



# Mortality Slide Series through 2015

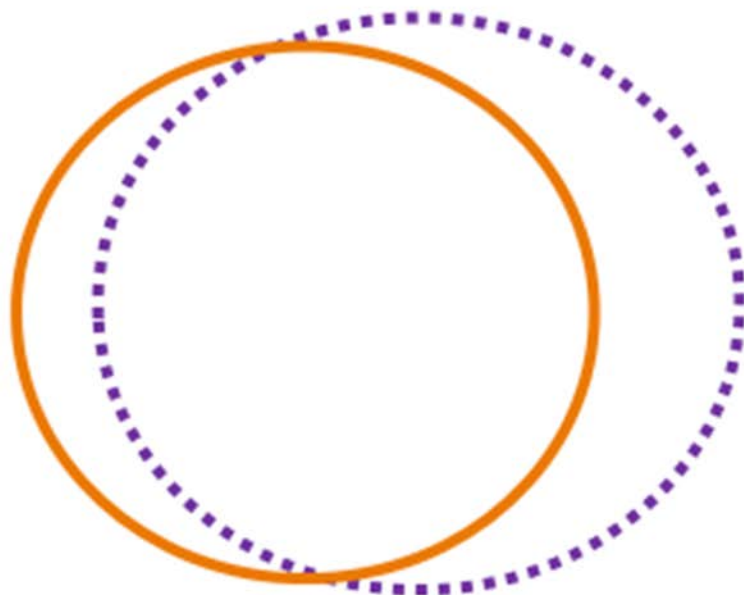
## HIV Mortality Slides

- An analysis of trends in rates and distributions of deaths in the United States, focusing on deaths due to human immunodeficiency virus (HIV) infection (including stage 3 [acquired immunodeficiency syndrome, AIDS]).
- Data were compiled from death certificates from all 50 states and the District of Columbia by the National Center for Health Statistics (NCHS) for the years 1987–2015.
- For more information, see the NCHS Web site: <http://www.cdc.gov/nchs/deaths.htm>



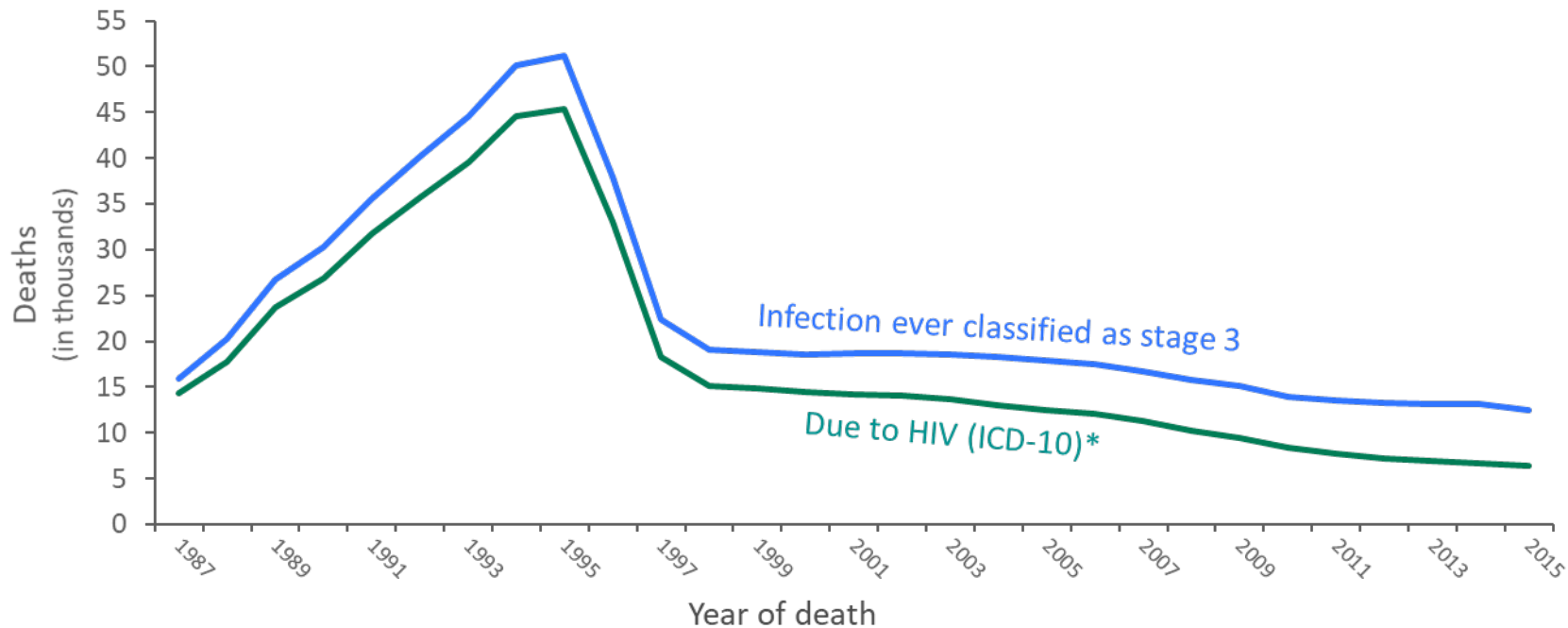
**Deaths due to HIV infection**  
**are not exactly the same as**  
deaths of persons with infection  
classified as stage 3 (AIDS)

Due to HIV  
infection



Stage 3  
(AIDS)

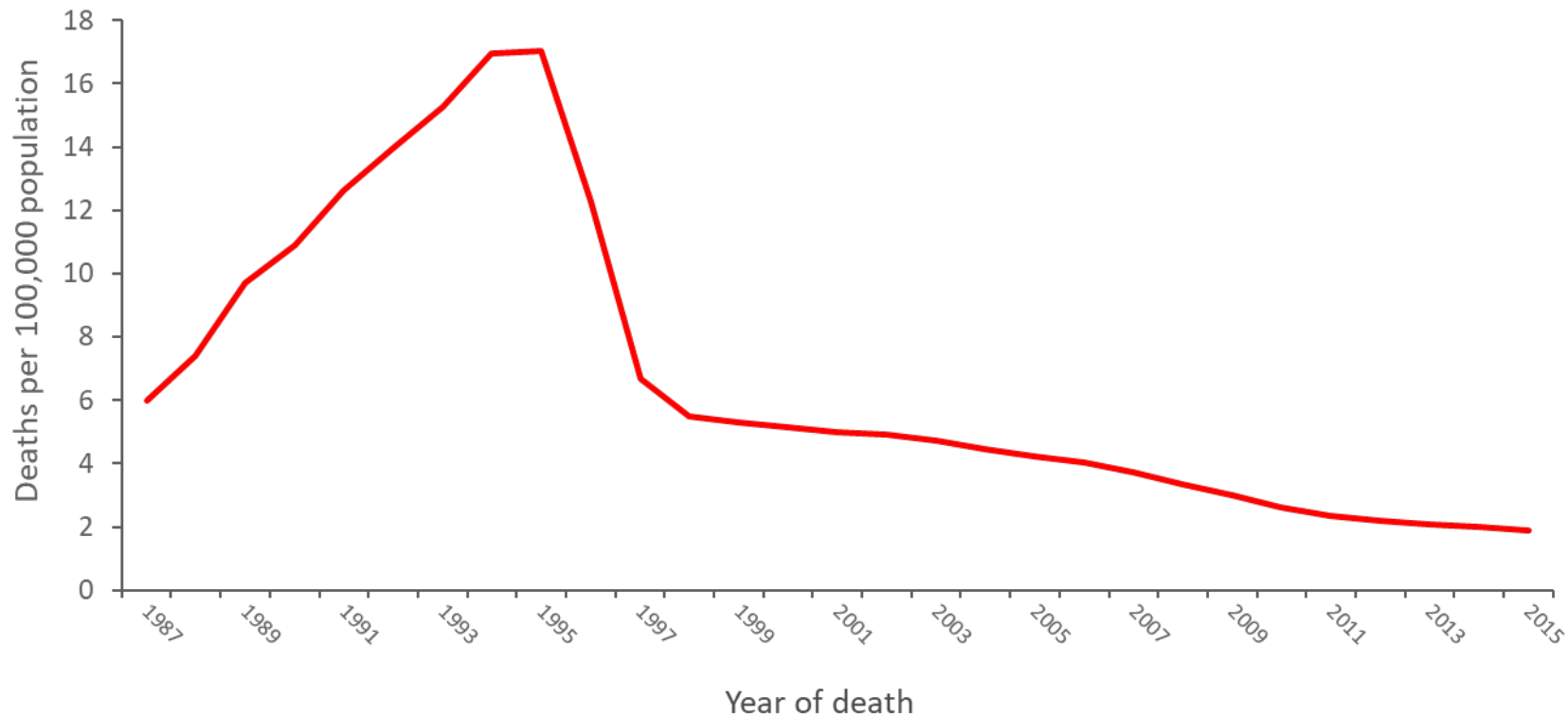
# Comparison of Mortality Data from Stage 3 (AIDS) Case Reports and Death Certificates in which HIV Infection was Selected as the Underlying Cause of Death, United States, 1987–2015



\*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.



