



HIV Mortality 2020



HIV Mortality Slides

- An analysis of trends in rates and distributions of deaths in the United States, focusing on deaths with human immunodeficiency virus (HIV) disease as the underlying cause and deaths among persons with diagnosed HIV infection ever classified as stage 3 (acquired immunodeficiency syndrome, [AIDS]).
- Data were compiled from death certificates from all 50 states and the District of Columbia by the CDC's National Center for Health Statistics (NCHS) for the years 1987–2020 and downloaded from the CDC WONDER Online Database <https://wonder.cdc.gov/>.
- For more information, see the NCHS Web site: <http://www.cdc.gov/nchs/deaths.htm>



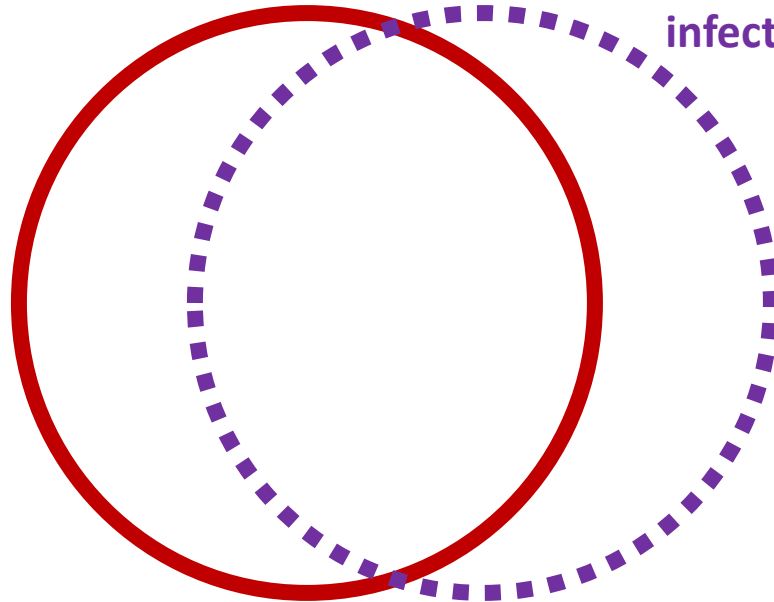
HIV Mortality Slides

Deaths due to HIV disease

are not exactly the same as

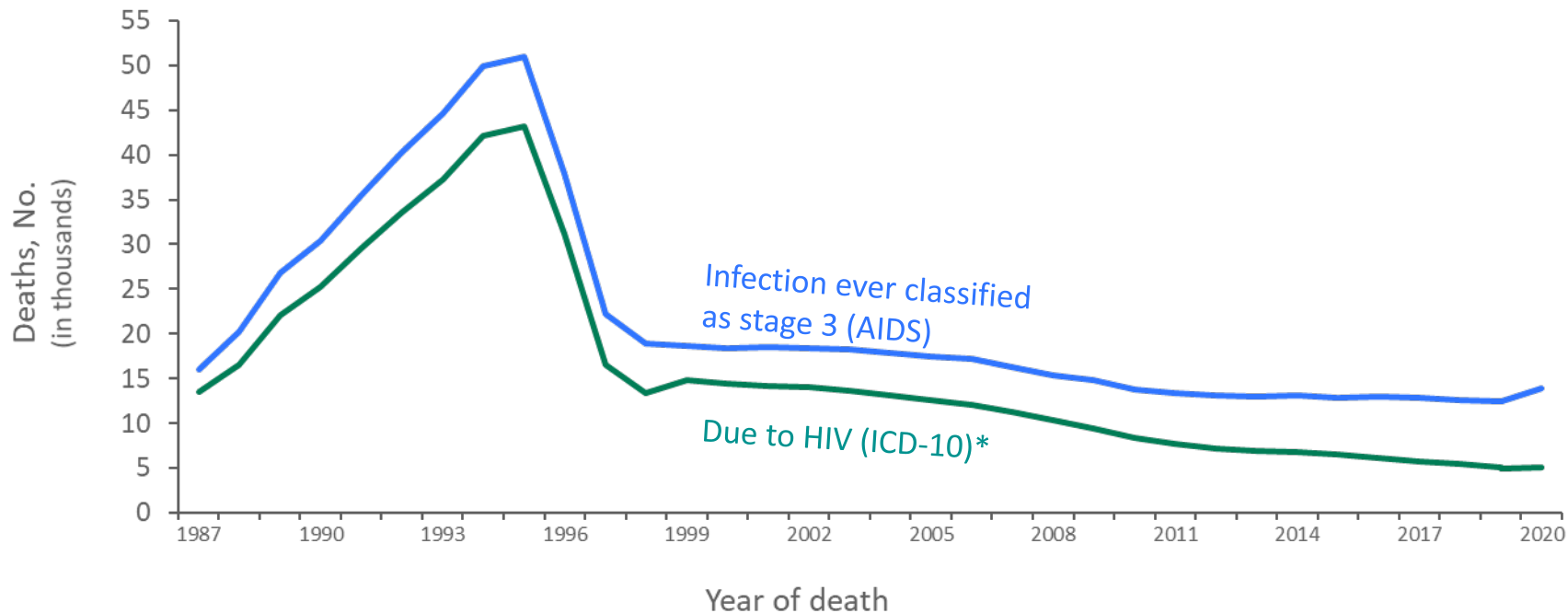
**deaths of persons with diagnosed HIV
infection ever classified as stage 3 (AIDS)**

**Due to HIV
disease**



**Stage 3
(AIDS)**

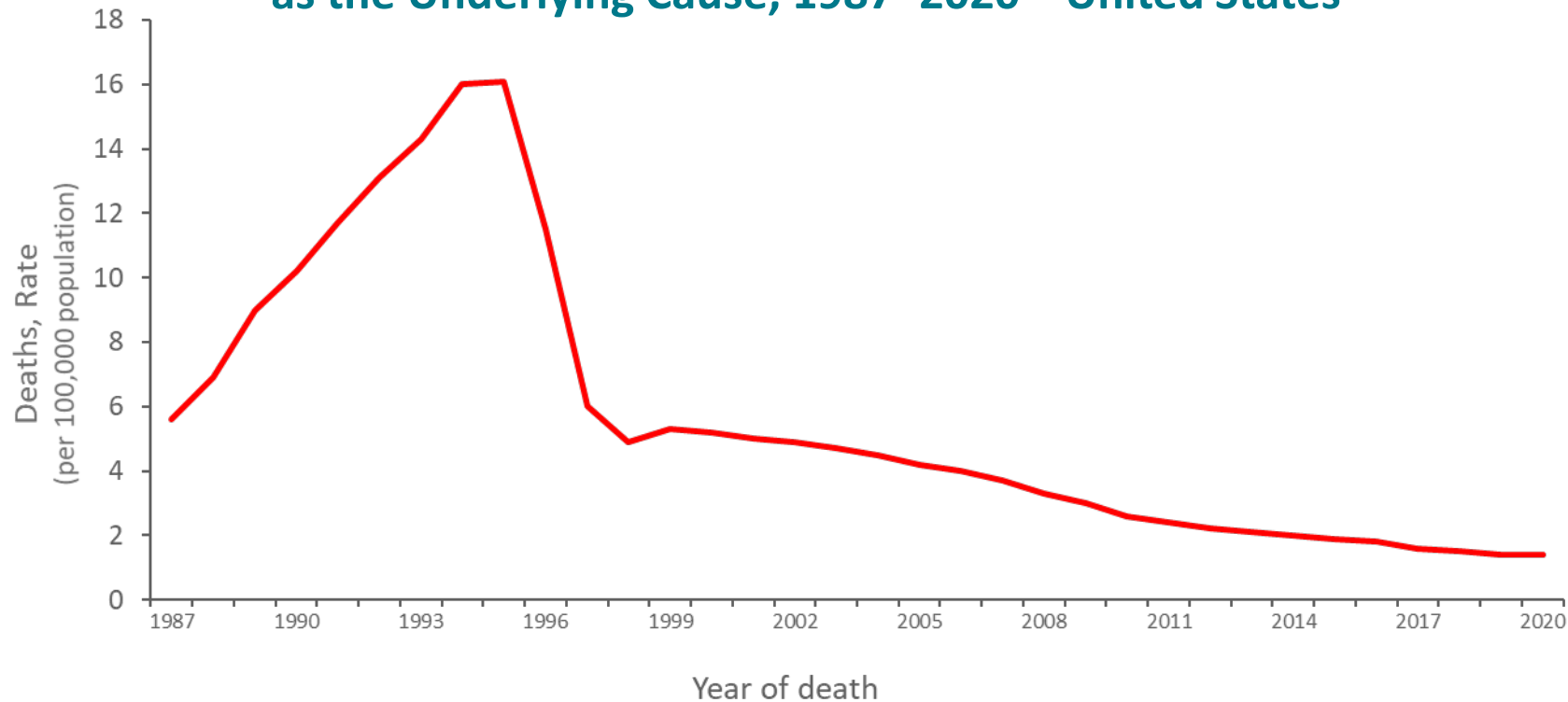
Comparison of Deaths among Persons with HIV Infection Ever Classified as Stage 3 (AIDS) in National HIV Surveillance System and Deaths Reported in Death Certificates in which HIV Disease was the Underlying Cause of Death, 1987–2020—United States



Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.



Trends in Annual Age-Adjusted* Rates of Death with HIV Disease as the Underlying Cause, 1987–2020—United States

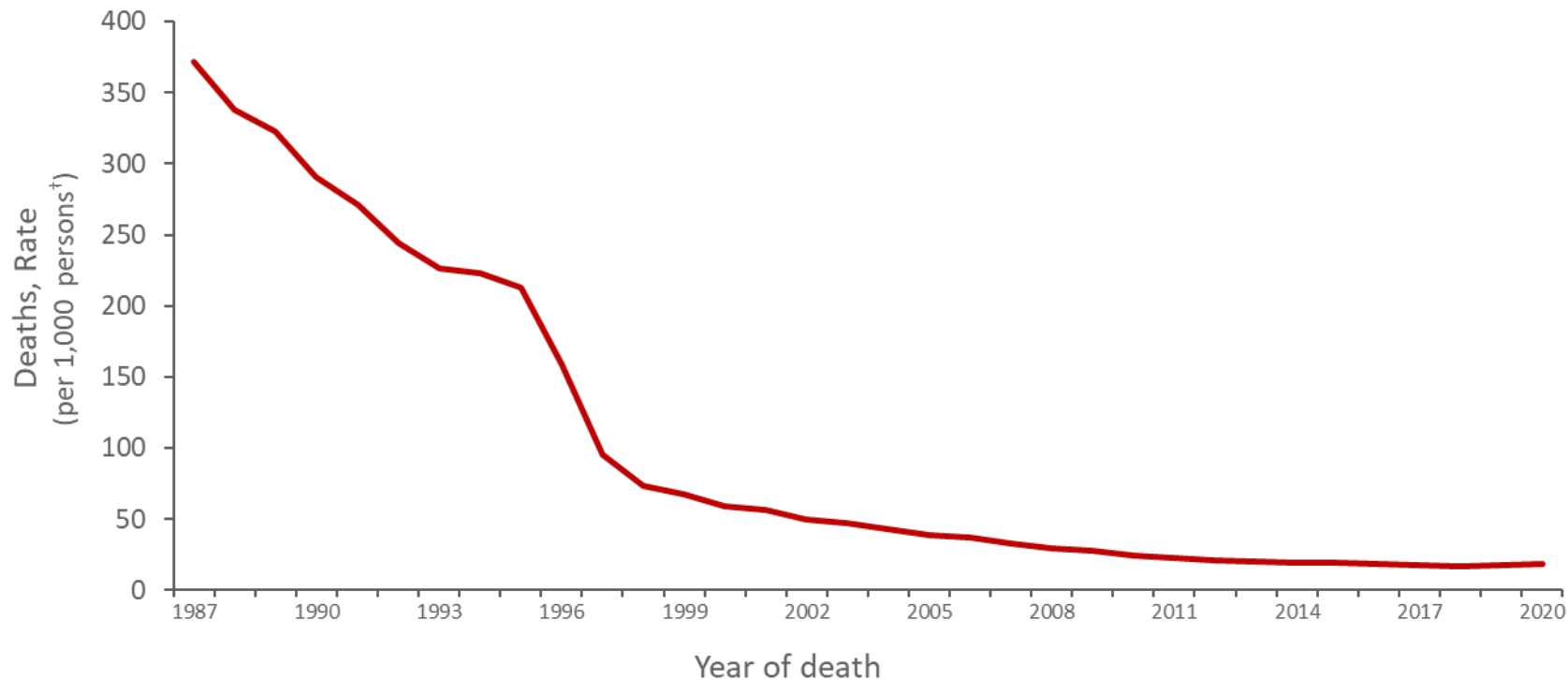


Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.



