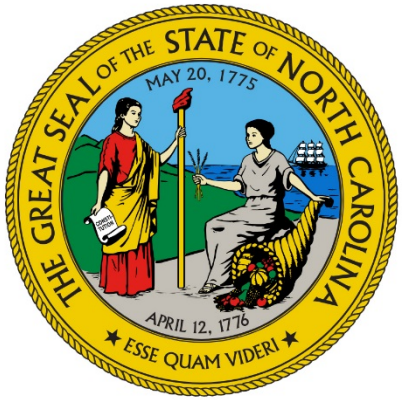


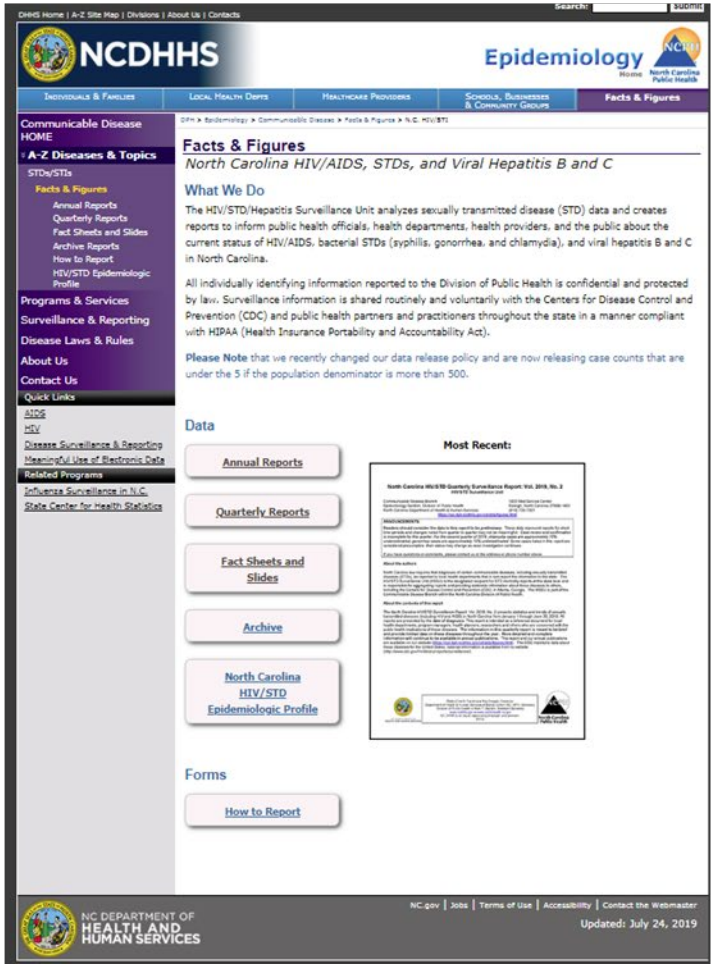
NC Department of Health and Human Services

HIV Epidemiology in North Carolina 2020

Division of Public Health/Epidemiology
Section/Communicable Disease Branch
HIV/STD/Viral Hepatitis Surveillance Unit

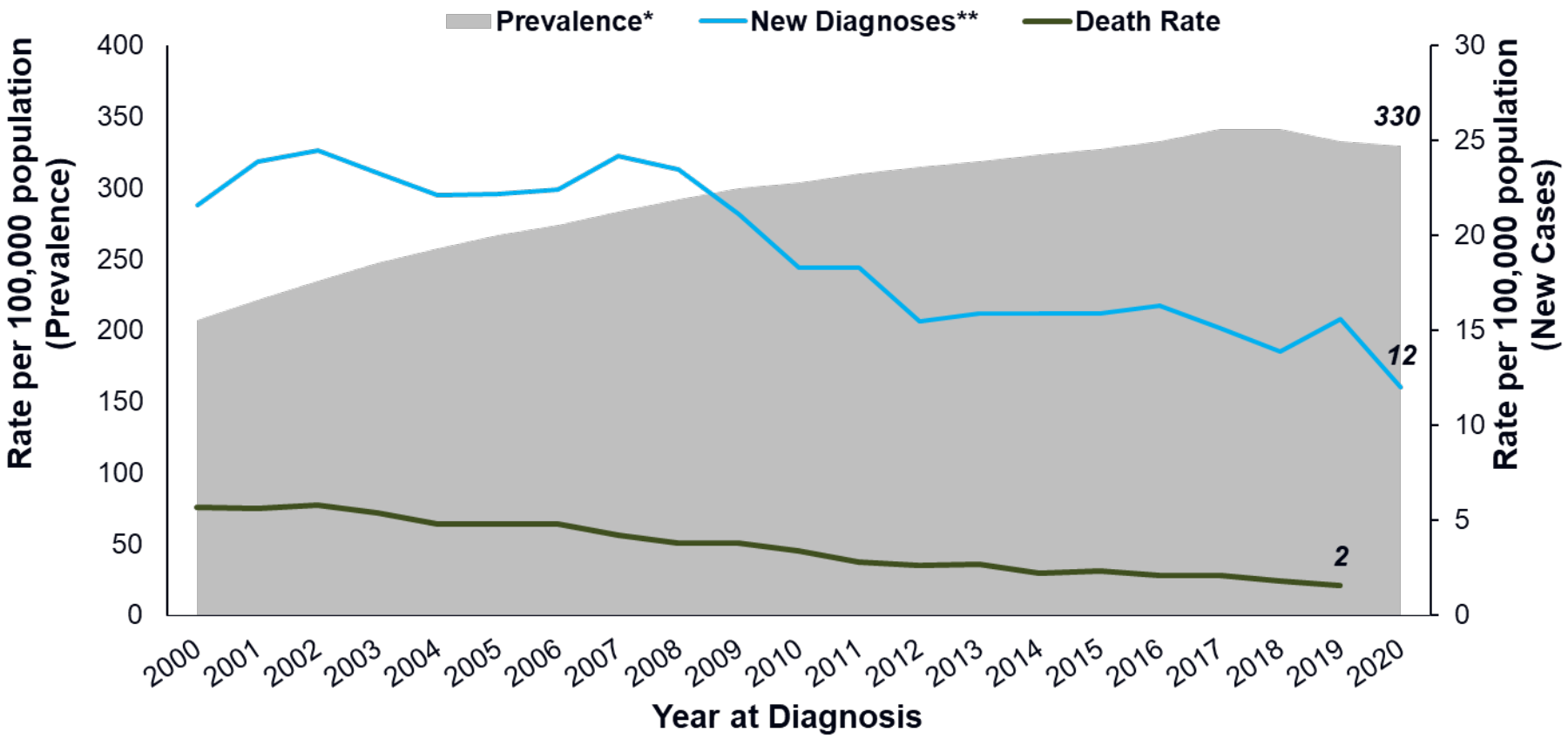
November 2021

Where to find HIV and STD Surveillance Information?



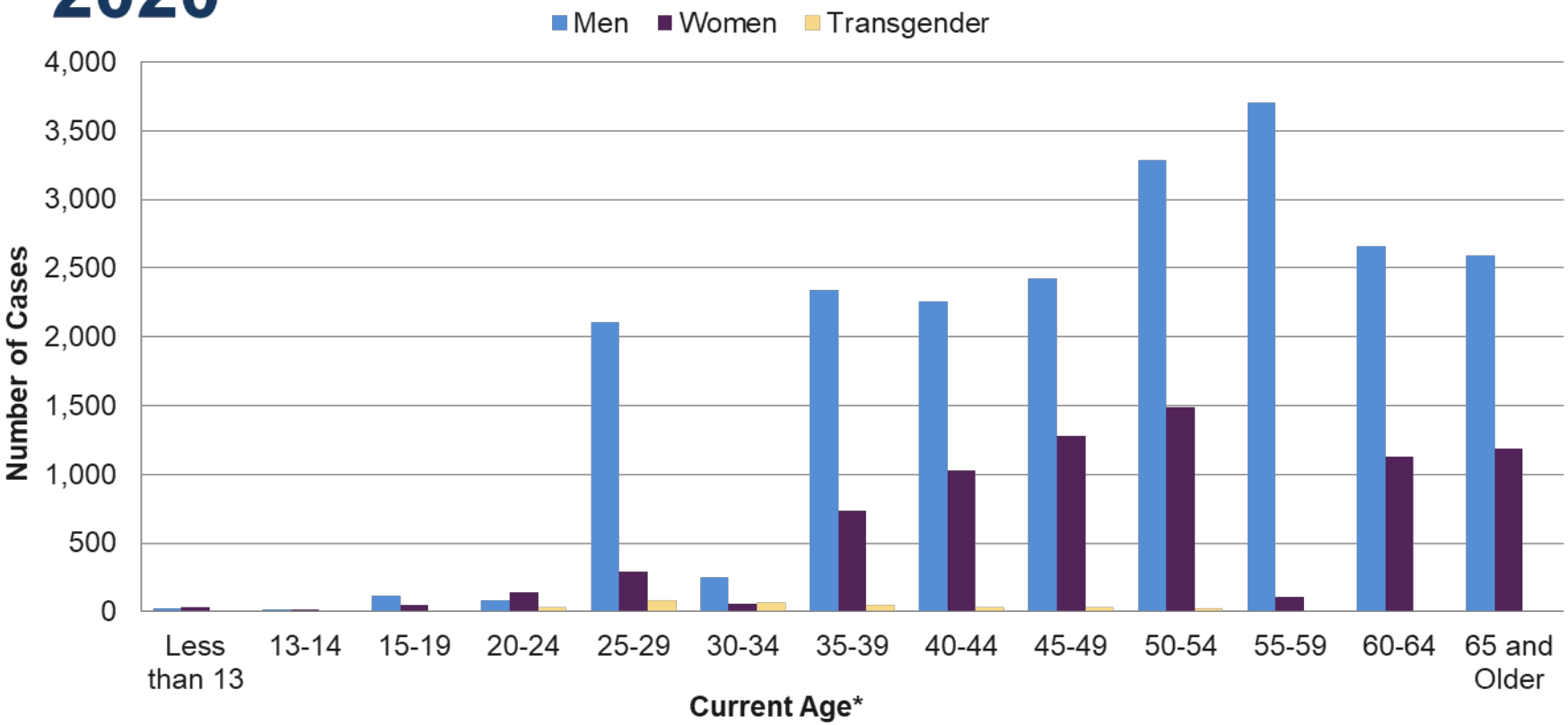
http://epi.publichealth.nc.gov/cd/stds/figures.html

