

# Plasmodium ovale a type of malaria

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## In news

An uncommon type of malaria, Plasmodium ovale, has been identified in a soldier in Kerala, it is believed that he might have contracted Plasmodium ovale during his posting in Sudan where the Plasmodium ovale is endemic.

## What is Malaria?

It is caused by the bite of the **female Anopheles mosquito** if the mosquito itself is infected with a malarial parasite. Infected mosquitoes carry the Plasmodium parasite

The mosquito transmits plasmodium from its saliva into the host while ingesting a blood meal. The plasmodia then enter the red blood cells and feed on the hemoglobin.

## What are the types of Malaria?

There are five kinds of malarial parasites

1. Plasmodium falciparum
2. Plasmodium vivax (the commonest ones)
3. Plasmodium malariae
4. Plasmodium ovale and
5. Plasmodium knowlesi

## What is Plasmodium ovale?

- Plasmodium ovale is a species of parasitic protozoa that causes tertian malaria in humans.
- *P. ovale* malaria-like other types of malaria infection begins when female *Anopheles* mosquito bites and inoculates plasmodial sporozoites from its salivary

gland during feeding.

- *P. ovale* may be composed of two coexisting species: *Plasmodium ovale curtisi* and *Plasmodium ovale wallikeri*
- It is termed ovale as about 20% of the parasitised cells are oval in shape

### Plasmodium ovale around the world

- *P. ovale* malaria is endemic to tropical Western Africa
- It has also been detected in the Philippines, Indonesia and Papua New Guinea, but is still relatively rare in these areas.
- In a 2016 study on the China-Myanmar border, it was found that *P. ovale* and *P. malariae* occurred at very low prevalence, but were often misidentified.

### Status of malaria in the world: World malaria report 2019

- According to the WHO World malaria report 2019, there were an estimated 228 million malaria cases in 89 countries
- Most malaria cases in 2018 were in the World Health Organization (WHO) African Region (213 million or 93%), followed by the WHO South-East Asia Region with 3.4% of the cases and the WHO Eastern Mediterranean Region with 2.1%.
- Nineteen countries in sub-Saharan Africa and India carried almost 85% of the global malaria burden.
- Six countries accounted for more than half of all malaria cases worldwide: Nigeria (25%), the Democratic Republic of the Congo (12%), Uganda (5%), and Côte d'Ivoire, Mozambique and Niger (4% each)

### Status of Malaria in India

- According to the WHO World malaria report 2019, India represents 3% of the global malaria burden.
- India is accelerating progress towards the attainment of malaria free status by 2027 and eliminating the disease

by 2030.

- The WHO report said that cases in India dropped from about 20 million in 2000 to about 5.6 million in 2019
- As per the Union Health Ministry, in India, out of 1.57 lakh malaria cases in the **high-burden states of Odisha, Chhattisgarh, Jharkhand, Meghalaya and Madhya Pradesh in 2019, 1.1 lakh cases (70%) were cases of falciparum malaria**
- The report also said that, India made impressive gains in the global fight against malaria, recording the largest reduction in cases in South-East Asia from 20 million in 2000 to about 5.6 million last year
- The report said that India also recorded a decrease in the number of deaths from malaria between 2000 and 2019.
- It also stated that Malaria deaths in India declined from about 29,500 in 2000 to about 7,700 last year

#### India's target to eliminate malaria

- In November 2015, the Prime Minister of India joined 17 Asia Pacific leaders in endorsing a plan and roadmap to eliminate malaria throughout the region by 2030.
- **India further pledged to achieve this goal by 2027** – three years ahead of the regional and global target.