Trends in Annual Age-Adjusted* Rates[†] of Death among Persons with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), 1987–2020—United States

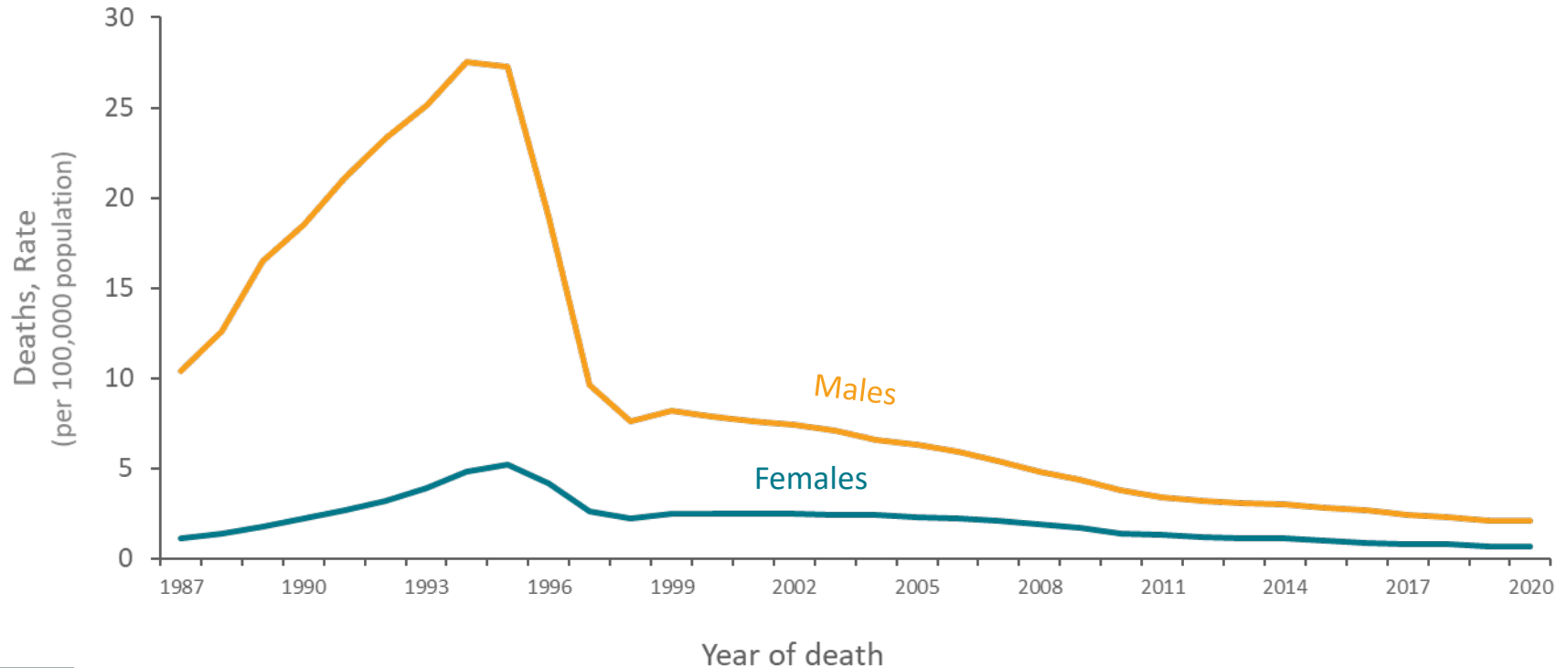


*Standard: age distribution of 2000 US population.

[†]Per 1,000 persons with diagnosed HIV infection ever classified as stage 3 (AIDS).



Trends in Annual Age-Adjusted* Rates of Death with HIV Disease as the Underlying Cause, by Sex, 1987–2020—United States



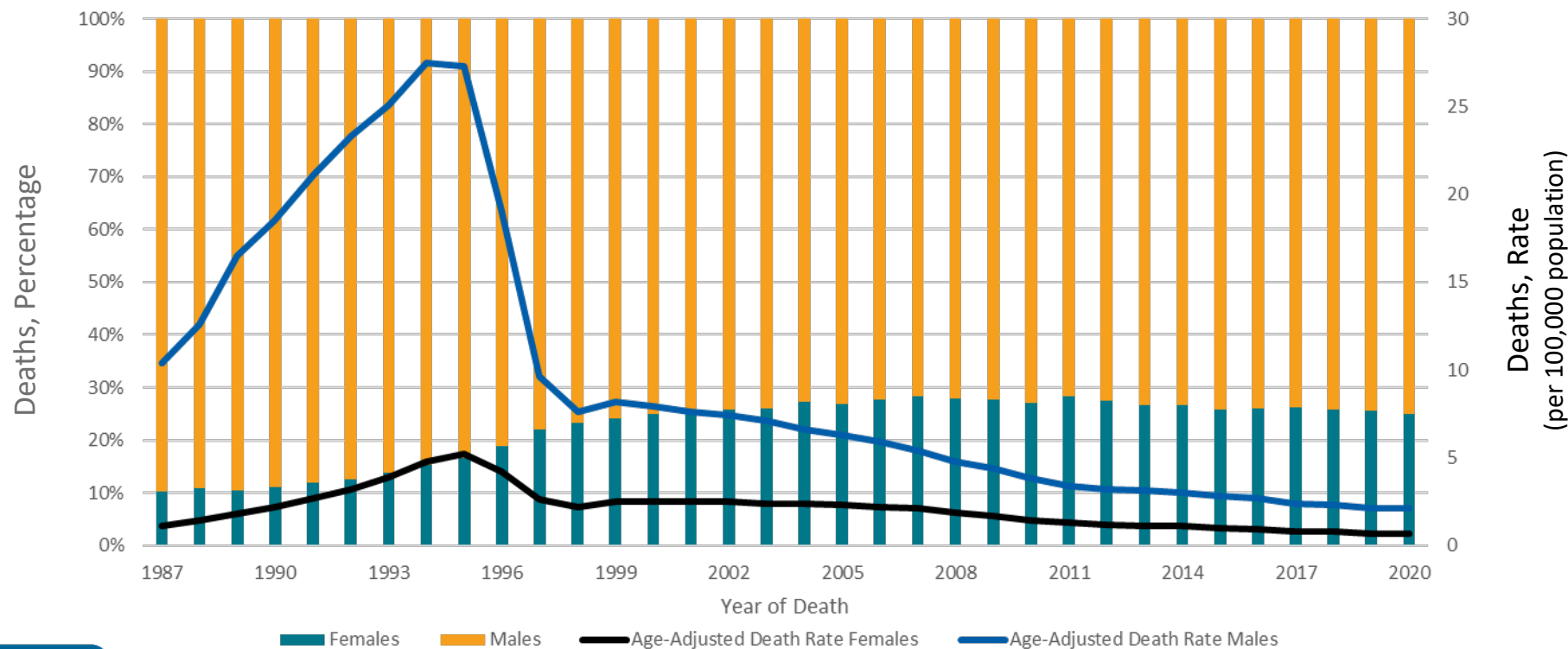
Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.





Trends in Annual Age-Adjusted* Rates of Death and the Percentage Distribution of Deaths with HIV Disease as the Underlying Cause, by Sex, 1987–2020—United States



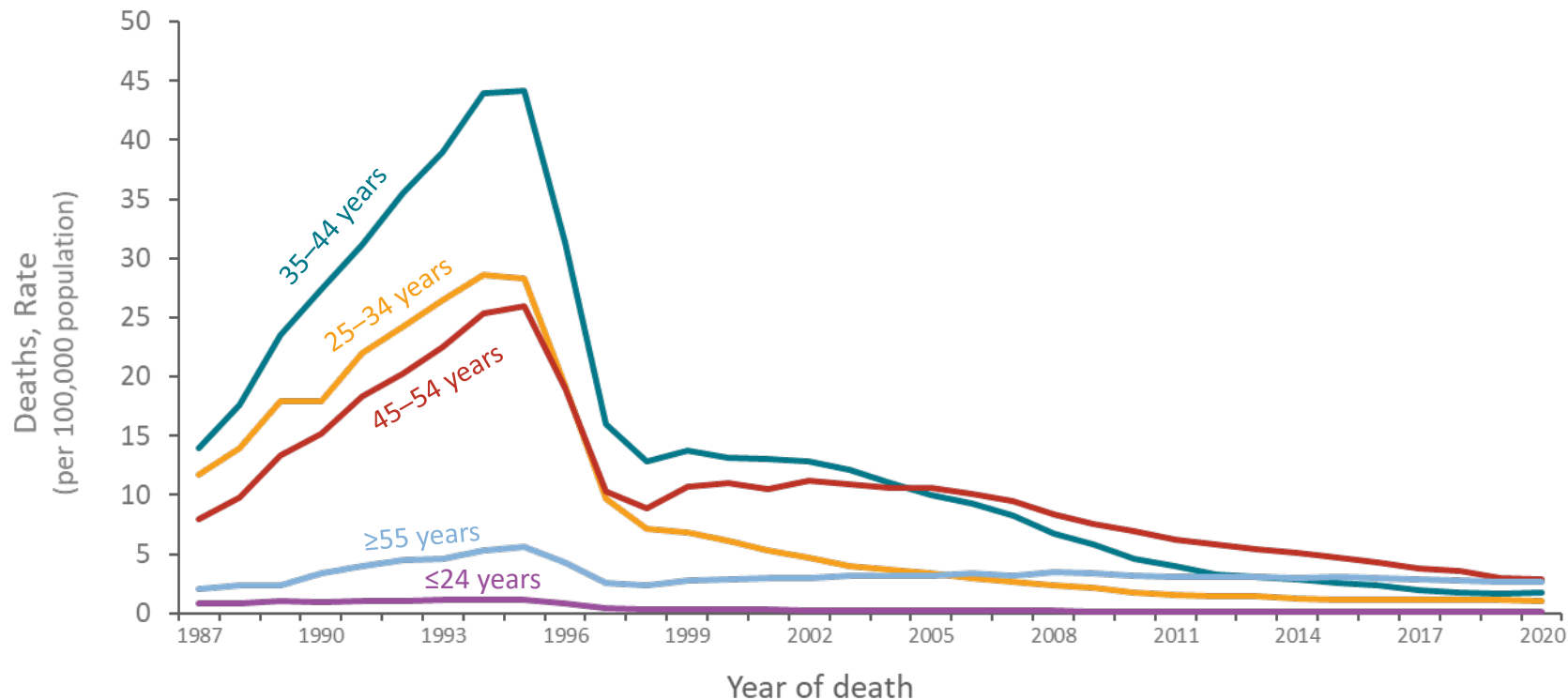
Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.



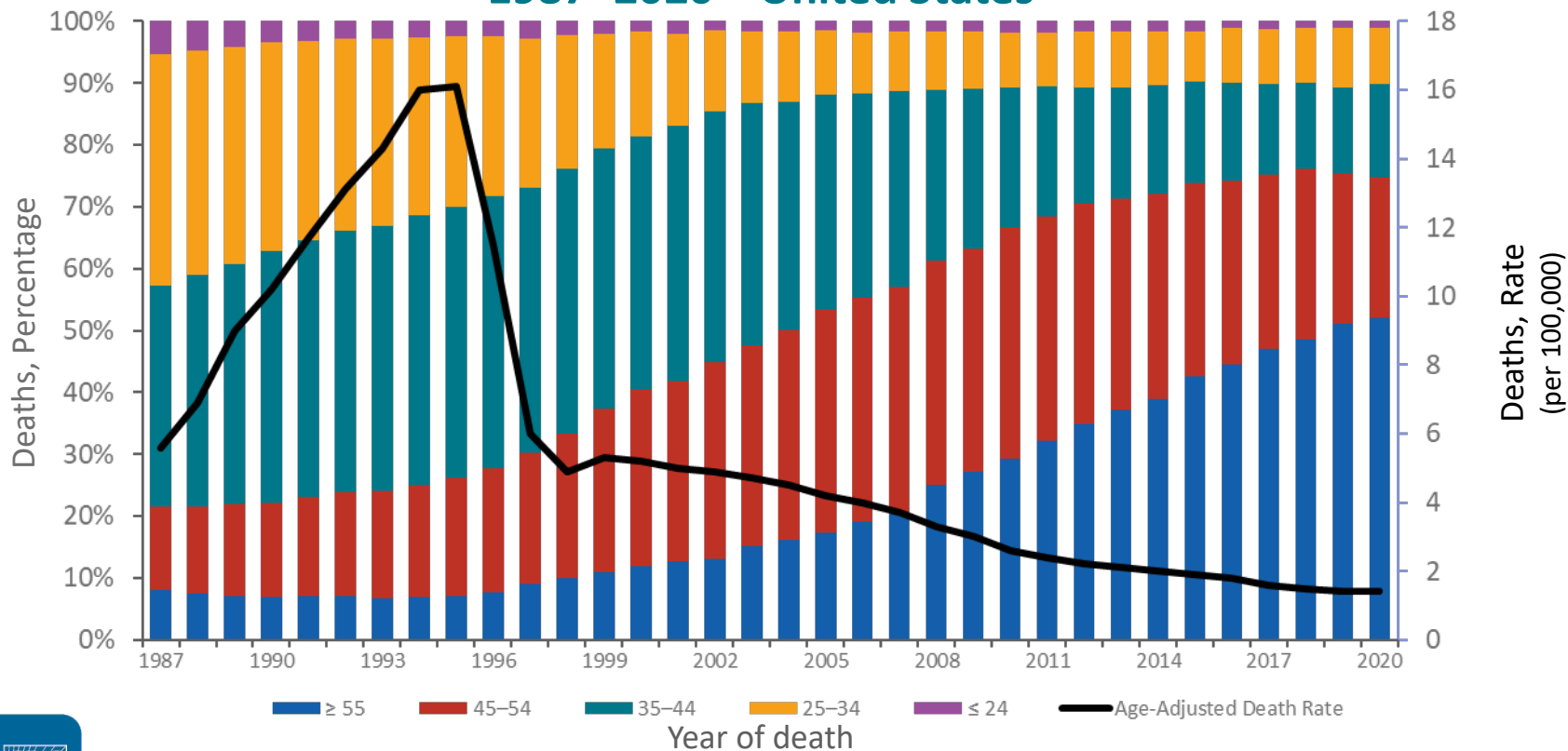


Trends in Annual Rates of Death with HIV Disease as the Underlying Cause, by Age Group, 1987–2020—United States



Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for *ICD-10* rules instead of *ICD-9* rules.

