

#### **DEPARTMENT OF THE NAVY**

BUREAU OF MEDICINE AND SURGERY 7700 ARLINGTON BOULEVARD FALLS CHURCH, VA 22042

> BUMEDINST 6220.8C BUMED-N44 6 Oct 25

### **BUMED INSTRUCTION 6220.8C**

From: Chief, Bureau of Medicine and Surgery

Subj: STREPTOCOCCAL INFECTION PREVENTION PROGRAM

Ref: (a) BUMEDINST 6230.15B

(b) NAVMED P-5010 Chapter 2(c) BUMEDINST 6220.12D

Encl: (1) Group A Streptococcal Infection Prevention Program Guidelines

1. <u>Purpose</u>. To provide policy and guidelines for streptococcal disease surveillance and the use of antibiotic prophylaxis, per reference (a), to control invasive Group A Streptococcal infections and sequelae among recruits at Recruit Training Command (RTC) and Marine Corps Recruit Depots (MCRD), MCRD graduates attending Marine Corps Schools of Infantry (SOIs), and personnel in other Navy and Marine Corps training environments with historically high incidences of streptococcal disease.

- 2. Cancellation. BUMEDINST 6220.8B.
- 3. <u>Scope and Applicability</u>. Applies to commanding officers and officers-in-charge of Navy Medicine Readiness and Training Commands and Navy Medicine Readiness and Training Units providing primary healthcare support to RTC, MCRDs, SOIs, and other Navy and Marine Corps accession or training environments with the potential for high incidence of streptococcal disease.
- 4. <u>Background</u>. Group A Streptococcal infections and their sequelae have long caused illness, training disruptions, and preventable deaths among Navy and Marine Corps recruit and trainee populations. Since the 1960's, a program of streptococcal disease surveillance and penicillin prophylaxis has been the cornerstone of efforts to control invasive streptococcal infection and its sequelae among recruits at Navy training centers and MCRDs. Despite these control efforts, occasional Group A Streptococcal outbreaks continue to occur, most often associated with lapses in control efforts. Routine chemoprophylaxis, continuous surveillance for Group A Streptococcal disease, and rapid intervention is essential for minimizing morbidity and training disruption due to streptococcal disease.
- 5. <u>Policy</u>. Commanding officers and officers-in-charge of Navy Medicine Readiness and Training Commands and Navy Medicine Readiness and Training Units providing primary healthcare support to RTC, MCRDs, SOIs, and other Navy and Marine Corps

accession or training environments must support training environment line leadership in implementing the streptococcal prevention program detailed in enclosure (1).

# 6. Records Management

- a. Records created as a result of this instruction, regardless of format or media, must be maintained and dispositioned per the records disposition schedules located on the Department of the Navy Assistant for Administration, Directives and Records Management Division portal page at <a href="https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx">https://portal.secnav.navy.mil/orgs/DUSNM/DONAA/DRM/Records-and-Information-Management/Approved%20Record%20Schedules/Forms/AllItems.aspx</a>.
- b. For questions concerning the management of records related to this instruction or the records disposition schedules, please contact the local records manager or the OPNAV Records Management Program (DNS-16).
- 7. Review and Effective Date. Per OPNAVINST 5215.17A, Public Health and Safety (BUMED-N44) will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.



D. VIA

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via the Navy Medicine Web site, <a href="https://www.med.navy.mil/Directives/">https://www.med.navy.mil/Directives/</a>

