US Child Health Trends

Compiled by AAP Research Staff

March 2021

American Academy of Pediatrics

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**Note: The majority of the slides have been updated through 2019, showing trends just prior to the pandemic. The data for 2019 have not yet been released for the remaining topics, with the exception of health insurance and vaping where some 2020 data have been included.*

The slides that follow are meant for AAP staff and leaders to use.

- No permissions are required.
- The graphics are developed from publicly available federal data sources.
- At the bottom of each slide, the data source is given, and a link is provided for those seeking more information.

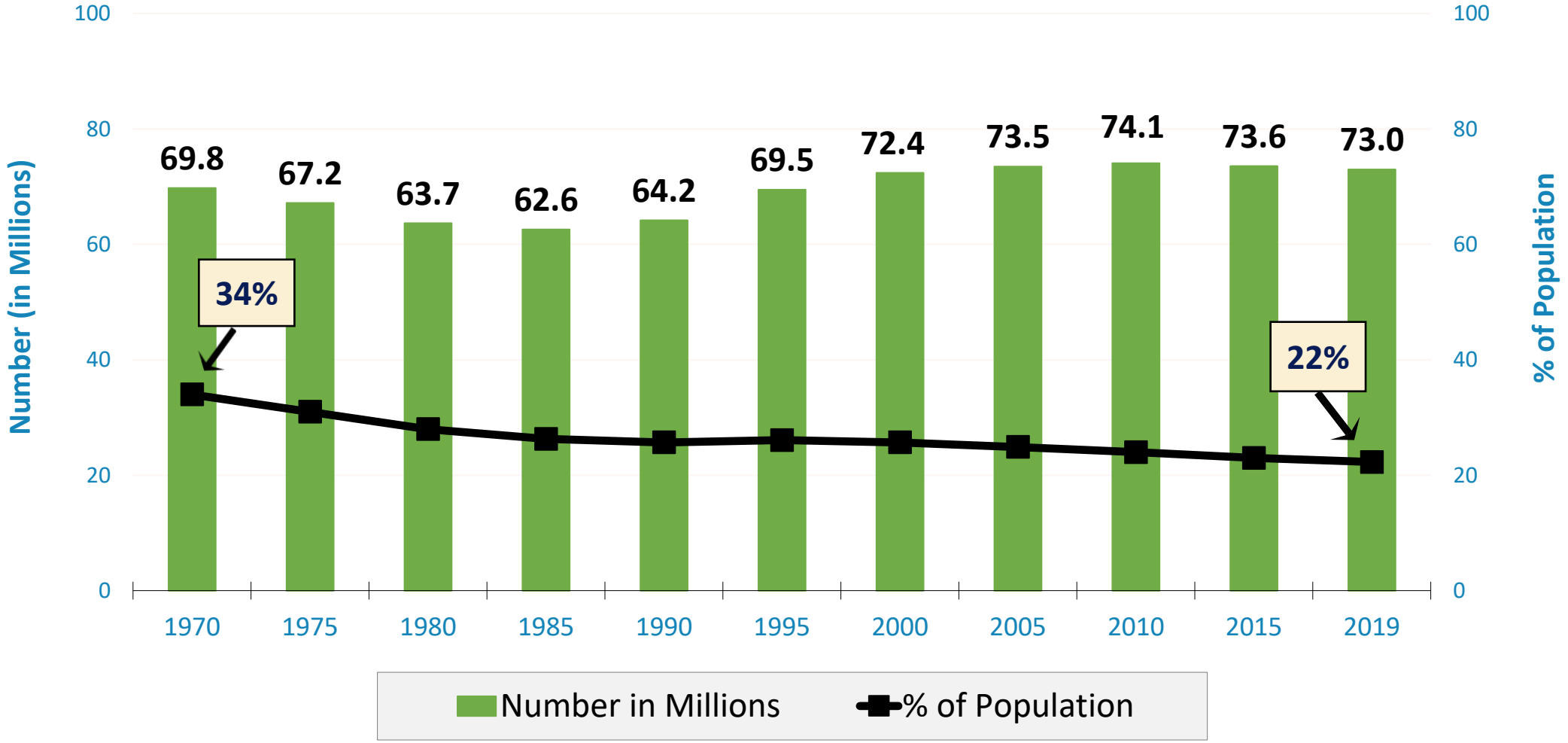
Trends in…

1. Population Characteristics
2. Health
3. Health Care

1. Population Characteristic Trends

- US child population
- Birth rates - overall and adolescent
- Racial/ethnic composition
- Immigrant children
- Language other than English
- Poverty/low income
- Family structure

US Child (under 18) Population: Number and % of Overall Population, 1970-2019



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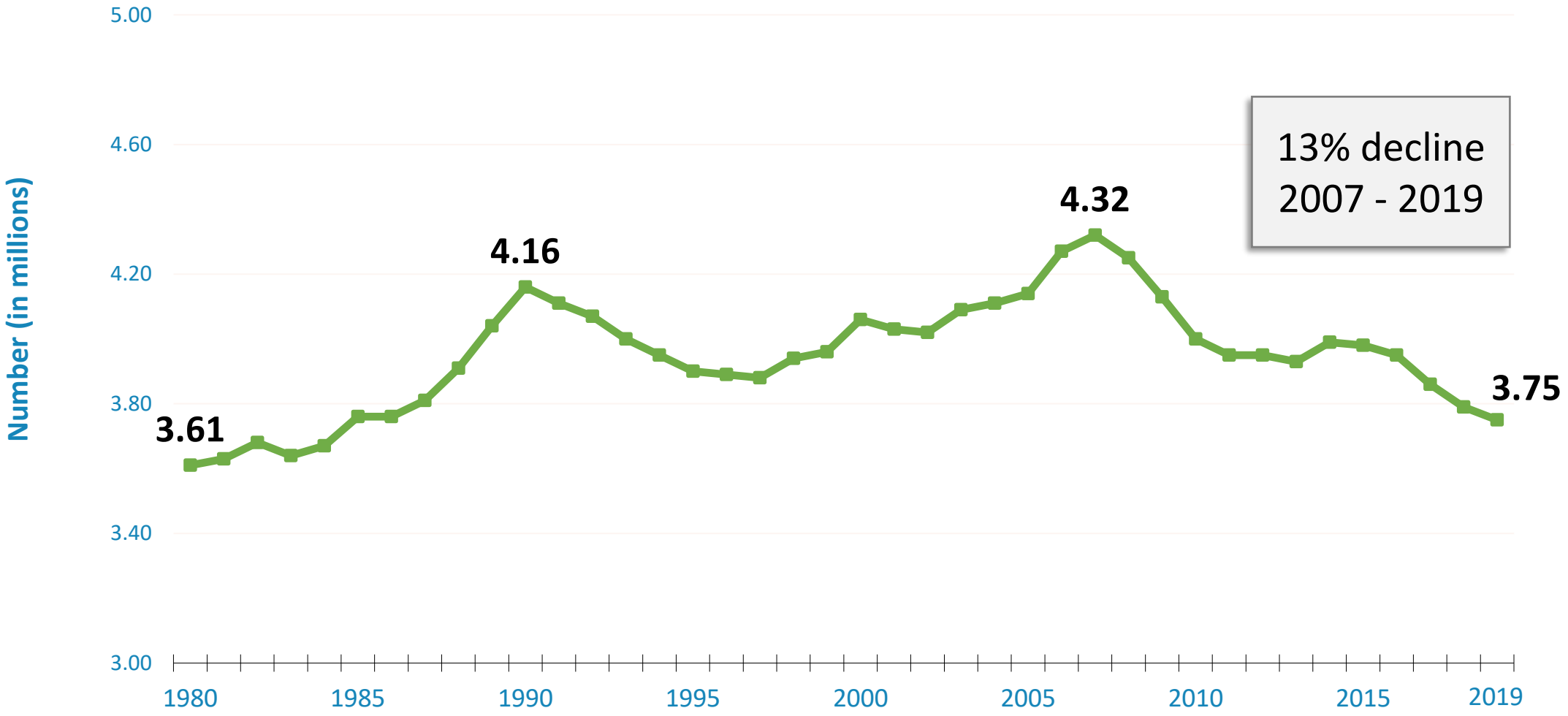
Source: US Census Bureau, Current Population Reports (http://www.childstats.gov/americaschildren/tables/pop1.asp and http://www.childstats.gov/americaschildren/tables/pop2.asp)

Number of US Births (in Millions of Children Born), 1980-2019



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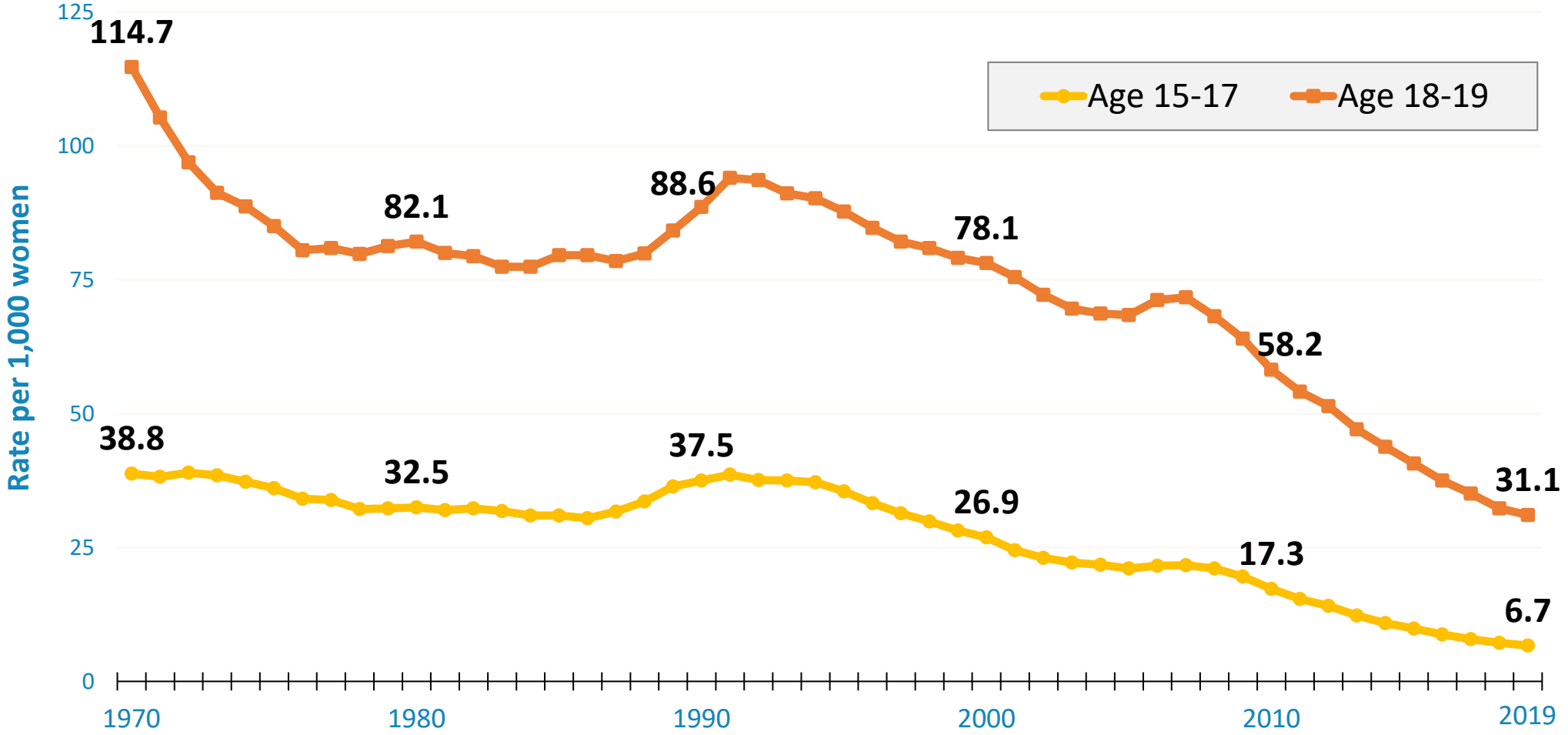
Source: CDC/NCHS, National Vital Statistics Reports (data for 1980-2015: https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf; 2016-2019: https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf)

US Adolescent Birth Rates (per 1,000 Women) by Age Group, 1970-2019



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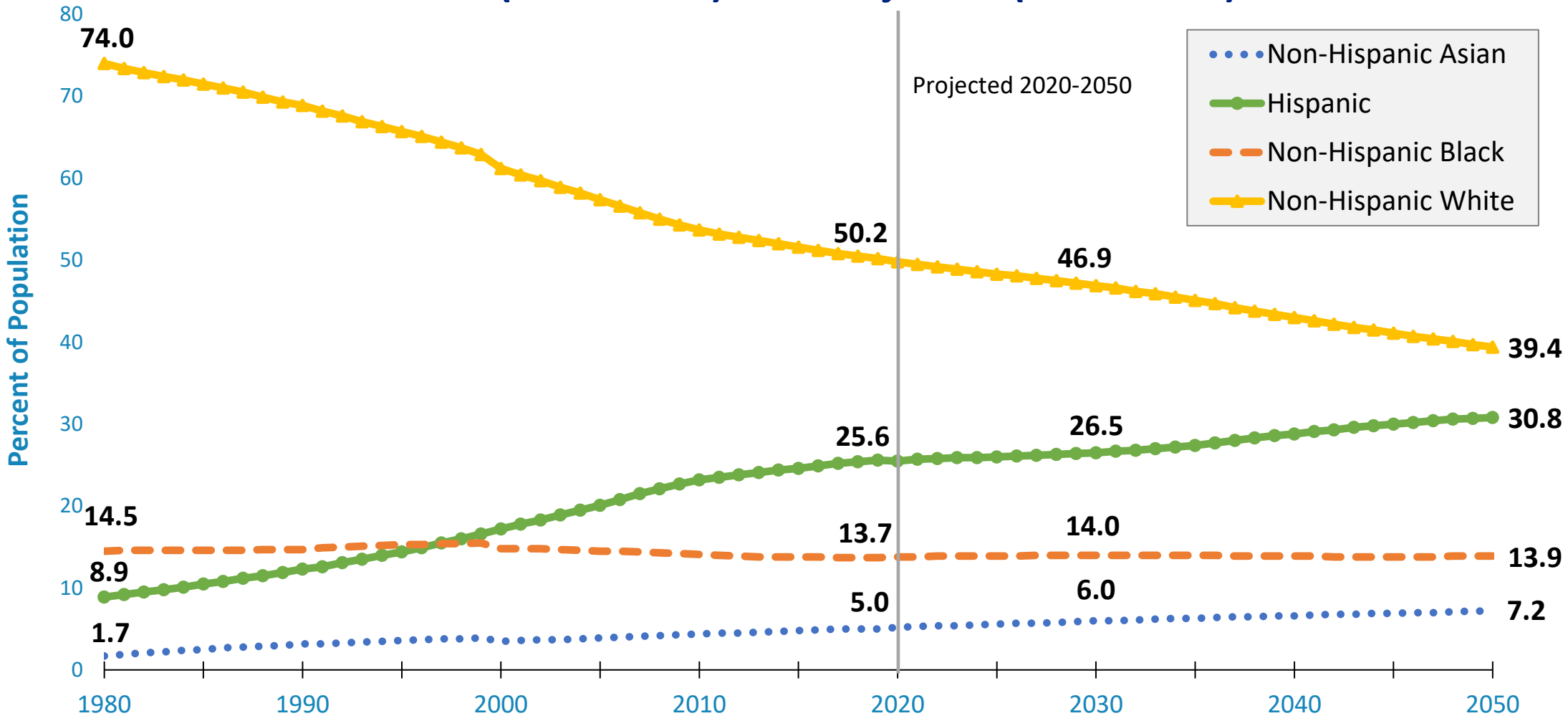
Source: CDC/NCHS, National Vital Statistics Reports (data for 1970-2015: https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf; 2016-2019: https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf)

Race/Ethnicity of US Children (under 18), Recorded (1980-2019) and Projected (2020-2050)



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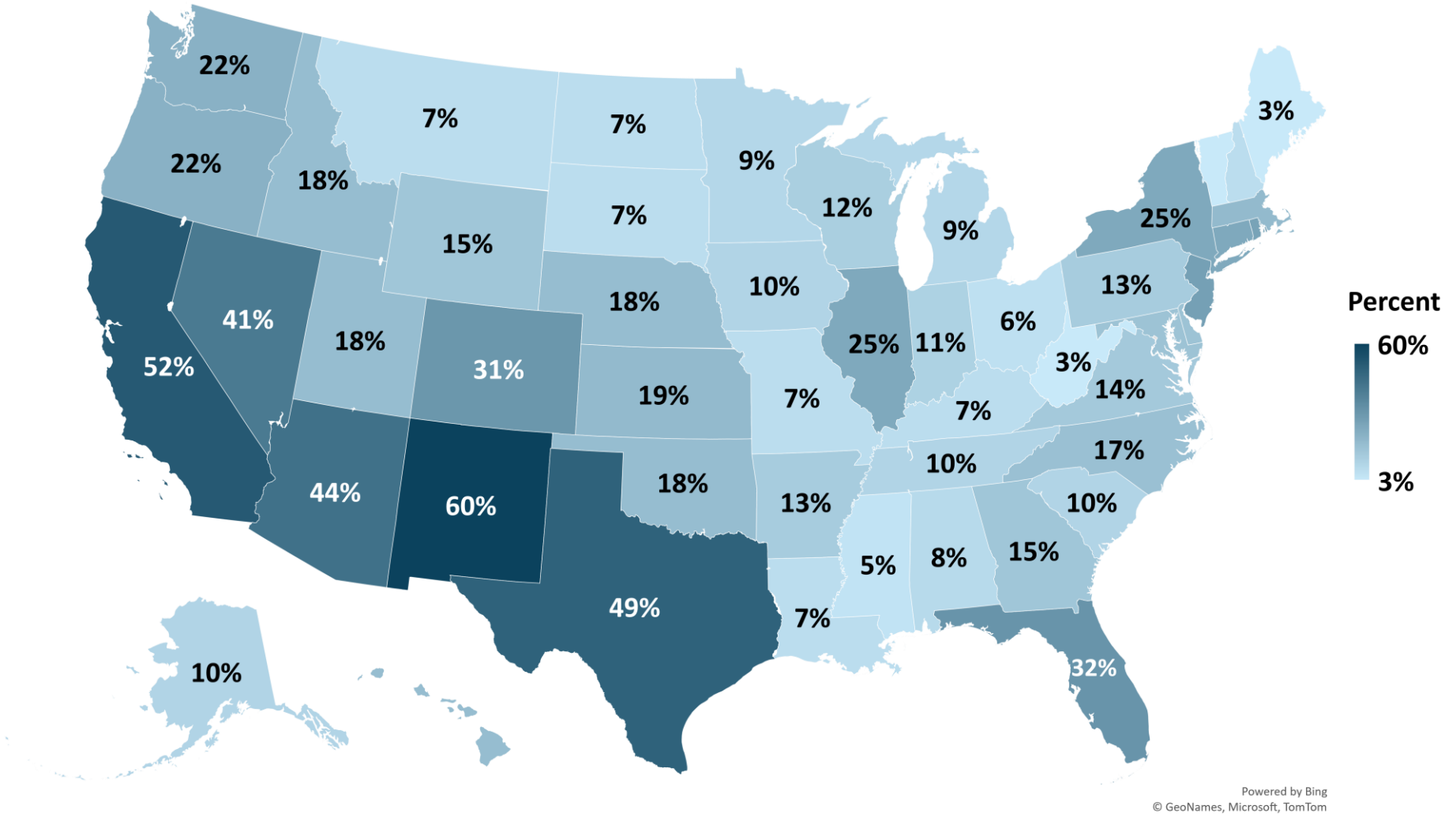
Source: US Census Bureau, Population Division (http://www.childstats.gov/americaschildren/tables/pop3.asp)

Percent of US Hispanic or Latino Children (under 18) by State, 2019



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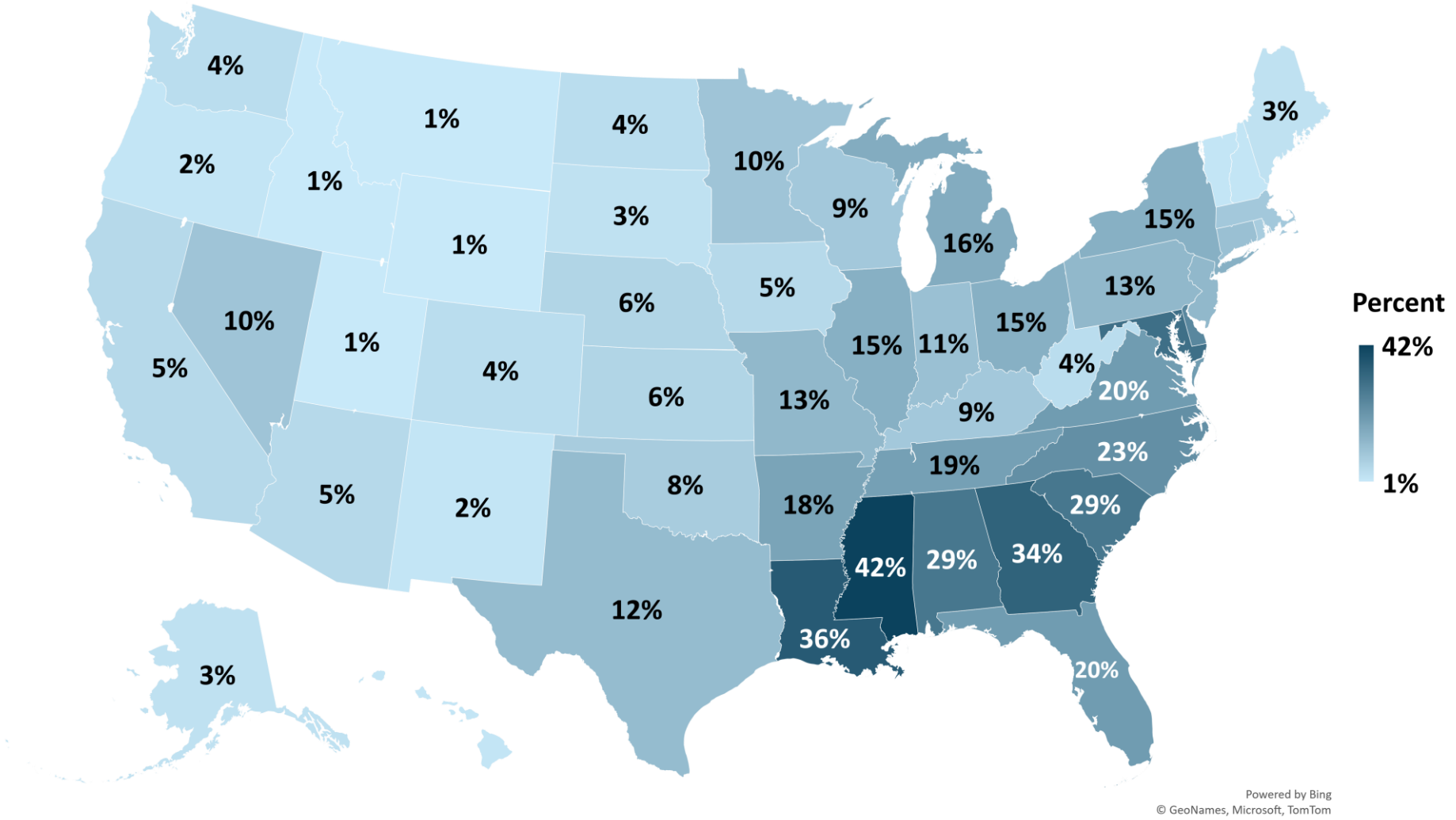
Source: US Census Bureau, Population Division; The Annie E. Casey Foundation, KIDS COUNT Data Center (datacenter.kidscount.org)

