

DATE:	04/09/2024
TO:	Health Alert Network
FROM:	Debra L. Bogen, MD, FAAP, Acting Secretary of Health
SUBJECT:	Multistate Increase in Invasive Serogroup Y Meningococcal Disease
DISTRIBUTION:	Statewide
LOCATION:	n/a
STREET ADDRESS:	n/a
COUNTY:	n/a
MUNICIPALITY:	n/a
ZIP CODE:	n/a

This transmission is a "Health Advisory": provides important information for a specific incident or situation; may require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, DENTAL, PEDIATRIC, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP; LONG-TERM CARE FACILITIES: PLEASE SHARE WITH ALL MEDICAL, INFECTION CONTROL, AND NURSING STAFF IN YOUR FACILITY

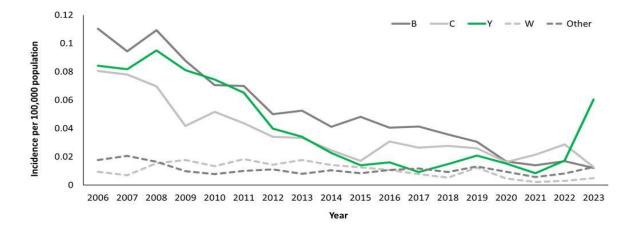
Summary

- On March 28, 2024, the Centers for Disease Control and Prevention (CDC) released a <u>Health Alert Network (HAN)</u> alerting healthcare providers of an increase in invasive meningococcal disease, mainly attributable to *Neisseria meningitidis* serogroup Y ST1466.
- Providers should have a heightened suspicion for invasive meningococcal disease and initiate <u>antibiotic treatment</u> immediately, particularly in people who are disproportionately affected by the current increase, including people ages 30-60 years, Black or African American people, and people with HIV.
- Providers should be aware that patients with invasive meningococcal disease may present with bacteremia or septic arthritis and without typical meningococcal symptoms such as headache and stiff neck.
- Providers should ensure that their patients are properly protected against meningococcal disease by having all eligible patients stay <u>up to date with their</u> <u>meningococcal vaccinations</u>, especially those at increased risk of severe disease.
- In addition to reporting, clinical laboratories must submit isolates of, or specimen isolates positive for, *Neisseria meningitidis* to DOH's Bureau of Laboratories (BOL) within 5 workdays of isolation.
- The Pennsylvania Department of Health (DOH) reminds healthcare providers that invasive meningococcal disease is a reportable condition, and healthcare providers and healthcare facilities are required to immediately report, within 24 hours, suspected cases of meningococcal invasive disease to their local health department or to the DOH at 877-PA-HEALTH (877-724-3258).

Background

On March 28, 2024, the CDC issued a <u>HAN</u> to alert healthcare providers of an increase in invasive meningococcal disease, mainly attributable to *Neisseria meningitidis* serogroup Y. In 2023, the CDC recorded the highest annual number of cases of invasive meningococcal disease since 2014. Additionally, as of March 25, 2024, there have been 143 cases reported to the CDC in 2024, which is an increase of 62 cases over the 81 reported as of this date in 2023. The CDC has noted a specific meningococcal serotype Y strain, sequence type (ST) 1466, as the type that has been responsible for most of the serogroup Y cases in 2023. Of note, these cases of meningococcal disease have disproportionately occurred in people ages 30-60 years (65%), Black or African American people (63%), and in people with HIV (15%). Fortunately, Pennsylvania has not experienced an increase in Neisseria meningitidis serotype Y disease with only sporadic cases of *Neisseria meningitidis* serogroup Y in the last year.

Figure: Trends in meningococcal disease incidence per 100,000 population, by serogroup—United States, 2006–2023. Incidence of *Neisseria meningitidis* serogroup Y is shown in green. Source: National Notifiable Diseases Surveillance System, with additional serogroup data from Active Bacterial Core surveillance (ABCs) and state health departments. 2022 and 2023 data are preliminary.



It is important for providers to remain vigilant for meningococcal disease. Providers should ensure that their patients are properly protected against meningococcal disease by having all eligible patients stay <u>up to date</u> <u>with their meningococcal vaccinations</u>. All health care providers are reminded that cases of meningococcal disease must be reported to their local or state health department within 24 hours of diagnosis.