Trends in Annual Age-Adjusted* Rates of Death and the Percentage Distribution of Deaths with HIV Disease as the Underlying Cause, by Age Group, 1987–2020—United States

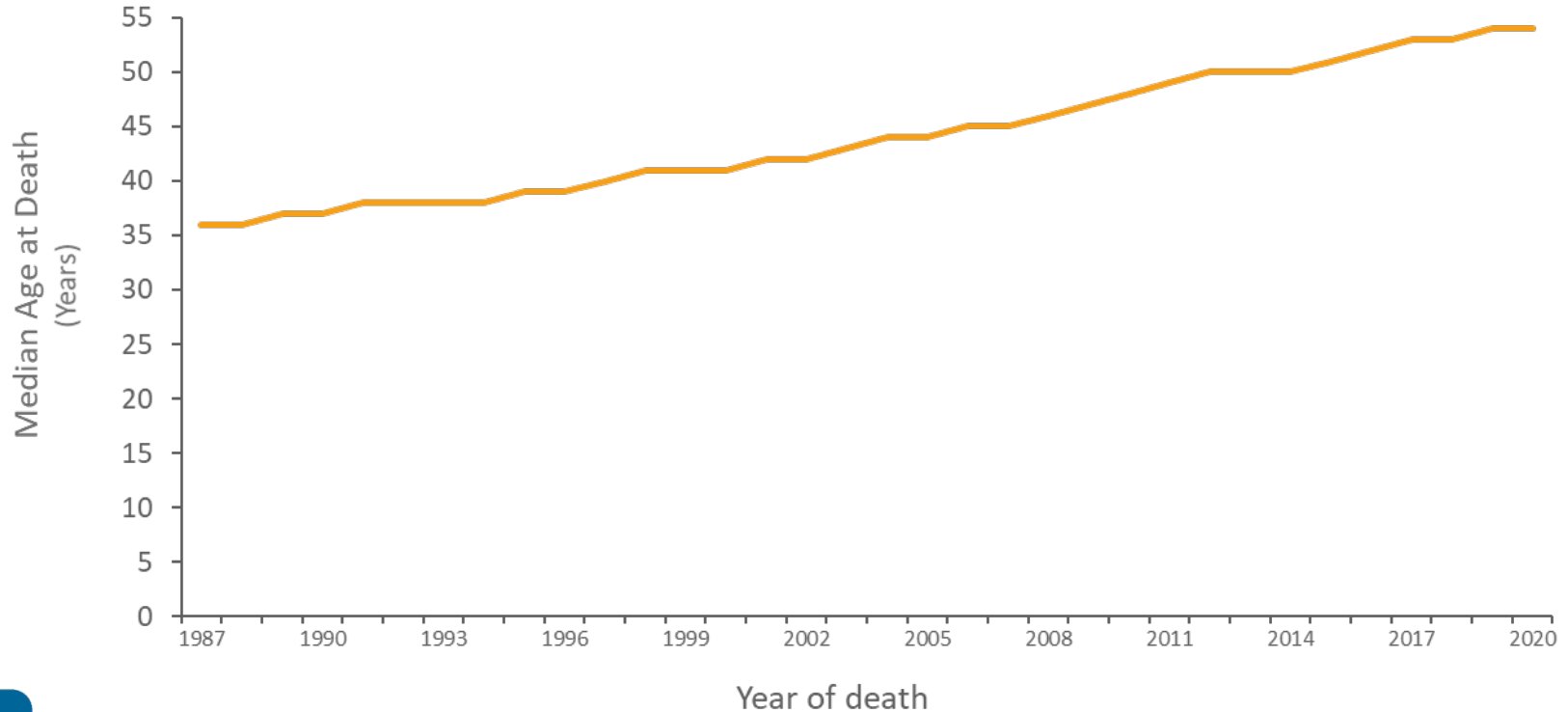


Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.



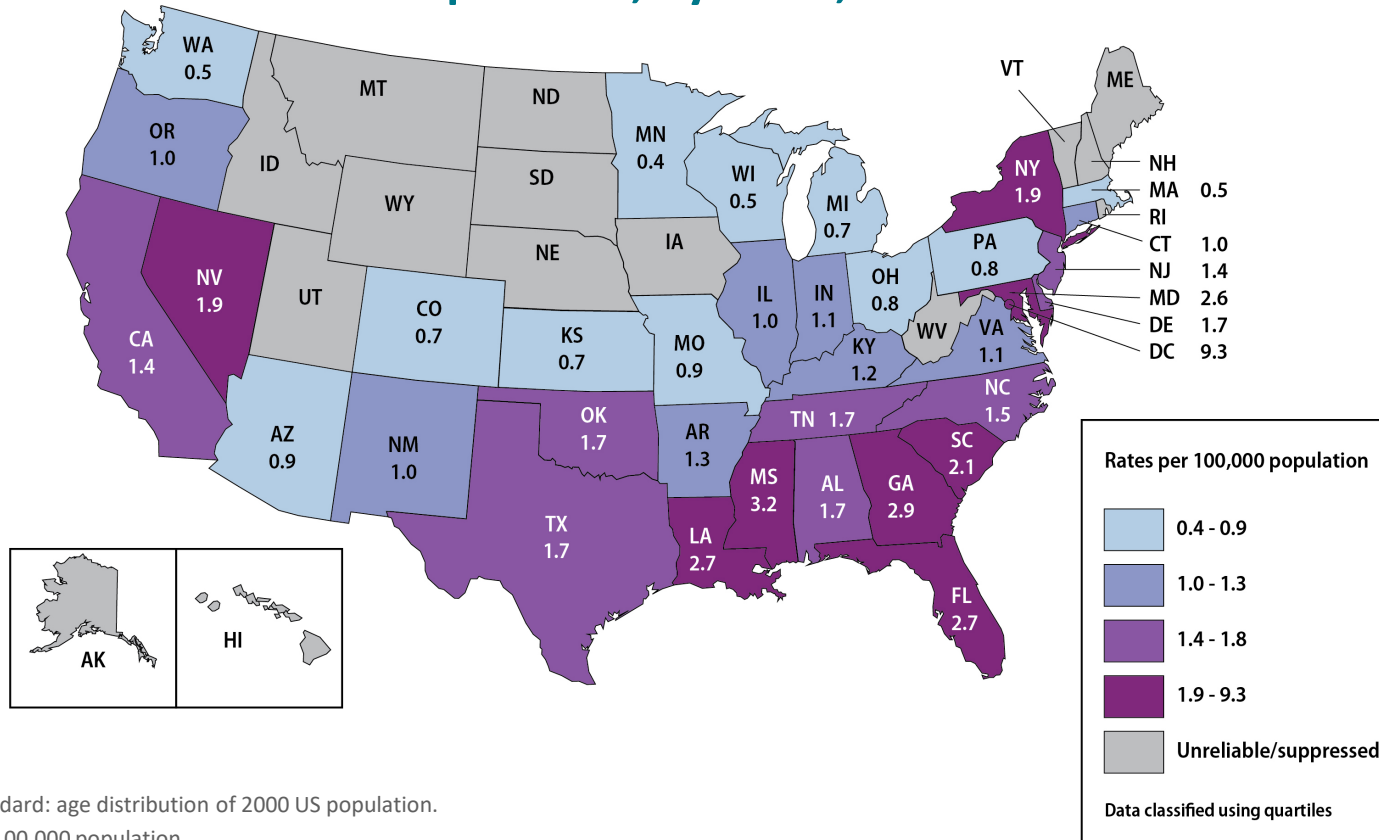
Median Age at Death with HIV Disease as the Underlying Cause 1987–2020—United States



Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for *ICD-10* rules instead of *ICD-9* rules.



Age-Adjusted* Rates† of Death with HIV Disease as the Underlying Cause in the General Population, by State, 2020—United States



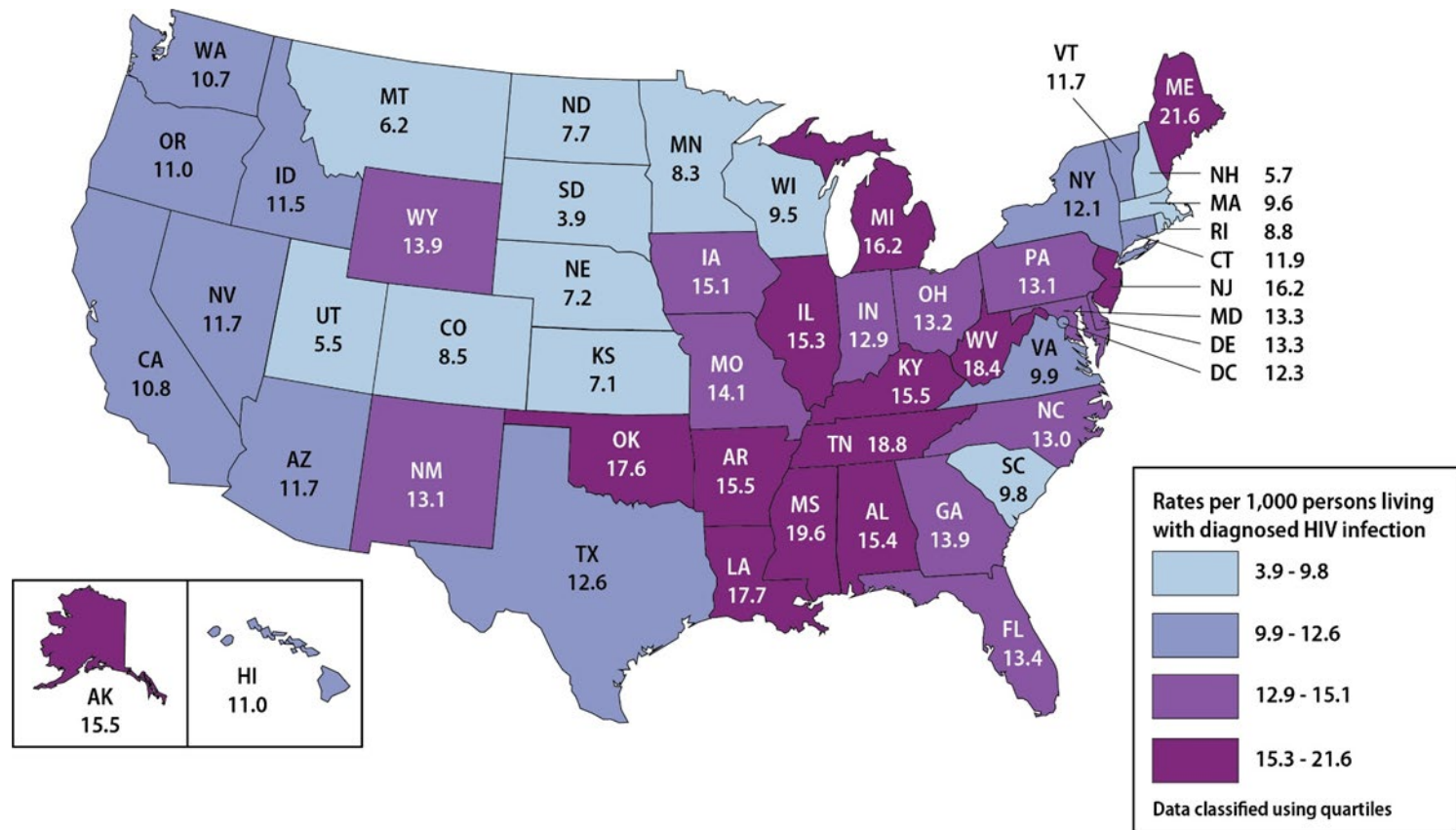
*Standard: age distribution of 2000 US population.

†Per 100,000 population.

§Death rates are not shown when unreliable (rate is calculated with a numerator of 20 or less) or suppressed (the data meet the criteria for confidentiality constraints).



