



2023 World Malaria Report

For Prelims: [Malaria](#), [World Health Organization](#), [World Health Assembly](#), **Vector-Borne Disease**

For Mains: Health, Malaria and its Eradication, Disease Burden in India, Measures to Ensure Good Health Outcomes, Government Initiatives

[Source: TH](#)

Why in News?

The **2023 World Malaria Report**, recently released by the [World Health Organization \(WHO\)](#), sheds light on the alarming [malaria](#) situation in India and globally.

What are the Key Highlights of the Report?

▪ Global Malaria Overview:

- The 2023 World Malaria Report reveals a global surge with an estimated **249 million cases in 2022, surpassing pre-pandemic levels.**
 - [Covid-19](#) disruptions, [drug resistance](#), humanitarian crises, and [climate change](#) pose threats to the global malaria response.
- Twenty-nine countries accounted for 95% of malaria cases globally.
 - Four countries, **Nigeria (27%), the Democratic Republic of the Congo (12%), Uganda (5%), and Mozambique (4%),** accounted for almost half of all malaria cases globally.

▪ India's Malaria Scenario:

- In 2022, **India** accounted for a staggering **66% of malaria cases** in the WHO **South-East Asia Region.**
 - **Plasmodium vivax**, a protozoal parasite, contributed to almost 46% of cases in the region.
- Despite a **55% reduction in cases since 2015**, India remains a significant contributor to the global malaria burden.
 - India faces challenges, including a surge in cases in 2023 linked to unseasonal rainfall.
- **India and Indonesia accounted for about 94% of all malaria deaths** in the WHO South-East Asia Region.

▪ Regional Impact:

- **Africa bears the highest malaria burden**, accounting for 94% of cases and 95% of global malaria deaths in 2022.
- The WHO South-East Asia Region, including India, managed to contain malaria over the last two decades, with a **77% reduction in cases and deaths since 2000.**

▪ Climate Change and Malaria:

- Climate change emerges as a major driver, affecting malaria transmission and overall burden.
 - Changing climate conditions enhance the sensitivity of the malaria pathogen and

vector, facilitating its spread.

- WHO emphasizes the substantial risk climate change poses to malaria progress, necessitating sustainable and resilient responses.

▪ **Global Eradication Goals:**

- WHO aimed to reduce malaria incidence and **mortality rates by 75% in 2025 and 90% in 2030.**
 - The world is off-track, with a **55% gap for 2025 incidence reduction and 53% for fatality rate reduction.**

▪ **Challenges in Malaria Eradication:**

- Funding gaps for malaria control increased from USD 2.3 billion in 2018 to USD 3.7 billion in 2022.
- Research and development funding hit a 15-year low at USD 603 million, raising concerns about innovation and progress.

▪ **Malaria Vaccine Advancements and Achievements:**

- The report emphasizes notable progress in malaria prevention through the phased introduction of the **WHO-recommended malaria vaccine, [RTS,S/AS01](#)**, in African nations.
 - Rigorous evaluations in Ghana, Kenya, and Malawi reveal a significant **decrease in severe malaria and a 13% reduction in early childhood deaths**, affirming the vaccine's effectiveness.
 - This achievement, combined with existing interventions like bed nets and indoor spraying, forms a comprehensive strategy, leading to improved overall outcomes in these regions.
- In October 2023, WHO recommended a second safe and effective malaria vaccine, **[R21/Matrix-M](#)**.
 - The availability of two malaria vaccines is expected to increase supply and make broad-scale deployment across Africa possible.

▪ **Call for Action:**

- WHO emphasizes the need for a substantial pivot in the fight against malaria, calling for increased resources, strengthened political commitment, data-driven strategies, and innovative tools.
- Sustainable and resilient malaria responses aligning with climate change mitigation efforts are deemed essential for progress.

What is Malaria?

- Malaria is a life-threatening mosquito borne blood disease caused by **plasmodium parasites**.
 - There are 5 Plasmodium parasite species that cause malaria in humans and 2 of these species – **P. falciparum and P. vivax** – pose the greatest threat.
- Malaria is predominantly found in the tropical and subtropical areas of Africa, South America as well as Asia.
- Malaria is spread by the bite of an **infected female Anopheles mosquito**.
 - The **mosquito becomes infected** after biting an infected person. The malaria parasites then enter the bloodstream of the next person the mosquito bites. The parasites travel to the liver, mature, and then infect **[red blood cells](#)**.
- Symptoms of malaria include fever and flu-like illness, including shaking chills, headache, muscle aches, and tiredness. Notably, **malaria is both preventable and curable.**

What are the Initiatives Related to Malaria?

▪ **Global:**

◦ **WHO's Global Malaria Program(GMP):**

- The WHO's GMP is responsible for coordinating WHO's global efforts to control and eliminate malaria.
- Its work is guided by the "**Global technical strategy for malaria 2016-2030**" adopted by the **[World Health Assembly](#)** in May 2015 and updated in 2021.

- The strategy sets the target of reducing global malaria incidence and mortality rates by **at least 90% by 2030.**
- **Malaria Elimination Initiative:**
 - Spearheaded by the **Bill and Melinda Gates Foundation**, this initiative focuses on eradicating malaria through diverse strategies such as treatment accessibility, mosquito population reduction, and technology development.
- **E-2025 Initiative:**
 - The WHO launched the [E-2025 initiative](#) in 2021. The initiative aims to stop the transmission of malaria in 25 countries by 2025.
 - The WHO has identified **25 countries that have the potential to eradicate malaria by 2025.**
- **India:**
 - **National Framework for Malaria Elimination 2016-2030:**
 - Aligned with WHO's strategy, aims to **eliminate malaria across India by 2030** and maintain malaria-free zones.
 - **National Vector-Borne Disease Control Programme:**
 - Addresses various [vector-borne diseases](#), including malaria, through prevention and control measures.
 - **National Malaria Control Programme (NMCP):**
 - To combat devastating effects of Malaria, the NMCP was launched in 1953 built around three key activities - insecticidal residual spray (IRS) with DDT; monitoring and surveillance of cases; and treatment of patients.
 - **High Burden to High Impact (HBHI) Initiative:**
 - Initiated in four states (West Bengal, Jharkhand, Chhattisgarh, and Madhya Pradesh) in 2019, focusing on malaria reduction through insecticidal net distribution.
 - **Malaria Elimination Research Alliance-India (MERA-India):**
 - Established by the [Indian Council of Medical Research \(ICMR\)](#), collaborates with partners on malaria control research.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

Prelims

Q. Widespread resistance of malarial parasite to drugs like chloroquine has prompted attempts to develop a malarial vaccine to combat malaria. Why is it difficult to develop an effective malaria vaccine? (2010)

- (a) Malaria is caused by several species of Plasmodium
- (b) Man does not develop immunity to malaria during natural infection
- (c) Vaccines can be developed only against bacteria
- (d) Man is only an intermediate host and not the definitive host

Ans: (b)