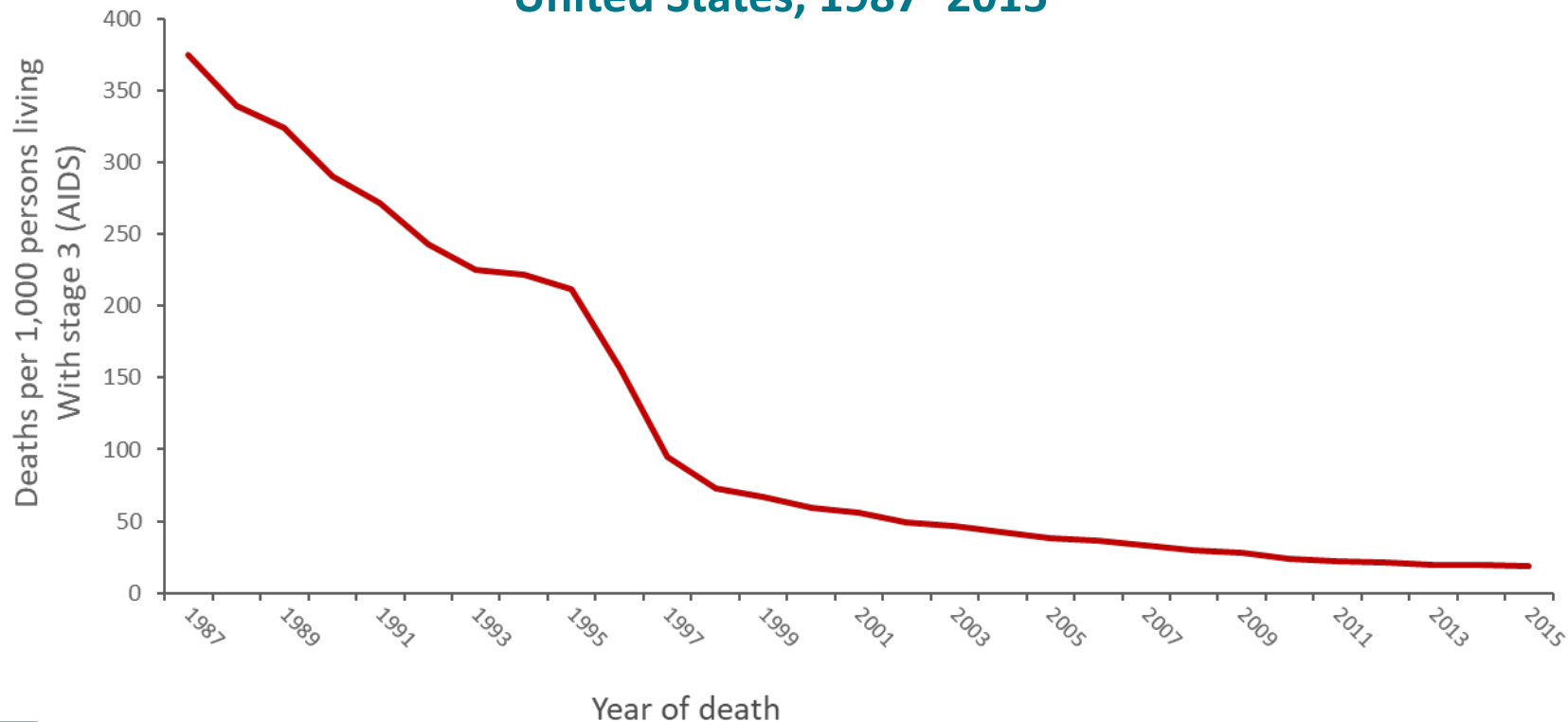
# Trends in Annual Age-Adjusted\* Rates of Death Due to HIV Infection, United States, 1987–2015



*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 living with Diagnosed HIV Infection Ever Classified as Stage 3 (AIDS), United States, 1987–2015

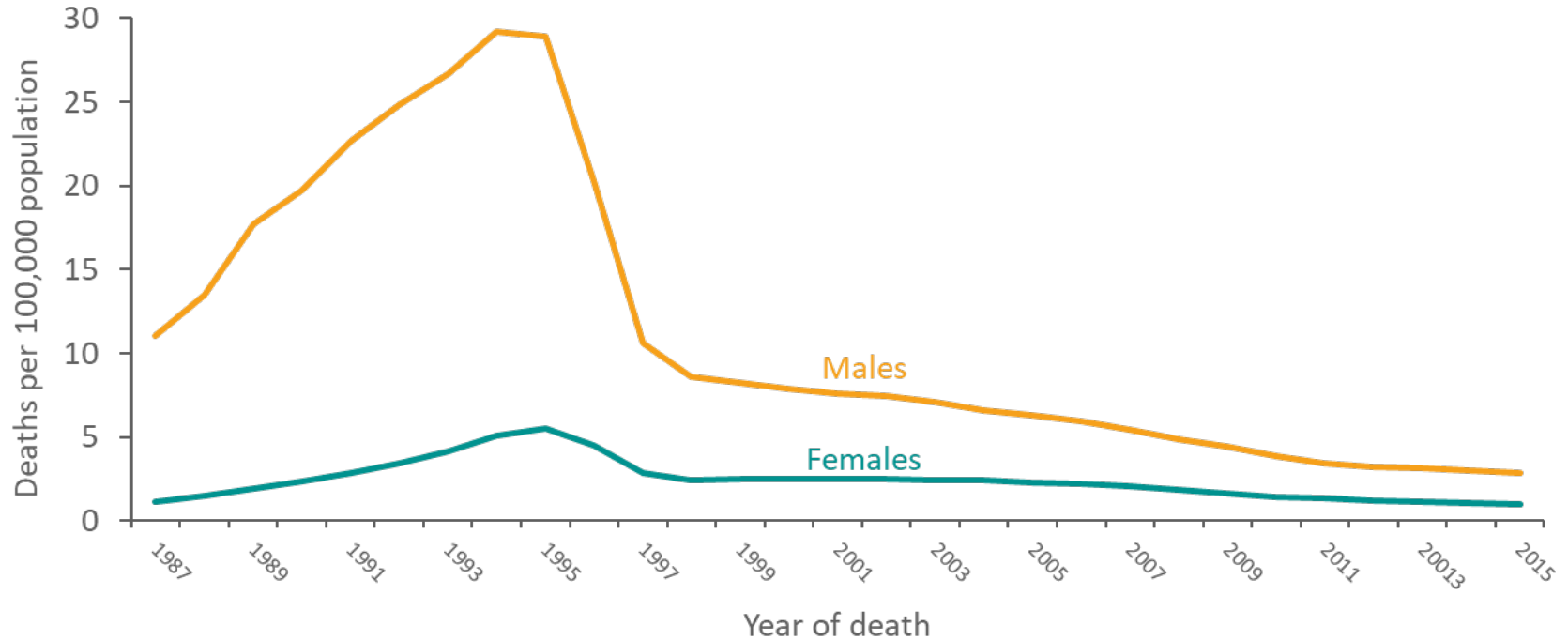


\*Standard: age distribution of 2000 US population

†Per 1,000 persons living with stage 3 (AIDS).



# Trends in annual Age-Adjusted\* Rate of Death Due to HIV Infection by Sex United States, 1987–2015



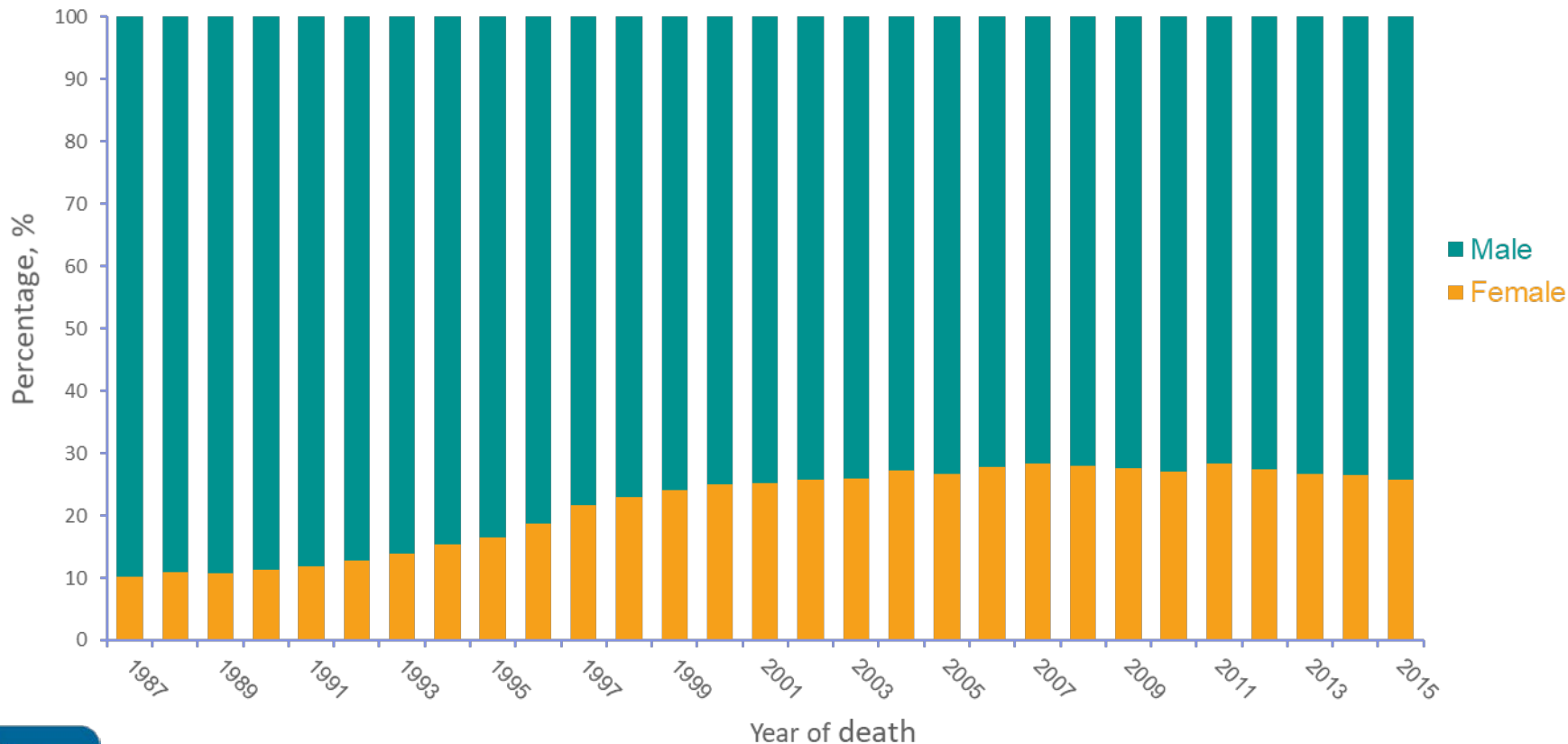
Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