### GROUP A STREPTOCOCCAL INFECTION PREVENTION PROGRAM GUIDELINES

# 1. Background

- a. Streptococcal infections are a significant cause of disease and lost training days among recruits. Most non-cutaneous Group A Streptococcal infections are relatively mild respiratory infections, such as streptococcal pharyngitis. However, Group A Streptococcal infections may also lead to severe life-threatening systemic diseases, such as rheumatic fever, pneumonia, necrotizing fasciitis, and streptococcal toxic shock syndrome. In addition to high risk of severe illness, Group A Streptococcal infections may result in training disruption, requiring delayed graduation or even medical separation of the trainee. Recruits live in an environment at high risk for efficient person-to-person transmission of pathogens and are a relatively immunocompromised population due to the rigorous requirements of introductory military training, which may result in more severe disease.
- b. Since the 1960's, the control of streptococcal infection and disease among recruits has involved various programs of surveillance and penicillin prophylaxis. The published medical literature is replete with recruits identified as a unique population where the risks from infectious diseases are magnified and where accepted practices in civilian populations may not be sufficient. Non-pharmaceutical interventions such as increased ventilation, habitability inspections, and head-to-toe sleeping arrangements may decrease risk, but have repeatedly proved inadequate to prevent Group A Streptococcal outbreaks. The Armed Forces Epidemiological Board memo DASG-AFEB 83 of 19 September 1983 addressed these issues and made recommendations for the use of penicillin prophylaxis in the control of Group A Streptococcal disease in Navy and Marine Corps recruits.
- c. In recent years, other training settings have proven to be high risk Group A Streptococcal environments similar to those of basic recruit training, necessitating a broader approach to streptococcal infection prevention. High-intensity training settings such as SOI Marine Combat Training (MCT) and Infantry Training Battalion (ITB) also require strong streptococcal prevention and control programs.
- d. Surveillance and chemoprophylaxis form the cornerstones of the Navy's streptococcal infection prevention program. Robust routine surveillance of outpatient and inpatient acute respiratory infections due to Group A Streptococcus will identify outbreaks early. Group A Streptococcal infections requiring hospitalization may herald circulation of a particularly virulent strain or an unidentified outbreak and could warrant implementation of prophylaxis even if overall disease rates are below baseline. A detailed accounting of the size of the training population under surveillance is essential to provide accurate disease rates, which are a necessary component of routine surveillance. Navy Medicine Readiness and Training Commands (NAVMEDREADTRNCMD) and Navy Medicine Readiness and Training Units (NAVMEDREADTRNUNIT) must work with their supported training commands to get population sizes of training cohorts.

- e. For the purposes of this instruction, recruit populations are divided into three 4-week groups: Phase I, the first 4 weeks of training; Phase II, the second 4 weeks of training; and in the case of Marine recruits a Phase III, the third 4 weeks of training. These time periods correspond with the approximate 4-week period of protection offered by the primary prophylaxis antibiotic regimen, long-acting benzathine penicillin G.
- f. Training periods and risk levels in settings other than recruit training are variable and should be taken into account when establishing chemoprophylaxis schedules. In general, training in SOI, MCT, and ITB schools can range from 1-to-2 months, and up to 6 months at Advanced ITB or other training locations.
- g. Discontinuation or deviation from established Group A Streptococcal prophylaxis protocols has repeatedly led to the re-emergence of disease and often resulted in preventable disease and hospitalizations. Deviation from established protocols should only be performed in consultation with preventive medicine and infectious disease services.

## 2. <u>Streptococcal Infection Prevention Programs in Recruits</u>

- a. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITs supporting recruit training centers must:
- (1) Establish a local standard operating procedure (SOP) or implementing instruction for Group A Streptococcal prevention. The SOP should include prevention activities based on reference (b) such as habitability inspections of living spaces and environmental cleaning and sanitation standards, and other nonpharmaceutical interventions (e.g., head-to-toe sleeping, indications for masking, cohorting, etc.) to limit transmission of communicable disease. It should also describe established prophylaxis schedules and regimens, detailed surveillance activities, and the process to request any deviations from the prescribed program.
- (2) Routinely administer antibiotic prophylaxis to all recruits upon arrival (year-round) and, additionally, as indicated in paragraph 4 of this enclosure, Primary Prophylaxis Regimen. Communicate monthly or as requested, in writing, the prophylaxis schedule and status to RTC and MCRD leadership.
- (3) Conduct surveillance for streptococcal pharyngitis and Group A Streptococcal infections and sequelae, described in paragraph 5 of this enclosure, Streptococcal Infection Surveillance, and make recommendations to institute prophylaxis for Phase II and Phase III recruits based on this surveillance. If streptococcal pharyngitis and Group A Streptococcal infection surveillance shows rates greater than two standard deviations from baseline rates among recruits past their fourth week at the recruit center (Phase II or Phase III recruits), prophylaxis will be given to populations determined to be at risk. Prophylaxis administration in Phase II training and beyond will continue for 12 weeks after the weekly surveillance rate returns

to baseline, or at the discretion of the commanding officer of the supporting NAVMEDREAD-TRNCMD or NAVMEDREADTRNUNIT as advised by the responsible preventive medicine officer.

b. Supporting Navy Environmental and Preventive Medicine Unit (NAVENPVNTMEDU) remain available for consultation and advice regarding program management.

