



DEPARTMENT OF THE NAVY
BUREAU OF MEDICINE AND SURGERY
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FALLS CHURCH, VA 22042

IN REPLY REFER TO
BUMEDINST 6230.16
BUMED-M3
8 Jul 2013

BUMED INSTRUCTION 6230.16

From: Chief, Bureau of Medicine and Surgery
To: Ships and Stations with Medical Department Personnel

Subj: MALARIA PREVENTION AND CONTROL

- Ref: (a) DoD Directive 6200.04, Force Health Protection, April 23, 2007
(b) World Health Organization. World Malaria Report. Geneva: World Health Organization, 2012
(c) BUMEDINST 6220.12C
(d) Navy Marine Corps Public Health Center Pocket Guide to Malaria Prevention and Control, NMCPHC-TIM PM 6250.1, 2011
(e) Centers for Disease Control and Prevention. Malaria and Travelers.
(f) Armed Forces Pest Management Board Technical Guide 24: Contingency Pest Management Guide of August 2010
(g) Armed Forces Pest Management Board Technical Guide 36: Personal Protective Techniques against Insects and Other Arthropods of Military Significance of October 2009
(h) US Navy Regulations, Chapter 9, Article 0923, 1990
(i) US Navy Regulations, Chapter 8, Article 0820, 1990
(j) Assistant Secretary of Defense (Health Affairs) Policy Memo 09-017, 04 Sep 2009
(k) Assistant Secretary of Defense (Health Affairs) Policy Memo 13-002, 15 Apr 2013
(l) SECNAV M-5214.1 of December 2005

Encl: (1) Bureau of Medicine and Surgery (BUMED) Malaria Prevention and Control Information Resources

1. Purpose. To provide guidelines, per reference (a), to Commanders and Navy Medicine personnel on assessing risk and preventing and treating malaria among active duty personnel, other beneficiaries and civilian employees of the United States Government.

2. Cancellation. NAVMEDCOMINST 6230.2

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 references (b). The majority of these cases occur in regions where U.S. Naval forces are currently or have historically operated. While demonstrating low immunogenicity, many endemic country adult nationals have some degree of immunity.

Most U.S. Forces will lack this limited protection and be susceptible to potentially lethal infections without the proper use of personnel protective/preventive medicine measures and command enforcement. In 2003, a Marine Expeditionary Unit (MEU) on emergent tasking to Liberia suffered a 44% attack rate (69 of 157 spending nights ashore) and an attack rate of 28% overall (80 of 290 who went ashore). In this incident, malaria compromised the mission.

b. Shipboard personnel are also at risk when visiting ports with known malaria transmission. Due to its high military significance, malaria has been included as an Armed Services reportable disease, per reference (c). All cases should be reported through the chain of command in order to ensure Command Surgeons/Operational Commanders are aware of any developing malaria threats to their operations and forces.

5. Malaria Information Resources

a. Local or Operational Commander Directives/Operational Plans/Health Service Support (HSS) Annexes on Malaria policies. Most operational or exercise plans will contain a HSS annex or HSS guidance. Medical personnel deploying or preparing to deploy should refer to the relevant plans for locality specific malaria prevention and control guidance. The HSS annex should direct when and if malaria chemoprophylaxis is required by the operational commander. It should also provide preventive medicine guidance directives needed to minimize the malaria risk.

b. 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 website for current Department of Defense (DoD) risk estimates of the malaria burden in planned area of operations or deployments.

c. The Navy Marine Corps Public Health Center (NMCPHC) Pocket Guide to Malaria Prevention and Control, reference (d), provides a compact reference for medical support to Navy and Marine Corps operations in malarious zones. It is a primary source of guidance on malaria prevention and control. It includes information about command-directed personal protective measures, individual chemoprophylaxis, pharmacology of anti-malaria agents, diagnosis and treatment, clinical disease presentation, and management of Glucose-6-Phosphate Dehydrogenase (G-6-PD) deficient personnel. The guide is available on line as a portable document format (pdf) download at the NMCPHC Web site under the Preventive Medicine Department at: http://www.nmcphc.med.navy.mil/diseases_conditions/malaria.aspx.

d. The Web site of the Centers for Disease Control and Prevention (CDC) provides general travel, malaria specific travel information by country, prevention (PPM and chemoprophylaxis), and treatment recommendations for malaria not covered by DoD/Department of Navy (DON) specific guidance, per reference (e). This is a useful site for individual or small unit travel guidance at: (<http://www.cdc.gov/malaria/travelers/index.html>).

e. Information on mosquito surveillance and control is provided in references (f) and (g) available at: (<http://www.afpmb.org/pubs/tims/tims.htm>). Guidance on personal protection for health may be found in reference (h).

6. Action. The potential adverse impact of malaria on US Forces and auxiliary personnel can be greatly minimized by proper prevention, treatment, surveillance, and vector control activities included in the following actions:

a. Commanders, commanding officers (CO), and officers in charge of units stationed in, or subject to operations in, malaria-risk areas are advised that malaria has historically caused a significant risk to forces and operations. Per reference (h), commanders are responsible for protecting the health of the persons in their charge and to obtain advice from their medical personnel. Command enforcement is best conducted at the junior officer and petty officer/staff noncommissioned officer (SNCO) level, with the support of the senior enlisted, executive officer (XO) and CO. Historically, malaria outbreaks are frequently traced back to insufficient command enforcement of either anti-malaria medication use and/or mosquito prevention measures. Unit deployment medical and pharmaceutical costs are borne by the deploying unit, not the Bureau of Medicine and Surgery (BUMED).

b. The CO, Navy and Marine Corps Public Health Center shall ensure reference (d) is periodically revised with current information on prevention and treatment of malaria, vector surveillance, and control measures.

c. To support the Commander's force health protection efforts, Medical Department personnel shall:

(1) Advise and assist line commanders in all aspects of malaria prevention and control. Unit or major command Medical Department personnel shall 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 department planning should also include estimates on malaria resources needed for the duration of the deployment/operation (medications, repellants, etc.).