North Carolina HIV Rates by Year of Diagnosis, 2000-2020^



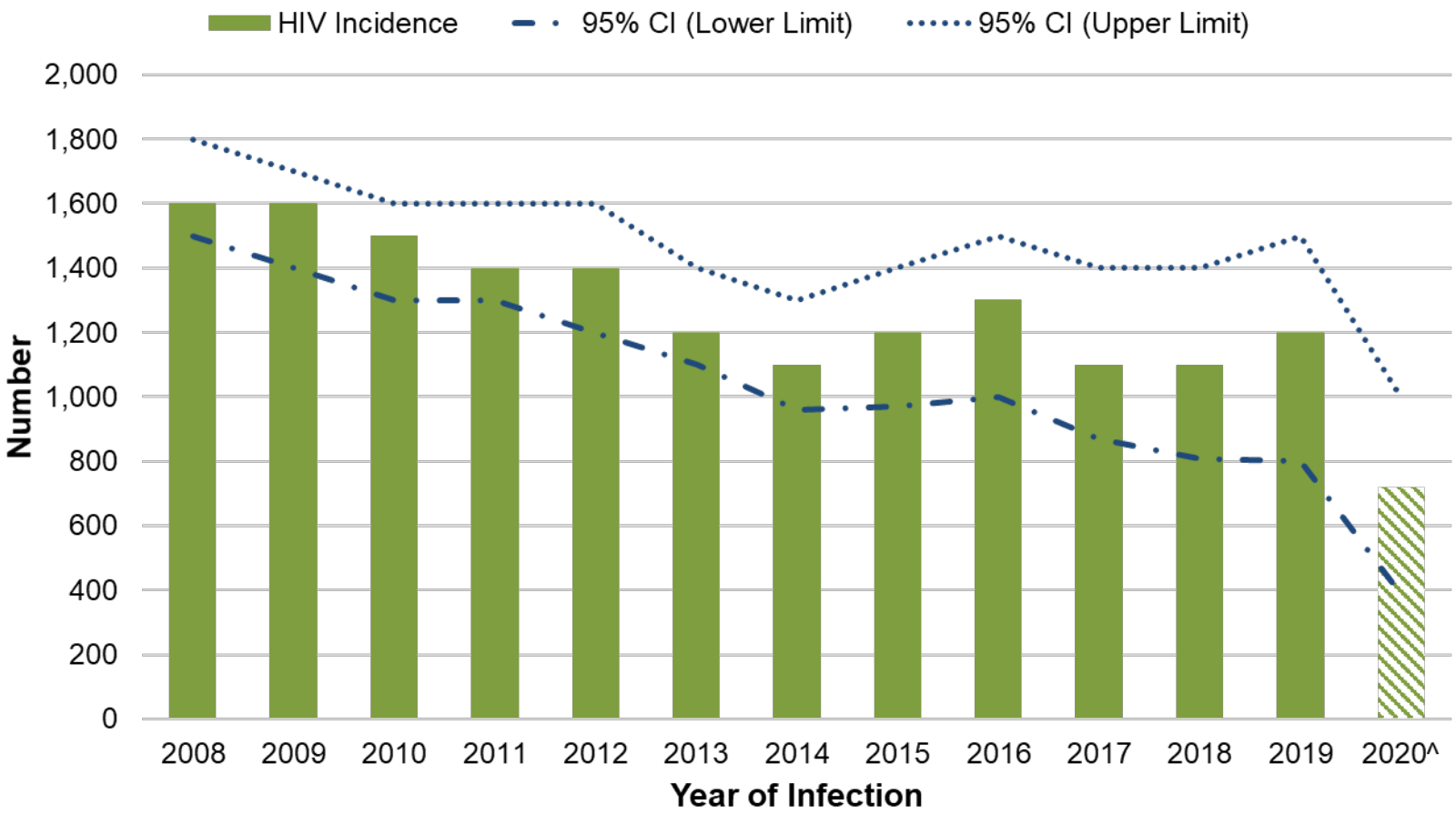
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
*Based on most recent address in eHARS as of December 31 of the given year.
**New cases are only among adults and adolescents (13 years and older).
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021) and North Carolina Vital Statistics, Volume 2: Leading Causes of Death 2000-2019.

Age Distribution of People Diagnosed with HIV and Living in NC* by Gender** in 2020^



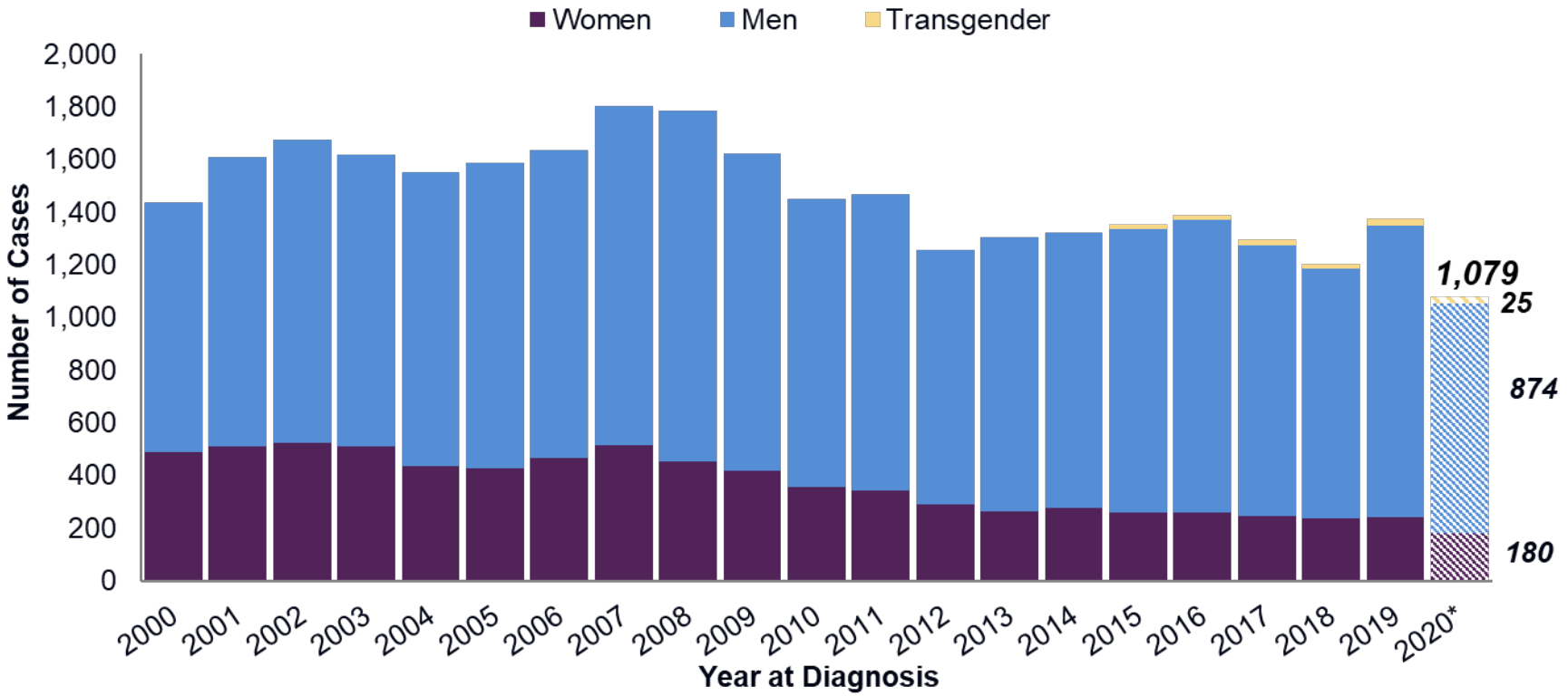
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
*Based on most recent address or age in eHARS as of December 31 of the given year.
**Transgender status is based on self-report; for exposure category, transgender people are classified by their recorded binary gender. Due to historical and current stigma, the total number of transgender people is likely to be an underestimation. This variable was not routinely captured until 2015 in our surveillance system.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

Estimated HIV Incidence in NC, 2009-2020^



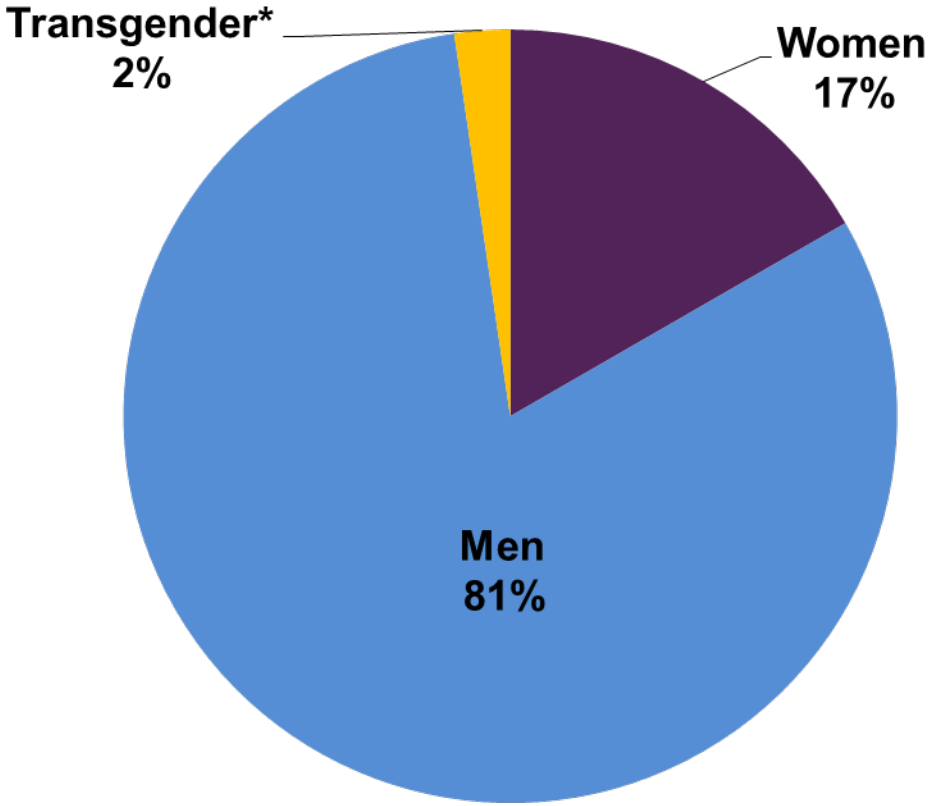
Estimated incidence using CDC's "CD4 Model" SAS code from August 2021.
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

Newly Diagnosed HIV among Adult and Adolescents (13 years and older) by Gender*, 2000-2020^



