In 2021 Nebraska saw the highest number of new HIV diagnoses (107) since 2010 (average: 81 new diagnoses/year). This HAN advisory describes demographic changes and reviews HIV screening, testing, diagnosis, treatment resources, and prevention.

In 2021 new HIV diagnoses were more frequent among non-Hispanic white males (Figure 1), and were more frequent among individuals residing in a rural county (urban: Douglas, Lancaster and Sarpy counties; rural: all other counties) (Figure 2). The number of new HIV diagnoses among rural county residents nearly doubled and accounted for over 35% of new diagnoses (prior 4 years averaged <25%). Individuals with new HIV diagnoses who reside in rural counties also had much lower initial CD4+ T cell counts at presentation (378 cells/mm$^3$) than individuals with HIV who reside in urban counties (953 cells/mm$^3$), suggesting delayed diagnosis of HIV infection. Physicians should be aware of these demographic trends as they consider HIV screening, testing, and diagnosis.

**Screening, Testing, & Diagnosis**
Everyone between the ages of 13 and 64 should get tested for HIV at least once as part of routine screening, and those at high risk should be tested at least yearly ([https://www.cdc.gov/hiv/testing/index.html](https://www.cdc.gov/hiv/testing/index.html)). Persons likely to be at high risk include injection-drug users and their sex partners, persons who exchange sex for money or drugs, sex partners of persons with HIV, and persons with multiple sex partners or those whose sex partner have multiple sex partners. In addition, testing for HIV infection should also be considered for persons with sexually transmitted infections and their sex partners.
The legal requirement for informed consent for HIV testing was repealed in 2018, eliminating the requirement for a separate written consent to perform a test for HIV. Nebraska law requires a physician or other health care provider who is providing obstetric or related care to a pregnant individual to obtain written informed consent if the individual refuses an HIV test. No additional process beyond that used for obtaining informed consent for general medical care and other types of testing is required for HIV testing.

For testing done in the clinical setting, screen with an HIV-1/2 antigen-antibody immunoassay with a reflex to a confirmatory HIV-1/2 antibody differentiation immunoassay. If both are positive, obtain follow up testing with an HIV viral load and CD4 count. Once the diagnosis of HIV infection has been made, treatment for HIV infection should be started as soon as possible.

**HIV Treatment Resources**

For providers seeking HIV services (case management, medication and medical assistance, housing, medical transportation, food vouchers, etc.) for their patients, please email dhhs.infectiousdisease@nebraska.gov. The Nebraska Ryan White HIV/AIDS Part B Program is administered by the Nebraska Department of Health and Human Services with the purpose of providing access to a wide variety of core and supportive services for individuals with HIV who are low-income, uninsured, or underinsured. Primary service units include:

- AIDS Drug Assistance Program: medication assistance service designed to provide coverage for and access to HIV/AIDS medications that are on the approved Ryan White Part B Formulary list
- AIDS Drug Assistance Program - Health Insurance Premium Assistance: can assist clients in finding and paying for qualifying medical and prescription insurance coverage
- Care Services: network of case management, core medical, and support services for individuals living with HIV

Additional information regarding HIV prevention and treatment programs can be found at: https://dhhs.ne.gov/Pages/HIV-Prevention.aspx, https://dhhs.ne.gov/Pages/HIV-Care.aspx.

**HIV Prevention**

**PreExposure Prophylaxis (PrEP):** PrEP is the use of antiretroviral drugs that has been proven to be effective in preventing HIV acquisition via sexual contact by up to 99% when taken daily. CDC recommends (https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf):

- Discussing PrEP with all sexually active persons (all gender identities), and referrals for higher risk individuals
- In addition to patients who request PrEP, indications include:
  - Injection drug use: HIV-positive injecting partner or sharing injection equipment
  - Anal or vaginal sex in past 6 months AND any of the following:
    - HIV-positive sexual partner (especially if partner has an unknown or detectable viral load)
    - Bacterial STI in past 6 months
    - History of inconsistent or no condom use with sexual partner(s)

Additional information on baseline and ongoing assessments and PrEP prescribing can be found at https://www.cdc.gov/hiv/clinicians/prevention/prep.html. Information regarding some of the PrEP clinics across the state can be found at https://dhhs.ne.gov/Pages/HIV-Prevention.aspx.

**Post-exposure Prophylaxis (PEP):** PEP is the use of antiretroviral drugs after a single high-risk event to prevent HIV infection. PEP must be started as soon as possible to be effective (and always within 72 hours of a possible exposure). Additional information can be found at https://www.cdc.gov/hiv/risk/pep/index.html.

Behavioral interventions (e.g., condom use), screening and testing for HIV, promptly starting HIV treatment upon diagnosis, using PrEP or PEP (where applicable) are all important measures for preventing new HIV infections.