(2) Provide appropriate advice and medications to active duty personnel, beneficiaries and civilian employees traveling to malaria risk areas on Temporary Additional Duty (TAD), leave, or other official travel on a case-by-case basis. MTF's may issue 30 to 60 day supplies of standard malaria chemoprophylaxis for individual travel or small detachment unit travel on a case by case basis (as medical treatment facility (MTF) pharmaceutical funding allows). This should not be interpreted as BUMED assuming the fiscal responsibility for care not received "in-garrison."

(3) Ensure special operations/special duty personnel receive pharmaceuticals only when authorized by their flight surgeon, diving medical officer or assigned medical support. Medical staff should consult with cognizant flight surgeons and/or dive officers regarding authorized medications.

(4) Contact the cognizant Navy Environmental and Preventive Medicine Unit (NEPMU) before deployment to potentially malarious areas for current area-specific risk assessment, prevention and treatment recommendations. See enclosure (1) for your local NEPMU point of contact information.

(5) To the greatest extent possible medical record should document malaria chemoprophylaxis, pharmaceutical issue, adverse reactions, or malaria treatment. Medical departments in an operational environment are not relieved from appropriate medical record documentation requirements. While recognizing the difficulty of operational medicine, Medical Department personnel at a minimum will ensure all medications and adverse reaction related to malaria treatment or prevention are documented in the hard copy outpatient medical record or appropriate electronic medical record.

(6) Prior to deployment, Medical Department shall screen the records of all deployers in order to identify and evaluate all G-6-PD 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 known G-6-PD deficiency status. Medical Department Personnel supporting joint operations should recognize that not all services track G-6-PD status. Verify G-6-PD deficiency status prior to pharmaceutical issue when chemoprophylaxing or treating non Navy-Marine Corps personnel.

(7) Medical providers or their support staff shall report suspect or confirmed malaria cases to the appropriate command surgeon (numbered fleet, Marine Expeditionary Force, Type Commander, or Joint Force Commander) by message, e-mail, or telephone. They shall also provide a Medical Event Report (MER) for all suspect or confirmed malaria cases to the Navy and Marine Corps Public Health Center using the Disease Reporting System internet (DRSi) or another authorized method, per reference (c). A malaria MER 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, personal protective measures used, etc). Further information on reporting, including account access to NDRSi, can be found at: <http://www.nmcphc.med.navy.mil/PreventiveMedicine/reportingtools.aspx>.

(8) Consider malaria in all diagnoses of febrile illness when medical history includes travel to malarious areas. Obtain a complete history of travel for the 6 months prior to illness. Do not forget DoD personnel who originated from Malaria endemic regions prior to enlistment or commissioning. Individuals that live in malarious areas for several years may develop

“limited” immunity. These individuals will become susceptible if they live outside malarious areas for prolonged periods. Personnel that re-visit homes of origin may develop malaria after losing this “limited” immunity

7. Medical providers shall be familiar and comply with all policy and requirements concerning the use of Mefloquine (Lariam®) for malaria prophylaxis per references (j) and (k). Mefloquine may cause psychiatric symptoms when used for prophylaxis. It is therefore designated as a prophylaxis option only after malarone and doxycycline have been ruled out. 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 must ensure for individuals prescribed mefloquine medical record documentation of screening for contraindications, counseling, and distribution of the medication guide and wallet card has been completed.

8. Records Management. Records created as a result of this instruction, regardless of media and format, shall be managed per reference (l).

9. Reports. Reports required by this instruction are authorized by reference (c).



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Distribution is electronic only via the navy medicine Website at:
<http://navymedicine.navy.mil/default.cfm?seltab=Directives>

BUMEDINST 6230.16
8 Jul 2013

**BUREAU OF MEDICINE AND SURGERY MALARIA PREVENTION AND CONTROL
INFORMATION RESOURCES**

EAST COAST/EUROPE/AFRICA RESOURCES

Officer in Charge

Navy Environmental and Preventive Medicine Unit No. 2

1887 Powhatan Street, Norfolk, VA 23511-3394

DSN: 377-6600; Comm: (757) 953-6600

Fax: DSN: 377-7212; Comm: (757) 953-7212

Email: NEPMU2NorfolkThreatAssessment@med.navy.mil

Message PLAD: NAVENPVNTMEDU TWO NORFOLK VA

<http://www.med.navy.mil/sites/nmcp/Partnerships/nepmu2/Pages/default.aspx>

WEST COAST/ASIA RESOURCES

Officer in Charge

Navy Environmental and Preventive Medicine Unit No. 5

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3235 Albacore Alley

San Diego, CA 92136-5199

DSN: 526-7070; Comm: (619) 556-7070

Fax: DSN: 526-7071; Comm: (619) 556-7071

Email: threatassessment@med.navy.mil,

Message PLAD: NAVENPVNTMEDU FIVE SAN DIEGO CA

<http://www.med.navy.mil/sites/nmcsd/nepmu5/pages/index.htm>

PACIFIC/ASIA RESOURCES

Officer in Charge

Navy Environmental and Preventive Medicine Unit No. 6

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<http://www.med.navy.mil/sites/nmcsd/nepmu6/Pages/index.html>

Officer in Charge

Navy Entomology Center of Excellence

Naval Air Station, P.O. Box 43

Jacksonville, FL 32212-0043

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http://www.nmcphe.med.navy.mil/Field_Activities/nece_departments.aspx

Enclosure (1)