



***Surveillance Snapshot: Cases of Service Member
Meningococcal Disease Reported to the Naval
Health Research Center Laboratory–
Based Meningococcal Disease
Surveillance Program, 2006–2014***

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Naval Health Research Center

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14. ABSTRACT Rates of meningococcal disease have decreased more than 90% since the early 1970s, and in recent years, the incidence rates in the military and general populations have become equivalent. Of the 33 cases reported, 31 have a record of receipt of quadrivalent meningococcal vaccine before their illnesses; for the other two cases, the vaccine history was unavailable. All fatal cases (n=6) had been immunized. Among the 33 cases, serogroups of <i>Neisseria meningitidis</i> identified were type B (n=10), type C (n=8), type Y (n=11), and undetermined (n=4). The distribution of serogroups among the fatal cases showed two each of types B, C, and Y. Among the six most recent cases (2012–2014), four were infected with group B and there was one each of groups C and Y. Serogroup B is not covered in the available quadrivalent vaccines (which protect against serogroups A, C, W-135, and Y) licensed in the United States. NHRC identifies cases of meningococcal disease through the Services' reportable events systems and regular reports from the Navy and Marine Corps Public Health Center and the Armed Forces Health Surveillance Center, as well as notification from sites cognizant of the surveillance.

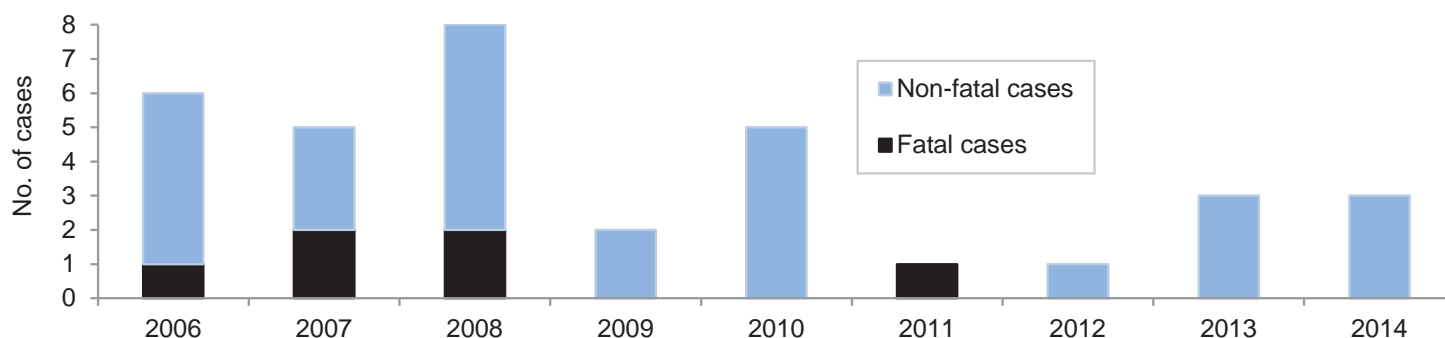
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Surveillance Snapshot: Cases of Service Member Meningococcal Disease Reported to the Naval Health Research Center Laboratory–Based Meningococcal Disease Surveillance Program, 2006–2014

Michael P. Broderick, PhD

FIGURE. Annual counts of fatal and non-fatal cases of meningococcal disease among active duty service members, U.S. Armed Forces, 2006–2014 (through June 2014)



The Naval Health Research Center (NHRC), San Diego, CA, conducts laboratory-based surveillance to capture every case of meningococcal disease in U.S. military active duty members and dependents. The surveillance program has been in place since 2007.

Rates of meningococcal disease have decreased by more than 90% since the early 1970s,¹ and in recent years, the incidence rates in the military and general populations have become equivalent.² Of the 34 cases reported in this snapshot (**Figure**), 32 have a record of receipt of quadrivalent meningococcal vaccine before their illnesses; for the other two cases, the vaccine history was unavailable. All fatal cases (n=6) had been immunized. Among the 34 cases, serogroups of *Neisseria meningitidis* identified were type B (n=10), type C (n=8), type Y (n=11), and undetermined (n=5). The distribution of serogroups among the fatal cases showed two each of types B, C, and Y. Among the seven most recent cases (2012–2014), four were infected with group B; there was one each of groups C and Y; and one was nongroupable. Serogroup B is not covered in the available quadrivalent vaccines (which protect against serogroups A, C, W-135, and Y) licensed in the U.S.

NHRC identifies cases of meningococcal disease through the Services' reportable events systems; daily feeds of laboratory results from the Navy and Marine Corps Public Health Center in Portsmouth, VA; a monthly report from the Armed Forces Health Surveillance Center covering diagnoses of meningococcal disease made during healthcare encounters in the Military Health System; and feeder reports from public health agencies in South Carolina and San Diego.

Clinicians and public health officials are encouraged to report cases of meningococcal infection and to forward microbiologic specimens to NHRC for confirmatory testing and serogrouping. Results are reported back to the originating treatment facility. NHRC produces a quarterly surveillance report, which is available online at <http://www.med.navy.mil/sites/nhrc/geis/Documents/MGCreport.pdf>.

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