PUBLIC HEALTH INFORMATION

Government of South Australia
SA Health

COMMUNICABLE DISEASE CONTROL BRANCH

- Please bring to the attention of all doctors -

Date: 24 May 2017 Contact telephone number: **1300 232 272 (24 hours/7 days)**

2017 Meningococcal Season Reminder

- Invasive meningococcal disease (IMD) should be considered in the differential diagnosis of any systemic febrile illness in any age group.
- A rash is not always present, especially in the early stages of the disease.
- Early recognition, immediate empirical treatment with parenteral benzylpenicillin and urgent transfer to hospital can be life-saving.
- Serogroup W and Y cases have begun to increase in Australia across all ages, including Aboriginal children, and in some cases have had atypical presentations.
- Urgent notification to the CDCB on suspicion of IMD is vital for a timely public health response.

Epidemiology
Notifications of invasive meningococcal disease (IMD) usually increase in winter and spring. While the age distribution of cases shows peaks in children <5 years and young adults aged 15-24 years, IMD can occur in any age group. Currently in Australia, IMD is predominantly caused by serogroup W, although in South Australia (SA) serogroup B remains predominant. Eight cases of IMD (3 serogroup W, 2 Y, 3 B) have been notified in SA since January 2017, with 27 cases notified in 2016 (5 serogroup W, 22 B).

Notification of cases
The Communicable Disease Control Branch (CDCB) must be notified urgently by phoning 1300 232 272 (24 hrs/7 days) when IMD is suspected. **Do not wait for laboratory confirmation**. This enables rapid contact tracing and provision of clearance antibiotics as soon as possible after diagnosis.

Clinical features
IMD usually causes meningitis, septicaemia, or a combination of both. Symptoms are often non-specific, including fever, headache, vomiting, photophobia, joint pains, neck stiffness, drowsiness and irritability. Septicaemia is more common than meningitis, with a greater mortality. A petechial or purpuric rash may be present, but in the early stages the rash may be atypical or absent, and does not occur with meningitis if septicaemia is not also present. Children may have clinical features not normally expected in an acute self-limiting illness, for example, poor eye contact, altered mental state, or pallor despite a high temperature. In children <16 years, early signs of peripheral vascular shutdown (leg pain, abnormal skin colour and cold hands and feet) should heighten suspicion of IMD. Serogroup W cases can present in less typical ways (e.g. septic arthritis, pneumonia and epiglottitis) and are associated with delayed diagnosis and a higher case fatality rate.

If a patient with a non-specific febrile illness does not require hospital referral, the carer should be told to watch the patient and seek urgent and immediate help if the patient deteriorates in any way, especially if a rash develops. A medical review may be urgently required at any time, even within hours of the initial consultation, as IMD can be associated with rapid clinical deterioration.

Management before hospitalisation
Early recognition and treatment of IMD can be life-saving. Before the administration of antibiotics, if possible, collect samples for blood cultures and PCR and send all samples with the patient to hospital. Patients suspected of having IMD should be treated immediately with parenteral benzylpenicillin (preferably intravenously, otherwise intramuscularly) followed by urgent ambulance transfer to hospital. All GPs should have benzylpenicillin in their surgeries and emergency bags ready for immediate use.

- Use: *benzylpenicillin 2.4 g (child: 60 mg/kg up to 2.4 g) IV or IM.*
- If hypersensitive to penicillins use: *ceftriaxone 2 g (child 1 month or older: 50 mg/kg up to 2 g) IV or IM.*

Further information
See www.sahealth.sa.gov.au/InfectiousDiseaseControl and Therapeutic Guidelines: Antibiotic. Guidelines for clinical and public health management of meningococcal disease in Australia are available at http://www.health.gov.au/internet/main/publishing.nsf/Content/cdna-song-IMD.htm. In some cases meningococcal infection will have serious health consequences or can be fatal. Doctors are urged to provide or refer people for qualified counselling.

For all enquires please contact the CDCB on 1300 232 272 (24 hours/7 days)
Dr Ann Koehler – Director, Communicable Disease Control Branch