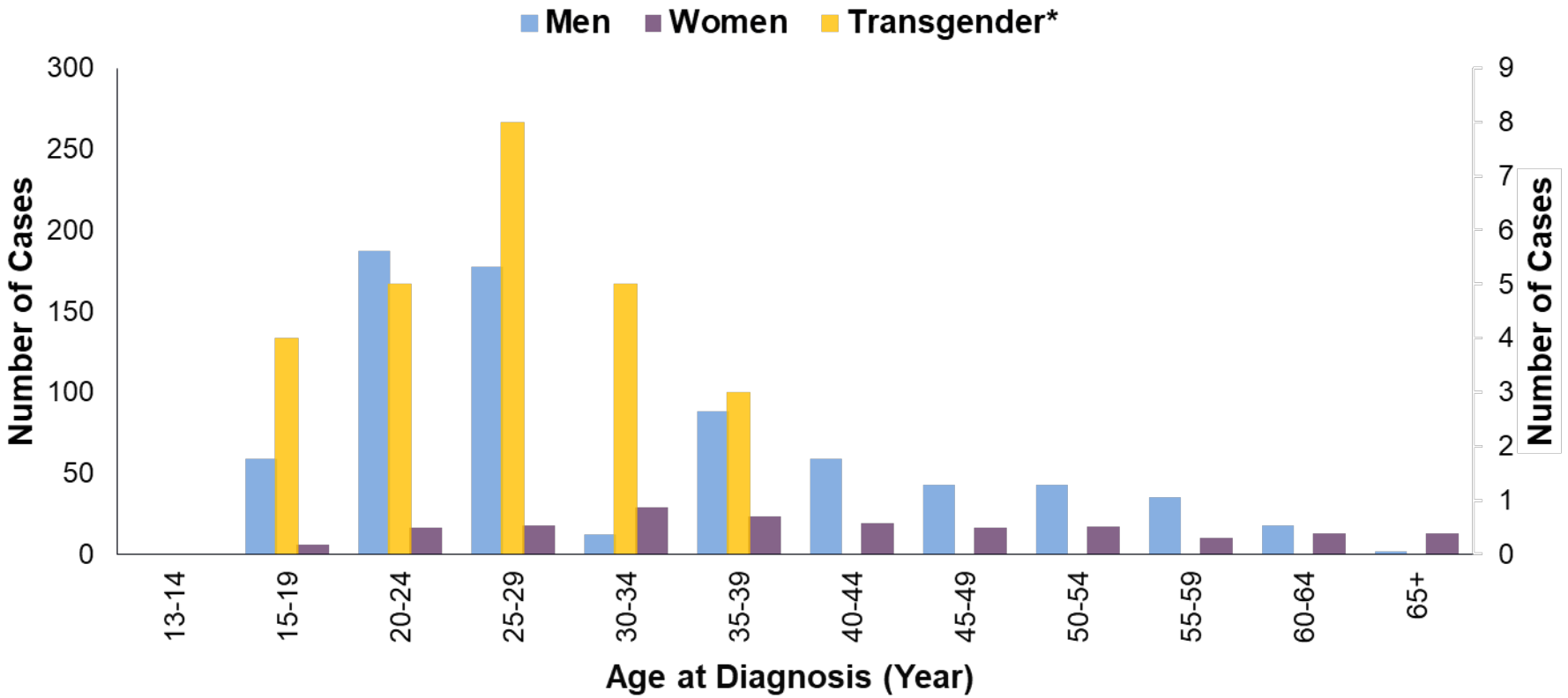
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
*Transgender status is based on self-report; for exposure category, transgender people are classified by their recorded binary gender. Due to historical and current stigma, the total number of transgender people is likely to be an underestimation. This variable was not routinely captured until 2015 in our surveillance system.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021) and North Carolina Engagement in Care Database for HIV Outreach (NC ECHO) (data as of July 2021).

Gender Distribution* of Newly Diagnosed HIV among Adult/Adolescent (13 years and older), 2020^



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
*Transgender status is based on self-report; for exposure category, transgender people are classified by their recorded binary gender. Due to historical and current stigma, the total number of transgender people is likely to be an underestimation. This variable was not routinely captured until 2015 in our surveillance system.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021) and North Carolina Engagement in Care Database for HIV Outreach (NC ECHO) (data as of July 2021).

Age Distribution of Newly Diagnosed HIV among Adult/Adolescent (13 years and older) by Gender*, 2020^

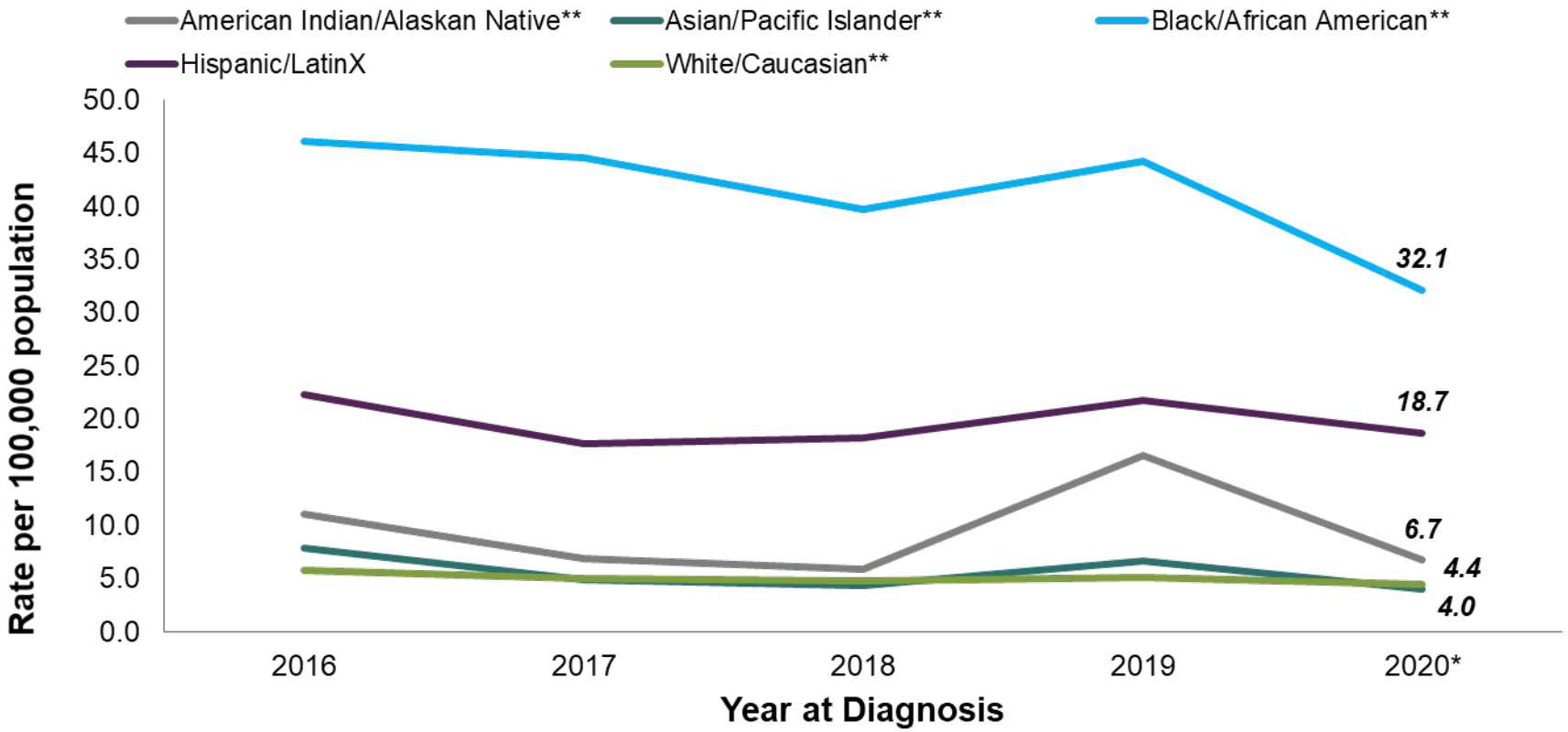


^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.

*Transgender status is based on self-report; for exposure category, transgender people are classified by their recorded binary gender. Due to historical and current stigma, the total number of transgender people is likely to be an underestimation. This variable was not routinely captured until 2015 in our surveillance system.

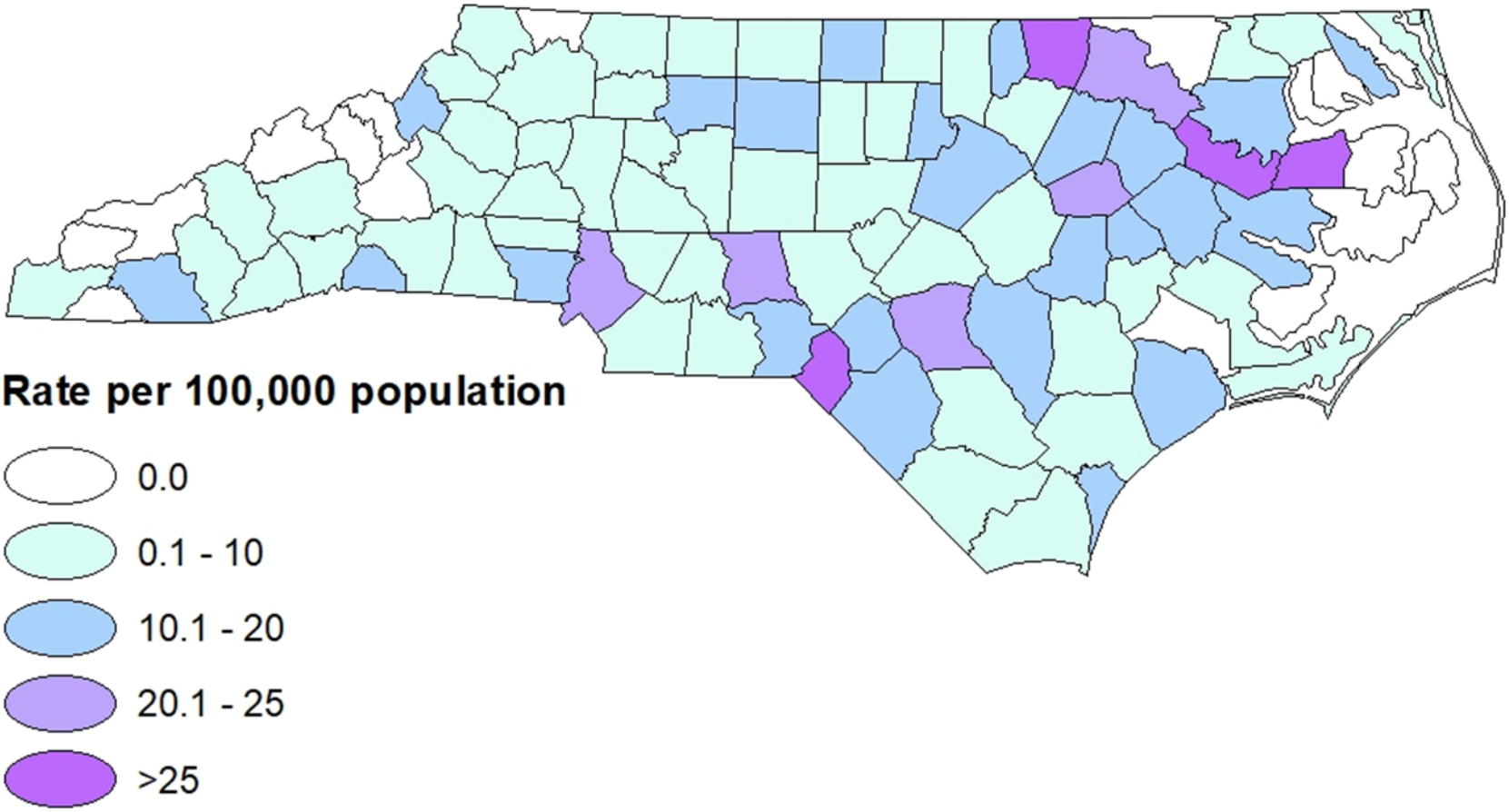
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021) and North Carolina Engagement in Care Database for HIV Outreach (NC ECHO) (data as of July 2021).