\*Standard: age distribution of 2000 US population



# Trends in the Percentage Distribution of Deaths due to HIV Infection by Sex

## United States, 1987–2015

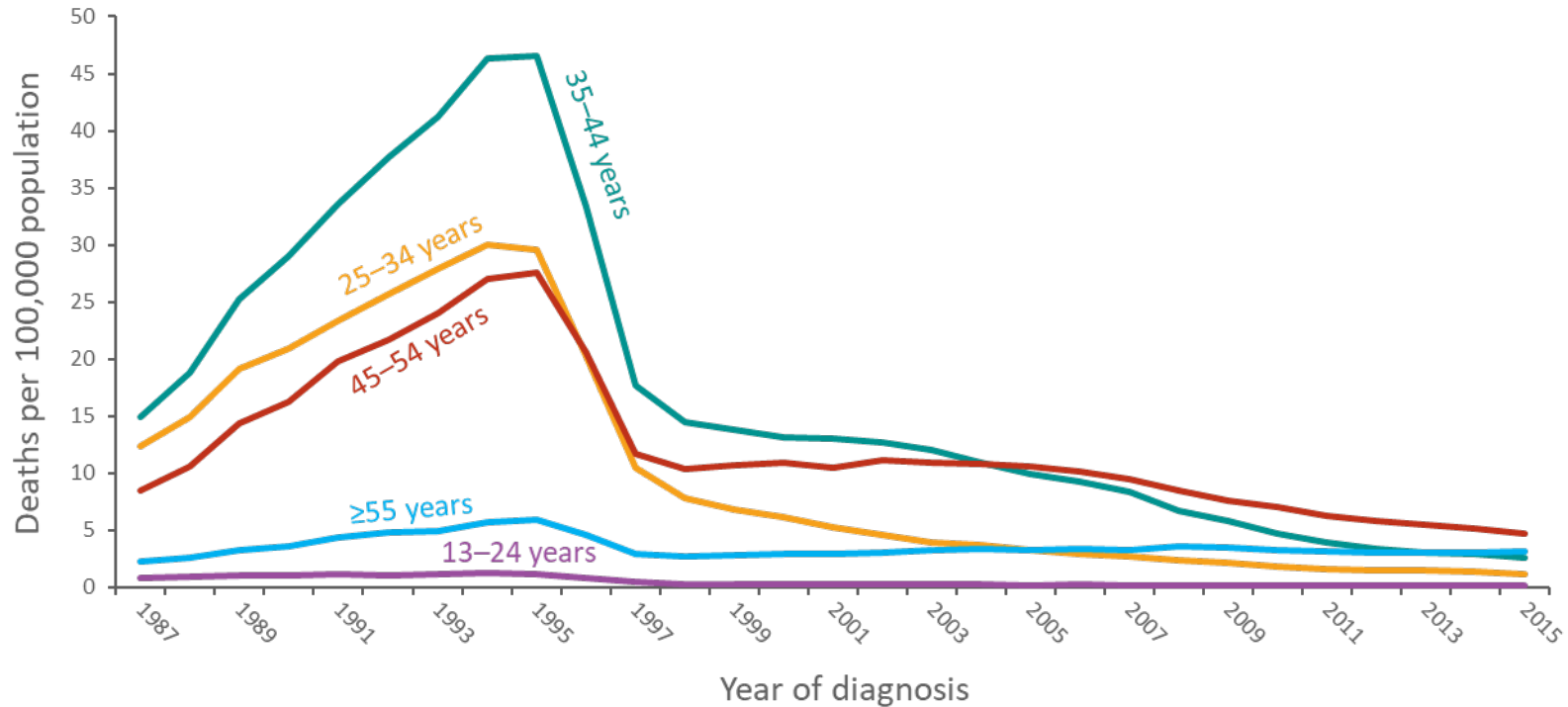


For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.





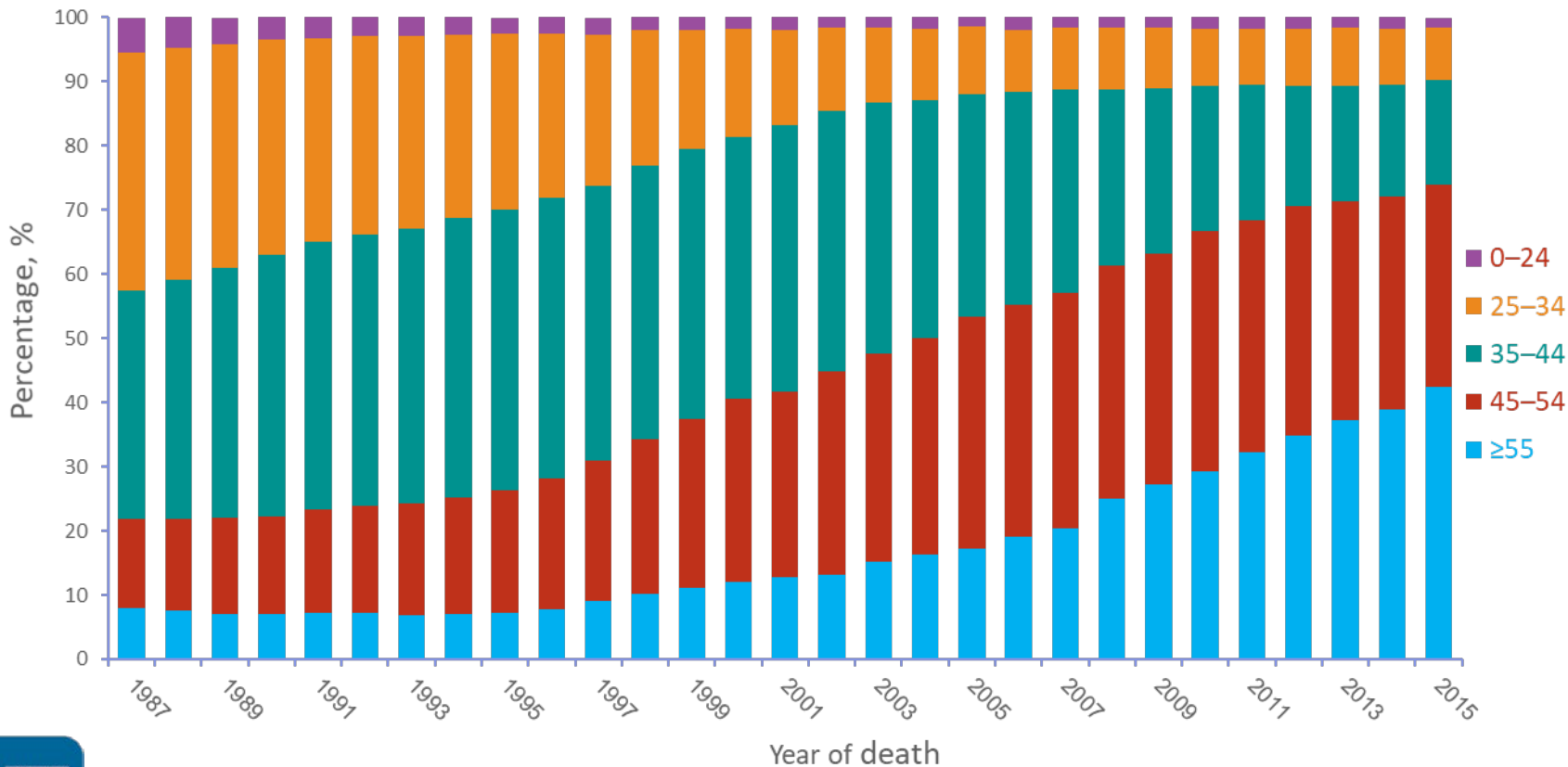
# Trends in Annual Rates of Death due to HIV Infection by Age Group, 1987–2015—United States



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



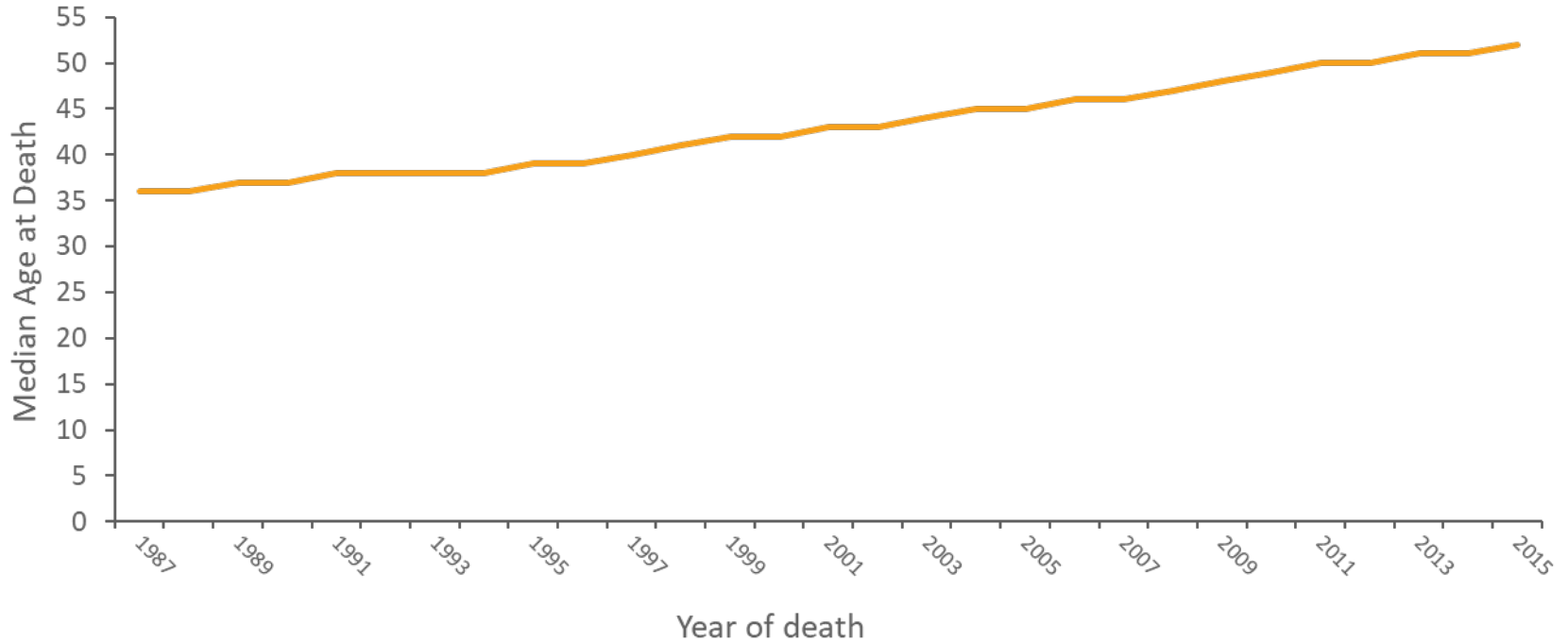
# Trends in the Percentage Distribution of Deaths due to HIV Infection by Age Group, United States, 1987–2015



