

# Malaria life cycle made simple

Malaria affects 300-500 million people a year worldwide, leading to more than a million deaths. It is caused by the *Plasmodium* parasite which needs both humans and female *Anopheles* mosquitoes to propagate itself

**1** Infected mosquito bites human. *Plasmodia* spores from mosquito saliva enter bloodstream

**2** Spores invade liver cells

**3** Within one to three weeks spores multiply, producing up to 30,000 **merozoites**

**4** Merozoite infects and multiplies inside red blood cells

**5** Blood cell ruptures, releasing up to 36 more merozoites

Malaria parasite inside mosquito reaches sexual maturity – when it can infect humans – after 10 to 14 days

Small blood vessels in skin

**7** Mosquito bites infected human. Cycle begins again

**6** Some merozoites change into **gametocytes** – male and female reproductive cells

Symptoms usually appear within three months but parasite can lie dormant in liver for a year or more