Age-Adjusted* Rates† of All-Cause Death among Persons with HIV by State 2020—United States

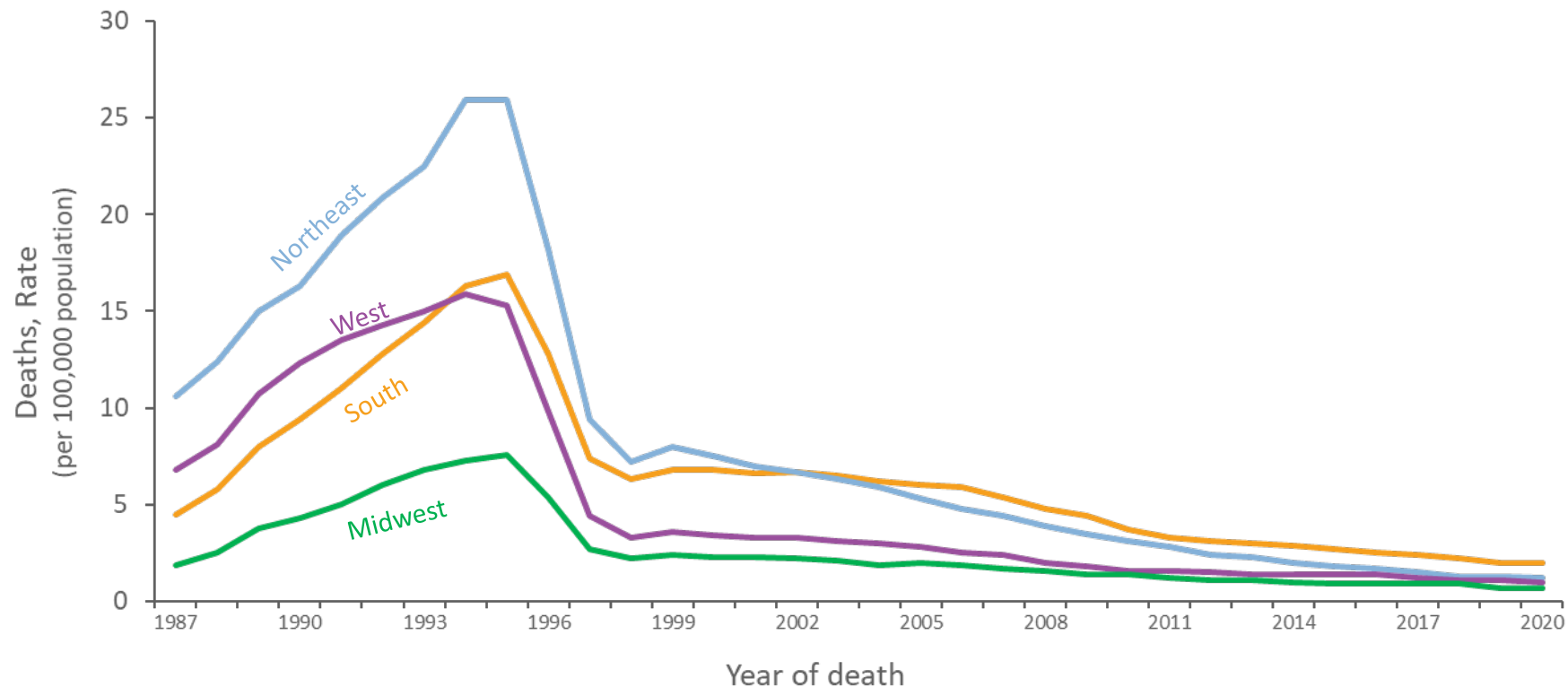


*Standard: age distribution of 2000 US population.

†Per 1,000 persons living with diagnosed HIV infection.



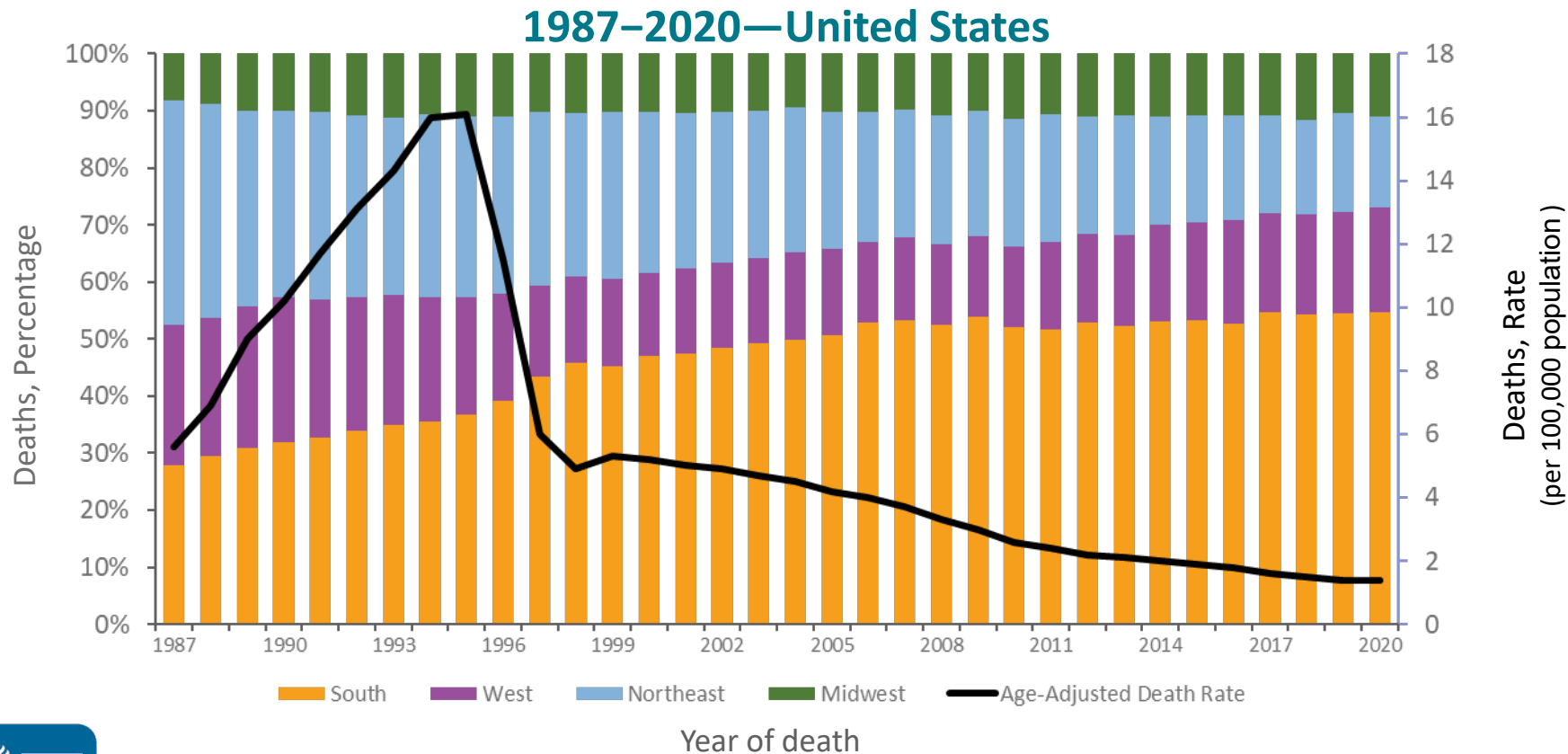
Trends in Age-Adjusted* Annual Rates of Death with HIV Disease as the Underlying Cause, by Geographic Region, 1987–2020—United States



Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.

Trends in Annual Age-Adjusted* Rates of Death and the Percentage Distribution of Deaths with HIV Disease as the Underlying Cause, by Geographic Region, 1987–2020—United States

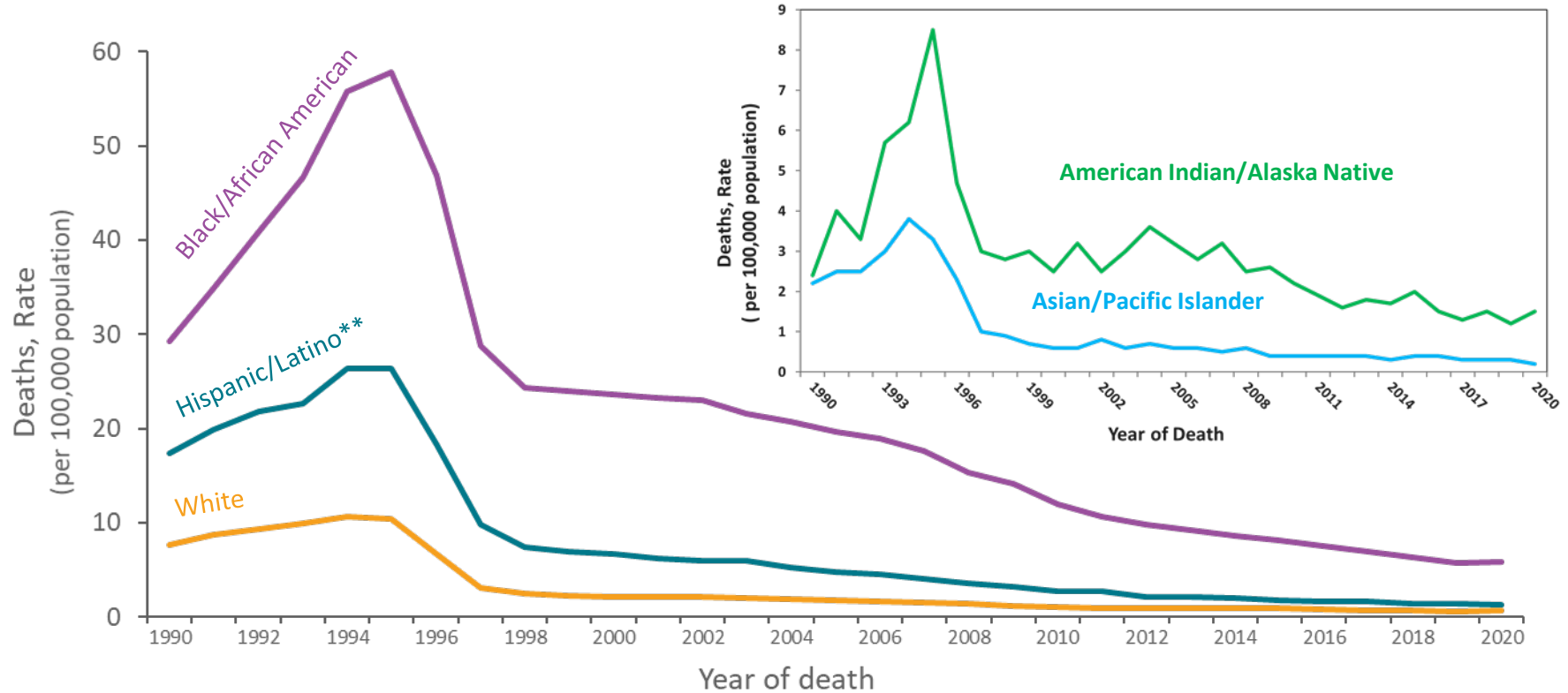


Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.



Trends in Age-Adjusted* Annual Rates of Death with HIV Disease as the Underlying Cause, by Race/Ethnicity, 1990–2020—United States



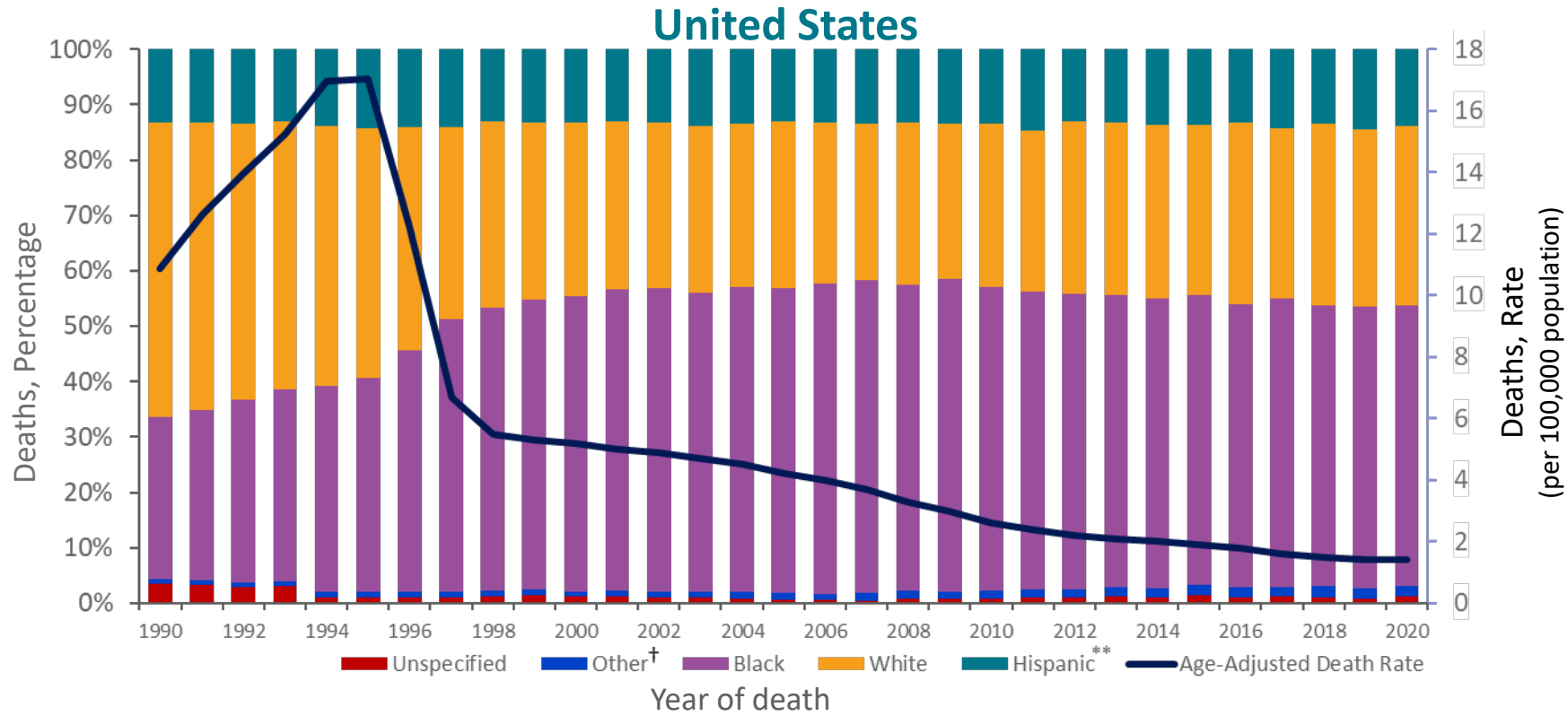
Note. For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard age distribution of 2000 US population.

