# California Tobacco Facts and Figures 2015

## 25 Years of Tobacco Control in California

California Department of Public Health,
California Tobacco Control Program

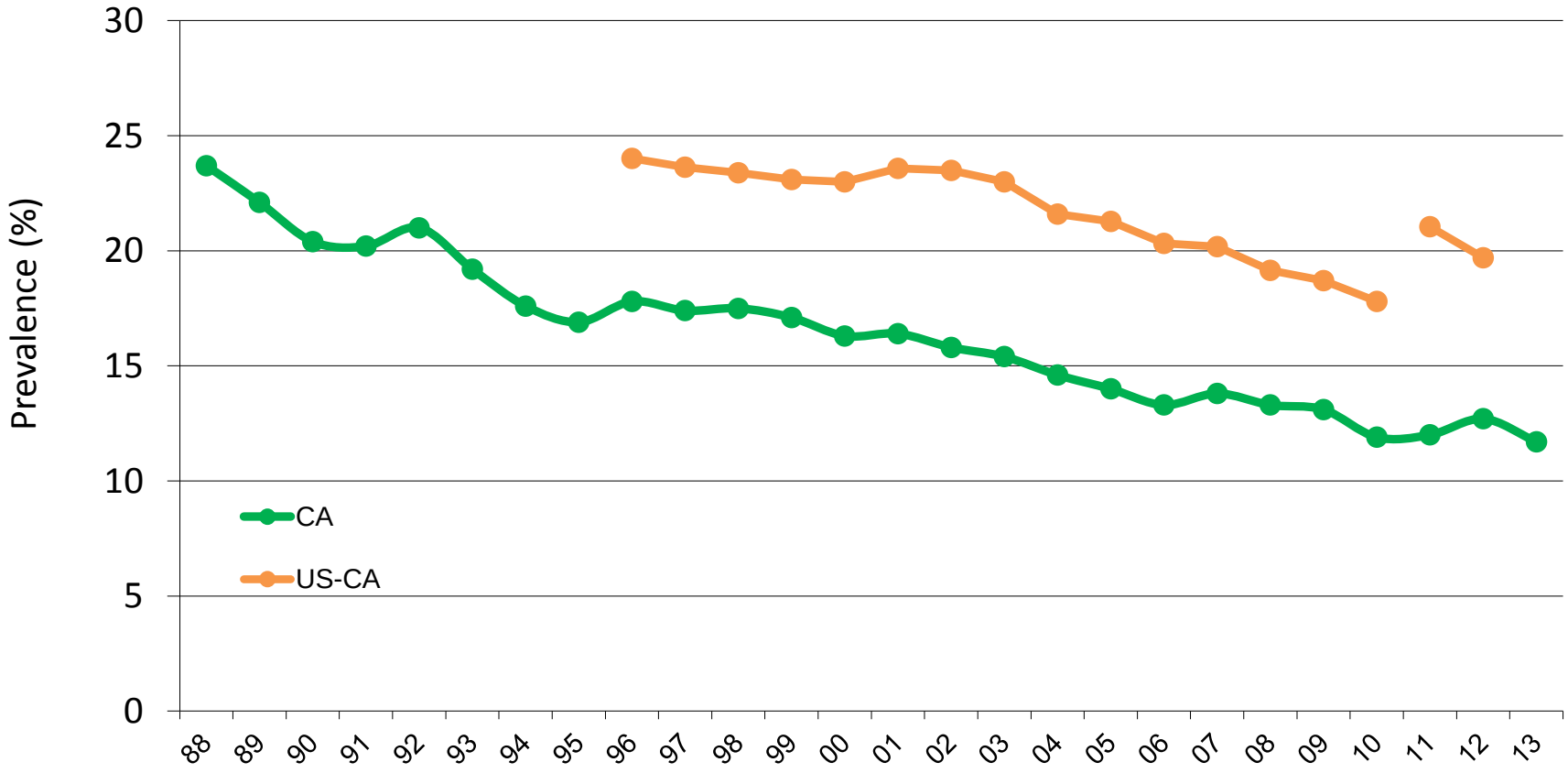
Section 1

# CALIFORNIA'S SMOKING PREVALENCE

Subsection 1A.

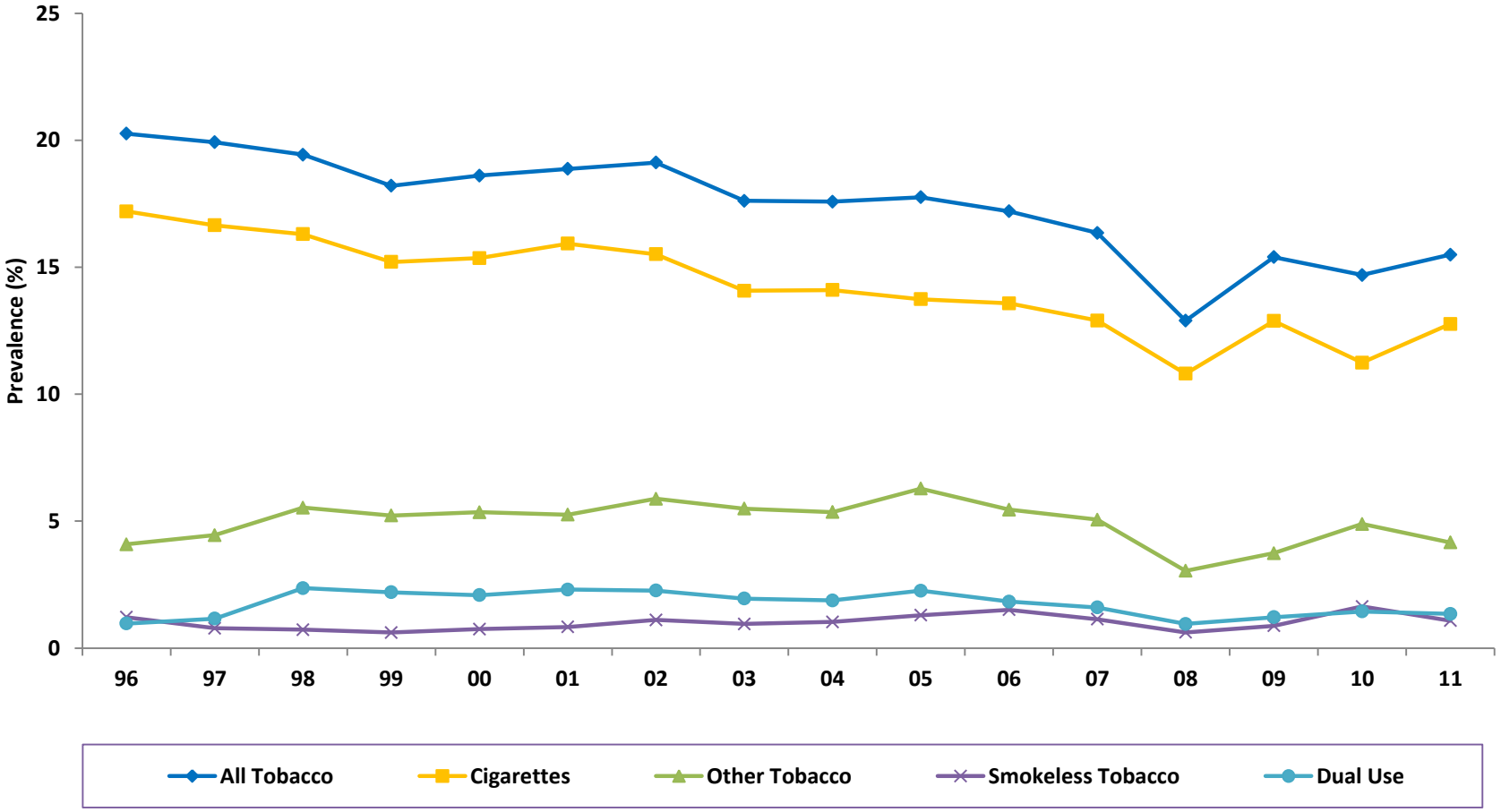
# ADULT SMOKING RATES – HISTORICAL TRENDS

# Figure 1A.1 Adult cigarette smoking prevalence within California (CA) and the rest of the United States (US-CA), 1988-2013.



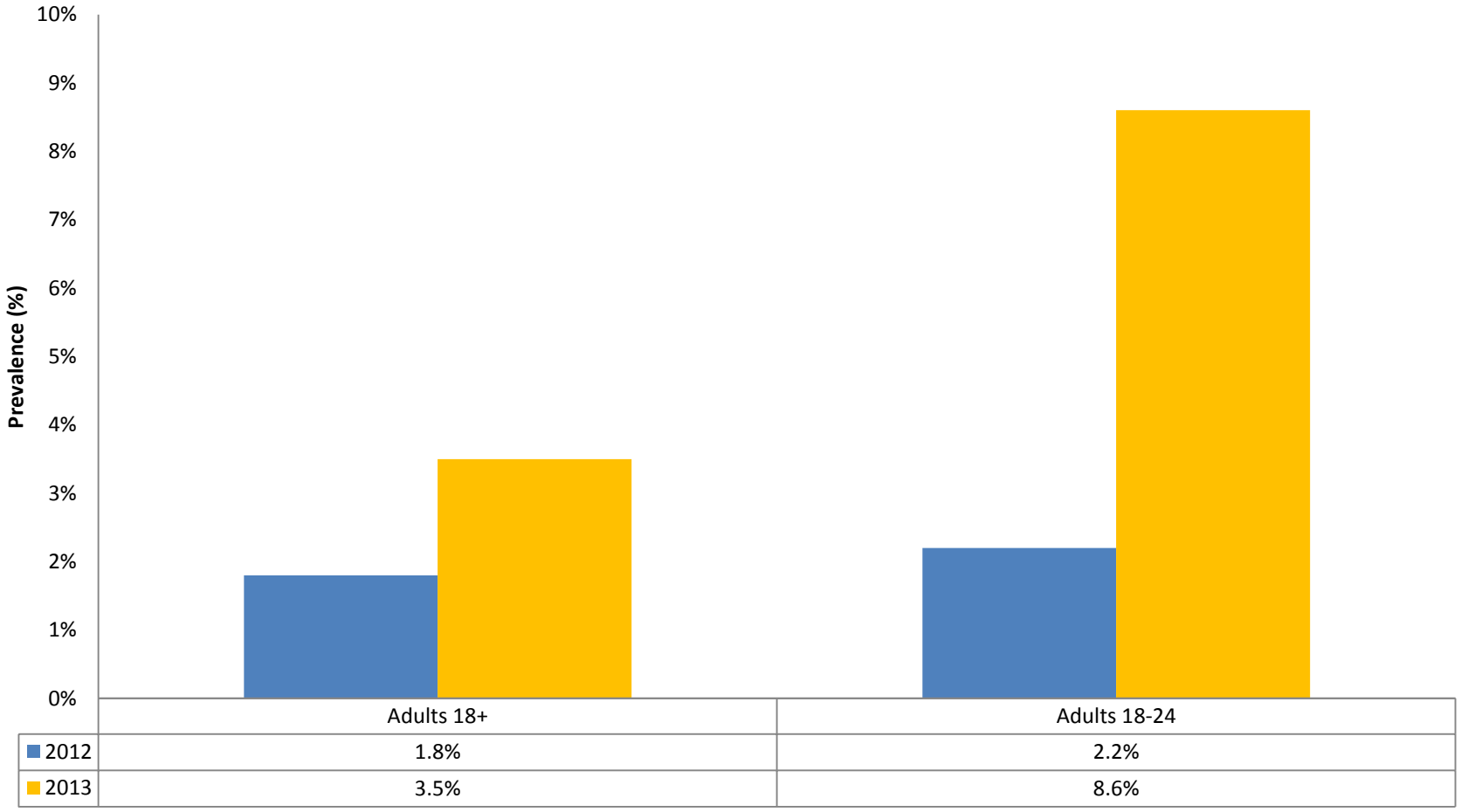

Source: Behavioral Risk Factor Surveillance System (BRFSS) 1984-2013.
The data are weighted to the 2000 California population from 1984 to 2011, weighted to 2010 California population since 2012. The U.S. estimate in this chart does not include California adults.
Note: an adjustment was made to address the change of smoking definition in 1996 that included more occasional smokers. The weighting methodology changed in 2011 for the rest of U.S., but changed in 2012 for CA.

# Figure 1A.2 California adult tobacco use trends, 1996-2011.




Source: Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey (BRFSS/CATS 1996-2011) weighted to 2000 California Population.
Notes: Current tobacco use is defined as: 1) All tobacco (cigarettes, cigars, little cigars, cigarillos, pipe, chew, snuff, and snus); 2) Other Tobacco (cigars, little cigars, cigarillos, pipe, chew, snuff, and snus); 3) Smokeless Tobacco (chew, snuff, snus); 4) Dual Use (cigarette users who also use another tobacco product). Electronic cigarette use is not included.