Newly Diagnosed HIV Rates among Adult/Adolescent (13 years and older) by Race/Ethnicity, 2016-2020^



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
*Non-Hispanic/LatinX.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

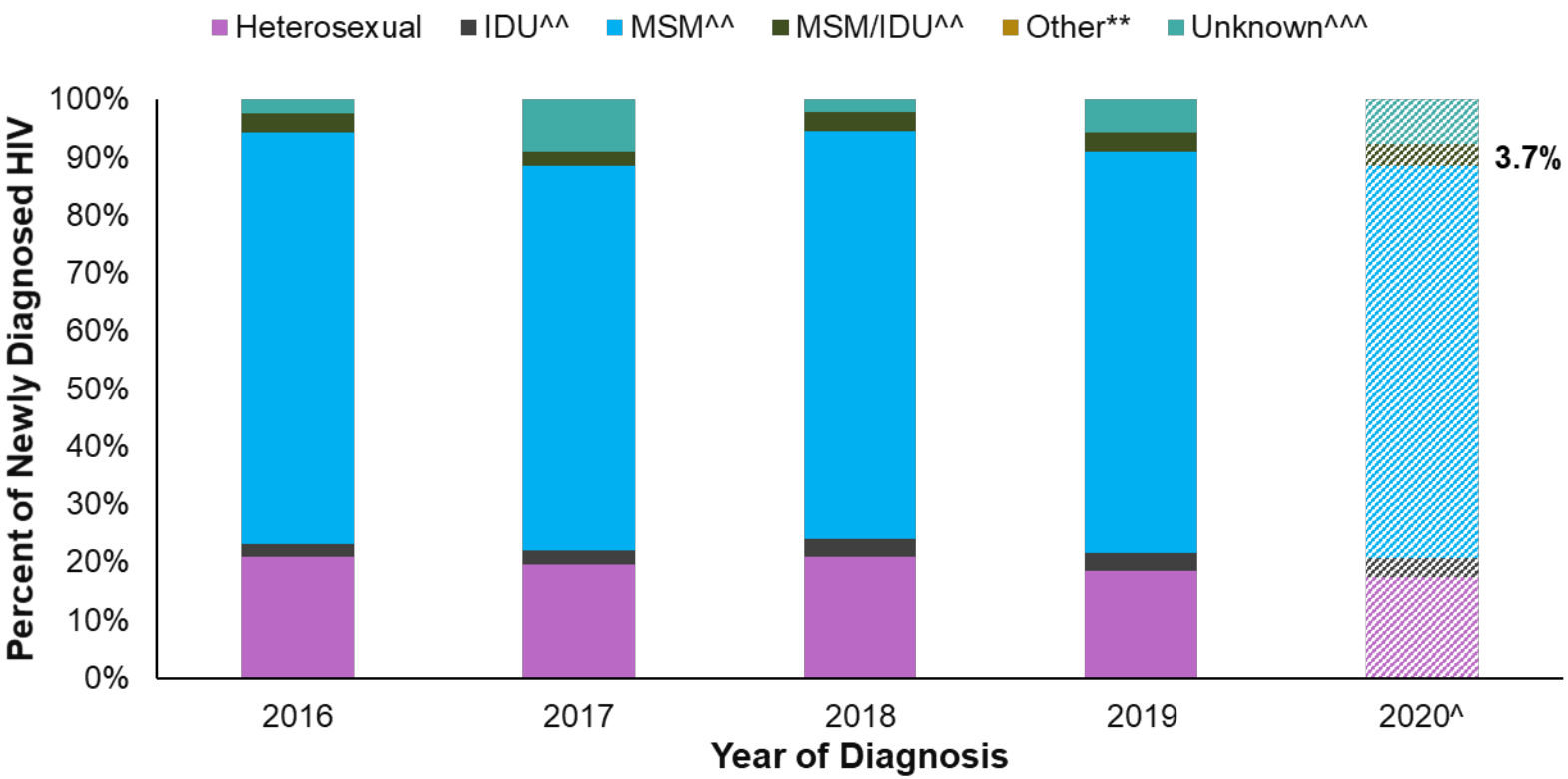
Newly Diagnosed HIV Rates by County 2020^



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

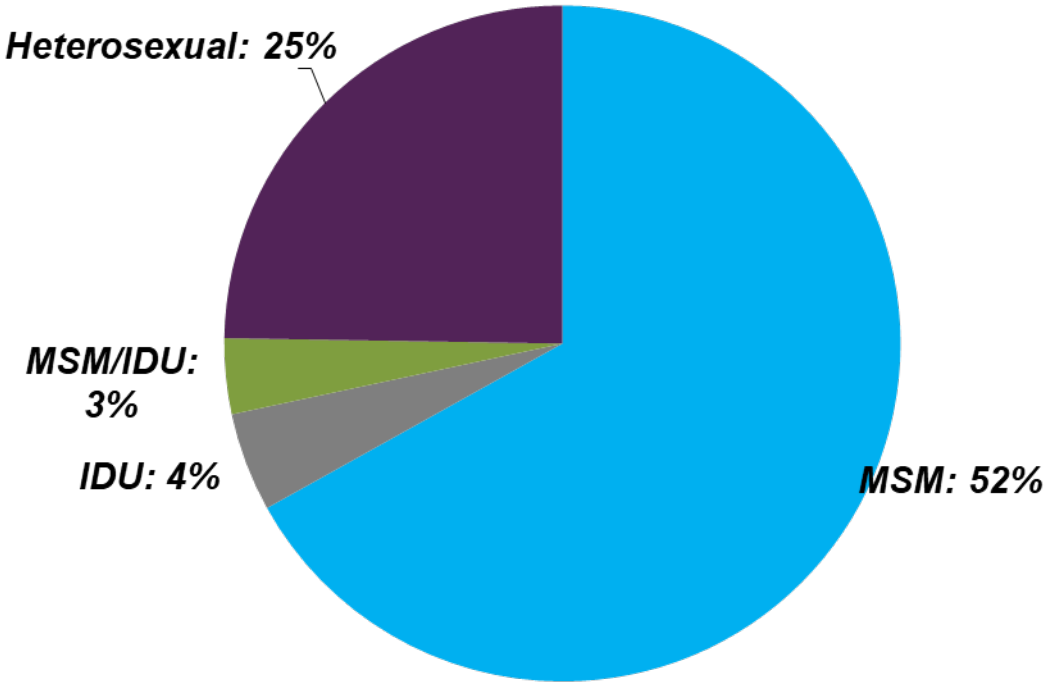
HIV Exposure (Hierarchical Risk)

Newly Diagnosed HIV Hierarchical Risk^^ among Adults and Adolescents in NC 2016-2020^



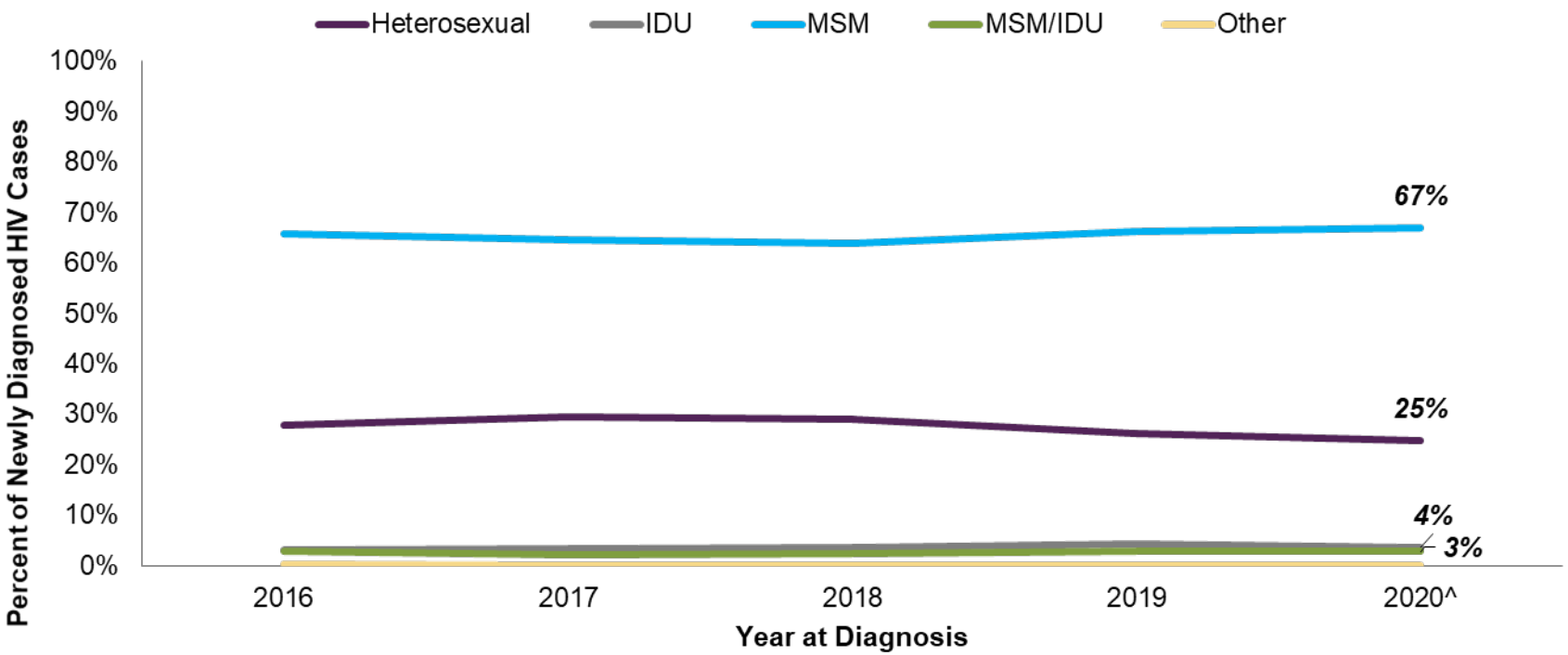
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^^Risk was assigned to each case based on the reported risk that was most likely to have resulted in HIV transmission. While people may have reported more than one behavior that can transmit HIV, each person is only classified with one risk in this chart.
*^^IDU = injection drug use; MSM = men who report sex with men; MSM/IDU = men who report sex with men and injection drug use.
**Other risks include exposure to blood products (adult hemophilia or transfusions), pediatric risk, needle sticks, and health care exposure.
^^^Unknown risk is defined as individuals classified as no identified risk (NIR) and no reported risk (NRR) individuals.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

Newly Diagnosed HIV Hierarchical Risk^^ (Redistributed*) among Adults and Adolescents in NC, 2020^



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^^Risk was assigned to each case based on the reported risk that was most likely to have resulted in HIV transmission. While people may have reported more than one behavior that can transmit HIV, each person is only classified with one risk in this chart.
*Unknown risk has been redistributed.
*Heterosexual-all is defined as a person who does not report IDU or MSM, but does report sexual contact with a partner of opposite sex, who is IDU, MSM, or known HIV-positive status. Also, if a person is a victim of sexual assault, exchanges sex for drugs/money, has had a recent STD or has sexual contact while using drugs, they are classified as high risk. It also includes individuals classified as people who reports sex with an opposite sex partner and does not report IDU, MSM, or any other potential "high risk" behaviors.
**IDU = injection drug use; MSM = men who report sex with men; MSM/IDU = men who report sex with men and injection drug use.
***Other risks include exposure to blood products (adult hemophilia or transfusions), pediatric risk, needle sticks, and health care exposure.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

Proportion of Newly Diagnosed HIV Hierarchical Risk^^ (Redistributed*) among Adults and Adolescents in NC, 2016-2020^



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.

^^Risk was assigned to each case based on the reported risk that was most likely to have resulted in HIV transmission. While people may have reported more than one behavior that can transmit HIV, each person is only classified with one risk in this chart.

*Unknown risk has been redistributed.