**Hispanic/Latino persons can be of any race.



Trends in Annual Age-Adjusted* Rates of Death and the Percentage Distribution of Deaths with HIV Disease as the Underlying Cause, by Race/Ethnicity, 1990–2020— United States



Note. For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

*Standard: age distribution of 2000 US population.

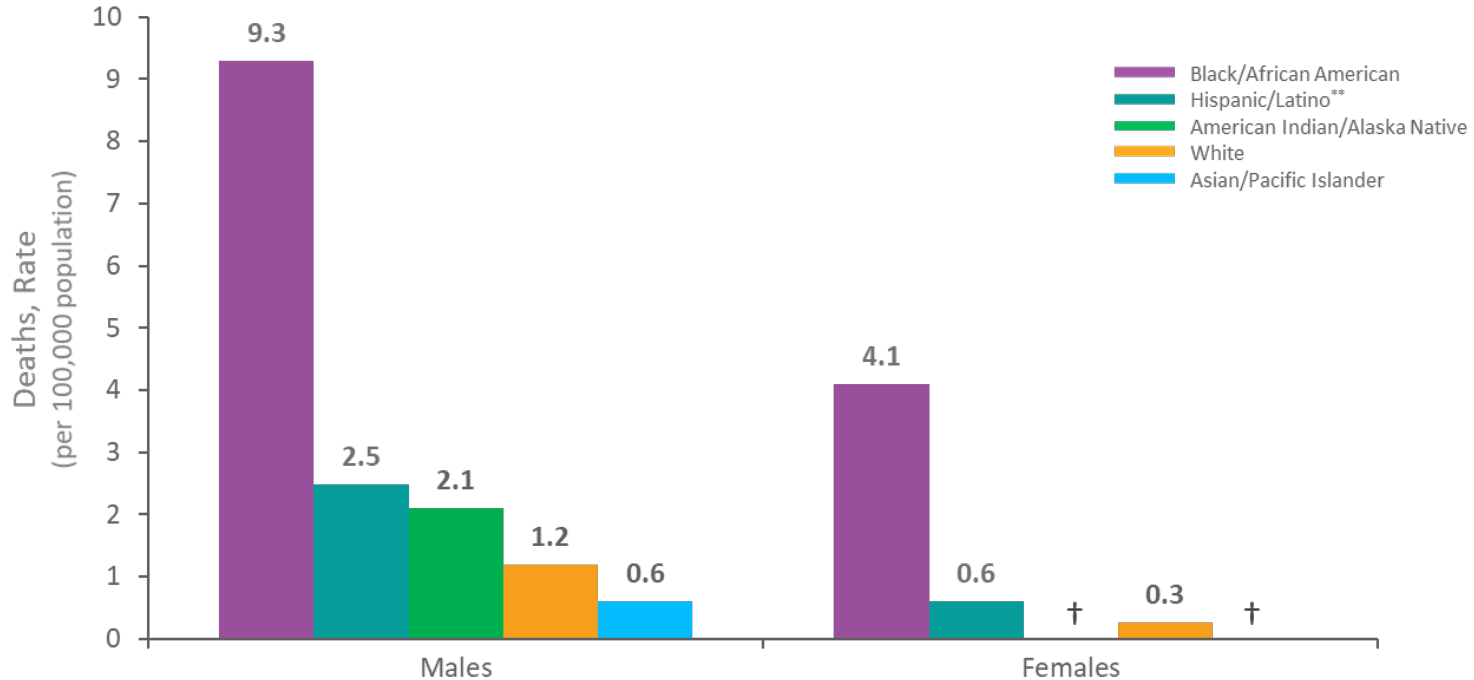
** Hispanic/Latino persons can be of any race.

†Asian/Pacific Islander persons and American Indian/Alaska Native persons.





Age-Adjusted* Average Annual Rate of Death with HIV Disease as the Underlying Cause by Sex and Race/Ethnicity, 2016–2020—United States



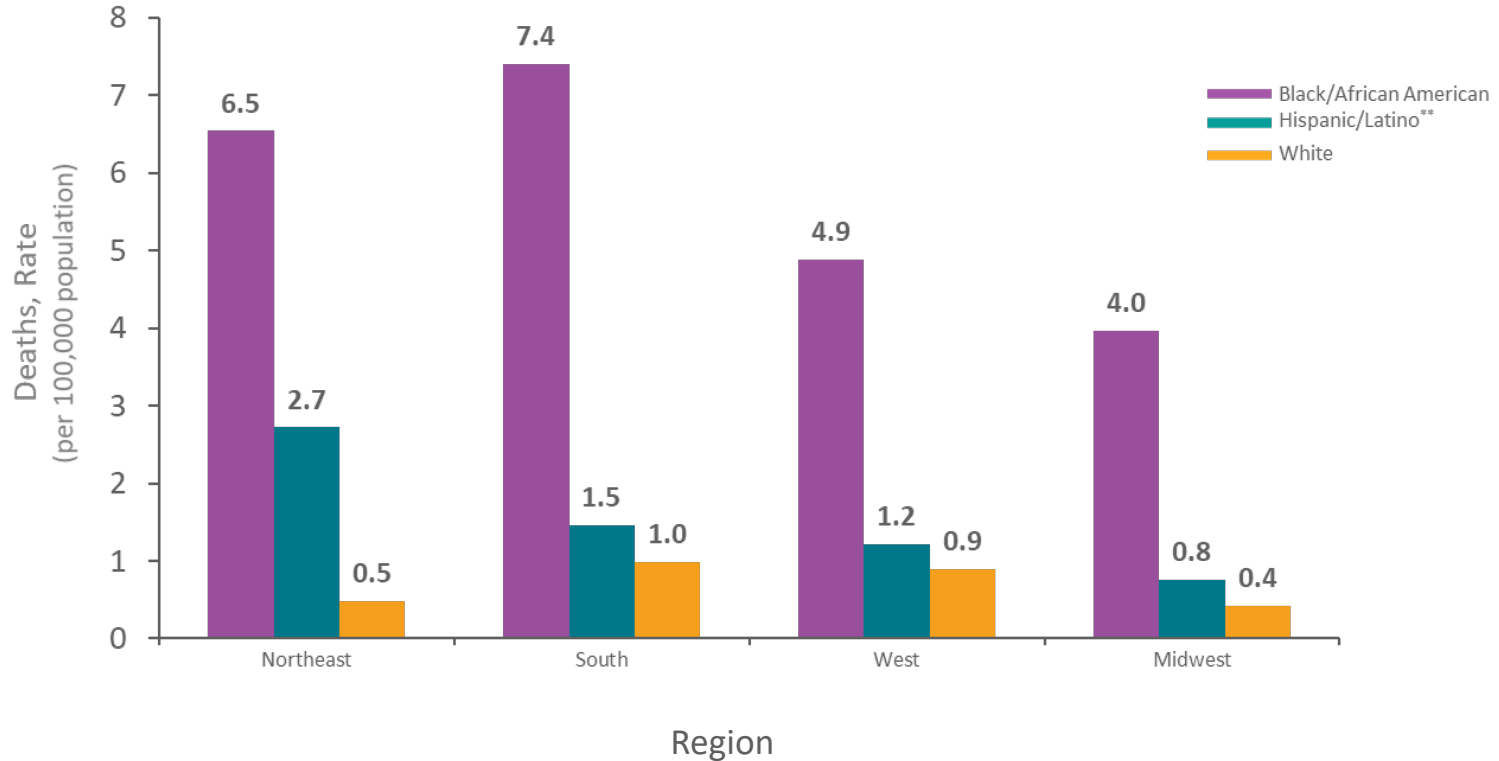
*Standard age distribution of 2000 US population

† Unreliable rate due to a numerator of less than 20 deaths.

**Hispanic/Latino persons can be of any race.



Age-Adjusted* Average Annual Rate of Death with HIV Disease as the Underlying Cause by Race/Ethnicity and Geographic Region, 2016–2020—United States

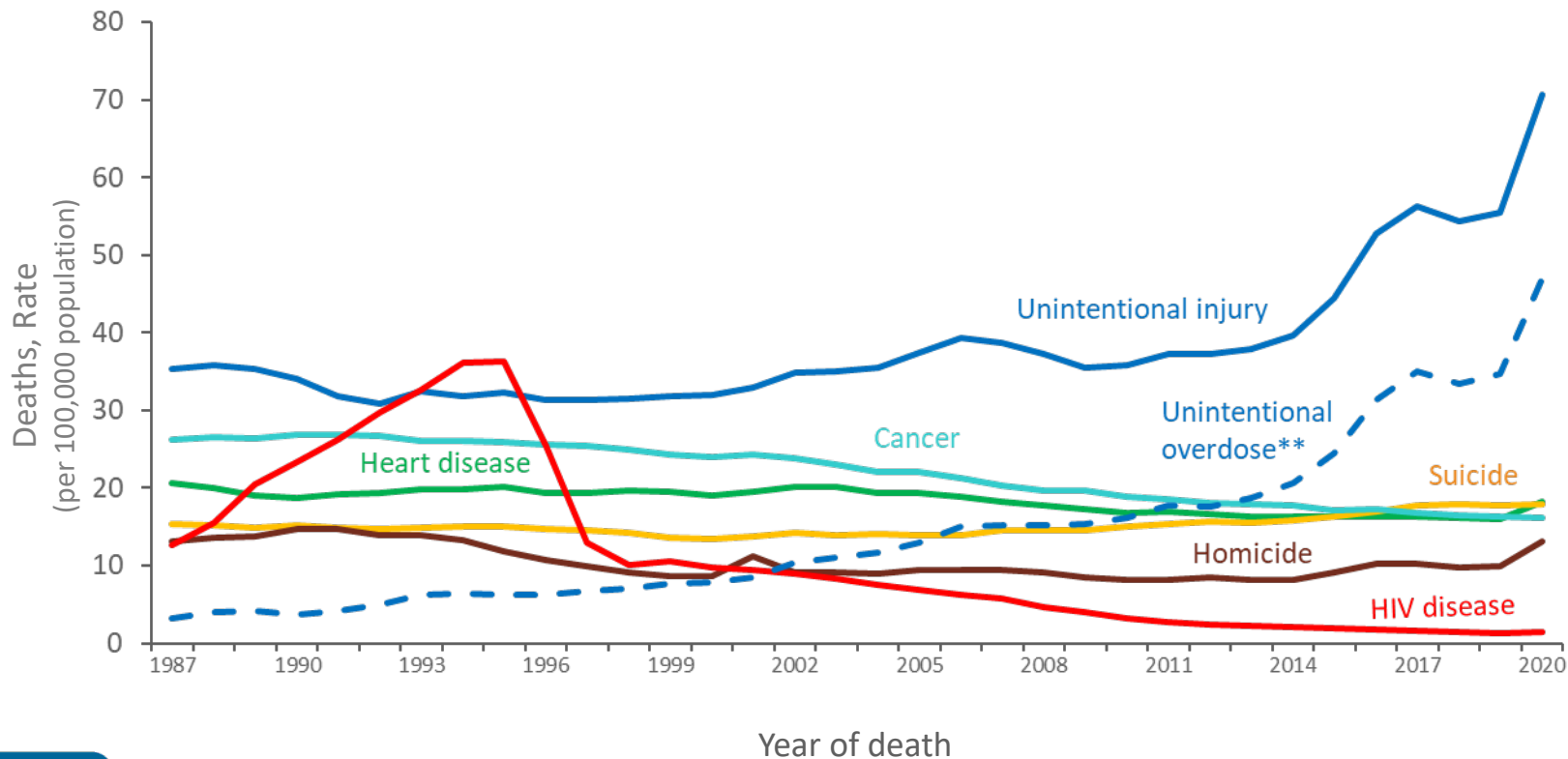


*Standard age distribution of 2000 US population

**Hispanic/Latino persons can be of any race.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Persons Aged 25–44 Years, 1987–2020—United States