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



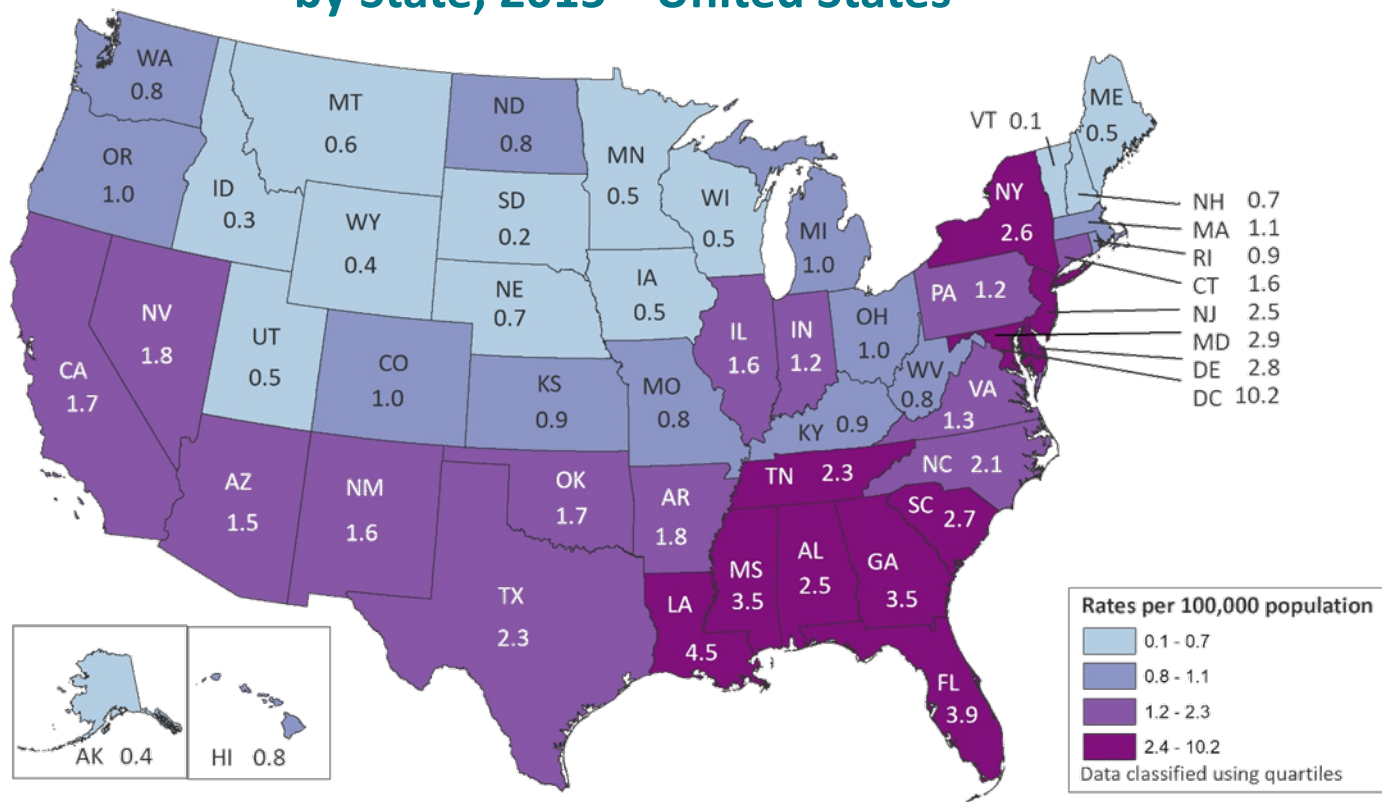
# Median Age at Death due to HIV Infection, United States, 1987–2015



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



# Age-Adjusted\* Rates† of Death due to HIV Infection in the General Population, by State, 2015—United States

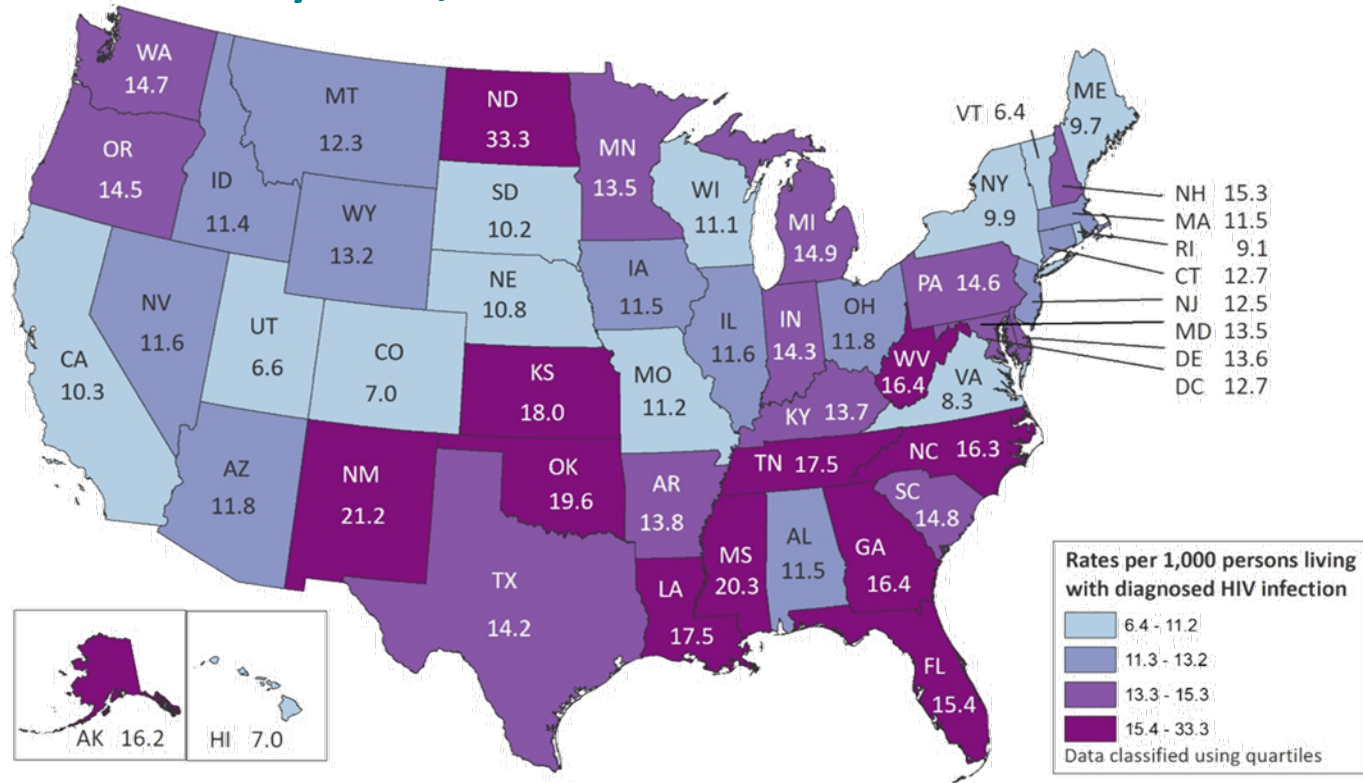


Standard: age distribution of 2000 US population.

†Per 100,000 population.



# Age-Adjusted\* Rates† of Death among Persons with diagnosed HIV Infection, by State, 2015—United States

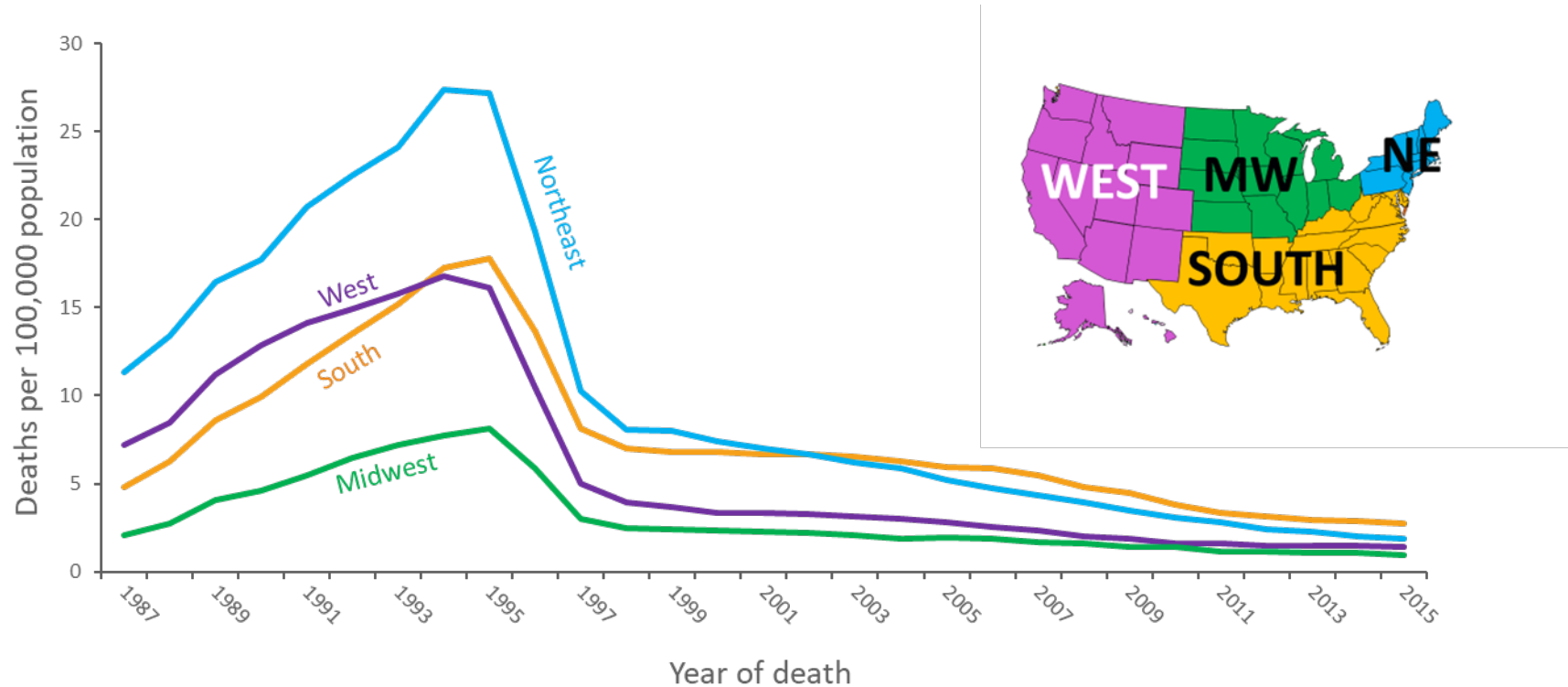


Deaths may be due to any cause. Standard: age distribution of 2000 US population.

†Per 100,000 persons living with a diagnosed HIV infection.



