



DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
7700 ARLINGTON BOULEVARD
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IN REPLY REFER TO
BUMEDINST 6230.16A
BUMED-M37
16 Jan 2018

BUMED INSTRUCTION 6230.16A

From: Chief, Bureau of Medicine and Surgery

Subj: MALARIA PREVENTION AND CONTROL

Ref: (a) DoD Directive 6200.04 of 9 October 2004
(b) World Health Organization, World Malaria Report, 2015 (NOTAL)
(c) BUMEDINST 6220.12C
(d) NMCPHC-TIM 6250.1, Navy Marine Corps Public Health Center Guide to Malaria Prevention and Control, 2015
(e) ASD(HA) Policy Memo 13-002 of 15 Apr 2013
(f) AFPMB Technical Guide 24: Contingency Pest Management Guide, August 2012
(g) AFPMB Technical Guide 36: Personal Protective Techniques against Insects and Other Arthropods of Military Significance, October 2015

Encl: (1) Navy Medicine Malaria Prevention and Control Resources

1. Purpose. To provide guidelines, per reference (a), to commanding officers and Medical Department personnel on assessing risk, and preventing and treating malaria among active duty personnel, other beneficiaries, and civilian employees of the U.S. Government.
2. Cancellation. BUMEDINST 6230.16.
3. Scope. This instruction applies to all ships and stations with Medical Department personnel.
4. Background

a. Malaria is one of the most deadly diseases in tropical and subtropical regions. It is a threat to individual health and can seriously impair the mission readiness of military units. Forty percent of the world is endemic for malaria leading to approximately 500 million cases and over one million deaths annually, per reference (b). The majority of these cases occur in regions where U.S. Navy forces currently or historically operate. Although many endemic country adult nationals have some degree of immunity, most U.S. forces lack this limited protection and are susceptible to potentially lethal infections without the proper use of force health protection measures and command enforcement. In 2003, a Marine expeditionary unit on a mission to Liberia suffered a 44 percent attack rate (69 of 157 spending nights ashore) and an attack rate of 28 percent overall (80 of 290 who went ashore). In this incident, malaria compromised the mission because Service members did not use personal protective measures (PPM) or take their medications for prophylaxis of malaria.

b. Shipboard personnel are at risk when visiting ports with known malaria transmission. Malaria is as an Armed Services reportable disease, per reference (c). In addition to the medical

event reporting required by reference (c), all cases should also be reported through the chain of command in order to ensure command surgeons and operational commanders are aware of any developing malaria threats to their operations and forces.

5. Responsibilities. The potential adverse impact of malaria on U.S. forces and auxiliary personnel can be greatly minimized by proper prevention, treatment, surveillance, and vector control activities included in the following actions:

a. The Commanding Officer, Navy and Marine Corps Public Health Center (NMCPHC) will ensure reference (d) is revised, as needed, with current information on prevention and treatment of malaria and vector surveillance and control measures, available at: <http://www.med.navy.mil/sites/nmcpbc/program-and-policy-support/Pages/Malaria-Prevention-and-Control.aspx>.

b. To support the commander's force health protection efforts, Medical Department personnel will:

(1) Obtain location-specific guidance on malaria prevention using the resources in paragraph 6. Contact the appropriate Navy Environmental and Preventive Medicine Unit (NAVENPVNTMEDU) before deployment to malaria-endemic areas for current area-specific risk assessment, prevention, and treatment recommendations. See enclosure (1) for local NAVENPVNTMEDU point of contact information.

(2) Advise and assist line commanders in all aspects of malaria prevention and control. Unit or major command medical personnel will ensure line commanders and their staff are educated on malaria threats and prevention measures for any unit deployments or operations where a potential malaria threat exists. Medical planning should also include estimates on the quantity of malaria countermeasures needed for the duration of the deployment or operation (medications, repellants, etc.).

(3) Verify glucose-6-phosphate dehydrogenase (G6PD) deficiency status prior to prescribing medications for malaria prophylaxis. Prior to deployment, Medical Department personnel will screen the records of all deployers in order to identify and evaluate all G6PD deficient individuals and determine their need for special chemoprophylaxis and treatment protocols when traveling, transiting through, or deploying to malaria-risk areas. As a part of unit readiness, all Navy and Marine Corps personnel should have a documented G6PD deficiency status. Medical Department personnel supporting joint operations should recognize that not all Services track G6PD status.

(4) Provide advice and malaria chemoprophylaxis to active duty personnel, reservists on orders, and civilian employees traveling to malaria risk areas on temporary additional duty, or other official travel. The same should be provided for active duty personnel and their dependents traveling to malaria-endemic areas on leave.

(5) Ensure special operations and special duty personnel receive pharmaceuticals only when authorized by the flight surgeon, diving medical officer, or assigned medical support. Medical staff should consult with flight surgeons or diving medical officers regarding authorized medications for this population.

