

# **California Tobacco Facts & Figures 2016**

Over 25 Years of Tobacco Control in California

California Department of Public Health  
California Tobacco Control Program

September 2016  
Pre-Print Version

## **Disclaimer**

Figures displayed in this document are from the pre-print version of California Tobacco Facts and Figures 2016 with the final version subject to change.

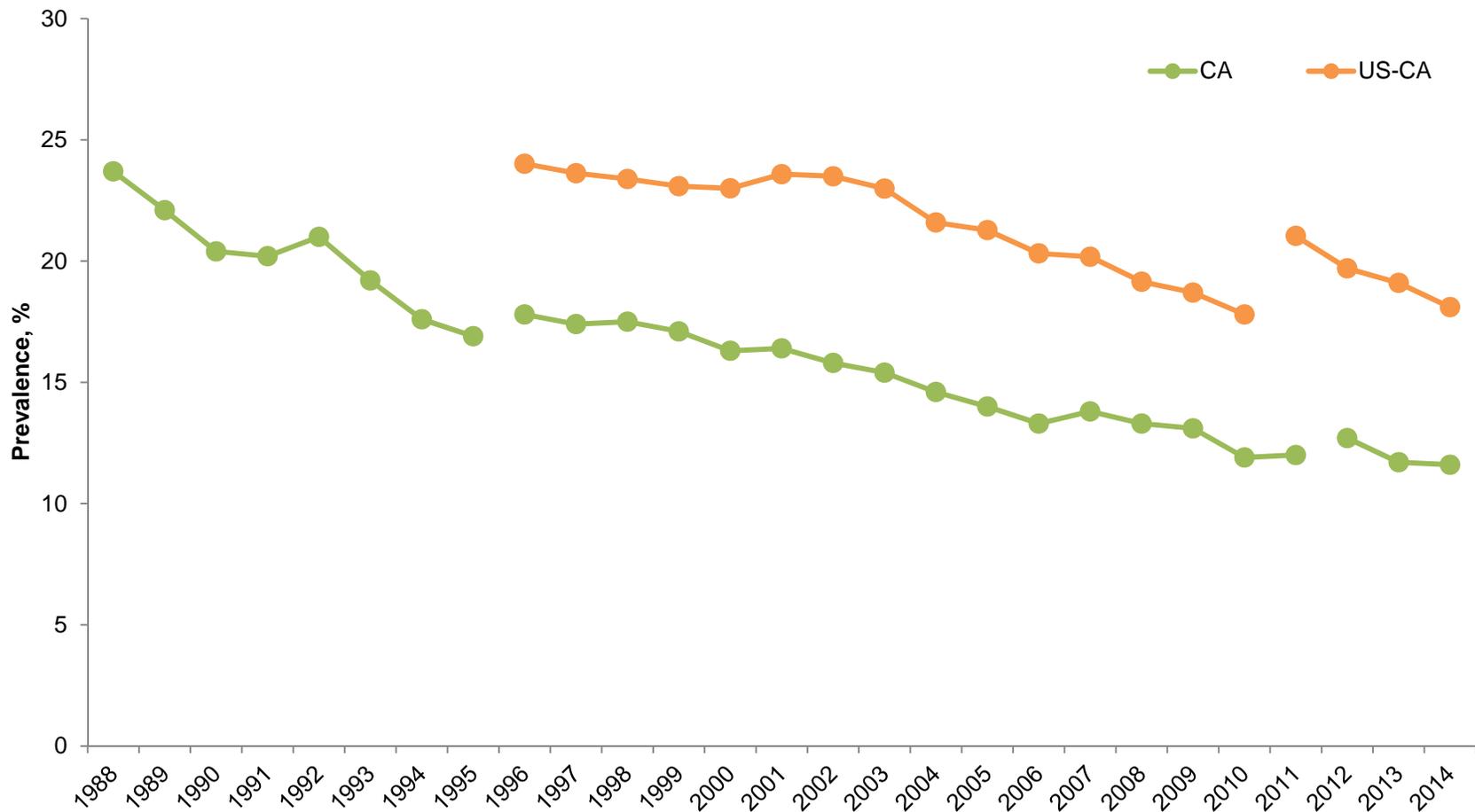
SECTION 1

# **CIGARETTE SMOKING PREVALENCE**

SUBSECTION 1A

# **ADULT SMOKING RATES – HISTORICAL TRENDS**

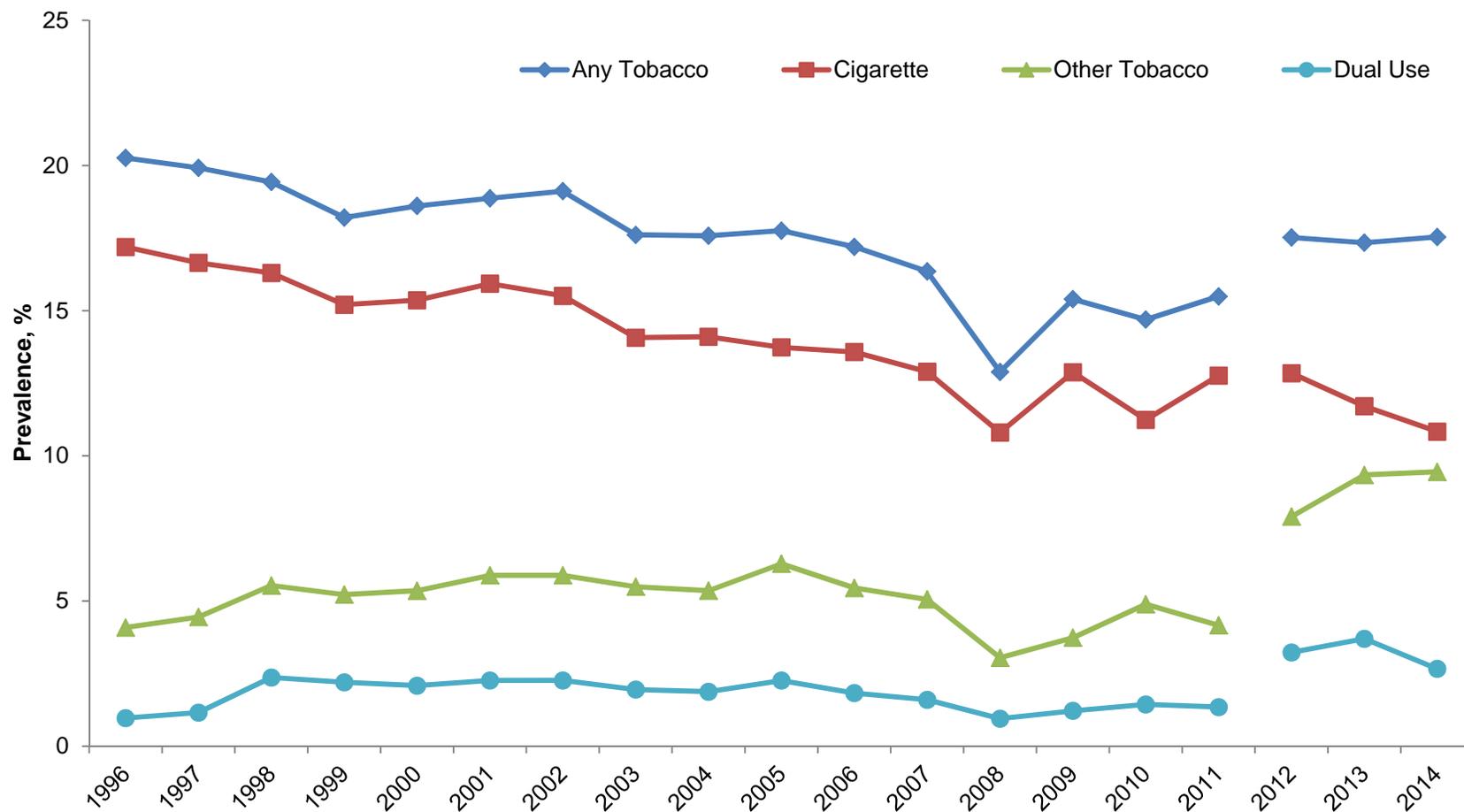
# Figure 1.1. Adult cigarette smoking prevalence within California and the rest of the United States (US-CA), 1988–2014



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. An adjustment was made to address the change of smoking definition in 1996 that included more occasional smokers. The weighting methodology changed in 2012 for California but changed for the rest of the United States in 2011. Weighted to the 2000 California population from 1988–2011 and to the 2010 California population since 2012. The U.S. estimate does not include California adults.

Source: Behavioral Risk Factor Surveillance System, 1988–2014.

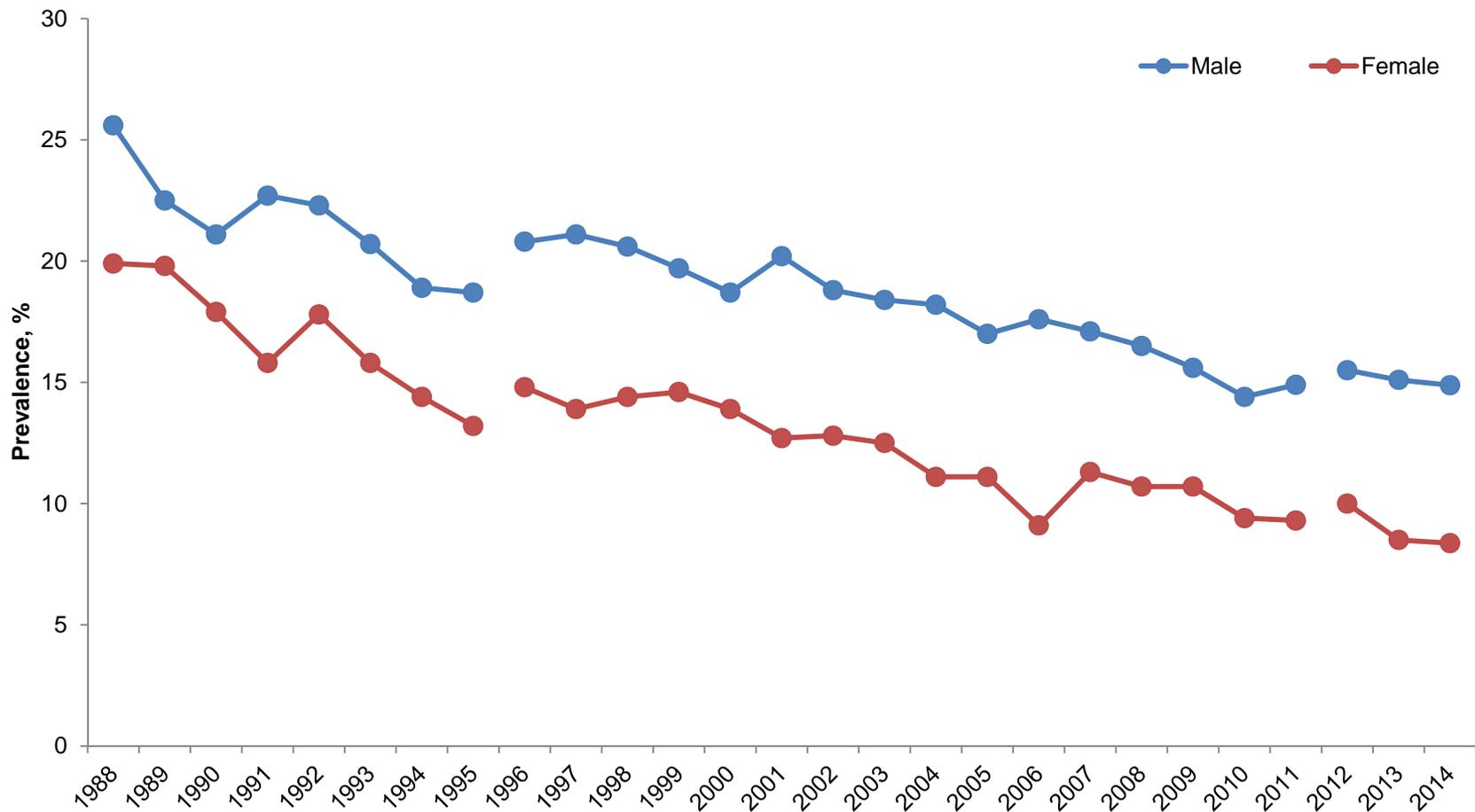
## Figure 1.2. California adult tobacco use trends, 1996–2014



Note: Respondents aged 18+ were asked to report current cigarette, cigar/cigarillo, pipe, chew, snuff, and snus behavior. Weighted to the 2000 California population from 1988–2011 and to the 2010 California population since 2012. From 1996–2011, current tobacco use is defined as: 1) any tobacco (cigarettes, cigars, little cigars/cigarillos, pipe, chew, snuff, and snus); 2) other tobacco (cigars, little cigars/cigarillos, pipe, chew, snuff, and snus); and 3) dual use (cigarette users who also use another tobacco product). From 2012–2014, electronic cigarettes and hookah pipe were included in the tobacco definition.

Source: Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey, 1996–2014.

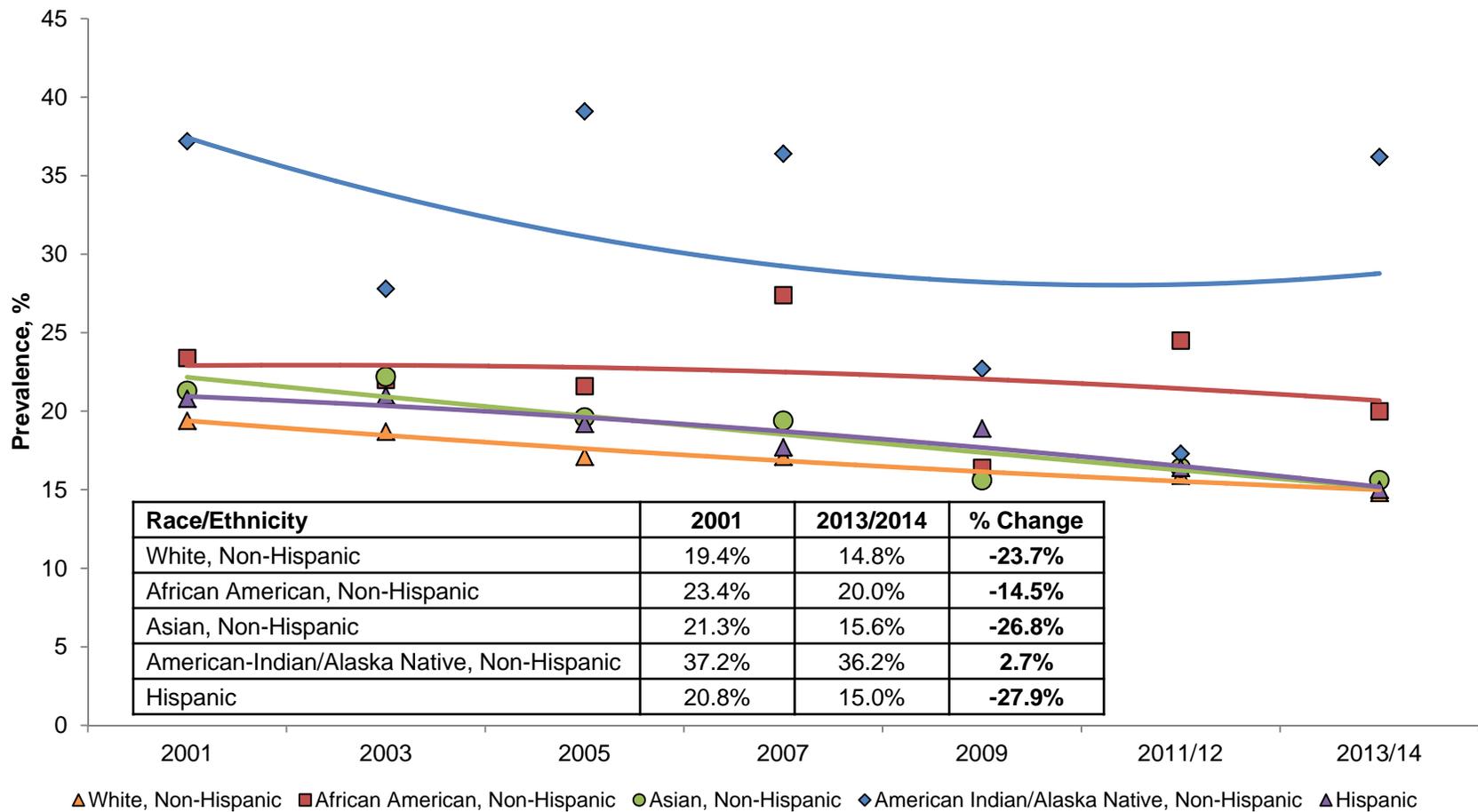
# Figure 1.3. Adult cigarette smoking prevalence within California by gender, 1988–2014



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. An adjustment was made to address the change of smoking definition in 1996 that included more occasional smokers. The weighting methodology changed in 2012. Weighted to the 2000 California population from 1988–2011 and to the 2010 California population since 2012.

Source: Behavioral Risk Factor Surveillance System, 1988–2014.

# Figure 1.4. Adult smoking prevalence among California males by race/ethnicity, 2001–2014

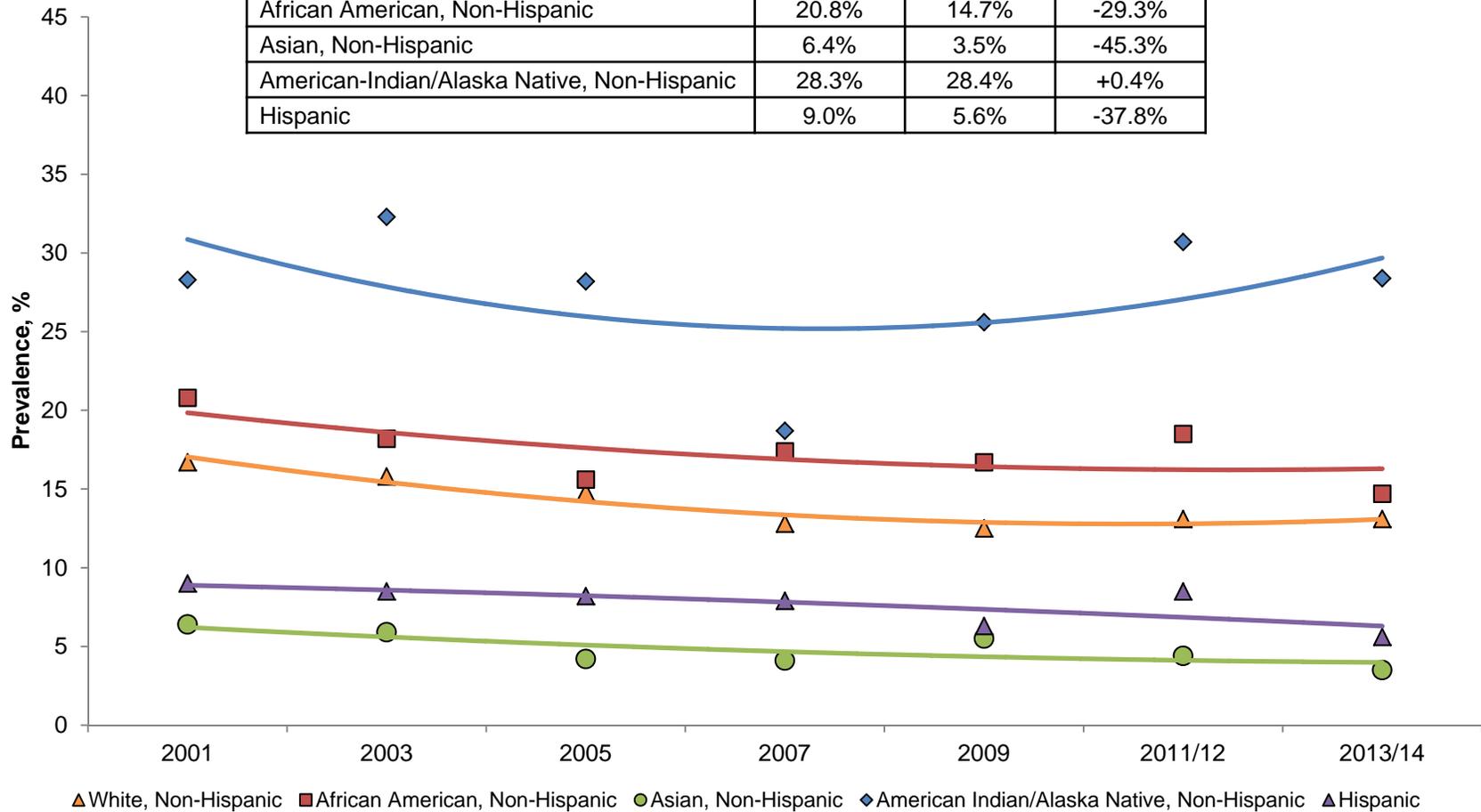


Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. California Health Interview Survey is a continuous survey since 2011 and was a biennial survey from 2001–2009. Data for 2011 and 2012 were pooled together. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2001–2014.