Percent of US Non-Hispanic Black Children (under 18) by State, 2019



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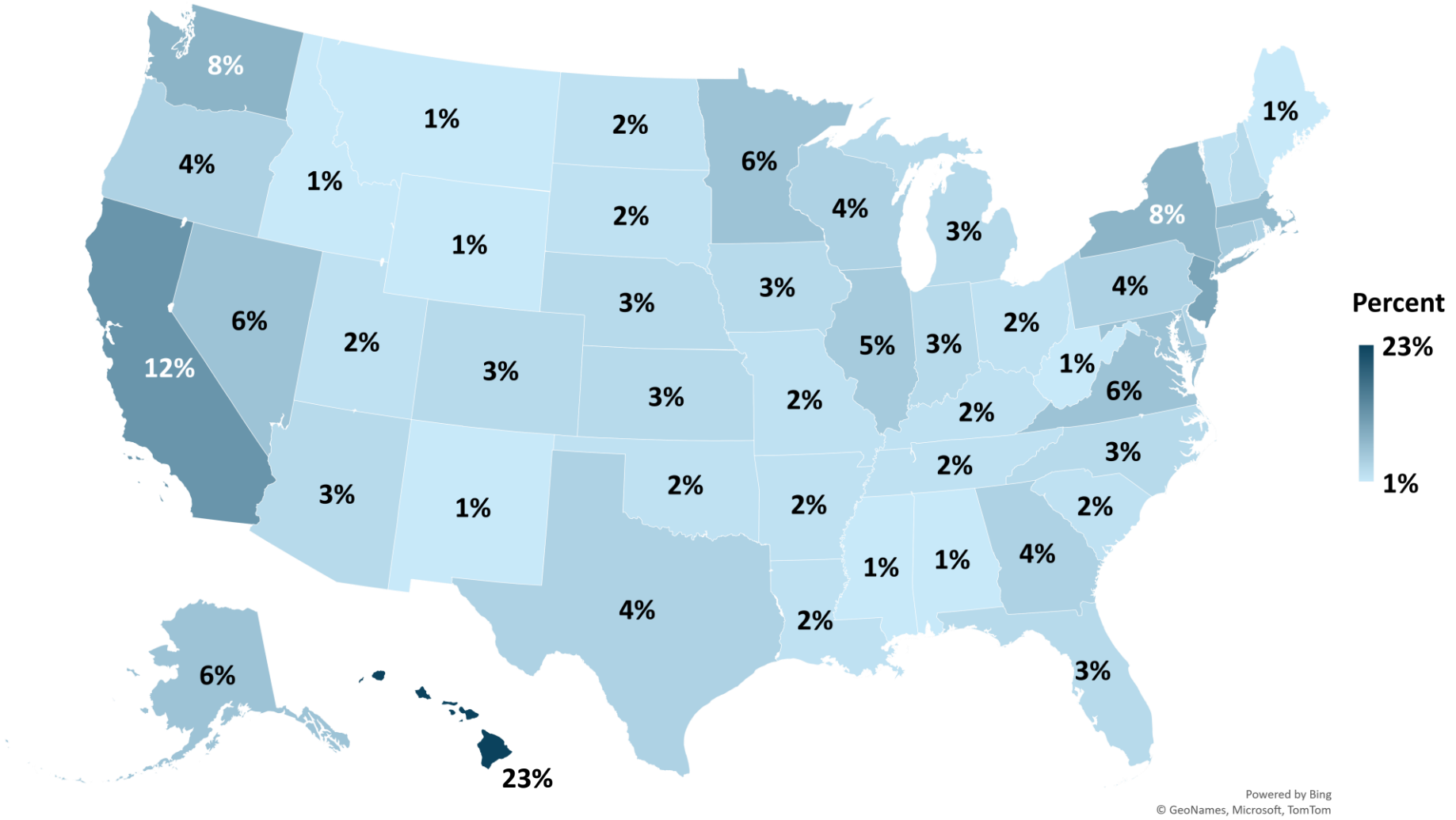
Source: US Census Bureau, Population Division; The Annie E. Casey Foundation, KIDS COUNT Data Center (datacenter.kidscount.org)

Percent of US Non-Hispanic Asian Children (under 18) by State, 2019



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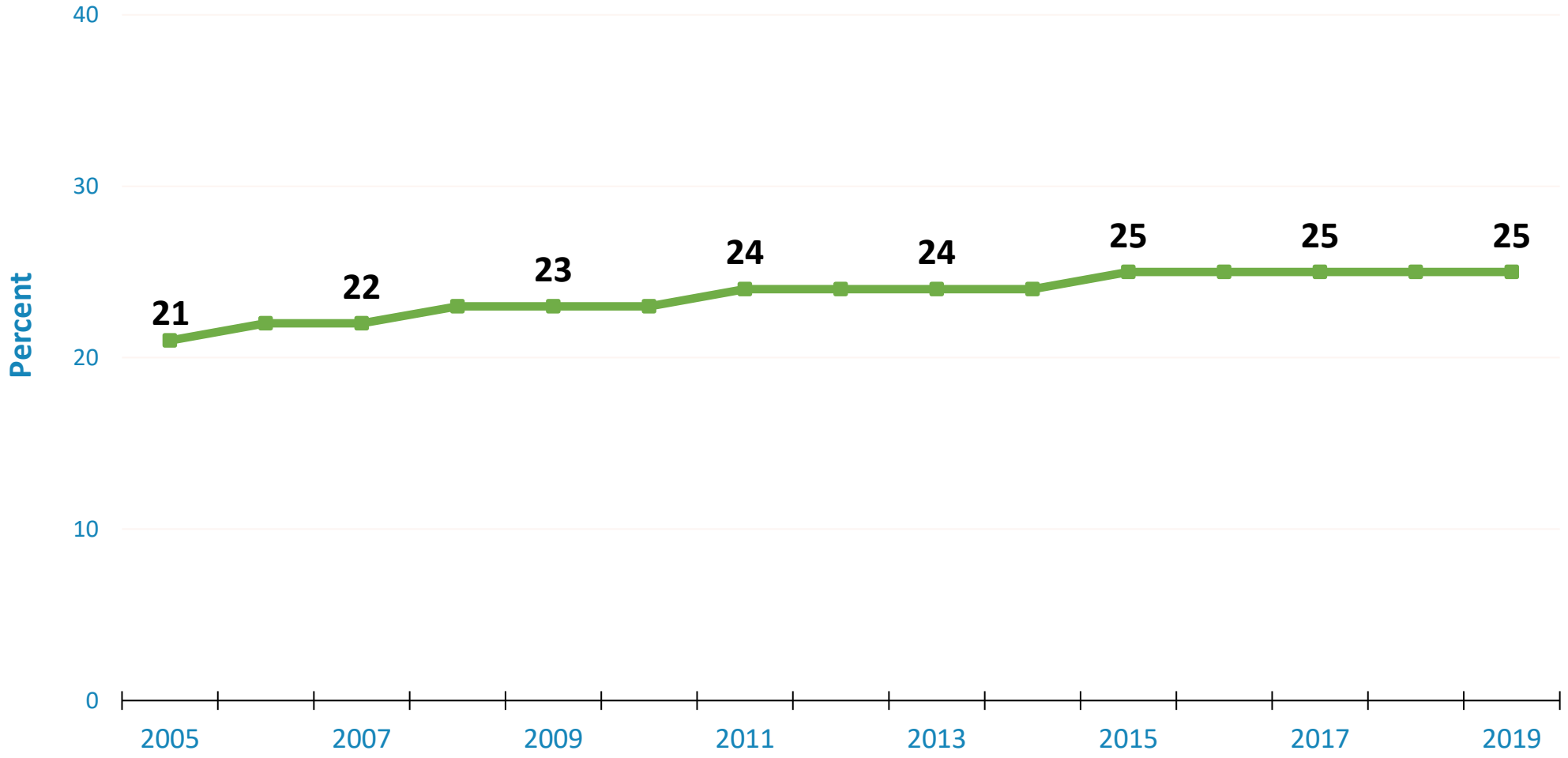
Source: US Census Bureau, Population Division; The Annie E. Casey Foundation, KIDS COUNT Data Center (datacenter.kidscount.org)

% of US Children (under 18) in Immigrant* Families, 2005-2019



*Children who are foreign-born or reside with at least one foreign-born parent

Source: US Census Bureau, American Community Survey (https://datacenter.kidscount.org/data#USA/1/0/char/3)

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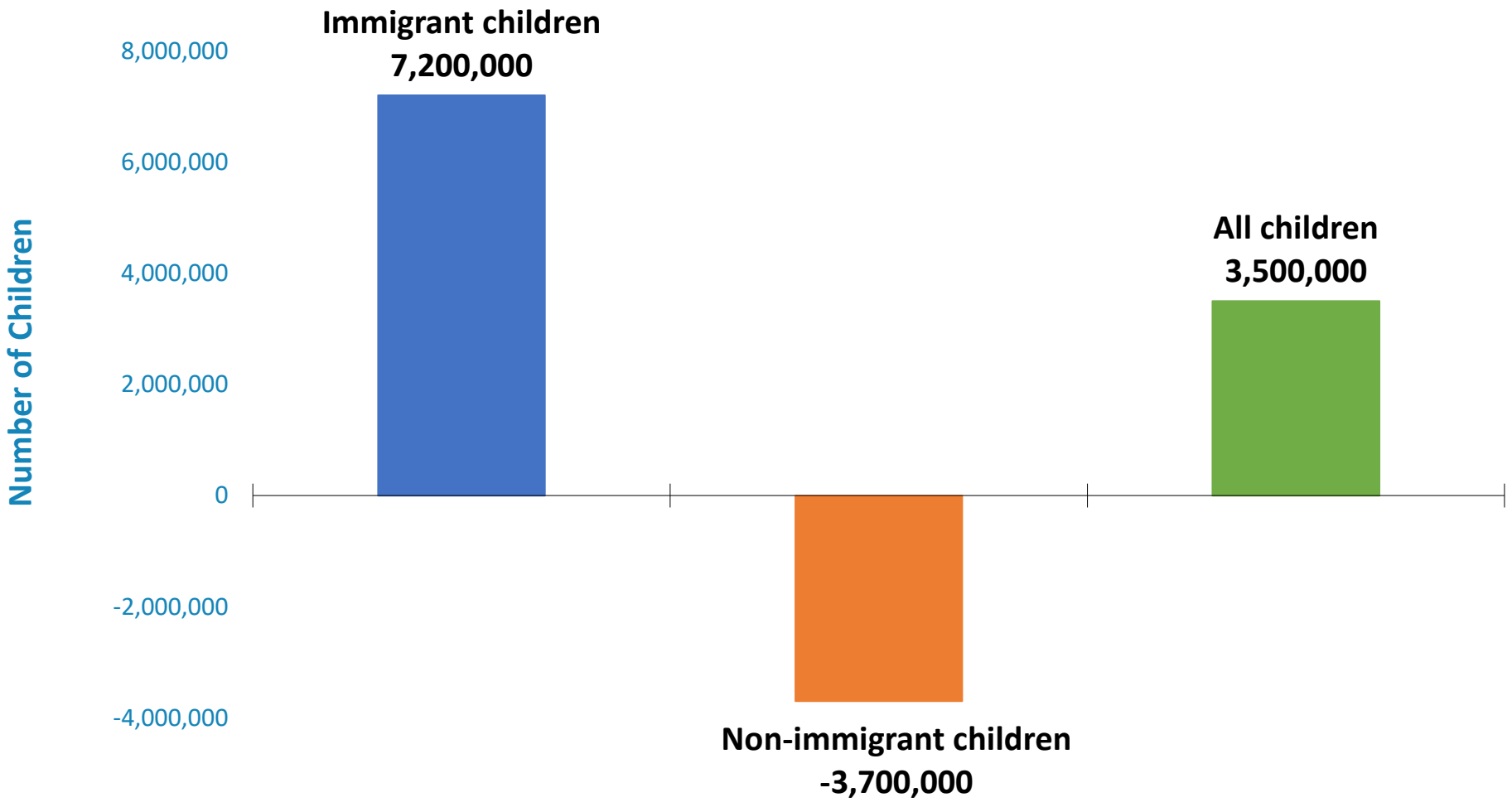
Growth in the Number of US Children (under 18) by Immigrant Status, 1995-2017



Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (http://www.childtrends.org/?indicators=immigrant-children)

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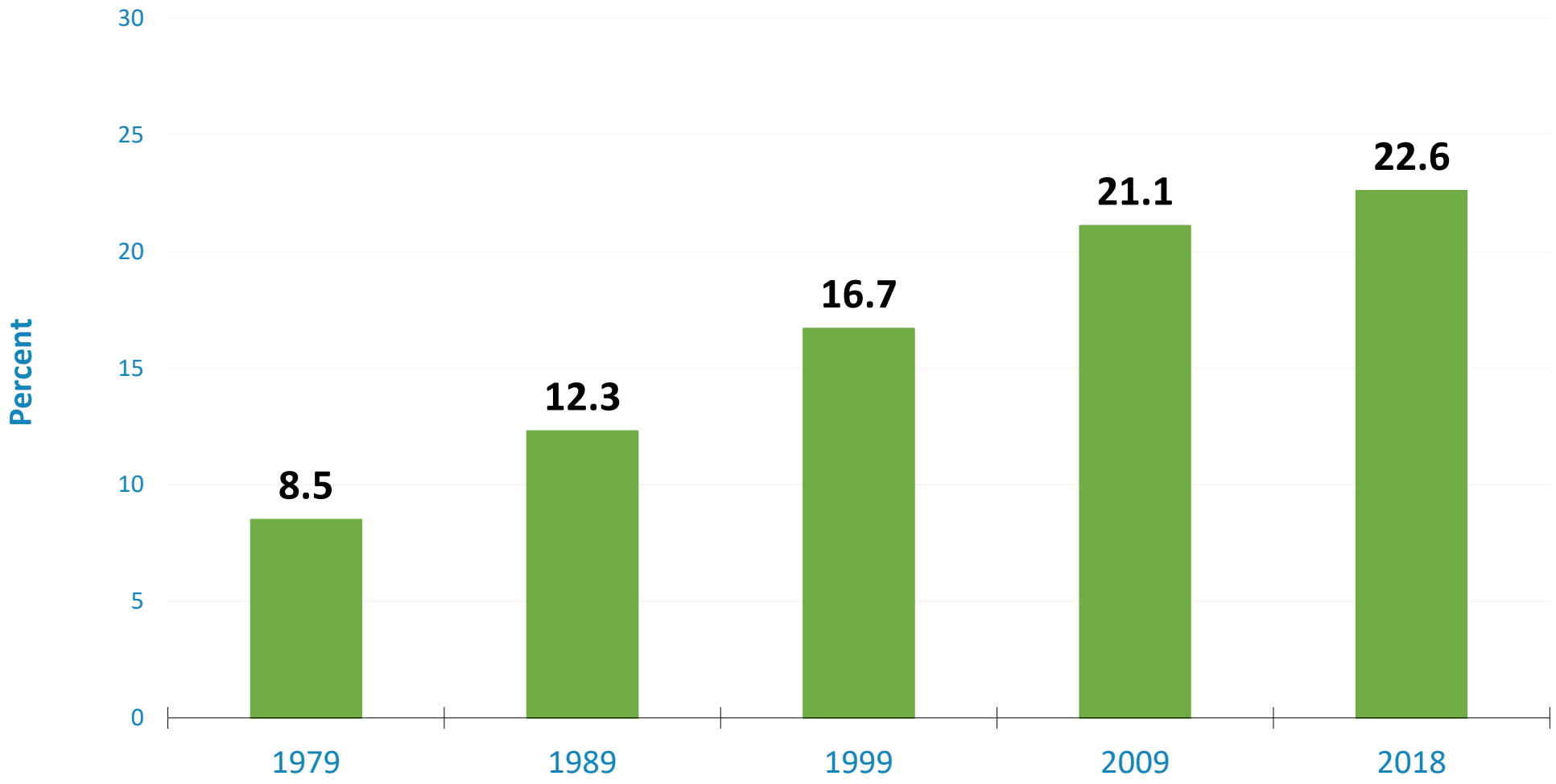
% of US Children (Ages 5-17) Who Speak a Language Other Than English at Home, 1979-2018



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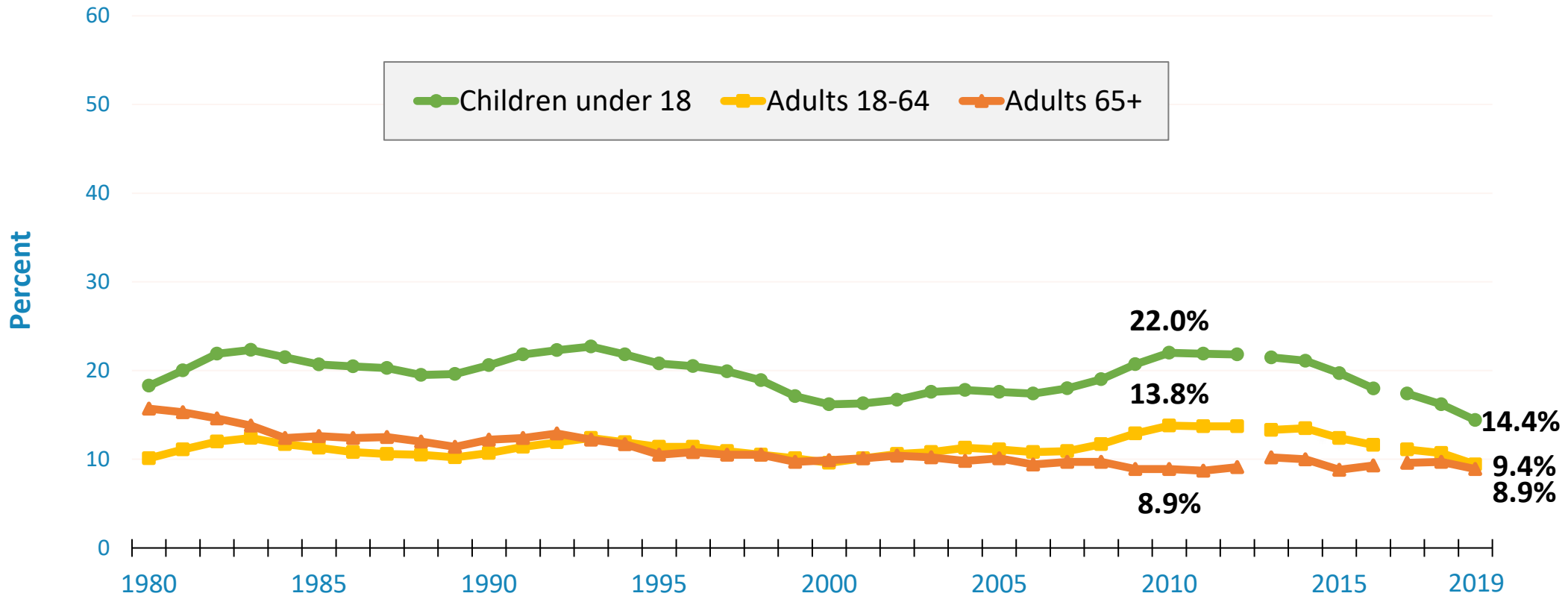
Source: US Census Bureau, Current Population Survey and American Community Survey (http://www.childstats.gov/americaschildren/tables/fam5.asp)

% of Persons in the US Living Below the Poverty Level by Age Group, 1980-2019*



**Estimates for 2013 and beyond are not directly comparable to previous years due to a re-design of the income questions. Estimates for 2017 and beyond are not directly comparable to previous years due to the implementation of an updated CPS ASEC processing system.*

Poverty Level in 2019: $25,926
(family of 4 with 2 children)

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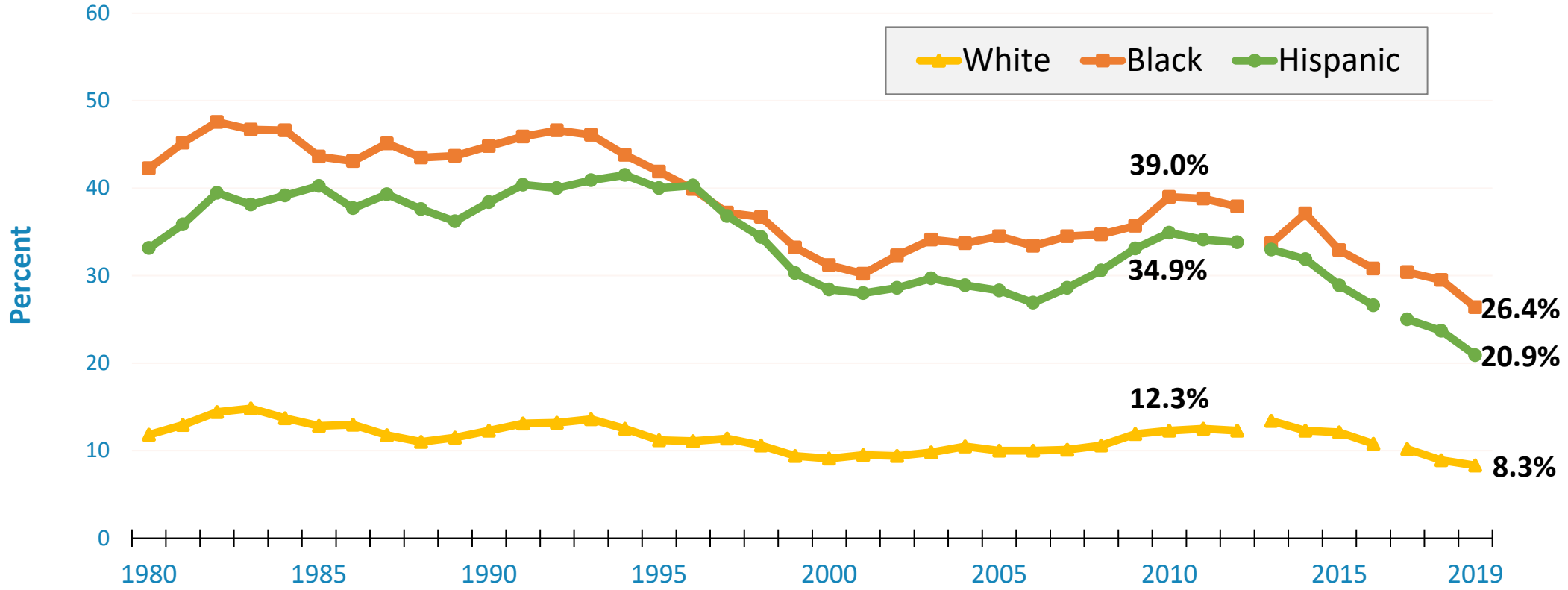
Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-270.pdf)

% of US Children (under 18) Living Below the Poverty Level by Race/Ethnicity, 1980-2019*



**Estimates for 2013 and beyond are not directly comparable to previous years due to a re-design of the income questions. Estimates for 2017 and beyond are not directly comparable to previous years due to the implementation of an updated CPS ASEC processing system.*

Poverty Level in 2019: $25,926
(family of 4 with 2 children)

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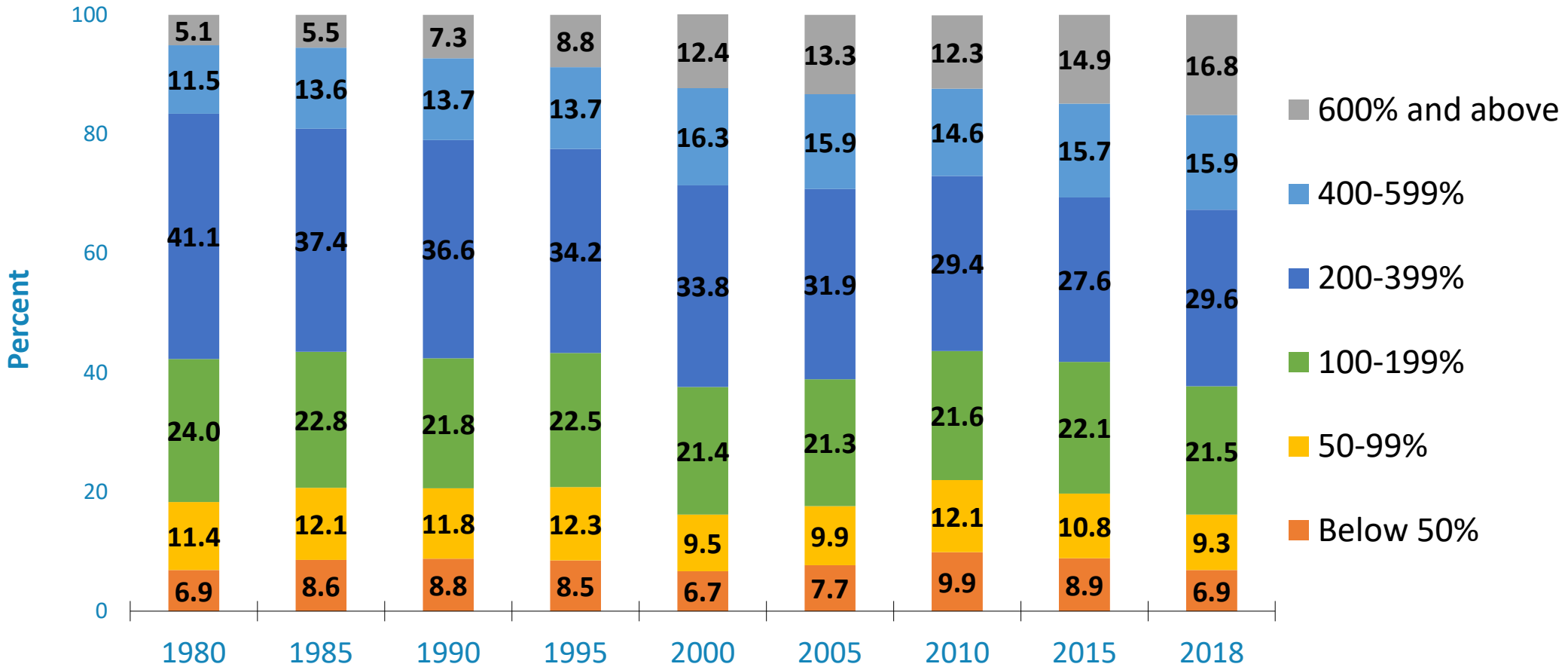
Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (https://www.census.gov/content/dam/Census/library/publications/2020/demo/p60-270.pdf)