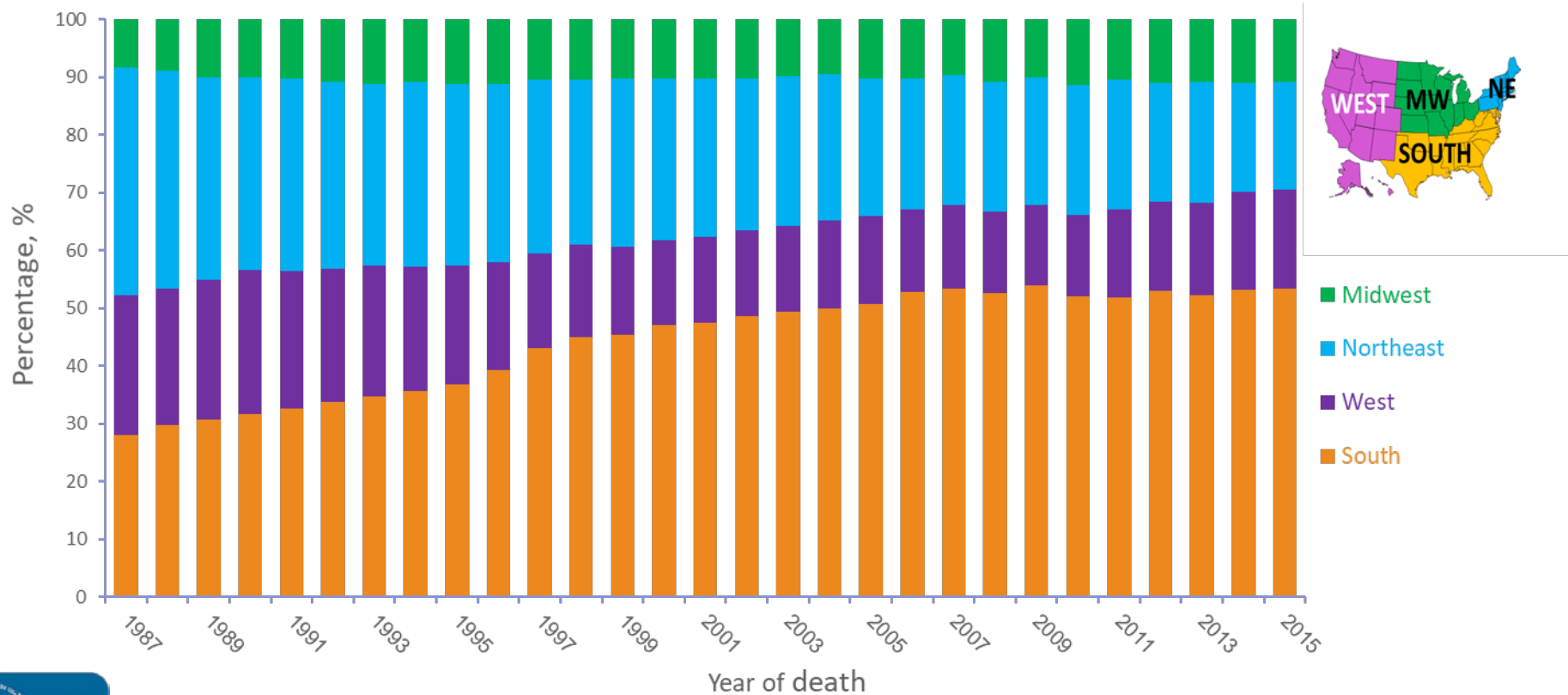
# Trends in in Age-Adjusted\* Annual Rates of Death due to HIV Infection, by Geographic Region, 1985–2015—United States



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



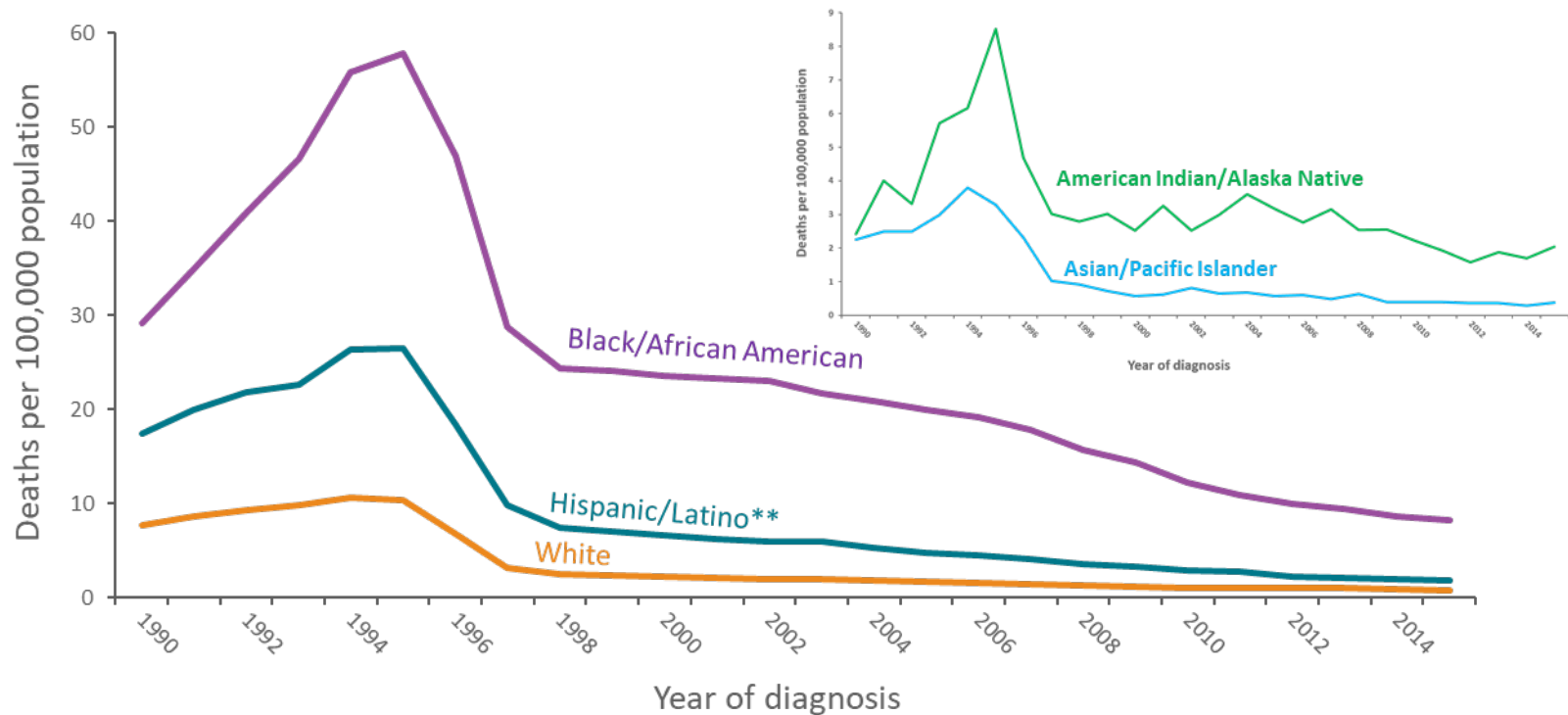
# Trends in the Percentage Distribution of Deaths due to HIV Infection, by Geographic Region, United States, 1987–2015



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



# Trends in Age-Adjusted\* Annual Rates of Death due to HIV Infection by Race/Ethnicity, 1990–2015—United States



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

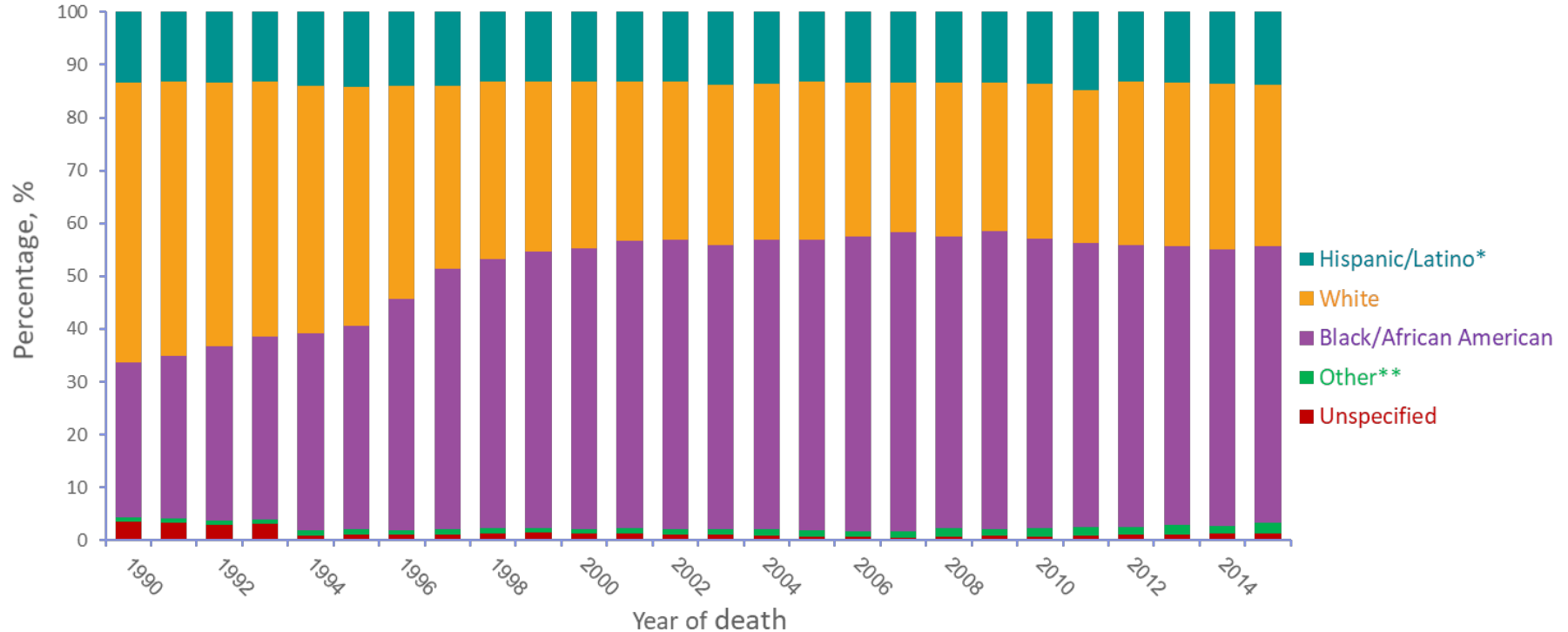
\*Standard age distribution of 2000 US population.

\*\*Hispanic/Latinos can be of any race.





