

World Malaria Day

For Prelims: Malaria - causes, symptoms, vaccine, Efforts to Control Malaria

For Mains: Health, Malaria and its Eradication

Why in News?

World Malaria Day is observed every year on 25th April.

- It was established by the **World Health Organization (WHO)** in 2007 to raise awareness about malaria.
- The theme for World Malaria Day 2023 is "Time to deliver zero malaria: invest, innovate, implement".

What is Malaria?

- About:
 - Malaria is a life-threatening disease caused by the Plasmodium parasite.
 - This parasite is transmitted to humans through the bites of infected female Anopheles mosquitoes.
 - Malaria is **most common in tropical and subtropical regions** of the world, including sub-Saharan Africa, Southeast Asia, and South America.
 - While Plasmodium falciparum is responsible for more deaths, Plasmodium vivax is the most widespread of all of the malaria species.
- Symptoms:
 - Once inside the human body, the parasites multiply in the liver and then infect red blood cells, causing symptoms such as fever, chills, headache, muscle aches, and fatigue.
 - In severe cases, malaria can lead to organ failure, coma, and death.
- Vaccine:
 - Till now, no malaria vaccine has shown the benchmark efficacy of 75% set by WHO. Still, WHO gave a go-ahead for the **first malaria vaccine called RTS.S** to be rolled out in high transmission African countries understanding the urgency of malaria control and prevention.
 - It has relatively low efficacy somewhere between 30-40%.
 - This vaccine has been developed by a collaborative effort of several organisations including GlaxoSmithKline (GSK), Bill and Melinda Gates Foundation etc.
 - In India, Bharat Biotech has been granted license to manufacture this vaccine.
 - Similar to RTS,S vaccine the Oxford University has developed a vaccine called R21 which is still waiting for the WHO's approval.
 - Ghana and Nigeria have approved this vaccine for use in their countries.
 - It is also being manufactured by Serum Institute of India.

Malaria Cases:

• As per the World Malaria Report 2022, the disease claimed the lives of an estimated 6,19,000 people in 2021.

• The report also highlighted that India has shown a **significant decline in malaria cases** and deaths in past **10** years.

What are the Efforts Made to Contain Malaria?

Globally:

- Global Malaria Program:
 - It was launched by WHO and 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".
 - The strategy aims to reduce malaria case incidence and mortality rates by at least 40% by 2020, at least 75% by 2025 and at least 90% by 2030 against a 2015 baseline.

Malaria Elimination Initiative:

- It was launched by Bill and Melinda Gates Foundation.
- This initiative focuses on eliminating malaria in certain regions of the world through a combination of strategies, including increasing access to effective treatments, reducing the mosquito population, and developing new tools and technologies to combat the disease.

• E-2025 initiative:

• In 2021, WHO launched the E-2025 initiative to halt the transmission of malaria in 25 identified countries by 2025.

India's efforts:

- <u>National Vector-Borne Disease Control Programme:</u> It is an umbrella programme for prevention and control of vector borne diseases viz. <u>Malaria</u>, <u>Japanese Encephalitis (JE)</u>, <u>Dengue</u>, <u>Chikungunya</u>, <u>Kala-azar</u> and <u>Lymphatic Filariasis</u>.
- National Malaria Control Programme (NMCP): Launched in 1953, it is built around three key activities:
 - Insecticidal residual spray (IRS) with DDT
 - Monitoring and surveillance of cases
 - Treatment of patients

National Framework for Malaria Elimination 2016-2030:

- Based on WHO Global Technical Strategy for Malaria 2016–2030 (GTS), the goals of the NFME are:
 - Eliminate malaria (zero indigenous cases) throughout the entire country by 2030
 - Maintain malaria-free status in areas where malaria transmission has been interrupted and prevent re-introduction of malaria.
- High Burden to High Impact (HBHI) Initiative: It was started in four states (West Bengal, Jharkhand, Chhattisgarh and Madhya Pradesh) in July 2019.
 - <u>Distribution of Long-Lasting Insecticidal Nets (LLINs)</u> to high burden areas has led to a reduction in endemicity in these 4 very high endemic states.
- Malaria Elimination Research Alliance-India (MERA-India): It has been established by Indian Council of Medical Research (ICMR) with the conglomeration of partners working on malaria control.

Conclusion

• India's aim is to be malaria-free by 2027 and to eliminate the disease by 2030. Through various measures, the country has made stupendous progress in thwarting malaria, by reducing the disease by 66% between 2018 and 2022.

UPSC Civil Services Examination, Previous Year Questions (PYQs)

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)

Source: IE