**Figure 1.5. Adult smoking prevalence among California females by race/ethnicity, 2001–2014**

Race/Ethnicity	2001	2013/2014	% Change
White, Non-Hispanic	16.7%	13.1%	-21.6%
African American, Non-Hispanic	20.8%	14.7%	-29.3%
Asian, Non-Hispanic	6.4%	3.5%	-45.3%
American-Indian/Alaska Native, Non-Hispanic	28.3%	28.4%	+0.4%
Hispanic	9.0%	5.6%	-37.8%



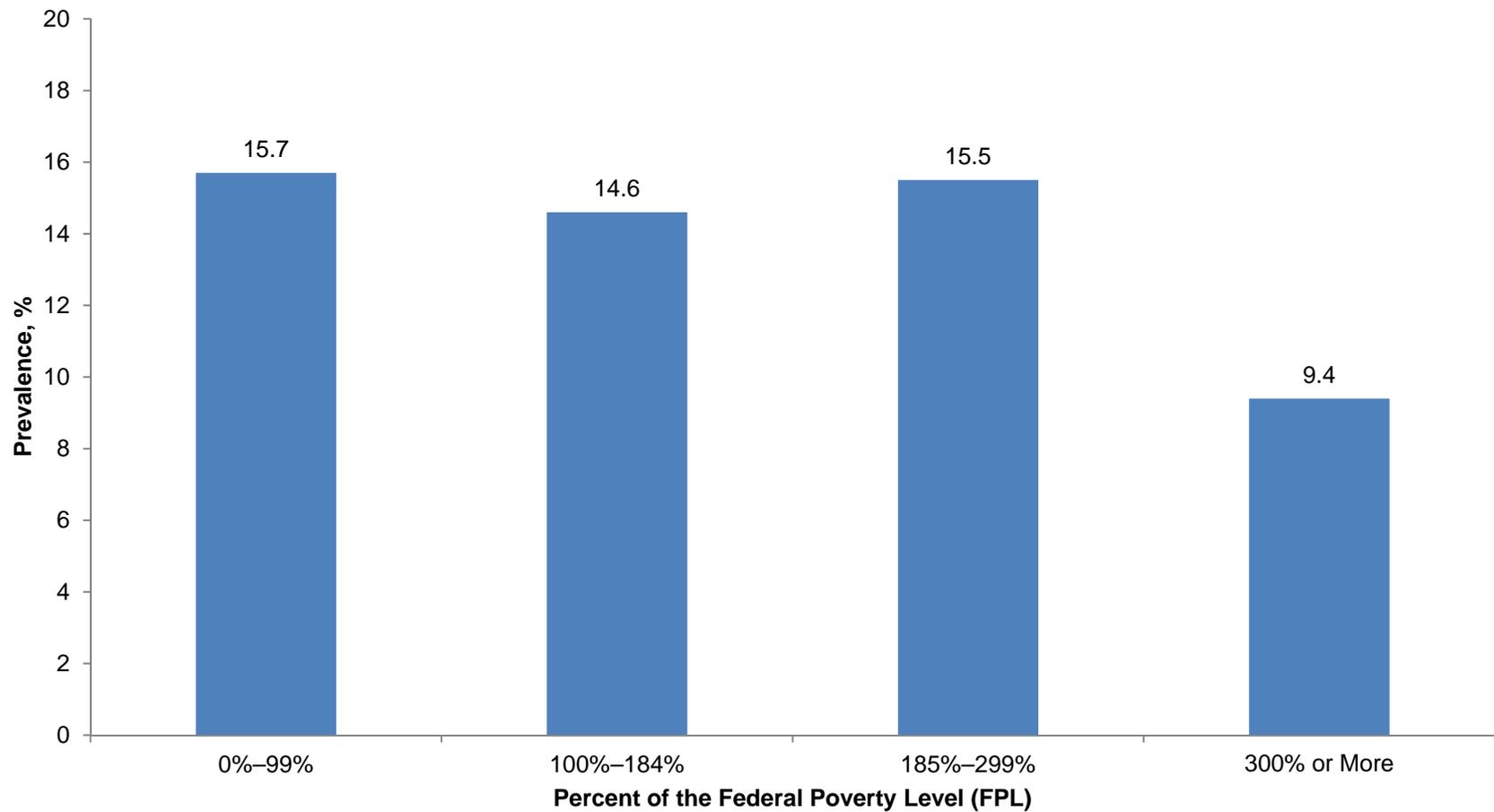
Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. California Health Interview Survey is a continuous survey since 2011 and was a biennial survey from 2001–2009. Data for 2011 and 2012 were pooled together. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2001–2014.

SUBSECTION 1B

# **ADULT SMOKING RATES – YEARLY SNAPSHOT**

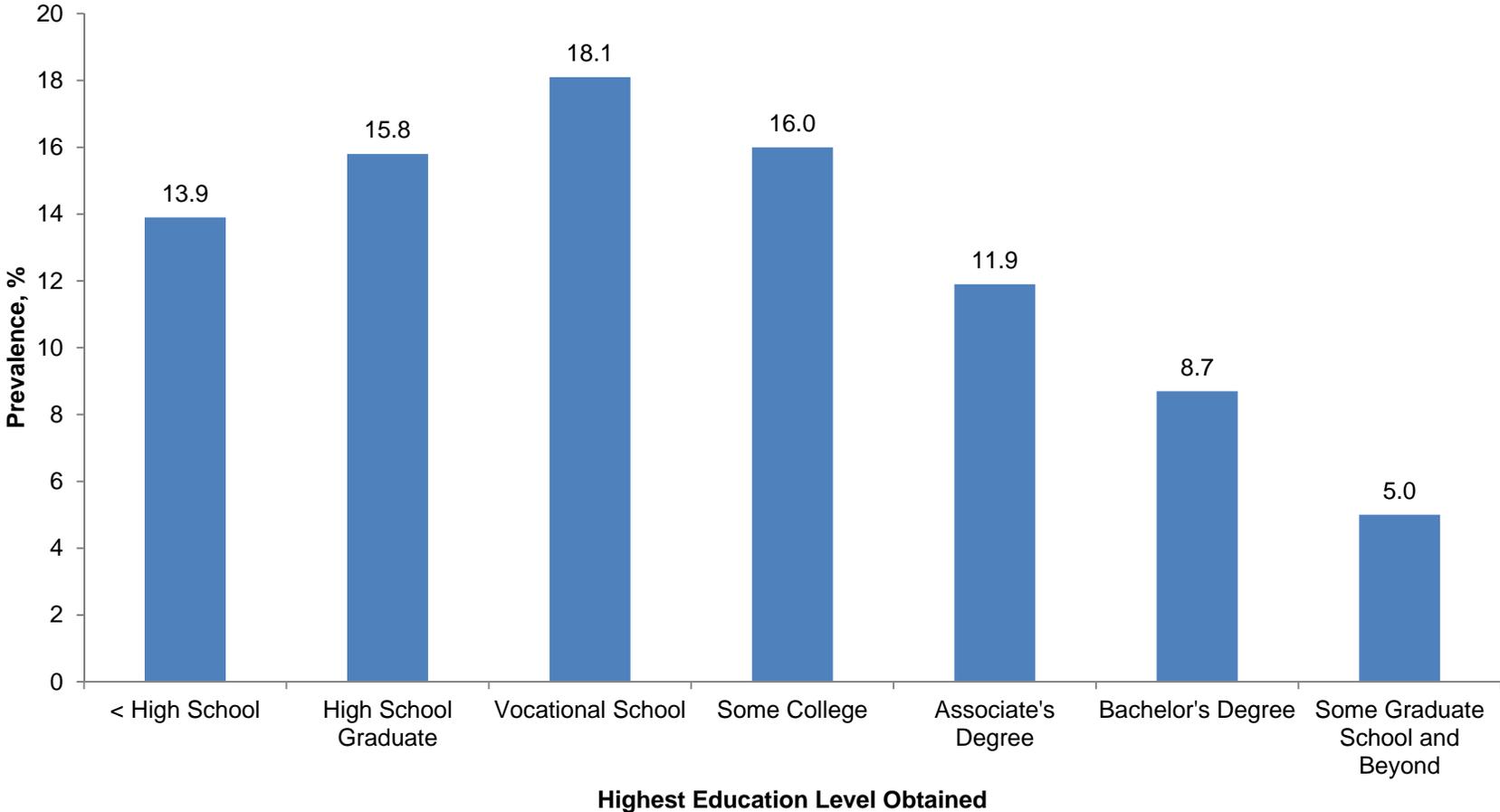
**Figure 1.6. California adult smoking prevalence by percent of the federal poverty level (FPL) by income, 2013–2014**



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior and annual household income (poverty level derived from household income). Data for 2013 and 2014 were pooled together.

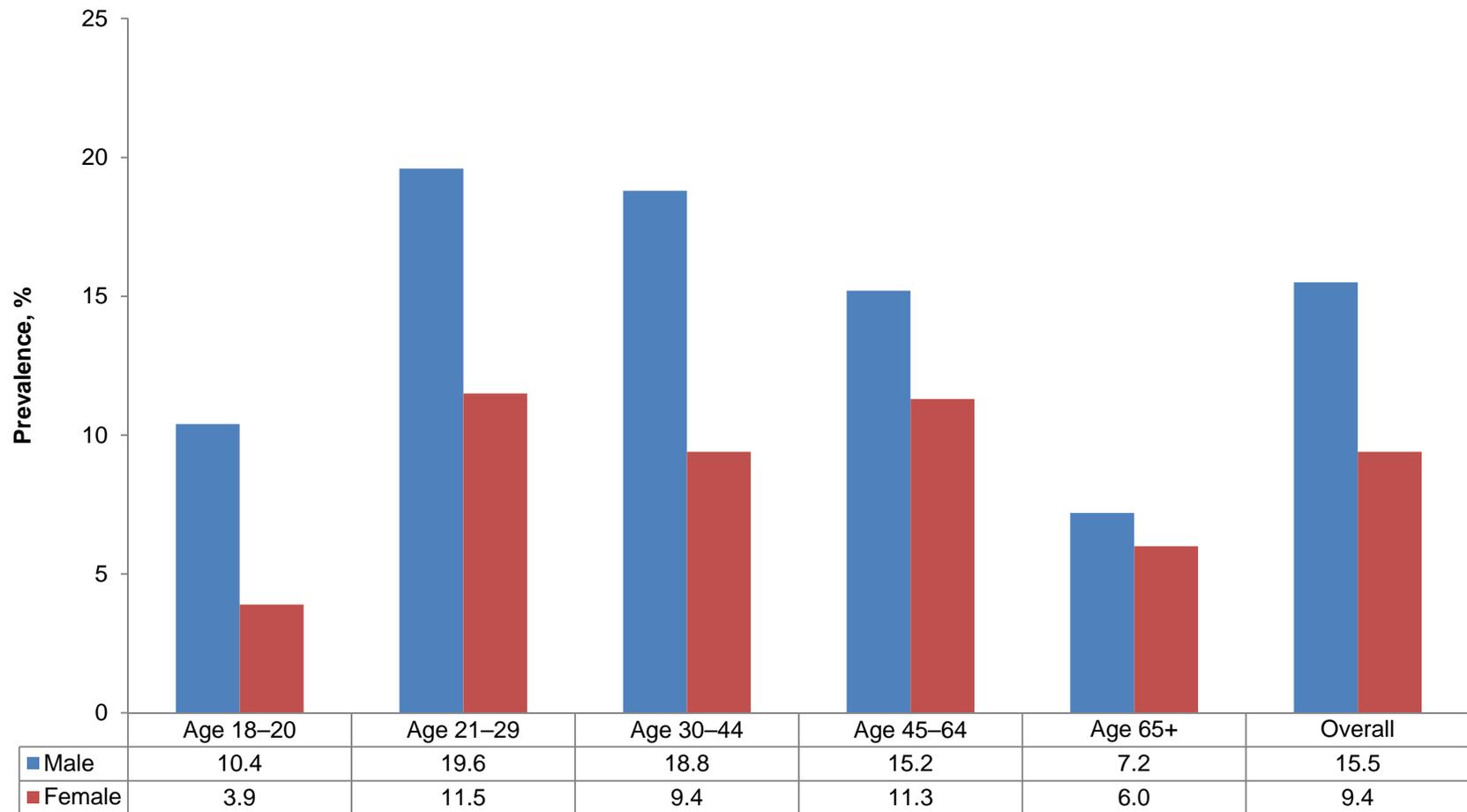
Source: California Health Interview Survey, 2013–2014.

# Figure 1.7. California adult smoking prevalence by educational level, 2013–2014



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior and highest grade of education completed. Data for 2013 and 2014 were pooled together.  
Source: California Health Interview Survey, 2013–2014.

## Figure 1.8. California adult smoking prevalence by age and gender, 2013–2014



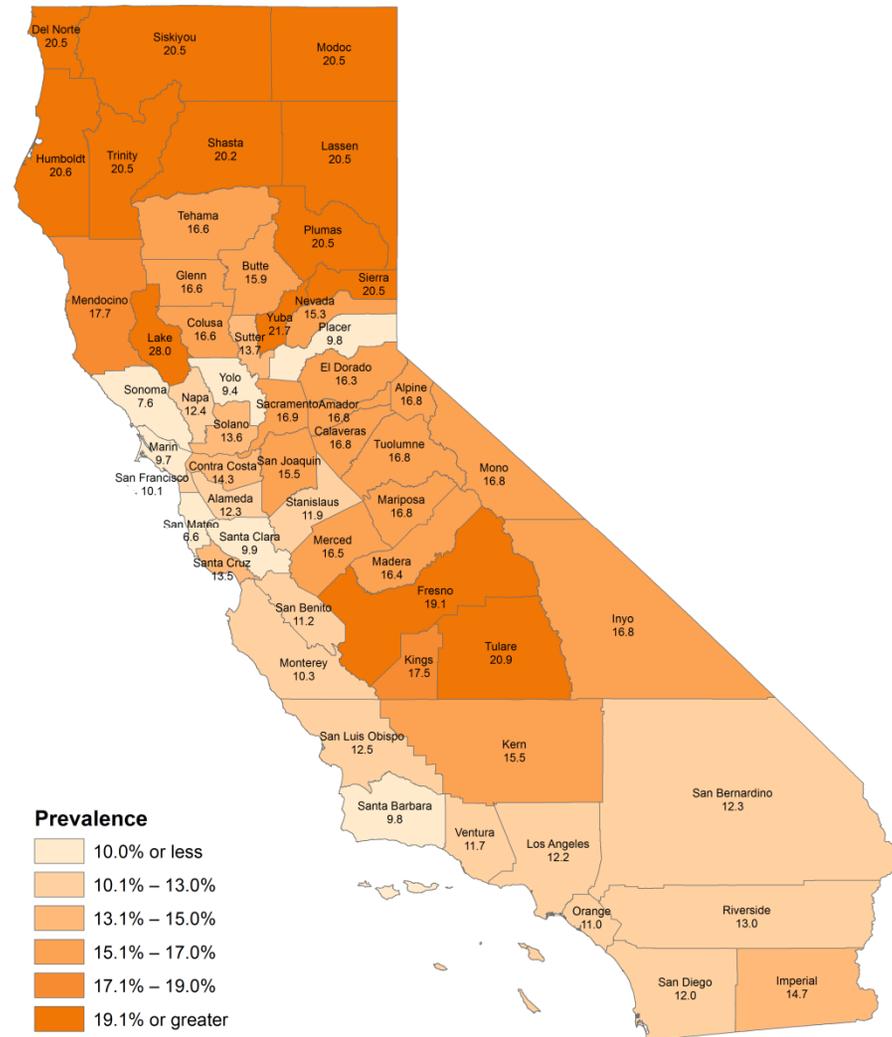
Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2013–2014.

SUBSECTION 1C

# **GEOGRAPHIC PATTERNS IN ADULT SMOKING PREVALENCE**

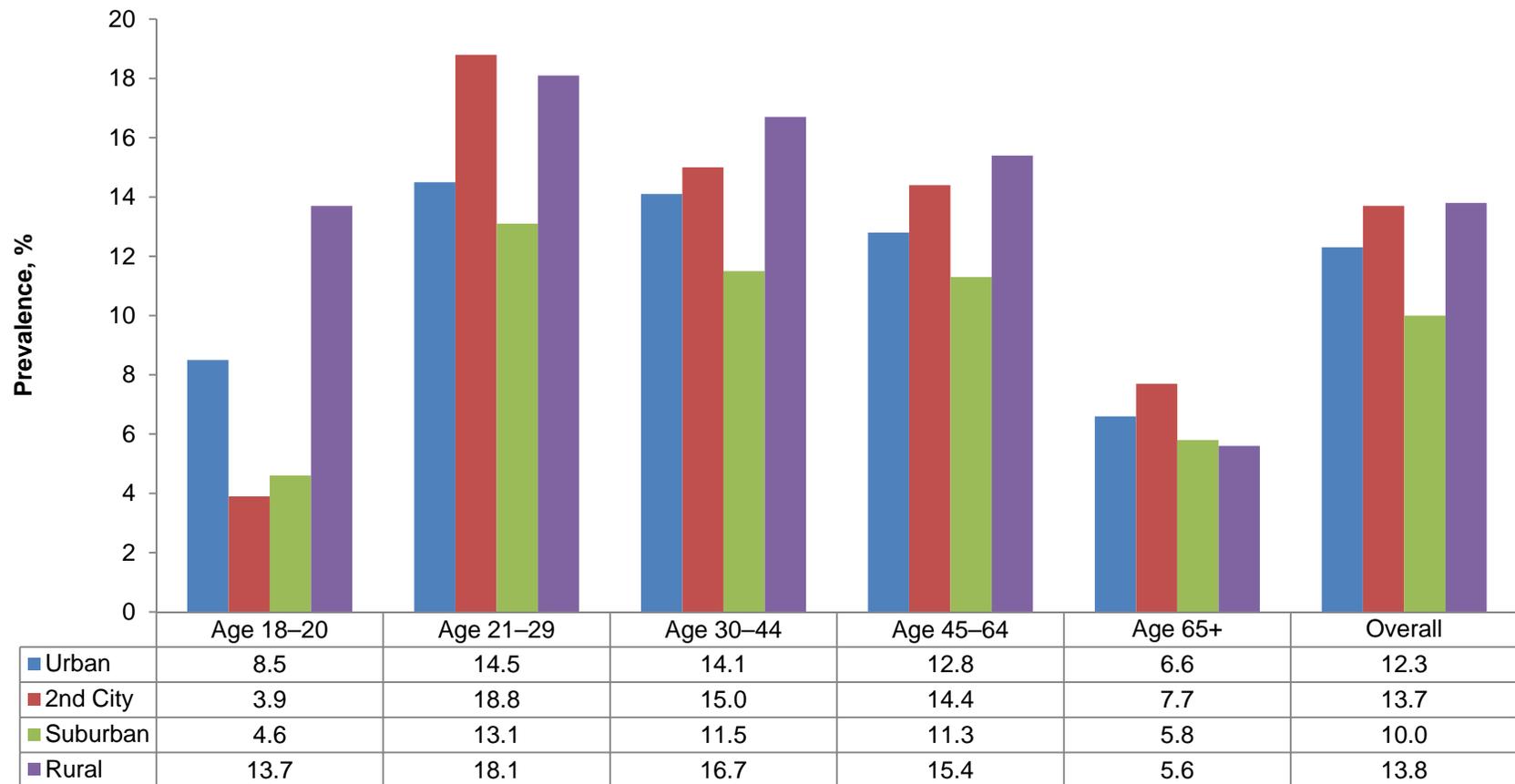
# Figure 1.9. California adult smoking prevalence by county, 2012–2014



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. Data for 2012, 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2012–2014.

## Figure 1.10. California adult smoking prevalence by age and rurality, 2013–2014



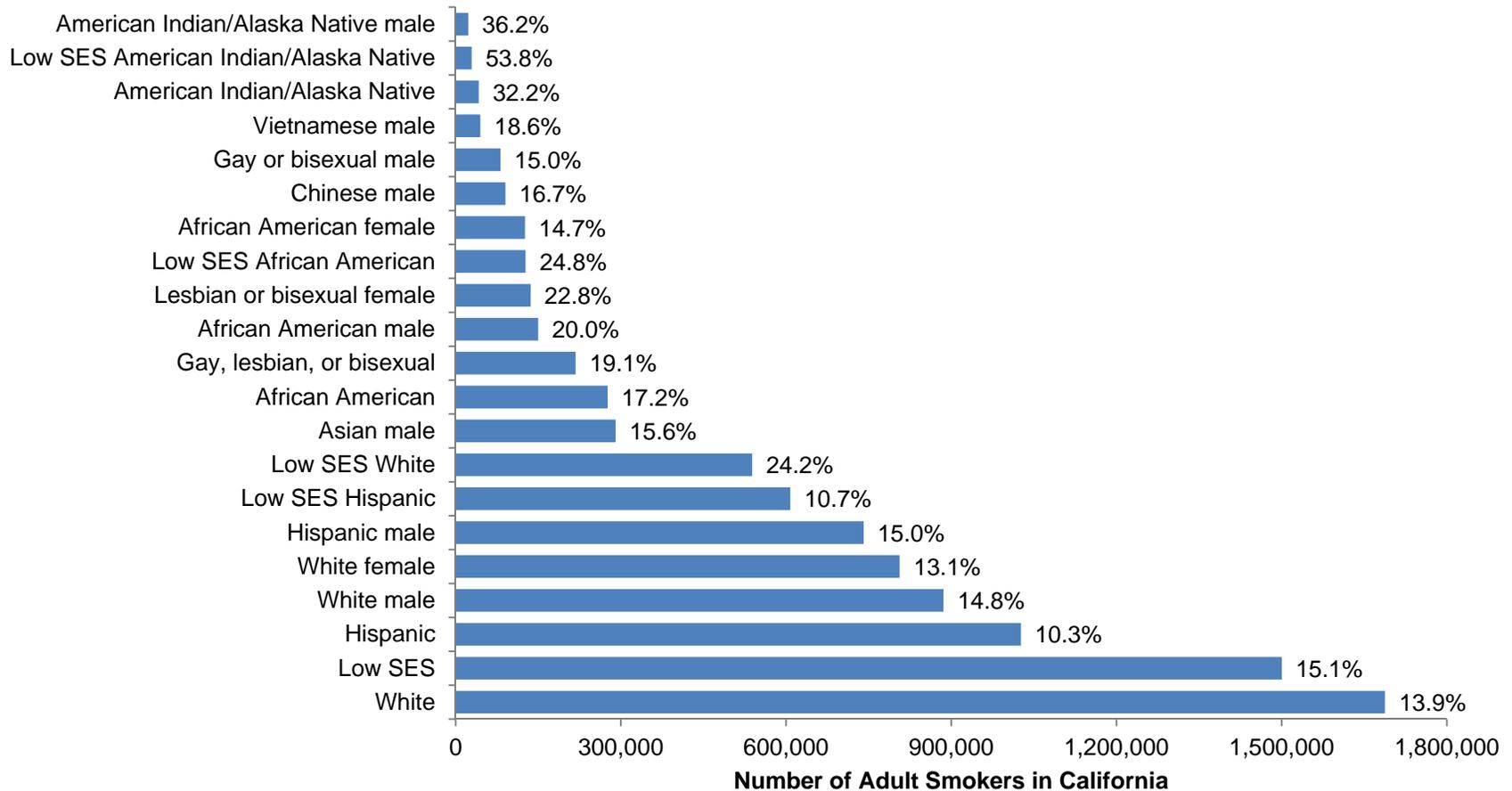
Note: Respondents aged 18+ were asked to report current cigarette smoking behavior and zip-code of place of residence. Definition of urban, second city, suburban, and rural are from Nielsen Consumer Activation (formerly Claritas): urban areas are population centers that have high population density (more than 4,150 persons per square mile) that represents the central cities of most major metropolitans, second city are population centers that have moderate population density (between 1,000 persons per square mile and 4,150 persons per square mile), suburban areas have moderate population density (between 1,000 persons per square mile and 4,150 per square mile) but are not considered population centers and are dependent on urban areas or second cities, and rural areas have low population densities (fewer than 1,000 persons per square mile). Areas are based on 2010 geoboundaries, 2010 redistricting updates, and 2013 population estimates. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2013–2014.

