(U) Middle East: Malaria Distribution Update in Iraq and the Surrounding Region

07 July 2004
DI-1812-542-04
Information Cutoff Date: 11 May 2004

(U) Key Judgments

(U) Malaria transmission is not uniform throughout the region, but varies with multiple ecological factors such as temperature, recent rainfall, human population, vector density, vector breeding habitat, elevation, and control measures.

(U) Information on malaria distribution in Iraq is improving with on-the-ground surveillance.

(U) The decision on whether to use malaria chemoprophylaxis should be based on AFMIC risk assessments and policies set forth by USEUCOM and USCENTCOM for their respective AORs.

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(U) Malaria Risk Distribution
(U) Evaluating Need for Malaria Chemoprophylaxis
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(U) This product updates the risk of malaria in Iraq and the surrounding region, including Iran, Saudi Arabia, and Syria in the USCENTCOM AOR and Turkey in the USEUCOM AOR. It is intended to assist operational medical personnel in determining the need for malaria chemoprophylaxis for deployed forces. Official chemoprophylaxis policies and guidance for this AOR are issued by USCENTCOM and USEUCOM.

(U) Malaria Risk Distribution

(U) Though information on malaria distribution in Iraq is improving, for other countries in the region, risk distribution was based on an assessment of suitable areas for transmission...
and available human and/or vector infection data. Transmission and risk distribution may change over time, as
the ecology in many areas has the capability to support malaria transmission if the parasite is introduced
through movement of infected human or vector populations.

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as temperature, recent rainfall, human population, vector density, vector breeding habitat, elevation, and
control measures.

(U) Evaluating Need for Malaria Chemoprophylaxis

(U) The decision on whether to use malaria chemoprophylaxis for forces should be based on AFMIC risk
assessments and policies set forth by USEUCOM and USCENTCOM for their respective AORs. The table
below outlines country-specific AFMIC assessments on anticipated malaria risk level for US forces,
seasonality, malaria species, and drug resistance for Iraq and the surrounding region. Risk-based
chemoprophylaxis considerations also are included.

(U) Additional details on malaria and other infectious disease risks are provided in country-specific AFMIC
Infectious Disease Risk Assessments.

(U) Country-Specific Malaria Information

<table>
<thead>
<tr>
<th>Country</th>
<th>Approx seasonality</th>
<th>Malaria species</th>
<th>Drug Resistance for P. falciparum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iran</td>
<td>March through November</td>
<td>Varies from 10% to 50% falciparum depending on location; the rest is mainly vivax; malariae also occurs</td>
<td>Significant chloroquine resistance; Fansidar resistance also occurs</td>
</tr>
<tr>
<td>Iraq</td>
<td>April through November</td>
<td>Virtually 100% vivax, no recent</td>
<td>N/A</td>
</tr>
<tr>
<td>Country</td>
<td>Season</td>
<td>Type of Malaria Cases Reported</td>
<td>Resistance/Medication Notes</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------</td>
<td>--------------------------------</td>
<td>----------------------------</td>
</tr>
<tr>
<td>Oman</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
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<td>Saudi Arabia</td>
<td>Year-round</td>
<td>More than 85% falciparum; rest is vivax</td>
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<td>Syria</td>
<td>May through October</td>
<td>Up to 100% vivax; falciparum may occur at low levels</td>
<td>None reported</td>
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<td>Yemen</td>
<td>Year-round with elevated risk after the two rainy seasons (March-May and Aug-Sept)</td>
<td>Predominantly <em>falciparum</em>, with an unknown percentage of <em>vivax</em> and <em>malariae</em></td>
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(U) Administrative Notes

(U) Prepared by:
(U) This report contains information as of 11 May 2004. It is published under the auspices of the Department of Defense Intelligence Production Program (DoDIPP). The Defense Intelligence Agency's Armed Forces Medical Intelligence Center produced it as the designated DoDIPP producer for this subject.

(U) This product supersedes (U) Iraq Update on Malaria Risk and Drug Resistance, 145,053-03, dated 10 December 2003, and (U) Iraq Update on Malaria Risk and Drug Resistance, U-145,052-03, dated 11 December 2003, which should be destroyed.

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(U) For USEUCOM see website http://www.eucom.mil/Directorates/EC14/index.htm?

(U) For USCENTCOM see SIPRNET website http://reclusa.centcom.mil/ccsg/branches/fhp/index.htm

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(b)(1), Sec. 1.4(c)
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<th>Distribution Period</th>
<th>Prevalence</th>
<th>Resistance</th>
</tr>
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