

**DOSAGE GUIDELINES FOR THE TREATMENT OF MALARIA IN SOUTH AFRICA -
AUGUST 2002**

DRUG	ADULT DOSAGE	PAEDIATRIC DOSAGE
<p>DRUG QUININE (parenteral) 1 ampoule (1ml) usually contains 300mg quinine dihydrochloride</p>	<p>Loading dose: Quinine dihydrochloride salt 20mg/kg by IV infusion over 4 hours in 5% dextrose saline: [Important Note: No loading dose to be given if the patient has definitely received <u>treatment doses of mefloquine (in the last 7 days), quinine (more than 40mg/kg in the previous 2 days), or quinidine or halofantrine (in the last 24 hours).</u> If in doubt the loading dose should be given.]</p> <p>Maintenance dose: Eight hours after the start of the loading dose, give 10mg/kg quinine dihydrochloride salt infused over 4 - 6 hours repeated every 8 hours until the patient can take oral quinine.</p> <p>[Important Note: If a treatment dose of mefloquine has been taken in the 12 hours before severe malaria treatment starts, ECG monitoring would be advisable.] The required dose, diluted preferably in 5% dextrose to counteract hypoglycaemia, is given in a total volume of 5-10ml/kg (depending on patient's fluid balance) by infusion into a large vein.</p> <ul style="list-style-type: none"> • Where facilities for IV infusion do not exist, quinine can be given IM in the same dosage. The required dose, diluted to between 60mg and 100mg/ml, should be given as half the dose in each anterior thigh. • Total quinine (parenteral and/or oral) duration <u>at least</u> 7-10 days, or until smears are negative. • Paediatric dose: Same as adult dose • All patients should ideally have cardiac monitoring. • <u>The dose of IV quinine should be reduced by 1/3-1/2 (to 5-7mg/kg) on the third day of treatment if parental therapy is required for more than 48 hours as there has been no significant improvement in the clinical condition of the patient, or acute renal failure develops</u> 	
<p>QUININE (oral) 1 tablet usually contains 300mg quinine sulphate</p>	<p>600mg (i.e. usually 2 tablets) every 8 hours for 7 days or 10mg salt/kg (maximum usually 600mg) 8 hourly for 7 days</p>	<p>10mg salt/kg body weight every 8 hours for 7 days. The tablets may be crushed with banana, jam or chocolate syrup.</p>
<p>DOXYCYCLINE (use in combination with quinine)</p>	<p>Begin 2-3 days after starting quinine. 200mg stat; followed by 100-200mg daily for 7 days. Avoid in pregnancy.</p>	<p>Do not use in children under 8 years old. 4mg/kg stat, then 2mg/kg daily for at least 7 days or until negative smears.</p>
<p>TETRACYCLINE (use in combination with quinine)</p>	<p>Begin 2-3 days after starting quinine. 500mg bd or 250mg qid for 7-10 days. Avoid in pregnancy</p>	<p>Do not use in children under 8 years old. 250mg salt qid or 4mg/kg qid for at least 7 days or until smears are negative.</p>
<p>CLINDAMYCIN (use in combination with quinine in pregnancy and children <8 years)</p>	<p>Begin 2-3 days after starting quinine. 10mg/kg bd for 7 days or 5mg/kg tds for 7 days.</p>	<p>10mg/kg bd for 7 days or 5mg/kg tds for 7 days.</p>
<p>ARTEMETHER</p>	<p>10 - <15kg: One tablet stat, followed by one after 8 hours and then</p>	