SUBSECTION 1D

# **SMOKING PREVALENCE AMONG DIVERSE POPULATION GROUPS**

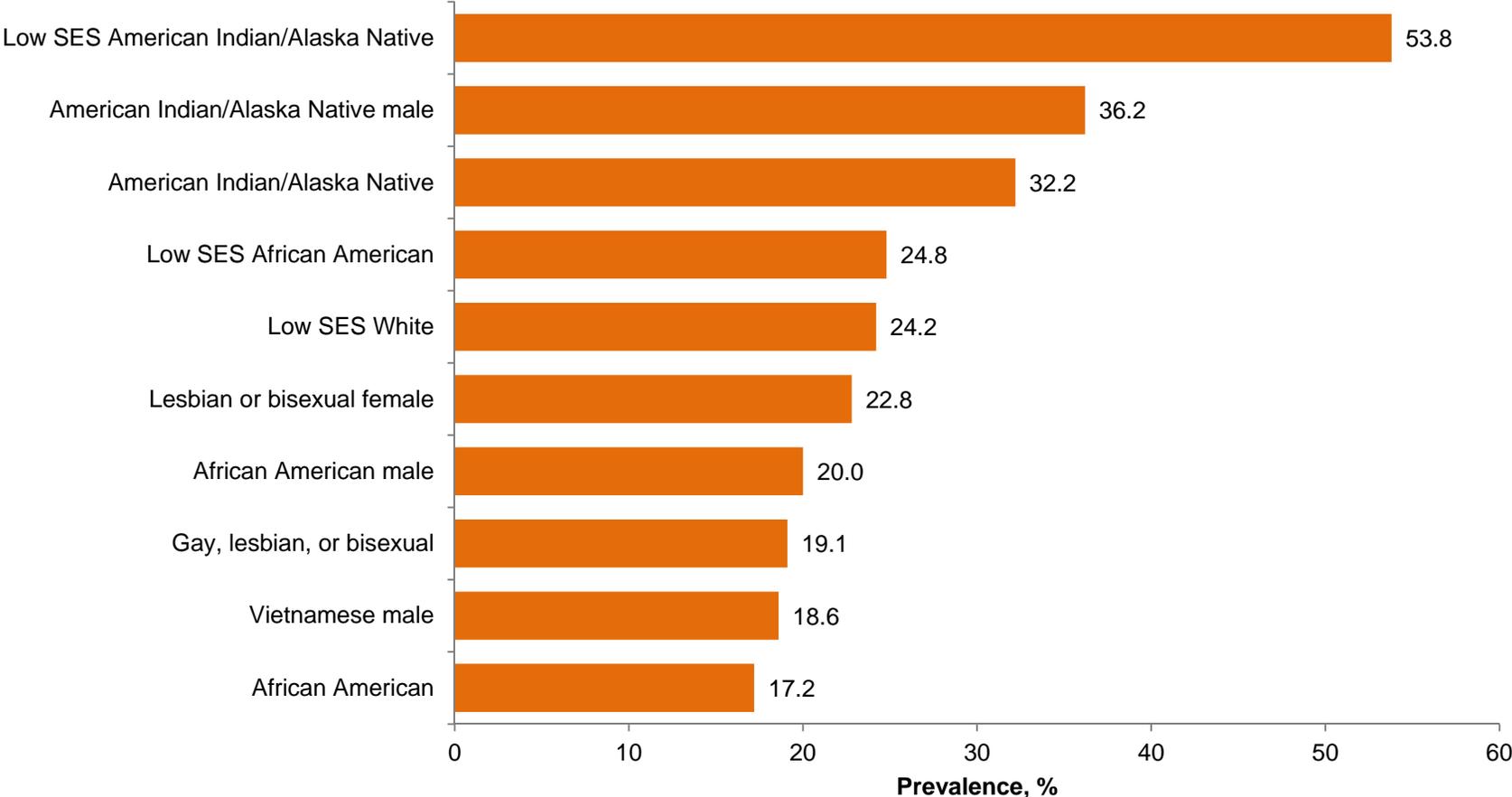
# Figure 1.11. Adult smoking prevalence and population size of various smoker demographic groups in California, 2013–2014



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. Low socioeconomic status (SES) is defined as below 185% of the federal poverty level (FPL). Unless otherwise noted, racial groups include only non-Hispanics.

Source: California Health Interview Survey, 2013–2014.

**Figure 1.12. Highest smoking prevalence rates among California population groups, 2013–2014**



Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. Low socioeconomic status (SES) is defined as below 185% of the federal poverty level (FPL). Unless otherwise noted, racial groups include only non-Hispanics.

Source: California Health Interview Survey, 2013–2014.

## Table 1.1. Profile of California smokers, 2014

	Percent of Smokers (95% C.I.)	Estimated Number of Smokers	Population Percent (95% C.I.)	Population Size
<b>Sexual Orientation:</b>				
Heterosexual	89.4 (85.9 – 92.9)	2,881,000	94.9 (94.0 – 95.7)	24,191,000
Gay, lesbian, or homosexual	3.1 (1.4 – 4.9)	101,000	2.3 (1.7 – 2.8)	582,000
Bisexual	<b>5.3 (2.9 – 7.7)</b>	<b>171,000</b>	<b>2.2 (1.7 – 2.7)</b>	<b>558,000</b>
Not sexual, celibate, or other	2.2* (0.4 – 3.9)	70,000	0.7 (0.4 – 0.9)	170,000
<b>Own or Rent:</b>				
Own home	44.5 (40.7 – 48.3)	1,482,000	57.6 (57.4 – 57.8)	16,250,000
Rent home	<b>49.7 (45.8 – 53.6)</b>	<b>1,656,000</b>	<b>38.3 (37.6 – 39.0)</b>	<b>10,808,000</b>
Have other arrangement	5.8 (4.0 – 7.7)	194,000	4.1 (3.5 – 4.7)	1,163,000
<b>Psychological Distress:</b>				
Likely in last year	<b>14.0 (10.7 – 17.4)</b>	<b>468,000</b>	<b>7.7 (7.0 – 8.4)</b>	<b>2,180,000</b>
Not likely in last year	86.0 (82.6 – 89.3)	2,870,000	92.3 (91.6 – 93.0)	26,241,000
<b>Health Insurance:</b>				
Currently insured	<b>74.3 (69.3 – 79.3)</b>	<b>2,486,000</b>	<b>85.6 (84.6 – 86.6)</b>	<b>24,430,000</b>
Not currently insured	25.7 (20.7 – 30.7)	860,000	14.4 (13.4 – 15.4)	4,109,000

Note: Respondents aged 18+ were asked to report current cigarette smoking behavior. **Red text** indicates those groups who smoke disproportionately relative to their representation in California.

Source: California Health Interview Survey, 2014.

SUBSECTION 1E

# **HIGH SCHOOL SMOKING PREVALENCE**

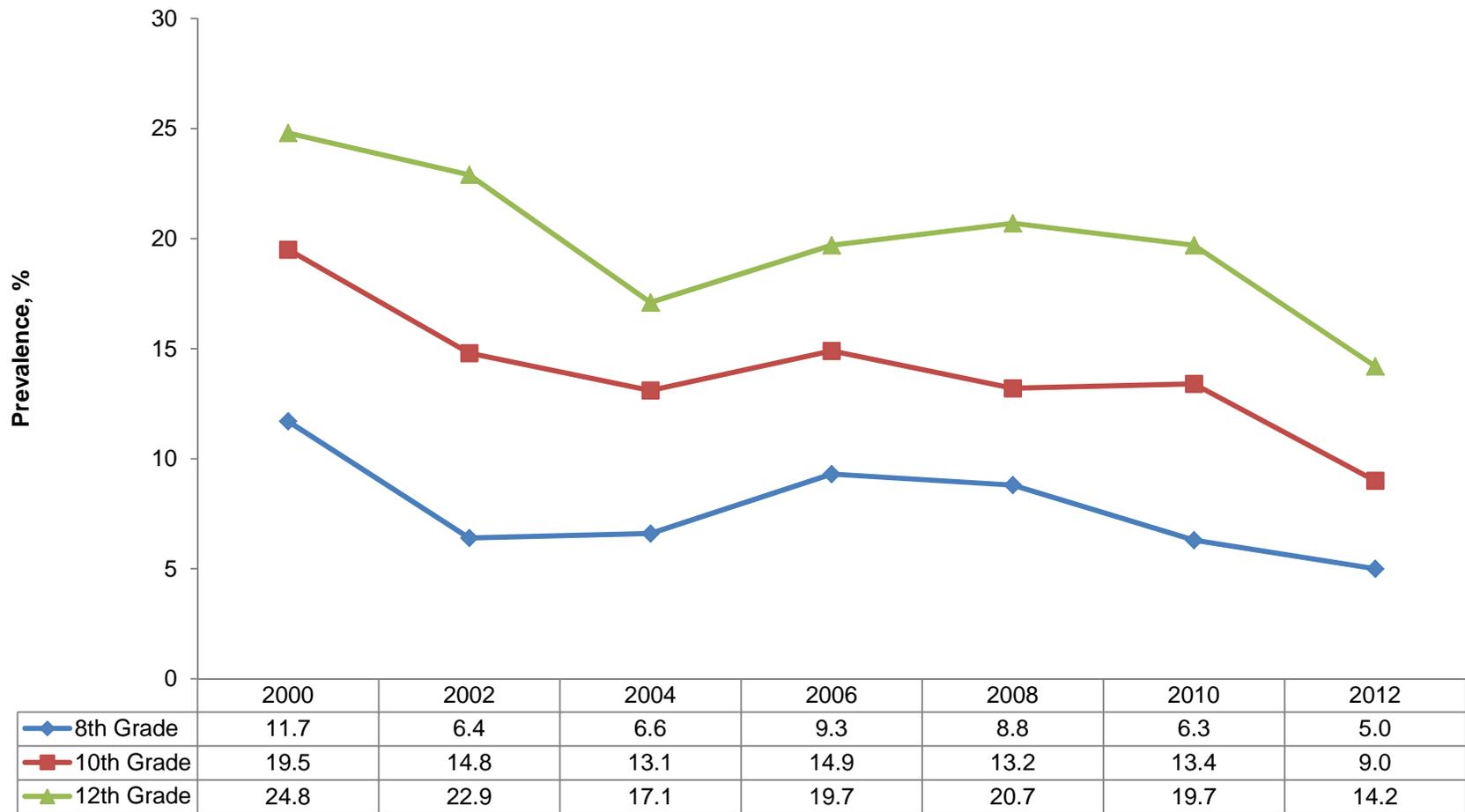
**Figure 1.13. Smoking prevalence for California and United States high school students (9th–12th grades), 2000–2012**



Note: Respondents were asked to report past 30-day cigarette smoking behavior.

Source: National Youth Tobacco Survey, 2000–2012 (US data); National Youth Tobacco Survey, 2000 (CA data); California Student Tobacco Survey, 2002–2012.

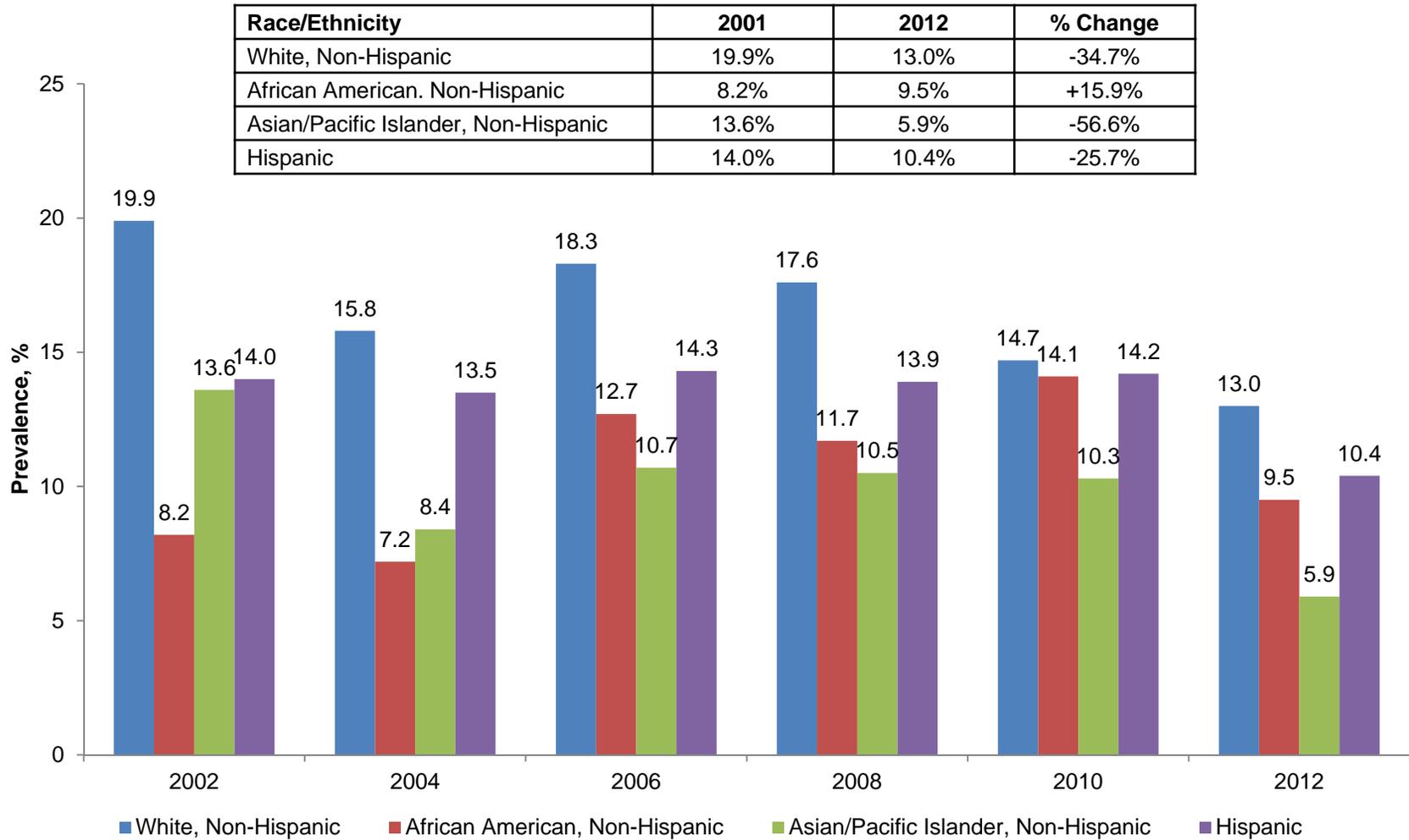
# Figure 1.14. Smoking prevalence for California students, 2000–2012



Note: Respondents were asked to report past 30-day cigarette smoking behavior.

Source: National Youth Tobacco Survey, 2000 (CA data); California Student Tobacco Survey, 2002–2012.

**Figure 1.15. Smoking prevalence for California high school students (9th–12th grades) by race/ethnicity, 2002–2012**



Note: Respondents were asked to report past 30-day cigarette smoking behavior.

Source: California Student Tobacco Survey, 2002–2012.

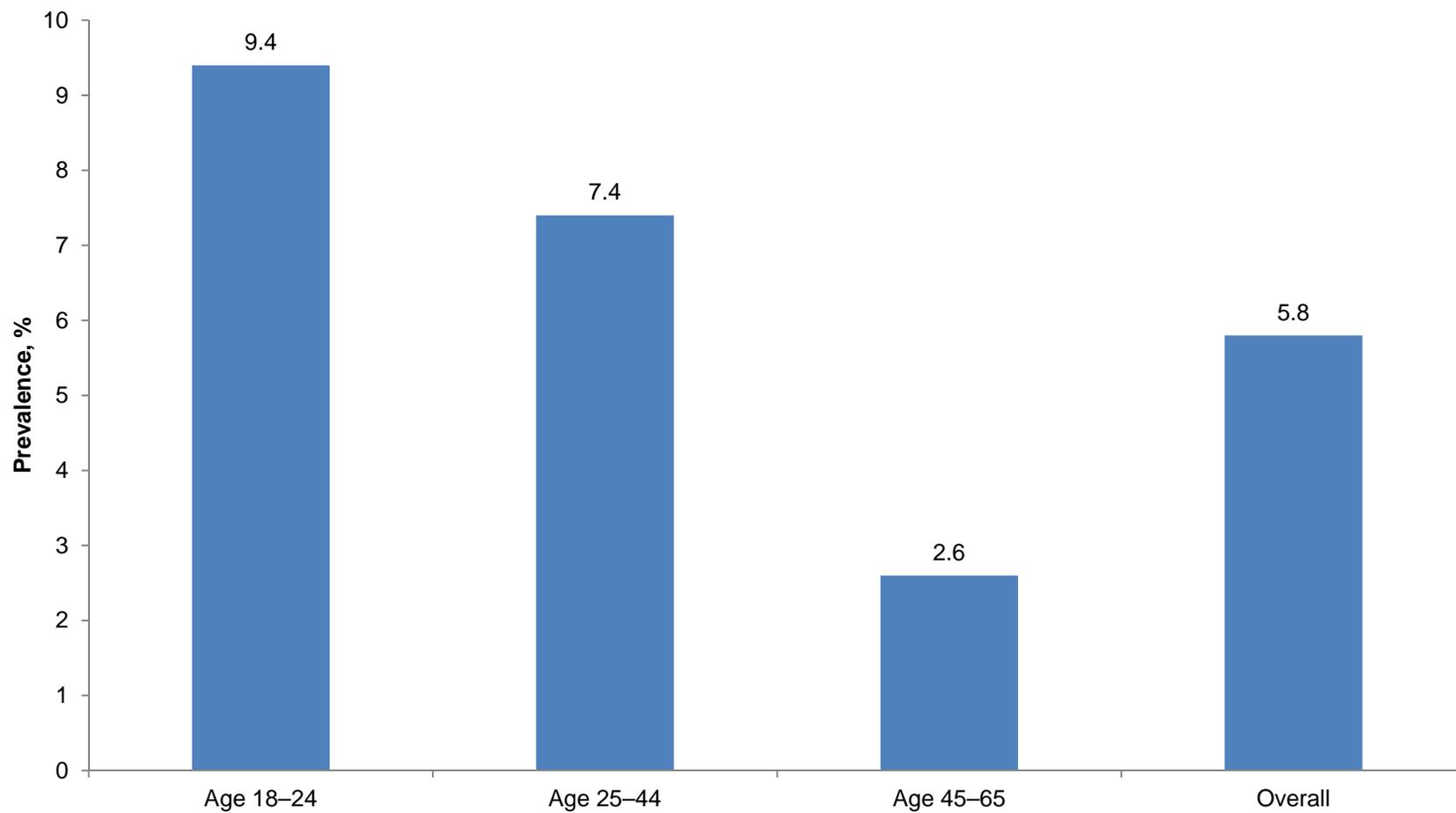
SECTION 2

**ELECTRONIC SMOKING DEVICES  
& FLAVORED TOBACCO  
PRODUCTS**

SUBSECTION 2A

# **ELECTRONIC SMOKING DEVICES**

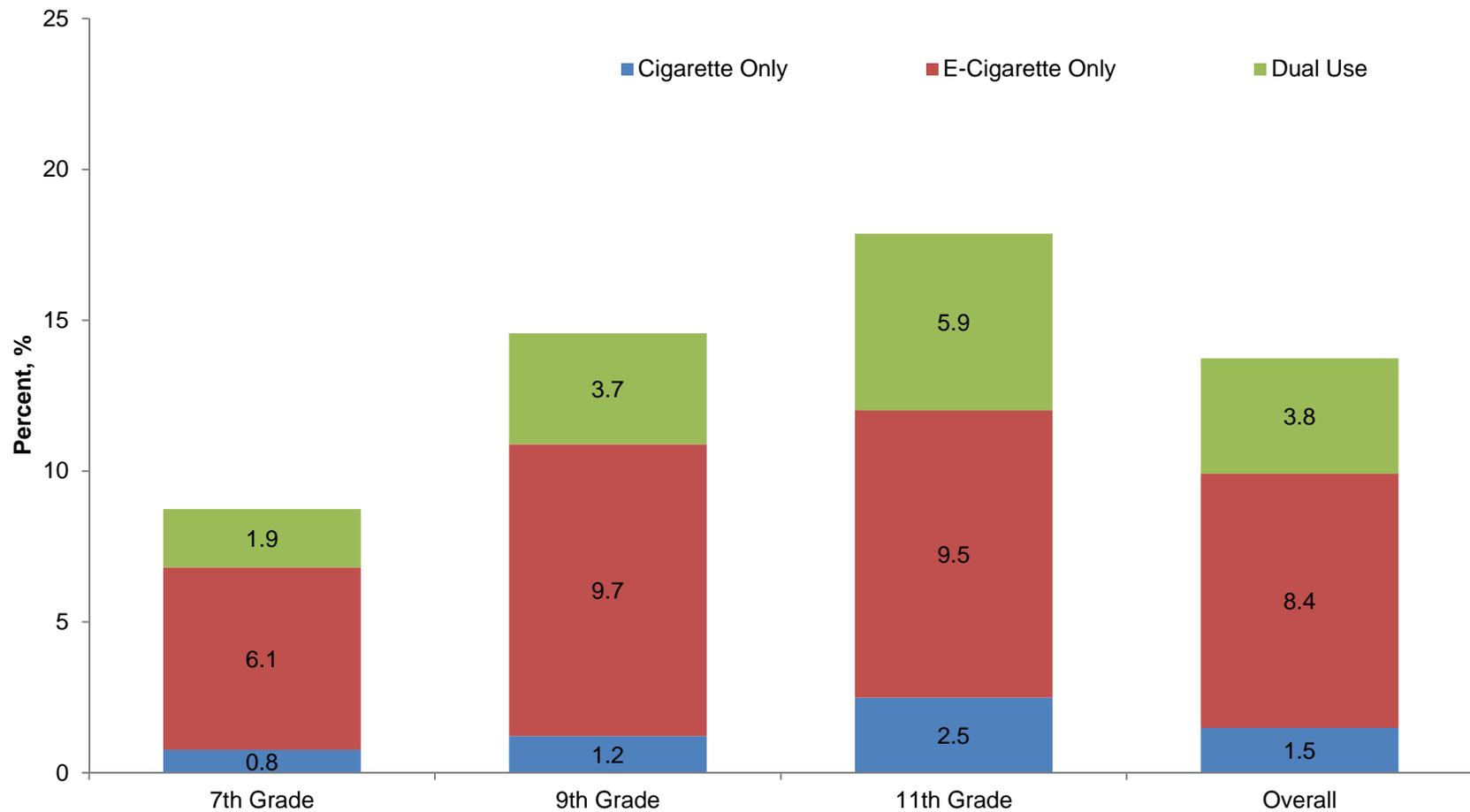
## Figure 2.1. California adult e-cigarette prevalence, 2014



Note: Respondents were asked to report past 30-day electronic cigarette smoking behavior.