(6) Document in the medical record all malaria chemoprophylaxis, pharmaceutical issues, adverse reactions, malaria treatments, and G6PD deficiency status.

(7) Report suspected or confirmed malaria cases to the appropriate command surgeon (numbered fleet, Marine expeditionary force, type command, or joint force command). Also provide a medical event report for all suspect or confirmed malaria cases to NMCPHC using the Disease Reporting System internet (DRSi) or another authorized method, per reference (c). A malaria medical event report should include information on chemoprophylaxis (medication(s) ordered, number of pills ordered), length of travel in malaria risk area, potential countries of exposure, and circumstances surrounding exposure (whether duty related, PPM used, etc.). Further information on reporting, including account access to DRSi, can be found at: <http://www.med.navy.mil/sites/nmcpbc/program-and-policy-support/drsi/Pages/default.aspx>.

(8) Consider malaria in all diagnoses of febrile illness when medical history includes travel to malaria-endemic areas. Obtain a complete history of travel for the 6 months prior to illness. Department of Defense (DoD) personnel who originated from malaria-endemic regions prior to enlistment or commissioning may have developed limited immunity. These individuals will become susceptible if they live outside malaria-endemic areas for prolonged periods. Personnel that revisit homes of origin may develop malaria after losing this limited immunity.

c. Healthcare providers must be familiar and comply with all policy and requirements concerning the use of mefloquine (Lariam®) for malaria prophylaxis, per reference (e). Mefloquine may cause psychiatric symptoms when used for prophylaxis. It is therefore designated as a prophylaxis option only for individuals with intolerance or contraindications to first line medications. It is contraindicated for use with those who have a history of seizure disorder and those with specific neurologic or behavioral disorders, to include suicidal and homicidal ideation, and post-traumatic stress disorder. Medical providers prescribing individuals mefloquine must ensure proper medical record documentation of screening for contraindications, counseling, and distribution of the medication guide and wallet card. The medication guide and wallet card are available at: <https://health.mil/Search-Results?query=Mefloquine%20Medication%20Guide%20and%20Wallet%20Card>.

6. Malaria Information Resources

a. Include local or operational commander directives, operation plans, and health service support (HSS) annexes. Most operation or exercise plans will contain an HSS annex or HSS guidance. Medical personnel deploying or preparing to deploy should refer to the relevant plan

for locality specific malaria prevention and control guidance. The HSS annex should direct when and if malaria chemoprophylaxis is required. It should also provide force health protection guidance needed to minimize the malaria risk.

b. The supporting NAVENPVNTMEDU can provide current area-specific risk assessment and prevention and treatment recommendations. See enclosure (1) for NAVENPVNTMEDU point of contact information.

c. Current medical guidance or risk estimates from the National Center for Medical Intelligence (NCMI). Medical planners or unit medical personnel should obtain access to the NCMI Web site at: <https://www.ncmi.detrick.army.mil/> for current DoD risk estimates of the malaria burden in planned area of operations or deployments. The NCMI risk estimate also assists with selection of malaria chemoprophylaxis agents.

d. The NMCPHC Guide to Malaria Prevention and Control, reference (d), is a primary source of guidance on malaria prevention and control. It includes information about command directed PPM, individual chemoprophylaxis, pharmacology of anti-malaria agents, diagnosis and treatment, clinical disease presentation, and management of G6PD deficient personnel. The guide is available at: <http://www.med.navy.mil/sites/nmcphc/Documents/program-and-policy-support/NMCPHC-Malaria-Guide-July2015.pdf>.

e. The Centers for Disease Control and Prevention (CDC) Web site on malaria and travelers at: <https://www.cdc.gov/malaria/travelers/index.html> provides general and malaria specific travel information by country, prevention (PPM and chemoprophylaxis), and treatment recommendations for malaria not covered by DoD or Department of Navy specific guidance.

f. Information on mosquito surveillance and control is provided in references (f) and (g) available at: <https://www.acq.osd.mil/eie/afpmb/techguides.html> (note that reference (f) is available by CAC access only).


g. Information on current diagnostic tests for malaria is available from the CDC at: https://www.cdc.gov/malaria/diagnosis_treatment/diagnosis.html.

7. Records Management. Records created as a result of this instruction, regardless of media and format, must be managed per SECNAV M-5210.1 of January 2012.

8. Review and Effective Date. Per OPNAVINST 5215.17A, review this instruction annually on the anniversary of its effective date to ensure applicability, currency, and consistency with Federal, DoD, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction.

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9. Information Management Control. The reports required in this instruction are authorized by SECNAV M-5214.1 of December 2005.



C. FORREST FAISON III

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via the Navy Medicine Web site: <http://www.med.navy.mil/directives/Pages/BUMEDInstructions.aspx>.

NAVY MEDICINE MALARIA PREVENTION AND CONTROL RESOURCES

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