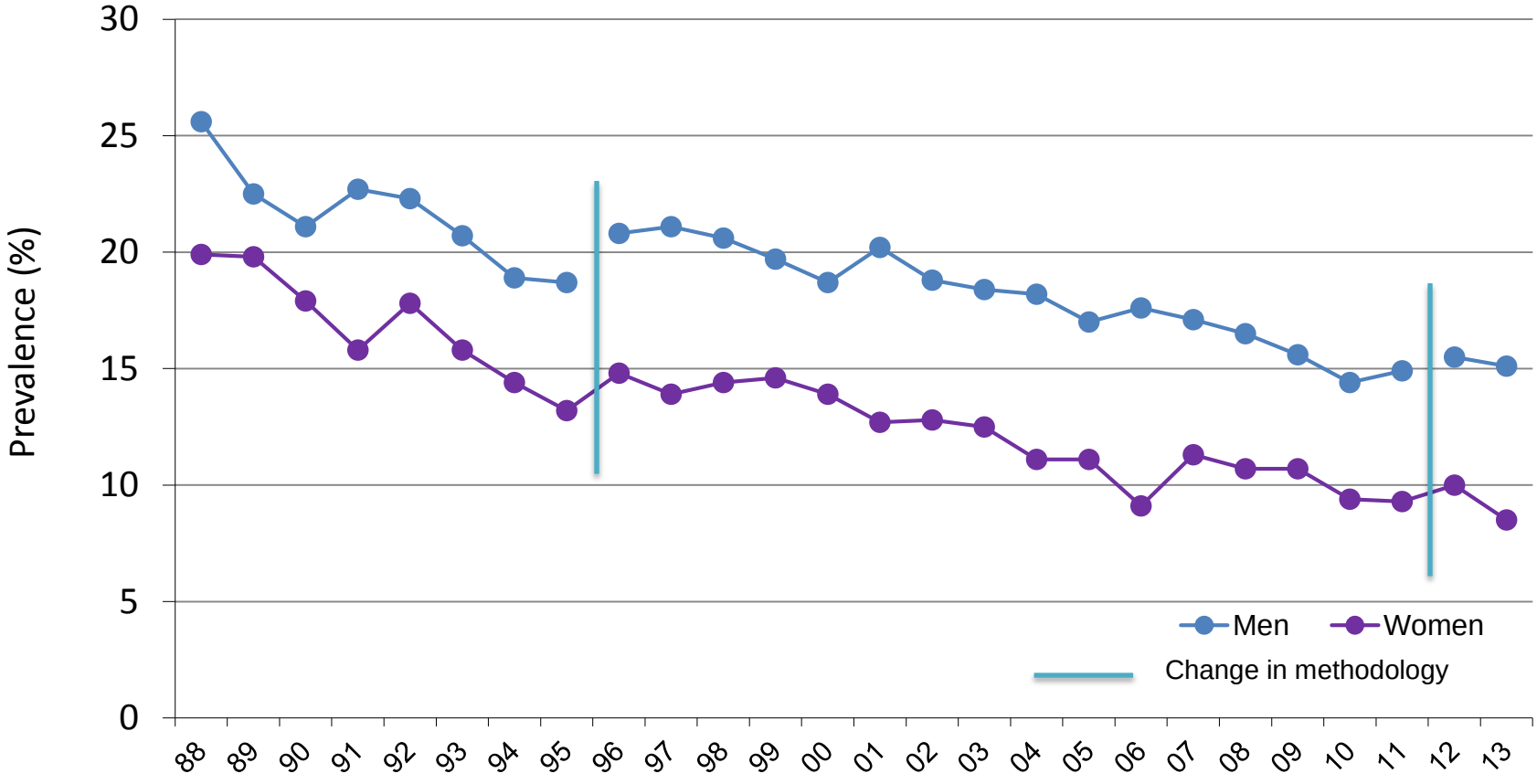
# Figure 1A.3 California e-cigarette use, 2012-2013.




| | Adults 18+ | Adults 18-24 |
|---|---|---|
| 2012 | 1.8% | 2.2% |
| 2013 | 3.5% | 8.6% |

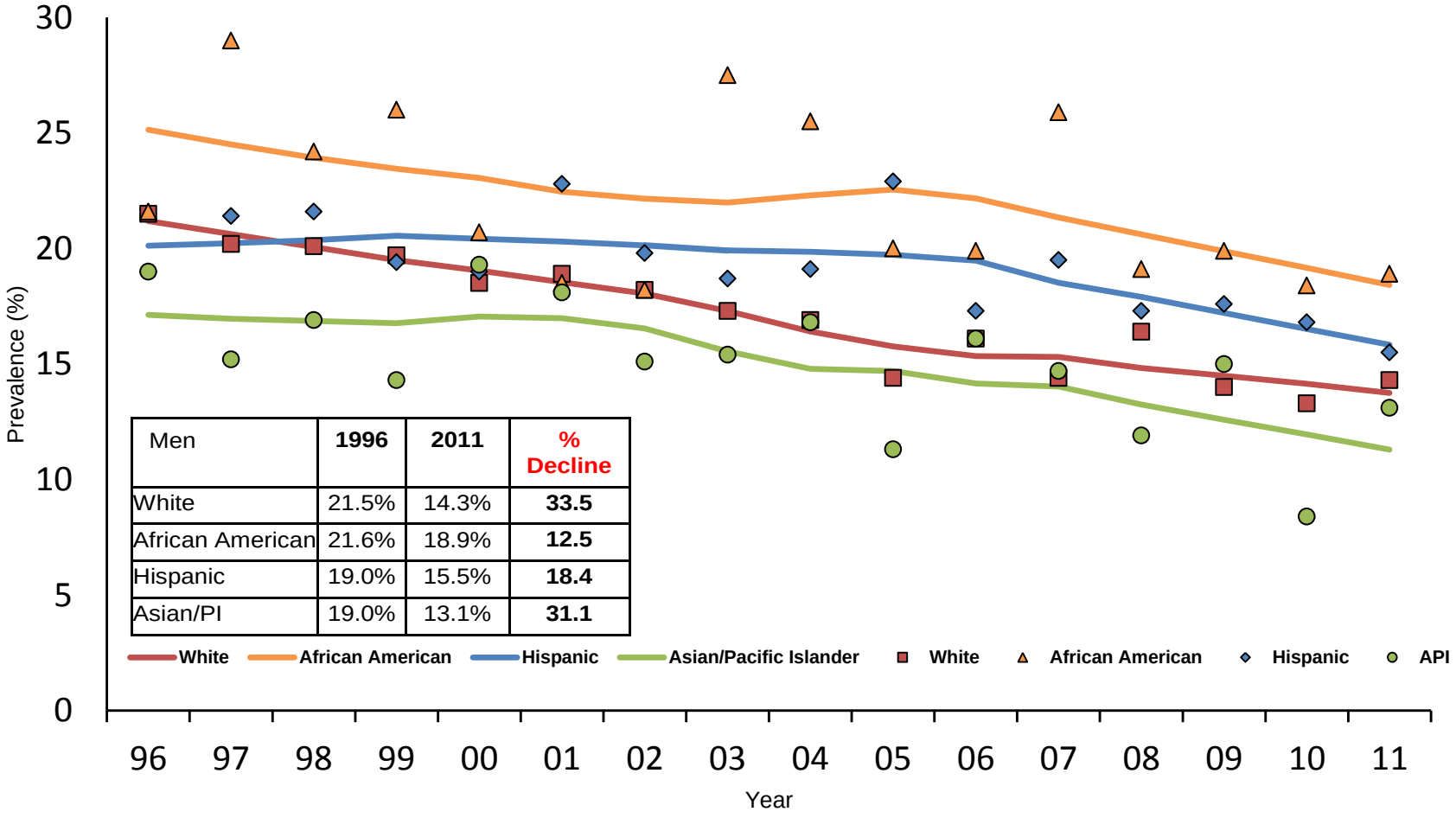
Source: Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey (BRFSS/CATS 2012-13) weighted to 2000 California Population.

# Figure 1A.4 Adult cigarette smoking prevalence by gender within California, 1988-2013.




Source: Behavioral Risk Factor Surveillance System (BRFSS) 1984-2013.
The data are weighted to the 2000 California population from 1984 to 2011, weighted to 2010 California population in 2012.
Note: 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 CA.

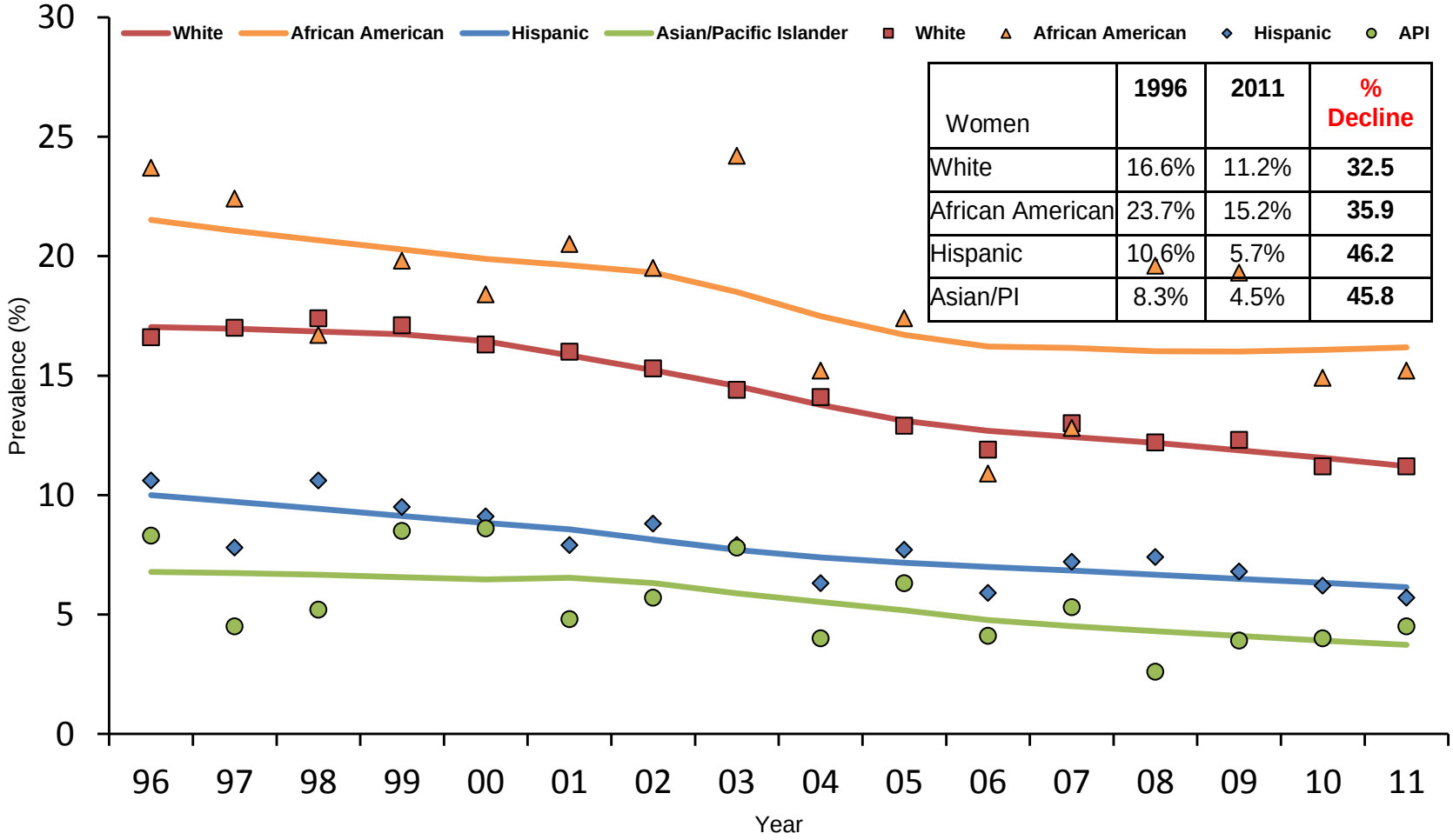
# Figure 1A.5 Smoking prevalence among California men by race/ethnicity, 1996-2011.




| Men | 1996 | 2011 | % Decline |
|---|---|---|---|
| White | 21.5% | 14.3% | **33.5** |
| African American | 21.6% | 18.9% | **12.5** |
| Hispanic | 19.0% | 15.5% | **18.4** |
| Asian/PI | 19.0% | 13.1% | **31.1** |

Source: Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey (BRFSS/CATS) 1996-2011. The data are weighted to the 2000 California population.
Note: The smooth lines are based on a model to smooth out the data. The National Health Interview Survey was not conducted in 1996. The rates were averaged for 1995 and 1997 to estimate the 1996 rates.