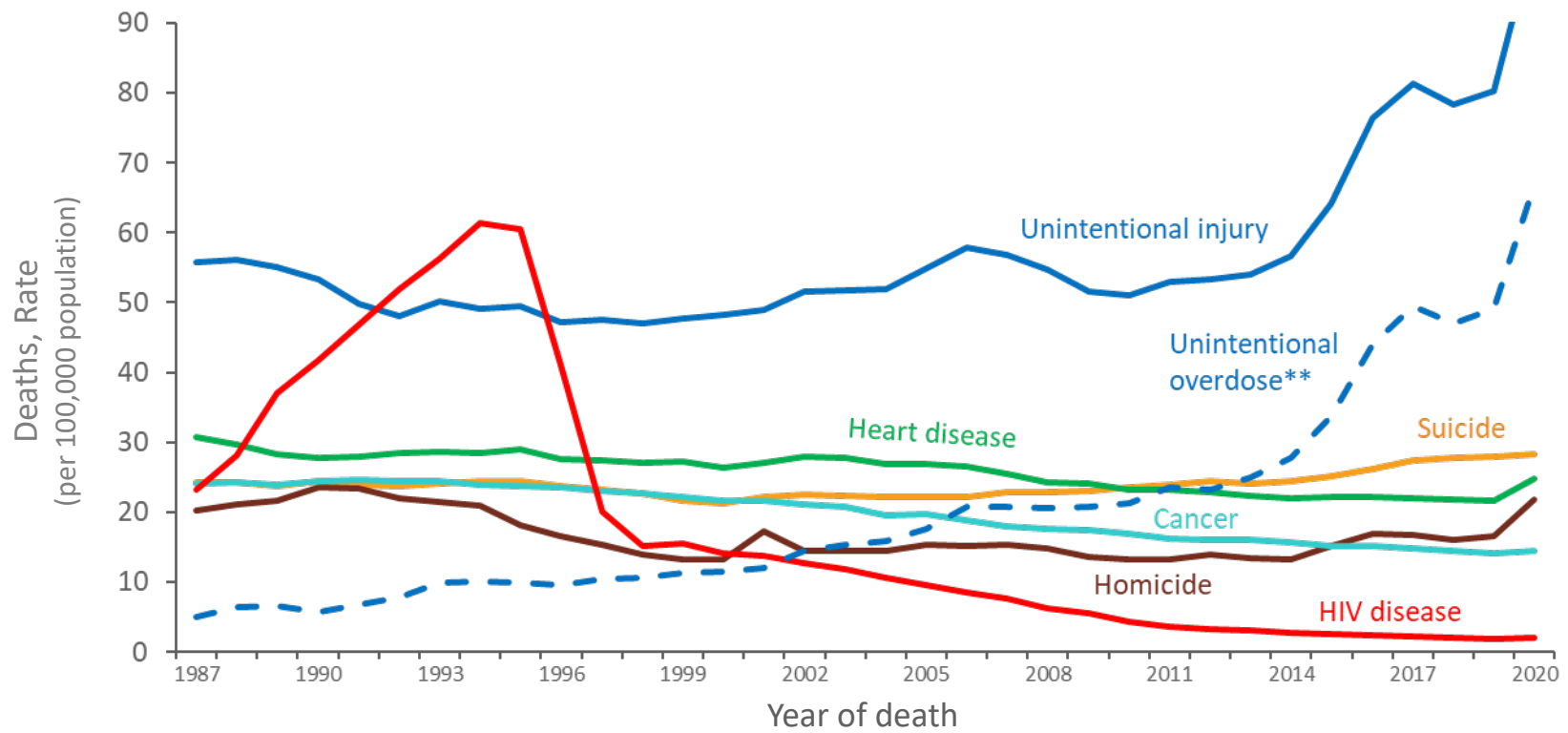


Note. For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Males Aged 25–44 Years, 1987–2020—United States

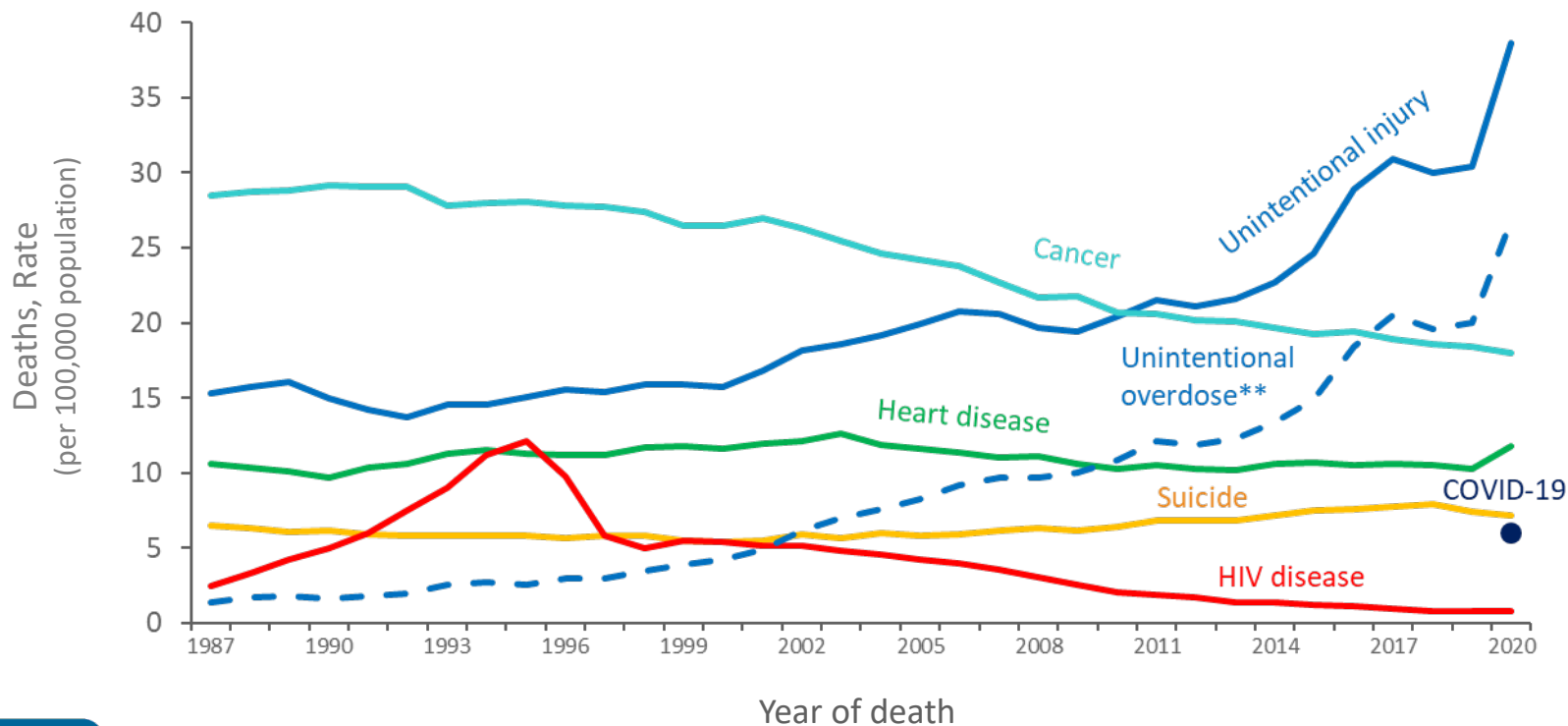


Note. For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Females Aged 25–44 Years, 1987–2020—United States

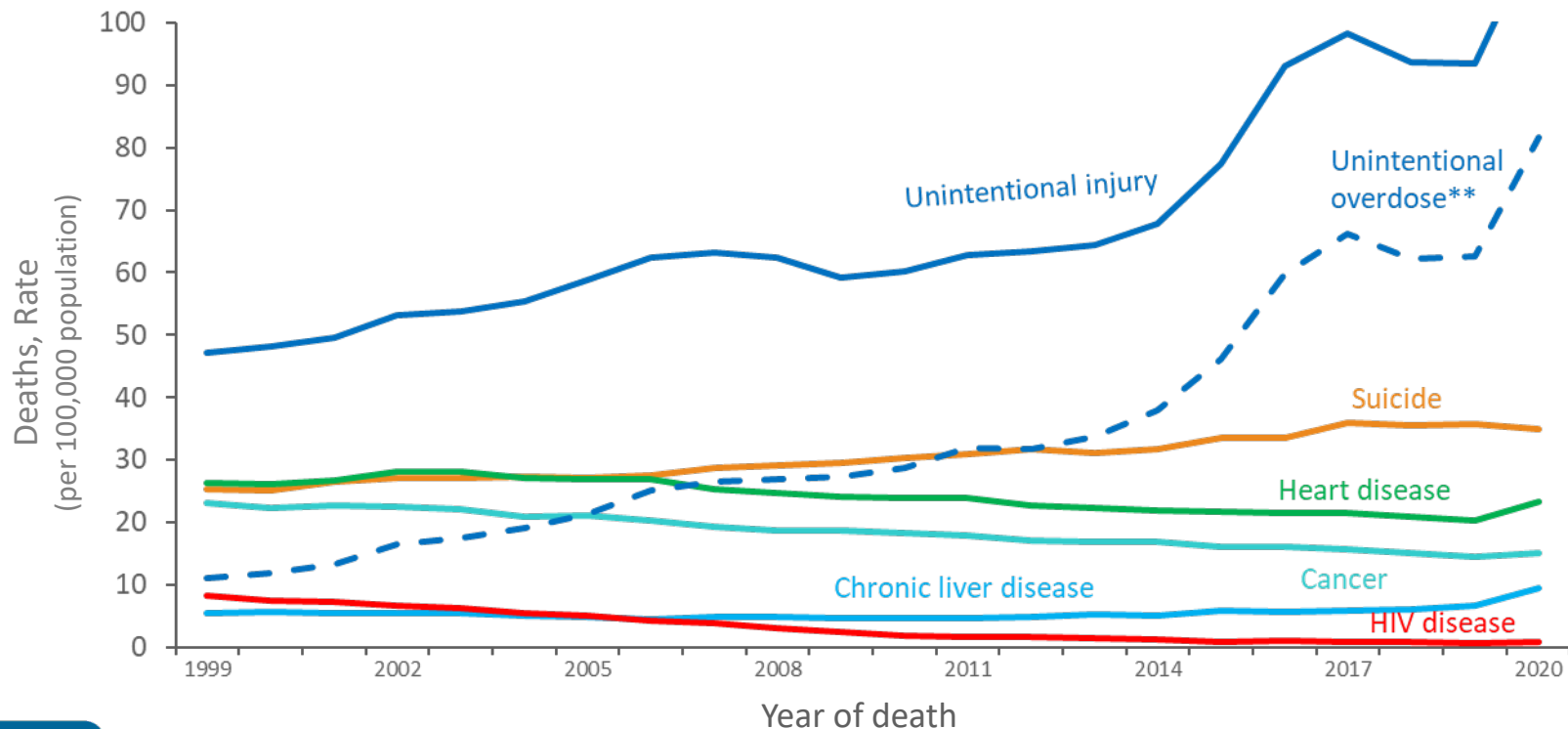


Note. For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among White* Males Aged 25–44 Years 1999–2020—United States



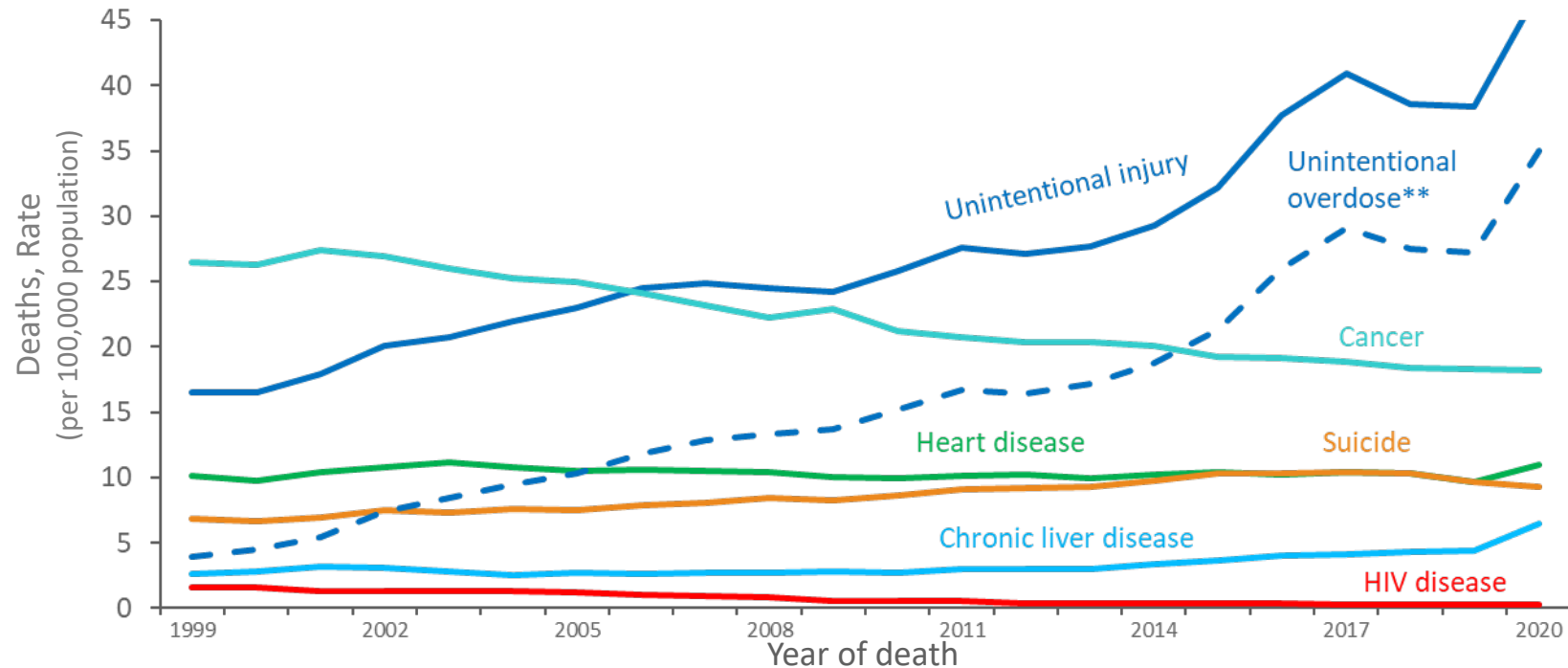
*Does not include persons of Hispanic/Latino ethnicity.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.





Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among White* Females Aged 25–44 Years 1999–2020—United States

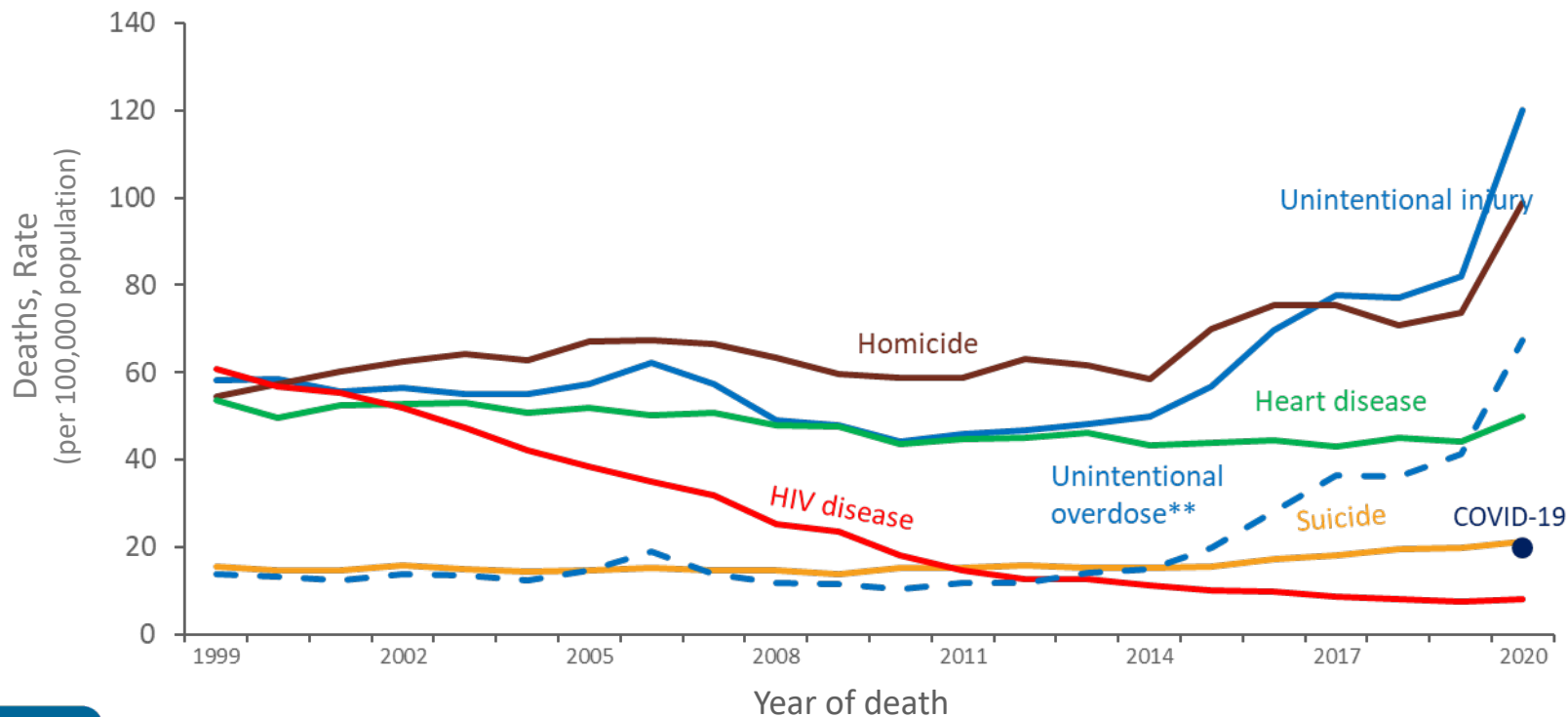


*Does not include persons of Hispanic/Latino ethnicity.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Black/African American* Males Aged 25–44 Years 1999–2020—United States

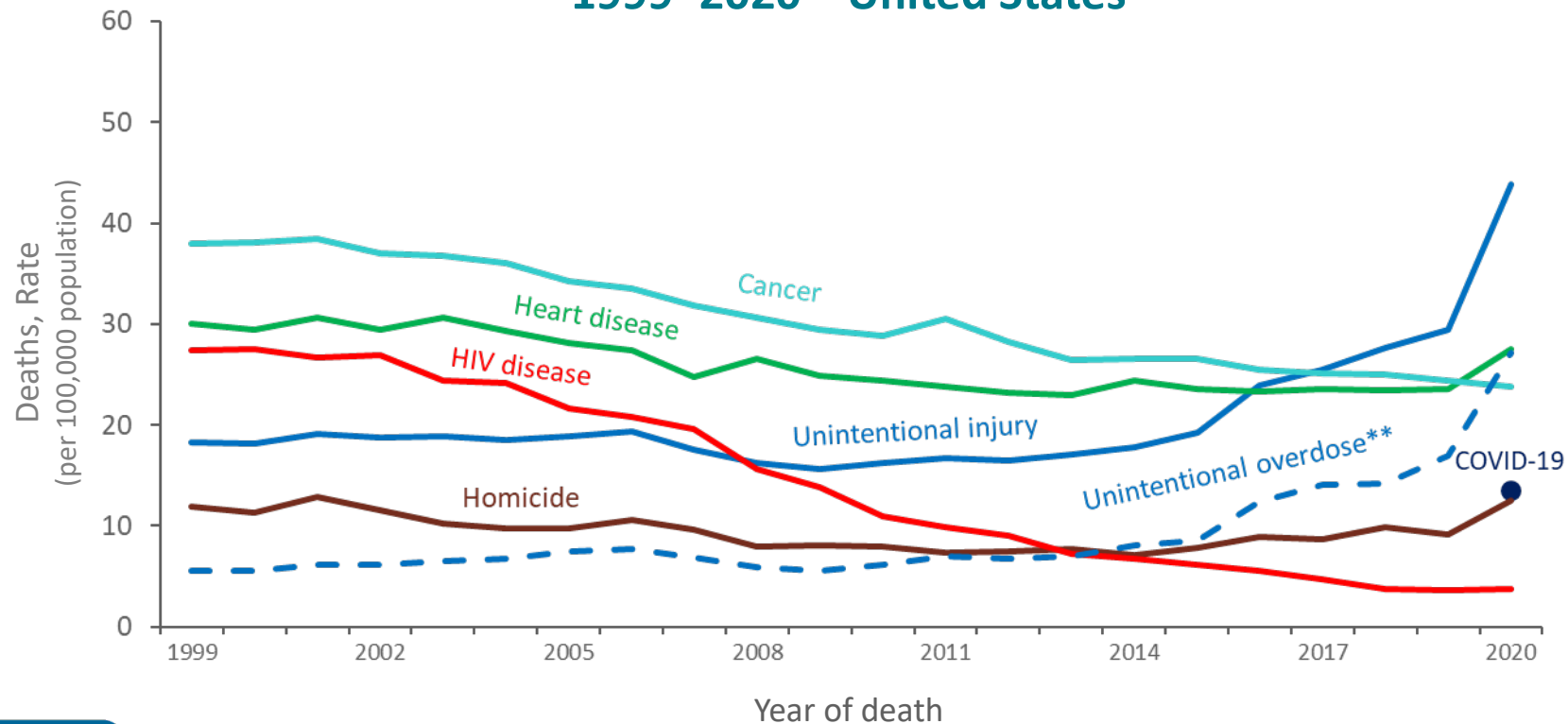


*Does not include persons of Hispanic/Latino ethnicity.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death due to HIV Disease as the Underlying Cause versus the 5 Leading Causes among Black/African American* Females Aged 25–44 Years 1999–2020—United States

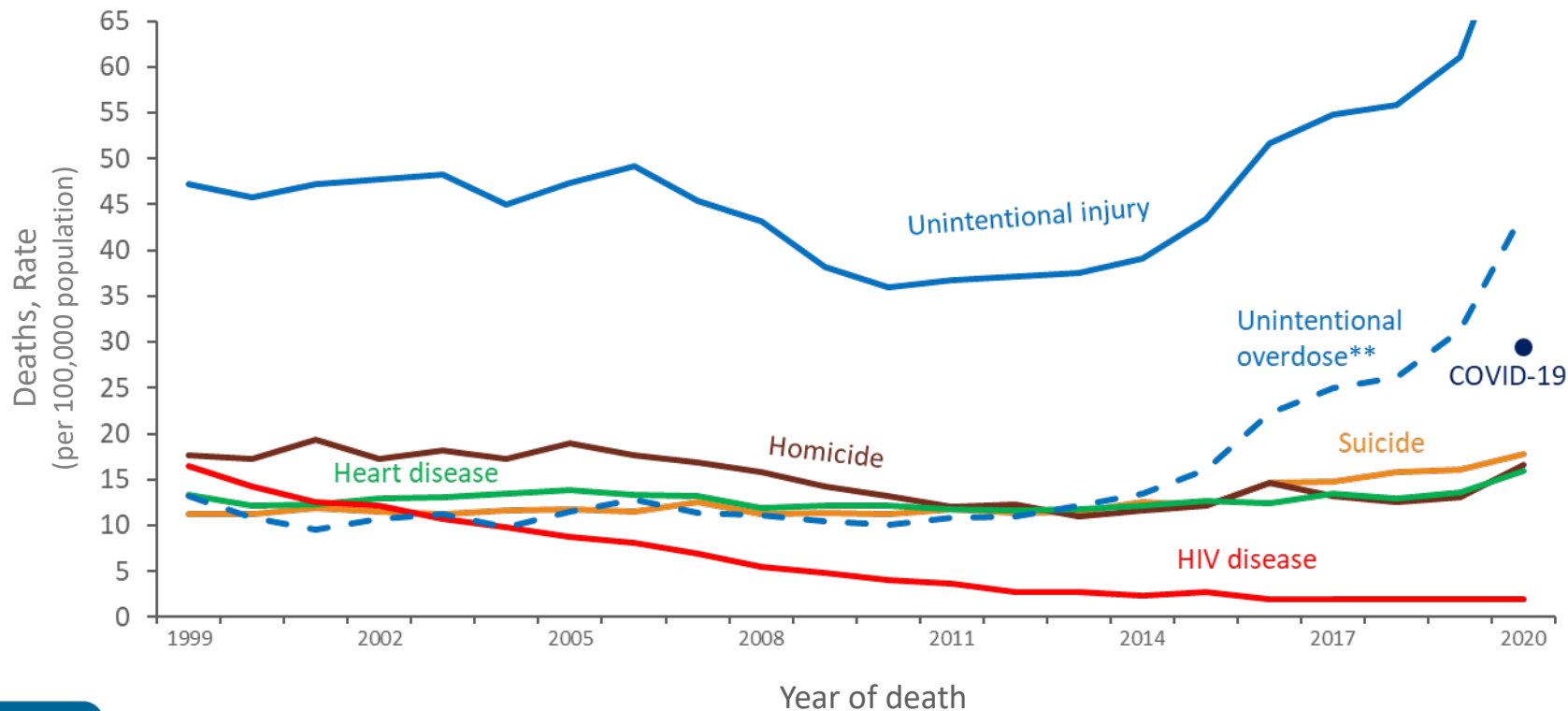


*Does not include persons of Hispanic/Latino ethnicity.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury.



Trends in Annual Rates of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Hispanic/Latino* Males Aged 25–44 Years 1999–2020—United States

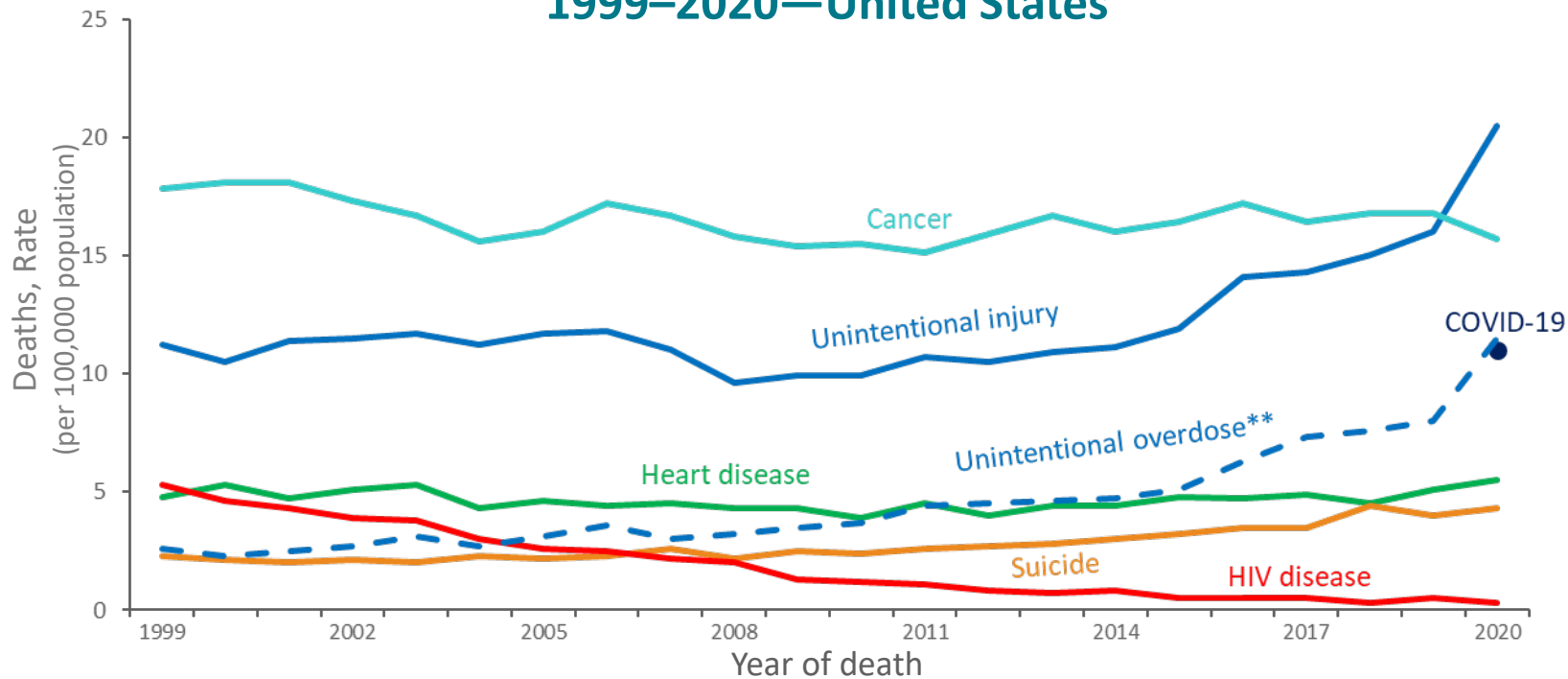


*Hispanic/Latino persons can be of any race.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury



