TuSalud

Meningococcal Disease Is Rising Among People Living With HIV

The transmissible infection, responsible for meningitis outbreaks among gay men, can be prevented with a vaccine.

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More than two dozen cases of meningococcal disease were reported among people living with HIV in 2022, nearly doubling the highest numbers from the previous five years, according to an analysis in Morbidity and Mortality Weekly Report, published by the Centers for Disease Control and Prevention (CDC). Not only is the number of cases on the rise, but HIV-positive people make up a growing proportion of these cases.

Meningococcal disease, caused by Neisseria meningitidis bacteria, is a life-threatening illness that can include meningitis (inflammation of the membranes covering the brain and spinal cord) and septicemia (bloodstream infection). Different Neisseria meningitidis strains, or serogroups, can cause meningococcal disease. Meningitis can be also caused by other bacteria, viruses, fungi and parasites.

The most common symptoms of meningococcal meningitis include fever, headache and a stiff neck. Symptoms of meningococcal septicemia may include fever, chills, fatigue, vomiting, diarrhea, cold hands and feet, severe aches and a dark rash. These symptoms typically develop three to 10 days after exposure. Meningococcal disease is potentially deadly and requires prompt medical attention. It can be treated with antibiotics, and most people recover, but they can be left with permanent disabilities, such as brain damage or hearing loss.

Fortunately, meningococcal disease is preventable with vaccines. Two vaccines are available to protect against different strains, or serogroups: the meningococcal conjugate vaccine (MenACWY) and the meningococcal serogroup B vaccine (MenB).

Meningococcal bacteria are present in saliva and respiratory secretions, and it can spread via coughing, kissing or sharing food and drinks. Transmission can also occur between people who live together, such as family members. However, it is not thought to be airborne like the virus that causes COVID-19. Meningococcal outbreaks are uncommon, but the frequency appears to be rising. In recent years, for example, clusters have been reported among students on college campuses.

Neisseria meningitidis, which is related to the bacteria that cause gonorrhea, is not a sexually transmitted infection, but gay, bisexual and other men who have sex with men are more prone to outbreaks. People living with HIV—especially those with a high viral load or a low CD4 T-cell count—are at greater risk of contracting meningococcal disease and developing more severe illness.

An earlier study found that of the 527 cases of meningococcal disease (all serogroup C) reported in the United States between January 2012 and June 2015, 14% were among men who have sex with men, and among those with a known status, 59% had HIV. That is, gay and bi men were four times more likely to have meningococcal disease compared with the general population, and HIV-positive gay men were 10 times more likely than HIV-negative gay men. Two thirds of the cases occurred in New York City, Los Angeles and Chicago. A meningitis outbreak among gay and bi men in Florida, which started in 2021 and is ongoing, has resulted in numerous deaths.

The new CDC report describes 29 cases of meningococcal disease among people with HIV reported in 2022. This is up from five to 15 cases reported annually during 2017 to 2021. In 2022, HIV-positive people accounted for 9.8% of all reported cases, up from 1.5% to 4.3% during the previous period. Of the 29 cases in 2022, only one person is known to have received the MenACWY vaccine, despite the fact that it is recommended for all people living with HIV.

Fifteen of the 29 cases were part of a large serogroup C outbreak among men who have sex with men (presumably the one in Florida), but cases among people with HIV rose even after excluding this outbreak. Nine of the other 14 cases were caused by a single serogroup Y strain; these cases were reported in three states, with no identified connections among them. The final five cases were not clustered geographically.

The CDC recommends the MenACWY vaccine for all adolescents at age 11 or 12. It is also recommended for babies, children and adults at increased risk, including those living with HIV, other immunocompromised individuals, military recruits, college students living in dorms and people who are part of a community experiencing a serogroup A, C, W or Y outbreak. People with HIV should receive two doses. The MenB vaccine is recommended for those who are part of a community experiencing a serogroup B outbreak. Some advocates think the guidelines should be widened to include all men who have sex with men, regardless of where they live or travel. Immunity is not lifelong, so the CDC recommends boosters every five years.

Given the trend in cases, “health care providers should ensure that all persons with HIV are up to date with MenACWY vaccination,” the authors of the report conclude. Providers should also “maintain a high index of suspicion for meningococcal disease” among HIV-positive people with suspicious symptoms. The CDC recommends that everyone should be screened for HIV at least once in their lifetime, and providers should ensure that patients with an unknown HIV status who develop meningococcal disease get tested.

Sexually active gay and bi men have even more reason to get vaccinated: Neisseria meningitidis and Neisseria gonorrhoeae are related, and the same vaccines can help prevent both.

At this year's Conference on Retroviruses and Opportunistic Infections, researchers reported that the MenB vaccine reduced the risk for gonorrhea among gay and bi men in a French HIV pre-exposure prophylaxis (PrEP). The DoxyVAC study found that participants who took the antibiotic doxycycline as post-exposure prophylaxis after sex (doxyPEP) and those who received the vaccine both had a lower likelihood of contracting gonorrhea, and men who received both saw an additive benefit.