Source: California Health Interview Survey, 2014.

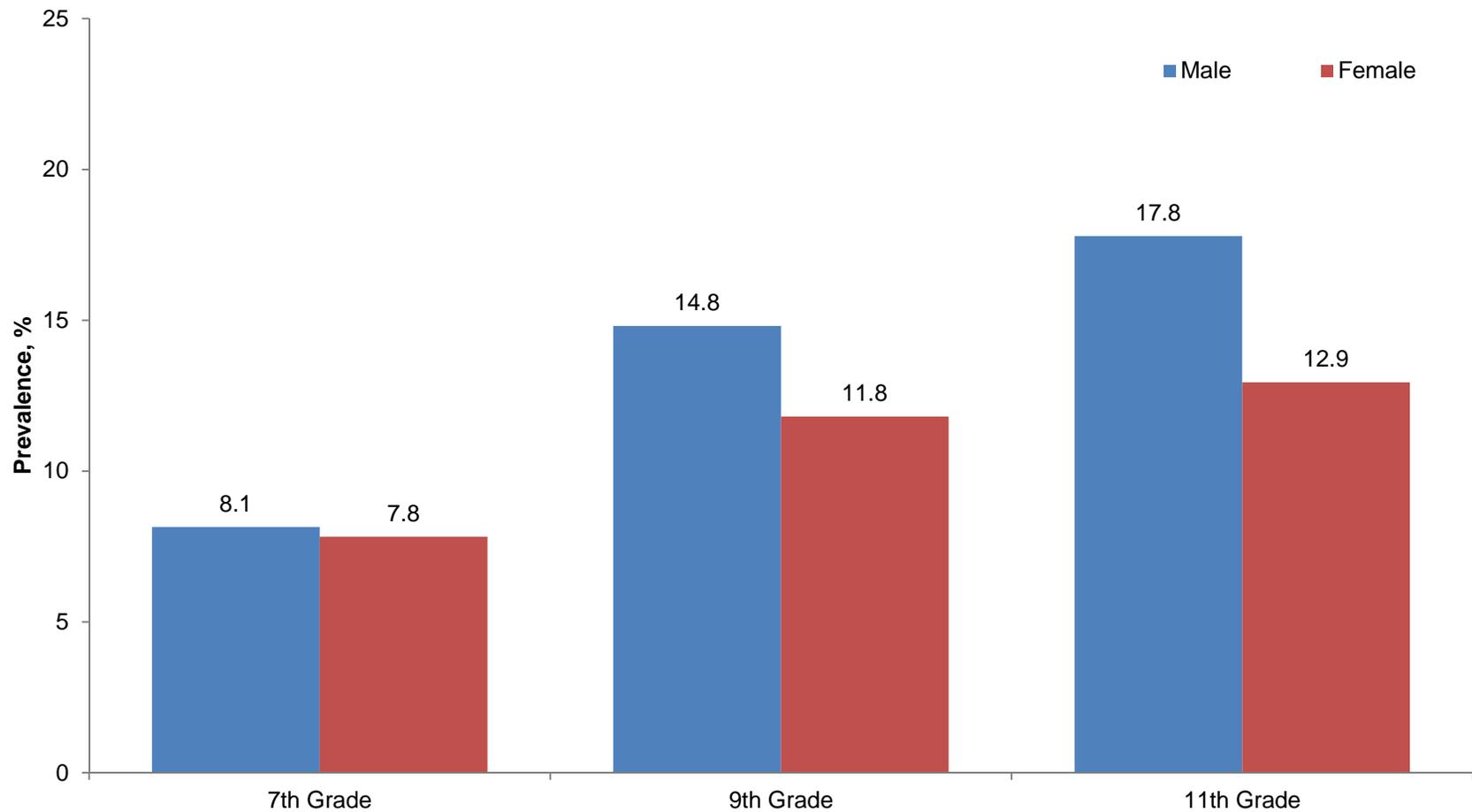
## Figure 2.2. California youth cigarette and e-cigarette usage, 2013–2015



Note: Respondents were asked to report past 30-day cigarette and electronic cigarette behavior. Electronic cigarettes include other vaping devices such as e-hookah, hookah pens, or vape pens.

Source: California Healthy Kids Survey, 2013–2015.

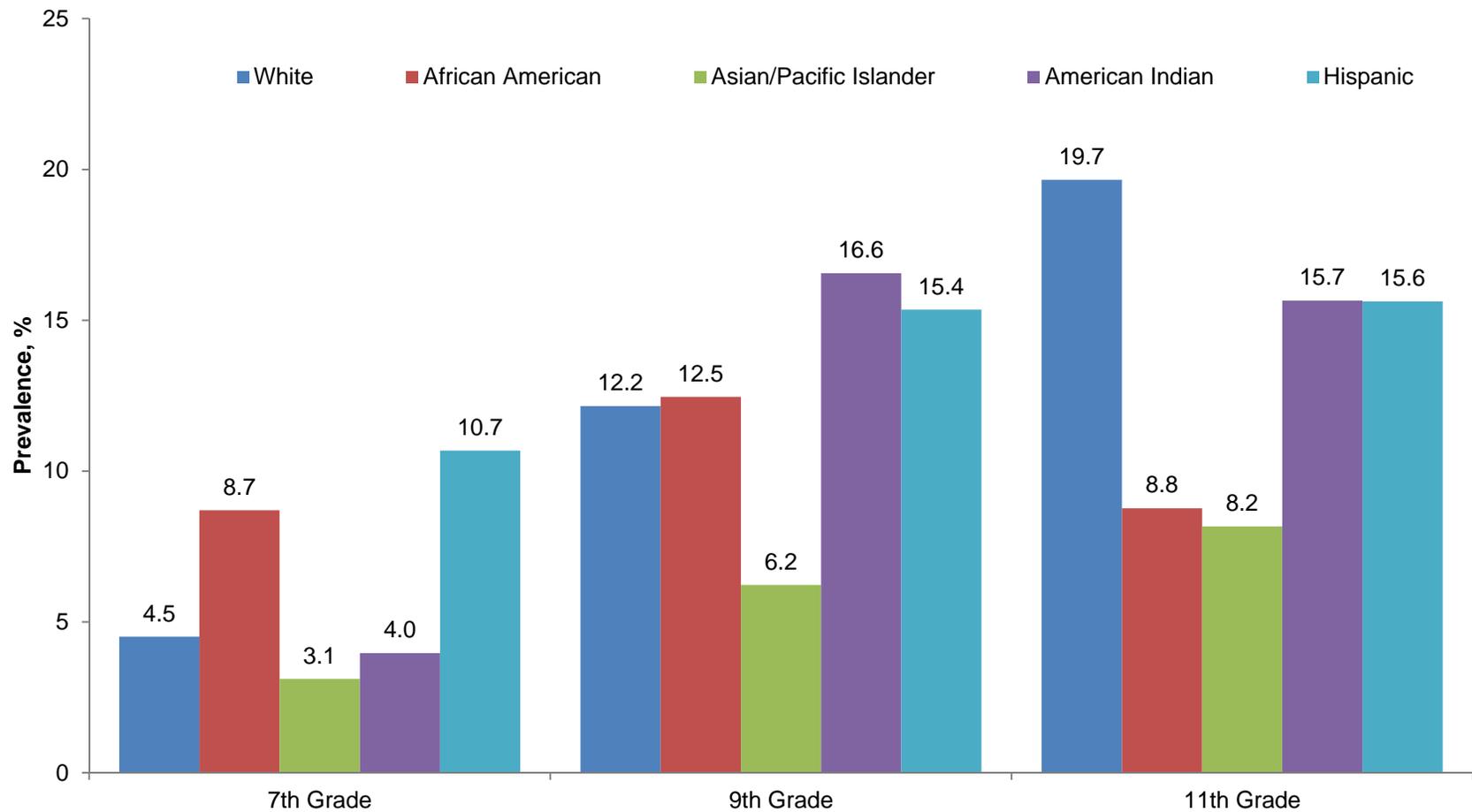
### Figure 2.3. California youth e-cigarette prevalence by grade level and gender, 2013–2015



Note: Respondents were asked to report past 30-day cigarette and electronic cigarette behavior. Electronic cigarettes include other vaping devices such as e-hookah, hookah pens, or vape pens.

Source: California Healthy Kids Survey, 2013–2015.

## Figure 2.4. California youth e-cigarette prevalence by grade level and race/ethnicity, 2013–2015



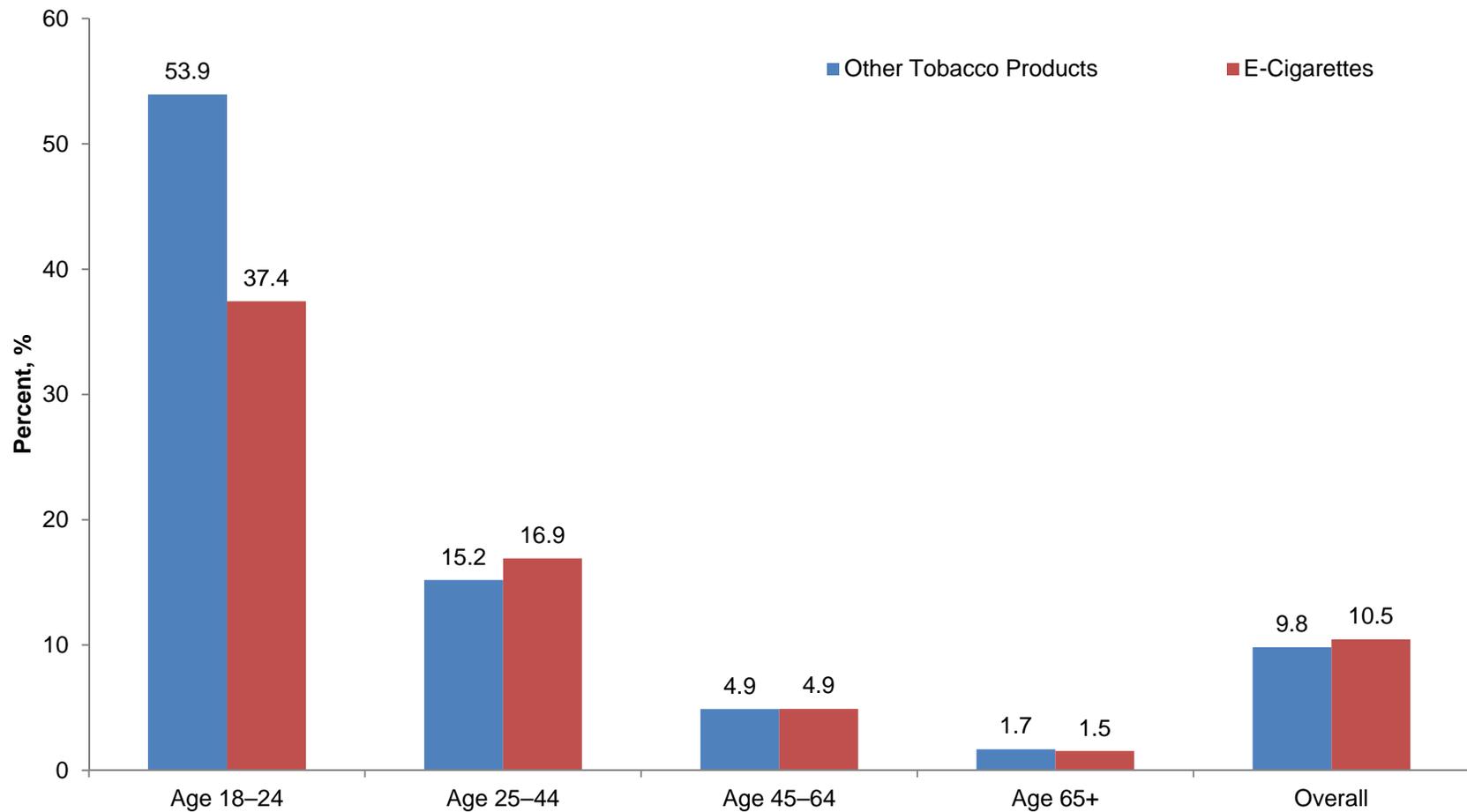
Note: Respondents were asked to report past 30-day cigarette and electronic cigarette behavior. Electronic cigarettes include other vaping devices such as e-hookah, hookah pens, or vape pens.

Source: California Healthy Kids Survey, 2013–2015.

SUBSECTION 2B

# **MENTHOL CIGARETTES & OTHER FLAVORED TOBACCO PRODUCTS**

**Figure 2.5. Percent of current and former adult California smokers that reported recent use of flavored tobacco products or flavored e-cigarettes, 2013–2014**



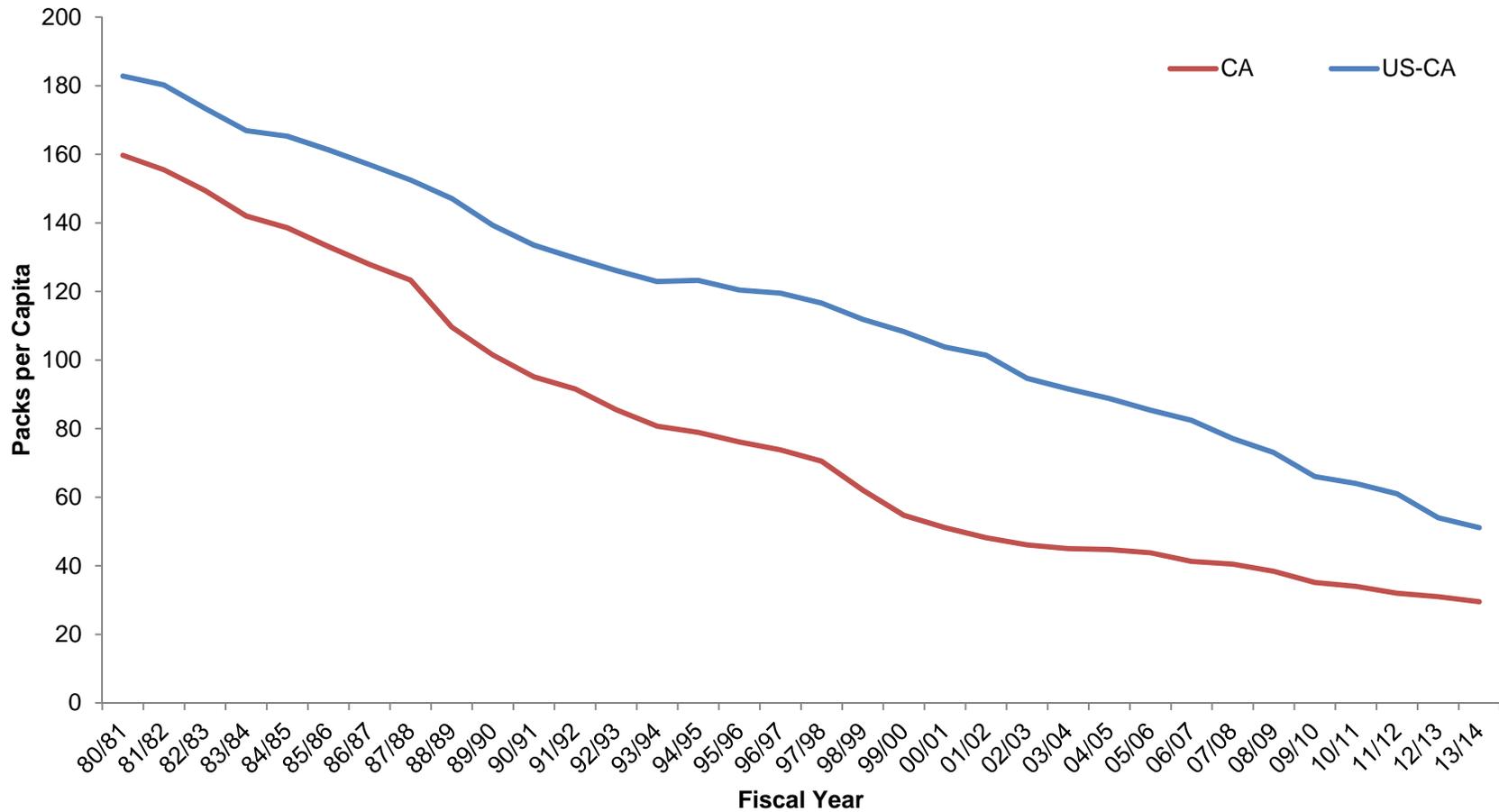
Note: Respondents were asked to report flavored tobacco use in the last six months only if they smoked more than 100 cigarettes in their lifetime. Other tobacco products include only snus, cigars, cigarillos, little cigars, and hookah. Flavor is defined as an additive that creates a distinct taste or smell, such as the taste or smell of fruit, chocolate, vanilla, or honey. Data for 2013 and 2014 were pooled together. Weighted to the 2010 California population.

Source: Behavioral Risk Factor Surveillance System, 2013–2014.

SECTION 3

# **TOBACCO CONSUMPTION**

**Figure 3.1. Per capita cigarette consumption in California and the rest of the United States (US-CA), 1980–2014**

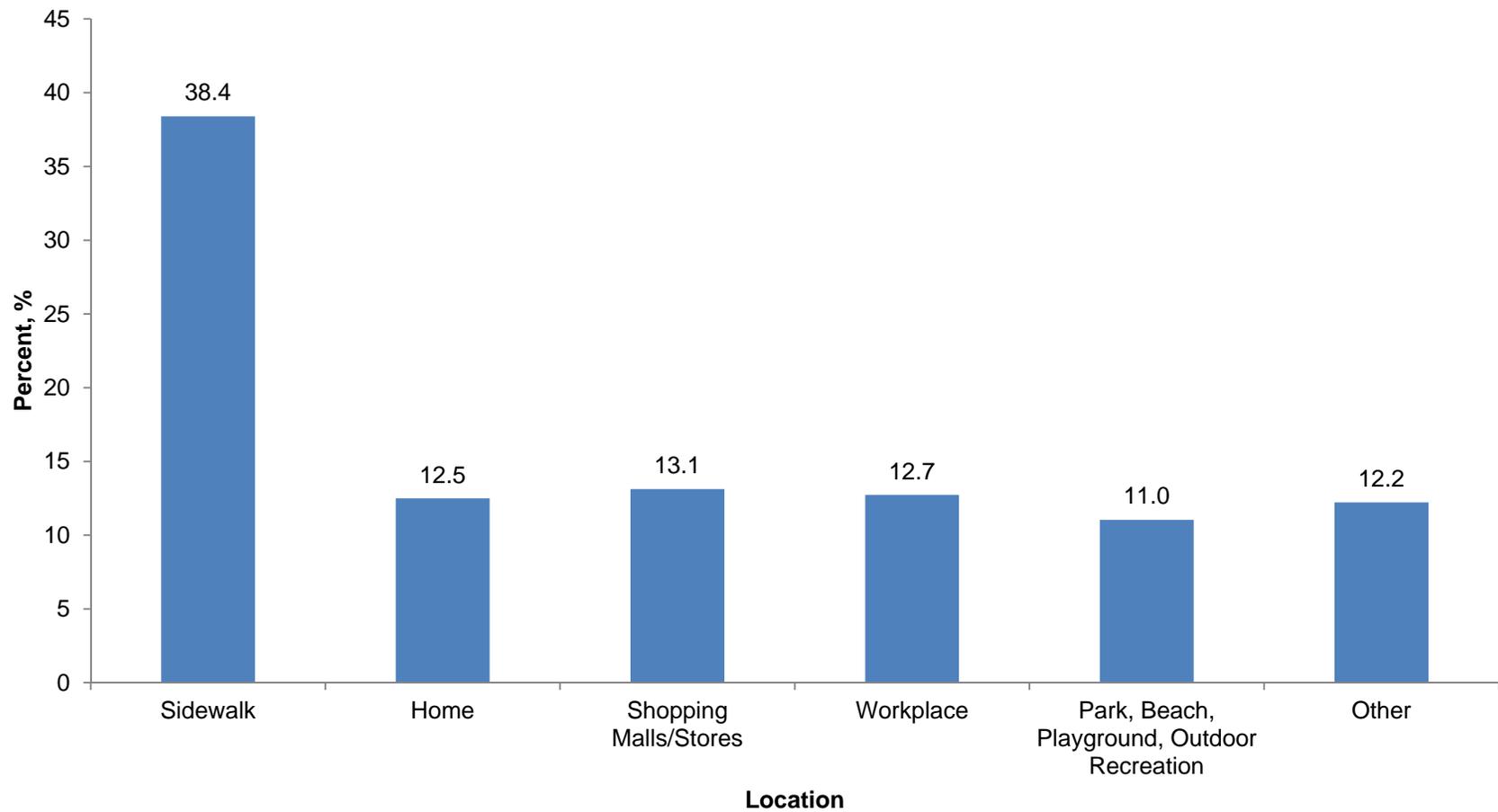


Source: The Tax Burden on Tobacco: Historical Compilation 2014; U.S. Census Bureau, 1980–2014.