Trends in Annual Rates of Death due to HIV Disease as the Underlying Cause versus the 5 Leading Causes among Hispanic/Latino* Females, Aged 25–44 Years 1999–2020—United States



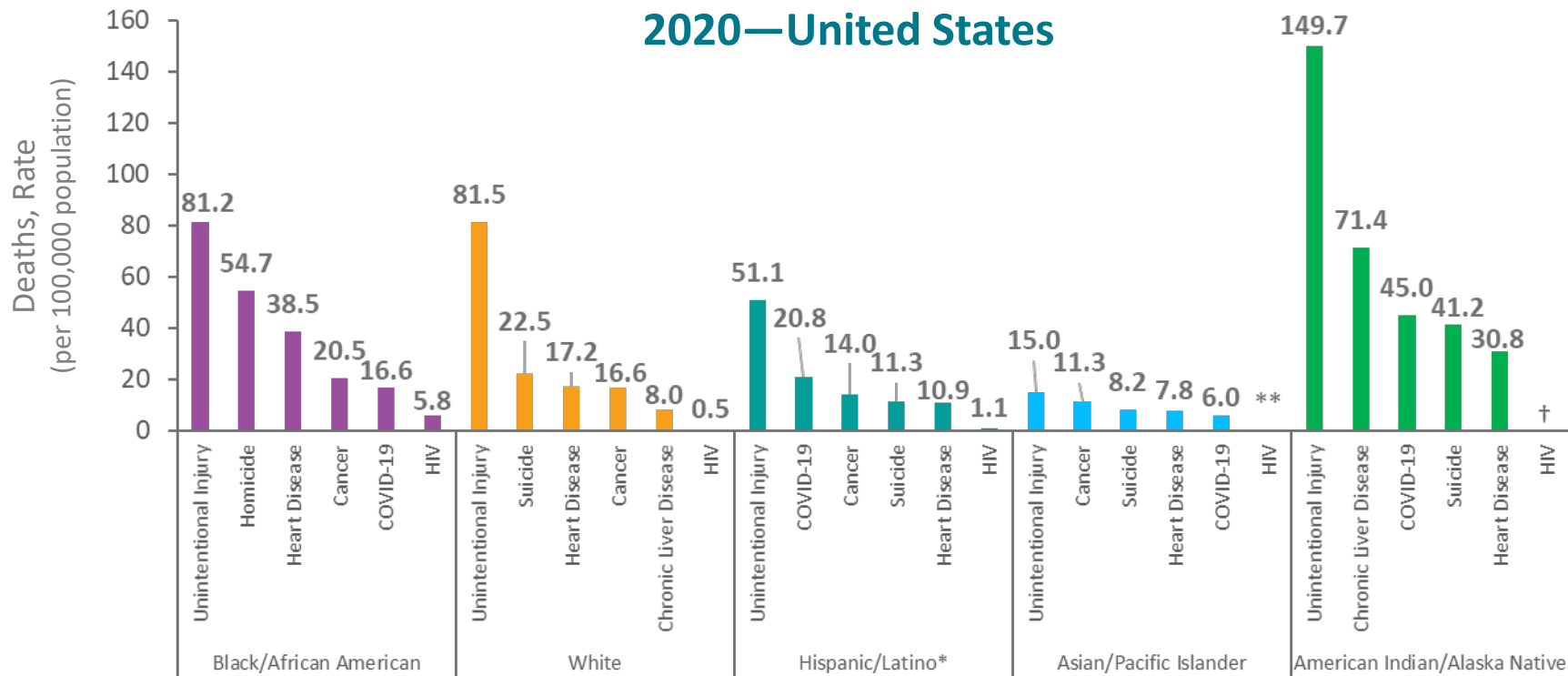
*Hispanic/Latino persons can be of any race.

** Deaths with an underlying cause of unintentional overdose are a subset of deaths with an underlying cause of unintentional injury





Annual Rate of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Persons Aged 25–44 Years, By Race/Ethnicity 2020—United States



*Hispanic/Latino persons can be of any race.

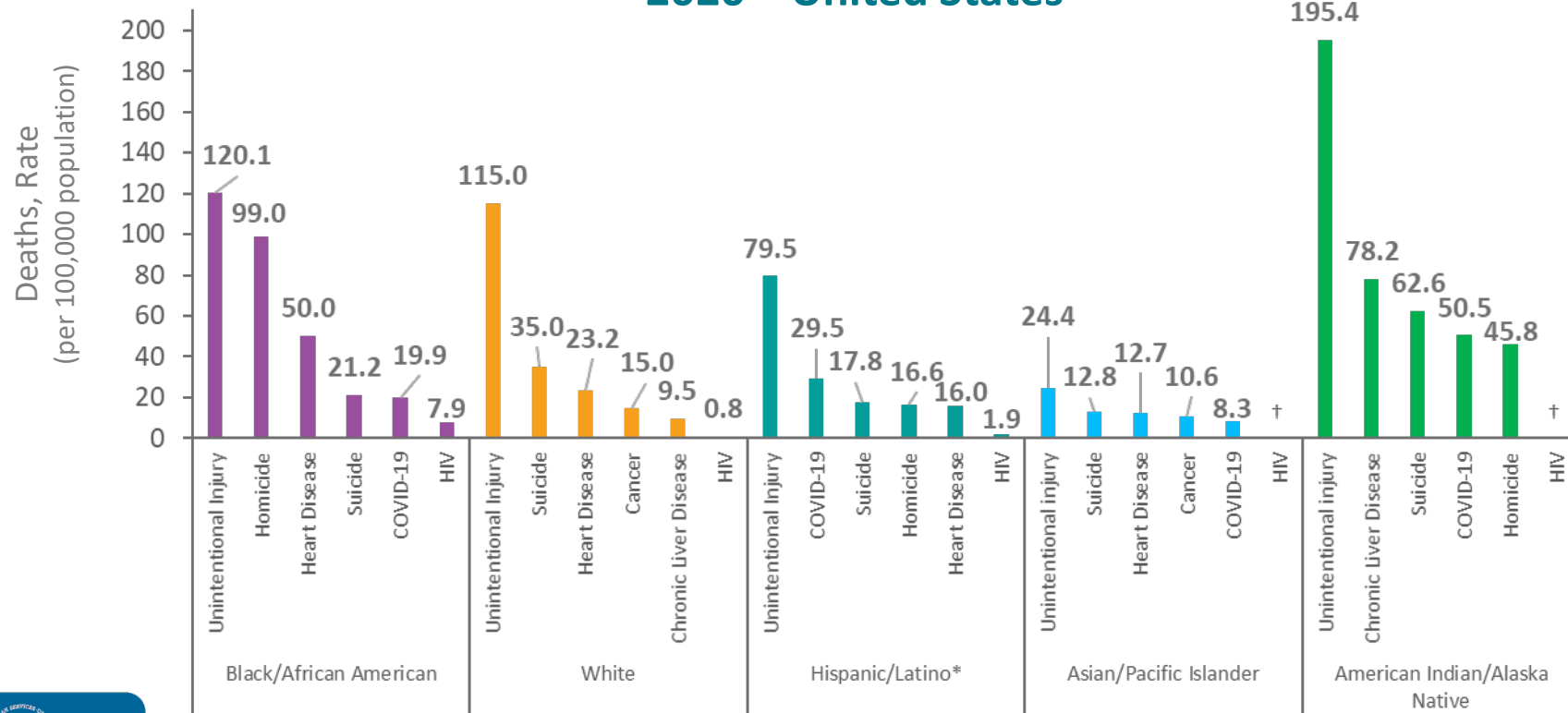
**Rate of death is less than 0.5 deaths per 100,000 persons.

† Unreliable rate due to a numerator of less than 20 deaths.





Annual Rate of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Males Aged 25–44 Years, By Race/Ethnicity 2020—United States

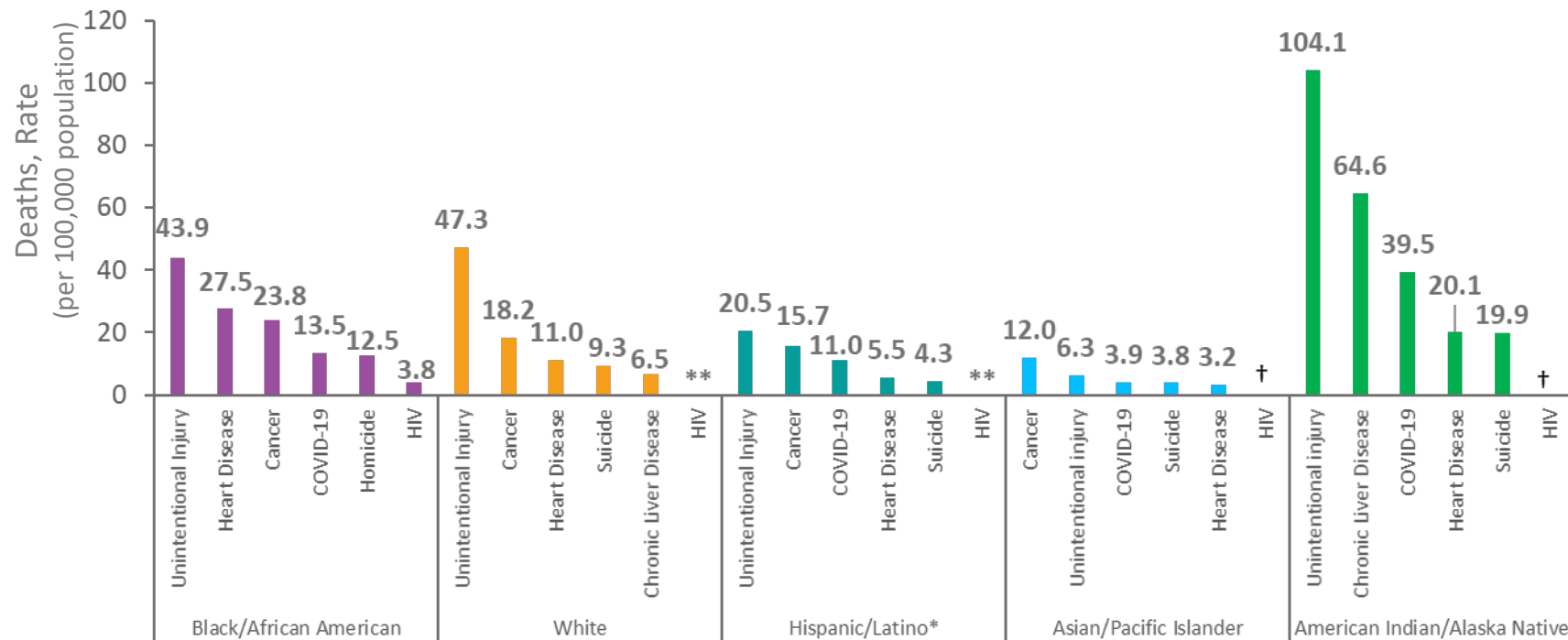


*Hispanic/Latino persons can be of any race.

† Unreliable rate estimate due to a numerator of less than 20 deaths.



Annual Rate of Death with HIV Disease as the Underlying Cause versus the 5 Leading Causes among Females Aged 25–44 Years, By Race/Ethnicity, 2020—United States



*Hispanic/Latino persons can be of any race.

**Rate of death is less than 0.5 deaths per 100,000 persons.

† Unreliable rate due to a numerator of less than 20 deaths.



Conclusions

- After rapidly increasing since the 1980s, the annual rate of death due to HIV disease peaked in 1994 or 1995 (depending on the demographic group), decreased rapidly through 1997, and continued to decrease much more slowly thereafter.
- Persons dying of HIV disease increasingly consist of:
 - males (75% in 2020)
 - Black/African American persons (51% in 2020)
 - residents of the South (55% in 2020)
 - persons 45 years of age or older (75% in 2020)
- HIV disease continues to remain among the leading causes of death among all persons aged 25 to 44 years, ranking 12th in 2020.
 - HIV disease an underlying cause of death is particularly high among Black/African American persons aged 25 to 44 years, ranking the 8th leading cause among Black males and the 10th leading cause among Black females in 2020.