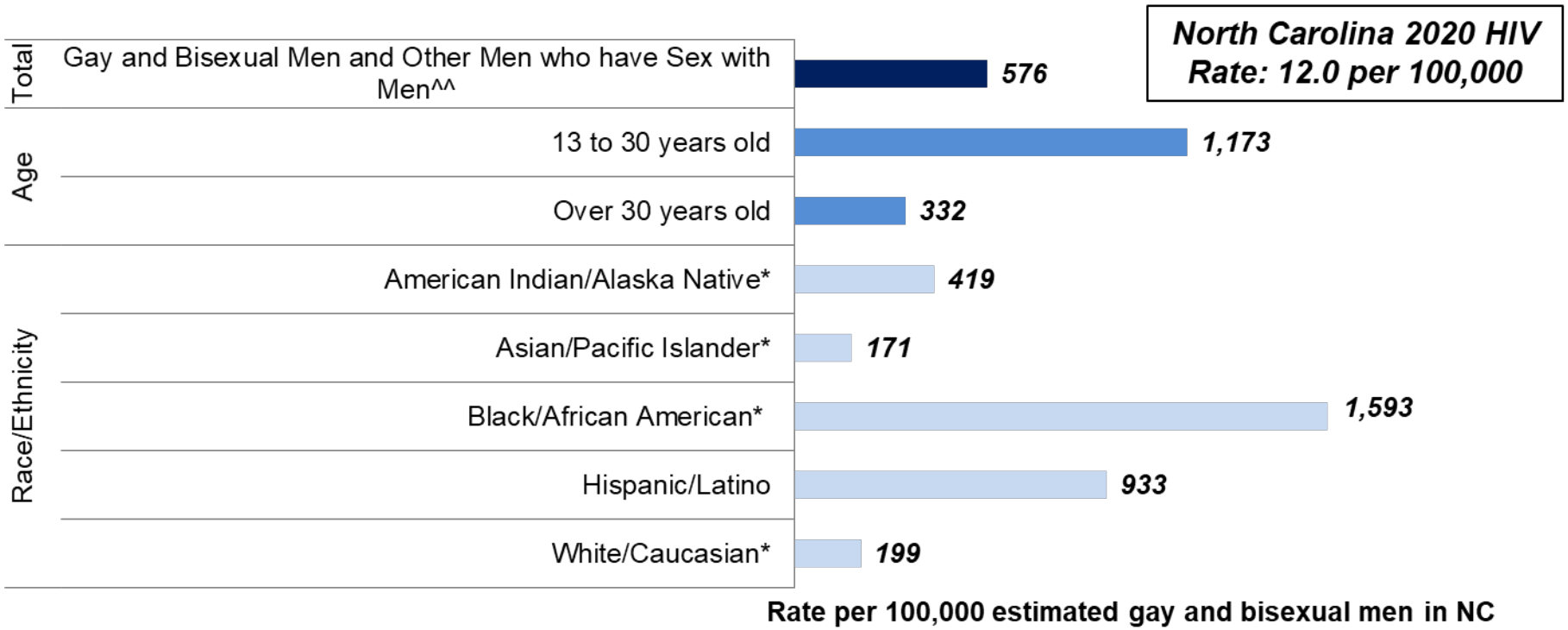
*Heterosexual-all is defined as a person who does not report IDU or MSM, but does report sexual contact with a partner of opposite sex, who is IDU, MSM, or known HIV-positive status. Also, if a person is a victim of sexual assault, exchanges sex for drugs/money, has had a recent STD or has sexual contact while using drugs, they are classified as high risk. It also includes individuals classified as people who reports sex with an opposite sex partner and does not report IDU, MSM, or any other potential "high risk" behaviors.

^^IDU = injection drug use; MSM = men who report sex with men; MSM/IDU = men who report sex with men and injection drug use.

**Other risks include exposure to blood products (adult hemophilia or transfusions), pediatric risk, needle sticks, and health care exposure.

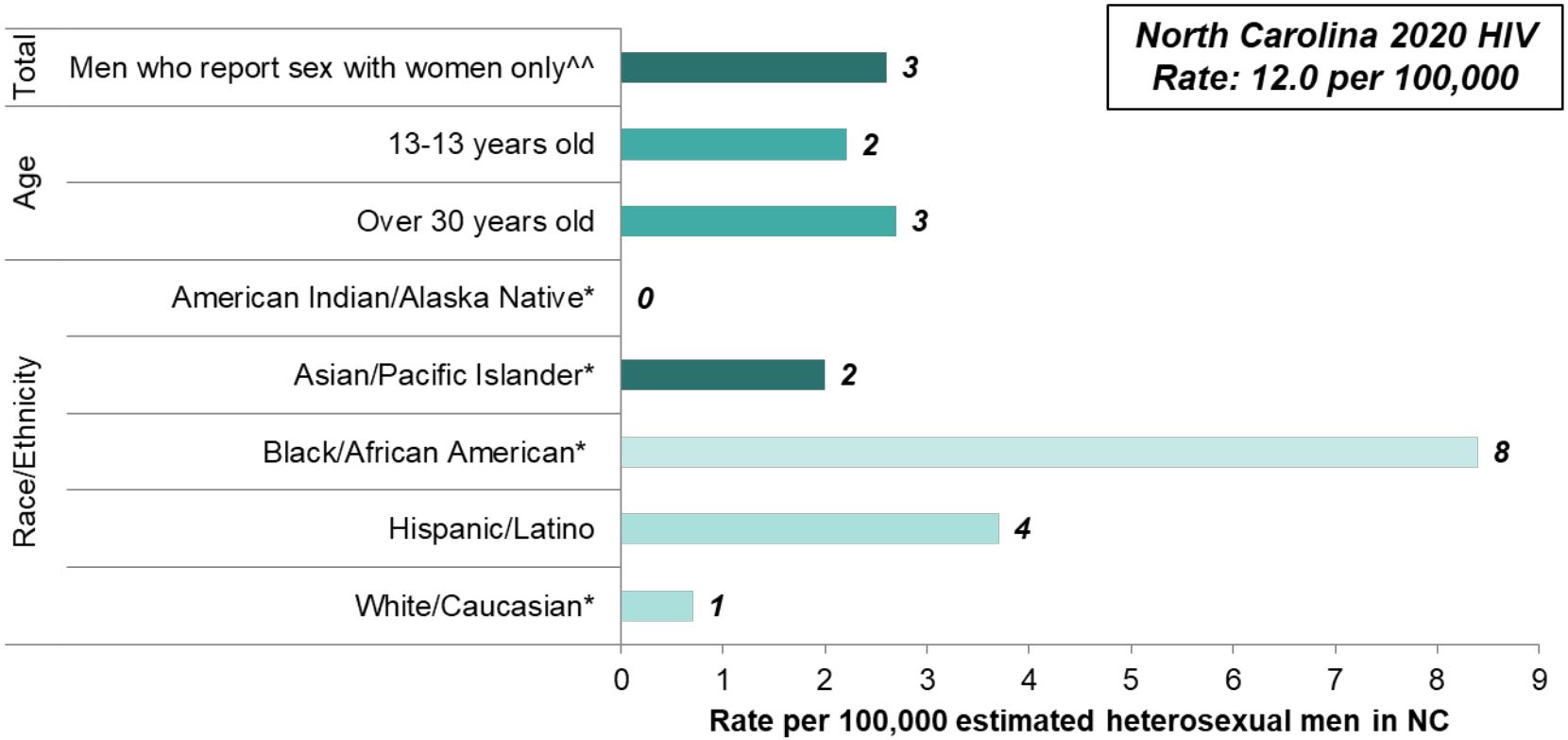
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021).

Estimated HIV Infection Rates among Newly Diagnosed Adult and Adolescents (13 years and older) Gay and Bisexual Men and Other Men who have Sex with Other Men^ in North Carolina 2020*



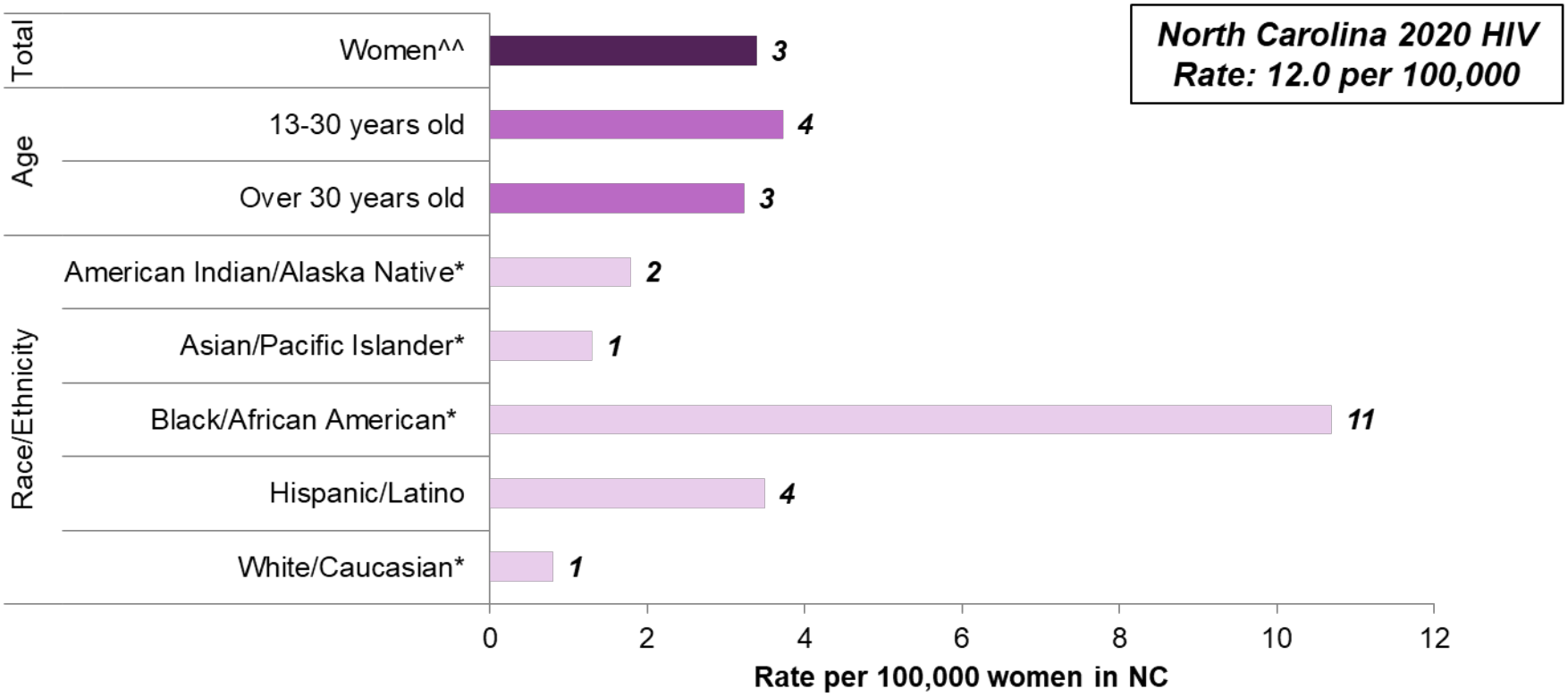
^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^Unknown risk has been redistributed. People who were classified as MSM and IDU were excluded.
^^Grey et al (2016). JMIR Public Health Surveill; 2(1): e14. https://publichealth.jmir.org/2016/1/e14/
*Non-Hispanic/LatinX.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021)