# Figure 1A.6 Smoking prevalence among California women by race/ethnicity, 1996-2011.



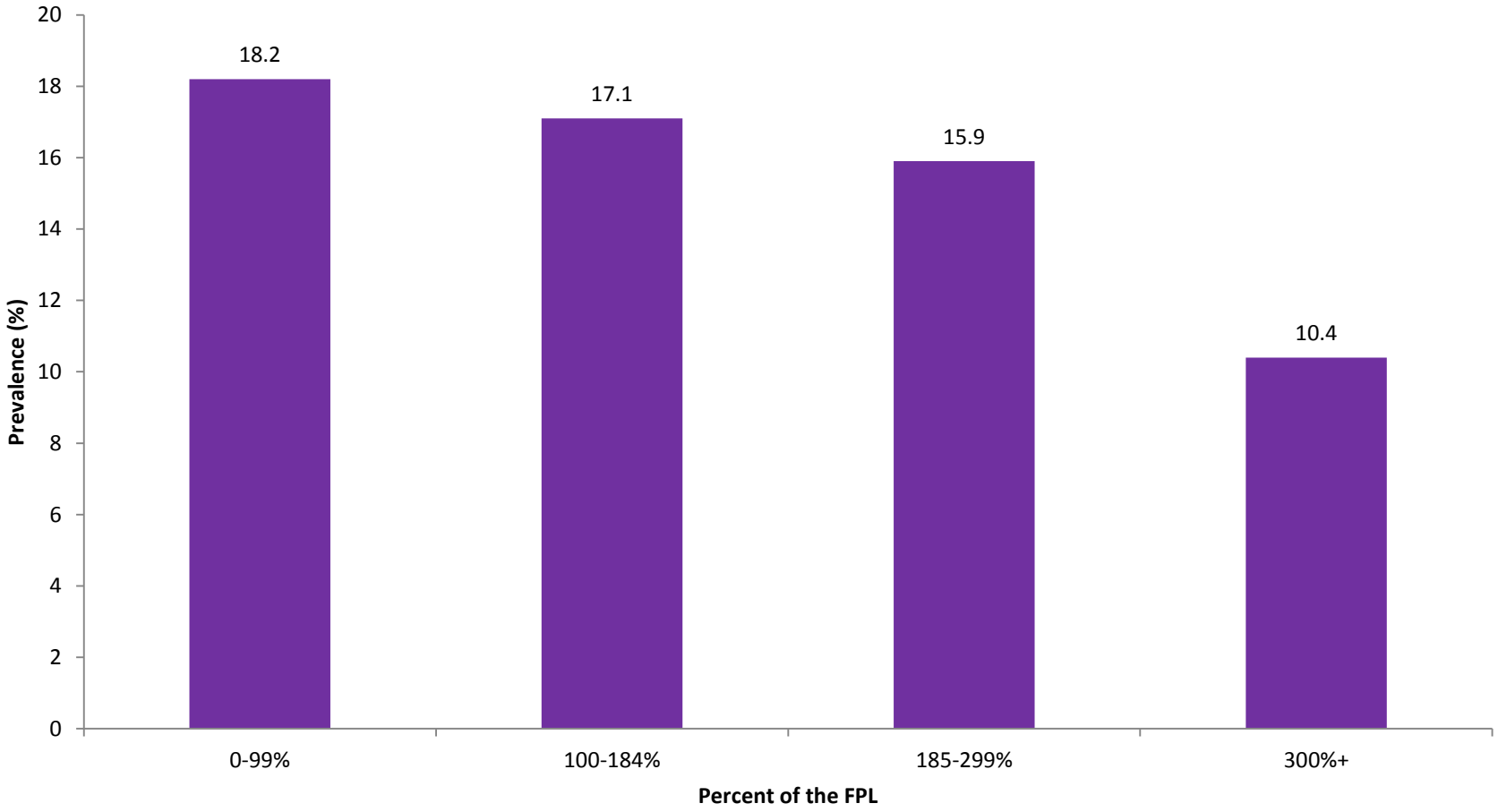

| Women | 1996 | 2011 | % Decline |
|---|---|---|---|
| White | 16.6% | 11.2% | **32.5** |
| African American | 23.7% | 15.2% | **35.9** |
| Hispanic | 10.6% | 5.7% | **46.2** |
| Asian/PI | 8.3% | 4.5% | **45.8** |

Source: Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey (BRFSS/CATS) 1996-2011. The data are weighted to the 2000 California population.
Note: The smooth lines are based on a model to smooth out the data. The National Health Interview Survey was not collected in 1996. The rates were averaged for 1995 and 1997 to estimate the 1996 rates.

Subsection 1B.

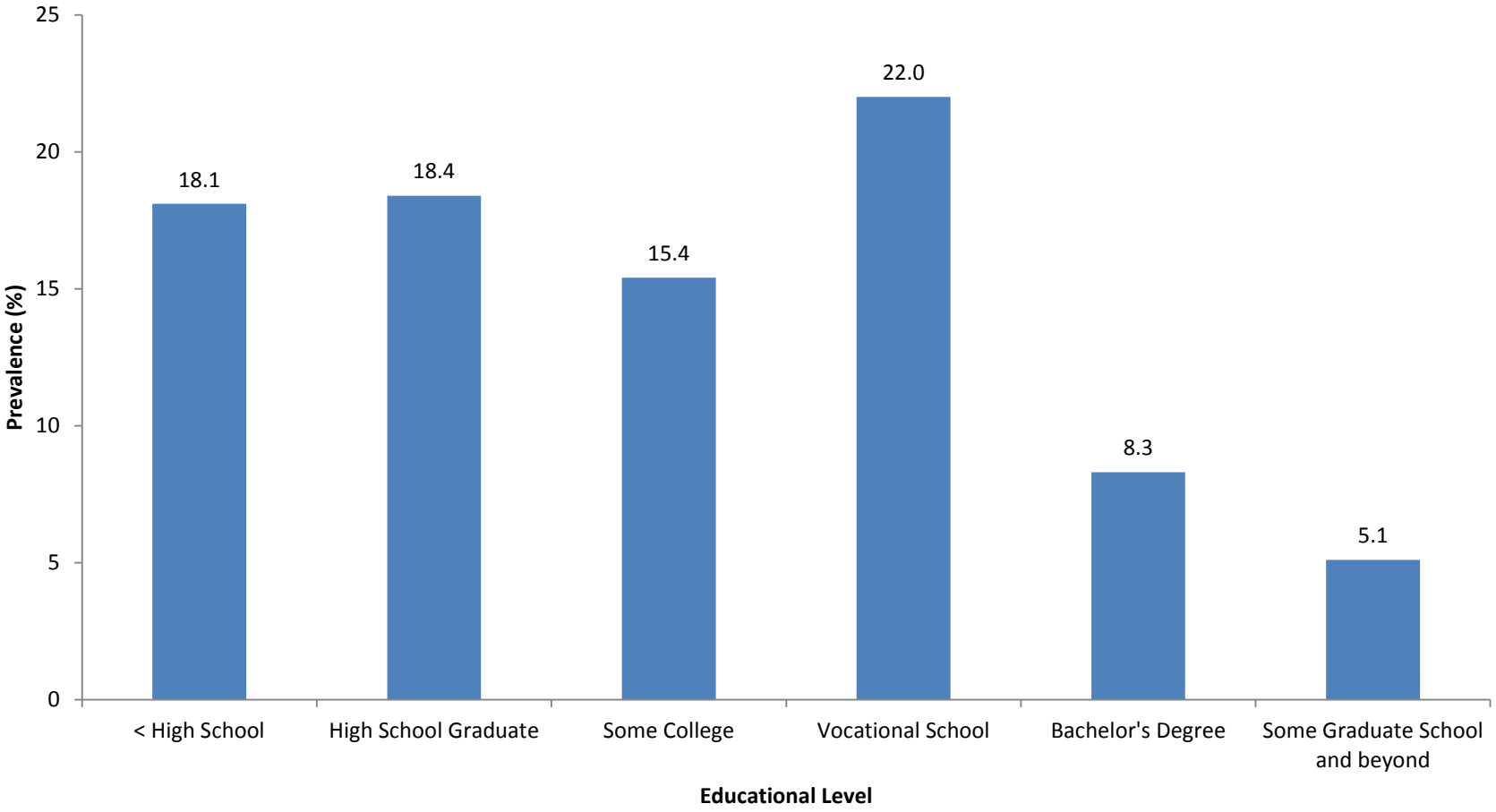
# ADULT SMOKING RATES – YEARLY SNAPSHOT

# Figure 1B.1 California adult cigarette smoking prevalence by percent of the federal poverty level (FPL) by income, 2011-2012.



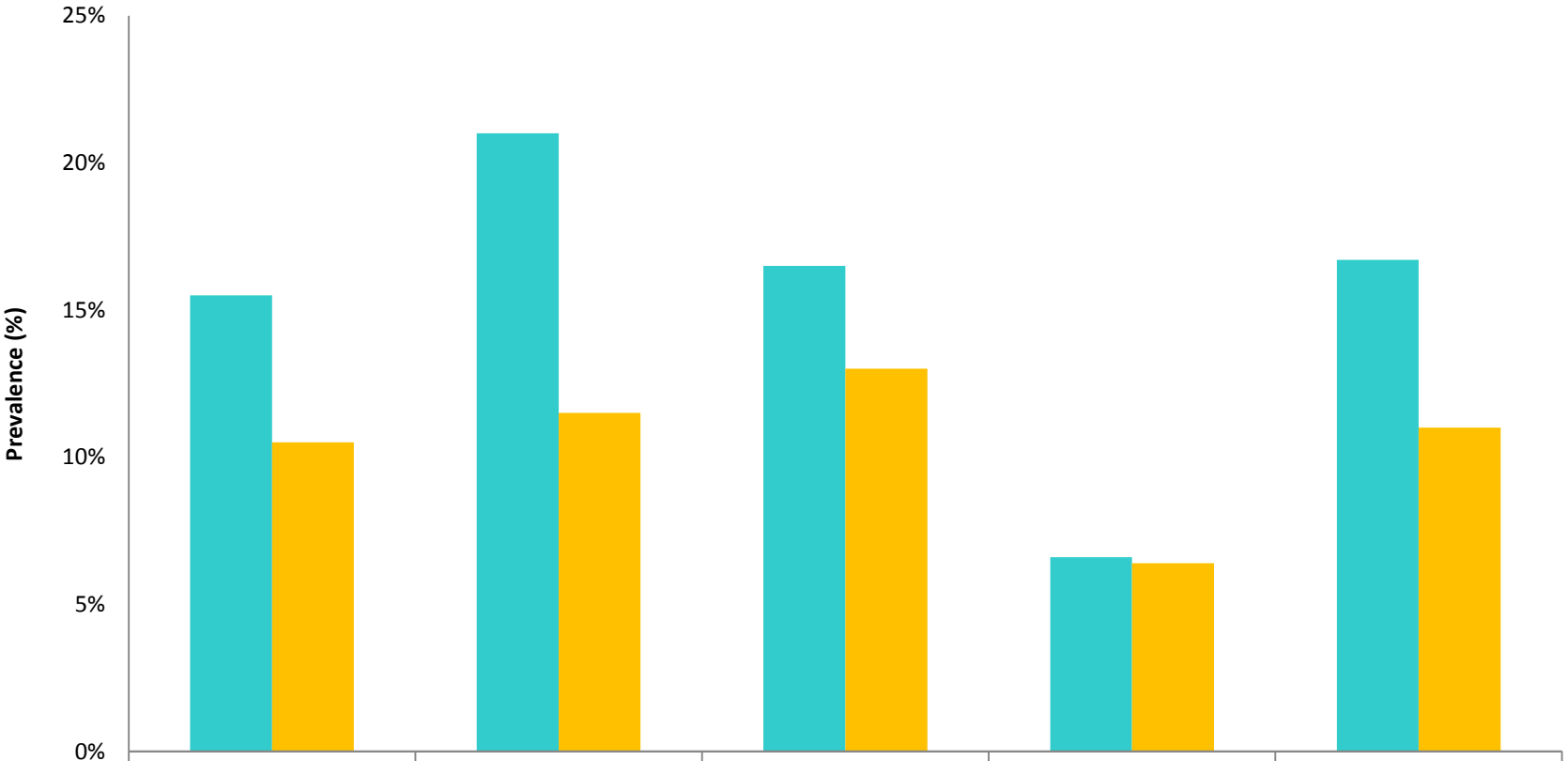

Source: California Health Interview Survey (CHIS), 2012 (restricted to respondents 18 years of age and older).

# Figure 1B.2 California adult cigarette smoking prevalence by educational level, 2011-2012.




Source: California Health Interview Survey (CHIS), 2012 (restricted to respondents 18 years of age and older)

# Figure 1B.3 California adult cigarette smoking prevalence by age and gender, 2011-2012.



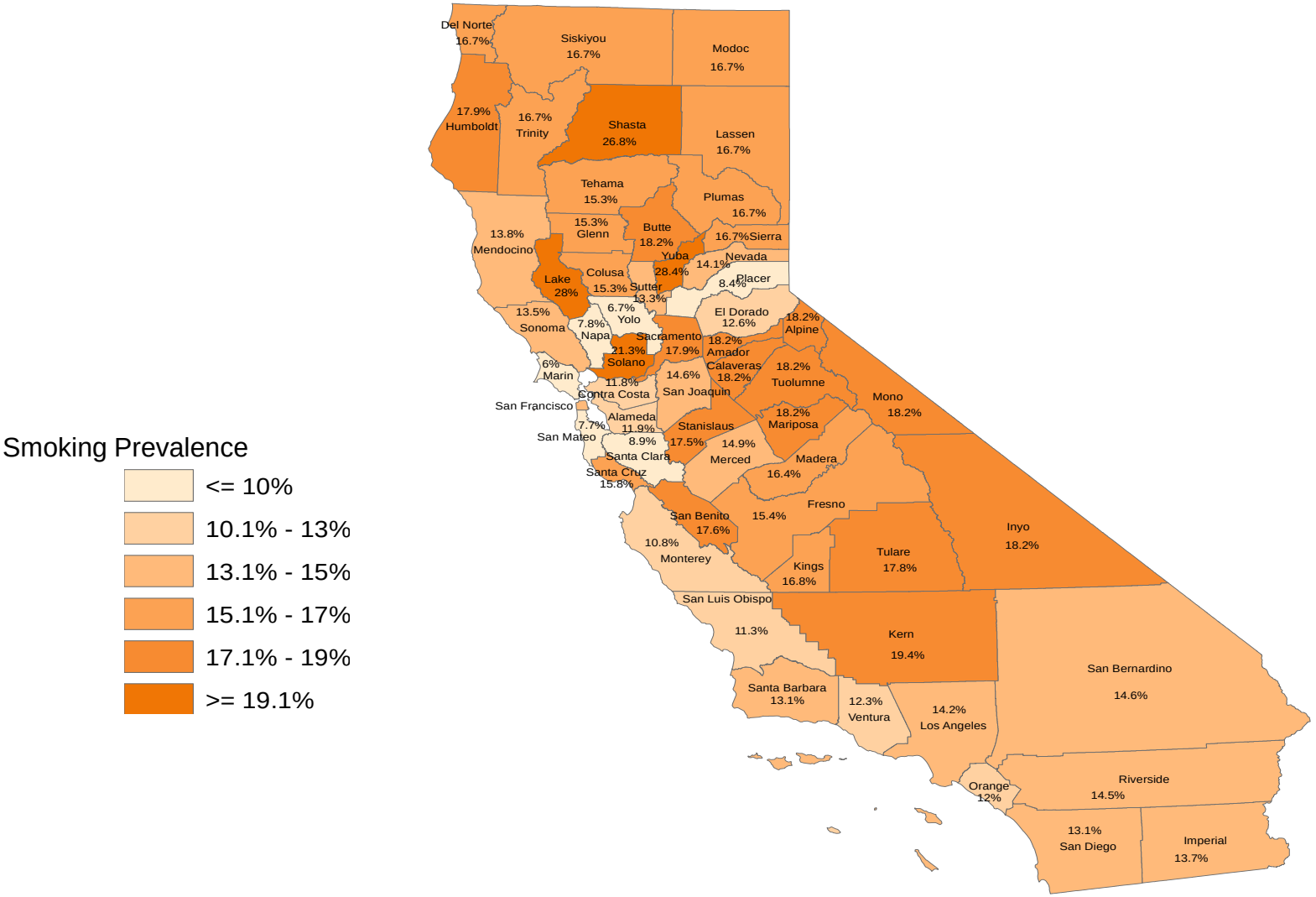

| | 18-24 | 25-44 | 45-64 | 65+ | Overall |
|---|---|---|---|---|---|
| Males | 15.5% | 21.0% | 16.5% | 6.6% | 16.7% |
| Females | 10.5% | 11.5% | 13.0% | 6.4% | 11.0% |

Source: California Health Interview Survey (CHIS), 2012.

