7FACTS ABOUT MALARIA VIVAX

1

MALARIA CAUSED BY

THE PARASITE PLASMODIUM VIVAX

HAS HISTORICALLY BEEN A NEGLECTED DISEASE.

THERE ARE 5 SPECIES OF PARASITES THAT CAUSE MALARIA IN HUMANS:

PLASMODIUM FALCIPARUM

PLASMODIUM VIVAX

- PLASMODIUM FALCIPARUM
 - PLASMODIUM OVALE
 - PLASMODIUM OVALI
 - PLASMODIUM KNOWLESI

PLASMODIUM MALARIAE



is the second most common cause of malaria in humans

2

P. VIVAX MALARIA HAS THE WIDEST

GEOGRAPHICAL DISTRIBUTION IN THE WORLD.

GLOBAL DISTRIBUTION
OF MALARIA CAUSED BY
PLASMODIUM VIVAX IN 2010



Source: Biological limits of the global distribution of *P. vivax* based on temperature, humidity, aridity, and contemporary reports of malaria risk. (Courtesy of Carlos Guerra, Malaria Atlas Project, Oxford University, United Kingdom.)

3

CONTRARY TO WHAT WAS ONCE BELIEVED

WE NOW KNOW THAT
P. VIVAX ALSO CAUSES
DEATH AND
SEVERE DISEASE.

5

P. VIVAX

CAN LIE DORMANT IN THE LIVER FOR WEEKS, MONTHS AND EVEN YEARS

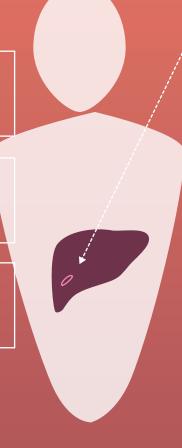
CAN CAUSE RELAPSE EVEN A LONG TIME AFTER INFECTION

THIS LATENT FORM OF THE PARASITE, CALLED THE HYPNOZOITE,

RESPONSIBLE FOR A LARGE PART OF THE DISEASE BURDEN OF *VIVAX* MALARIA

ONE OF THE MAIN GAPS IN KNOWLEDGE AND RESEARCH

A MAJOR OBSTACLE TO THE ERADICATION OF MALARIA



P. VIVAX

HAS DEVELOPED RESISTANCE TO CHLOROQUINE AND OTHER DRUGS.

CHLOROQUINE-RESISTANT P. VIVAX



Fully susceptible
 ■ > 90% susceptible
 ■ < 50% susceptible

Source: Resistance to therapies for infection by *Plasmodium vivax*. Baird JK. Clin Microbiol Rev. 2009 Jul;22(3):508-34. doi: 10.1128/CMR.00008-09. Review.

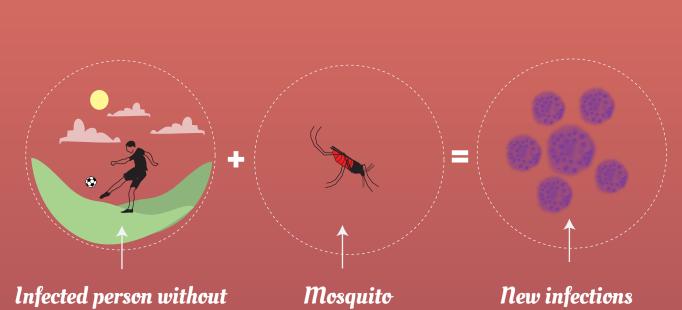
6

BLOOD STAGE PARASITES THAT TRANSMIT P. VIVAX MALARIA DEVELOP BEFORE CLINICAL SYMPTOMS APPEAR.

THEREFORE THE DISEASE

symptoms

IS PROPAGATED BY APPARENTLY HEALTHY PEOPLE WHO ARE INFECTED.



7

P. VIVAX MALARIA RESEARCH IS EXTREMELY DIFFICULT

BECAUSE NO ONE HAS SUCCEEDED IN GROWING THE PARASITE IN THE LABORATORY.



It will not be possible to eradicate malaria until the problem of *P. vivax* is properly addressed