Meningococcal B Strain Disease Outbreak at Oregon State University (OSU).

Strain B is not covered by routine meningitis vaccine.

GRANT COUNTY, WA – Grant County Health Officer, Dr. Alexander Brzezny, issues an alert to inform all healthcare providers of a Meningococcal B Strain Disease Outbreak at Oregon State University (OSU) in Corvallis, OR. As of, November 24, 2017, five OSU students have been diagnosed with serogroup B Meningococcal disease. GCHD is encouraging all providers to look for the signs and symptoms of meningococcal disease in high risk patients (presently OSU college population). GCHD is also recommending that OSU students without symptoms receive Meningococcal B strain vaccine.

Meningococcal disease (meningitis) is a serious, potentially fatal infection leading to inflammation of the tissue around the brain and spinal cord, often rapidly progressing to sepsis (meningococcemia). It is caused by Neisseria meningitidis bacteria. While routine meningococcal vaccine (most commonly Menactra® or Menveo®) provides a good level of protection against ACWY invasive strains of Neisseria, the current OSU outbreak is caused by strain B, not contained in routinely administered vaccine.

Signs or symptoms of meningococcal disease are similar to other illnesses and can be initially hard to identify. Early treatment can prevent disability and even death. An increased level of vigilance is advised for the next several weeks as students may be traveling for winter break. OSU’s winter break spans from December 8, 2017 – January 7, 2018.

Providers should consider meningococcal disease in their differential diagnosis for any patient attending OSU, who present with meningitis symptoms. Vaccination of asymptomatic students attending OSU with strain B vaccine should be strongly considered. For information on managing students who have a known history of close exposure to Neisseria, please contact GCHD. Post-exposure prophylaxis is an appropriate treatment measure for those with a proven close contact to Neisseria.

Maintaining high suspicion of illness:
Continued close surveillance in your practice for the next several weeks as students may be traveling for winter break. Early signs of illness in patients is important to initiate appropriate tests and therapy without delay. Early symptoms may include:

- sudden onset of fever,
• intense headache,
• nausea,
• vomiting,
• often a stiff neck and
• frequently a petechial rash or other nuanced rashes.
  o The rash may present as pink macules, petechiae, or even vesicles. Photophobia, altered mental state, delirium and coma may appear. It can also present as pneumonia, arthritis and epiglottitis. Occasionally fulminant cases exhibit sudden prostration, widespread ecchymoses and shock at onset.

**CDC recommended Serogroup B Meningococcal Vaccines**

Two serogroup B meningococcal vaccines — Bexsero® and Trumenba® — have been licensed by the Food and Drug Administration (FDA).

These vaccines are recommended routinely for people 10 years or older who are at increased risk for serogroup B meningococcal infections, including:

• People at risk because of a serogroup B meningococcal disease outbreak
• Anyone with functional asplenia (non-functional spleen or splenectomy)
• Anyone with "persistent complement component deficiency"
• Anyone taking eculizumab (also called Soliris®)
• Microbiologists who routinely work with isolates of N. meningitides

For best protection, more than 1 dose of a serogroup B meningococcal vaccine is needed. The same vaccine must be used for all doses.

**Meningococcal Meningitis is immediately reportable to GCHD.** If you suspect illness or have encountered individuals with a proven close contacts to Neisseria, please contact GCHD as soon as possible. Please see attached “Reporting and Surveillance Guidelines” from the state Department of Health for more in depth information.

**Addition Resources and Report form:**
- Meningococcal Disease  I  DOH
- Serogroup B Meningococcal (MenB) VIS  I CDC

**Consultation**
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