% of US Children (under 18) by Family Income Relative to the Poverty Line, 1980-2018



Poverty Level in 2018: $25,465 (family of 4 with 2 children)

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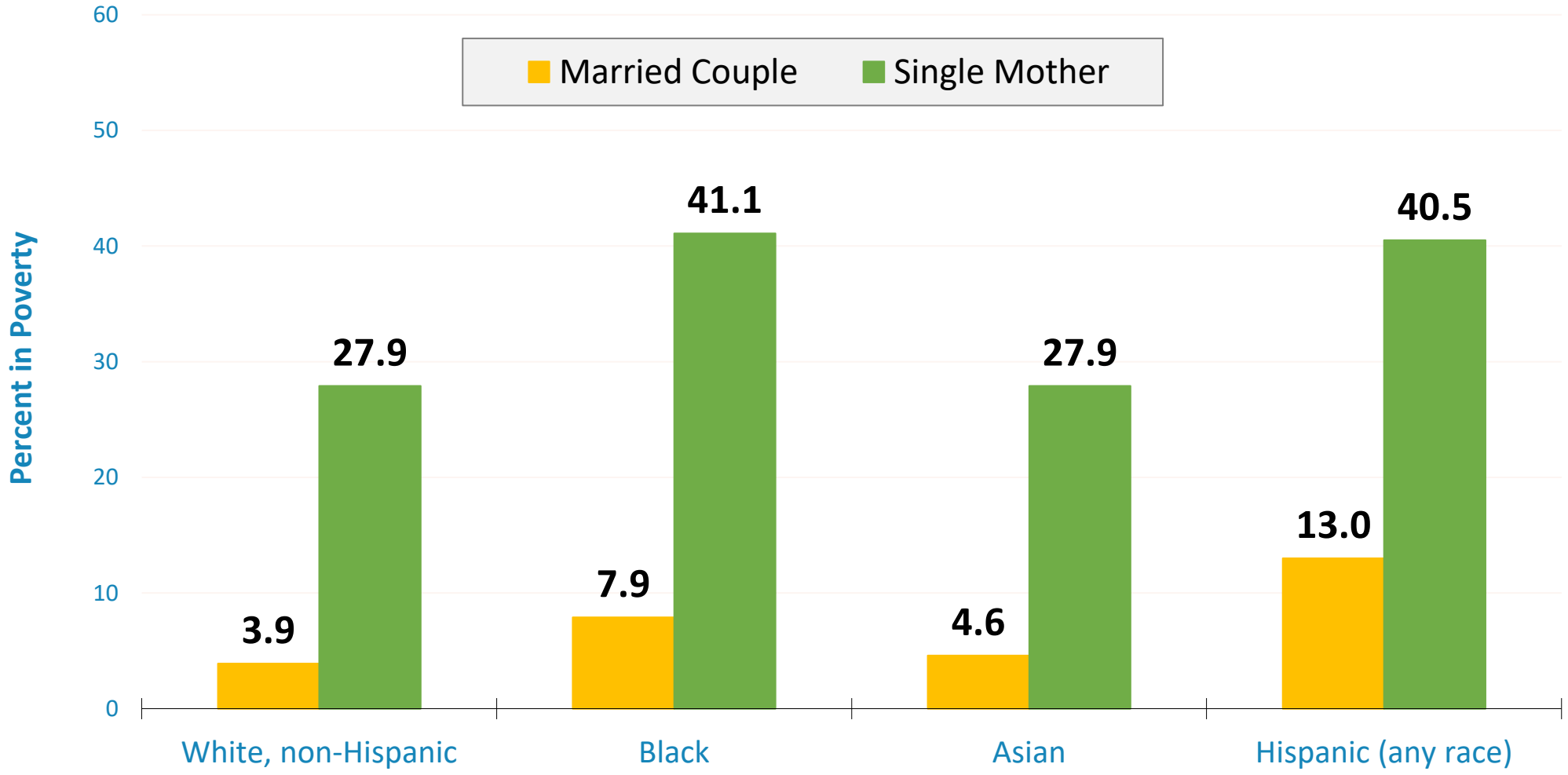
Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (http://www.childstats.gov/americaschildren/tables/econ1b.asp)

% of US Children (under 18) in Poverty by Race/Ethnicity and Family Structure, 2019



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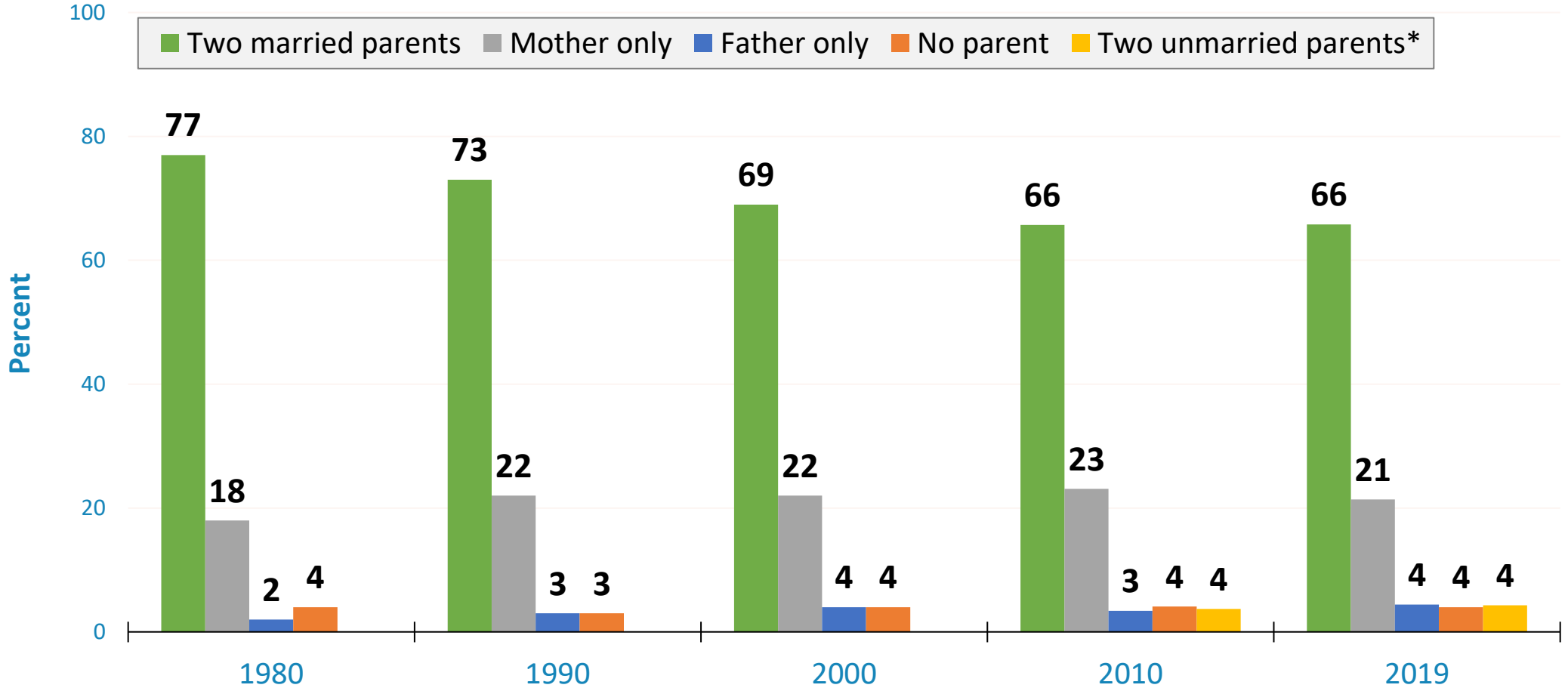
Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (https://www.census.gov/data/tables/time-series/demo/income-poverty/cps-pov/pov-02.html)

Living Arrangements of US Children (under 18), 1980-2019



**Prior to 2007, children with two unmarried parents in the household may be identified as "mother only" or "father only." Starting in 2007, a second parent identifier permits identification of two co-resident parents, even if the parents are not married to each other.*

Note: Estimates for 2019 are not directly comparable to previous years due to data collection and processing changes resulting in shifts in estimates of the number of parents with whom children live and the type of relationship (biological, step, or adoptive) between children and their parent(s).

Source: US Census Bureau, Current Population Survey, Annual Social and Economic Supplement (http://www.childstats.gov/americaschildren/tables/fam1a.asp)

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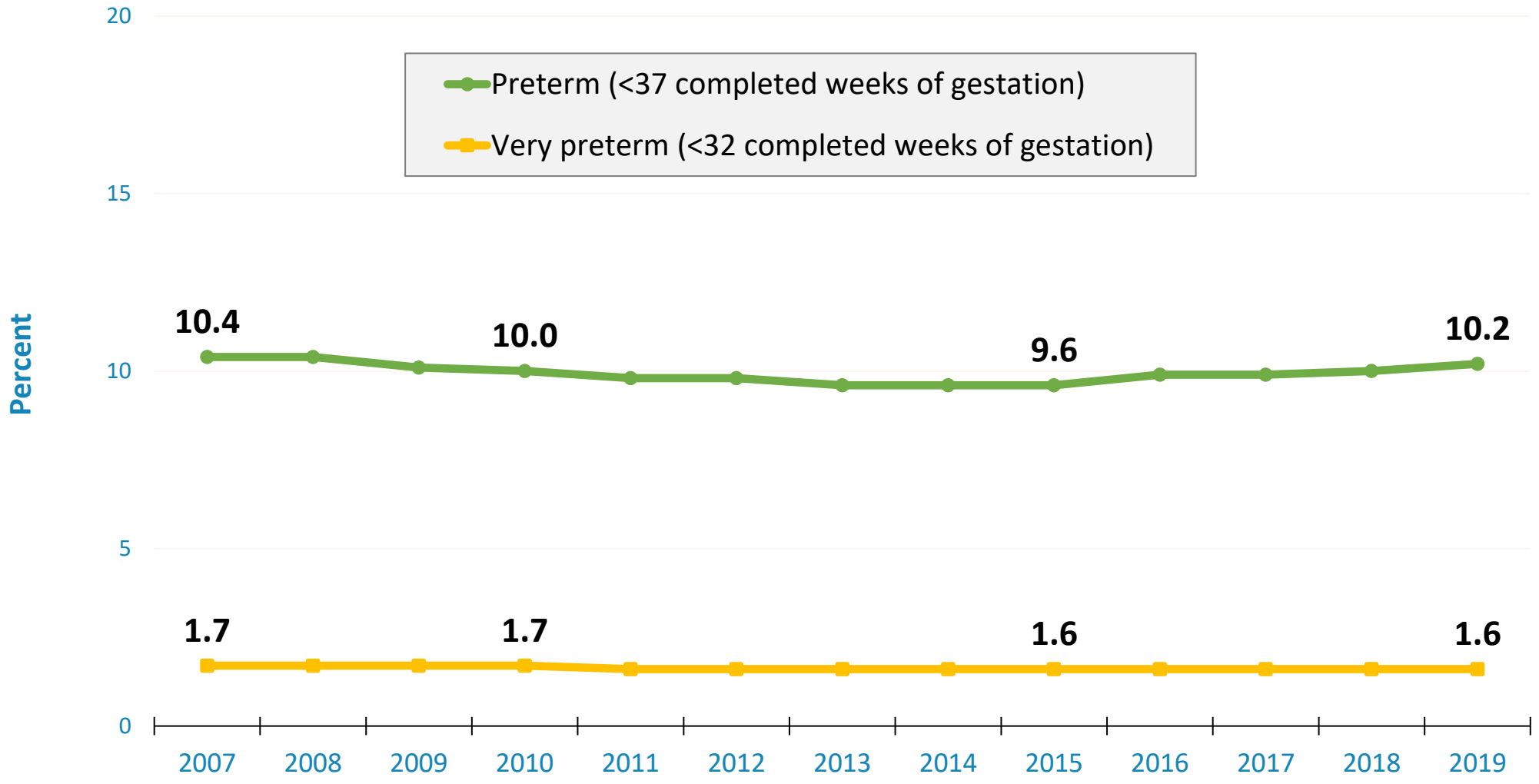
Population Characteristic Takeaways

- The number of US children is not increasing
- Children are a shrinking portion of the population
- The adolescent birth rate has gone down
- % of Hispanic and Asian children has gone up
- % of immigrant children has gone up
- % of children who speak a language other than English has gone up
- % of children in poverty remains high, higher than adults
- % of children in middle class families has shrunk
- % of children in two married parent homes has gone down

2. Health Trends

- Preterm birth and low birthweight
- Neonatal Abstinence Syndrome
- Infant mortality
- Child/adolescent injury and mortality
- Suicide and suicidal behavior
- Youth major depressive episodes
- Mental health diagnoses
- Adolescent alcohol use
- Adolescent cigarette use/vaping
- Asthma
- Activity limitation/disability
- ADHD
- Obesity
- Breastfeeding

% of US Infants Born Preterm, 2007-2019



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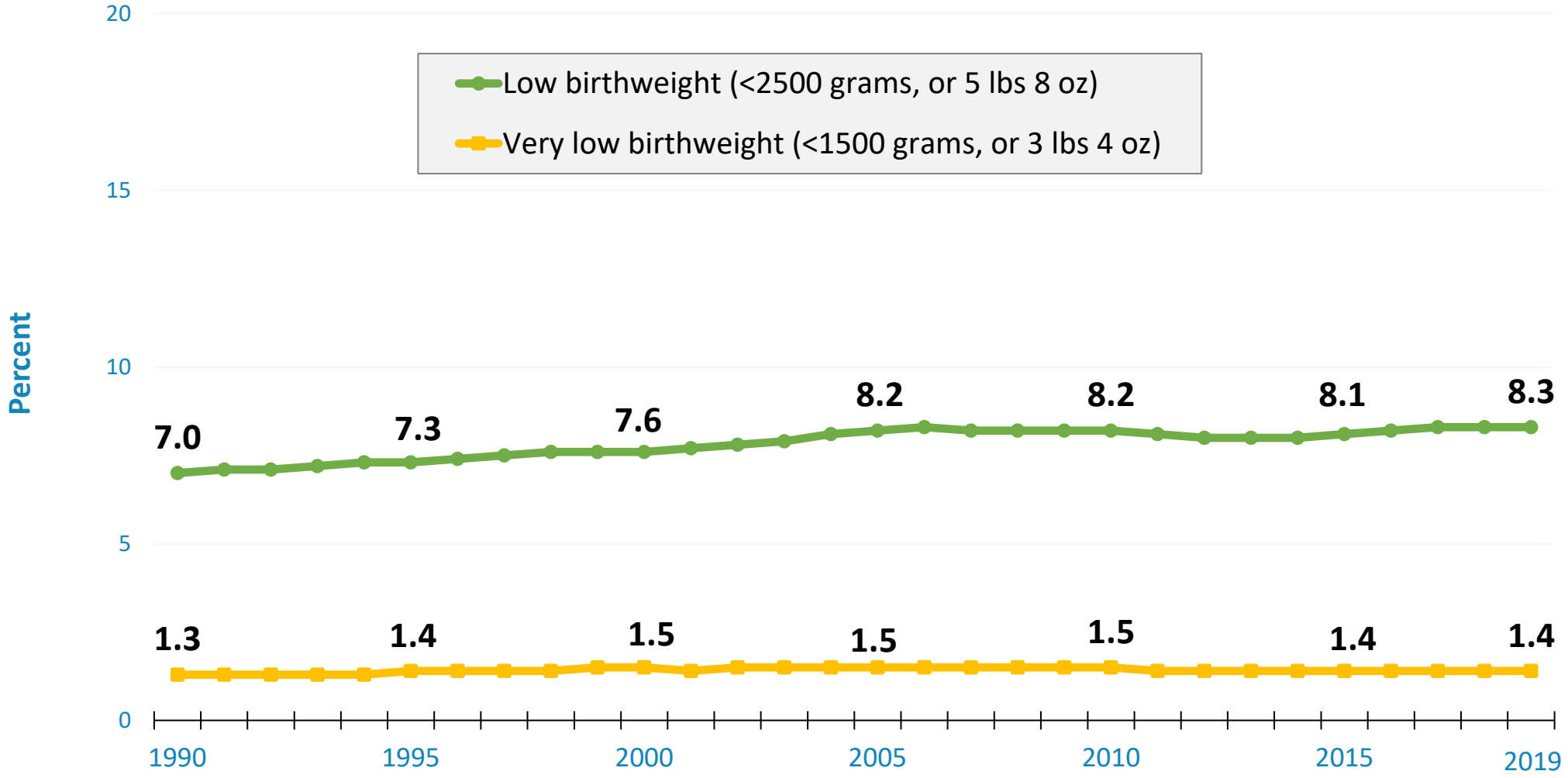
Sources: CDC/NCHS, National Vital Statistics System (https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf and https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf)

% of US Infants Born with Low Birthweight, 1990-2019



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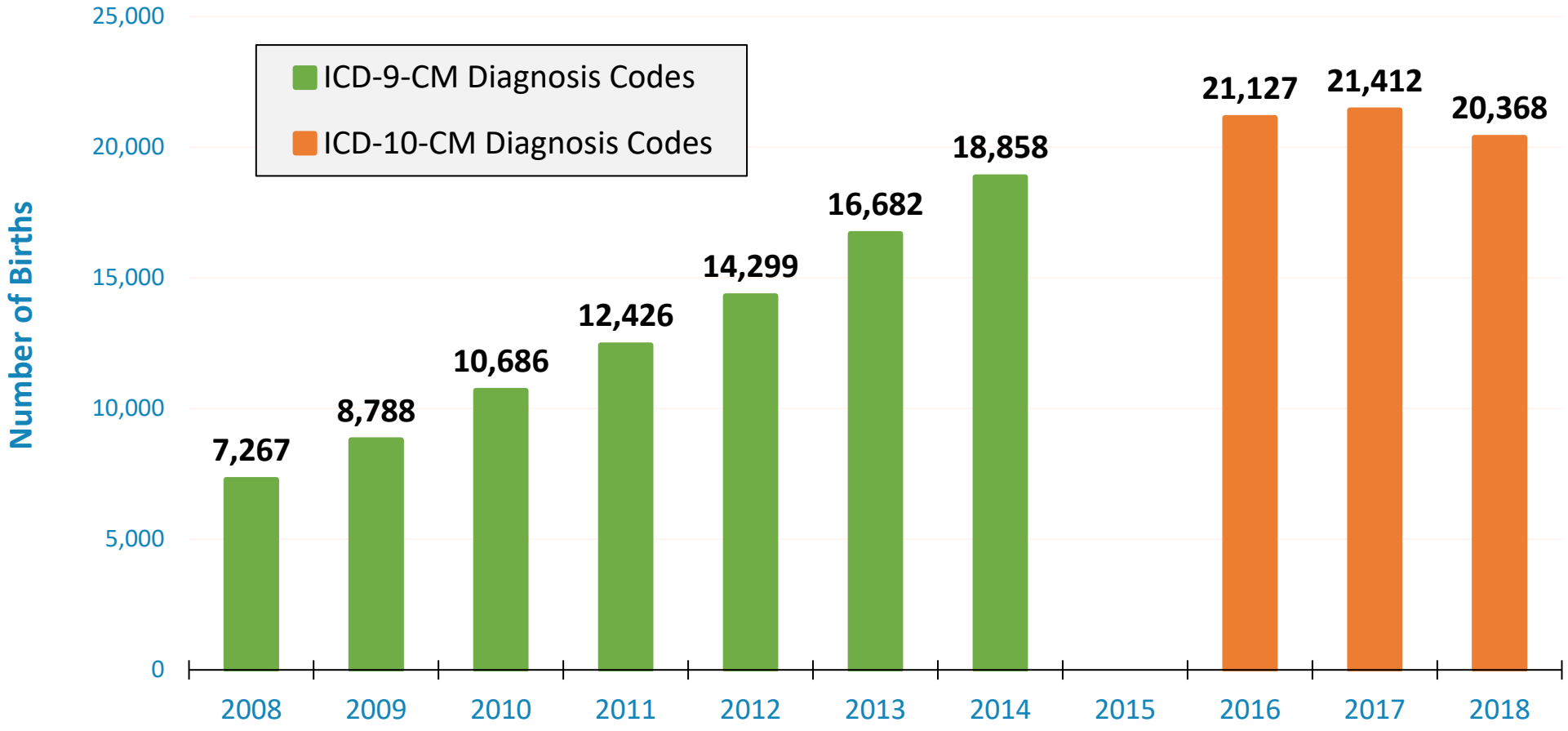
Sources: CDC/NCHS, National Vital Statistics System (https://www.cdc.gov/nchs/data/nvsr/nvsr66/nvsr66_01.pdf and https://www.cdc.gov/nchs/data/nvsr/nvsr70/nvsr70-02-508.pdf)

Number of US^ Neonatal Abstinence Syndrome Births, 2008-2018*



^Estimates for 2008–2018 include data from the following in all years: Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Jersey, New Mexico, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

**Data for 2015 are not shown due to the transition from ICD-9-CM to ICD-10-CM on October 1, 2015.*

Source: Agency for Healthcare Research and Quality (AHRQ), Healthcare Cost and Utilization Project (HCUP), State Inpatient Databases (https://www.hcup-us.ahrq.gov/reports/ataglance/HCUPtrendsNASbirthsUS.pdf)

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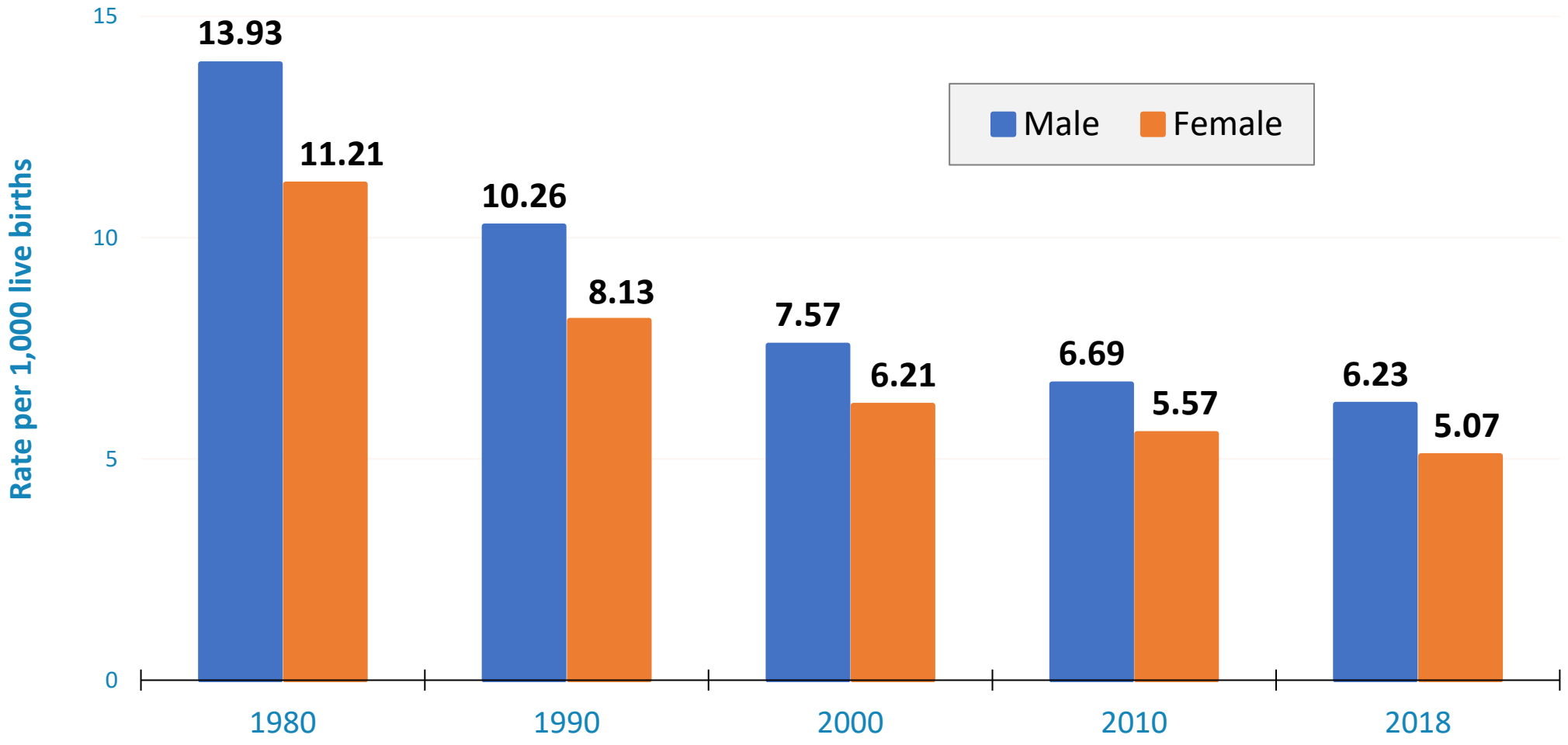
US Infant Mortality Rates (per 1,000 Live Births) by Gender, 1980-2018



