



# Health Alert



City of Chicago  
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## ***Neisseria meningitidis* Cases in a Chicago Shelter**

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### Summary and Action Items

- Two cases of *Neisseria meningitidis* infections have been detected since May 2024 in individuals residing in the same Chicago shelter.
- In 2024 to date, there have been 10 cases of *N. meningitidis* in Chicago residents, compared to 1–3 cases annually from 2017 to 2022.
- Vaccination efforts at the shelter are underway.
- Providers should continue to have a high index of suspicion for *N. meningitidis* in patients presenting with clinically compatible symptoms.

**REPORTING/CONTACT INFORMATION:** Suspect or confirmed cases of *N. meningitidis* should be reported immediately in INEDSS or through the disease reporting line at 312-743-9000 (option 7) or 311 after business hours.

**Background:** Two cases of *Neisseria meningitidis* infections, caused by serogroup Y, have been detected since May 2024 in individuals residing in the same Chicago shelter. According to CDC, a meningococcal disease outbreak can be defined as 2–3 cases caused by the same serogroup and occurring in the same well-defined community within a 3-month period. As part of its response, Chicago Department of Public Health (CDPH) has initiated a vaccination and education campaign at the affected shelter. The infections occurred in one adult and one infant causing meningitis and bacteremia, respectively. Close contacts have received post-exposure prophylaxis and onsite shelter efforts are currently underway.

In Chicago, the incidence of meningococcal disease has been increasing. During 2017–2022, CDPH detected 1–3 cases annually. However, CDPH detected 7 cases of *N. meningitidis* infection in 2023 and has 10 cases have already been reported this year. Of the 10 cases in 2024, 9 were associated with bacteremia rather than meningitis; 4 patients have died. Seven cases have been associated with serogroup Y; the remaining were either non-groupable or were unable to be serotyped. Six cases have been in people ages 30–60 and 6 have occurred in females. Five cases have been in Black Non-Hispanic persons, and 4 in White Hispanic persons. No common exposures have been identified among any of the 8 previous 2024 cases. For additional information regarding *N. meningitidis* in Chicago, view this [health alert](#) from May 2024.

**Clinical manifestations:** Providers should continue to have a high index of suspicion for *N. meningitidis* in individuals presenting with clinically compatible symptoms. Invasive meningococcal disease (IMD) has a case-fatality rate of 10–15% even with appropriate antibiotic treatment. IMD most often presents as meningitis with symptoms that may include fever, headache, stiff neck, nausea, vomiting, photophobia, or altered mental status. It may also present as a bloodstream infection with symptoms that may 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 be non-specific, they can worsen rapidly, and the disease can become life-threatening within hours. Immediate, broad-spectrum antibiotic treatment for suspected meningococcal disease is critical. Survivors may experience long-term effects such as deafness or amputations of the extremities. Risk factors for IMD may be found [here](#).

**Infection Control Precautions:** Patients suspected or confirmed to have infections with *N. meningitidis* should be placed on droplet precautions until 24 hours after administration of effective antimicrobial therapy.

**Vaccination recommendations:** Vaccination is a recommended control measure during an outbreak. CDPH will offer vaccinations to all people aged  $\geq 2$  months residing in the affected shelter. Providers should be aware that non-routine doses of MenACWY vaccine documented in iCARE may indicate that a patient has or had an increased risk of meningococcal disease based on medical conditions, medications, or setting/occupation. Providers should ask patients about risk factors and determine if additional doses are indicated. See risk-based indications for meningococcal vaccination [here](#).

No change in the routine vaccination schedule is recommended for the general population; providers should continue to offer MenACWY vaccines to all patients at age 11 or 12, with a booster dose at 16 years. Teens and young adults (16 through 23 years old) may also get a MenB vaccine. See routine vaccination recommendations [here](#).

**Post-Exposure Prophylaxis:** *N. meningitidis* is transmitted through direct contact with respiratory secretions; kissing partners, those in the same household, and roommates are examples of close contacts indicated for post-exposure prophylaxis. Chemoprophylaxis with rifampin, ciprofloxacin, or ceftriaxone is 90–95% effective and should be administered to eligible contacts within 24 hours of identification of index patient. Isolates of *N. meningitidis* over the past three years have remained susceptible to ciprofloxacin in Illinois. Health departments continue to monitor resistance profiles of all invasive *N. meningitidis* specimens through CDC's Bacterial Meningitis Laboratory.

**Reporting:** Suspect or confirmed cases of *N. meningitidis* should be reported immediately in INEDSS, through the disease reporting line at 312-743-9000 (option 7) or 311 after business hours. Gram-negative diplococci identified from a normally sterile site and physician-diagnosed purpura fulminans are reportable in Illinois. Isolates should be sent to Illinois Department of Public Health Laboratory for serogroup testing.

**Additional Resources:**

- [CDC MMWR: Meningococcal Vaccination](#)
- [CDC Health Alert](#)
- [cdc.gov/meningococcal](http://cdc.gov/meningococcal)