# Trends in the Percentage Distribution of Deaths due to HIV Infection, by Race/Ethnicity, United States, 1990–2015



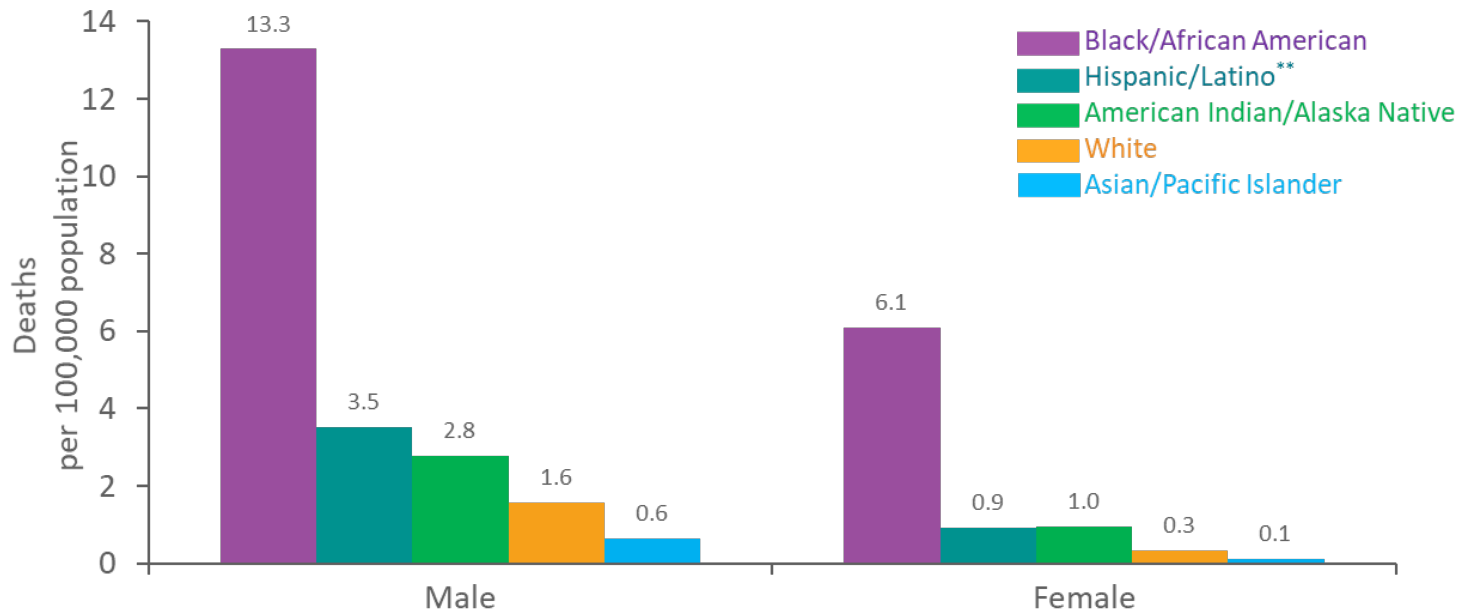
Note. For comparison with data for 1999 and later years, data for 1987–1998 were modified to account for ICD-10 10rules instead of ICD-9 rules.

\*Hispanic/Latinos can be of any race.

\*\*Asian/Pacific Islander, American Indian/Alaska Native.



# Age-Adjusted\* Average Rates of Death due to HIV Infection by Sex and Race/Ethnicity, 2011–2015—United States

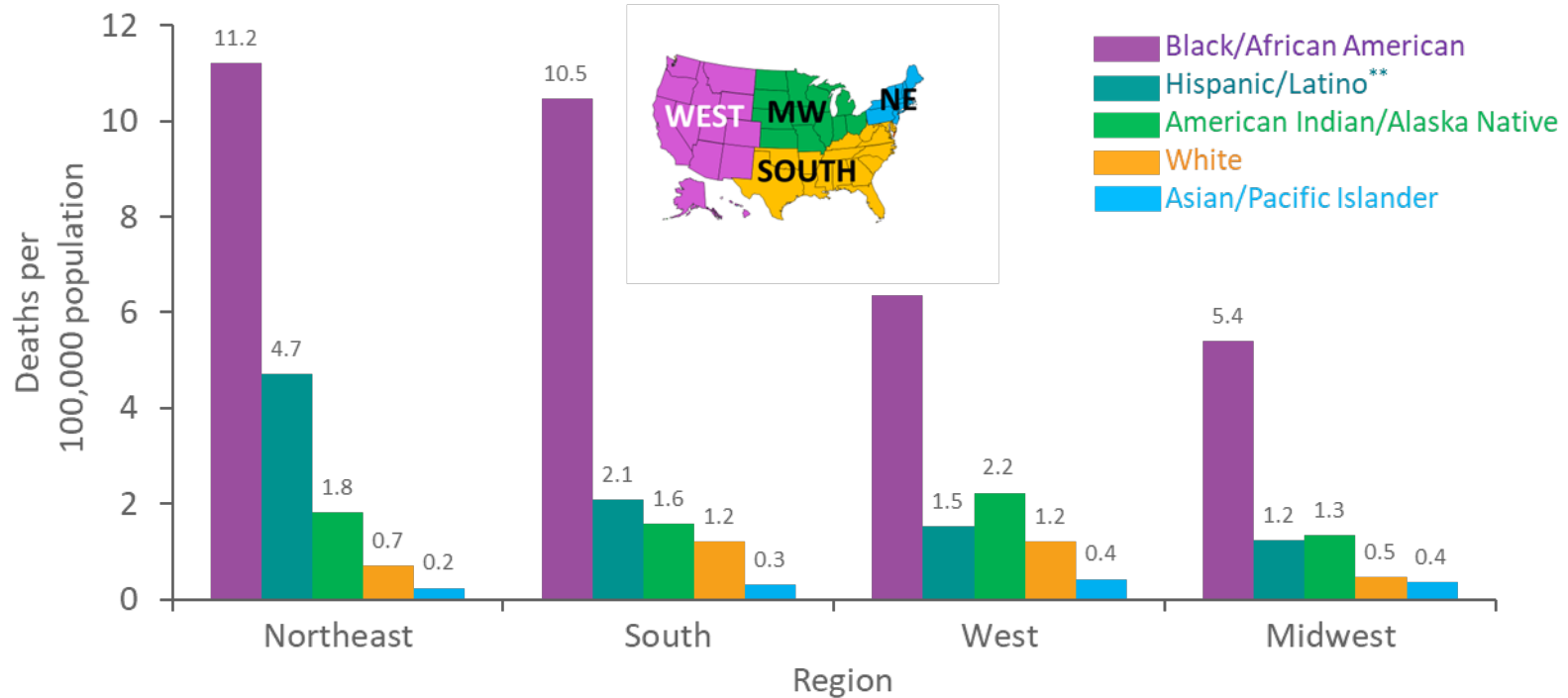


\*Standard age distribution of 2000 US population

\*\*Hispanics/Latinos can be of any race.



# Age-Adjusted\* Average Rates of Death due to HIV Infection by Race/Ethnicity and Geographic Region, 2011–2015—United States

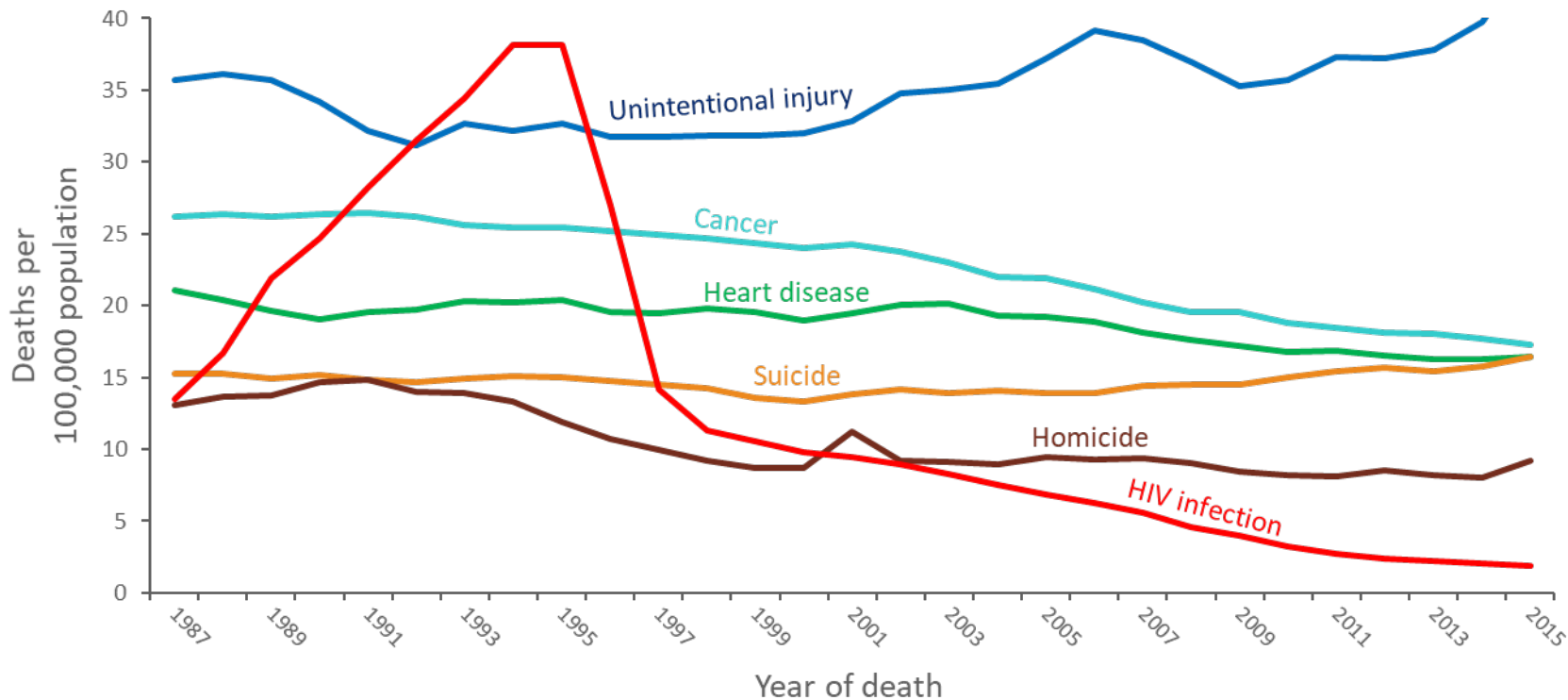


\*Standard age distribution of 2000 US population

\*\*Hispanics/Latinos can be of any race.