SECTION 4

# **SECONDHAND SMOKE & AEROSOL EXPOSURE**

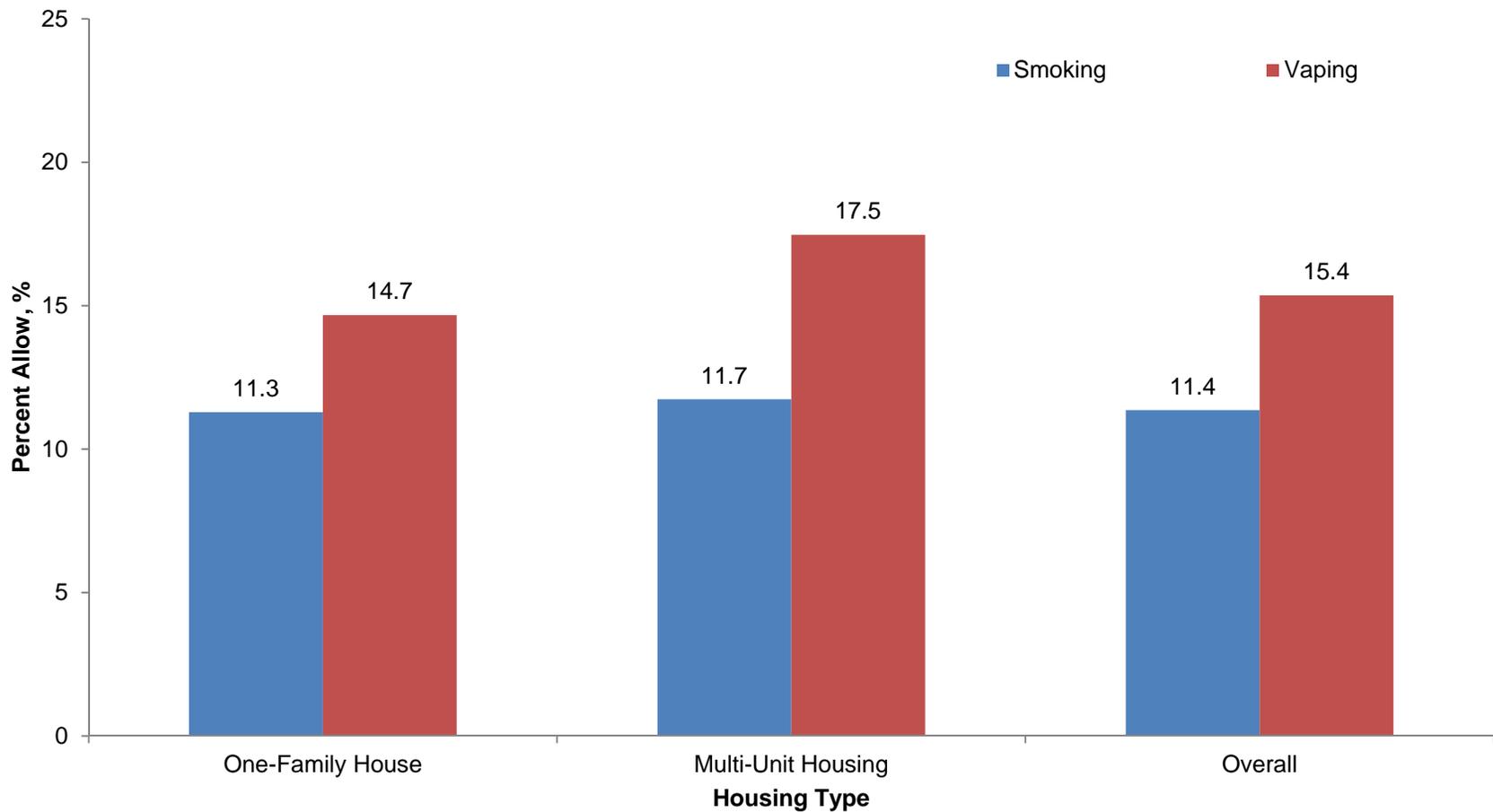
**Figure 4.1. Location of most recent secondhand smoke exposure for California adults aged 18–64, 2016**



Note: Respondents were asked to report location of most recent secondhand smoke exposure if exposed to secondhand smoke in the last two weeks. Weighted to 2015 Current Population Survey California population.

Source: Online California Adult Tobacco Survey, 2016.

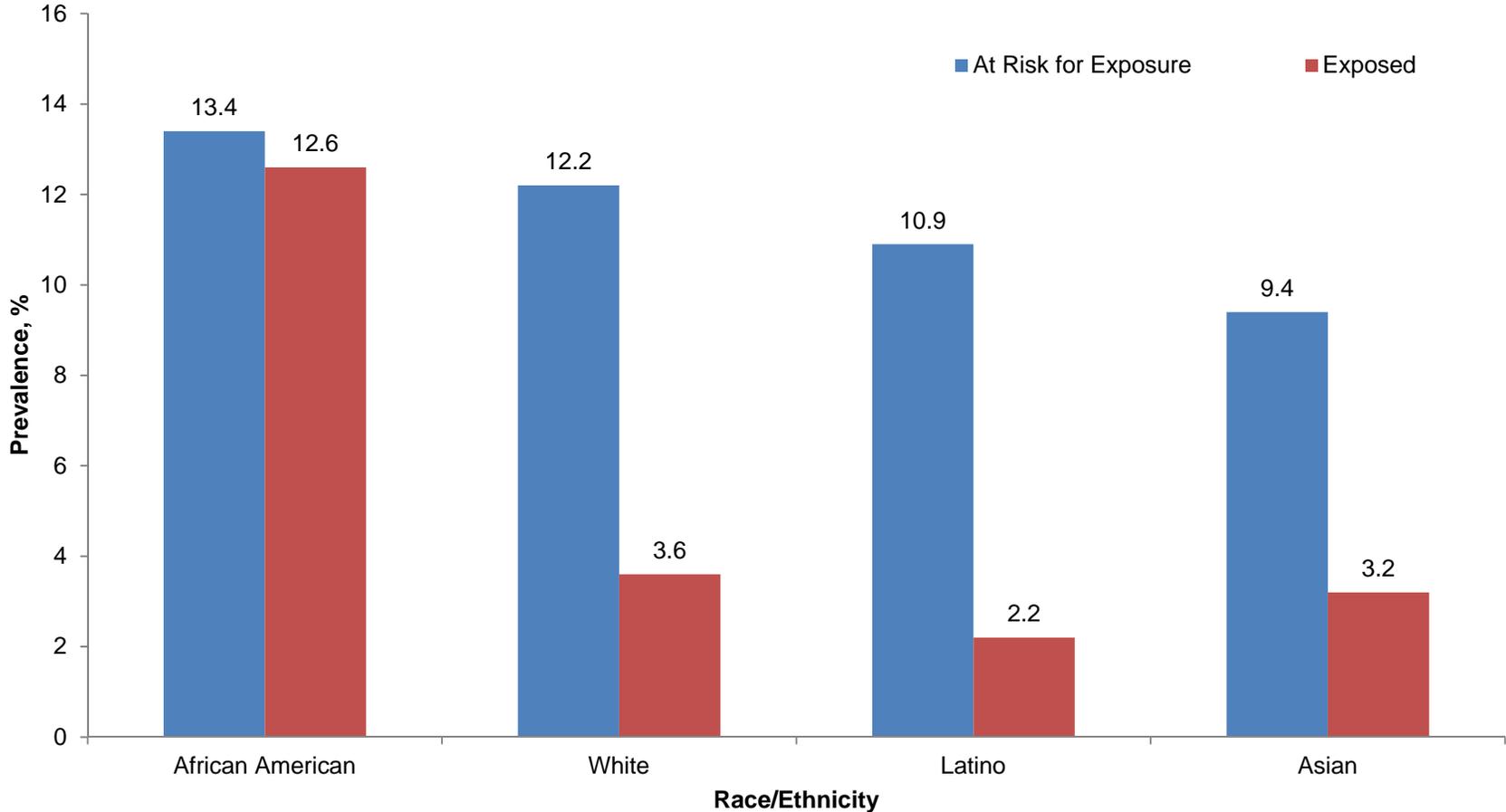
**Figure 4.2. Percent of California adults aged 18–64 living in a household that allow smoking or vaping inside their homes, 2016**



Note: Respondents were asked the type of building they lived in and smoking and vaping rules inside their homes. Overall includes mobile home, boat, RV, and vans. Weighted to 2015 Current Population Survey California population.

Source: Online California Adult Tobacco Survey, 2016.

**Figure 4.3. Racial and ethnic differences in children's secondhand smoke exposure in the home, 2005–2009**

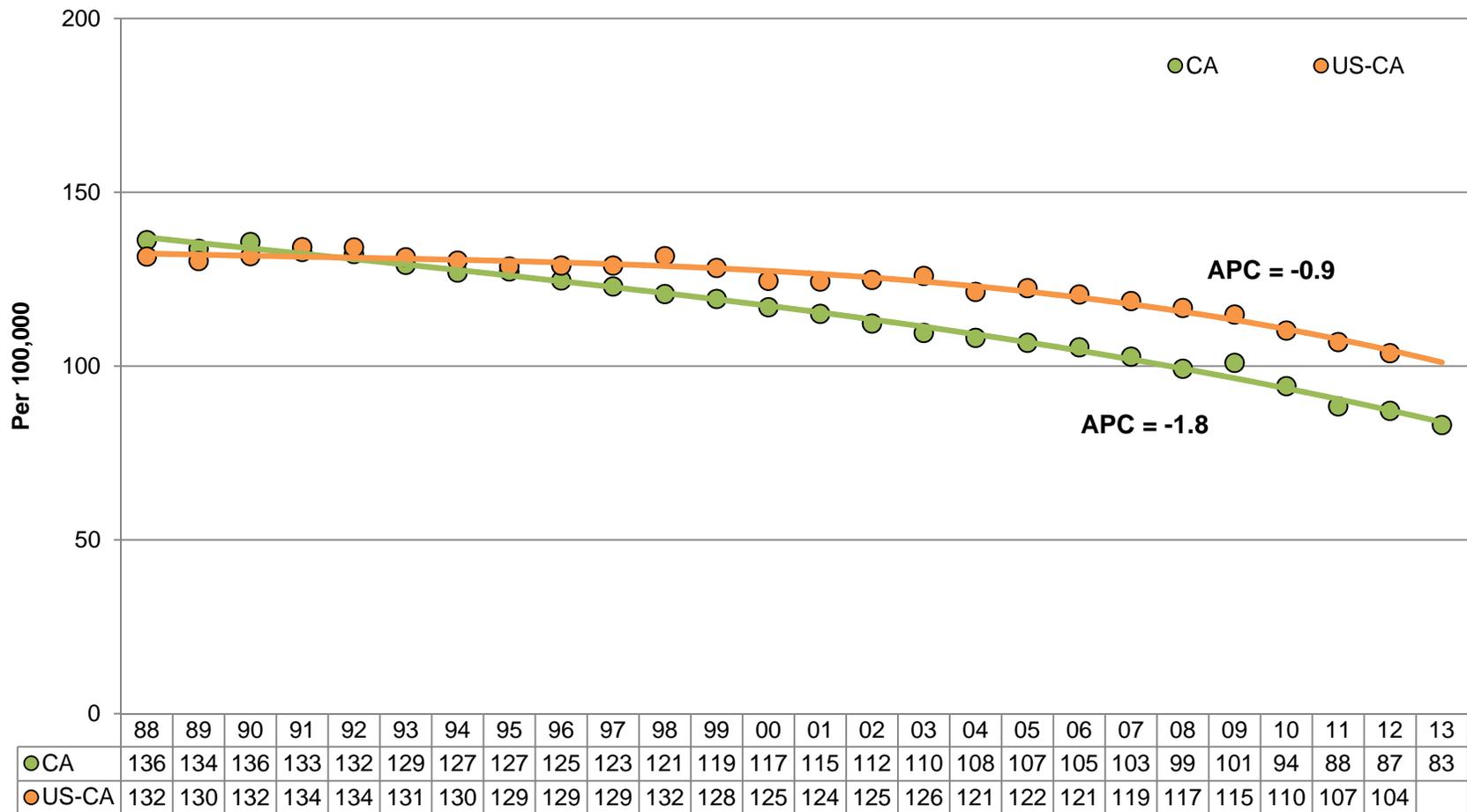


Note: Reprinted with permission from the UCLA Center for Health Policy Research.  
Source: California Health Interview Survey, 2005–2009.

SECTION 5

# **CANCER INCIDENCE & MORTALITY RATES**

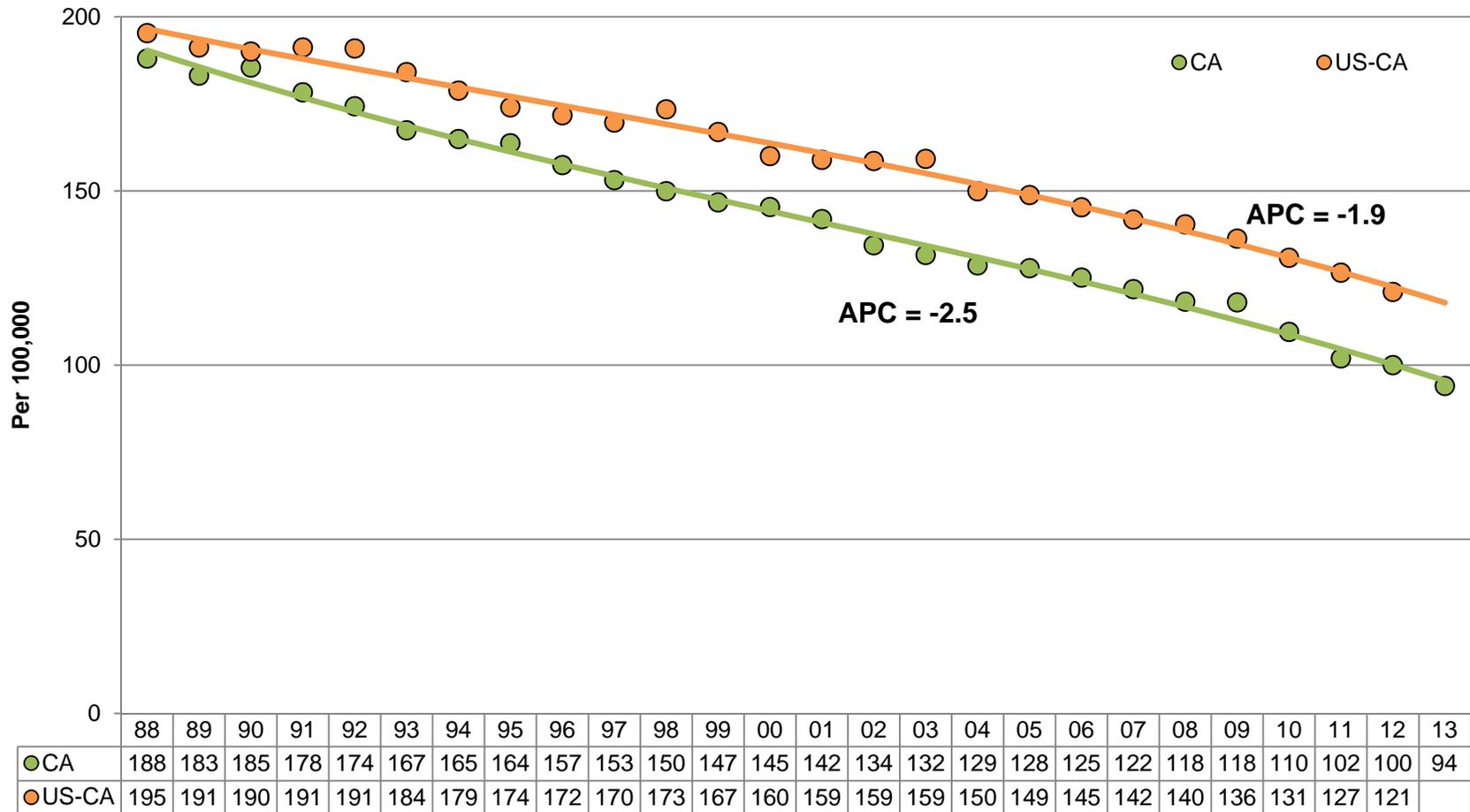
# Figure 5.1. Lung and bronchus cancer incidence in California (1988–2013) and the rest of the United States (1988–2012)



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using 2 years for each end point; annual percent changes (APCs) were calculated using non-weighted least squares method. \* The APC is not significantly different from zero ( $p < 0.05$ ).

Source: California Cancer Registry.

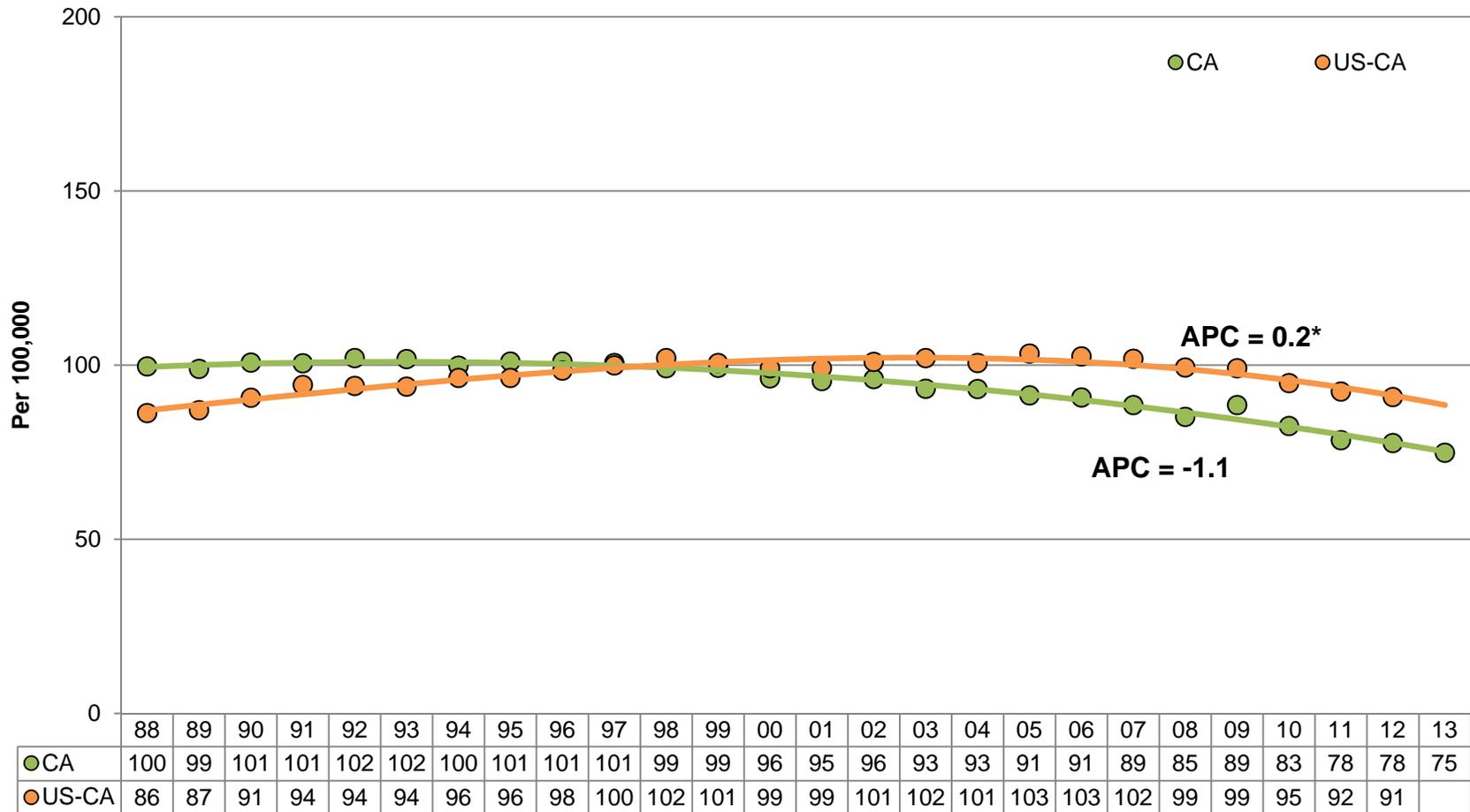
**Figure 5.2. Lung and bronchus cancer incidence among MALES in California (1988–2013) and the rest of the United States (1988–2012)**



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using 2 years for each end point; annual percent changes (APCs) were calculated using non-weighted least squares method. \* The APC is not significantly different from zero ( $p < 0.05$ ).

Source: California Cancer Registry.