### 3. Streptococcal Infection Prevention Programs in Populations other than Recruits

- a. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITS supporting ITB and MCT students at the SOIs and populations in other military settings where the risks from Group A Streptococcal disease are magnified due to physically and mentally demanding training and high-density living conditions are strongly encouraged to:
- (1) Establish a local SOP or implementing instruction for Group A Streptococcal prevention. The SOP should include prevention activities based on reference (b) such as habitability inspections of living spaces and environmental cleaning and sanitation standards, and other nonpharmaceutical interventions (e.g., head-to-toe sleeping, indications for masking, cohorting, etc.) to limit transmission of communicable disease. It should also describe established prophylaxis schedules and regimens, detailed surveillance activities, and the process to request any deviations from the prescribed program.
- (2) Administer prophylaxis, per paragraph 4 of this enclosure, Primary Prophylaxis Regimen, established local prophylaxis schedules and regimens. Risk of infection varies among trainee populations. Therefore, prophylaxis schedules may range from no prophylaxis to year-round prophylaxis depending on the observed risk to the population. The supporting NAVENPVNTMEDUs remain a repository of expertise, and consultation with their subject matter experts is strongly encouraged before any deviations are made to routine prophylaxis schedules and regimens. This includes changes in prophylaxis schedules or regimens due to shortages in Bicillin L-A. During an outbreak, the decision to provide prophylaxis beyond what is routinely administered will be guided by surveillance and risk assessment.
- (3) Conduct surveillance for streptococcal pharyngitis and Group A Streptococcal infections and sequelae, described in paragraph 5 (Streptococcal Infection Surveillance), and make decisions to institute antibiotic prophylaxis based on this surveillance. If additional prophylaxis is administered in response to an outbreak, enhanced surveillance activities and control measures must also be commenced. These surveillance data should be used to inform the return to baseline prophylaxis activities.
- (4) Communicate prophylaxis schedule and status to commanding officers or officers-incharge of the training commands monthly or as requested in writing.
- b. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITs responsible for other training populations (such as students in other training programs at the SOIs, Basic Underwater

Demolition School, Marine Corps Basic School and Infantry Officer Course, U.S. Naval Academy, etc.) should consult with the supporting NAVENVPVNTMEDU and implement Group A Streptococcal surveillance per paragraph 5 of this enclosure, Streptococcal Infection Surveillance, when deemed necessary.

### 4. Primary Prophylaxis Regimen

- a. The preferred regimen for Group A Streptococcal prophylaxis is benzathine penicillin G. For the prophylaxis of streptococcal infections, the long-acting formulation of benzathine penicillin G, Bicillin L-A sterile penicillin G benzathine suspension, NSN 6505-01-562-3649 (Bicillin L-A), is the acceptable formulation. Other types of penicillin formulated for other clinical uses will not be used for streptococcal infection prophylaxis. If Bicillin L-A is not available, oral azithromycin 1 gram weekly for 4 weeks is the alternate regimen.
- b. Bicillin L-A is given in a dosage of 1.2 million units intramuscularly in the upper outer quadrant of one buttock. Bicillin L-A is an irritating material; therefore, deep intramuscular injection is required. When administered as stipulated, Bicillin L-A is sufficient for streptococcal disease prevention for approximately 2-to-4 weeks.
- c. There is a rare possibility of immediate and severe anaphylactic reaction to parenteral penicillin. Before administration of Bicillin L-A, trainees will be questioned for any history of penicillin hypersensitivity, specifically including breathing difficulty, tightness in the chest, drop in blood pressure, or urticarial rash following penicillin administration in the past. Persons giving a history with the above symptoms compatible with severe immediate or delayed reactions to penicillin will not be given Bicillin L-A for streptococcal control without prior consultation with NAVMEDREADTRNCMD or NAVMEDREADTRNUNIT Allergy and Immunology.
- d. Trainees with established penicillin hypersensitivity should be given the preferred alternate Group A Streptococcal prophylaxis regimen of oral azithromycin, 1 gram weekly for 4 weeks. When administering alternate prophylaxis regimens, directly observed therapy must be instituted. It is strongly recommended that Marine drill instructors and Navy recruit division commanders verify that each recruit takes each dose. Failure to provide adequate prophylaxis to penicillin-allergic trainees has caused severe Group A Streptococcal outbreaks in the past.
- e. Navy Medicine personnel must coordinate with Defense Health Agency pharmacies to ensure sufficient antibiotic availability to seamlessly support without interruption the Group A Streptococcal prophylaxis and treatment regimens identified in this document.
- f. There is a possibility of immediate and severe anaphylactic reactions to parenteral penicillin. Be prepared to manage a medical emergency related to the administration of Bicillin