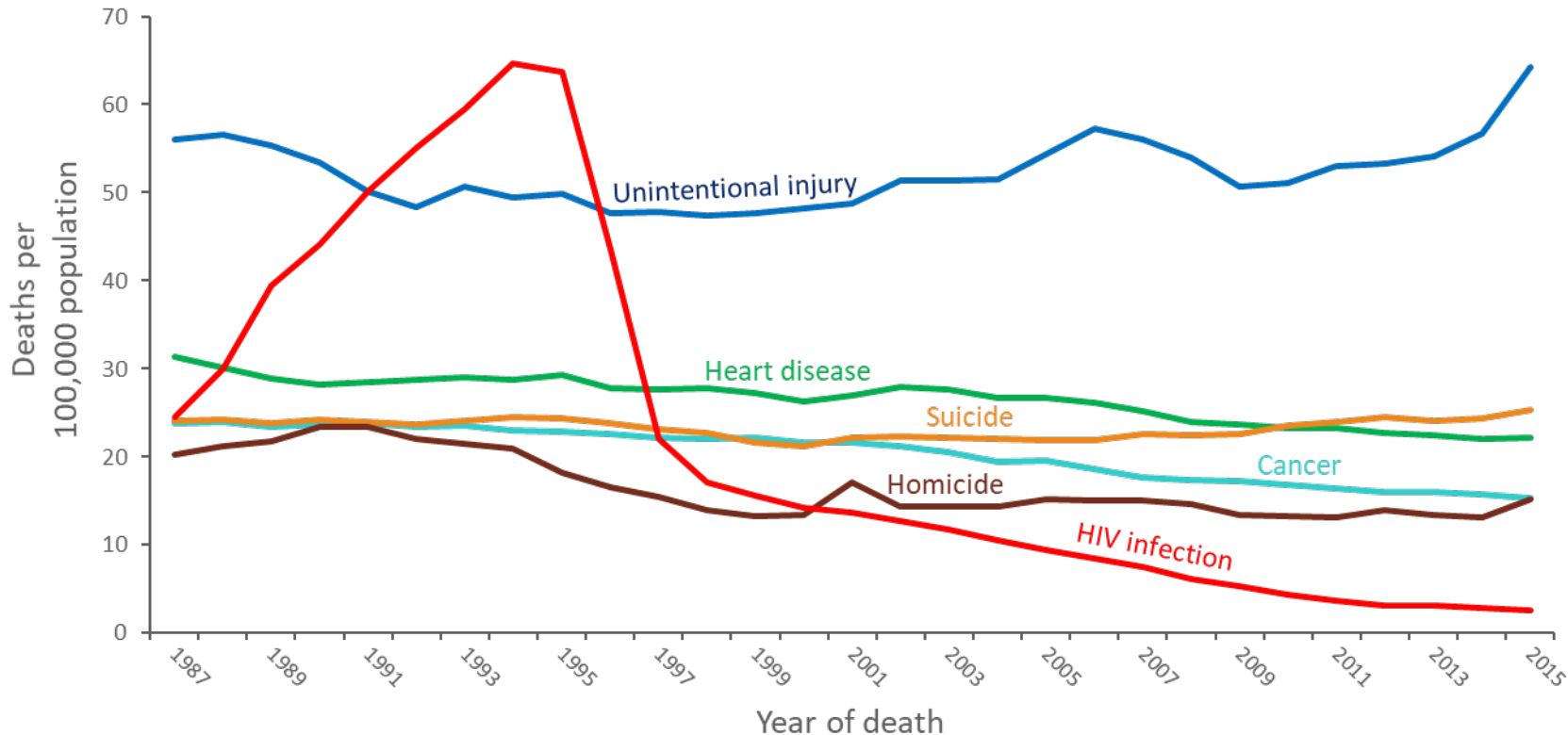
# Trends in Annual Rates of Death due to the 6 Leading Causes among Persons 25–44 Years Old, 1987–2015—United States



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.



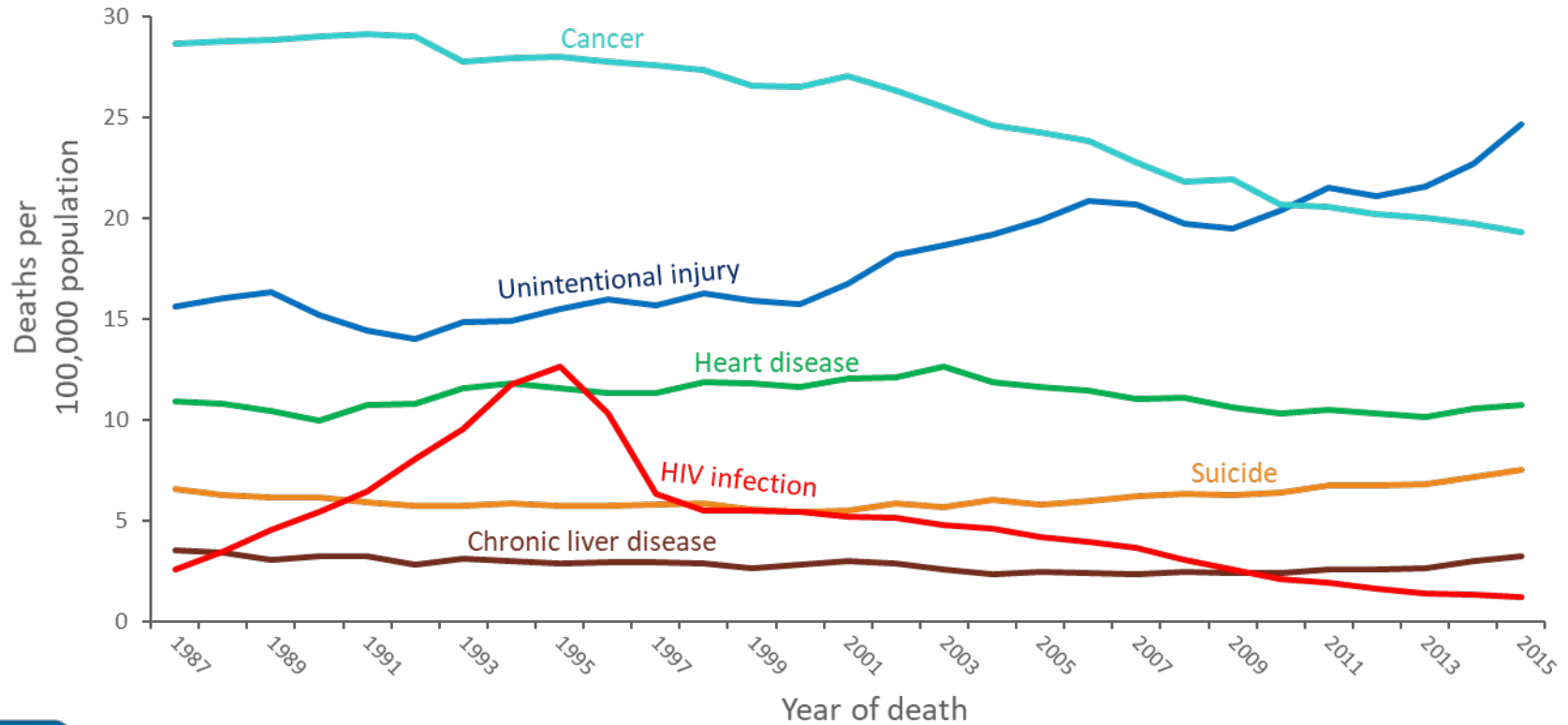
# Trends in Annual Rates of Death due to the 6 Leading Causes among Men 25–44 Years Old, 1987–2015—United States



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.



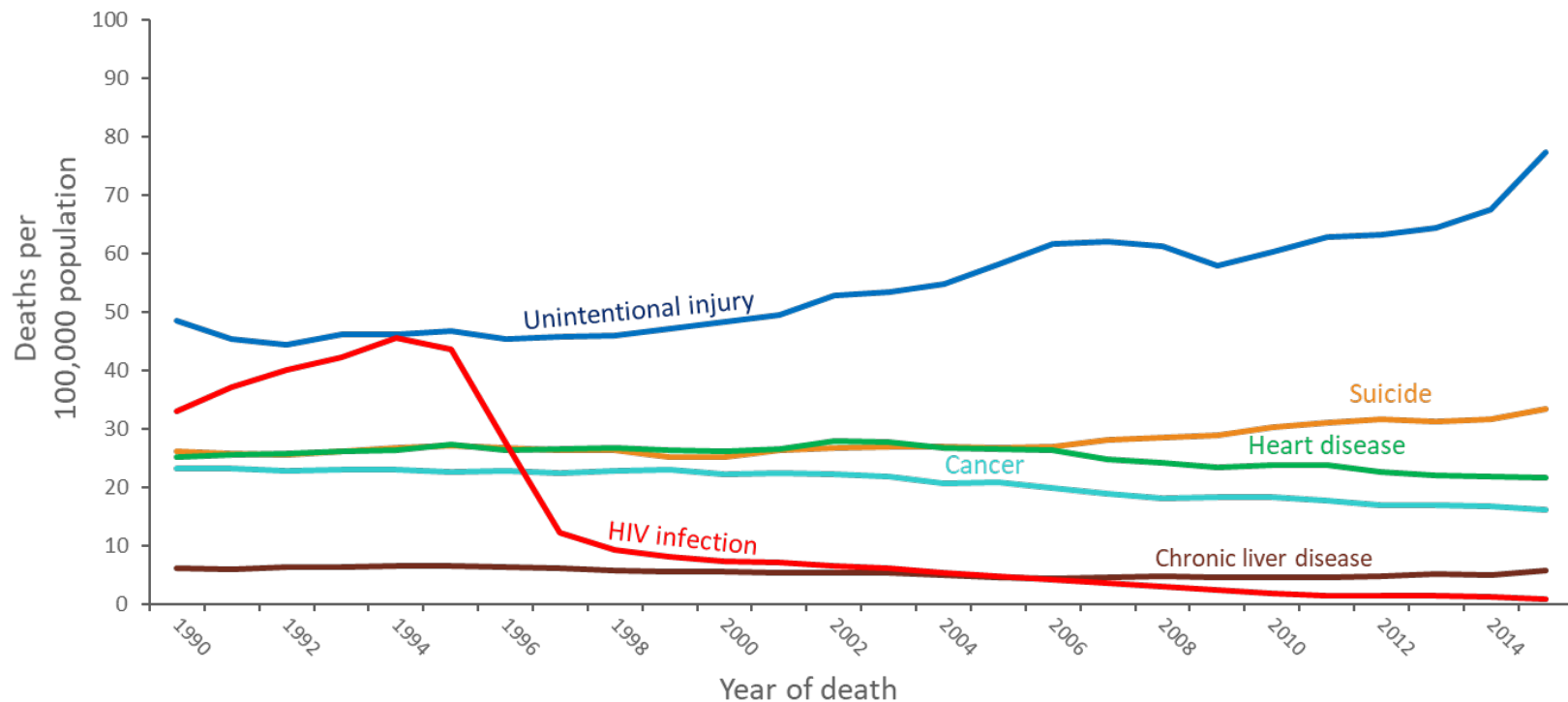
# Trends in Annual Rates of Death due to the 6 Leading Causes among Women 25–44 Years Old, 1987–2015—United States



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 Rates of Death due to the 6 Leading Causes among White\* Men 25–44 Years Old, 1990–2015—United States