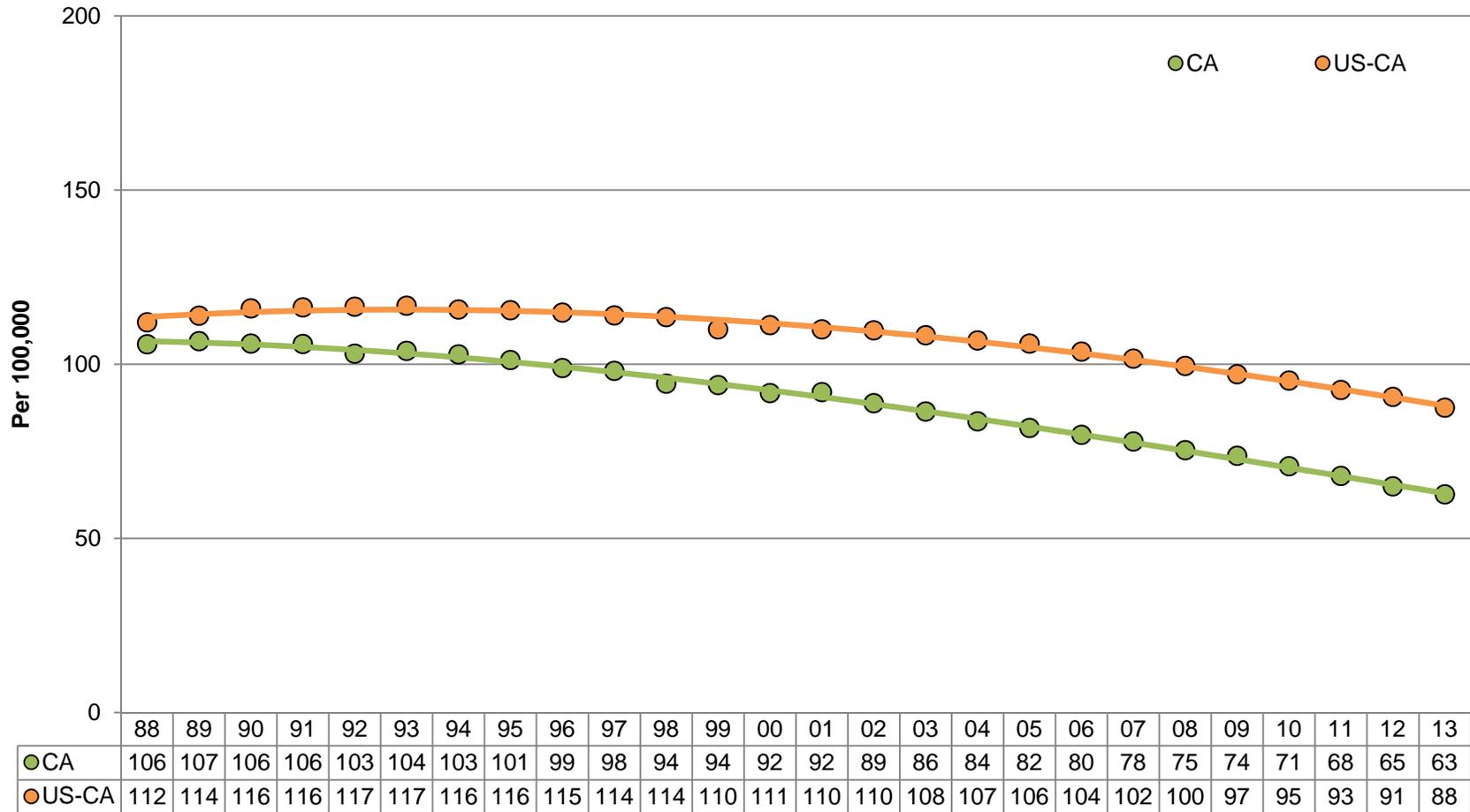
# Figure 5.2. Lung and bronchus cancer incidence among FEMALES in California (1988–2013) and the rest of the United States (1988–2012)



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using 2 years for each end point; annual percent changes (APCs) were calculated using non-weighted least squares method. \* The APC is not significantly different from zero ( $p < 0.05$ ).

Source: California Cancer Registry.

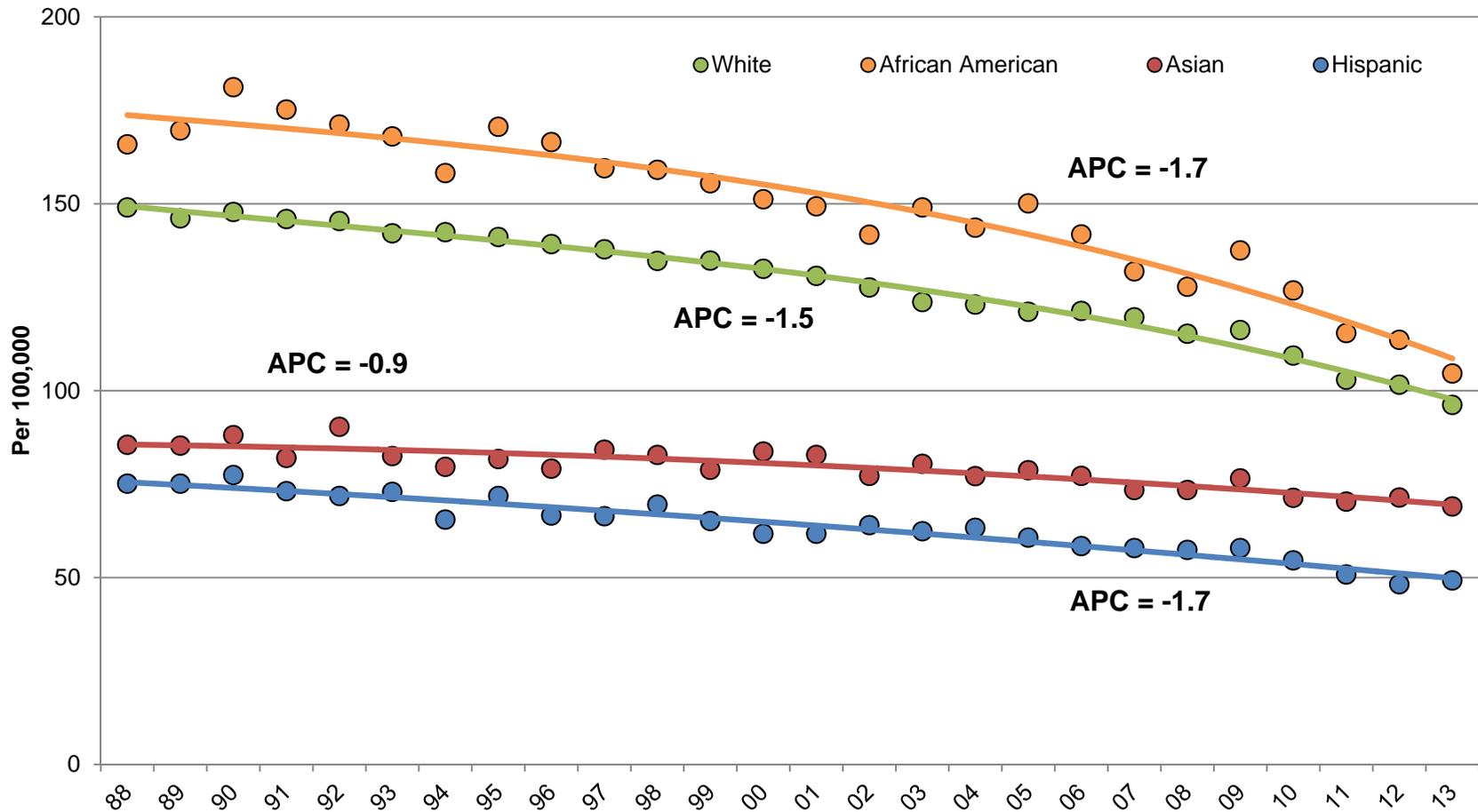
### Figure 5.3. Lung and bronchus cancer mortality in California and the rest of the United States, 1988–2013



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard.

Source: California Cancer Registry.

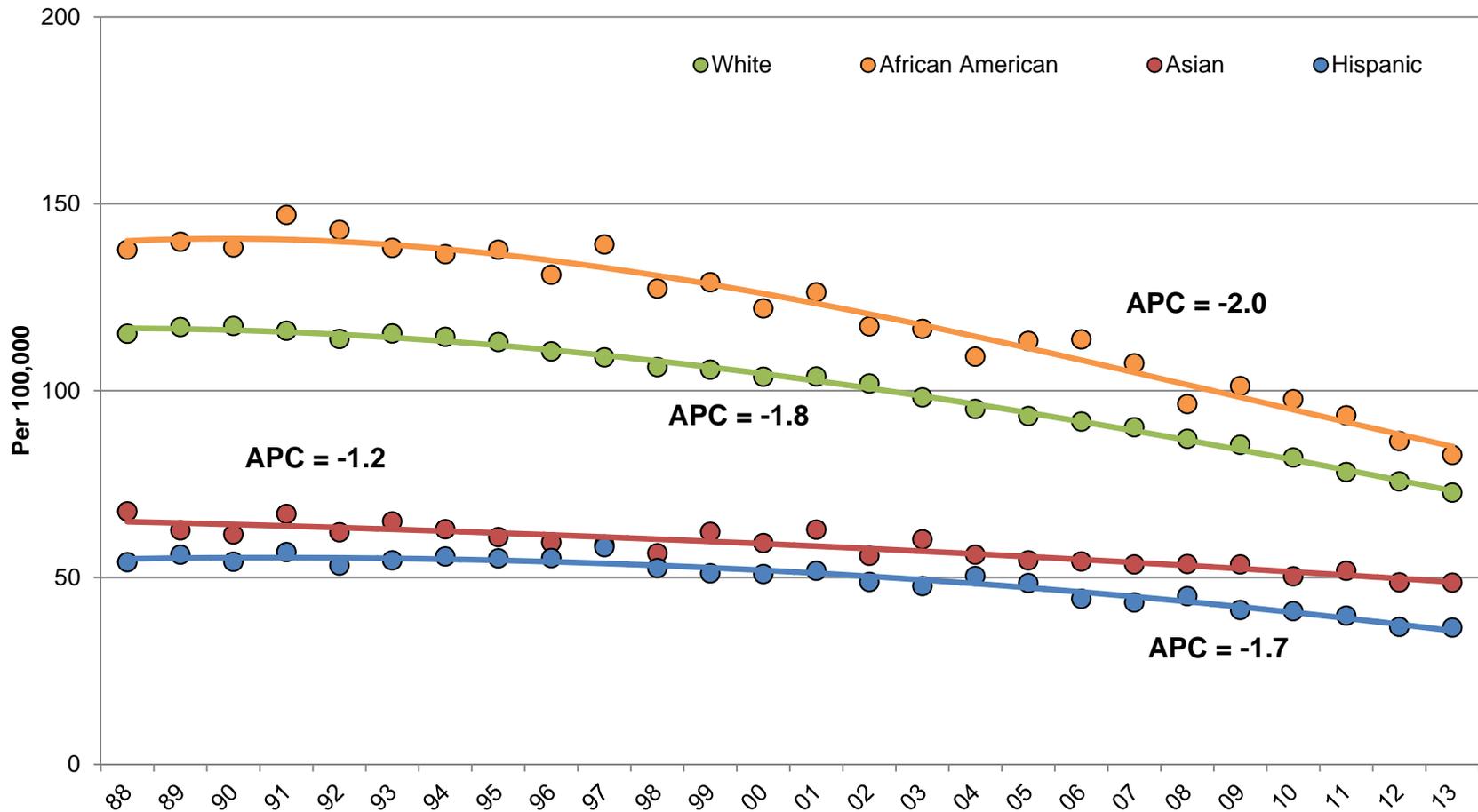
### Figure 5.4. Lung and bronchus cancer incidence by race/ethnicity in California, 1988–2013



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using 2 years for each end point; annual percent changes (APCs) were calculated using non-weighted least squares method. \* The APC is not significantly different from zero ( $p < 0.05$ ).

Source: California Cancer Registry.

### Figure 5.5. Lung and bronchus cancer mortality by race/ethnicity in California, 1988–2013



Note: Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using 2 years for each end point; annual percent changes (APCs) were calculated using non-weighted least squares method. \* The APC is not significantly different from zero ( $p < 0.05$ ).

Source: California Cancer Registry.

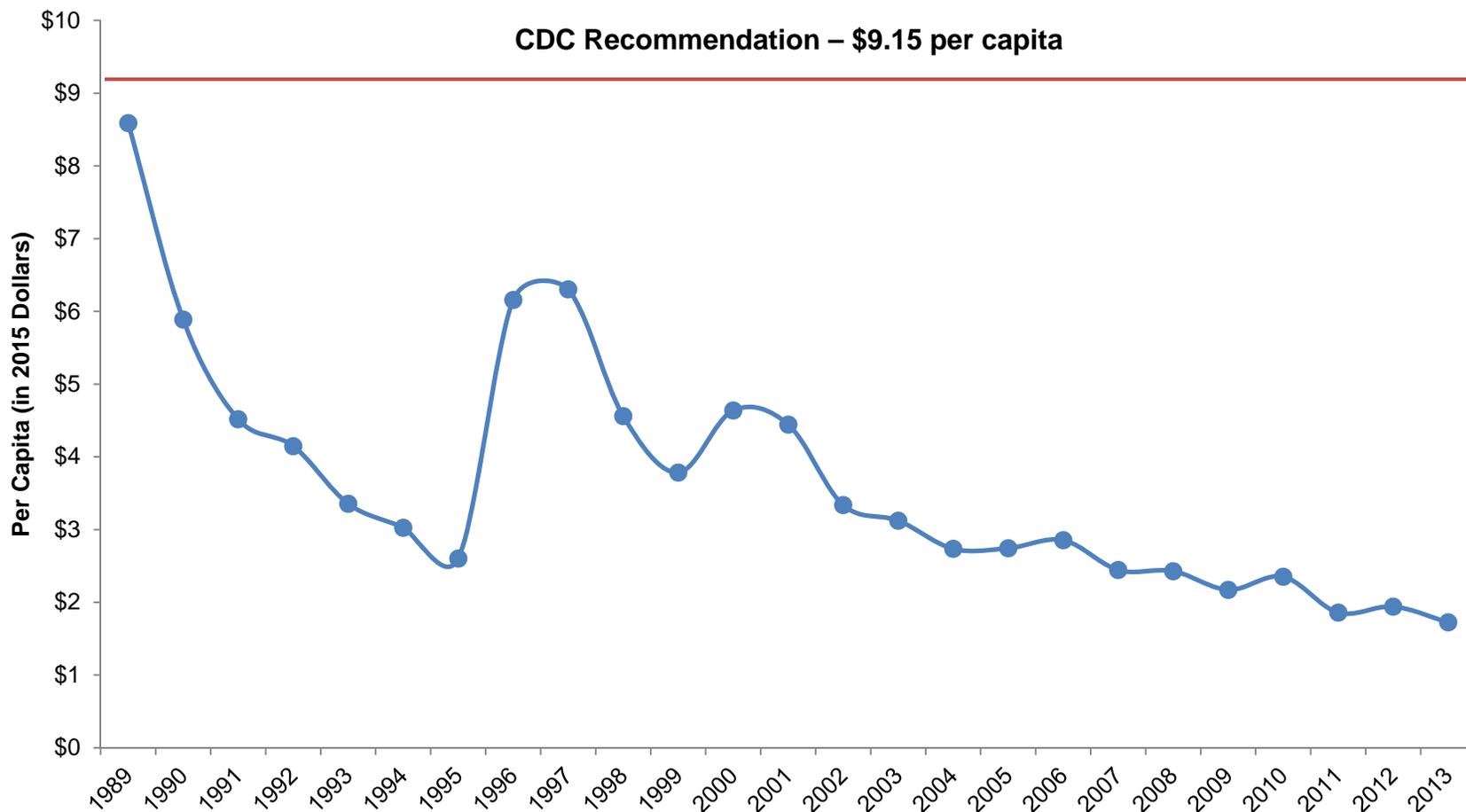
SECTION 6

# **TOBACCO INDUSTRY**

SUBSECTION 6A

**TOBACCO INDUSTRY  
EXPENDITURES VS. TOBACCO  
CONTROL FUNDING**

# Figure 6.1. California tobacco control expenditure, 1989–2013



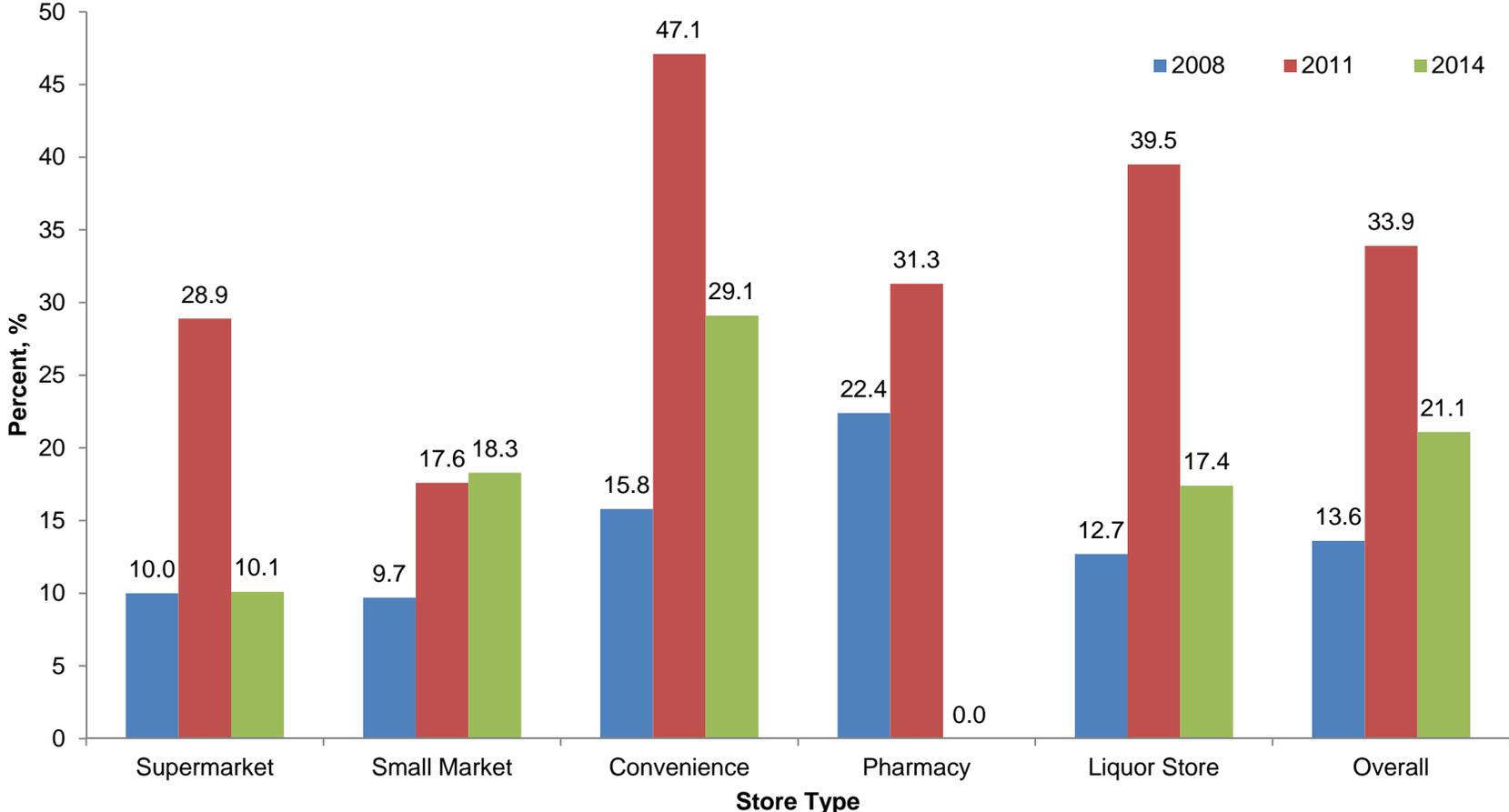
Note: Tobacco control expenditures are Health Education Account expenditures for the California Tobacco Control Program and California Department of Education, standardized to the U.S. 2015 dollar based on the Consumer Price Index.

Source: California Department of Public Health for expenditures; Centers for Disease Control and Prevention, *Best Practices for Comprehensive Tobacco Control Programs—2014*, for CDC recommendation.

SUBSECTION 6B

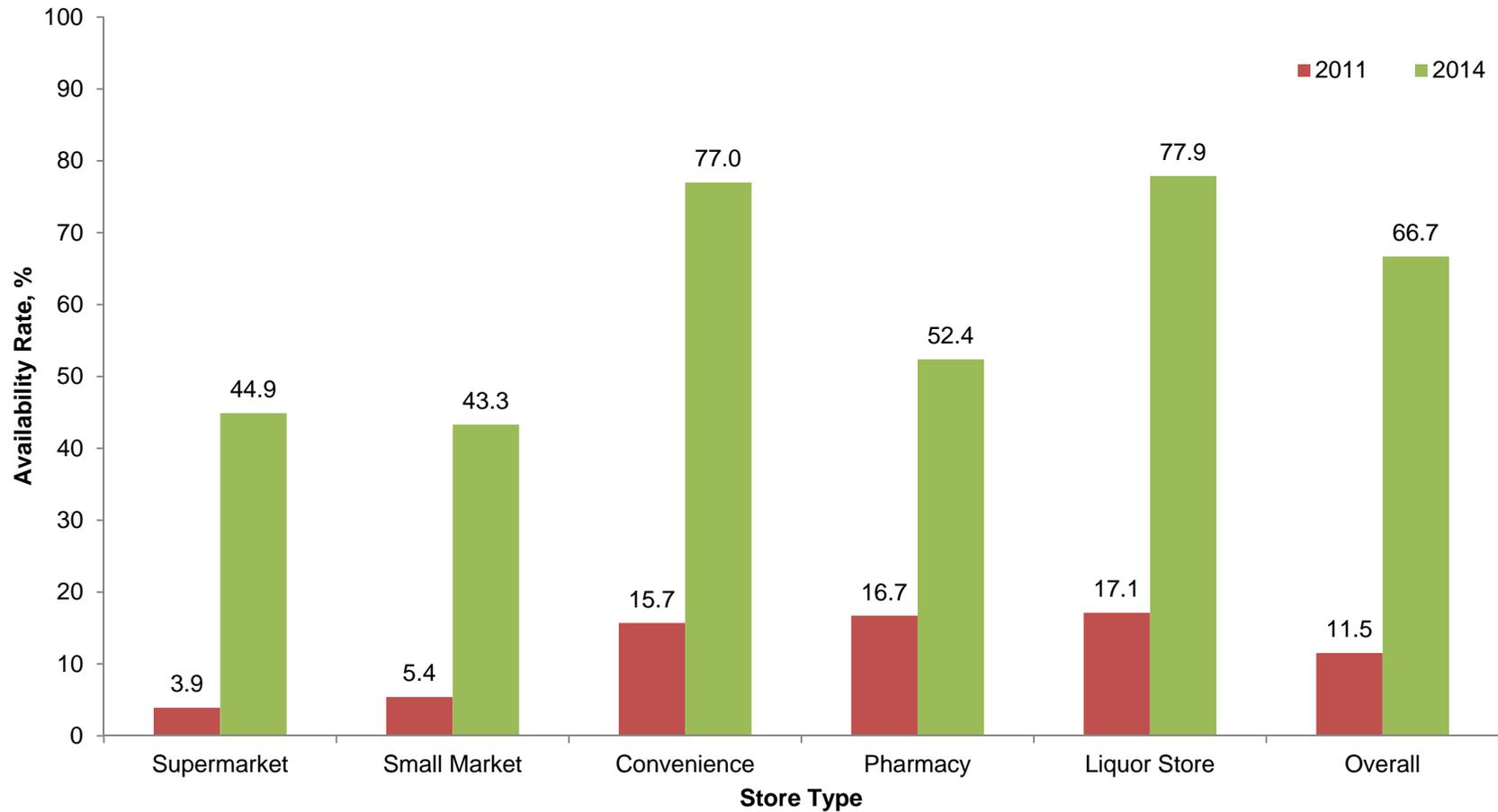
# **TOBACCO MARKETING & RETAIL AVAILABILITY**

**Figure 6.2. Interior tobacco advertisements below three feet by store type, 2008–2014**



Source: California Tobacco Assessment Study, 2008–2014.