Subsection 1C.

# GEOGRAPHIC PATTERNS IN ADULT SMOKING PREVALENCE

# Figure 1C.1 California Adult Smoking Prevalence, 2011-2012.

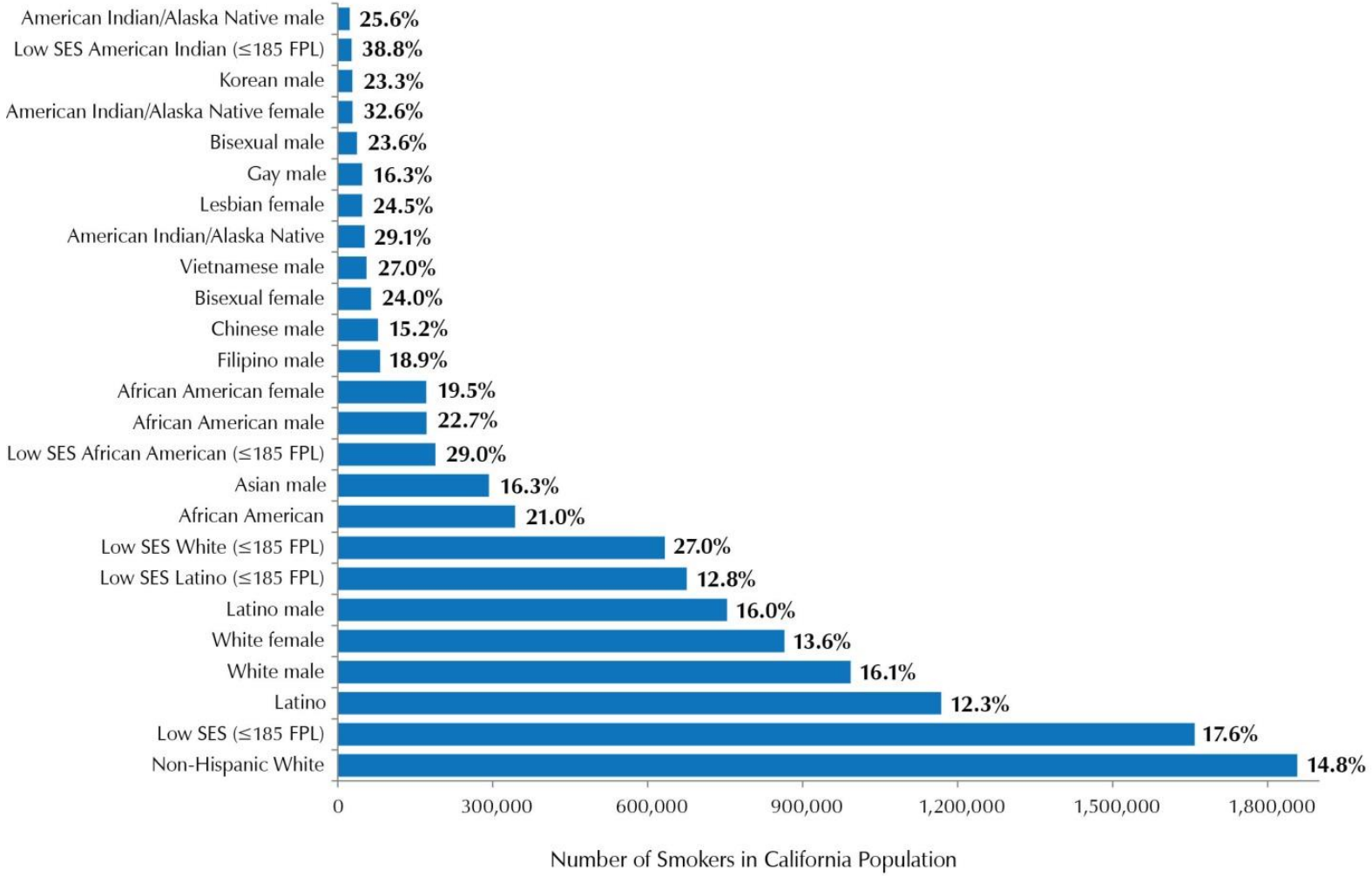



Source: California Health Interview Survey, 2011-2012.

Subsection 1D.

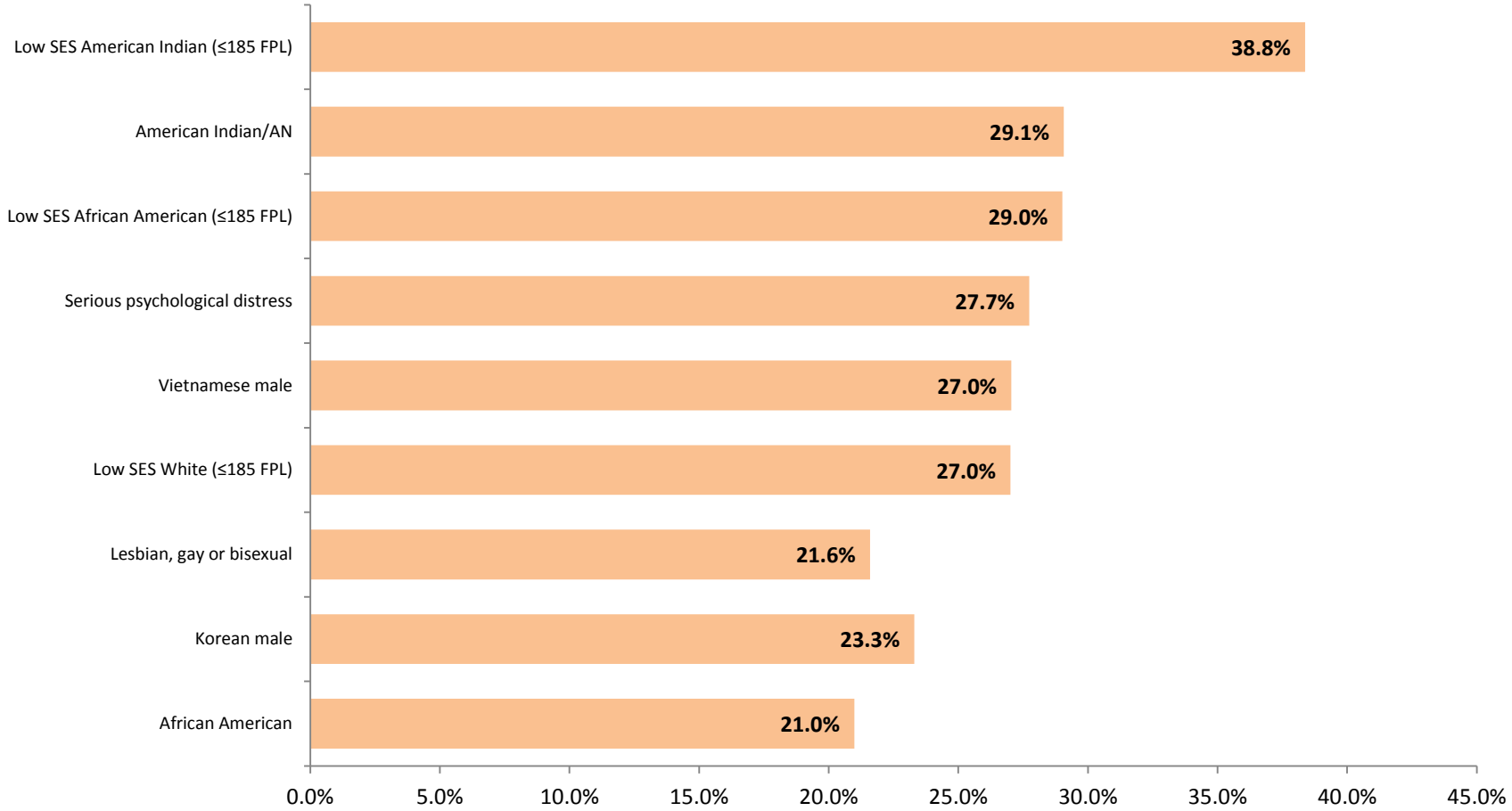
# SMOKING PREVALENCE AMONG DIVERSE POPULATION GROUPS

# Figure 1D.1 Smoking prevalence and population size of various smoker demographic groups in California (2011-2012 CHIS)




Source: California Health Interview Survey, 2011-2012. Data restricted to adults aged 18 years and older. Low SES is defined as ≤185 Federal Poverty Limit.

# Figure 1D.2 Highest smoking prevalence rates among California population subgroups




Note: Respondents were asked their current smoking status and data were restricted to adults (18+ years old). Low income is defined as 185% below the Federal Poverty Limit. Sexual Orientation estimates were computed using the Online CHIS Query. Data Source: California Health Interview Survey (2011-2012 CHIS) SAS dataset.
*Psychological distress is defined as reporting of psychological distress in the past 12 months.

# Figure 1D.3 Who are the smokers in California?

| | Percent of Smokers | Population percent | Number of smokers | Population size |
|---|---|---|---|---|
| Heterosexual | 94.4% | 95.8% | 3.5M | 23.9M |
| Homosexual or bisexual | 5.3% | 3.6% | 195K | 903K |
| Not sexual, celibate, or other | 0.3% | 0.6% | 12K | 158K |
| | | | | |
| Urban | 44.9% | 43.4% | 1.8M | 13.4M |
| *2nd City | 28.0% | 26.8% | 1.1M | 8.3M |
| Suburban | 15.4% | 19.4% | 607K | 6.0M |
| Town and rural | 11.6% | 10.5% | 456K | 3.2M |
| | | | | |
| Own home | 42.7% | 58.7% | 1.6M | 16.2M |
| Rent home | 52.2% | 37.3% | 2.0M | 10.2M |
| Have other arrangement | 5.1% | 3.9% | 192K | 1.1M |
| | | | | |
| Psychological distress likely in last year | 15.9% | 7.9% | 608K | 2.2M |
| Psychological distress not likely in last year | 84.1% | 92.1% | 3.2M | 25.5M |
| | | | | |
| Currently insured | 73.50% | 83.10% | 2.9M | 25.7M |
| Not currently insured | 26.5% | 16.9% | 1.0M | 5.2M |

