Fever and history of travel to malaria-endemic area or clinical suspicion of malaria

Perform thick and thin blood smears and read within few hours.*

No

Blood film positive?

Repeat blood films every 12-24 hours (total of 3 times)

No

Blood film positive?

Consider alternate diagnosis

P. falciparum, P. knowlesi, or species not yet identified†

Admit to hospital and monitor for disease progression

P. falciparum or species not yet identified†

Admit hospital and monitor for disease progression

P. falciparum or species not yet identified†

Admit to hospital and monitor for disease progression

P. knowlesi

Chloroquine or Hydroxychloroquine§

P. malariae

Chloroquine or Hydroxychloroquine§

P. ovale or P. vivax acquired in area without chloroquine resistance

Chloroquine or Hydroxychloroquine§

P. vivax acquired in area with chloroquine resistance

From smear: calculate parasitemia and determine species

Evaluate clinical status and disease severity

Severe malaria and/or patient unable to tolerate oral medication, regardless of species‡

Admit to intensive care unit. Call CDC

Intravenous artesunate (Call CDC) Interim treatment: Artemether-lumefantrine or Atovaquone-proguanil or Quinine or if no other options Mefloquine

Monitor parasitemia every 12–24 hours

Chloroquine or Hydroxychloroquine§

P. falciparum acquired in area with no chloroquine resistance

Atovaquone-proguanil or Artemether-lumefantrine or Quinine plus tetracycline or doxycycline or clindamycin or Mefloquine

PLUS

Chloroquine or Hydroxychloroquine§

P. falciparum acquired in area with chloroquine resistance

Atovaquone-proguanil or Artemether-lumefantrine or Quinine plus tetracycline or doxycycline or clindamycin

P. falciparum acquired in area with mefloquine resistance

Atovaquone-proguanil or Artemether-lumefantrine or Quinine plus tetracycline or doxycycline or clindamycin

If not G6PD deficient by quantitative testing: Primaquine or tafenoquine (not for children <16 years old)

Administer follow on treatment after artesunate complete:†

Artemether-lumefantrine or Atovaquone-proguanil or Doxycycline (or clindamycin) or if no other options Mefloquine

Footnotes
*If rapid diagnostic test performed, smear should also be performed with results available as soon as possible
†If species later identified as P. vivax or P. ovale, add primaquine or tafenoquine if not G6PD deficient by quantitative testing
‡Drug options for chloroquine-resistant P. falciparum may be used

Algorithm for Management of Malaria

CDC Malaria Hotline: (770) 488-7788 or (855) 856-4713 (toll-free) Monday–Friday 9am–5pm EST (770) 488-7100 after hours, weekends, and holidays