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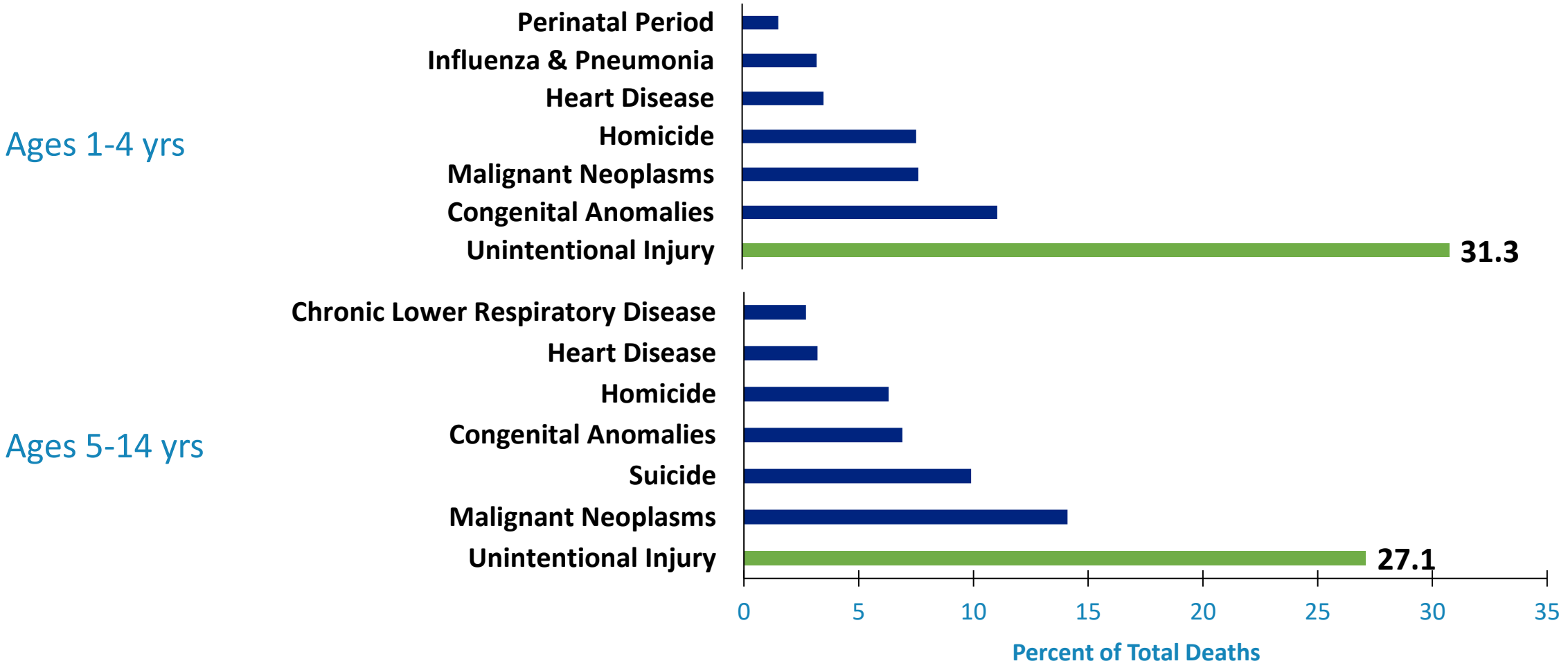
Source: CDC/NCHS, National Vital Statistics Reports (data for 1980-2000: https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf and 2010-2018: https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr69-13-508.pdf)

Leading Causes of Death among US Children (Ages 1-14) by Age Group, 2019



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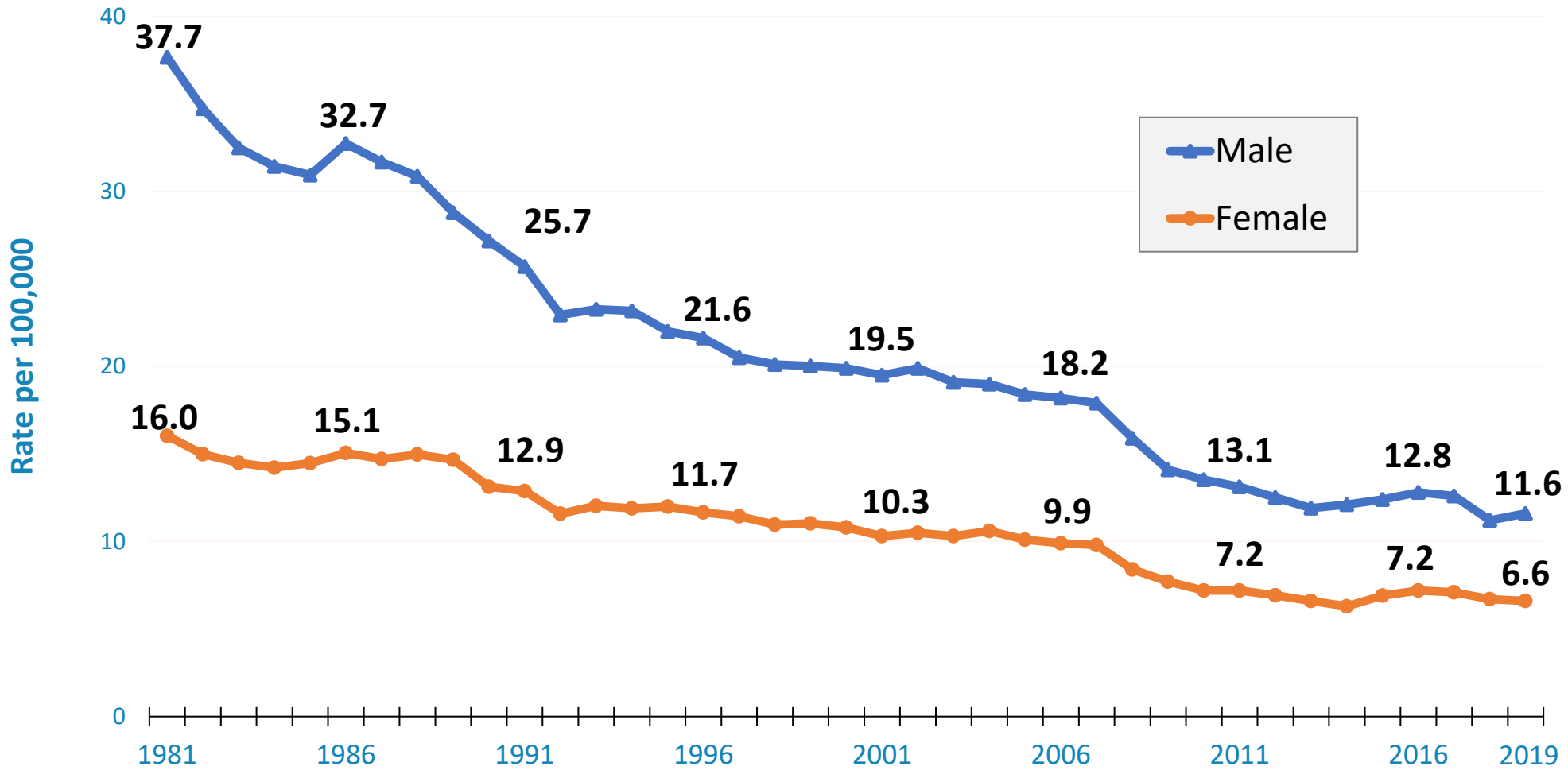
Source: CDC/National Center for Injury Prevention and Control, WISQARS Fatal Injury Data - Leading Causes of Death (https://webappa.cdc.gov/sasweb/ncipc/leadcause.html)

Fatal Unintentional Injuries (Rate per 100,000) among US Children (Ages 0-19) by Gender, 1981-2019



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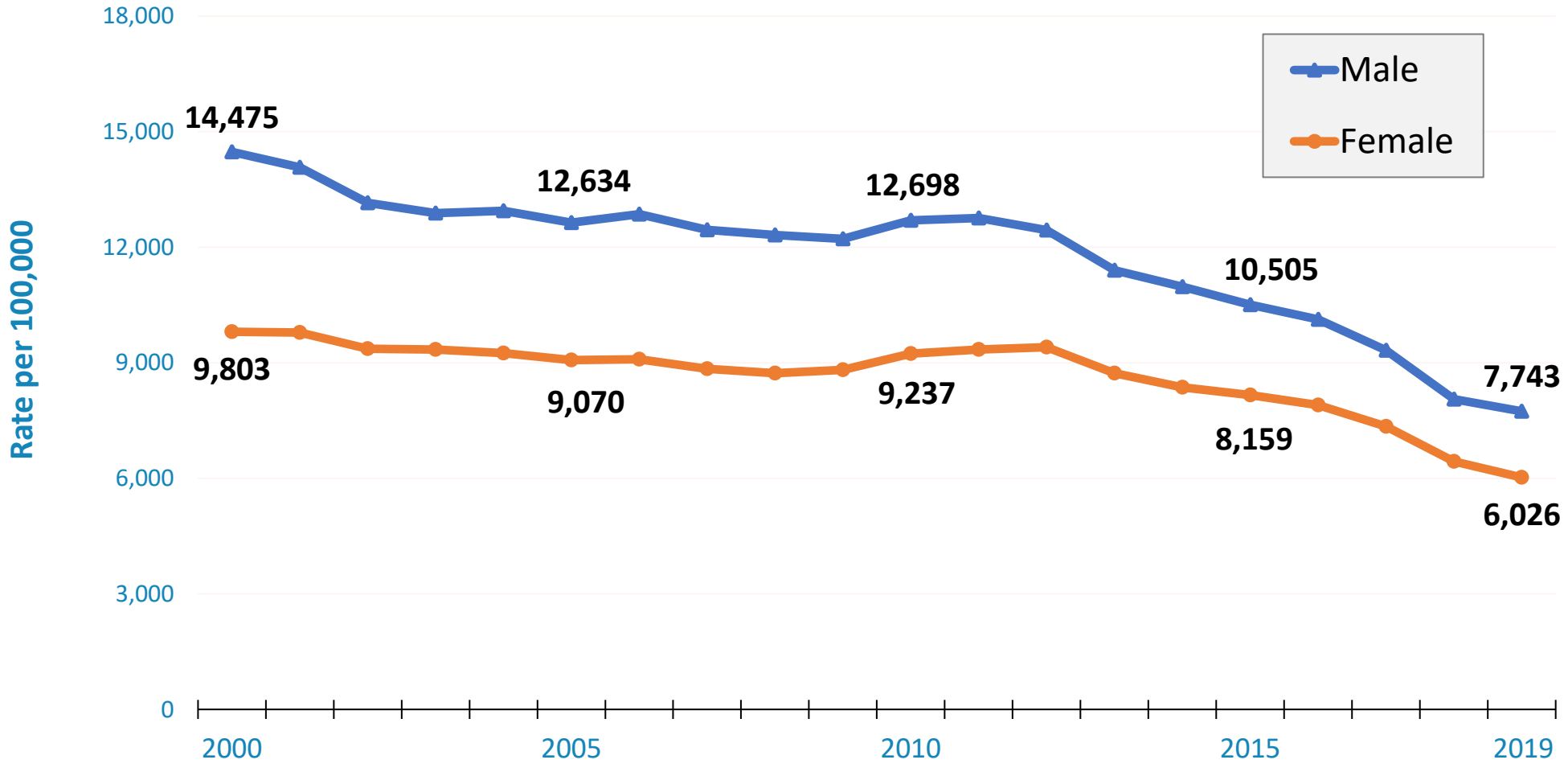
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

Non-Fatal Unintentional Injuries Treated in Emergency Rooms (Rate per 100,000) among US Children (Ages 0-19) by Gender, 2000-2019



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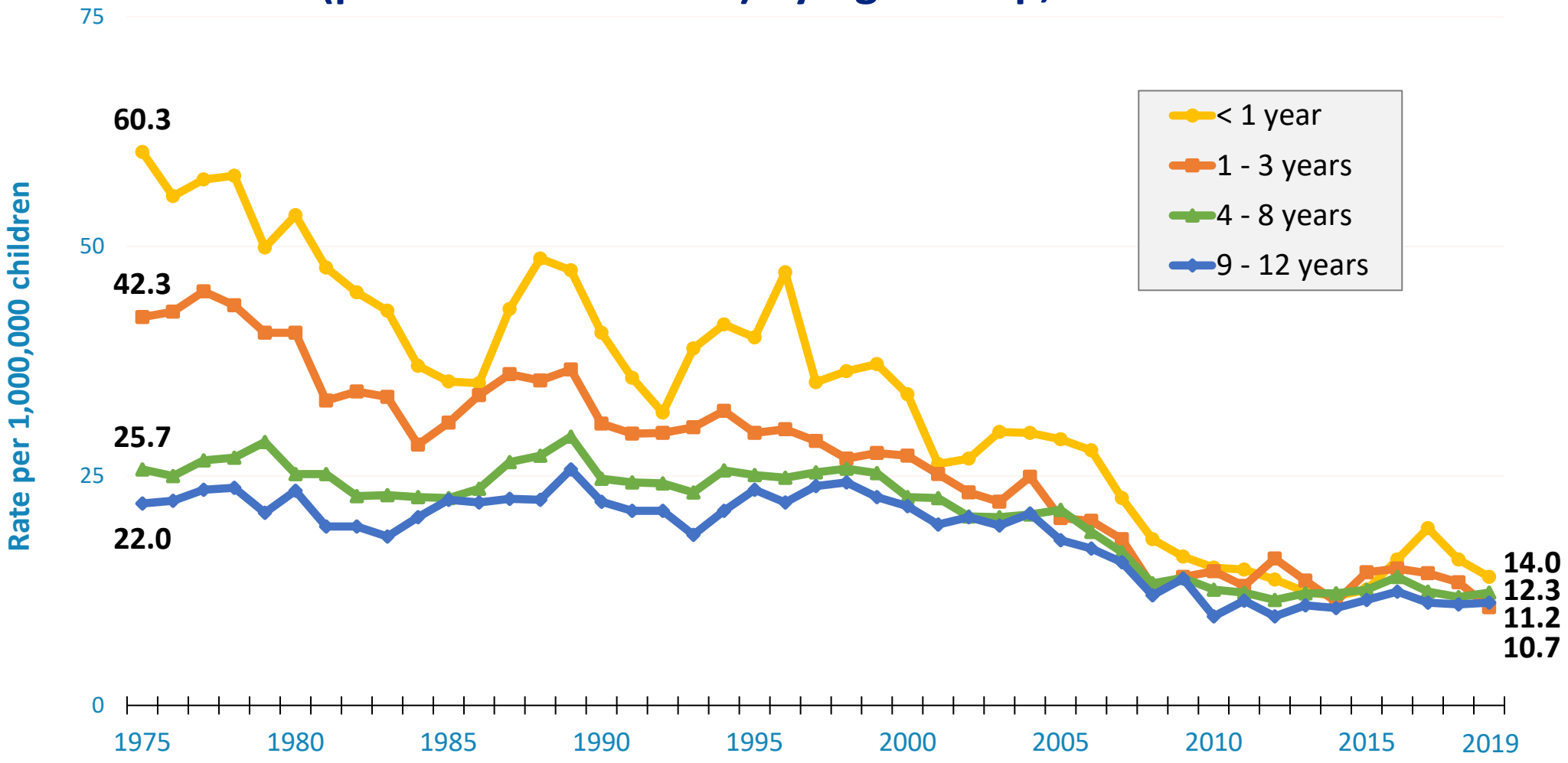
Source: CDC/National Center for Injury Prevention and Control, WISQARS non-fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/nfirates.html)

US Passenger Vehicle Child Occupant Deaths (per Million Children) by Age Group, 1975-2019



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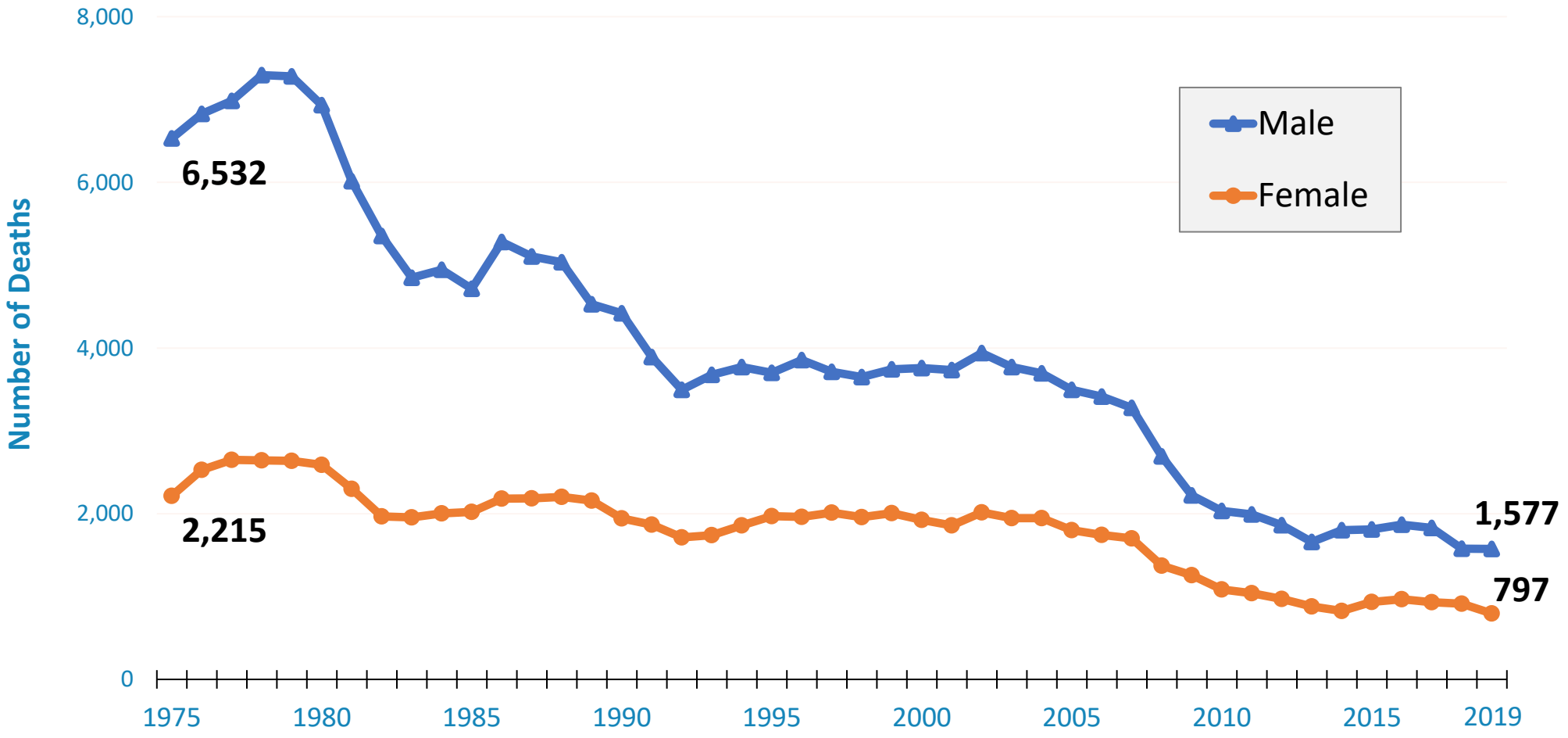
Source: US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) (http://www.iihs.org/iihs/topics/t/child-safety/fatalityfacts/child-safety)

US Teenage (Ages 13-19) Motor Vehicle Crash Deaths by Gender, 1975-2019



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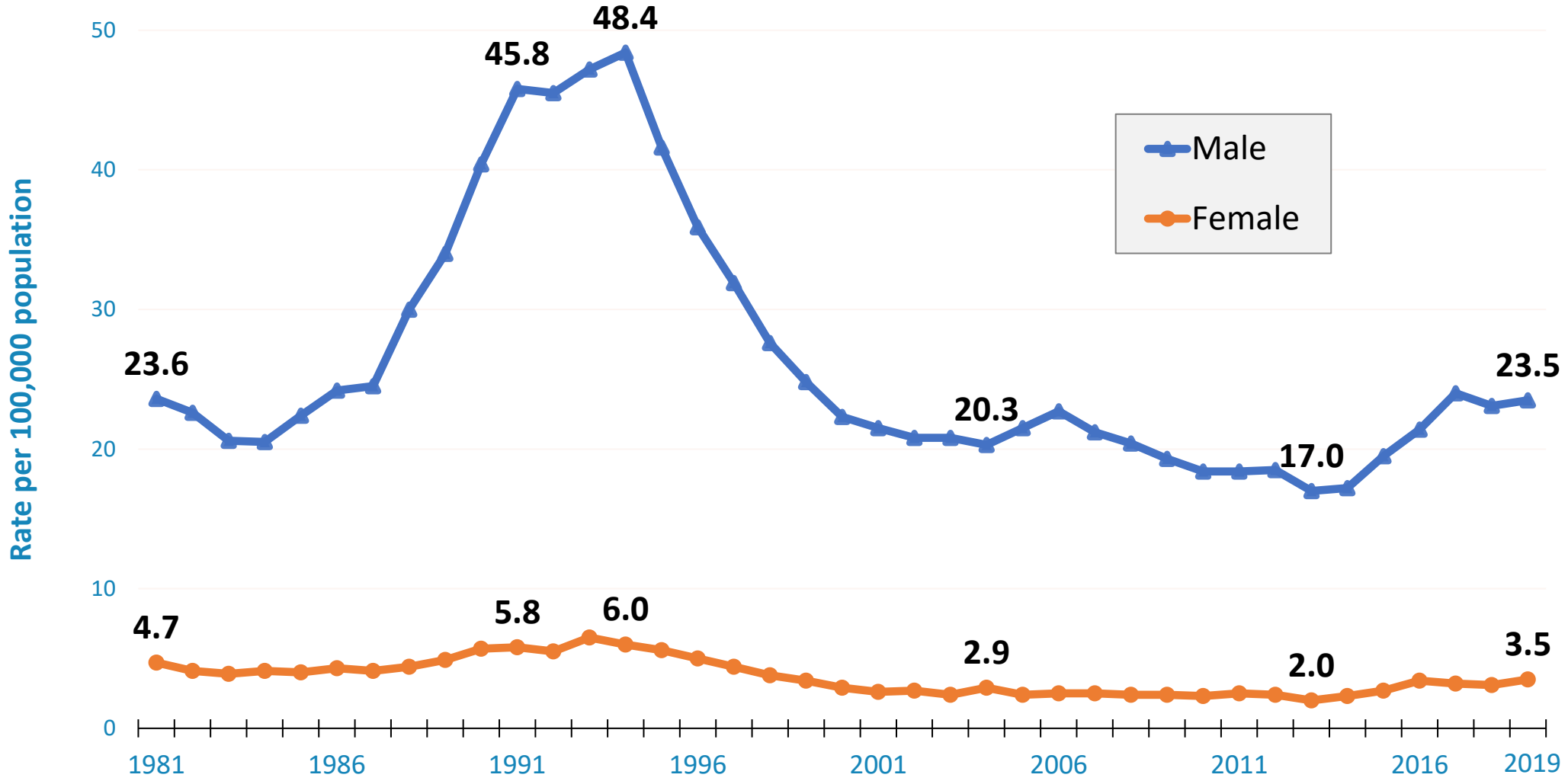
Source: US Department of Transportation, National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) (http://www.iihs.org/iihs/topics/t/teenagers/fatalityfacts/teenagers)

