b Meningococcal disease

Only 19 cases of laboratory-confirmed invasive meningococcal disease (IMD) have been reported through the GERMS-SA surveillance network from 1 January 2017 until 7 May 2017 (end of week 18). This is less than the 27 cases reported in 2016 or the 42 cases reported in 2015 for the same period. As winter approaches we expect to see a rise in the number of cases. However, it presently appears that South Africa may benefit from yet another year of low IMD incidence.

The majority of cases have been reported from the Western Cape Province (8), followed by Gauteng Province (5), Eastern Cape Province (4) and Free State Province (2). Infants still bear the greatest burden of disease. Of the 10 clinical isolates available for typing, serogroup B is the most predominant serogroup (5 cases), followed by Y (3). This is indicative of the continuous shift in serogroup distribution seen over the past few years, with serogroup B now dominating, serogroup W decreasing, and C and Y increasing. (Figure 3)

A diagnosis or suspicion of meningococcal disease evokes fear in the patient, the clinician and family members and could lead to widespread panic within the patient’s community. Neisseria meningitidis (the meningococcus) is an obligate human commensal and is carried asymptomatically in the nasopharynx of approximately 1 in 10 healthy people. It is readily spread from person to person through aerosolised respiratory droplets or direct contact with sputum or saliva. Meningococcal disease develops when a recently-acquired virulent strain of meningococcus invades the mucosa and enters the blood stream causing an overwhelming infection.

Post-exposure prophylaxis is only necessary for close contacts of the case. These are identified as household contacts (those who eat and sleep at the home of the case) or overnight visitors at the case’s home in the preceding week. Intimate kissing partners and close friends who may have been exposed to large respiratory droplets through sharing of eating utensils or coughing exposure are included. Only health care workers who have been exposed to large secretory droplets - for example when inserting an endotracheal tube or administering CPR - require prophylaxis. Fellow school pupils, friends, work colleagues or co-travellers on a bus/aeroplane or taxi are not considered close contacts of the case and do not require prophylaxis. A single dose of oral ciprofloxacin 500 mg (10 mg/kg in children) is sufficient to eliminate carriage of meningococcus. Alternate prophylaxis includes a single dose of ceftriaxone 250 mg IM or rifampicin 10 mg/kg take twice daily for 2 days.

Although cases present throughout the year, IMD peaks in the winter through to spring months in South Africa. With winter approaching, clinicians should be extra vigilant in suspecting meningococcal disease and meningitis in patients presenting with fever, headaches or other non-specific symptoms, and appropriate intravenous antibiotics (penicillin or ceftriaxone) should be started promptly. All suspected or confirmed cases of meningococcal disease should be immediately notified telephonically to the provincial Communicable Disease Control Coordinator (National Department of Health CDCC 012 395 8096) to ensure accurate surveillance data and to facilitate contract tracing and post-exposure prophylaxis.

Source: Centre for Respiratory Diseases and Meningitis, NICD-NHLS; annev@nicd.ac.za

Figure 3. Numbers of laboratory-confirmed invasive meningococcal disease in South Africa from 2014 to 2017, by province.