Estimated HIV Infection Rates among Newly Diagnosed Adult and Adolescents (13 years and older) Heterosexual Men^ in North Carolina 2020*



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^Unknown risk has been redistributed. People who were classified as MSM and IDU were excluded.
^^Grey et al (2016). JMIR Public Health Surveill; 2(1): e14. https://publichealth.jmir.org/2016/1/e14/
*Non-Hispanic/LatinX.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021)

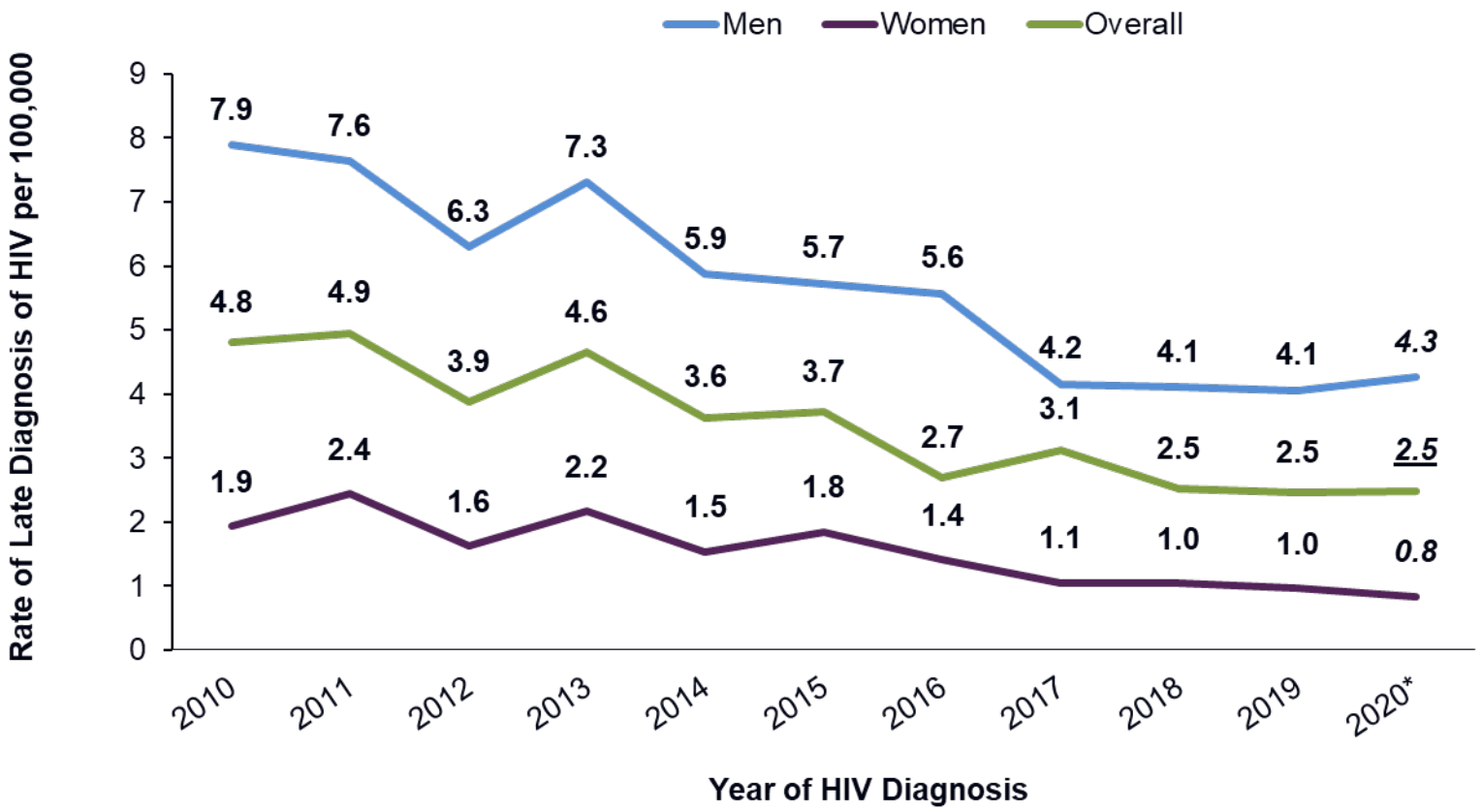
HIV Infection Rates among Newly Diagnosed Adult and Adolescents (13 years and older) Heterosexual Women^ in North Carolina 2020*



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^Unknown risk has been redistributed. People who were classified as MSM and IDU were excluded.
^^Grey et al (2016). JMIR Public Health Surveill; 2(1): e14. https://publichealth.jmir.org/2016/1/e14/
*Non-Hispanic/LatinX.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021)

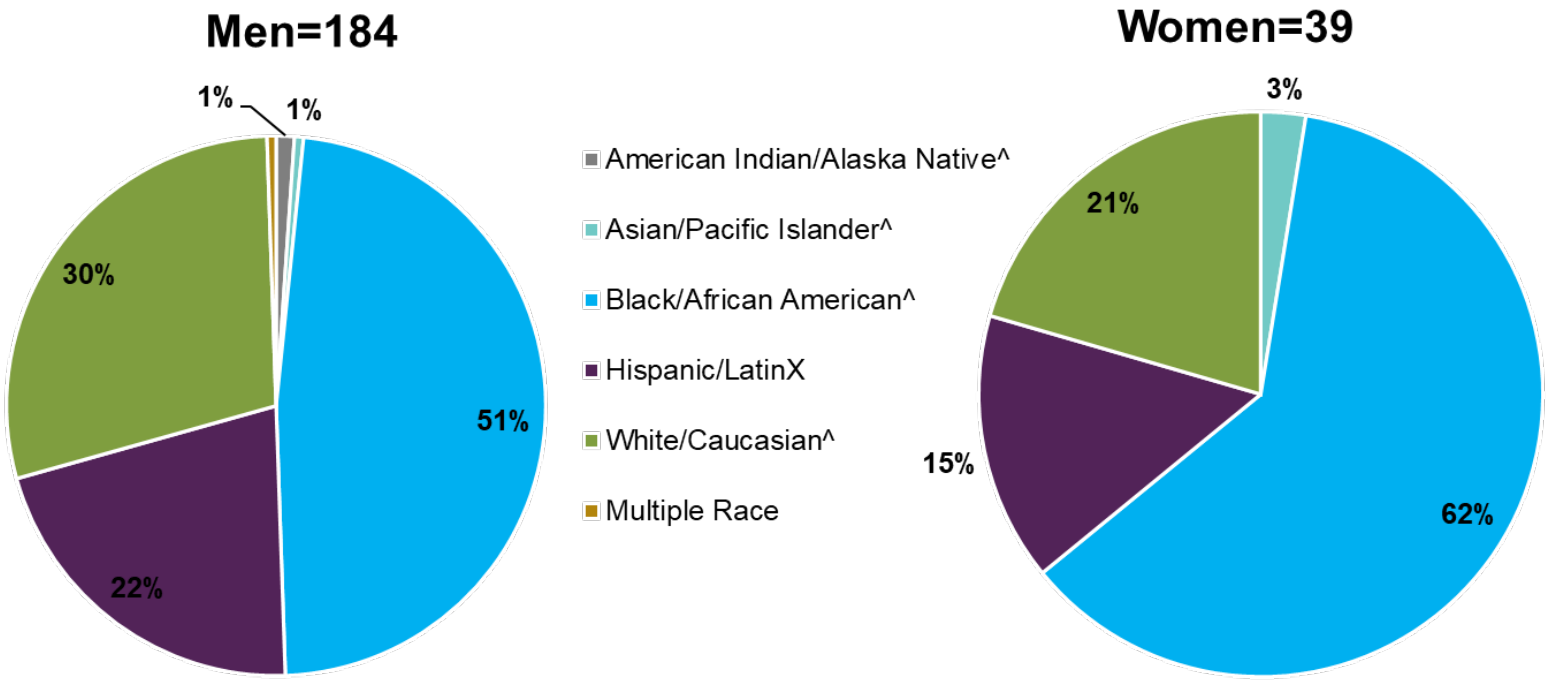
Late Diagnosis of HIV (HIV and AIDS within 6 months)

Rate of Late Diagnoses of HIV by Gender, 2010-2020*



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021)

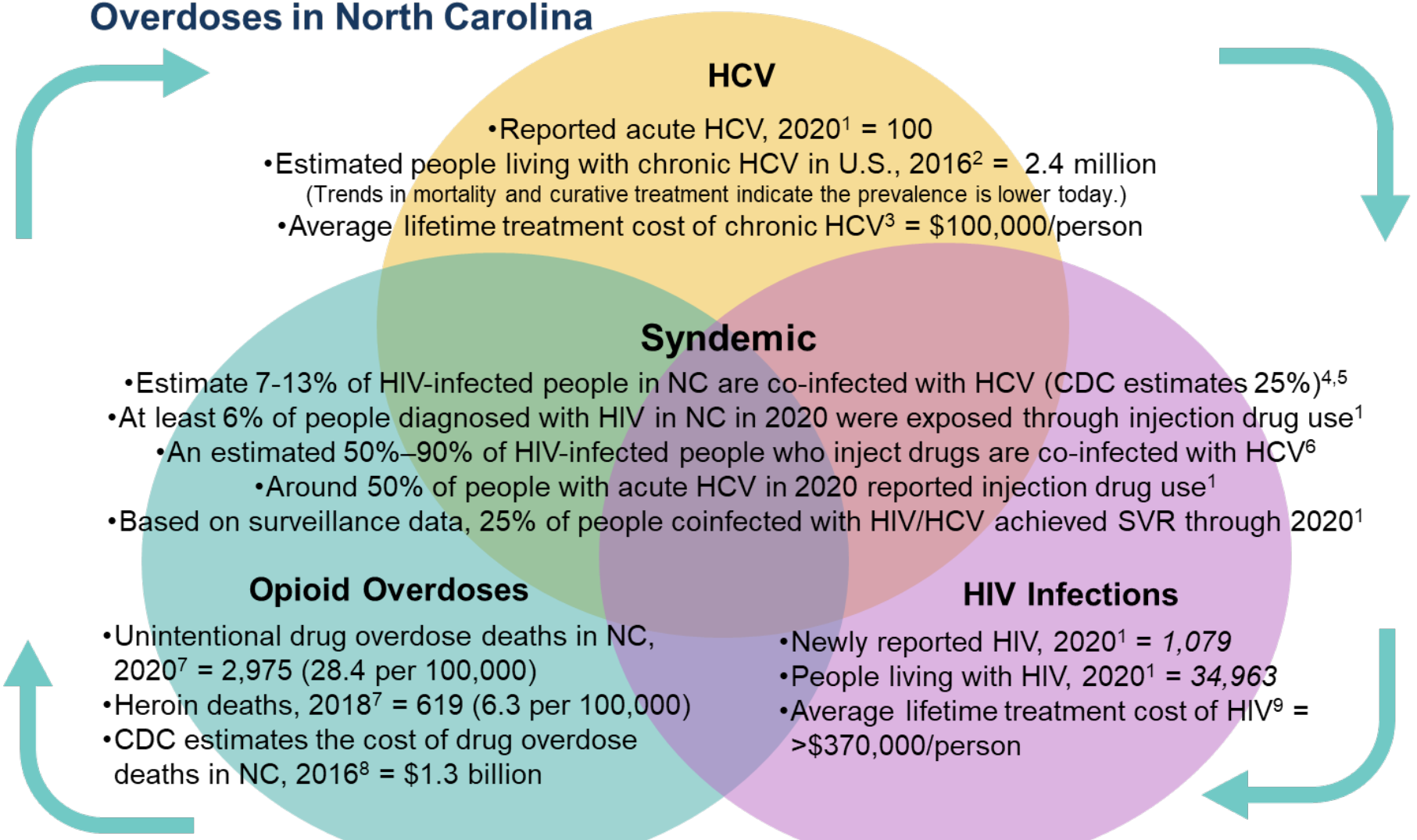
Proportion of Late Diagnosed HIV by Gender and Race/Ethnicity, 2020*