US Teenage (Ages 15-19) Firearm-Related Deaths by Gender, 1981-2019



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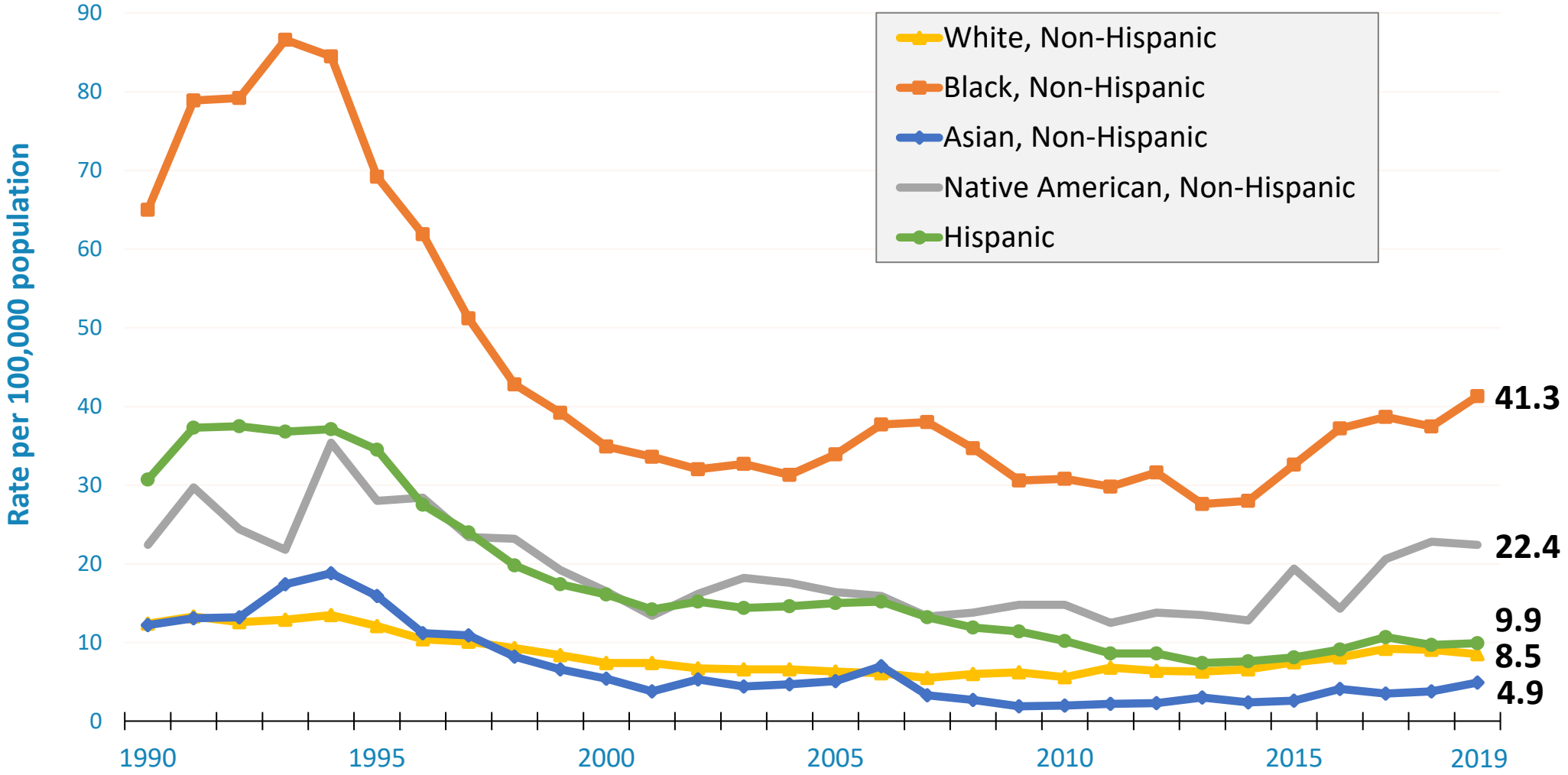
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

US Teenage (Ages 15-19) Firearm-Related Deaths by Race/Ethnicity, 1990-2019



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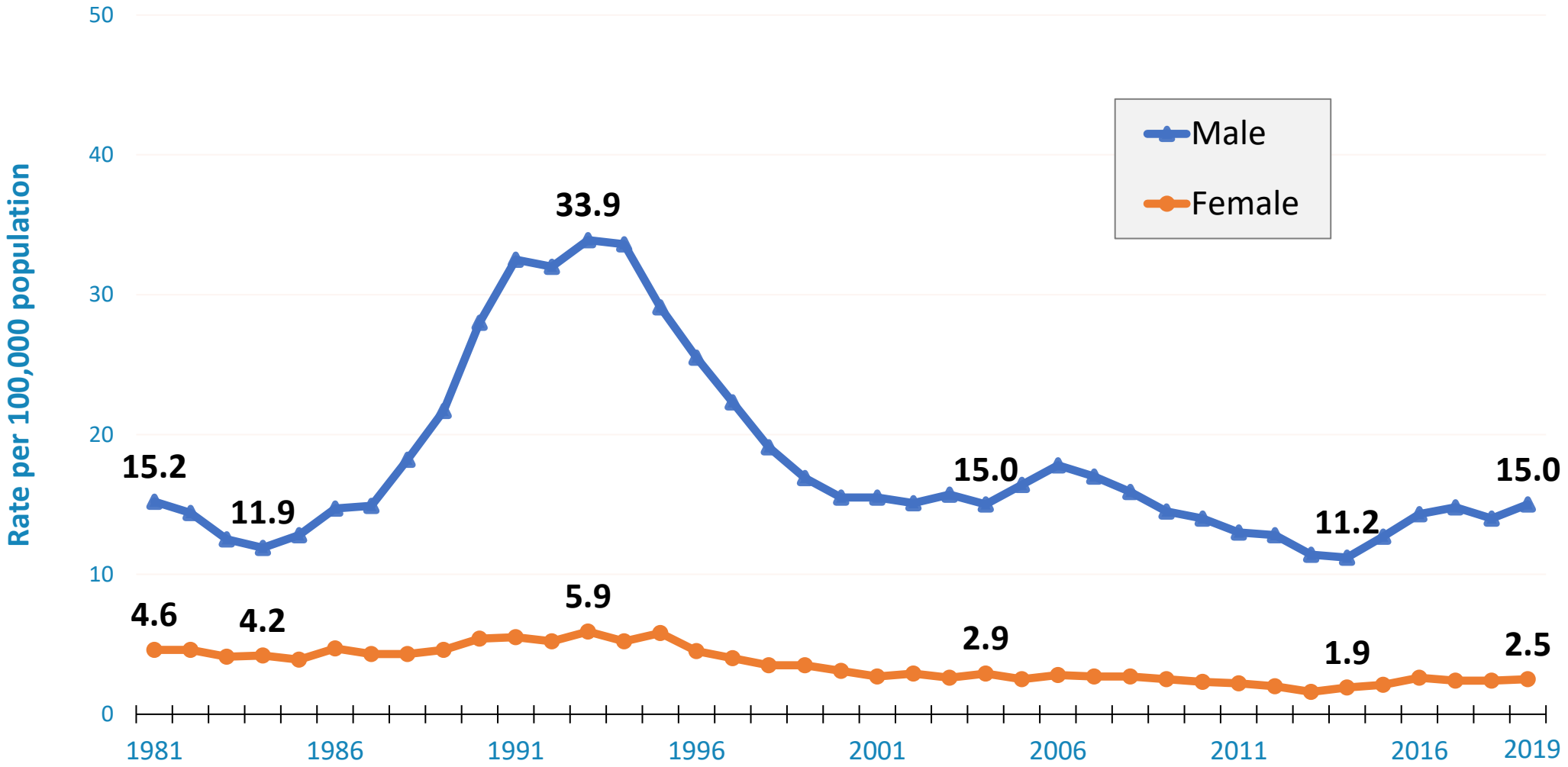
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

US Teenage (Ages 15-19) Homicide Deaths by Gender, 1981-2019



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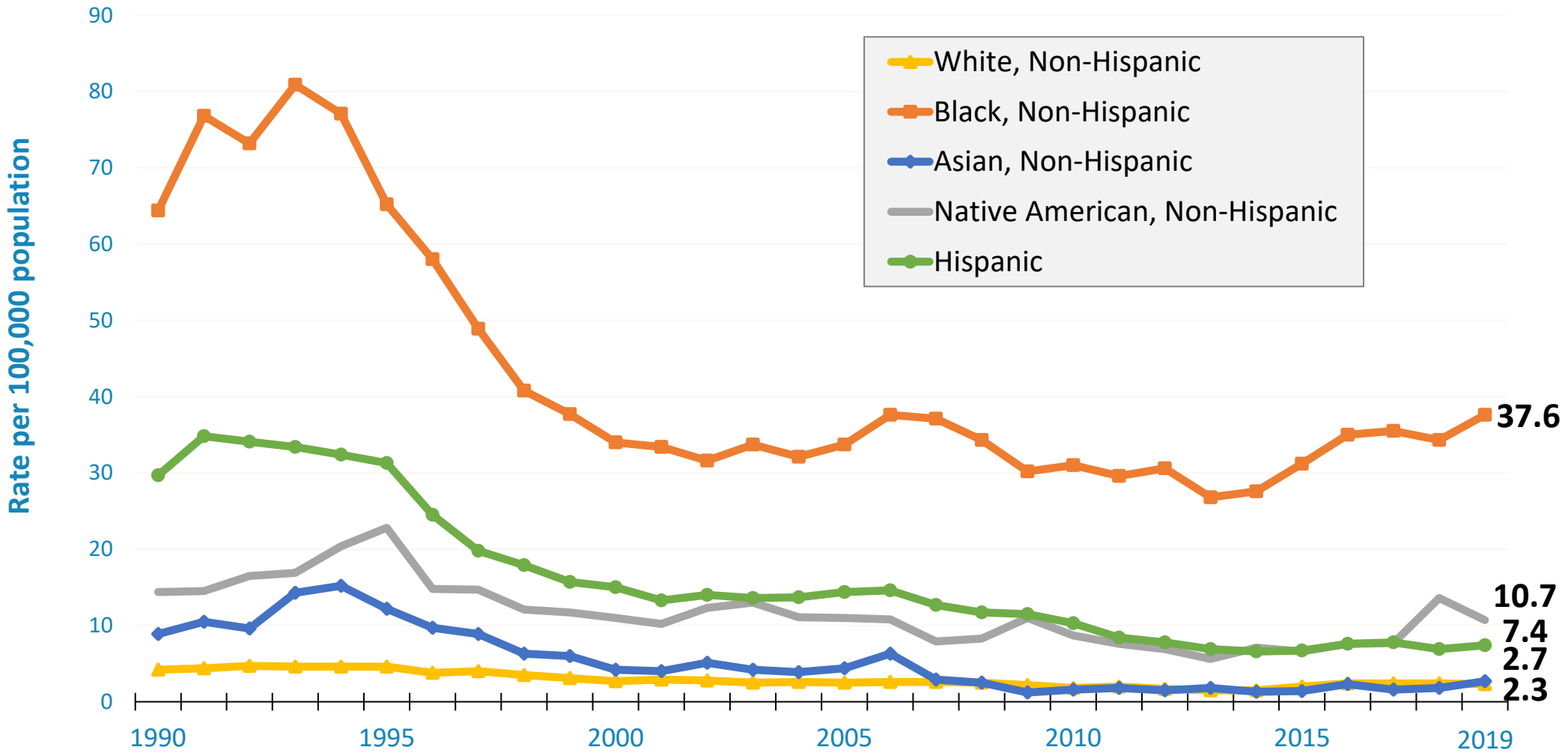
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

US Teenage (Ages 15-19) Homicide Deaths by Race/Ethnicity, 1990-2019



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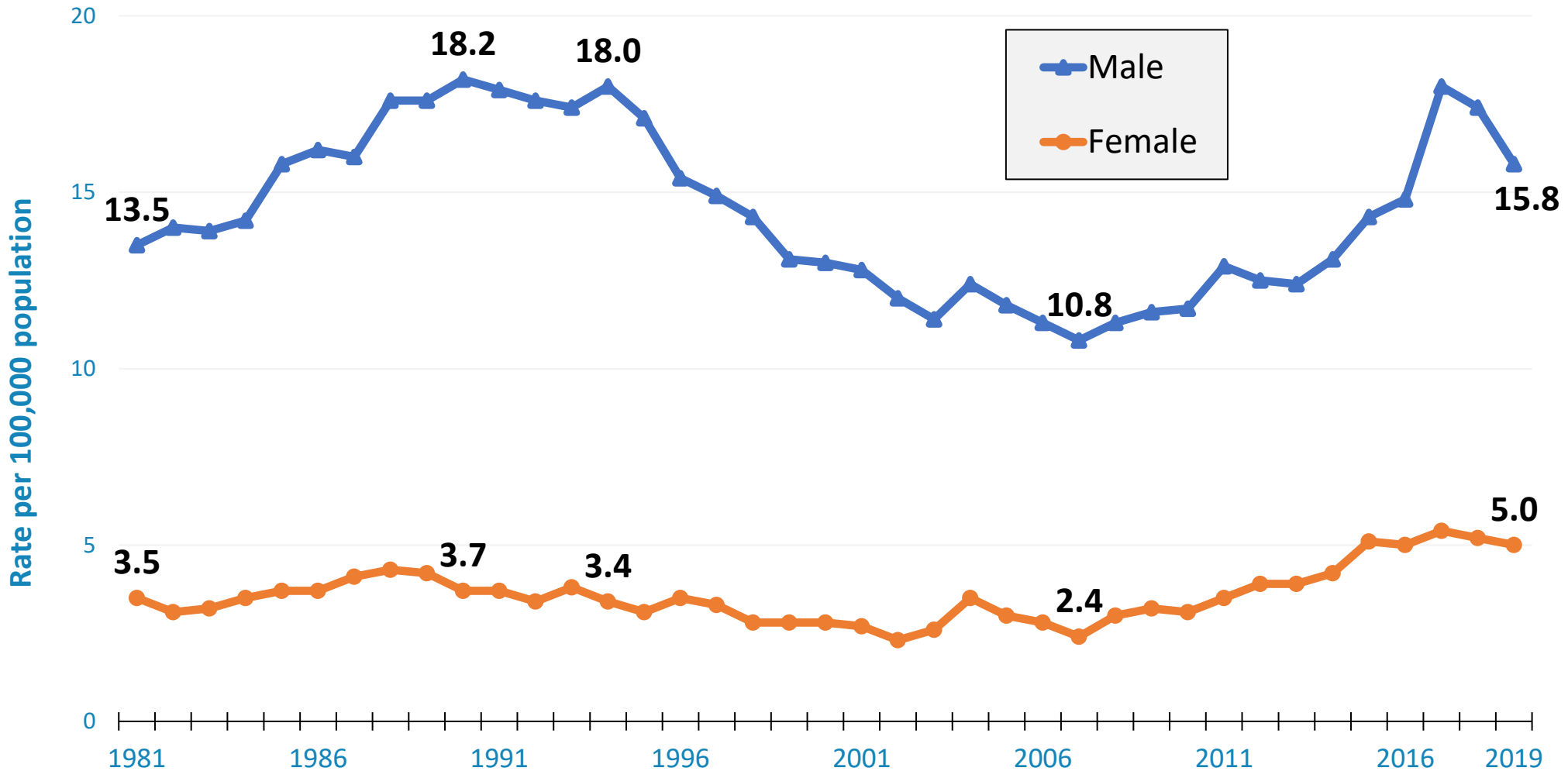
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

US Teenage (Ages 15-19) Suicide Deaths by Gender, 1981-2019



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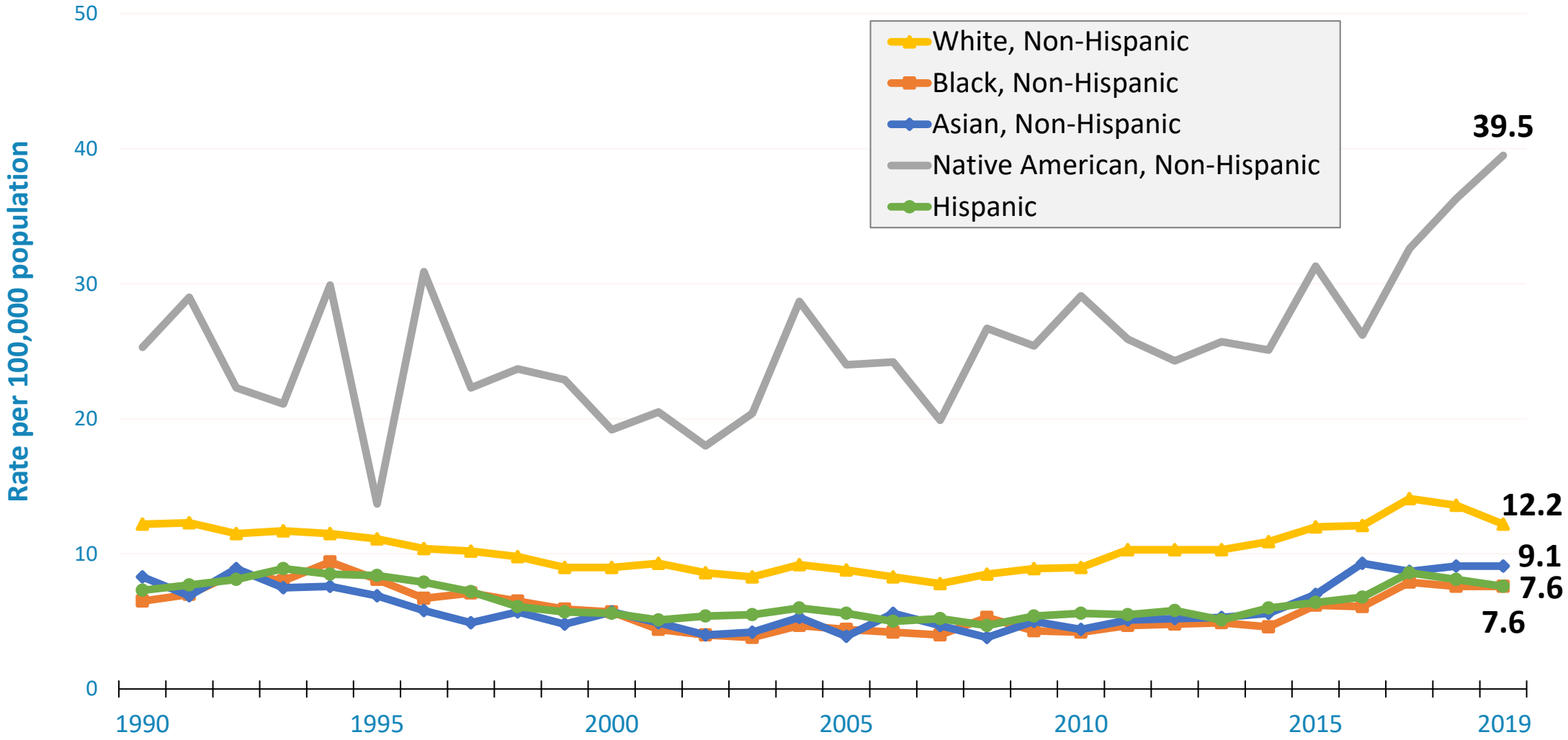
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

US Teenage (Ages 15-19) Suicide Deaths by Race/Ethnicity, 1990-2019



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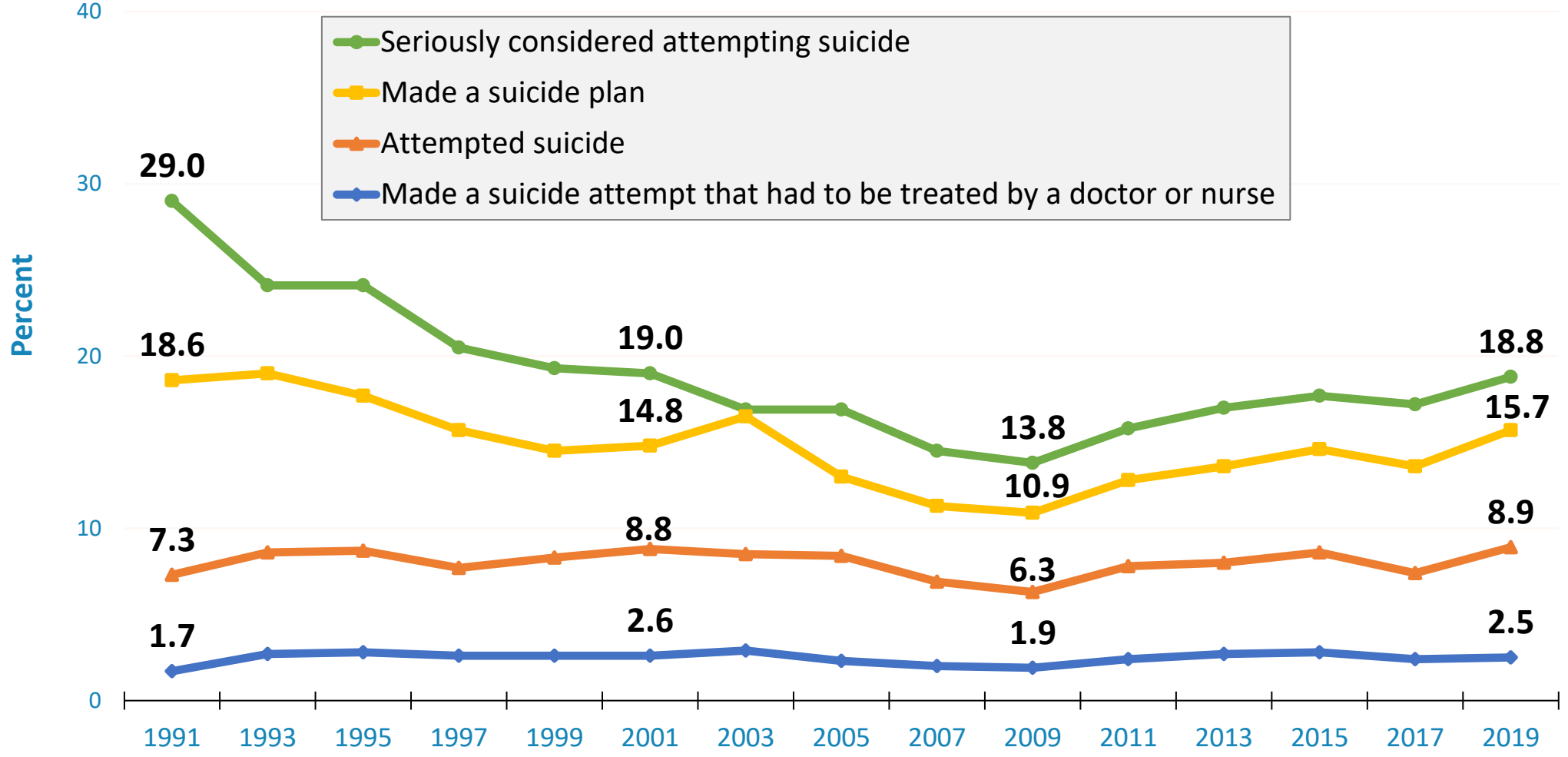
Source: CDC/National Center for Injury Prevention and Control, WISQARS fatal injury reports (https://webappa.cdc.gov/sasweb/ncipc/mortrate.html)

% of US Students (9th - 12th Graders) Who Reported Suicide-Related Behavior, 1991-2019