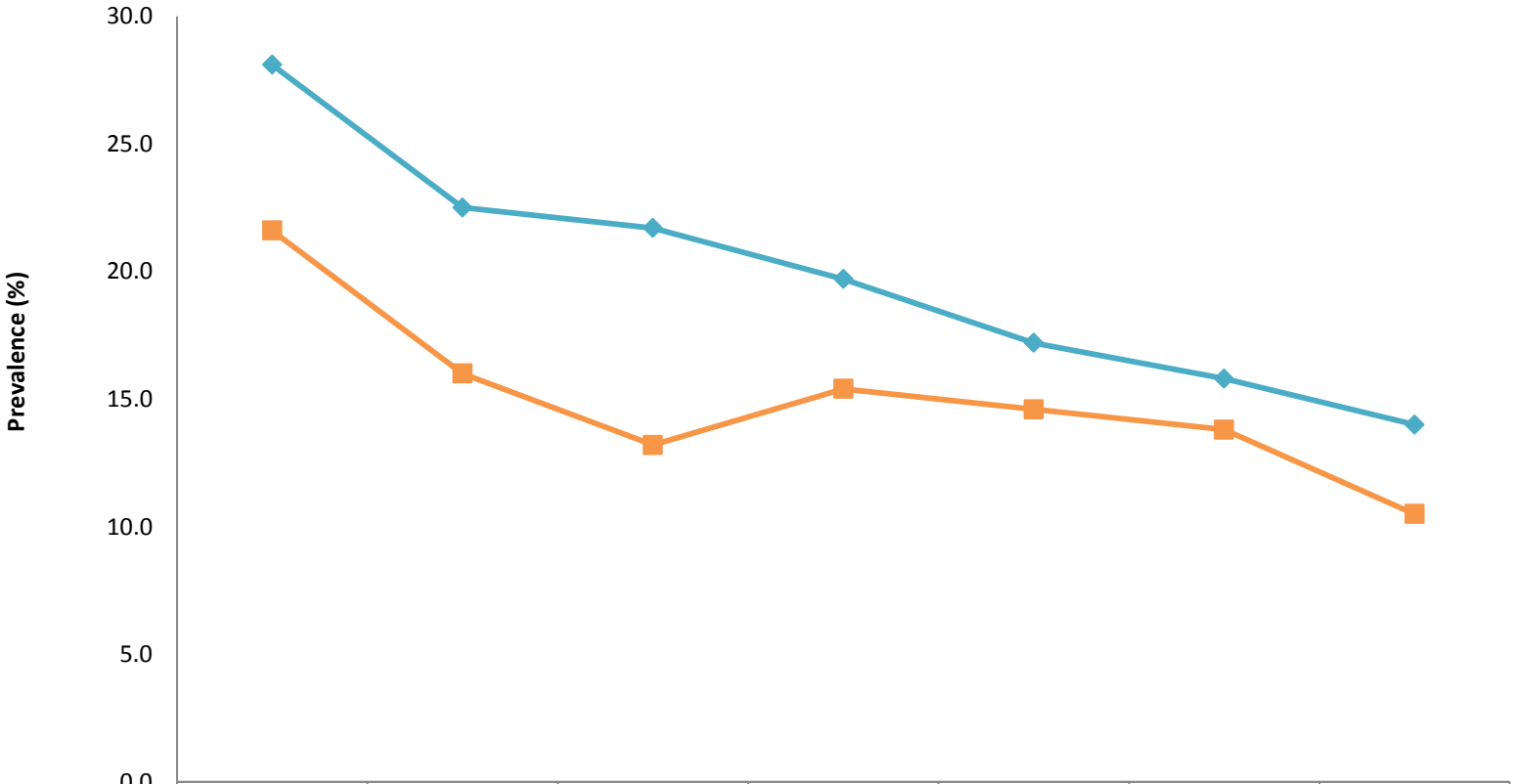
Source: California Health Interview Survey, 2011-2012. Data restricted to adults aged 18 years and older.

*2nd City is defined as regions that are less densely populated than urban areas, and are often concentrated within larger towns and smaller cities.

Subsection 1E.

# HIGH SCHOOL SMOKING PREVALENCE

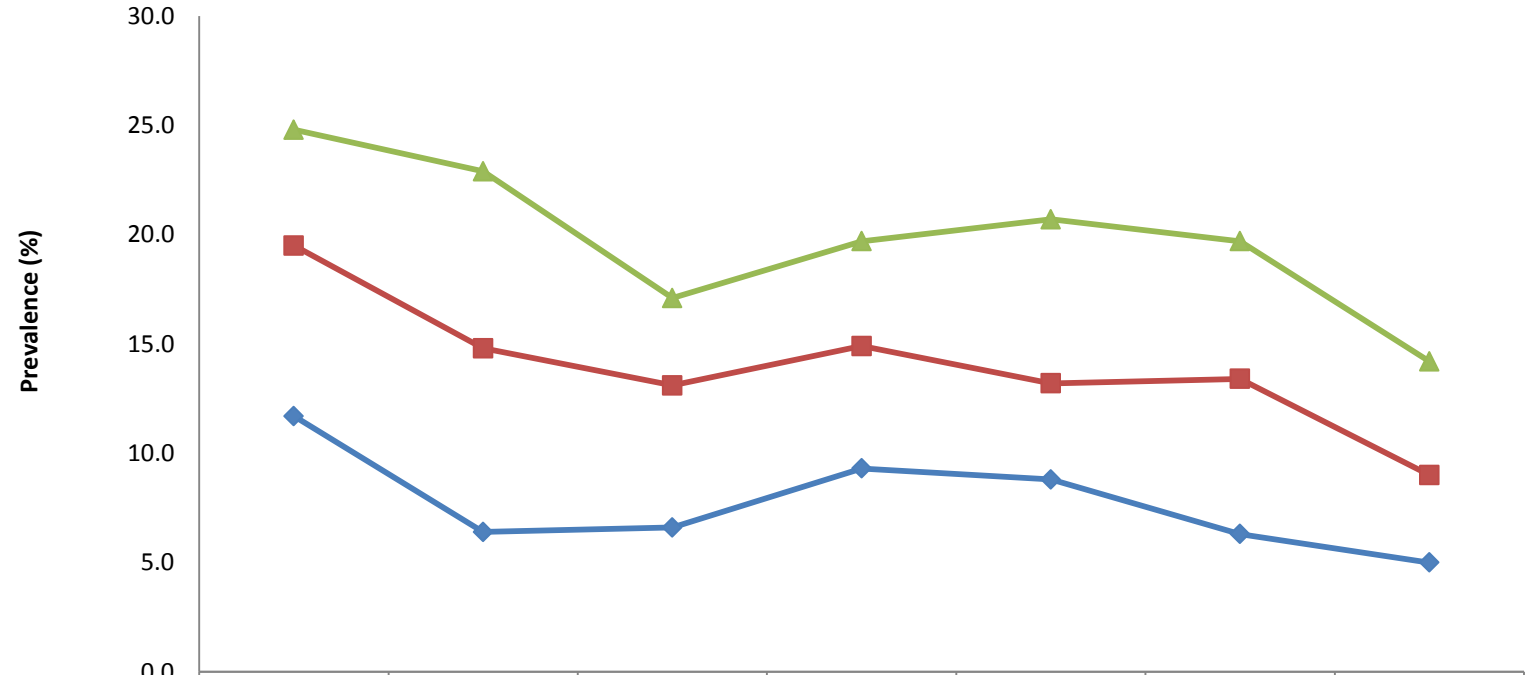
# Figure 1E.1 Smoking prevalence for California and United States high school (9th-12th grades) students, 2000--2012.




| | 2000 | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 |
|---|---|---|---|---|---|---|---|
| 9th-12th Grade (US) | 28.1 | 22.5 | 21.7 | 19.7 | 17.2 | 15.8 | 14.0 |
| 9th-12th Grade (CA) | 21.6 | 16.0 | 13.2 | 15.4 | 14.6 | 13.8 | 10.5 |

Source: Respondents were asked to report past 30 day cigarette smoking behavior. The 2000 California data are from the National Youth Tobacco Survey (NYTS) collected by the American Legacy Foundation, which used passive parental consent. The other year data are from the California Student Tobacco Survey (CSTS). The United States data are from the NYTS collected by the American Legacy Foundation and the Centers for Disease Control and Prevention (CDC).

# Figure 1E.2 Smoking prevalence for California students, 2000-2012.

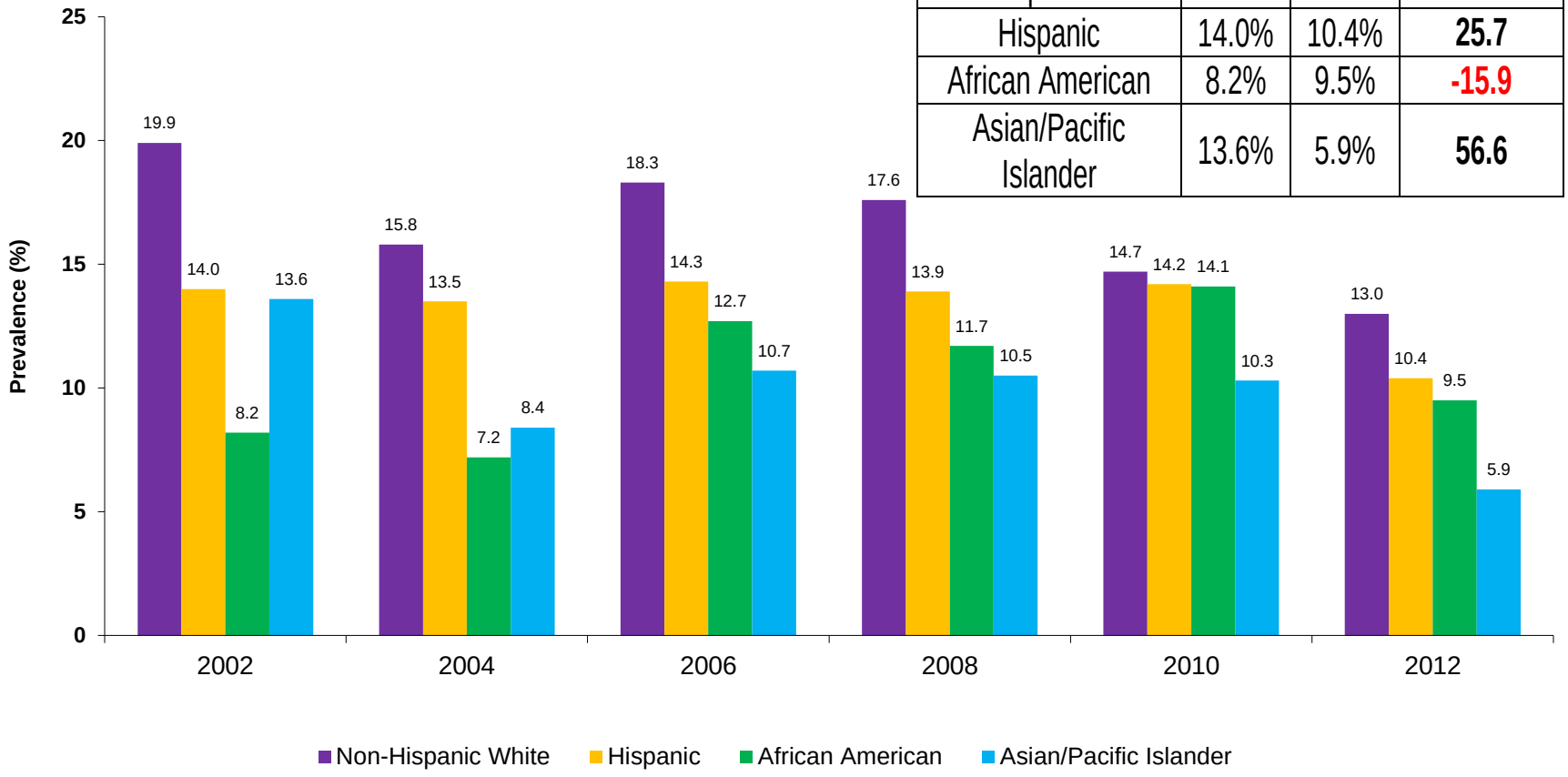



| | 2000 | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 |
|---|---|---|---|---|---|---|---|
| 8th Grade | 11.7 | 6.4 | 6.6 | 9.3 | 8.8 | 6.3 | 5.0 |
| 10th Grade | 19.5 | 14.8 | 13.1 | 14.9 | 13.2 | 13.4 | 9.0 |
| 12th Grade | 24.8 | 22.9 | 17.1 | 19.7 | 20.7 | 19.7 | 14.2 |

Source: Respondents were asked to report past 30 day cigarette smoking behavior. The 2000 California data are from the National Youth Tobacco Survey (NYTS) collected by the American Legacy Foundation, which used passive parental consent. The other year data are from the California Student Tobacco Survey (CSTS). The United States data are from the NYTS collected by the American Legacy Foundation and the Centers for Disease Control and Prevention (CDC).

# Figure 1E.3 Smoking prevalence of high school students (9th-12th grades) in California by ethnicity, 2002-2012.

| | 2002 | 2012 | % Decline |
|---|---|---|---|
| Non-Hispanic White | 19.9% | 13.0% | **34.7** |
| Hispanic | 14.0% | 10.4% | **25.7** |
| African American | 8.2% | 9.5% | **-15.9** |
| Asian/Pacific Islander | 13.6% | 5.9% | **56.6** |

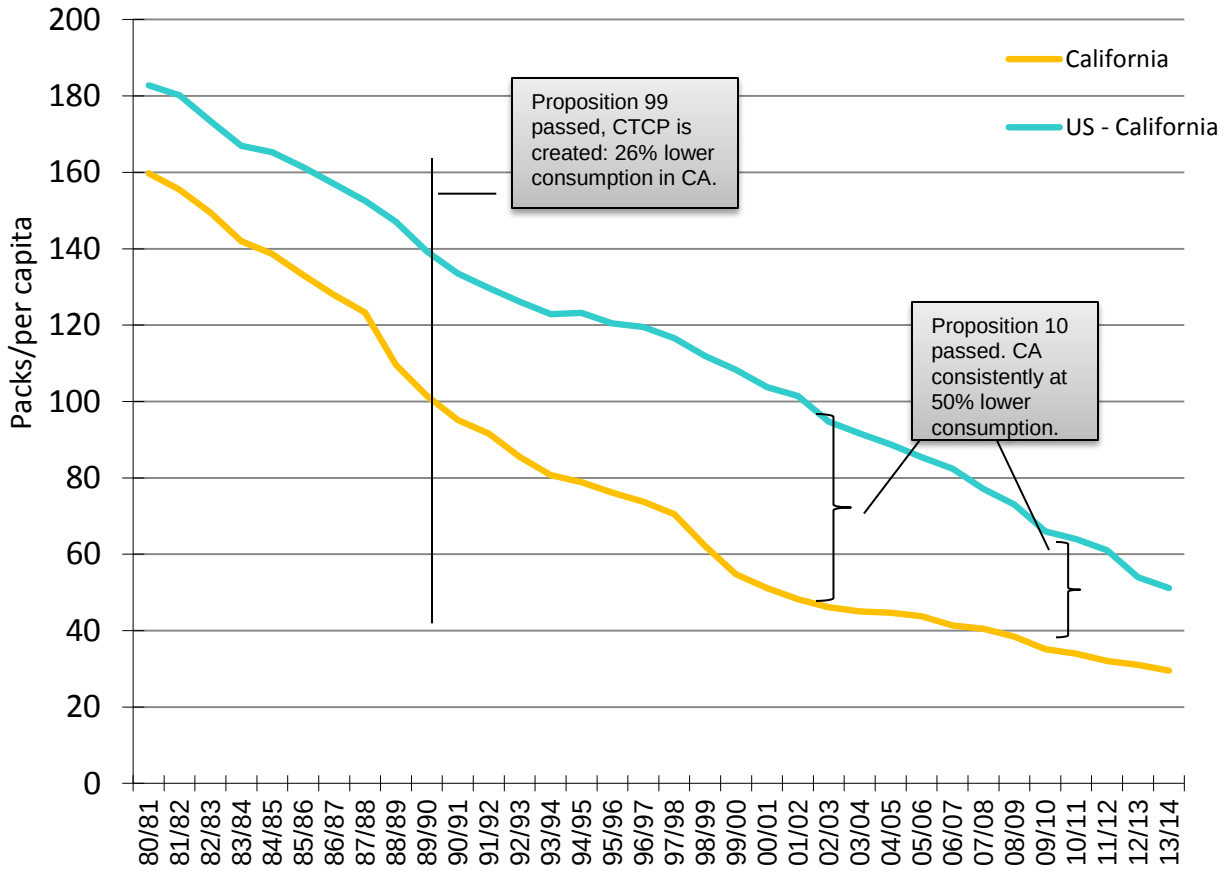



Source: Respondents were asked to report past 30 day cigarette smoking behavior on the California Student Tobacco Survey (CSTS).