<p>LUMEFANTRINE 1 tablet contains artemether 20mg plus lumefantrine 120mg.</p>	<p>one twice daily on each of the following two days (total course = 6 tablets)</p> <p>15 - <25kg: Two tablets stat, followed by two after 8 hours and then two twice daily on each of the following two days (total course = 12 tablets)</p> <p>25 - <35kg: Three tablets stat, followed by three after 8 hours and then three twice daily on each of the following two days (total course = 18 tablets)</p> <p>35 - <65kg: Four tablets stat, followed by four after 8 hours and then four twice daily on each of the following two days (total course = 24 tablets)³</p> <p>>65kg: Dose as for > 35kg above, although inadequate experience in this weight group Administer with fat containing food / milk to ensure adequate absorption.</p>																						
<p>ARTESUNATE Each tablet contains 50mg. Only for use in combination with sulfadoxine-pyrimethamine.</p>	<p>4mg/kg daily for 3 days.</p>	<p>4mg/kg daily for 3 days.</p>																					
<p>SULFADOXINE-PYRIMETHAMINE 1 tablet contains sulfadoxine 500mg plus pyrimethamine 25mg.</p>	<p>Usually: 3 tablets as a single dose / Sulphadoxine 25mg/kg pyrimethamine 1.25mg/kg single dose (maximum 1500mg sulfadoxine / 75mg pyrimethamine)</p>	<p>Do not use in premature and newborn infants during the first weeks of life.</p> <table border="1" data-bbox="884 987 1361 1272"> <thead> <tr> <th>Weight(kg)</th> <th>Age(yrs)</th> <th>Tablets</th> </tr> </thead> <tbody> <tr> <td>6-10</td> <td><1</td> <td>½</td> </tr> <tr> <td>11-20</td> <td>1-4</td> <td>1</td> </tr> <tr> <td>21-30</td> <td>5-9</td> <td>1½</td> </tr> <tr> <td>31-40</td> <td>10-11</td> <td>2</td> </tr> <tr> <td>41-50</td> <td>12-13</td> <td>2½</td> </tr> <tr> <td>>50</td> <td>>13</td> <td>3</td> </tr> </tbody> </table> <p>Slight dosage adjustment will be required when co-packed with artesunate.</p>	Weight(kg)	Age(yrs)	Tablets	6-10	<1	½	11-20	1-4	1	21-30	5-9	1½	31-40	10-11	2	41-50	12-13	2½	>50	>13	3
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<p>CHLOROQUINE (non-falciparum malaria only) 1 tablet contains 150mg chloroquine base</p>	<p>Orally : 1.5g over 3 days, as follows: initially 600mg, followed by 300mg 6-8 hours later, and 300mg once daily on second and third days.</p>	<p>Initial dose: 10mg base/kg then 5mg base/kg at the same dosage intervals as the adult regimen.</p>																					
<p>PRIMAQUINE 1 tablet usually contains 26.3 primaquine phosphate = 15mg primaquine base.</p>	<p>Orally: 15mg base daily for 14 days following standard treatment or 0.25mg base/kg daily for 14 days. In mild G-6-PD Deficiency (10-60% residual G-6-PD activity): 45mg base weekly / 0.5-0.8mg base/kg body weight once a week for six to eight weeks.</p>	<p>Contraindicated in children under 1 year old. 0.25-0.3mg base/kg daily for 14 days following standard treatment. In mild G-6-PD Deficiency: 0.5-0.8mg base/kg weekly for 8 weeks.</p>																					
<p>MEFLOQUINE (not registered for treatment of malaria in South Africa) 1 tablet</p>	<p>Oral, 25mg/kg base (maximum total dose 1.5g) in 2-3 divided doses 6-8 hours apart as follows: loading</p>	<p>Oral, 25mg/kg base as a single dose or 2 divided doses.</p>																					

contains 250mg base	dose, 750mg; then 500mg after 6–8 hours and 250mg after a further 6-8 hours.	
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Adapted with permission from the Malaria Update, edited by A. Swart of the Medicines Information Centre, UCT.

Important Notes:

- Patients who vomit less than 30 minutes after receiving the drug orally, should be given a second full dose. If they vomit 30-60 minutes after the dose, an additional half-dose should be given.
- When treating severe malaria, oral treatment should be substituted as soon as the patient can take tablets by mouth and at least 3 doses of parenteral quinine have been given.
- For *P. vivax* malaria acquired in Oceania and southeast Asia the dose of primaquine should be increased to 0.33-0.5mg base/kg daily for 14 days.
- In severe malaria, full treatment doses of all antimalarial drugs should be given unless there is clear evidence of adequate pretreatment.