L-A by having a written emergency medical protocol available, as well as appropriate equipment and medications. The requirements of reference (a) for vaccine administration procedures and emergency medical treatment also apply to the administration of Bicillin L-A.

g. Use of any other prophylaxis regimens require consultation with the chain of command preventive medicine assets. It is most strongly recommended to consult with the supporting NAVMEDREADTRNCMD or NAVMEDREADTRNUNIT infectious disease service prior to initiating any alternate regimen.

### 5. Streptococcal Infection Surveillance

- a. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITs providing primary support to a Navy or Marine Corps training activity must monitor the incidence of streptococcal pharyngitis and Group A Streptococcal infections among training populations throughout the year. Surveillance requirements include:
- (1) Monitoring streptococcal pharyngitis and Group A Streptococcal infections. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITs must know the baseline rate of disease in their supported population. The disease rate is defined as the number of cases divided by the number of recruits. Rapid antigen detection tests or nucleic acid amplification tests can be used to expedite patient management decisions and can be used for counting positive cases but should not replace obtaining cultures which are necessary for monitoring antibiotic resistance.
- (2) Monitoring for drug resistance. If using azithromycin instead of Bicillin L-A during times of Bicillin L-A non-availability, NAVMEDREADTRNCMD or NAVMEDREADTRNUNIT preventive medicine should work closely with military medical treatment facility medical microbiology to monitor for emergence of streptococcal group A resistance. NAVMEDREADTRNCMD or NAVMEDREADTRNUNIT infectious disease consultation should be considered if high levels (greater than twenty percent) of resistance are detected.
- (3) Monitoring for severe disease manifestations. A severe infection requiring hospitalization may herald circulation of a particularly virulent strain and warrant consideration of antibiotic prophylaxis even if rates are below baseline. NAVMEDREADTRNCMD or NAVMEDREADTRNUNIT consultation with infectious disease should be considered.
- (4) Surveillance processes that allow for rapid identification of an outbreak. In the event of an outbreak, detailed data collection must be implemented to ensure effective outbreak response. Data elements to collect for each case include: Department of Defense identification number, name, sex, company or ship, date of clinic visit, diagnosis, laboratory confirmation status, date and type of Group A Streptococcal prophylaxis, date of hospital admission, and admission diagnosis. NAVMEDREADTRNCMDs and NAVMEDREADTRNUNITs providing

care for trainees should maintain a line list of streptococcal pharyngitis and Group A Streptococcal cases until the outbreak is declared over. Report the outbreak as required per reference (c).

- (5) In general, screening for asymptomatic carriers of Group A Streptococcal is not useful in the trainee setting and is not recommended. In the setting of an outbreak, screening for asymptomatic carriers may be considered to help guide interventions to limit further spread of the pathogen.
- b. Supporting NAVENPVNTMEDUs remain available for consultation and advice regarding surveillance initiatives.
- 6. Preventive medicine authorities providing installation public health support to recruit training centers should work closely with RTC leadership to ensure all RTC staff are aware of the current prophylaxis schedule and nonpharmaceutical interventions that can be taken to reduce spread. Preventive medicine authorities should emphasize the potential for prophylaxis noncompliance to result in significant outbreaks and training delays. Deviations from current prophylaxis guidelines is strongly discouraged and should involve approval from chain of command advised by preventive medicine assets. The supporting NAVENVPVNTMEDU remains available for consultation.