SECTION 2.

# TOBACCO CONSUMPTION

# Figure 2A.1 Per capita cigarette consumption in California and the rest of the United States, 1980 to 2013.




Source: The Tax Burden on Tobacco, 2015, and US Census (population).

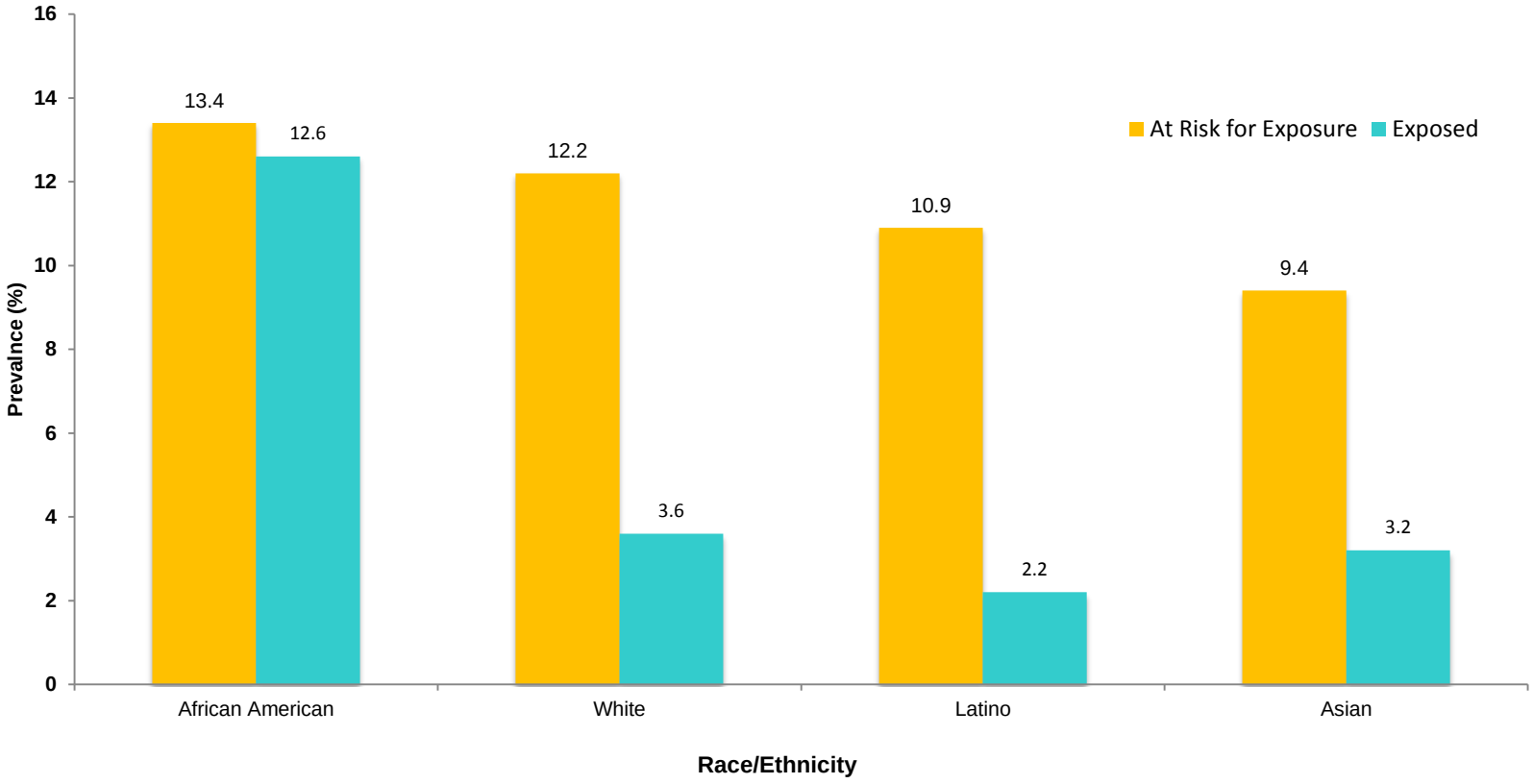
SECTION 3.

# SECONDHAND SMOKE

Subsection 3A.

# CHILDREN'S HOME EXPOSURE

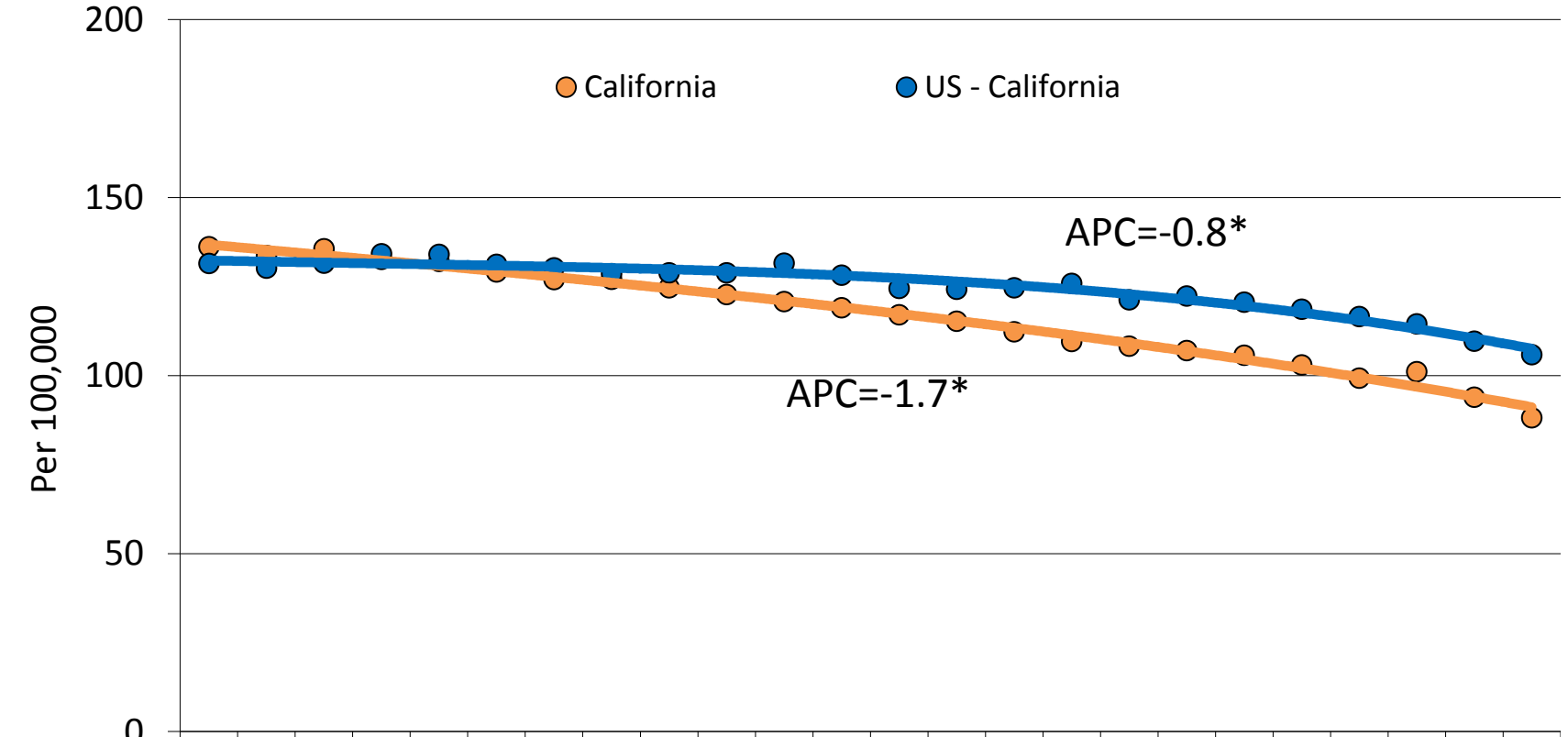
# Figure 3A.1. Racial and Ethnic Differences in Children's Secondhand Smoke Exposure in the Home, (2005-2009).



SECTION 4.

# CANCER INCIDENCE AND MORTALITY RATES

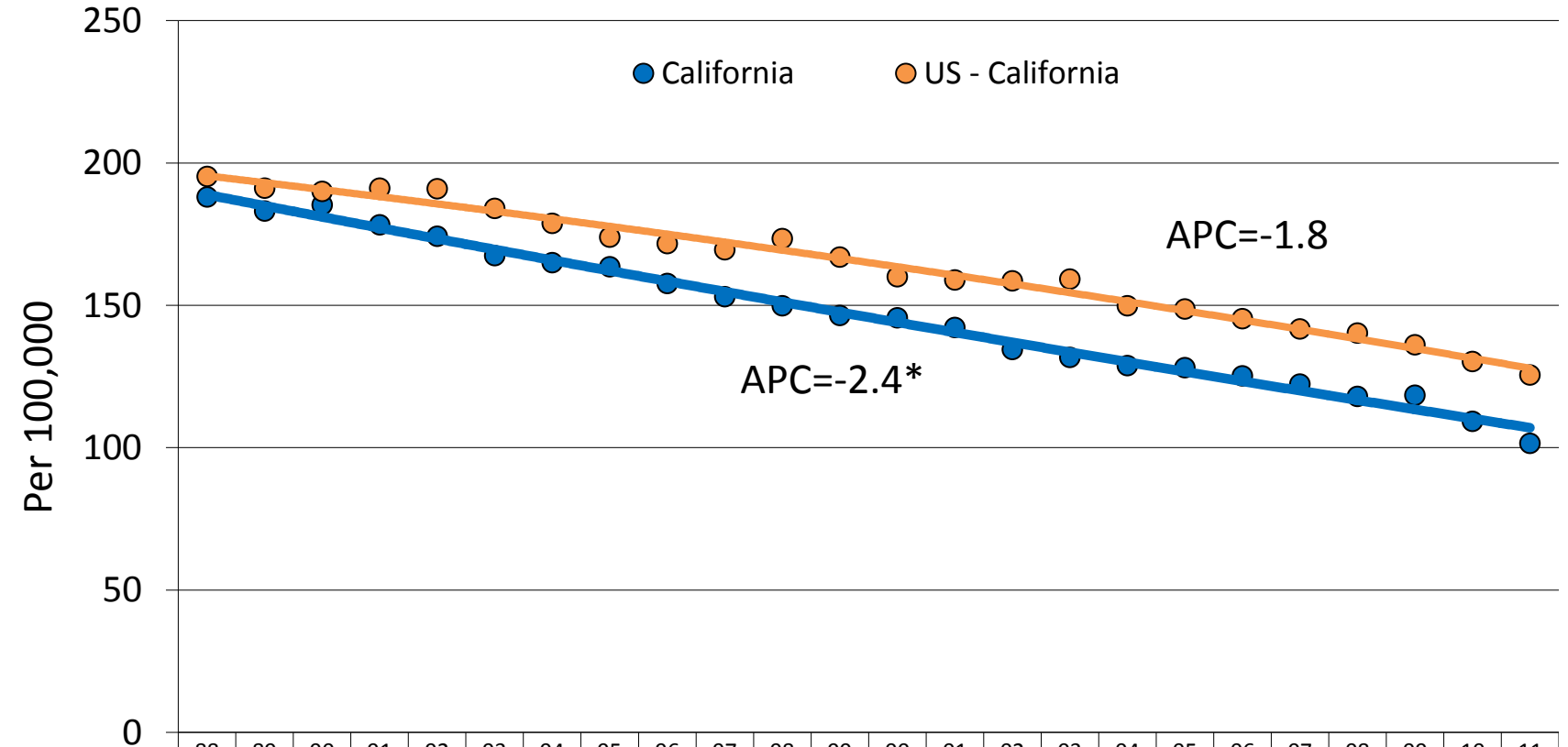
# Figure 4A.1 Lung and bronchus cancer incidence in California and U.S. minus California, 1988-2011




| | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| California | 136 | 134 | 136 | 133 | 132 | 129 | 127 | 127 | 125 | 123 | 121 | 119 | 117 | 115 | 112 | 110 | 108 | 107 | 106 | 103 | 99 | 101 | 94 | 88 |
| US - California | 132 | 130 | 132 | 134 | 134 | 131 | 130 | 129 | 129 | 129 | 132 | 128 | 125 | 124 | 125 | 126 | 121 | 122 | 121 | 119 | 117 | 115 | 110 | 106 |

Source: California Cancer Registry. 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; APCs were calculated using non-weighted least squares method. *The APC is significantly different from zero ($p<0.05$).

