

## WORLD MALARIA REPORT 2022

Author: World Health Organization / Date: December 2022

### Key points:

The World Malaria Report 2022 details progress towards a number of critical health and development goals in the global campaign to reduce the overall impact of malaria and, where possible, eradicate the disease. These goals are listed under the Sustainable Development Goals (SDGs). The report covers the years 2000 to 2021 for most indicators. A specific analysis is conducted to evidence the impact of service interruptions on malaria cases and deaths since the start of the coronavirus pandemic (COVID-19) in 2020. Currently, the WHO Region of the Americas is 48% behind the malaria incidence milestones set by the Global Malaria Eradication Strategy.

#### KEY EVENTS IN 2021-2022

- Case management, vector control, vaccines, malaria chemoprevention, mass drug administration (MDA), and elimination were among the technical areas covered by the consolidated malaria guidelines released by WHO in June 2022.
- WHO launched the Strategy for Addressing Antimalarial Drug Resistance in Africa in November 2022 after recent studies confirmed the emergence of partial resistance to artemisinin in several regions of Africa. This technical and advocacy document was developed to provide guidance to key stakeholders in the malaria community.
- WHO and UN-Habitat jointly launched in October 2022 the Global Urban Malaria Response Framework for policy actors and relevant stakeholders. The framework was developed following extensive multidisciplinary consultations and is based on best practices and published research.

#### MALARIA BURDEN TRENDS IN THE AMERICAS

- In 84 malaria-endemic countries, an estimated 247 million cases occurred in 2021, an increase of 2 million cases from the previous year. Compared to 2019, the estimated number of cases in Panama and Honduras more than doubled. In the same time period, the Bolivarian Republic of Venezuela experienced a significant decrease in cases.
- Malaria deaths decreased by 64% (from 919 to 334) and the mortality rate by 73% in the WHO Region of the Americas (from 0.8 to 0.2). Adults (78% of deaths in this area) constituted the majority.
- Argentina, El Salvador, and Paraguay were three countries declared officially malaria-free in 2019, 2021, and 2018, respectively.



## MALARIA ELIMINATION AND PREVENTION OF REESTABLISHMENT

- Countries and territories with national elimination programs: Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Dominican Republic, Ecuador, French Guiana, Guatemala, Guyana, Haiti, Honduras, Mexico, Nicaragua, Panama, Peru, Suriname, Venezuela (Bolivarian Republic of).
- The E-2025 initiative includes French Guiana, Guatemala, Honduras, Mexico, Panama, Suriname, Dominican Republic, Ecuador, French Guiana, Belize, Costa Rica, Guatemala, Honduras, Mexico and the United States of America. A subregional initiative to eradicate malaria by 2025 includes seven other Central American nations, in addition to Colombia and the Dominican Republic (RMEI).

## MONITORING

- WHO/GMP has developed a series of digital solutions and other tools that are used in more than 40 countries, including the Americas, to support the strengthening of national surveillance systems.
- WHO has developed a malaria surveillance assessment toolkit with the help of its partners. The toolkit includes a collection of standardized tests to determine whether the integrated malaria disease surveillance system is able to accurately record malaria cases and deaths in all malaria transmission settings.

## INVESTMENTS IN MALARIA RESEARCH AND PROGRAMS

- More than seventy percent (78%) of the US\$ 3.5 billion invested in 2021 went to the WHO African Region, 5% to the South-East Asia Region and 5% to the Eastern Mediterranean Region, 4% to the Region of the Americas, and 3% to the Western Pacific Region.
- Domestic funding per person at risk in the WHO Region of the Americas was four times higher in 2021 than international funding, but the overall trend showed a reduction in total funding of almost 50% since 2010.

## DISTRIBUTION AND COVERAGE OF MALARIA PREVENTION, DIAGNOSIS, AND TREATMENT.

- Delivery data from manufacturers for the period 2004-2021 show that nearly 2.5 billion insecticide-treated nets (ITNs) were supplied globally in that period.
- Globally, the percentage of the population at risk protected by indoor residual spraying (IRS) in malaria-endemic countries declined from 5.5% in 2010 to 2.4% in 2021.

## PROGRESS TOWARDS THE 2020 ETM MILESTONES

- Case incidence decreased by at least 40% in Dominican Republic, French Guiana, Guatemala, Honduras, Mexico, Peru, and Suriname in 2021 compared to 2015.
- The estimated increase in case incidence was less than 25% in Colombia and between 25% and 40% in the Bolivarian Republic of Venezuela and Guyana, depending on estimates. Case incidence increased by 40% or more between 2015 and 2021 in the Plurinational State of Bolivia, Costa Rica, Ecuador, Nicaragua, and Panama.
- With no change in trend expected between 2021 and 2030, the region is currently off track to meet all present and future GTS mortality rate milestones.

## BIOLOGICAL AND OTHER THREATS TO MALARIA INTERVENTION TOOLS

- The WHO Region of the Americas has only a small amount of data from therapeutic efficacy studies (TES). LA TSEs conducted in Brazil and Colombia between 2015 and 2021 showed high efficacy. The sporadic observation of the PfKelch13 C580Y mutation linked to partial artemisinin resistance in Guyana between 2010 and 2017 and the absence of the mutation in more recent samples suggest that the mutation is likely to have disappeared.
- CQ is advised as first-line treatment against *P. vivax* in all malaria-endemic countries in the WHO Region of the Americas. In Brazil, research on the efficacy of CQ revealed that it is very high.

Malaria-endemic countries and their partners have set excellent examples of resilience in the worst of times, despite many difficulties. resilience in the worst of times, despite many challenges.

A multidisciplinary, multisectoral response with credible national leadership and effective, equitable and resilient health systems will be needed to be prepared to meet these anticipated challenges and less predictable extreme events. For these systems to be built on a platform of primary health care and essential public health functions, it will be important to have a resilient community response that is able to withstand, adapt to, and recover from adversity.