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^Non-Hispanic/LatinX.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021)

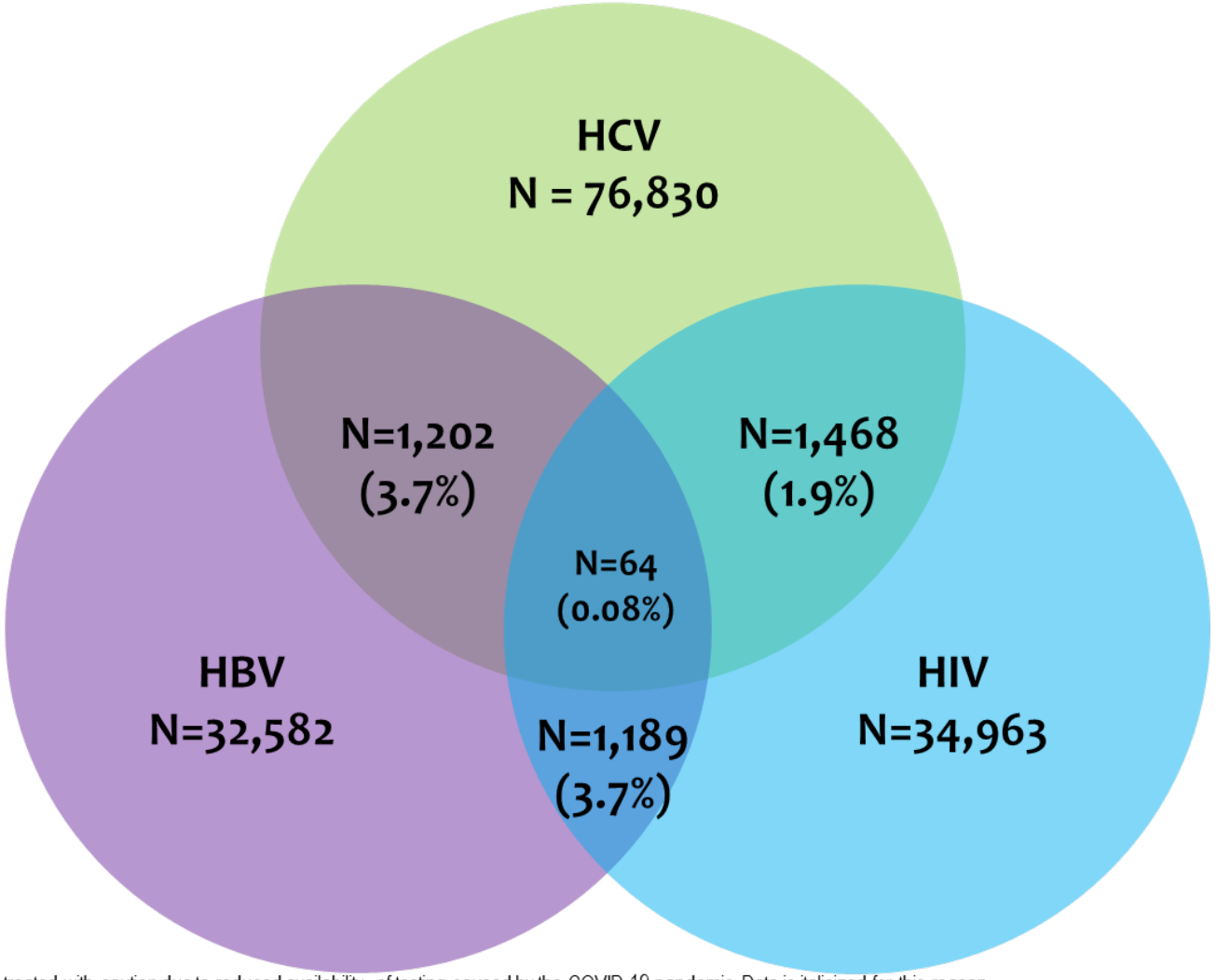
HIV and Hepatitis B and C

Conquering the Syndemic: The Impact of HCV, HIV, and Opioid Overdoses in North Carolina



[1]NC HIV/STD/Hepatitis Annual Surveillance Report, 2019; [2]CDC Surveillance for Viral Hepatitis (https://www.cdc.gov/hepatitis/hcv/hcvfaq.htm#Ref01). [3]In the absence of liver transplant (C. Everett Koop Institute, Dartmouth http://www.epidemic.org/thefacts/theepidemic/USHealthCareCosts/); [4]Based on estimates from NC Ryan White CAREWare and the Medical Monitoring Project in NC; [5]CDC HIV and Viral Hepatitis Fact Sheet https://www.cdc.gov/hiv/pdf/library_factsheets_hiv_and_viral_hepatitis.pdf ; [6]HIV/AIDS and Viral Hepatitis, CDC https://www.cdc.gov/hepatitis/populations/hiv.htm; [7]https://www.ncdhhs.gov/about/department-initiatives/opioid-epidemic/opioid-action-plan-data-dashboard; [8] https://www.drugabuse.gov/drug-topics/opioids/opioid-summaries-by-state/north-carolina-opioid-involved-deaths-related-harms. [9]HIV Cost-effectiveness, CDC: https://www.cdc.gov/hiv/programresources/guidance/costeffectiveness/index.html).

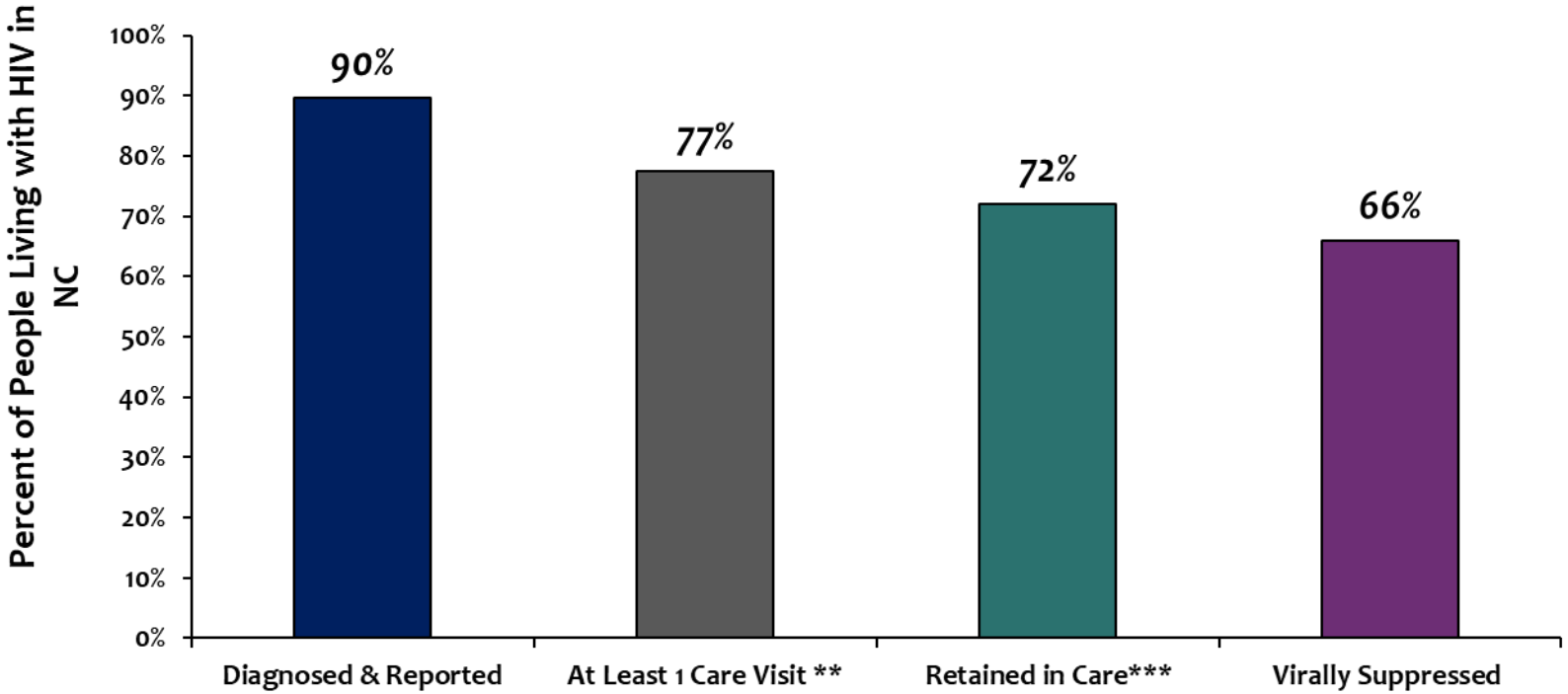
2020 HIV/Hepatitis B/Hepatitis C Coinfection



^Note: 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 28, 2021) and North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of August 1, 2021).