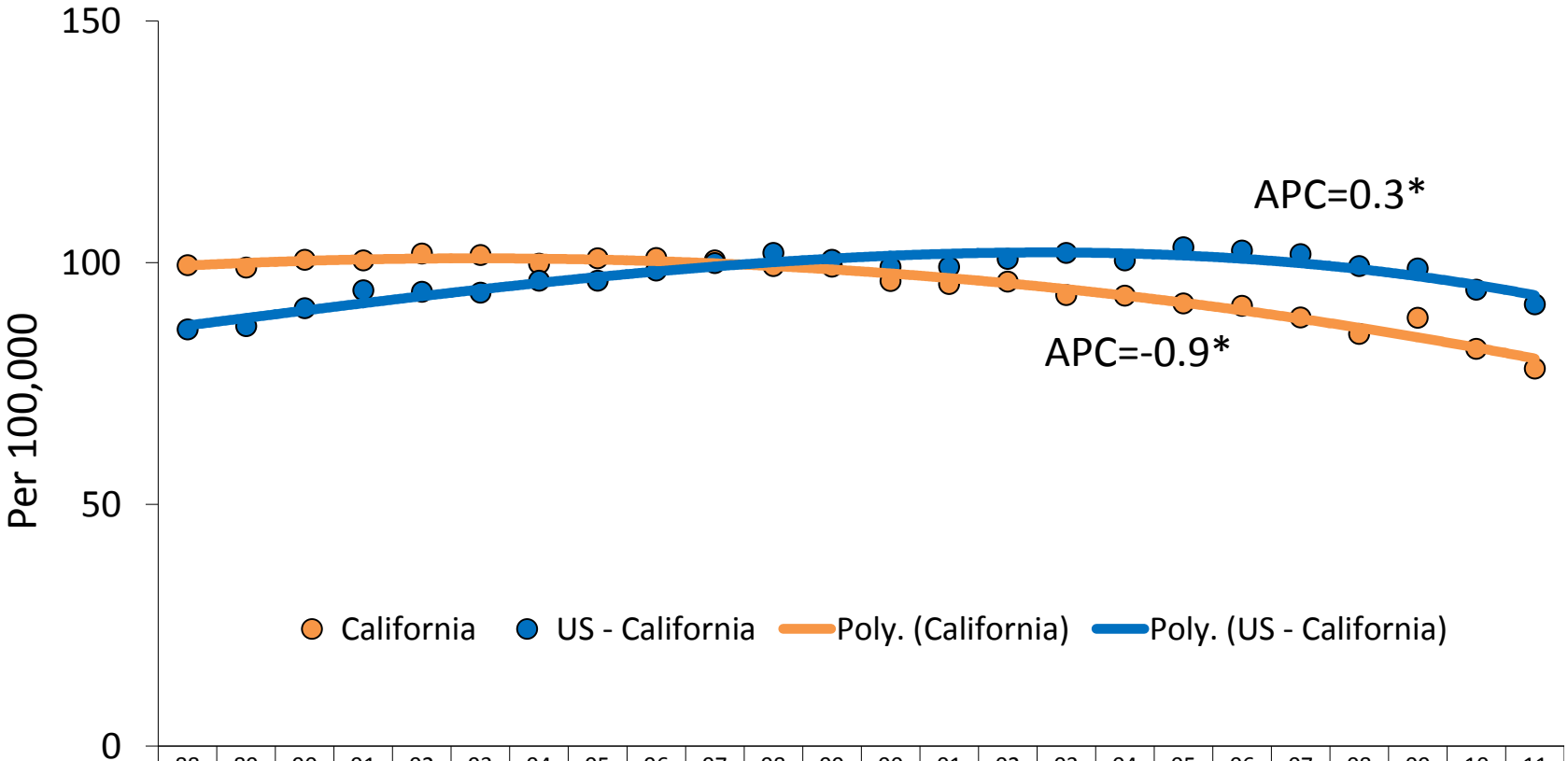
# Figure 4A.2 Lung and bronchus cancer incidence among men in California and U.S. minus California, 1988-2011




| | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| California | 188 | 183 | 185 | 178 | 174 | 168 | 165 | 164 | 158 | 153 | 150 | 146 | 146 | 142 | 135 | 132 | 129 | 128 | 125 | 122 | 118 | 118 | 109 | 102 |
| US - California | 195 | 191 | 190 | 191 | 191 | 184 | 179 | 174 | 172 | 170 | 173 | 167 | 160 | 159 | 159 | 159 | 150 | 149 | 145 | 142 | 140 | 136 | 130 | 126 |

Source: California Cancer Registry. 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; APCs were calculated using non-weighted least squares method. *The APC is significantly different from zero ($p<0.05$).

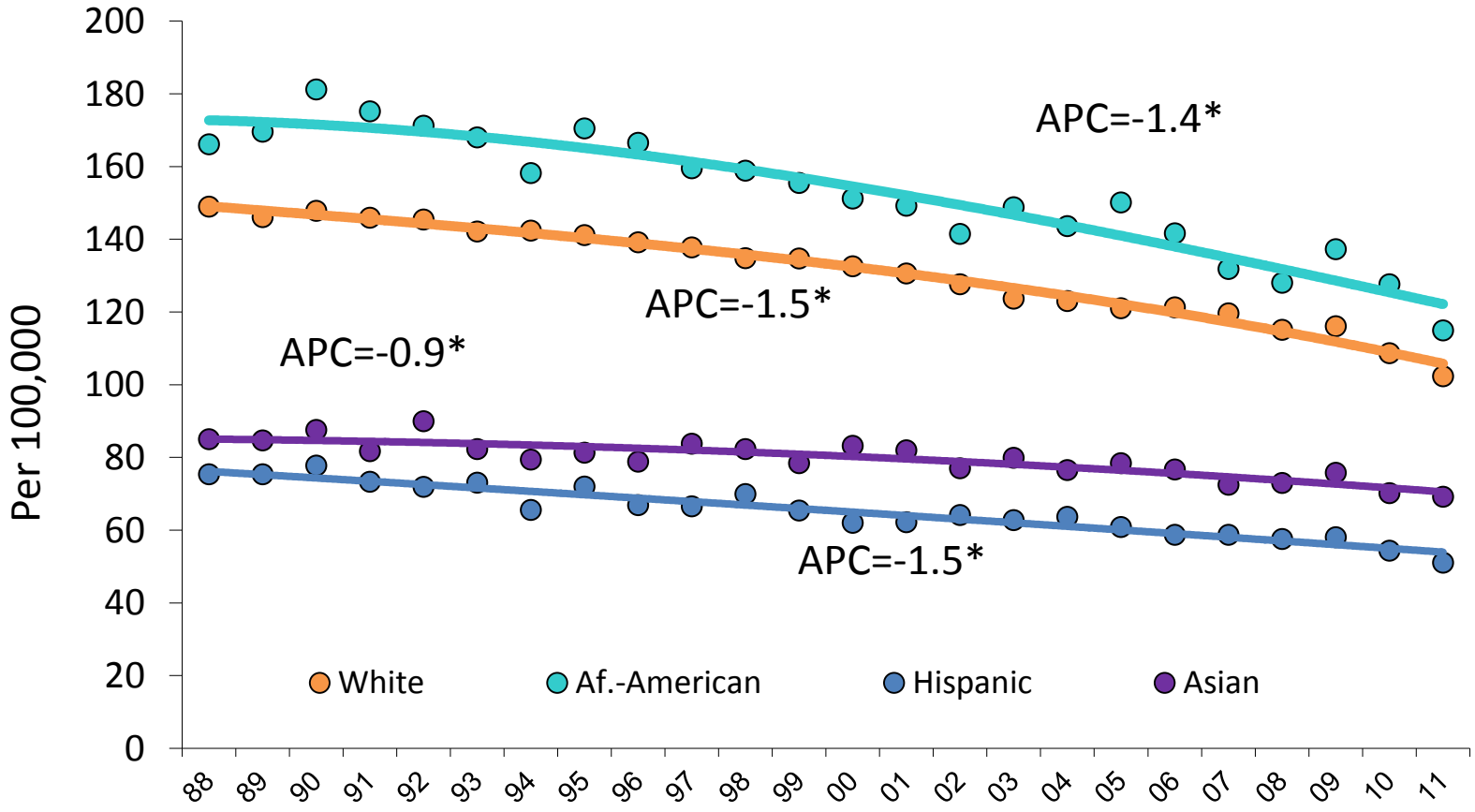
# Figure 4A.3 Lung and bronchus cancer incidence among women in California and U.S. minus California, 1988-2011




| | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 10 | 11 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| California | 100 | 99 | 101 | 101 | 102 | 102 | 100 | 101 | 101 | 101 | 99 | 99 | 96 | 96 | 96 | 93 | 93 | 92 | 91 | 89 | 85 | 89 | 82 | 78 |
| US - California | 86 | 87 | 91 | 94 | 94 | 94 | 96 | 96 | 98 | 100 | 102 | 101 | 99 | 99 | 101 | 102 | 101 | 103 | 103 | 102 | 99 | 99 | 94 | 91 |

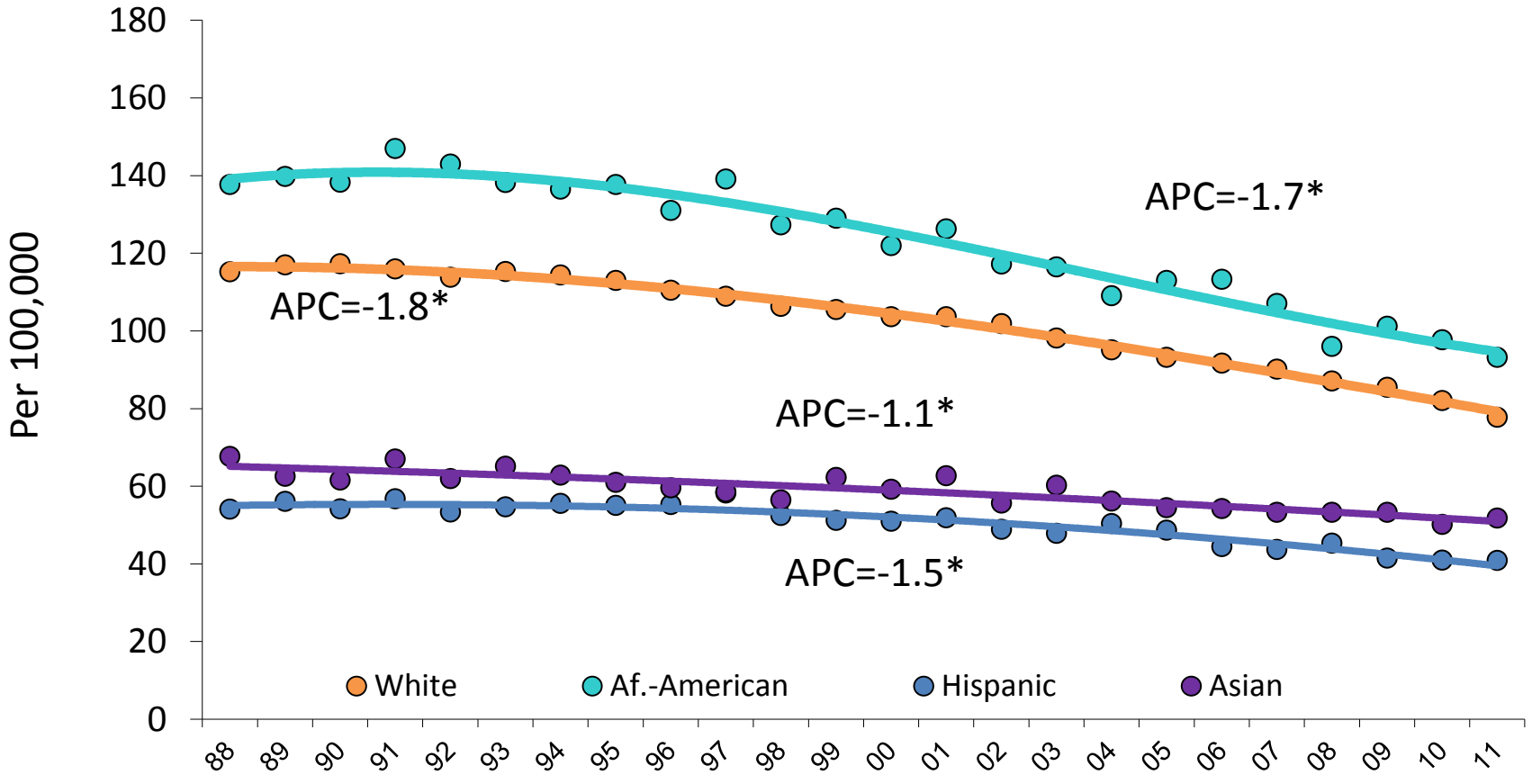
Source: California Cancer Registry. Rates are per 100,000 and age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) standard. Percent changes were calculated using two years for each end point; APCs were calculated using non-weighted least squares method. * The APC is significantly different from zero ($p<0.05$).

