable, including women and adolescent girls.
- Accelerate the development and delivery of a robust and game-changing pipeline of new malaria innovations.

