Public Health Advisory
4/2/2024
Increase in Invasive Serogroup Y Meningococcal Disease

KEY POINTS
• The CDC issued a health advisory on March 28, 2024, highlighting a significant surge in invasive meningococcal disease cases in the US. In 2024, 143 cases were reported nationally as of March 25, marking a 77% increase from March 2023's, 81 cases. • Of the *Neisseria meningitidis* serogroup Y cases in 2023, the sequence type (ST) 1466 accounted for 68% of cases. • In 2023, most cases of invasive meningococcal disease serogroup Y ST-1466 had a clinically distinct presentation from meningitis. • Over the past 5 years, Clark County recorded 11 cases with 82% diagnosed with bacteremia. • Although rare, all serogroups of invasive meningococcal disease have a case-fatality rate of 10-15% with ST-1466 showing a slightly higher rate at 18% in 2023.

Actions for providers:

1) **Consideration**: Consider meningococcal disease even with patients that **may have no meningeal symptoms**, particularly **in disproportionately affected populations** affected by serogroup Y ST-1466 in 2023:
    - Ages 30 – 60 years old (65% of cases)
    - Black or African American people (63% of cases)
    - People with HIV (15% of cases)
2) **Testing:** Order **blood and CSF cultures** to confirm N. meningitis infection. While molecular tests can also be ordered, culture and sensitivity testing help guide treatment.
3) **Treatment:** Start empiric antibiotics (ceftriaxone 2 g IV every 12 hours for adults and 50 mg/kg (maximum 2 g) IV every 12 hours for children) in suspected cases until culture and sensitivity results are back. **Serogroup Y ST-1466 have been susceptible to all first-line antibiotics to date** and are distinctly separate from ciprofloxacin-resistant serogroup Y strains that are also circulating in the U.S.
4) **Recommendation:** Recommend **prophylactic treatment for close contacts** (Table 1).
5) **Vaccination:** Ensure all people eligible for meningococcal vaccination are up to date (Table 2).
6) **Notification:** Immediately report suspect or confirmed cases to SNHD.

To view the CDC Health advisory, visit https://emergency.cdc.gov/han/2024/pdf/CDC_HAN_505.pdf

If you have any questions, please contact the Southern Nevada Health District Office of Acute Communicable Disease Control at 702-759-1300.

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Health Alert: conveys the highest level of importance; warrants immediate action or attention
Health Advisory: provides important information for a specific incident or situation; may not require immediate action
Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action

Table 1. Recommended chemoprophylaxis regimens for high-risk contacts of persons with invasive meningococcal disease (adapted from https://www.cdc.gov/vaccines/pubs/surv-manual/chpt08-mening.html)

Drug	Age	Dose	Duration	Efficacy (%)	Cautions
Rifampin	<1 month	5 mg/kg, orally, every 12 hours	2 days		Discussion with an expert for infants <1 month
	≥1 month	10 mg/kg (maximum 600 mg), orally, every 12 hours	2 days	90–95	Can interfere with efficacy of oral contraceptives and some seizure prevention and anticoagulant medications; may stain soft contact lenses. Not recommended for pregnant women.
Ceftriaxone	<15 years	125 mg, intramuscularly	Single dose	90–95	To decrease pain at injection site, dilute with 1% lidocaine.
	≥15 years	250 mg, intramuscularly	Single dose	90–95	
Ciprofloxacin	≥1 month	20mg/kg (maximum 500 mg), orally	Single dose	90-95	Not recommended for pregnant women. Do not use if there is community fluoroquinolone-resistant strains
Azithromycin		10 mg/kg (maximum 500 mg)	Single dose	90	Not recommended routinely. Equivalent to rifampin for eradication of *N. meningitidis* from nasopharynx in one study

- Chemoprophylaxis should be administered as soon as possible, ideally within 24 hours. If given more than 14 days after disease onset, it is of limited to no benefit.
- Close contacts of persons with N. meningitidis positive from sterile collection sites (blood, CSF, synovial fluid, et cetera) should receive antimicrobial chemoprophylaxis, regardless of immunization status, and include:
    1) Household members
    2) Childcare center contacts
    3) Anyone directly exposed to oral secretions from the patient (kissing, mouth to mouth resuscitation, endotracheal tube management)

Table 2. Vaccination schedules for meningitis

Meningococcal Serogroup A,C,W,Y Vaccination				
	Minimum age for special situations*	11-12 years	16 years	>/= 19 years
MenACWY-CRM (Menveo ®)	2 months lypophilized 10 years liquid	Dose 1	Dose 2*	*special situations
MenACWY-TT (MenQuadfi ®)	2 years	Dose 1	Dose 2*	
MenACWY-TT/MenB-FHbp (Penbraya ®)	10 years	Dose 1 *(combined with MenB vaccination requires shared decision making if patient is not at increased risk).*		

*For special situations such as cases of anatomic or functional asplenia (including sickle cell disease), HIV infection, persistent complement deficiency, complement inhibitor use; travel to places with hyperendemic or epidemic cases (African meningitis, travel during Hajj), earlier vaccination is advised. Please refer to https://www.cdc.gov/vaccines/schedules/hcp/imz/child-schedule-notes.html#note-mening.

NOTE: Meningococcal serogroup B vaccination is a 2-dose series that starts at 16 years of age (Bexsero ® and Trumenba ® are not interchangeable). If Penbraya ® is administered, second dose for Men B must be Trumenba ®