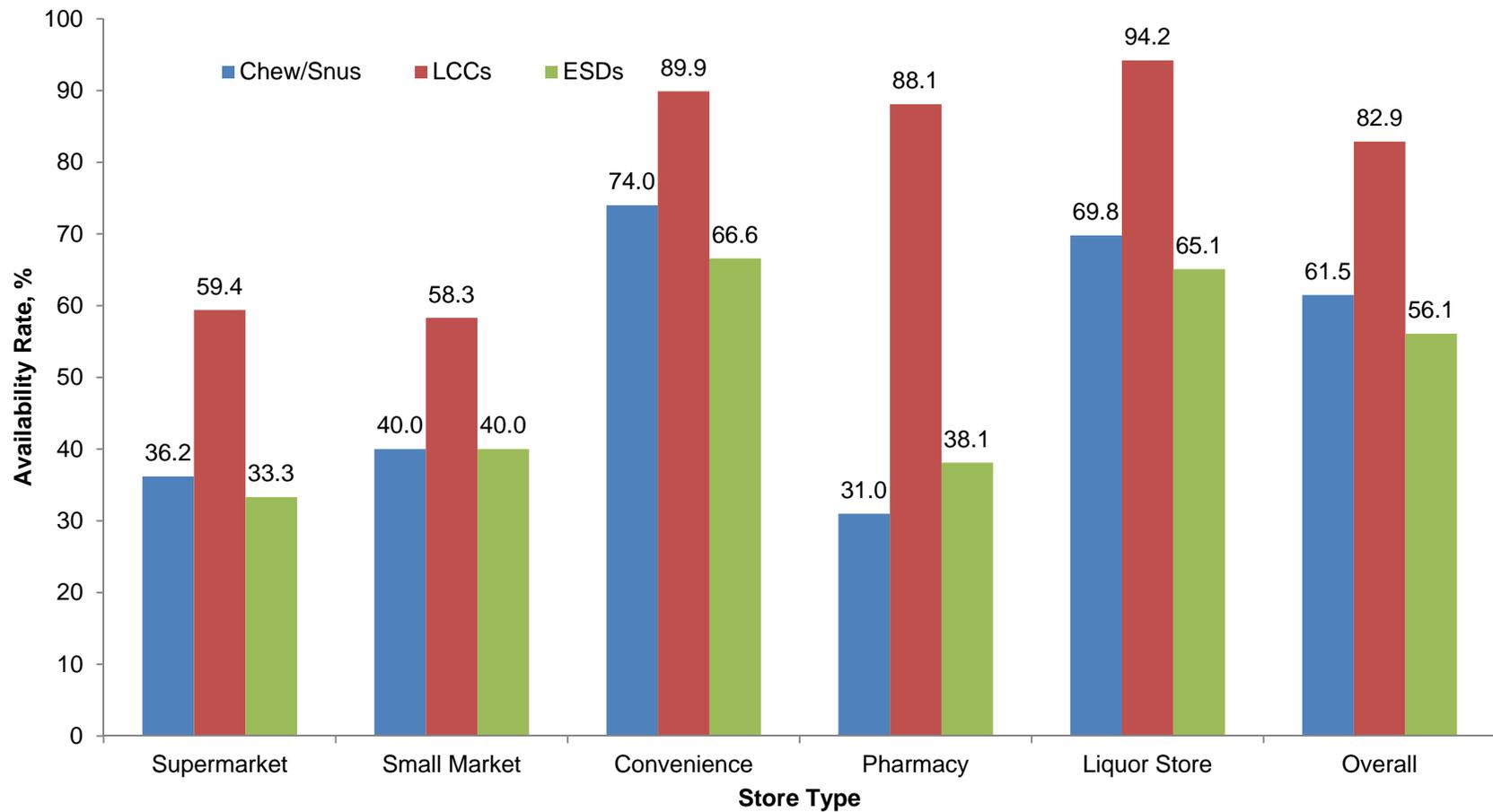
**Figure 6.3. Retail availability of electronic smoking devices by store type, 2011–2014**



Note: Electronic smoking devices includes e-cigarette (disposable cigarette lookalikes), rechargeable/refillable e-cigarettes, vape pens/tanks/MODs, e-hookah, e-liquid, and e-cigars.

Source: California Tobacco Assessment Study, 2011–2014.

## Figure 6.4. Retail availability of flavored tobacco products by store type, 2014



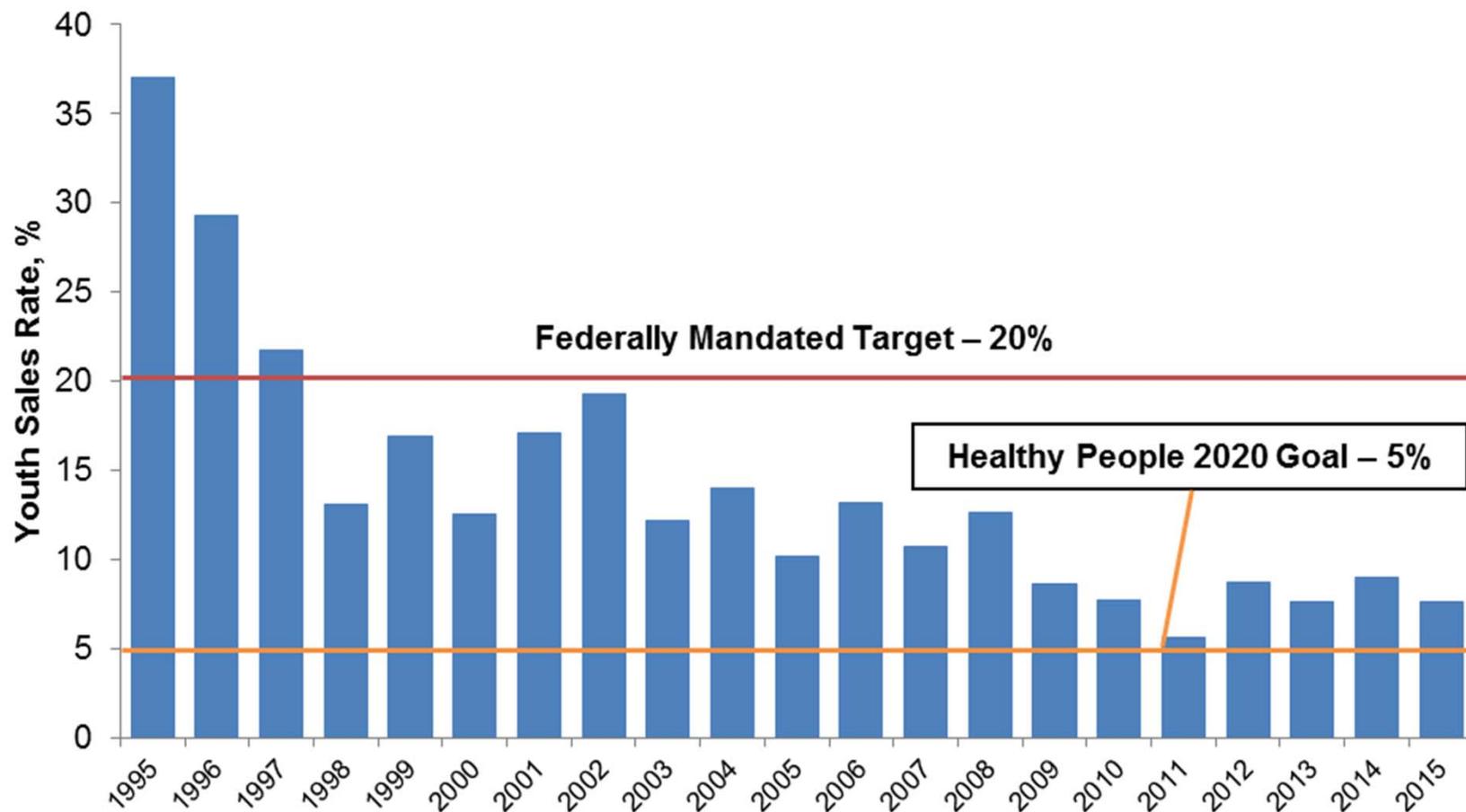
Note: Flavored tobacco product refers to products that is marketed with terms that refer to menthol/mint flavors, fruit/sweet/candy flavors (e.g., cherry, vanilla, chocolate), or liquor flavors (e.g., rum, wine, brandy) for chew/snus, little cigars or cigarillos (LCCs), and electronic smoking devices (ESDs). ESD includes e-cigarette (disposable cigarette lookalikes), rechargeable/refillable e-cigarettes, vape pens/tanks/MODs, e-hookah, e-liquid, and e-cigars.

Source: California Tobacco Assessment Study, 2014.

SUBSECTION 6C

# **TOBACCO SALES TO MINORS**

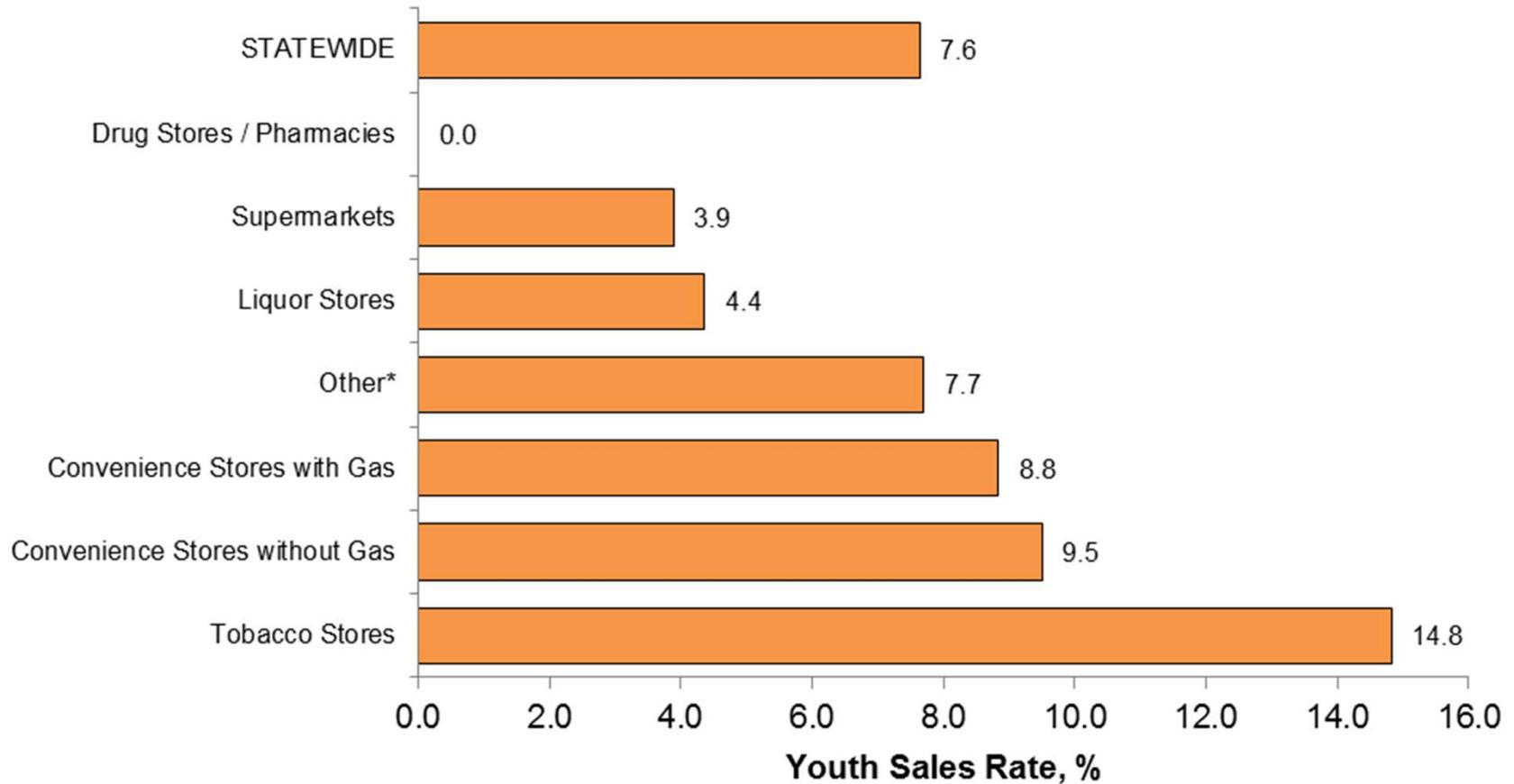
### Figure 6.5. Percent of retailers selling tobacco to youth, 1995–2015



Note: Prior to 1997, protocol was based on attempted buy and not actual buy.

Source: Youth Tobacco Purchase Survey, 1995–2015.

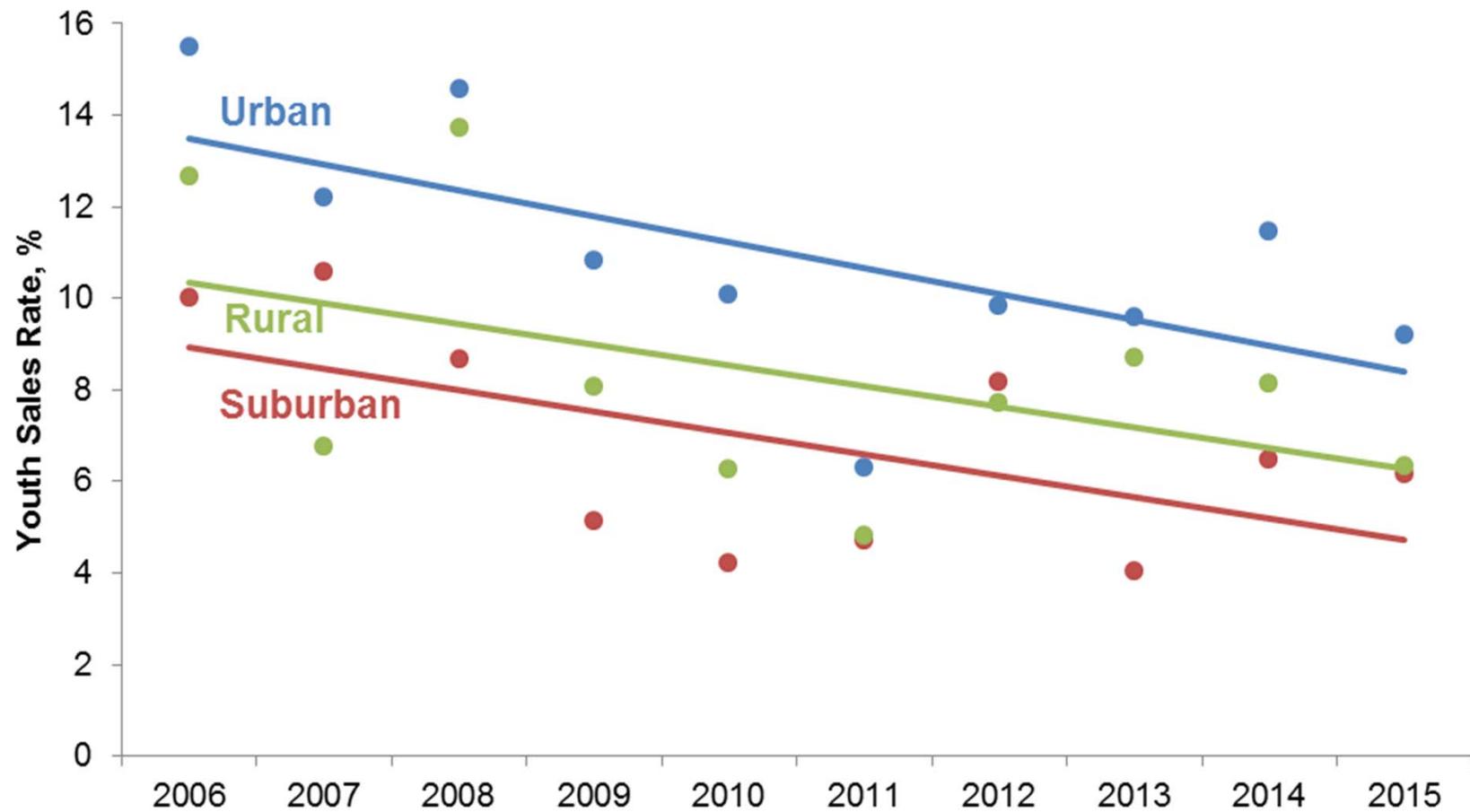
**Figure 6.6. Percent of retailers selling tobacco to youth by store type, 2015**



Note: Sales rates are standardized to an equal distribution of youth's gender and age. \* Other includes donut shops, discount stores, deli/meat markets, gift stores, produce markets, restaurants, and others.

Source: Youth Tobacco Purchase Survey, 2015.

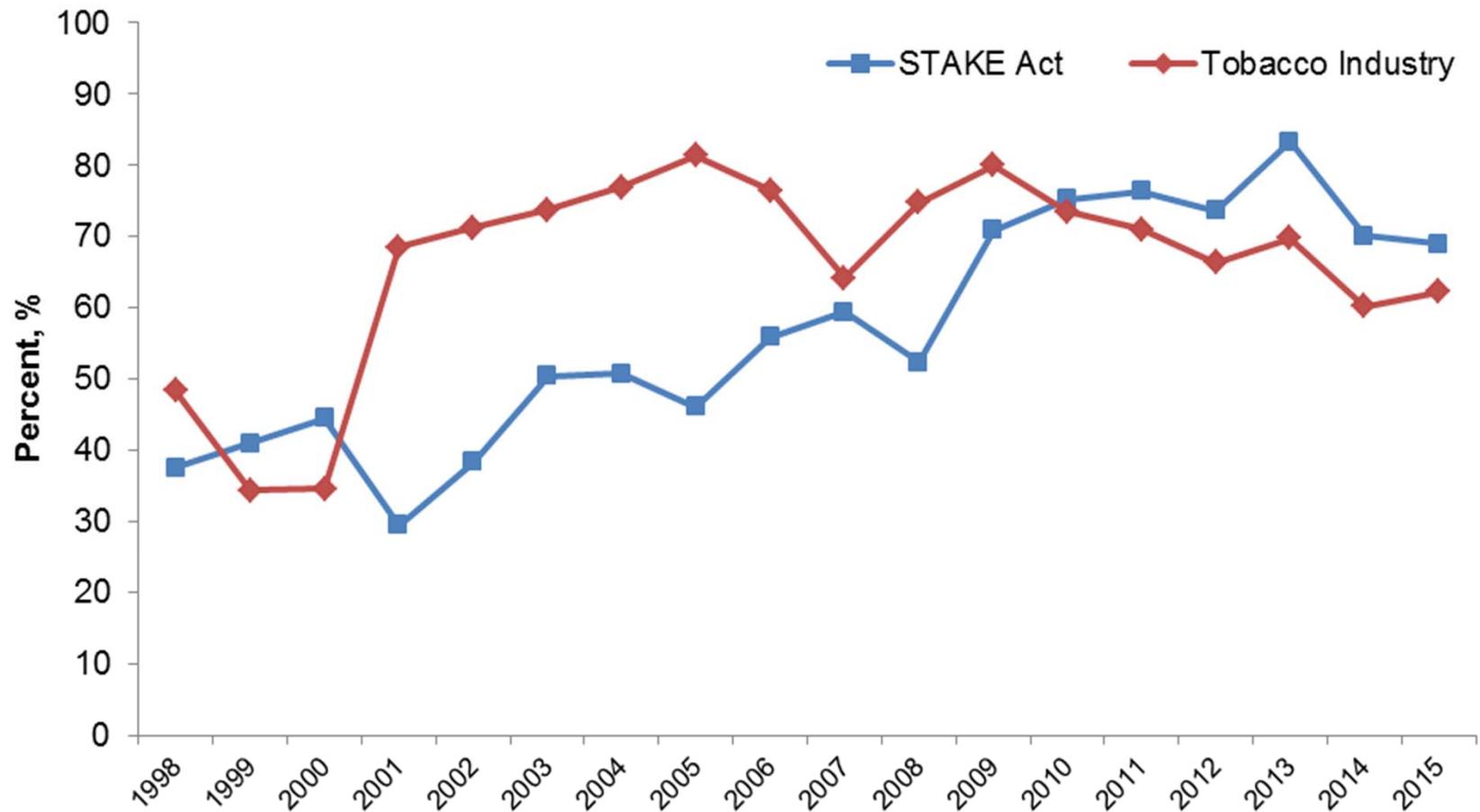
**Figure 6.7. Percent of retailers selling tobacco to youth by urban, suburban and rural, 2006–2015**



Note: Urban area is defined as 5,000 people and above per zip code. Rural area is defined as 500 people and under per zip code. All other areas are classified as suburban.