Clinical Presentation

<u>Meningococcal disease</u>, caused by the bacterium *Neisseria meningitidis*, is a rare but severe illness with a case-fatality rate of 10–15% even with appropriate antibiotic treatment.

Typically, meningococcal disease presents with the following symptoms: fever, headache, stiff neck, nausea, vomiting, photophobia, or altered mental status. However, it can also present with signs and symptoms of bacteremia which include fever and chills, fatigue, vomiting, cold hands and feet, severe aches and pains, rapid breathing, diarrhea, or, in later stages, a dark purple rash. While initial symptoms of meningococcal disease can at first be non-specific, they worsen rapidly, and the disease can become life-threatening within hours.

In the last year the CDC has reported that the clinical presentation of the *Neisseria meningitidis* serogroup Y ST-146 is typically with bacteremia rather than classic meningitis. 64% of cases presented with bacteremia, and at least 4% presented with septic arthritis.

The case fatality rate in the last year has also been higher than the historical case fatality rate for meningococcal disease. In 2022-2023, of the 94 patients with known outcomes, 17 (18%) died as compared to the 11% reported rate for serogroup Y cases in 2017–2021.

Treatment

Immediate <u>antibiotic treatment</u> for meningococcal disease is critical to prevent long term morbidity and mortality. *Neisseria meningitidis* serogroup Y ST-1466 isolates tested to date have been susceptible to all first-line antibiotics recommended for treatment and prophylaxis. *Neisseria meningitidis* serogroup Y ST-1466 isolates are distinct from <u>ciprofloxacin-resistant serogroup Y strains that are also circulating in the United States</u> that are disproportionately affecting Hispanic populations.

Prevention with Vaccines

Vaccines against serogroups A, C, W, Y (MenACWY) and serogroup B (MenB) are available in the United States. <u>MenACWY vaccines are routinely recommended</u> for adolescents and for <u>people with other risk</u> factors (occupation, travel) or underlying medical conditions, including <u>HIV</u>. The CDC reports that in 2022-2023 only four patients with HIV who were infected with the *Neisseria meningitidis* serogroup Y ST-1466, had been previously vaccinated with MenACWY vaccine, and none of them were up to date with the recommended doses. Providers should be aware that patients with <u>high-risk conditions such as HIV</u>, may be on a schedule that requires more frequent boosters.

To date, no other *Neisseria meningitidis* serogroup Y ST-1466 infections have been identified in previously healthy people who had received MenACWY vaccine.

Public Health Recommendations:

All suspected cases of invasive *Neisseria meningitidis* should be investigated to identify <u>close contacts</u>, determine <u>vaccination status</u>, and evaluate for the possibility of an <u>outbreak</u>. The DOH reminds healthcare providers that invasive meningococcal disease is a reportable condition, and healthcare providers and healthcare facilities are required to immediately report, within 24 hours, suspected cases of meningococcal invasive disease to their local health department or to the DOH at 877-PA-HEALTH (877-724-3258).

Post-exposure prophylaxis is recommended for all <u>close contacts</u> of a person with invasive meningococcal disease. *Neisseria meningitidis* serogroup Y ST-1466 is susceptible to all the <u>first line</u> <u>antibotics recommended by the CDC</u> as it is different from <u>ciprofloxacin-resistant serogroup Y strains that</u> <u>are also circulating in the United States</u>.

Pennsylvania Department of Health Bureau of Laboratories Requirements

In addition to reporting, clinical laboratories must submit isolates of, or specimen isolates positive for *Neisseria meningitidis* to DOH's BOL within 5 workdays of isolation. Bacterial isolates are needed to determine the organism's strain or subtype, resistance patterns, and other characteristics. BOL routinely ships all *Neisseria meningitidis* serogroup Y isolates to CDC to perform whole genome sequencing.

For *Neisseria meningitidis* specimen collection and shipping information along with <u>submission forms</u> see the <u>https://www.health.pa.gov/topics/Documents/Laboratories/BOL-1-V11.pdf</u> on the DOH's BOL website.

For questions, please call your local health department or DOH at 1-877-PA-HEALTH (877-724-3258).

DOH reminds providers to immediately report suspected cases of invasive meningococcal disease to local public health authorities or to DOH at 877-PA-HEALTH.

Individuals interested in receiving future PA-HANs can register at: <u>https://ondemand.mir3.com/han-pa-gov/login/</u>.

This information is current as of April 9, 2024 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.