(b)(3):10 USC 424

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(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
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(U) Background

(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.

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(U) Malaria Risk Distribution

(U) Though information on malaria distribution in Iraq is improving, (b)(3):10 USC 424;(b)(3):50 USC 3024(i)

other countries in the region, risk distribution was based on an assessment of suitable areas for transmission

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and available human and	Update in Iraq and the Surrounding (b)(3):10 USC 424 d/or vector infection data. Transmission and risk distribution may change over tas has the capability to support malaria transmission if the parasite is introduced
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Country	Approx seasonality	Malaria species	Drug Resistance for P. falciparum	(b)(3):50 USC 3024(i);(b)(3):10 USC 424
Iran		depending on location; the rest is mainly vivax;	Significant chloroquine resistance; Fansidar resistance also occurs	
Iraq	April through November	Virtually 100% vivax, no recent	N/A	

		E.	1	1	(b)(3):50 USC 3024(i)
	(b)(3):10 USC 424;(b)(3):50 USC 3024(i)		indigenous falciparum cases reported		
Oman		N/A	N/A	N/A	
Saudi Arabia		Year-round	More than 85% falciparum; rest is vivax	Significant chloroquine resistance	-
Syria		May through October	Up to 100% vivax; falciparum may occur at low levels	None reported	
Turkey		March through October	Up to 100% vivax; falciparum may occur at low levels	None reported	
UAE		N/A	N/A	N/A	
Yemen		Year-round with elevated risk after the two rainy seasons (March-May and Aug-Sept)	Predominantly falciparum, with an unknown percentage of vivax and malariae	Significant chloroquine resistance	

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(U) Prepared by:	(b)(3):10 USC 424		

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- (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.

(b)(3):10 USC 424;(b)(3):50 USC 3024(i)

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07 July 2004

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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.

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(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

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capability to support malaria transmission if the parasite is introduced through movement of infected human or vector populations.

(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. [(b)(1),Sec. 1.4(c)

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(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) For USEUCOM see website at http://www.eucom.mil/Directorates/ECJ4/index.htm? http://www.eucom.mil/Directorates/ECJ4/main.htm.2
- (U) For USCENTCOM see SIPRNET website http://recluse.centcom.smil.mil/ccsg/branches/fhp.index.htm
- (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

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Country	(b)(1),Sec. 1.4 (c)	Approx seasonality	II :	Drug Resistance for P. falciparum	(b)(1),Sec. 1.4(c)
Iran		March through November	falciparum	chloroquine resistance; Fansidar resistance	
Iraq		April through November	Virtually 100% vivax, no recent indigenous falciparum cases reported	N/A	

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Oman	(b)(1),Sec. 1.4 (c)	N/A	N/A	N/A	(b)(1),Sec. 1.4(c)
Saudi Arabia		Year-round	More than 85% falciparum; rest is vivax	Significant chloroquine resistance	
Syria		May through October	Up to 100% vivax; falciparum may occur at low levels	None reported	
Turkey		October	1 4	None reported	
UAE		N/A	N/A	N/A	
Yemen		with elevated risk after the two rainy seasons	Predominantly falciparum, with an unknown percentage of vivax and malariae	Significant chloroquine resistance	

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