Source: Youth Tobacco Purchase Survey, 2006–2015.

**Figure 6.8. Percent of retailers displaying tobacco industry age-of-sale warning signs and STAKE Act age-of-sale warning signs, 1998–2015**



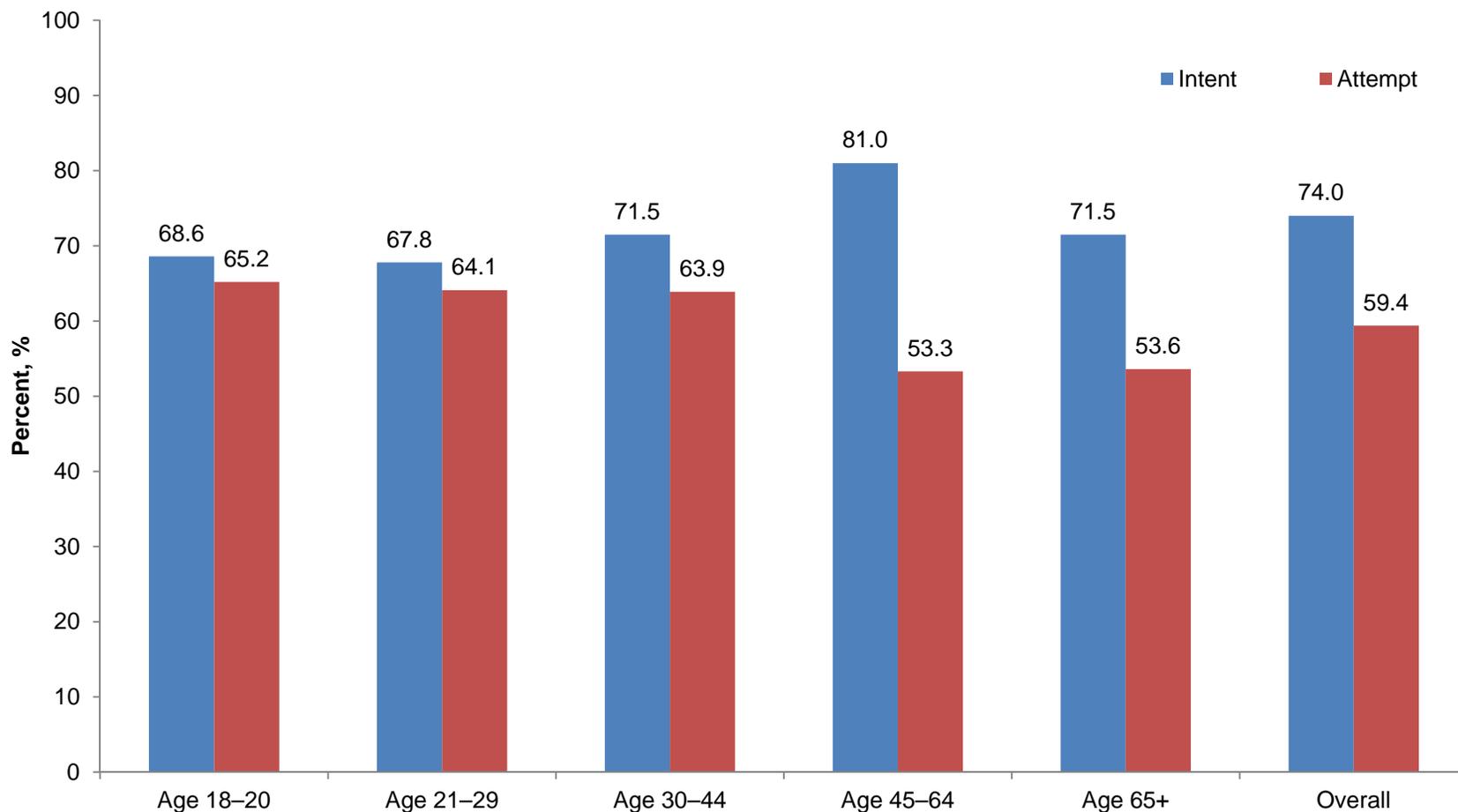
Note: The definition of a STAKE Act sign changed in 2006 to include non-California Department of Public Health signs that still met the legal requirements.

Source: Youth Tobacco Purchase Survey, 1998–2015.

SECTION 7

# **SMOKING CESSATION**

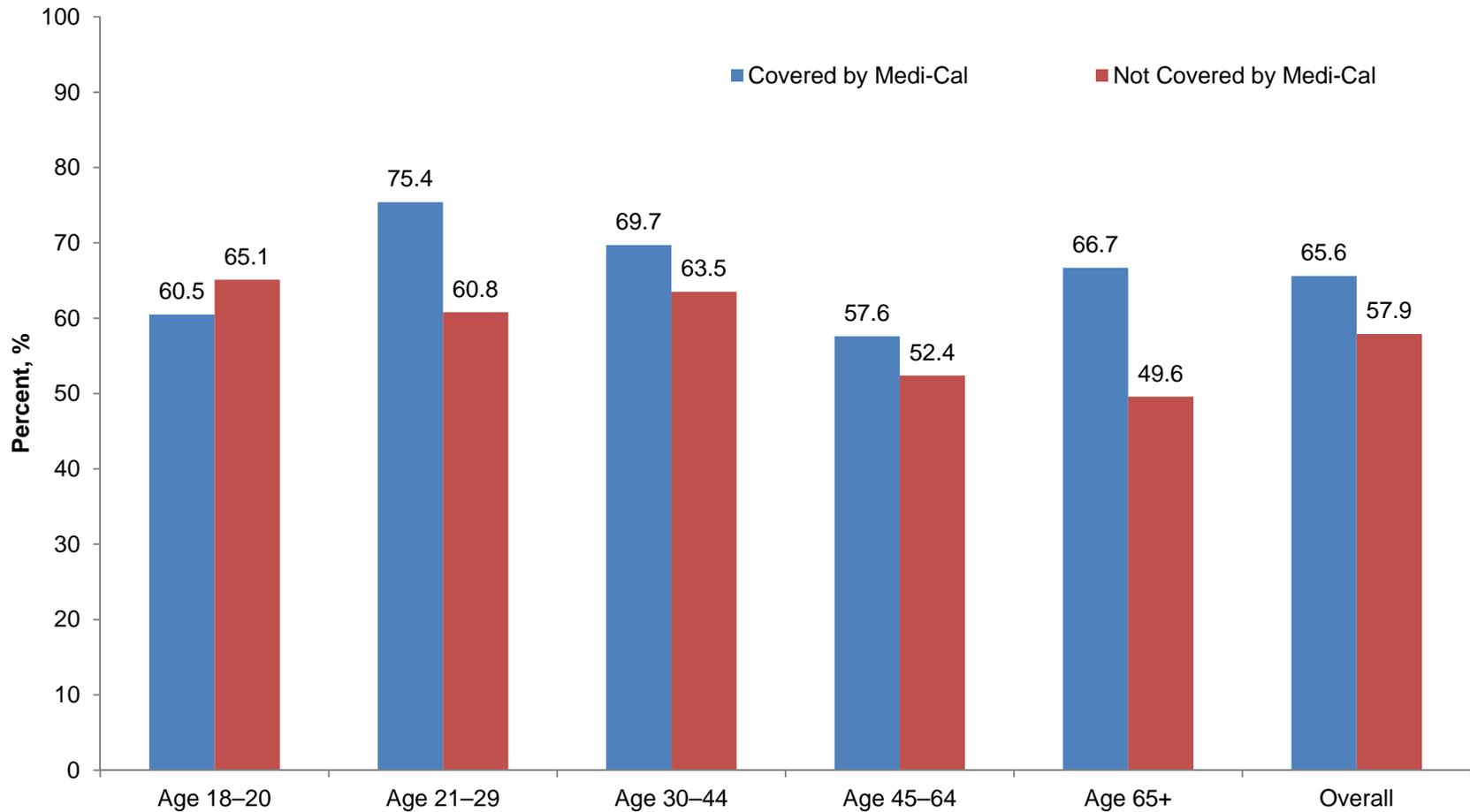
**Figure 7.1. Percent of current California adult smokers thinking about quitting smoking (intent) and quitting one day or longer (attempt) by age, 2013–2014**



Note: Respondents who are current smokers aged 18+ were asked if they were thinking about quitting (intention) in the next six months and also if a quit attempt lasting one day or longer was made in the past year. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2013–2014.

**Figure 7.2. Percent of current California adult smokers who made a quit attempt lasting one day or longer by age and Medi-Cal coverage, 2013–2014**



Note: Respondents who are current smokers aged 18+ were asked if they stopped smoking for one day or longer as an attempt to quit smoking and current Medi-Cal coverage. Data for 2013 and 2014 were pooled together.

Source: California Health Interview Survey, 2013–2014.

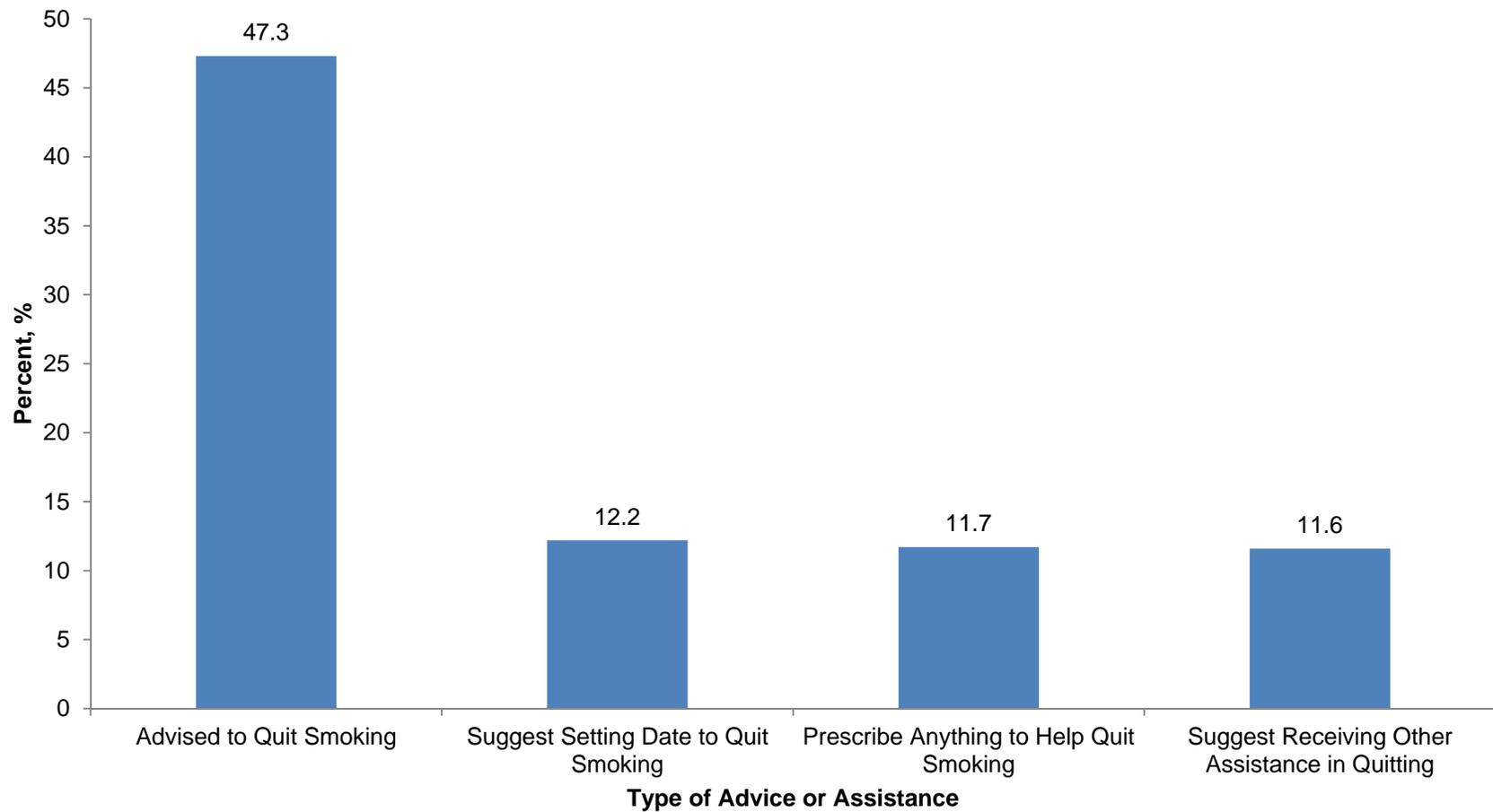
**Table 7.1. Methods used to quit smoking in the past 12 months among California smokers aged 18–64, 2016**

<b>Method</b>	<b>Percent (95% C.I.)</b>
<b>Quit cold turkey</b>	67.4 (59.8 – 75.0)
<b>Use e-cigarettes</b>	19.5 (12.8 – 26.1)
<b>Nicotine patches, gum, or lozenges</b>	18.5 (12.2 – 24.8)
<b>California Smoker's helpline (1-800-NO-BUTTS)</b>	7.3 (2.8 – 11.8)
<b>Medication (e.g. Chantix, Zyban)</b>	6.7 (3.6 – 9.8)
<b>Self-help materials</b>	5.9 (3.3 - 8.6)
<b>Counseling</b>	4.1 (1.1 – 7.0)

Note: Respondents who successful or attempted to quit smoking in the last 12 months were asked the method used to quit smoking cigarettes in their last attempt. Percent does not equal to 100% as smokers could use multiple methods of quitting. Weighted to 2015 Current Population Survey California population.

Source: Online California Adult Tobacco Survey, 2016.

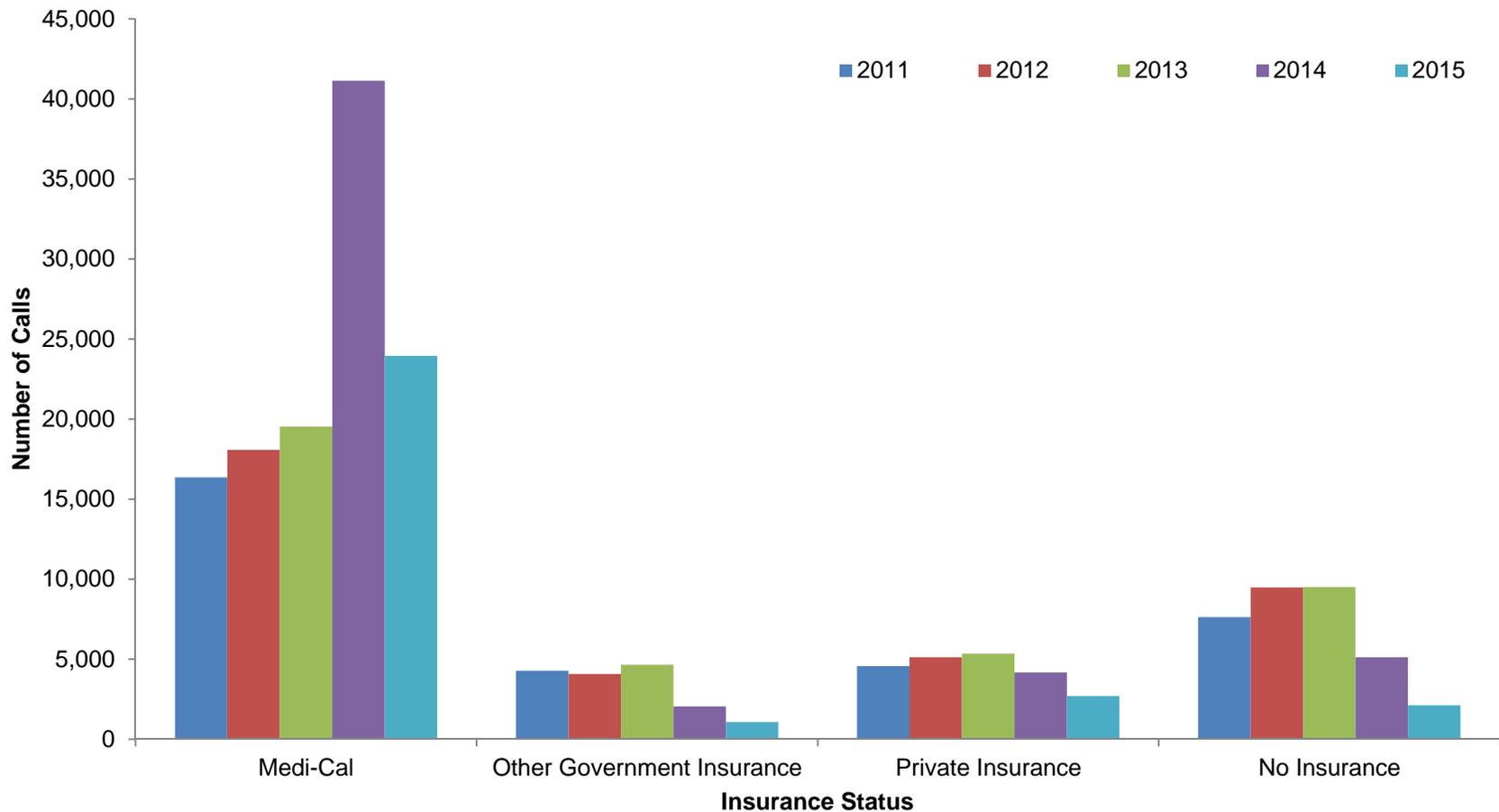
**Figure 7.3. Type of advice or assistance provided by physicians to current and recent adult smokers, 2016**



Note: Respondents who are current or recent smokers aged 18 through 64 who saw a doctor or other health care provider in the past 12 months were asked type of advice or assistance provided by the doctor or other health care provider. Weighted to 2015 Current Population Survey California population.

Source: Online California Adult Tobacco Survey, 2016.

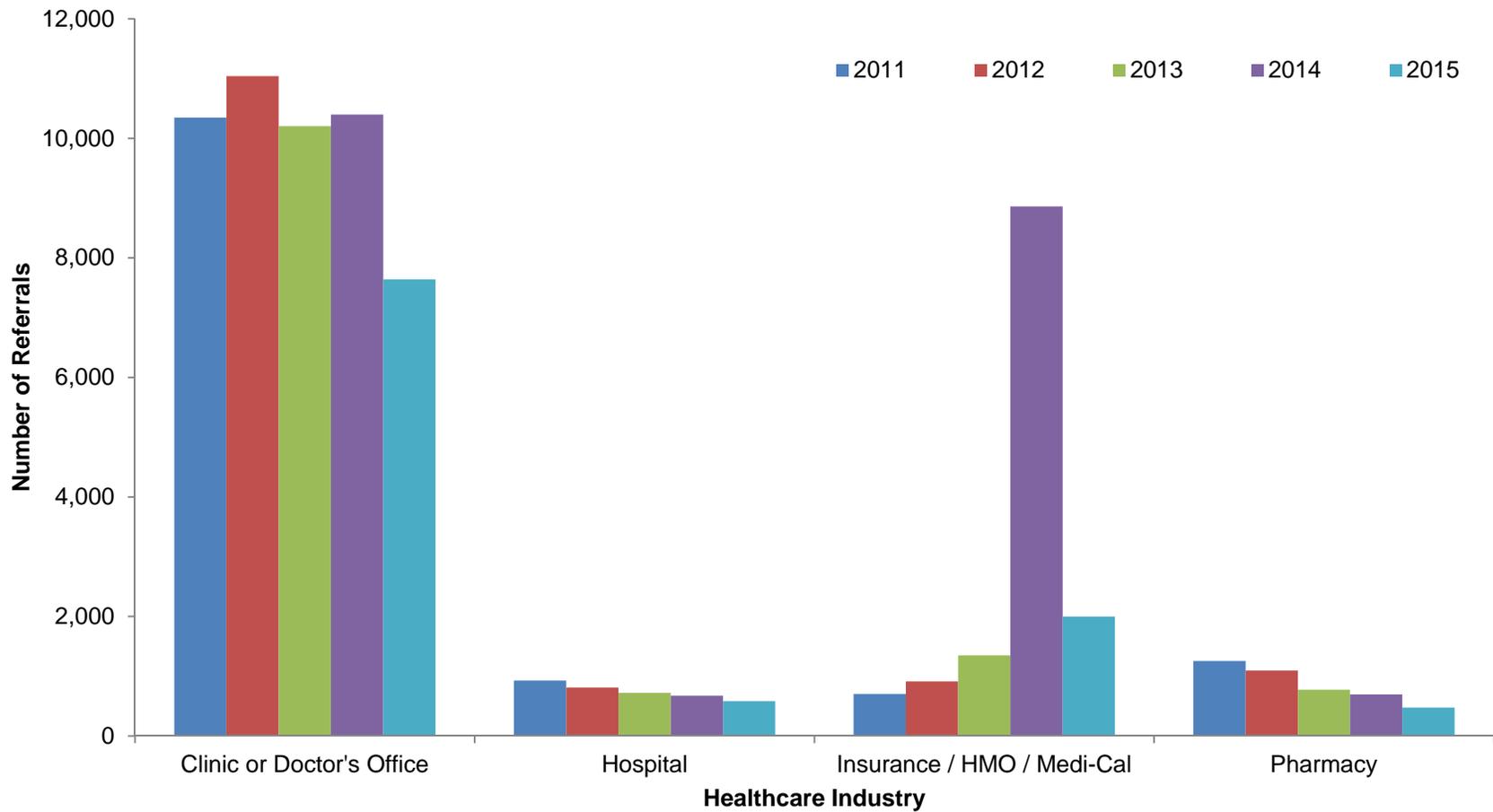
**Figure 7.4. Number of calls to the California Smokers' Helpline by health insurance status, 2011–2015**



Note: Callers to the California Smokers' Helpline were asked about current insurance status.

Source: California Smokers' Helpline, 2011–2015.

**Figure 7.5. Number of referrals to the California Smokers' Helpline by the healthcare industry, 2011–2015**



Note: Callers to the California Smokers' Helpline were asked how they heard about the helpline.

Source: California Smokers' Helpline, 2011–2015.