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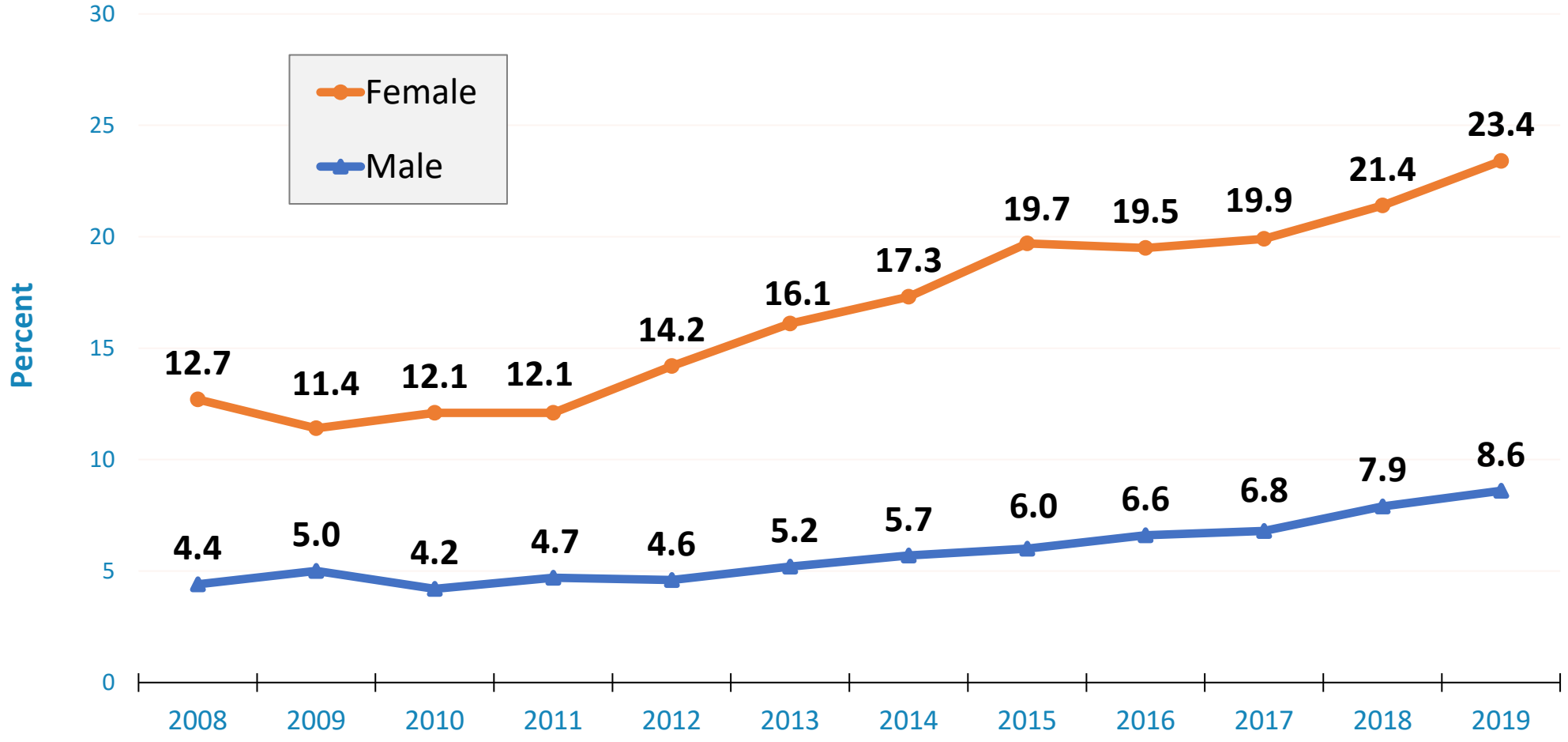
Source: CDC/Division of Adolescent and School Health, Youth Risk Behavior Survey (YRBS) (https://www.cdc.gov/healthyyouth/data/yrbs/factsheets/2019_suicide_trend_yrbs.htm)

% of US Youth (Ages 12-17) Who Reported a Major Depressive Episode in the Past Year by Gender, 2008-2019



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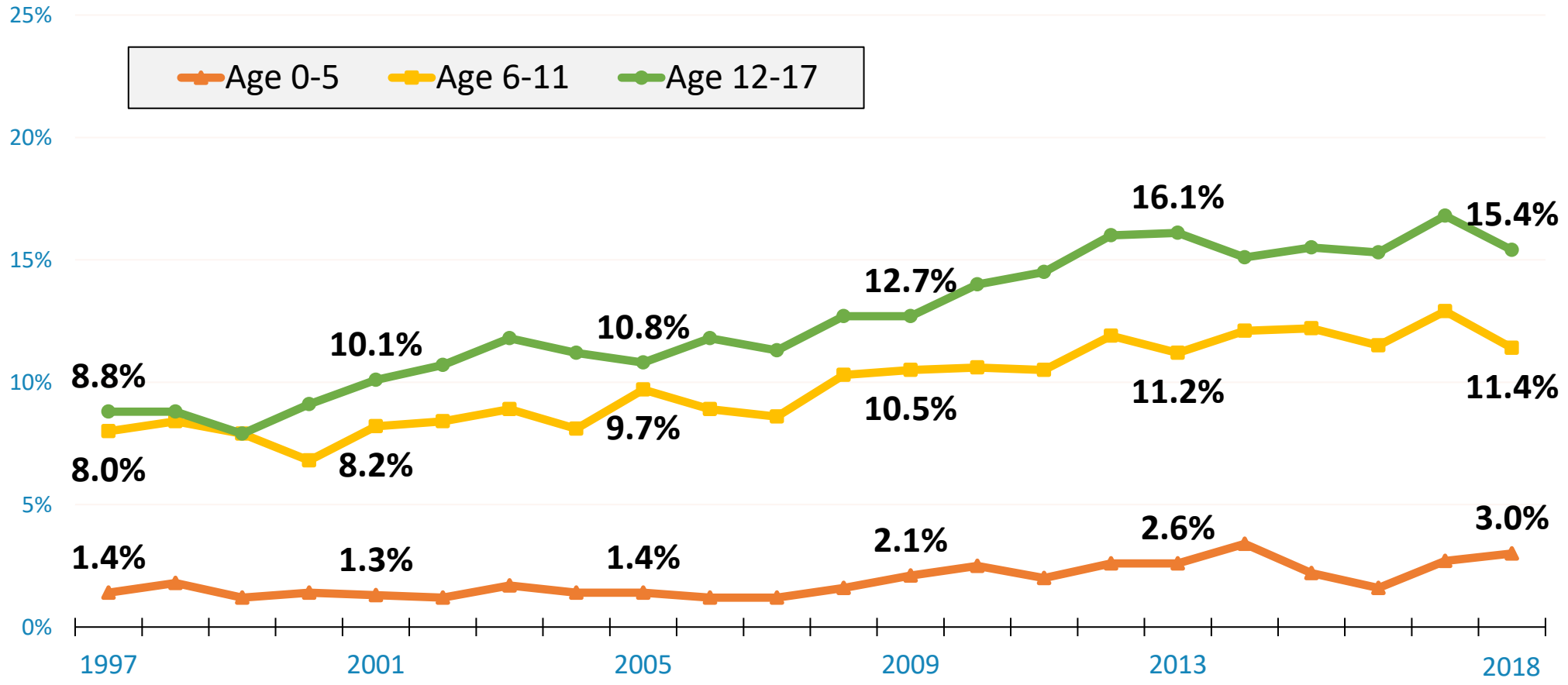
Source: SAMHSA, National Survey on Drug Use and Health online query system (https://pdas.samhsa.gov/#/)

% of US Children (Ages 0-17) with Any Mental Health Diagnosis* by Age Group, 1997-2018



**Mental health diagnosis is defined broadly - it includes adjustment disorders; anxiety disorders; attention-deficit/conduct/disruptive behavior disorders; cognitive disorders; developmental disorders; impulse control disorders; mood disorders; personality disorders; psychotic disorders; alcohol/substance-related disorders; suicide and intentional self-inflicted injury; and other miscellaneous mental health disorders.*

Source: AAP Health Services Research analysis of AHRQ, Medical Expenditure Panel Survey (MEPS) data

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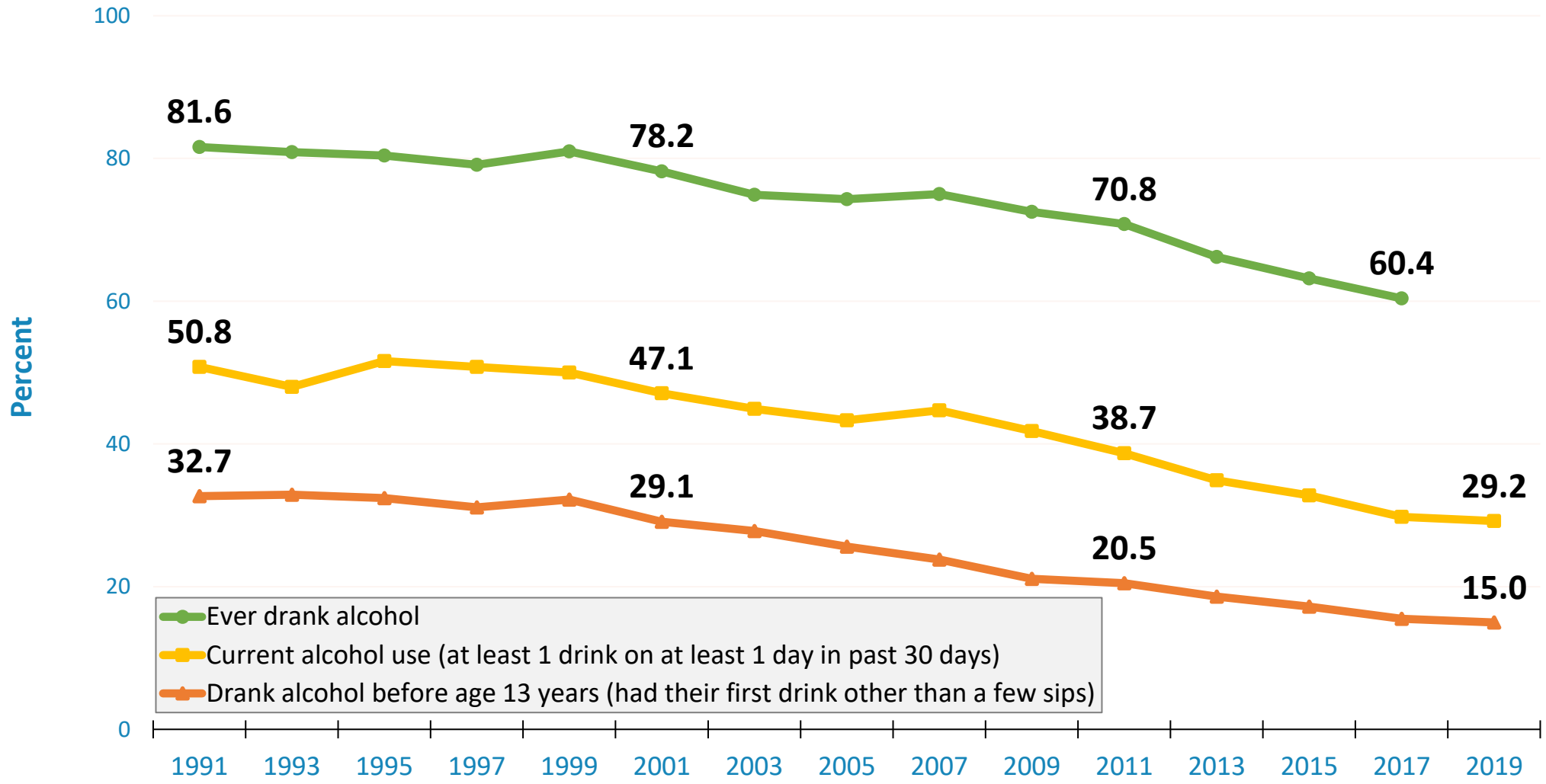
% of US Students (9th - 12th Graders) Who Reported Alcohol Use, 1991-2019



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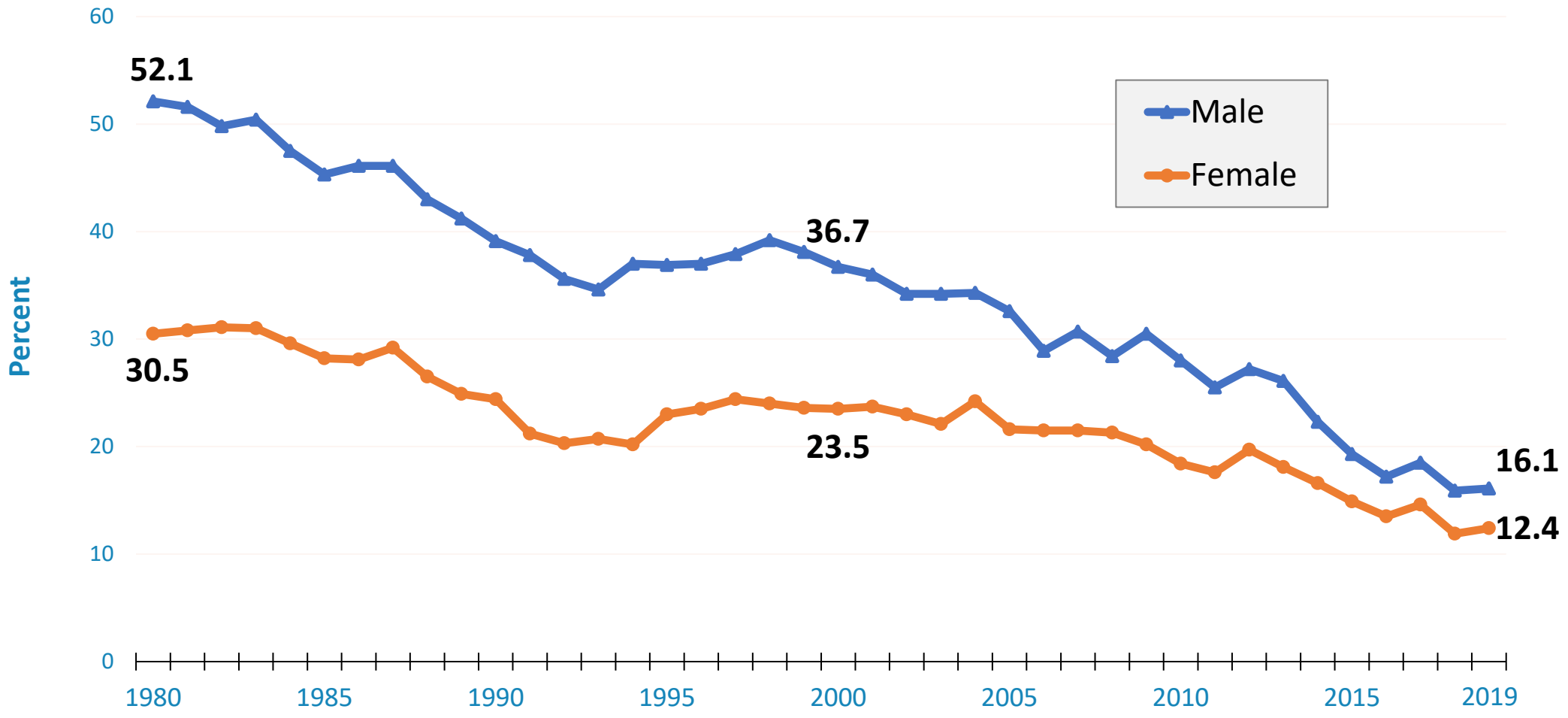
Source: CDC/Division of Adolescent and School Health, YRBSS
(https://www.cdc.gov/healthyyouth/data/yrbs/factsheets/2017_alcohol_trend_yrbs.htm and https://www.cdc.gov/healthyyouth/data/yrbs/factsheets/2019_alcohol_trend_yrbs.htm)

% of US 12th Grade Students Who Reported Having 5 or More Alcoholic Beverages in a Row in the Past 2 Weeks by Gender, 1980-2019



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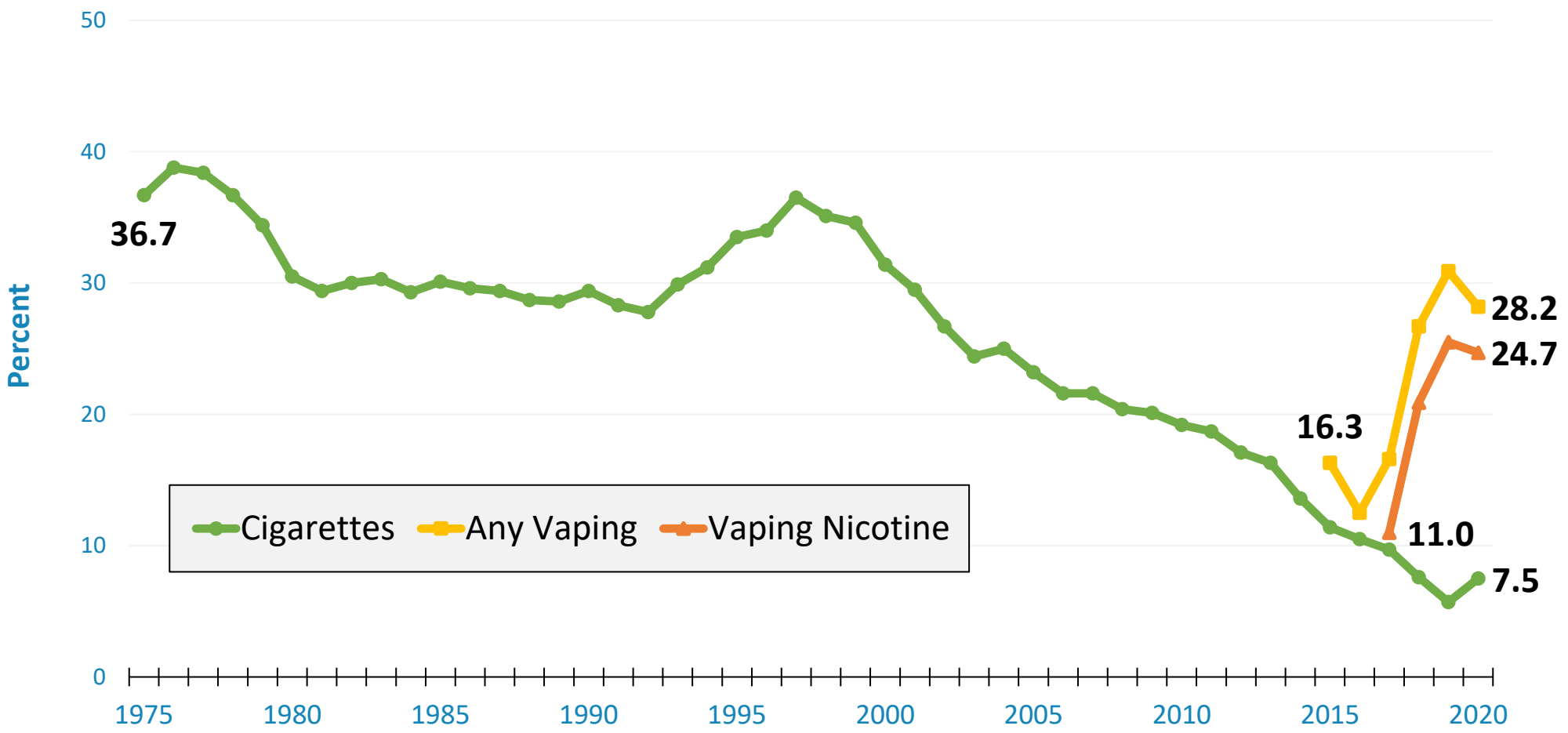
Source: National Institute on Drug Abuse and University of Michigan's Institute for Social Research, Monitoring the Future Survey (https://www.childstats.gov/americaschildren/tables/beh2.asp)

% of US 12th Grade Students Who Reported Cigarette Use and Vaping in the Past 30 Days, 1975-2020



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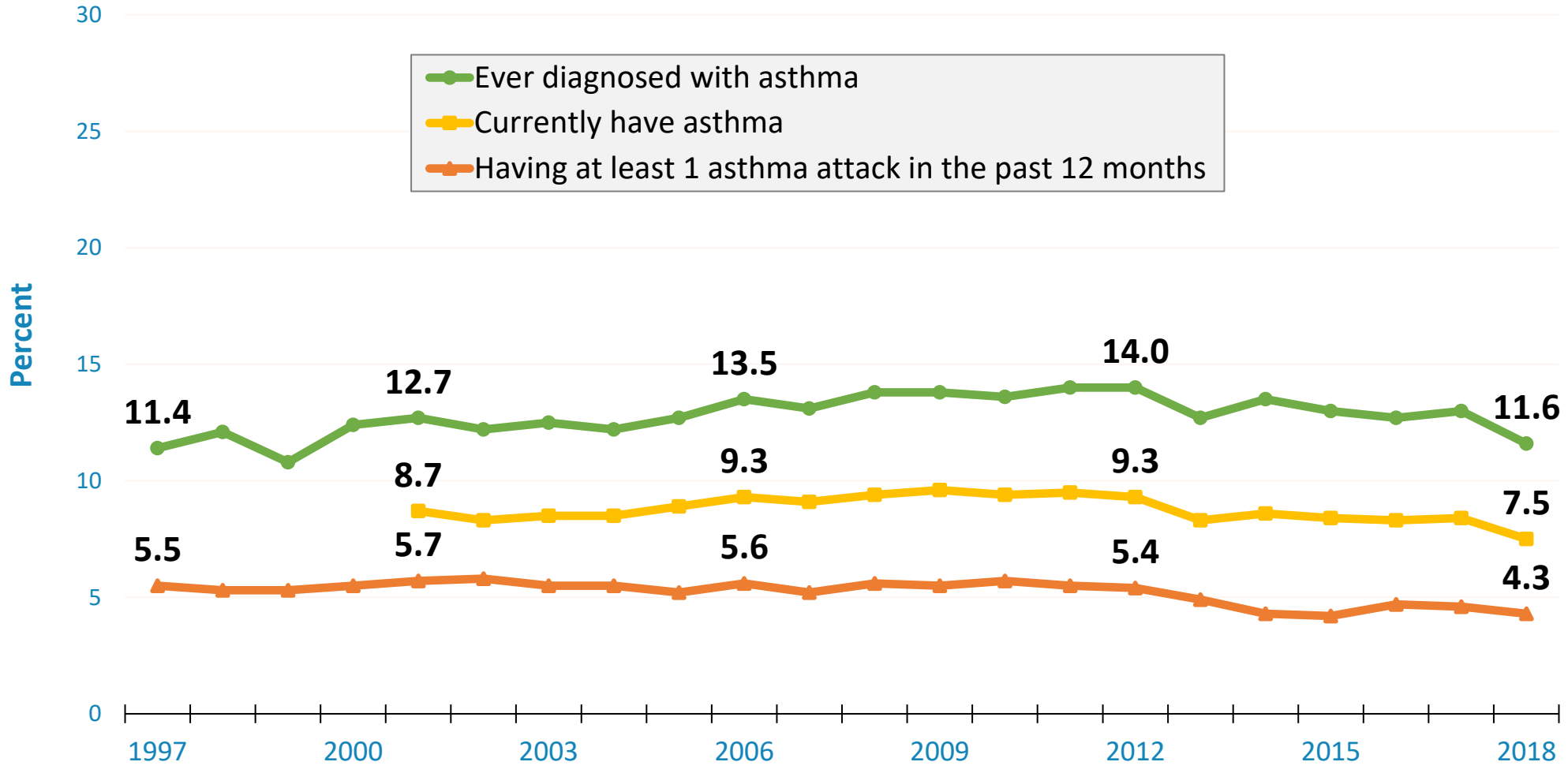
Source: National Institute on Drug Abuse and University of Michigan's Institute for Social Research, Monitoring the Future Survey (http://monitoringthefuture.org/pubs/monographs/mtf-vol1_2018.pdf and http://www.monitoringthefuture.org/data/20data/table3.pdf)

