b Meningococcal disease

In South Africa, meningococcal disease is endemic with cases occurring year-round, but with seasonal peaks in winter and early spring. In addition, there is a natural cyclical pattern of meningococcal disease with peaks of disease occurring every 5 to 10 years. Current rates of meningococcal disease in South Africa are at a nadir and we are expecting an increase in rates based on known periodicity.

Currently, sporadic cases of meningococcal disease continue to be reported across the country, with no noticeable seasonal increase of laboratory-confirmed cases as yet. A possible case (laboratory results pending) in a college student in Potchefstroom was the subject of a number of recent media reports. There are inherent delays in laboratory-based reporting, which lags behind clinical reports. In addition, because our laboratory-based surveillance system excludes disease diagnosed clinically without laboratory confirmation, rates reported through laboratory surveillance represent a minimum estimate of the true burden of disease.

By the end of epidemiological week 22 (week ending 31 May 2015), a total of 31 laboratory-confirmed cases was reported to the Centre for Respiratory Diseases and Meningitis (CRDM), NICD-NHLS (Table 1). The highest burden of disease is seen usually in young children. Amongst the <2-year age group, 7 (22%) cases have been reported so far; a higher number of cases for the equivalent time period and age group in 2014 (n=14, 30%) were reported. Eight cases have also being reported in the 10 to 19-year-old age group.

The reported cases were caused by diverse serogroups, which is in keeping with sporadic endemic disease in the country. Serogroup data were available for 22/31 (71%) of cases. Serogroups B, W* and Y have been identified most commonly this year (7/22, 32% serogroup B; 8/22, 36% serogroup W* and 5/22, 23% serogroup Y). There were also 2 cases of serogroup C disease.
As the meningococcal season is due to start and an increase in cases may be expected this year, clinicians should have a high index of suspicion for meningococcal disease in patients who present with an acute febrile illness and nonspecific early signs and symptoms. Disease typically has a rapid progression and should be managed as a medical emergency in order to reduce morbidity and mortality. All cases of suspected and/or confirmed meningococcal disease (meningitis and sepsis) should be notified telephonically to the Department of Health.

A quadrivalent meningococcal conjugate vaccine is now available in South Africa and is recommended for certain high risk groups (Table 2). Recommendations in Table 2 are not yet officially endorsed, but are advised by local experts. Please discuss with CRDM consultants if clarification is required.

Table 1. Number of laboratory-confirmed meningococcal disease cases reported until

Province	Year 2014	2015
Eastern Cape	11	8
Free State	2	3
Gauteng	15	4
KwaZulu-Natal	2	5
Limpopo	0	0
Mpumalanga	0	1
Northern Cape	0	0
North West	0	1
Western Cape	17	9
	47	31

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS

Table 2. Proposed recommendations for meningococcal vaccine use in South Africa*

Population Group	Vaccine choice	Recommendation	Primary dosing	Booster
Healthy children and infants	Quadrivalent conjugate vaccine MenACYW	Should be considered	According to Menactra package insert: Children 9 months to 24 months: 2 doses 12 weeks apart Children >24 months: 1 dose	
Healthy adolescents or young adults entering university or college (particularly if staying in hostels)	Quadrivalent conjugate vaccine	Should be considered	Single dose prior to entry into university or college	
Hajj pilgrims and travellers to Saudi Arabia	Quadrivalent conjugate vaccine	Required	Single primary dose	
Persons with medical conditions at high risk of acquiring infection:	Quadrivalent conjugate vaccine	Recommended	Two-dose primary schedule 8 weeks apart	Booster every 5 years
Complement component deficiencies				
Anatomical or functional asplenia	Quadrivalent conjugate vaccine	Recommended	Two-dose primary schedule 8 weeks apart	Booster every 5 years
HIV infection	Quadrivalent conjugate vaccine	Should be considered	Two-dose primary schedule 8 weeks apart	Booster every 5 years
Other immunocompromising conditions	Quadrivalent conjugate vaccine	Should be considered	Two-dose primary schedule 8 weeks apart	Booster every 5 years

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