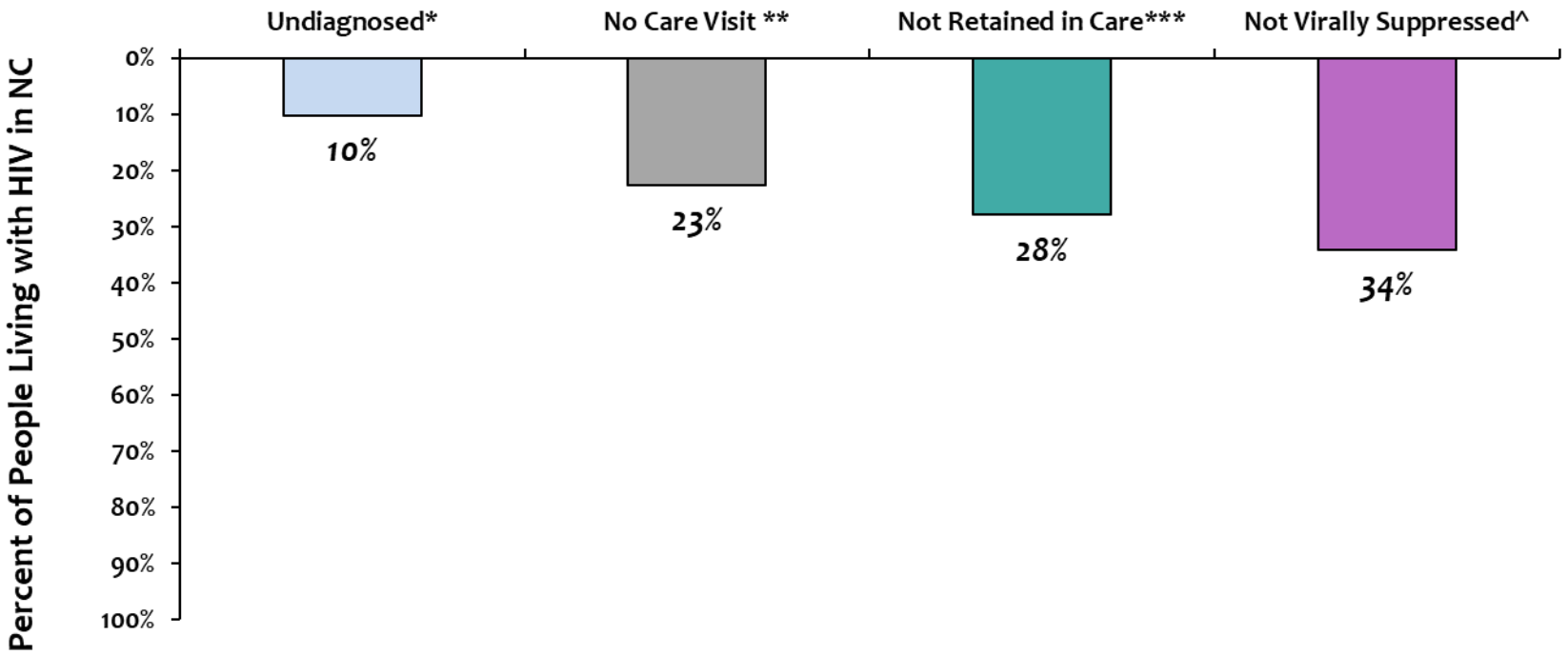
North Carolina HIV Continuum of Care

North Carolina HIV Continuum of Care 2020*



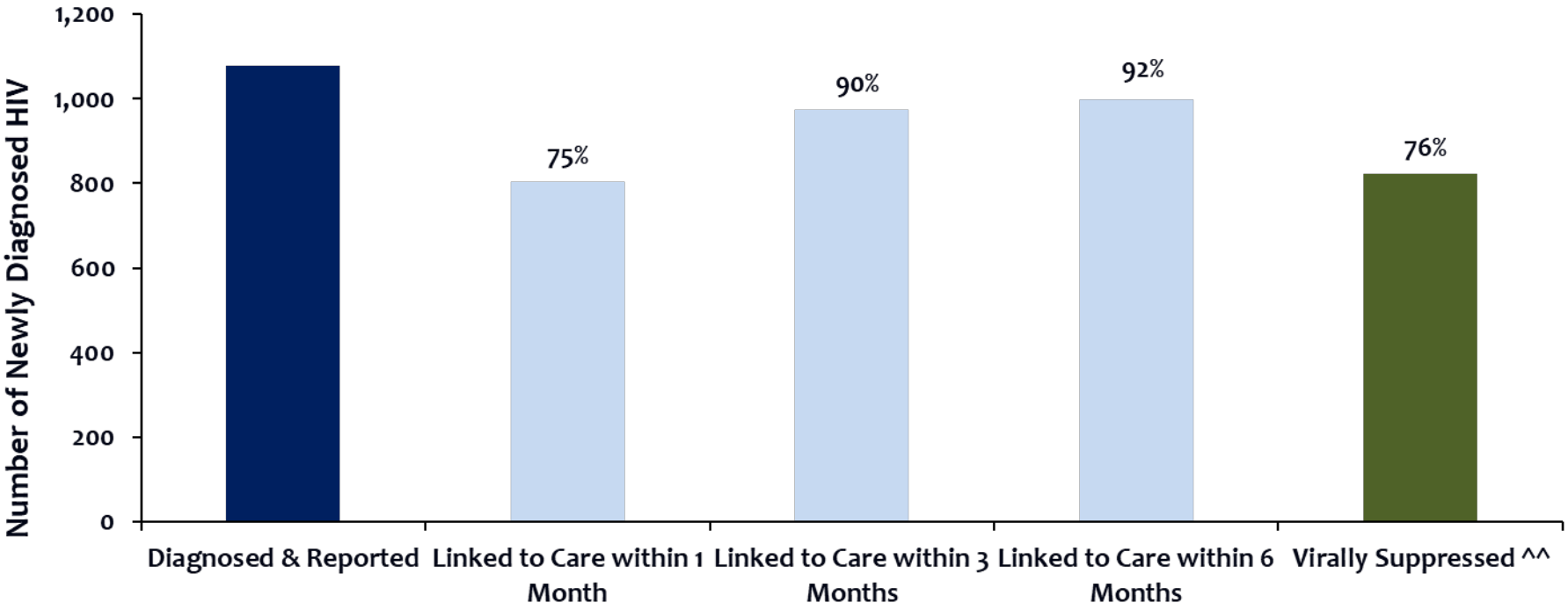
*Note: Data are preliminary (do not include vital records or national death matches). Data for 2020 are preliminary (does not include state vital records or national death matches) and 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
**At least 1 care marker (CD4 or VL test, HMAP dispense, or Medicaid claim) in the given calendar year.
***Retained in care is defined as being virally suppressed within 12 months or having 2 or more care markers (CD4 or VL test, HMAP dispense, or Medicaid claim) at least 90 days apart in the given calendar year.
^Virally suppressed is defined as the last viral load during the given calendar year <200 copies/ml.
Legend: People ≥ 13 years of age and diagnosed and living through December 31 of each calendar year. Data includes labs and services from CAREWare (all Ryan White services excluding Part A), HIV Medication Assistance Program (HMAP), and Medicaid data sources. The estimated number of people living in North Carolina in 2020 was 38,900 (based on CD4 model from CDC July 2021).
Data Sources: enhanced HIV/AIDS Reporting System (eHARS) (June 28, 2021) and NC ECHO (July 2021).

Upside Down HIV Continuum of Care 2020*



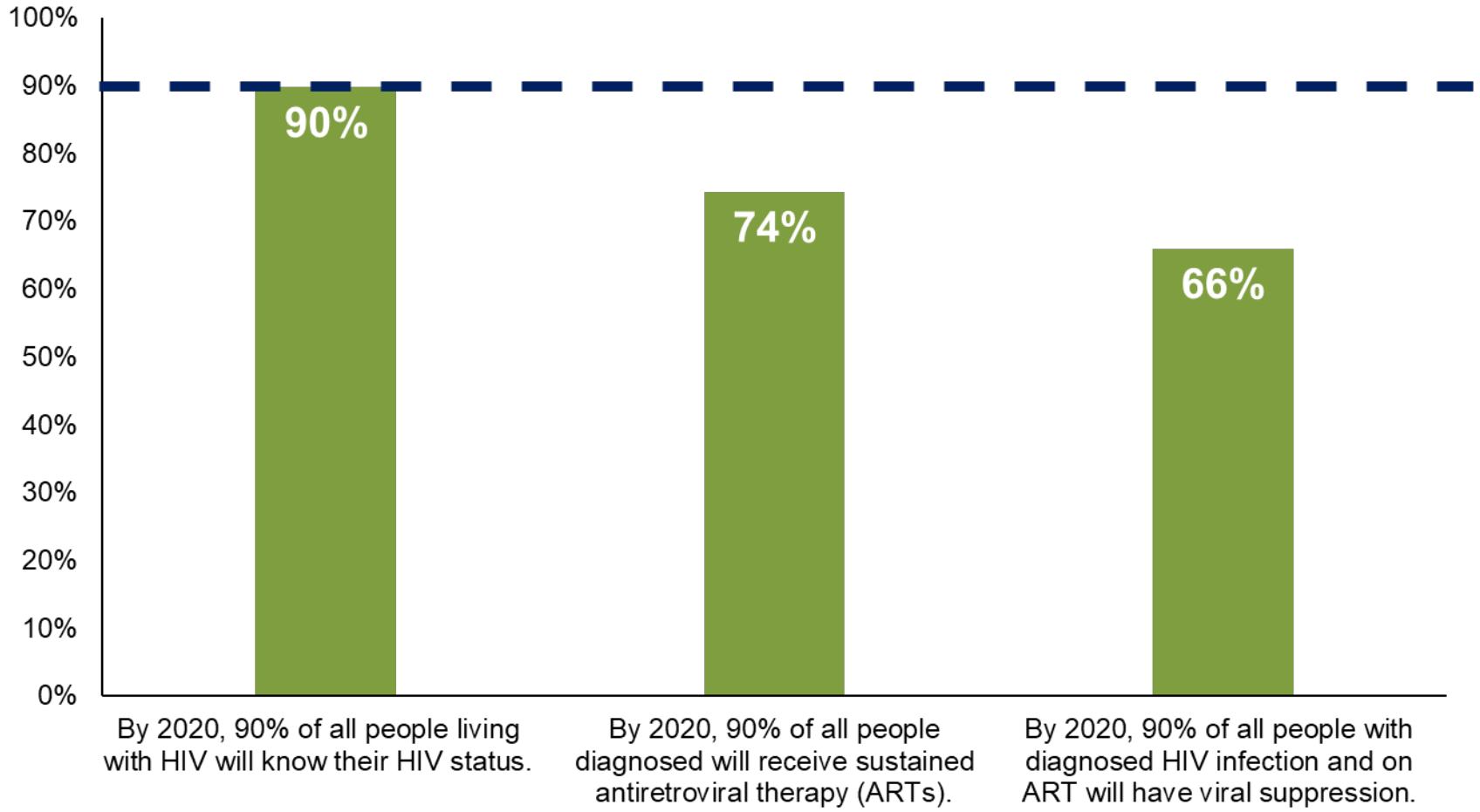
*Note: Data are preliminary (do not include vital records or national death matches). Data for 2020 are preliminary (does not include state vital records or national death matches) and 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
**No care visit (CD4 or VL test, HMAP dispense, or Medicaid claim) in the given calendar year.
***Not retained in care is defined as being virally suppressed within 12 months or having 2 or more care markers (CD4 or VL test, HMAP dispense, or Medicaid claim) at least 90 days apart in the given calendar year.
^Not virally suppressed is defined as the last viral load during the given calendar year <200 copies/ml.
Legend: People ≥ 13 years of age and living through December 31 of each calendar year. Data includes labs and services from CAREWare (all Ryan White services excluding Part A), HIV Medication Assistance Program (HMAP), and Medicaid data sources. The estimated number of people living in North Carolina in 2020 was 38,900 (based on CD4 model from CDC July 2021).
Data Sources: enhanced HIV/AIDS Reporting System (eHARS) (June 28, 2021) and NC ECHO (July 2021).

2020* North Carolina Newly Diagnosed HIV Continuum of Care



*Note: Data are preliminary (do not include vital records or national death matches). 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
^^Virally suppressed is defined as the last viral load during the given calendar year being <200 copies/ml.
Legend: Newly diagnosed people with HIV in 2020. Data includes labs and services from CAREWare (all Ryan White services excluding Part A), HIV Medication Assistance Program (HMAP), and Medicaid data sources.
Data Sources: enhanced HIV/AIDS Reporting System (eHARS) (June 28, 2021) and NC ECHO (July 2021).

90-90-90 Status: North Carolina



*Note: Data are preliminary (do not include vital records or national death matches). 2020 data should be treated with caution due to reduced availability of testing caused by the COVID-19 pandemic. Data is italicized for this reason.
Data Sources: enhanced HIV/AIDS Reporting System (eHARS) (June 28, 2021) and NC ECHO (July 2021).