% of US Children (Ages 0-17) with Asthma According to Parent Report, 1997-2018



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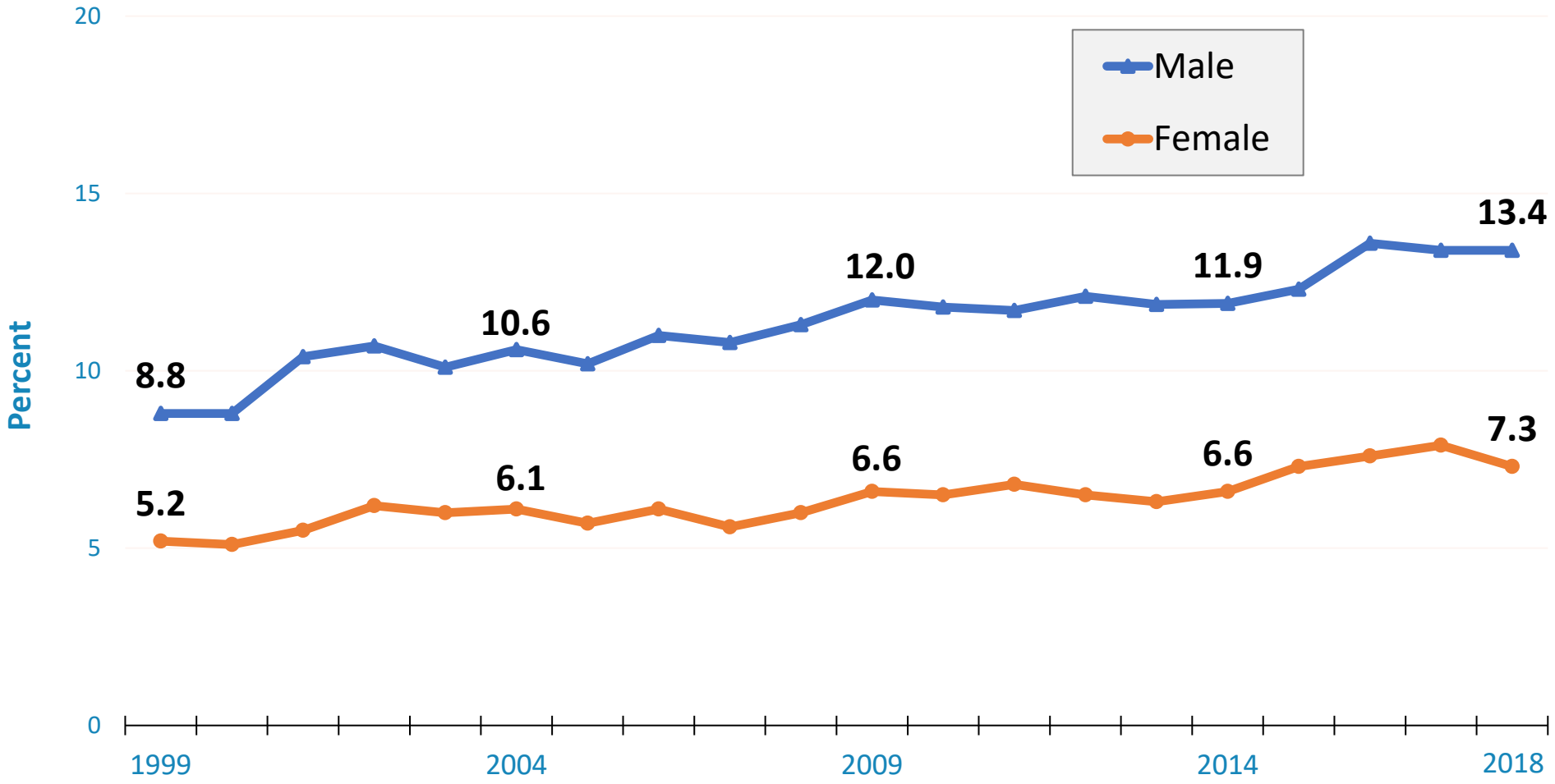
Source: CDC/NCHS, National Health Interview Survey (http://www.childstats.gov/americaschildren/tables/health8a.asp)

% of US Children (Ages 5-17) with a Disability Due to Chronic Health Conditions by Gender According to Parent Report, 1999-2018



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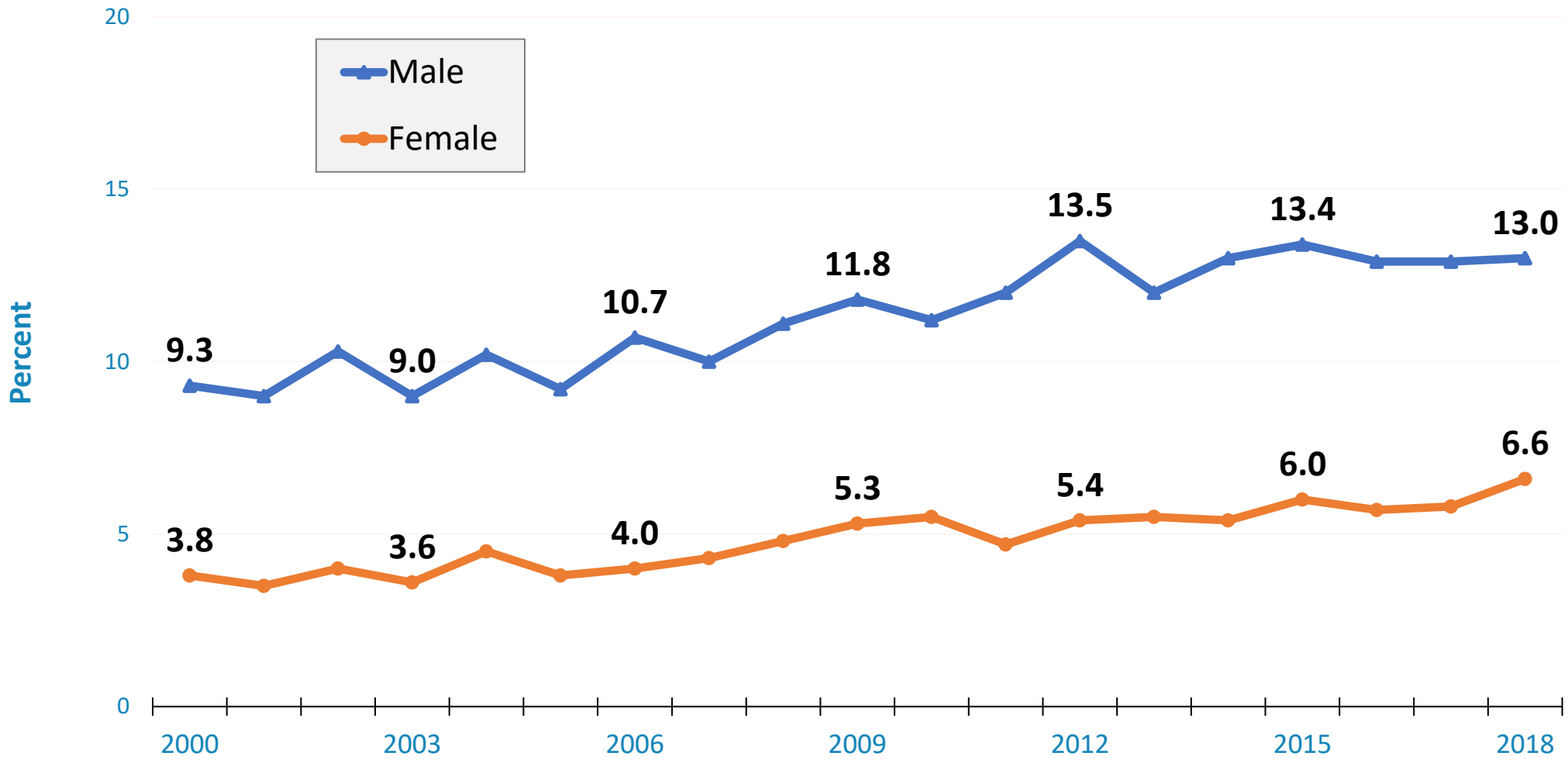
Source: CDC/NCHS, National Health Interview Survey (http://www.childstats.gov/americaschildren/tables/health5.asp)

% of US Children (Ages 3-17) Ever Diagnosed with ADHD by Gender According to Parent Report, 2000-2018



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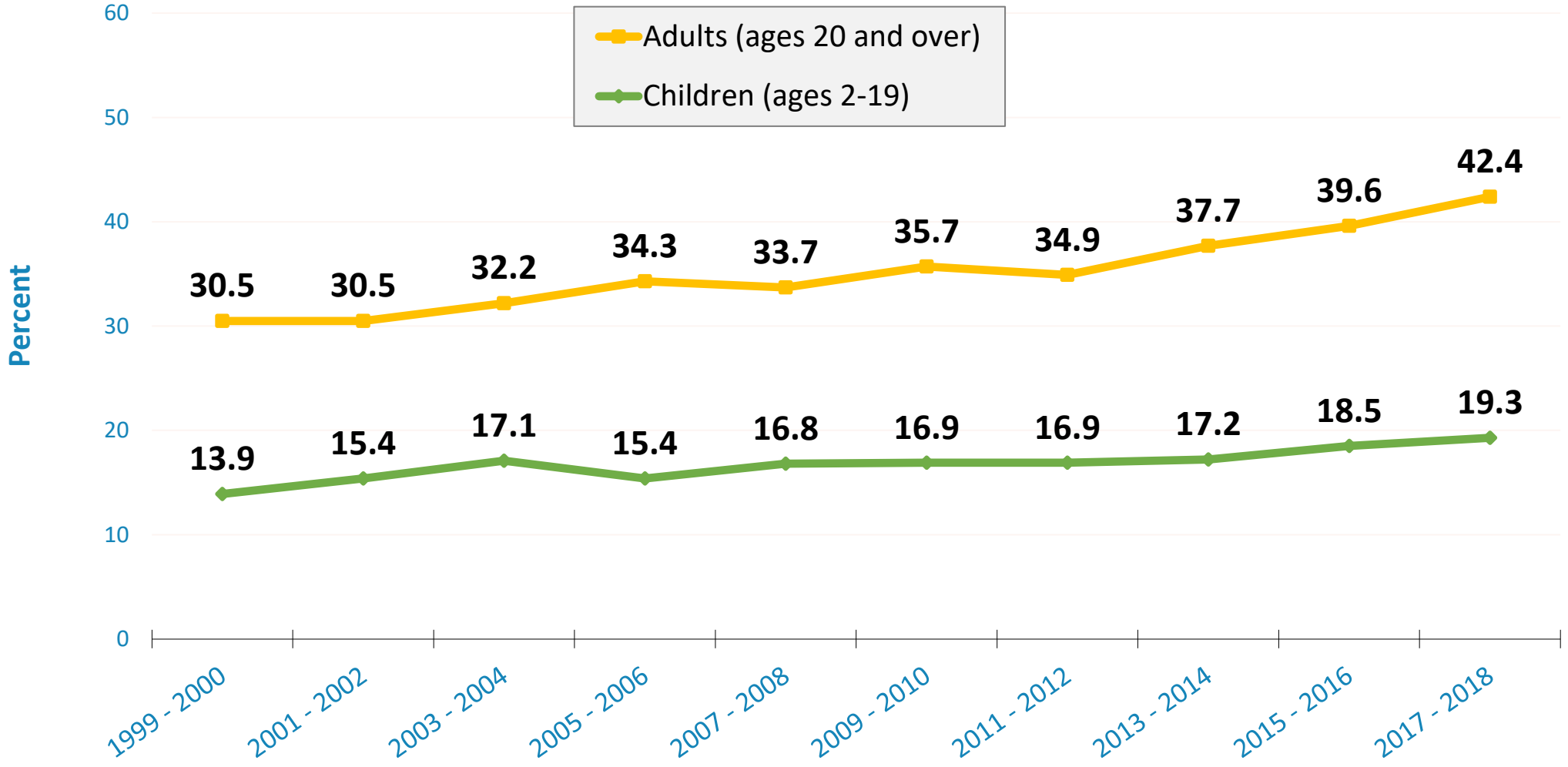
Source: AAP Health Services Research analysis of CDC/NCHS National Health Interview Survey data and Summary Health Statistics Tables (https://www.cdc.gov/nchs/nhis/SHS/tables.htm)

Obesity Prevalence among US Children (Ages 2-19) and Adults, 1999-2018



Source: CDC/NCHS, National Health and Nutrition Examination Survey

(1999-2016: https://www.cdc.gov/nchs/data/databriefs/db288.pdf; 2017-2018: https://www.cdc.gov/nchs/data/databriefs/db360-h.pdf and https://www.cdc.gov/mmwr/volumes/69/wr/mm6913a6.htm?s_cid=mm6913a6_w)

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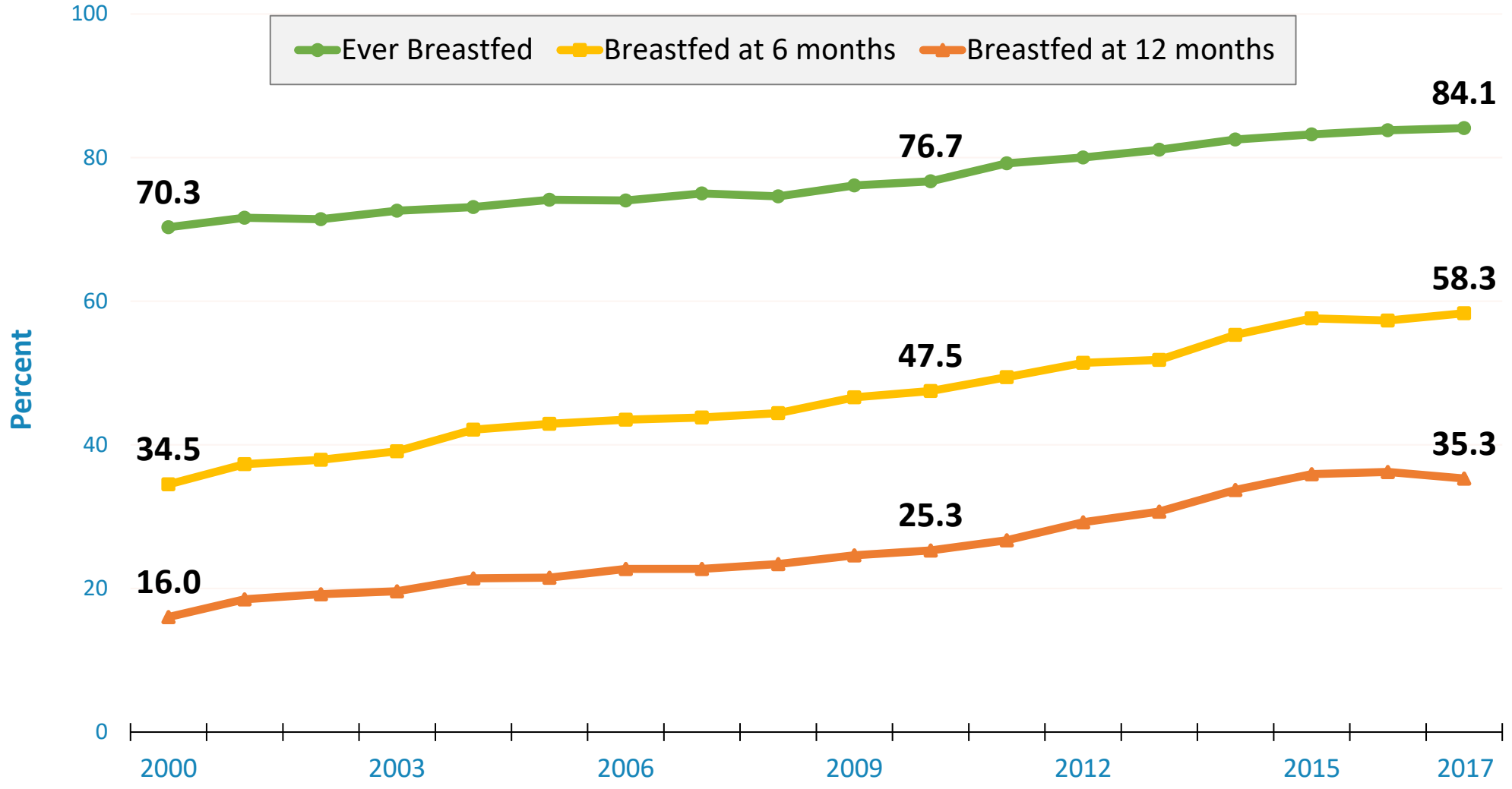
% of US Infants Breastfed by Birth Year of Infant, 2000-2017



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Source: CDC/NCHS, National Immunization Survey (https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html)

Health Takeaways

Improvements:

- Infant mortality rates have gone down
- Fatal and non-fatal unintentional injuries among children have gone down
- Child and adolescent motor vehicle deaths have gone down
- Adolescent alcohol use has gone down
- Adolescent cigarette use has gone down
- % of breastfed children has gone up

Health Takeaways (cont.)

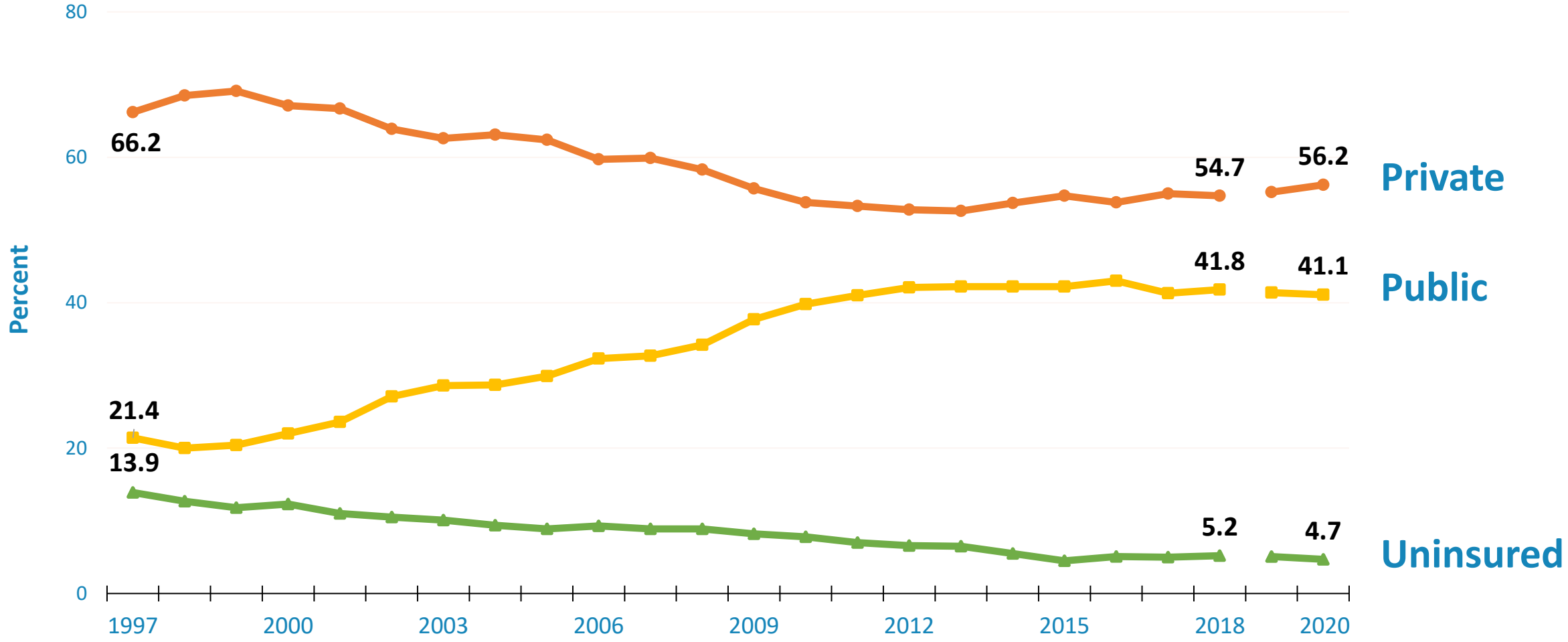
Challenges:

- % of infants born preterm and with low birthweight have remained relatively stable
- Number of infants born with NAS have gone up, but recently started to stabilize
- Teen firearm and homicide death rates have decreased, but recently started to go up
- Suicide death rates among teenagers have started to go up
- Youth-reported major depressive episodes have gone up
- Mental health diagnoses have gone up
- Adolescent vaping rates have gone up
- Asthma rates among children have remained stable
- % of children with a disability has gone up
- % of children diagnosed with ADHD has gone up
- Obesity rates among children have gone up

3. Health Care Trends

- Health insurance coverage
- Usual source of health care
- Immunizations
- Well-child visits
- Dental visits

% of US Children (Ages 0-17) with Health Insurance by Coverage Type at Time of Interview, 1997-2020*



**Estimates for 2019 and beyond are not directly comparable to previous years due to a survey re-design; estimate for 2020 includes Jan-June only.*

Source: CDC/NCHS, National Health Interview Survey

(1997-2010: https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201106.pdf; 2011-2018: https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201905.pdf and 2019-2020: https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur202102-508.pdf)

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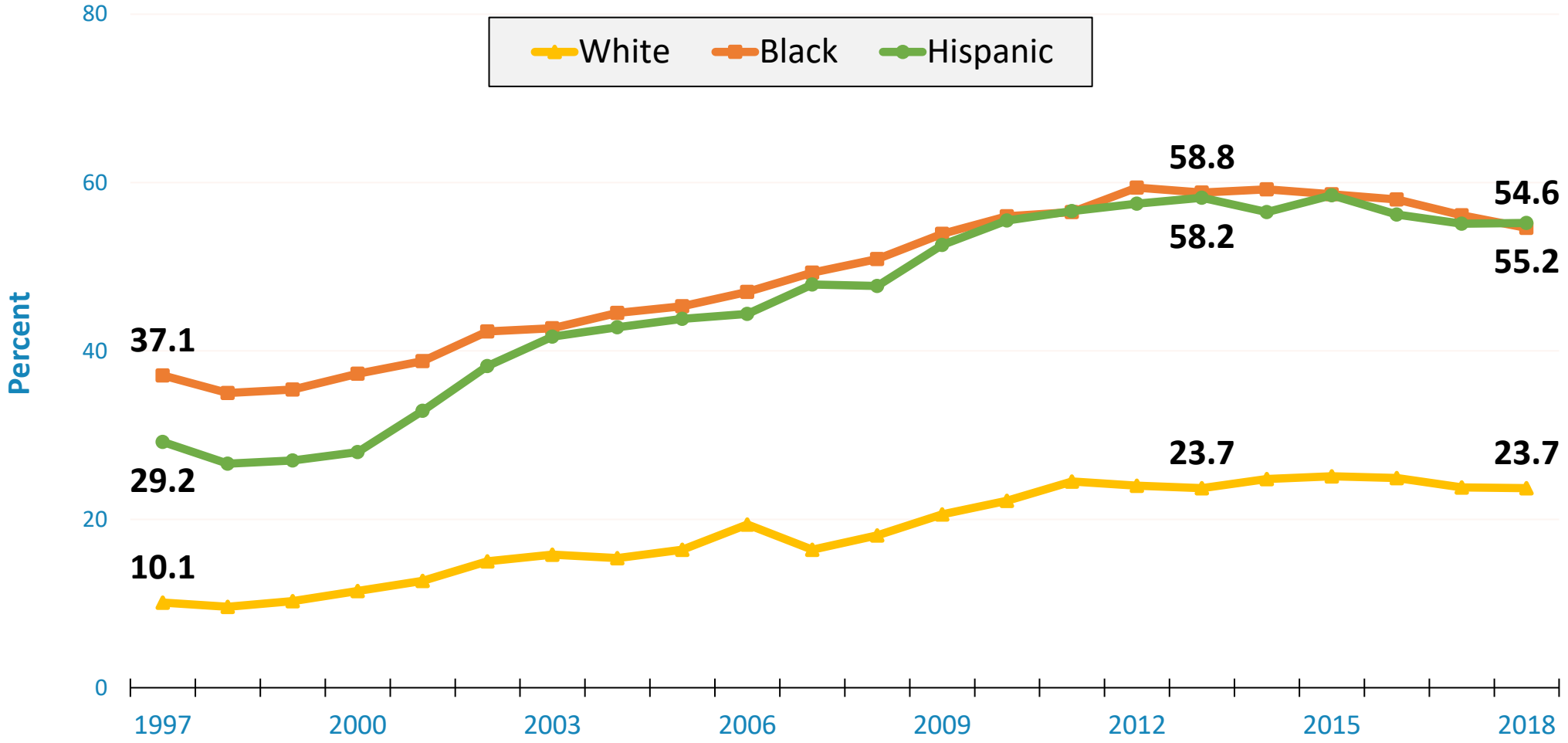
% of US Children (Ages 0-17) with Public Health Insurance Coverage at Time of Interview by Race/Ethnicity, 1997-2018