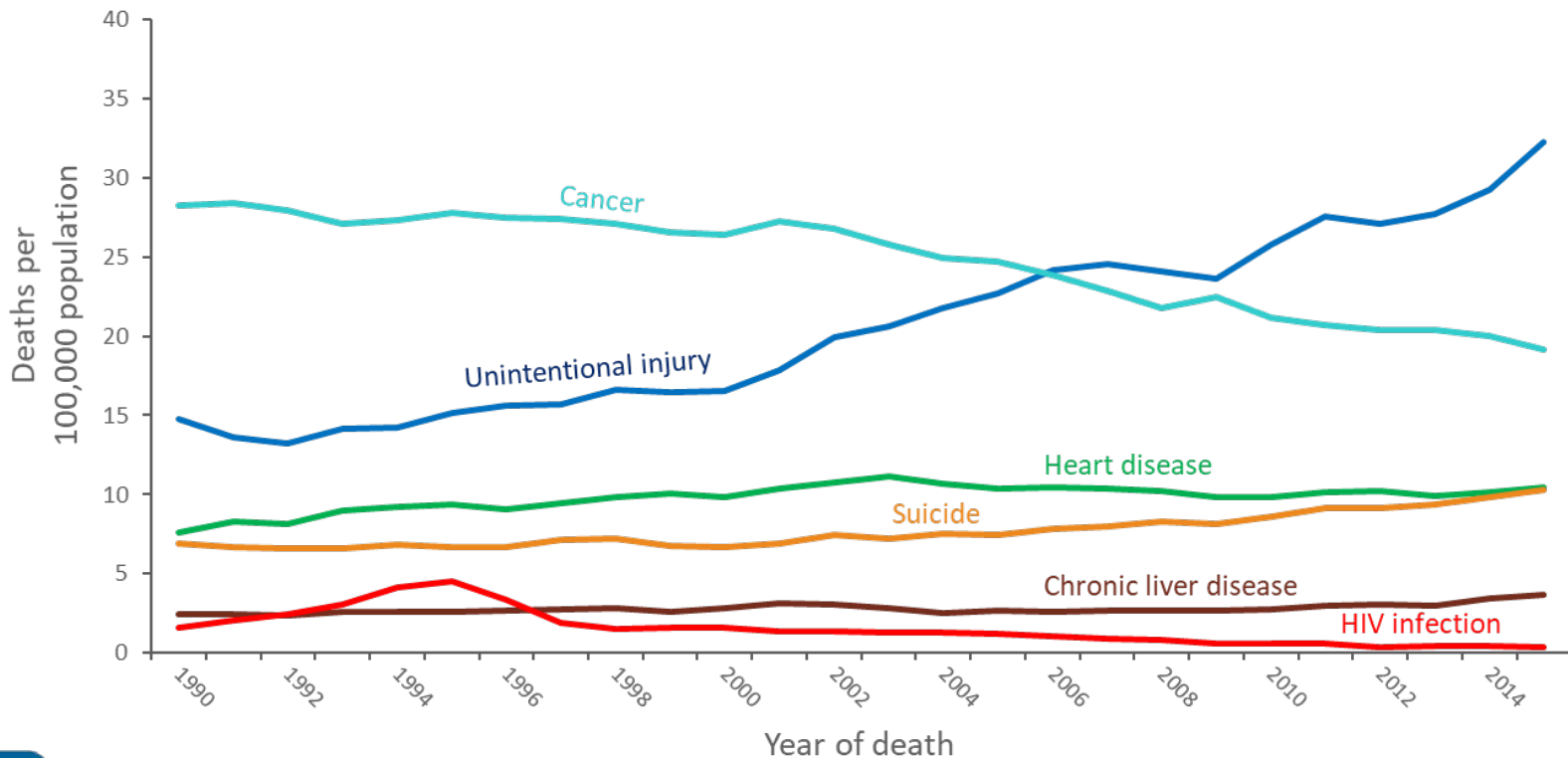


Note: For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

\*Does not include persons of Hispanic/Latino ethnicity.



# Trends in Annual Rates of Death due to the 6 Leading Causes among White\* Women 25–44 Years Old, 1990–2015—United States



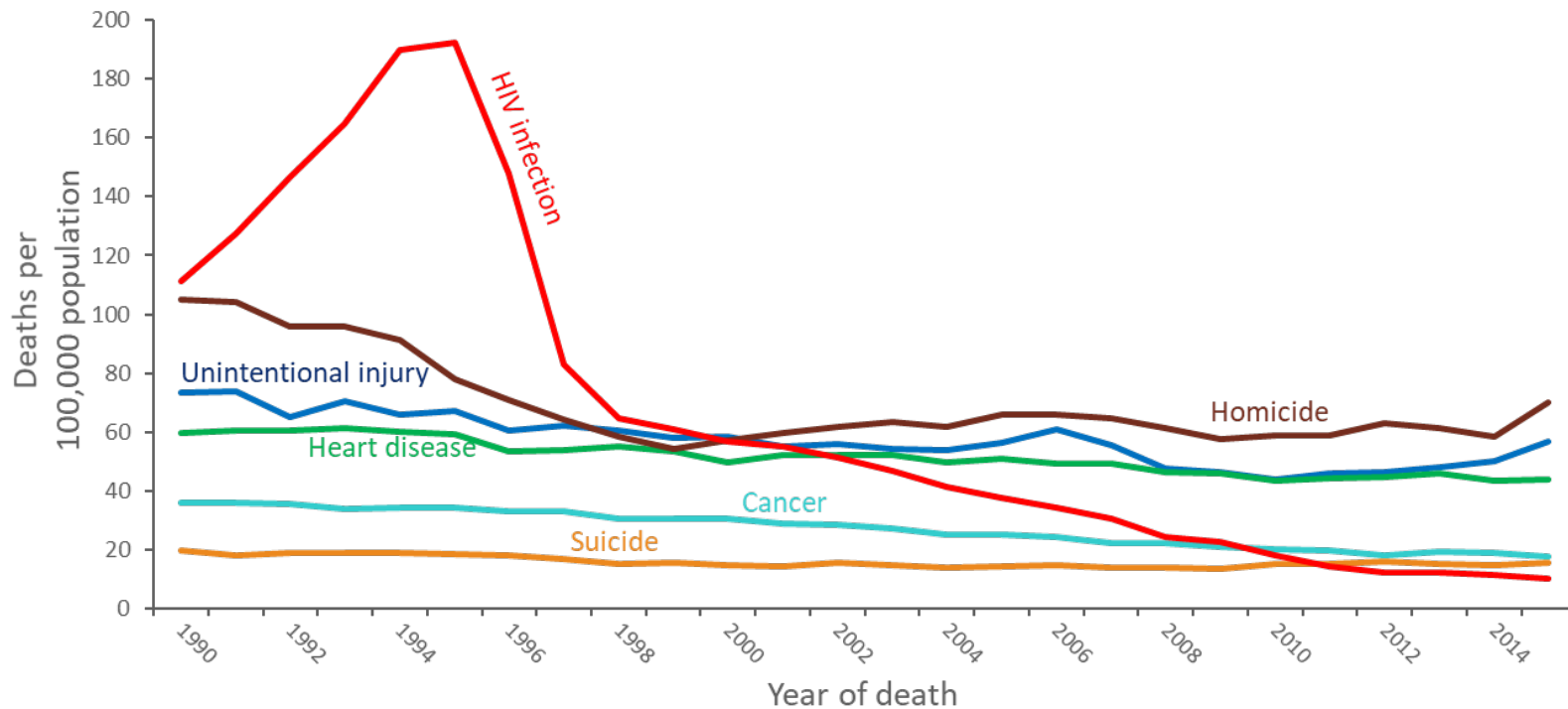
Note: For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

\*Does not include persons of Hispanic/Latino ethnicity.





# Trends in Annual Rates of Death due to the 6 Leading Causes among Black/African American\* Men 25–44 Years Old, 1990–2015—United States

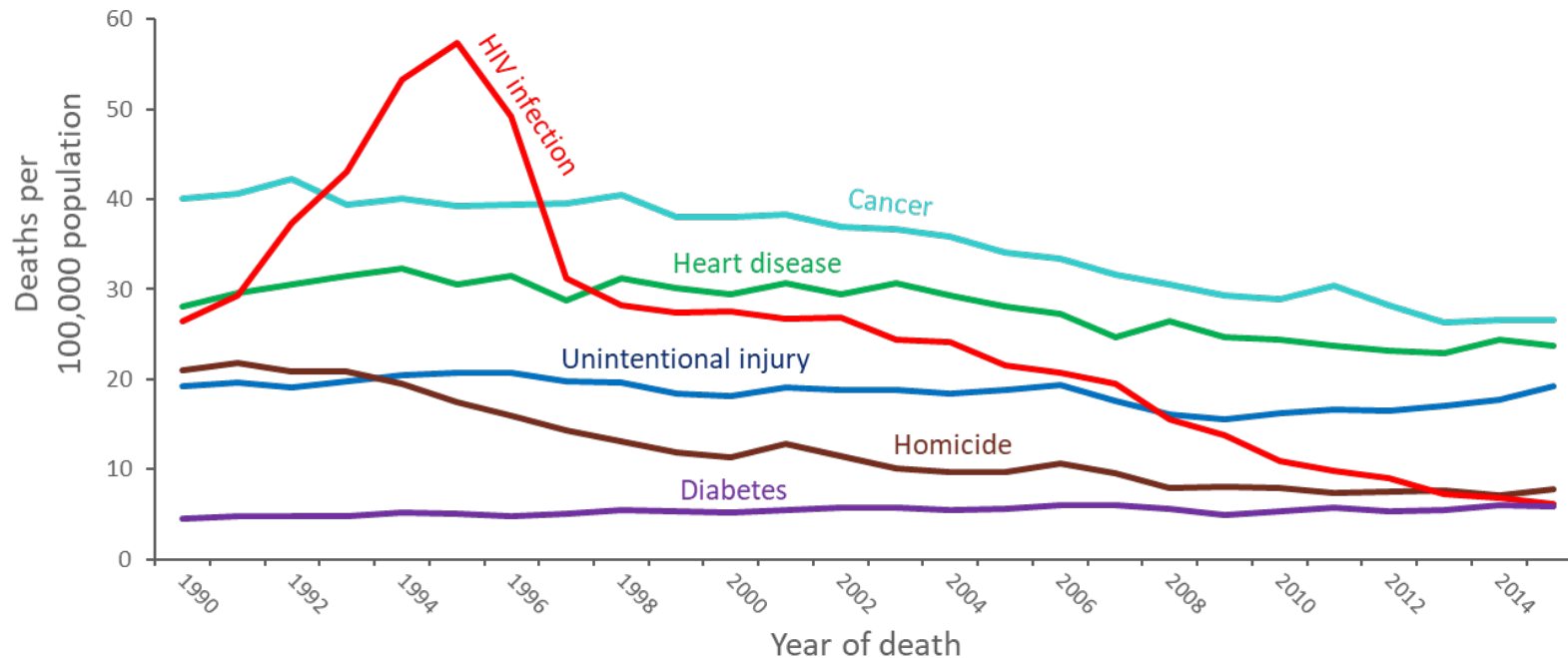


Note: For comparison with data for 1999 and later years, data for 1990–1998 were modified to account for ICD-10 rules instead of ICD-9 rules.

\*Does not include persons of Hispanic/Latino ethnicity.



# Trends in Annual Rates of Death due to the 6 Leading Causes among Black/African American\* Women 25–44 Years Old, 1990–2015—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.

\*Does not include persons of Hispanic/Latino ethnicity.



# Conclusions

- After rapidly increasing since the 1980s, the annual rate of death due to HIV infection 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 infection increasingly consist of:
  - women (26% in 2015)
  - blacks/African Americans (52% in 2015)
  - residents of the South (53% in 2015)
  - persons 45 years of age or older (74% in 2015) (71% in 2013)
- HIV infection continues to remain among the 10 leading causes of death among persons 25 to 44 years old, particularly among blacks/African Americans.