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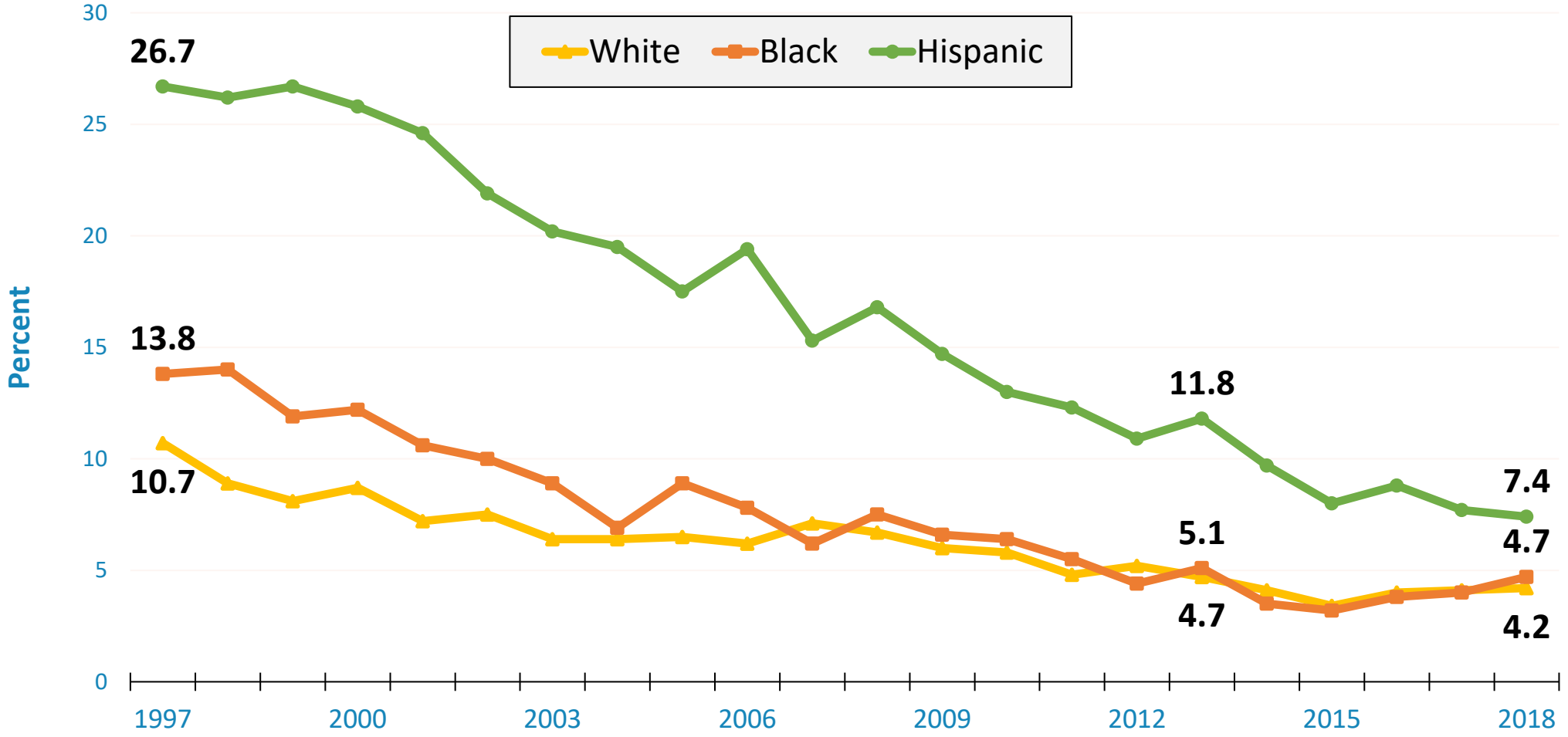
Source: CDC/NCHS, National Health Interview Survey (http://www.childstats.gov/americaschildren/tables/hc1.asp)

% of US Children (Ages 0-17) with No Health Insurance Coverage at Time of Interview by Race/Ethnicity, 1997-2018



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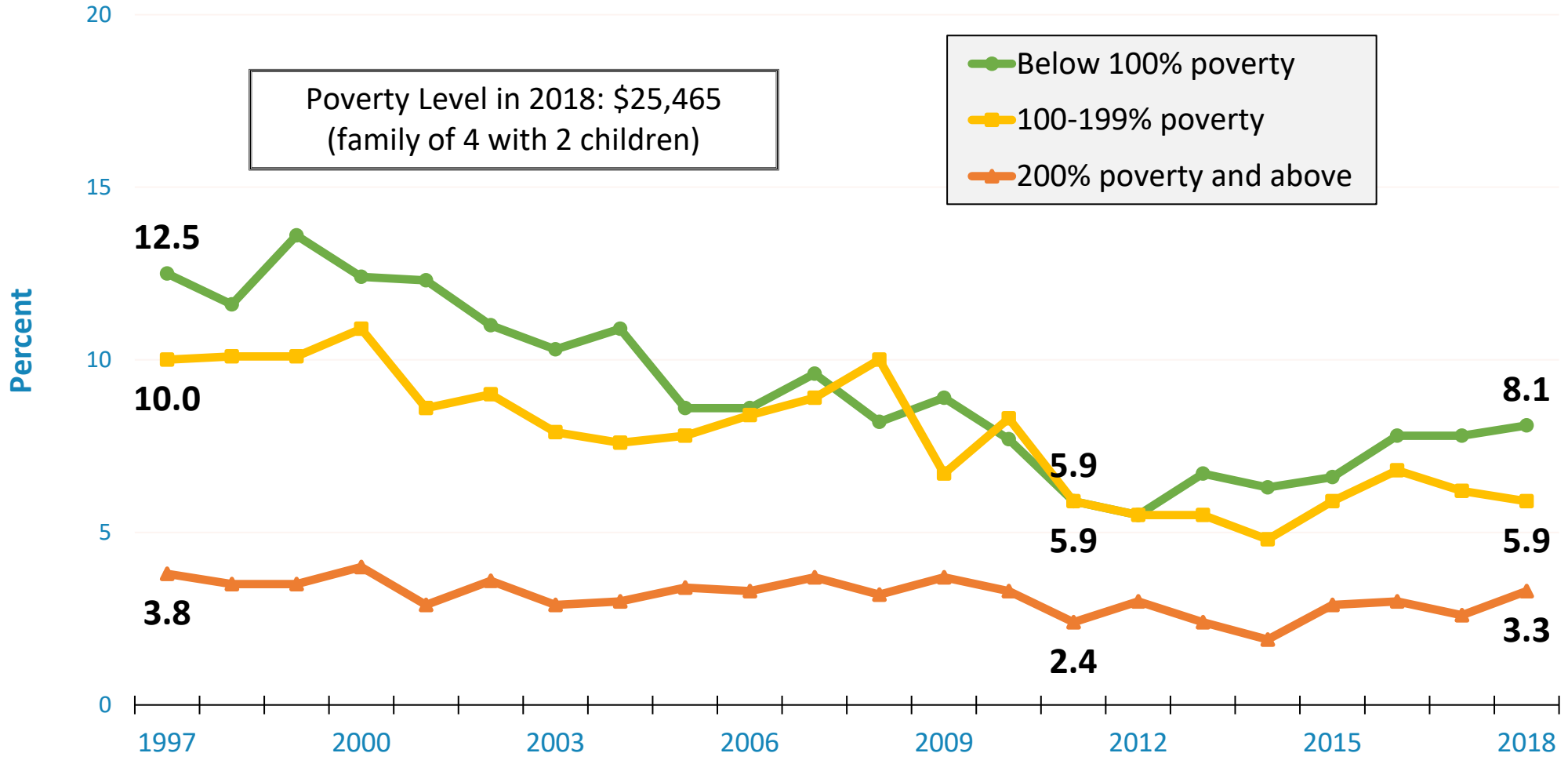
Source: CDC/NCHS, National Health Interview Survey (http://www.childstats.gov/americaschildren/tables/hc1.asp)

% of US Children (Ages 0-17) with No Usual Source of Health Care by Poverty Status According to Parent Report, 1997-2018



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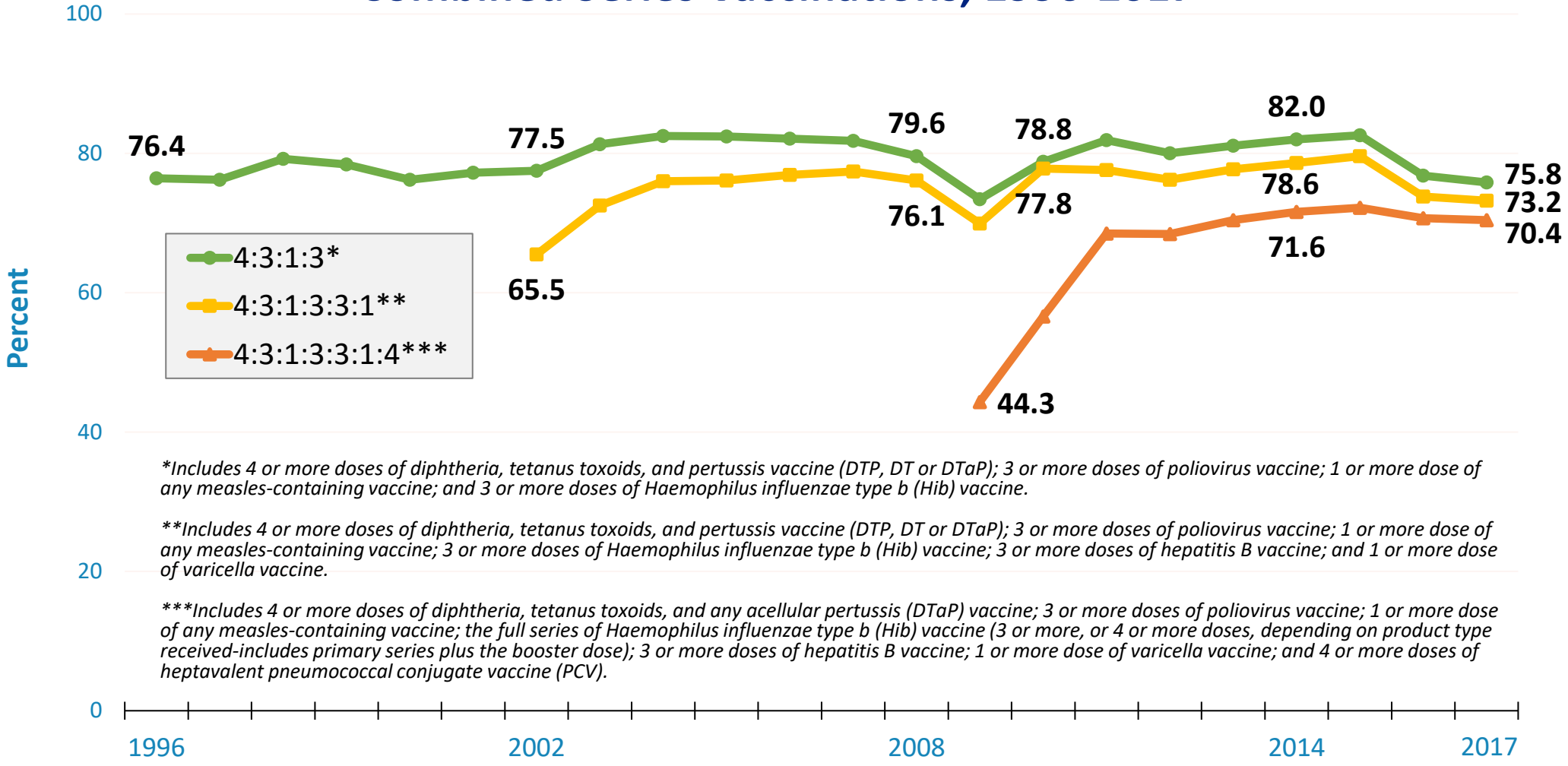
Source: CDC/NCHS, National Health Interview Survey (http://www.childstats.gov/americaschildren/tables/hc2.asp)

% of US Children (Ages 19-35 Months) Receiving Combined Series Vaccinations, 1996-2017



Includes 4 or more doses of diphtheria, tetanus toxoids, and pertussis vaccine (DTP, DT or DTaP); 3 or more doses of poliovirus vaccine; 1 or more dose of any measles-containing vaccine; and 3 or more doses of Haemophilus influenzae type b (Hib) vaccine.

***Includes 4 or more doses of diphtheria, tetanus toxoids, and pertussis vaccine (DTP, DT or DTaP); 3 or more doses of poliovirus vaccine; 1 or more dose of any measles-containing vaccine; 3 or more doses of Haemophilus influenzae type b (Hib) vaccine; 3 or more doses of hepatitis B vaccine; and 1 or more dose of varicella vaccine.*

****Includes 4 or more doses of diphtheria, tetanus toxoids, and any acellular pertussis (DTaP) vaccine; 3 or more doses of poliovirus vaccine; 1 or more dose of any measles-containing vaccine; the full series of Haemophilus influenzae type b (Hib) vaccine (3 or more, or 4 or more doses, depending on product type received-includes primary series plus the booster dose); 3 or more doses of hepatitis B vaccine; 1 or more dose of varicella vaccine; and 4 or more doses of heptavalent pneumococcal conjugate vaccine (PCV).*

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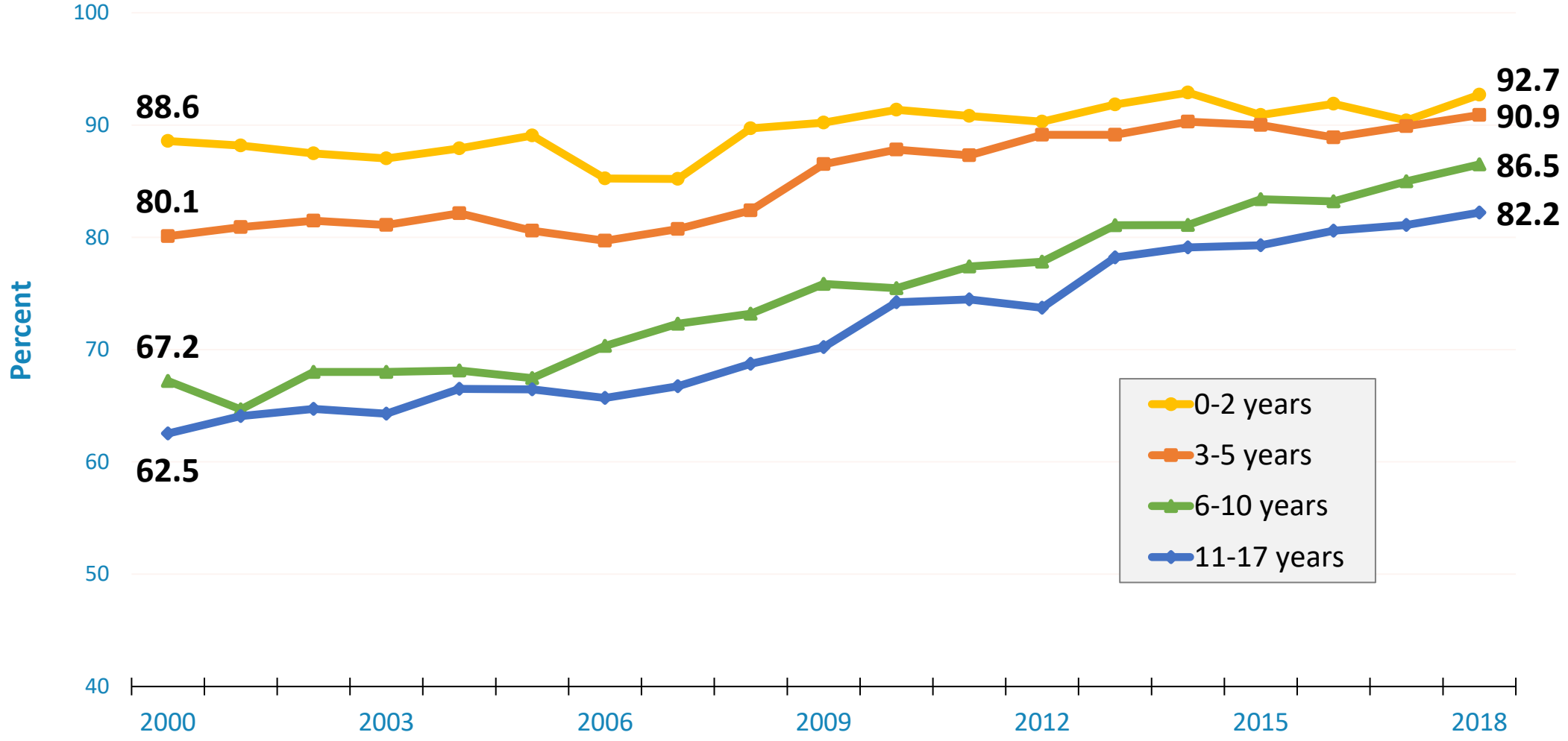
Source: CDC/NCHS, National Immunization Survey (https://www.childstats.gov/americaschildren/tables/hc3a.asp)

% of US Children (Ages 0-17) Who Received a Well-Child Visit in the Past 12 Months by Age According to Parent Report, 2000-2018



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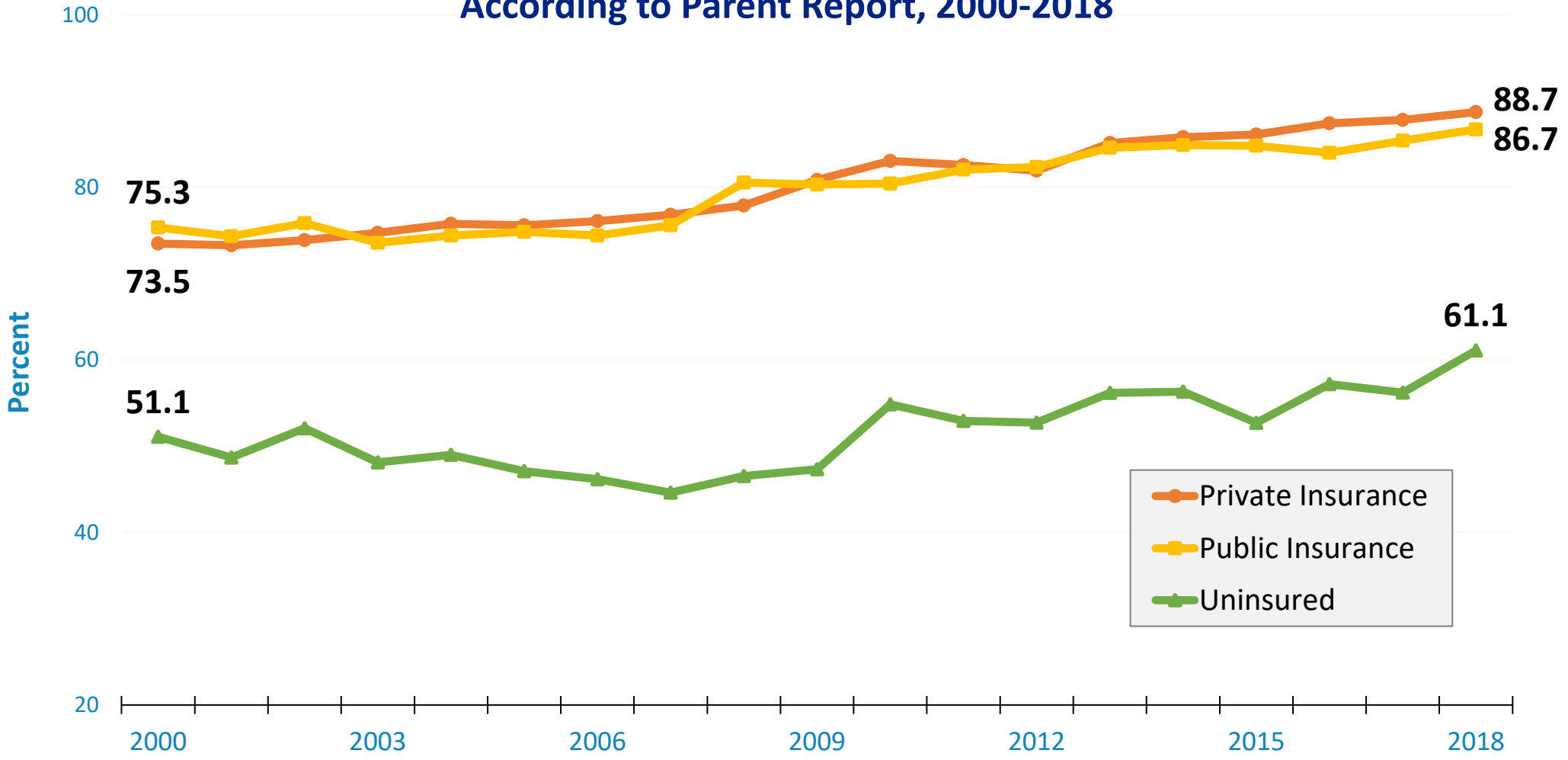
Source: AAP Health Services Research analysis of CDC/NCHS, National Health Interview Survey data

% of US Children (Ages 0-17) Who Received a Well-Child Visit in the Past 12 Months by Type of Health Insurance According to Parent Report, 2000-2018



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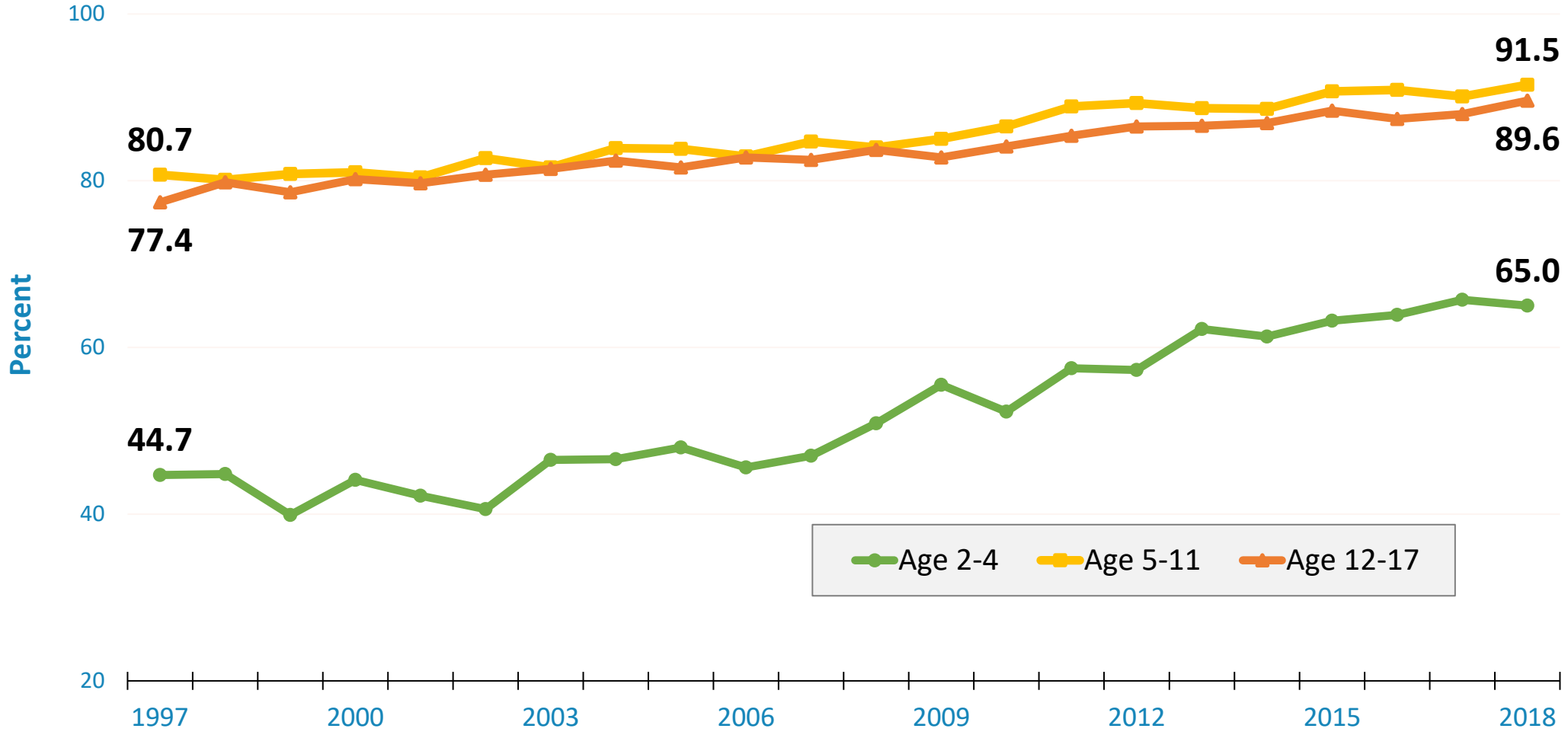
Source: AAP Health Services Research analysis of CDC/NCHS, National Health Interview Survey data

% of US Children (Ages 2-17) with a Dental Visit in the Past Year by Age According to Parent Report, 1997-2018



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Source: CDC/NCHS, National Health Interview Survey (https://www.childstats.gov/americaschildren/tables/hc4a.asp)

Health Care Takeaways

- % of uninsured children has gone down, but recently started to stabilize
- % of children with public insurance has gone up, but started to stabilize
- % of children with no usual source of care has gone down
- Immunization rates have gone up and were stable, but recently started to go down
- % of children with well-child visits has gone up
- % of children with dental visits has gone up

For more information, please contact
Liz Gottschlich, MA or Kandyce Larson, PhD
in Health Services Research

Slides are posted on the intranet
(Online Documents → Research → General Documents)