# Figure 4A.4 Lung and bronchus cancer incidence by race/ethnicity in California, 1988-2011




Source: California Cancer Registry. 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 two years for each end point; APCs were calculated using non-weighted least squares method. * The APC is significantly different from zero ($p<0.05$).

# Figure 4A.5 Lung and bronchus cancer mortality by race/ethnicity in California, 1988-2011




Source: California Cancer Registry. 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 two years for each end point; APCs were calculated using non-weighted least squares method. * The APC is significantly different from zero ($p<0.05$).

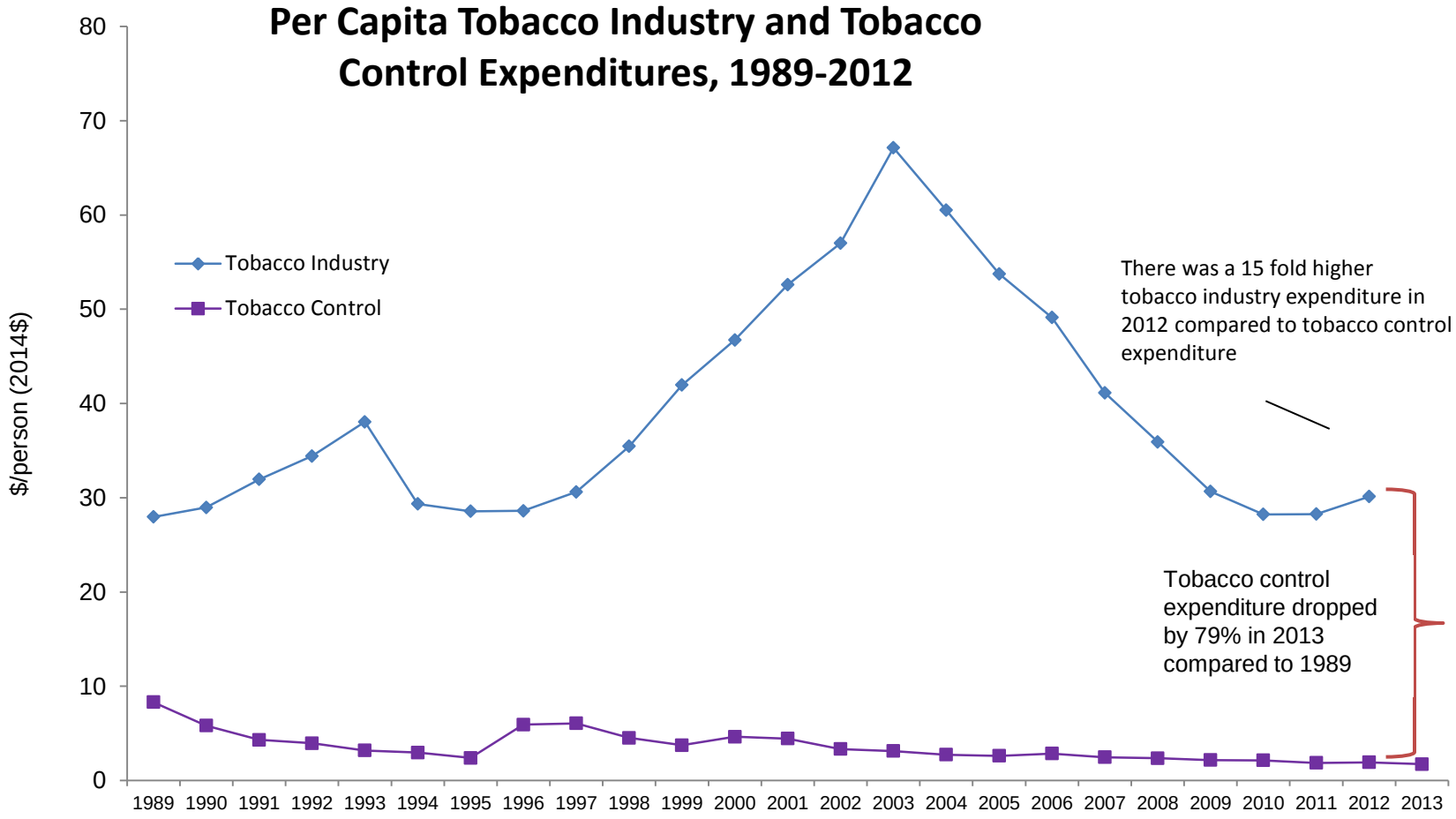
SECTION 5.

# TOBACCO INDUSTRY SPENDING VS. TOBACCO CONTROL FUNDING

Subsection 5A.

# TOBACCO INDUSTRY EXPENDITURES

# Figure 5A.1 Cigarette Promotional Expenditure vs. California Tobacco Control Program Budget.



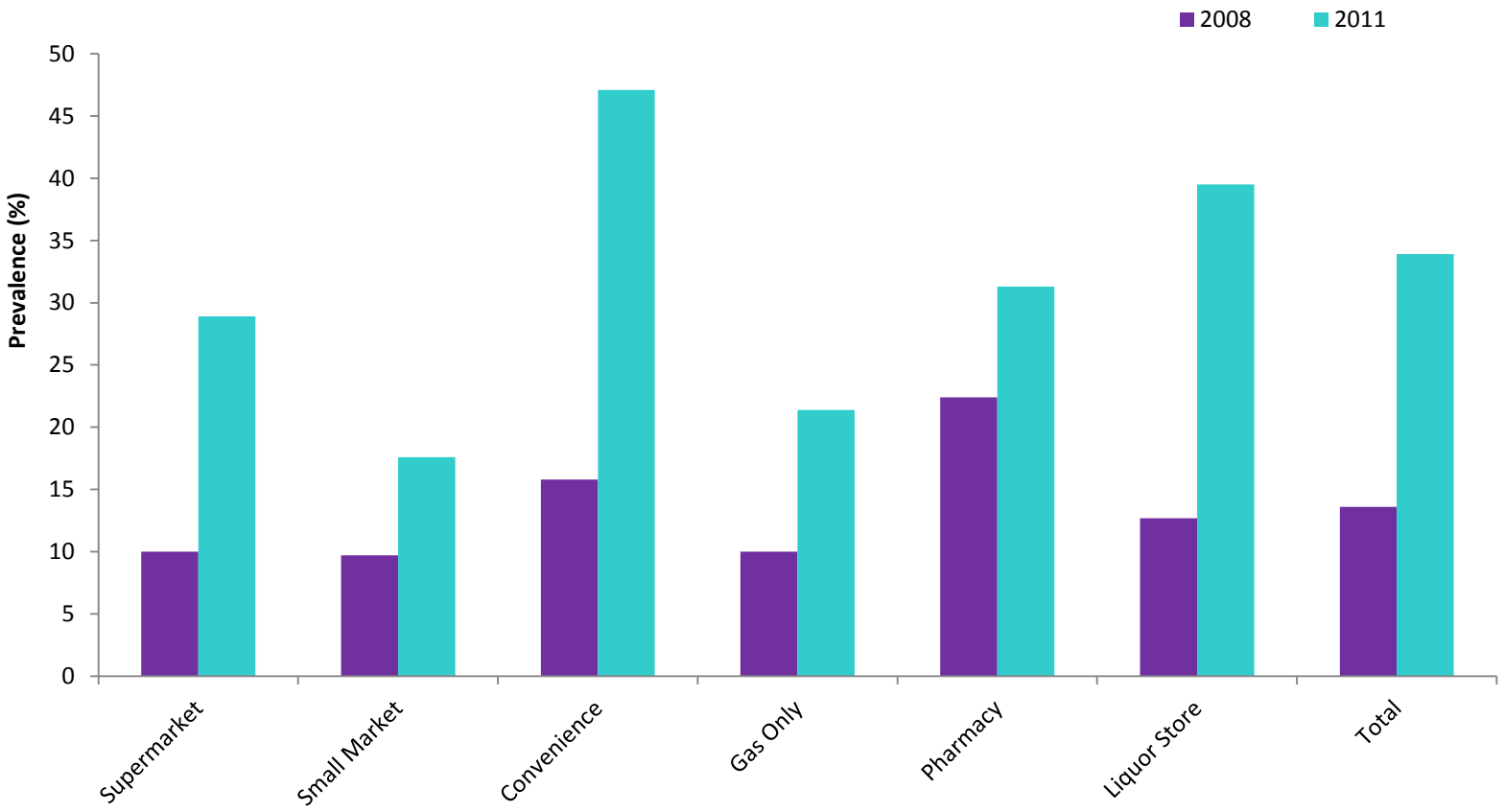

Sources: Federal Trade Commission Cigarette Report (2015) for tobacco industry marketing expenditures; California Department of Public Health, Tobacco Control Program for CTCP expenditures. Monies shown are adjusted to 2014 dollars.

Note: California tobacco industry expenditures calculated as a proportion of U.S. expenditures based on cigarette pack consumption. Both tobacco control and tobacco industry expenditures have been standardized to the U.S. 2014 dollar, based on the Consumer Price Index (CPI). Tobacco control expenditures are Health Education Account actual expenditures and represent a combination of media campaign, competitive grant, local lead agencies (LLA), tobacco settlement fund, and California Department of Education totals.

Subsection 5B.

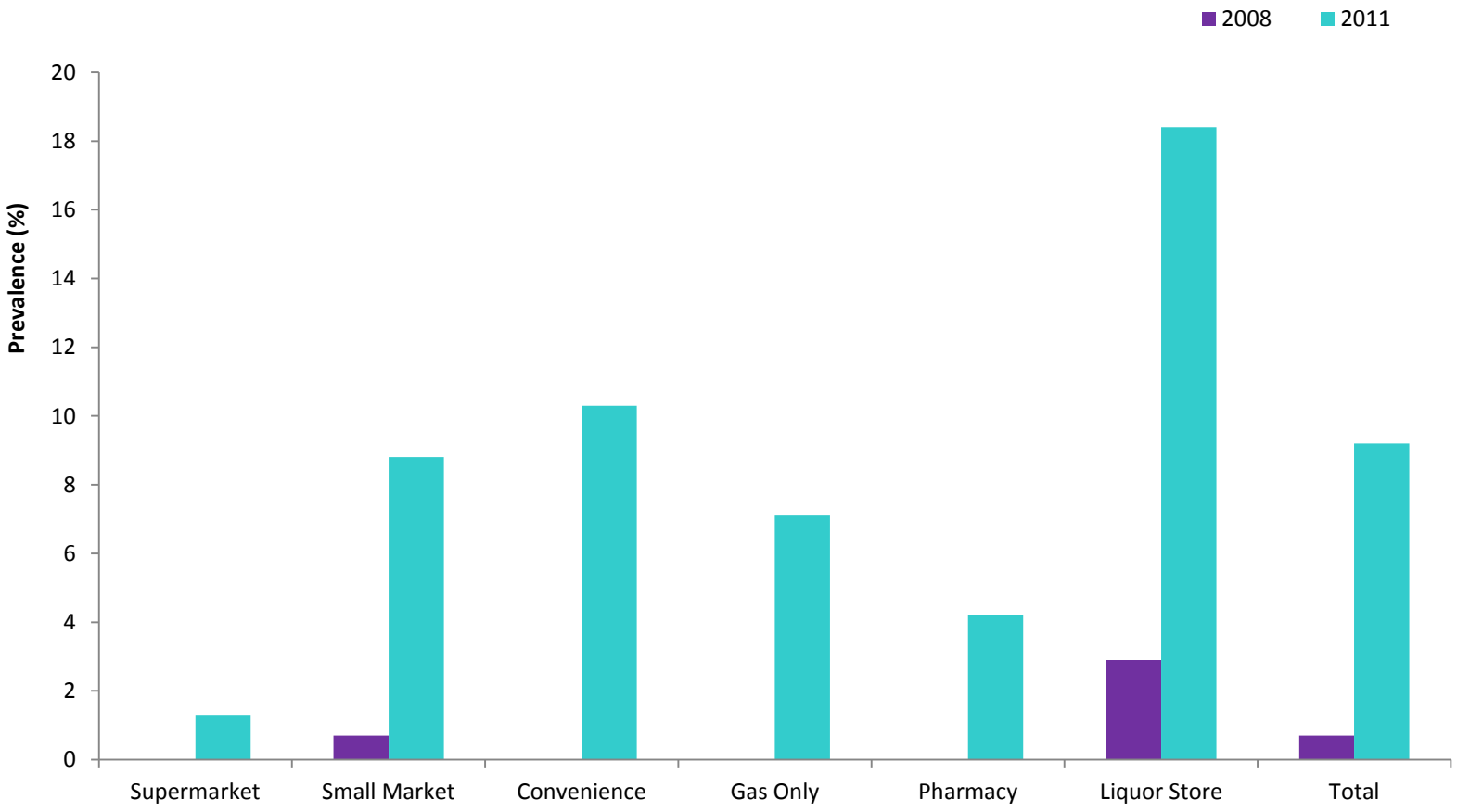
# THE CALIFORNIA TOBACCO ASSESSMENT STUDY, TOBACCO RETAIL MARKETING

# Figure 5B.1 Tobacco advertisements below 3 feet by store type, 2008 – 2011.




Source: California Tobacco Advertising Survey (CTAS), 2011.

# Figure 5B.2 Tobacco advertisements near candy by store type, 2008-2011

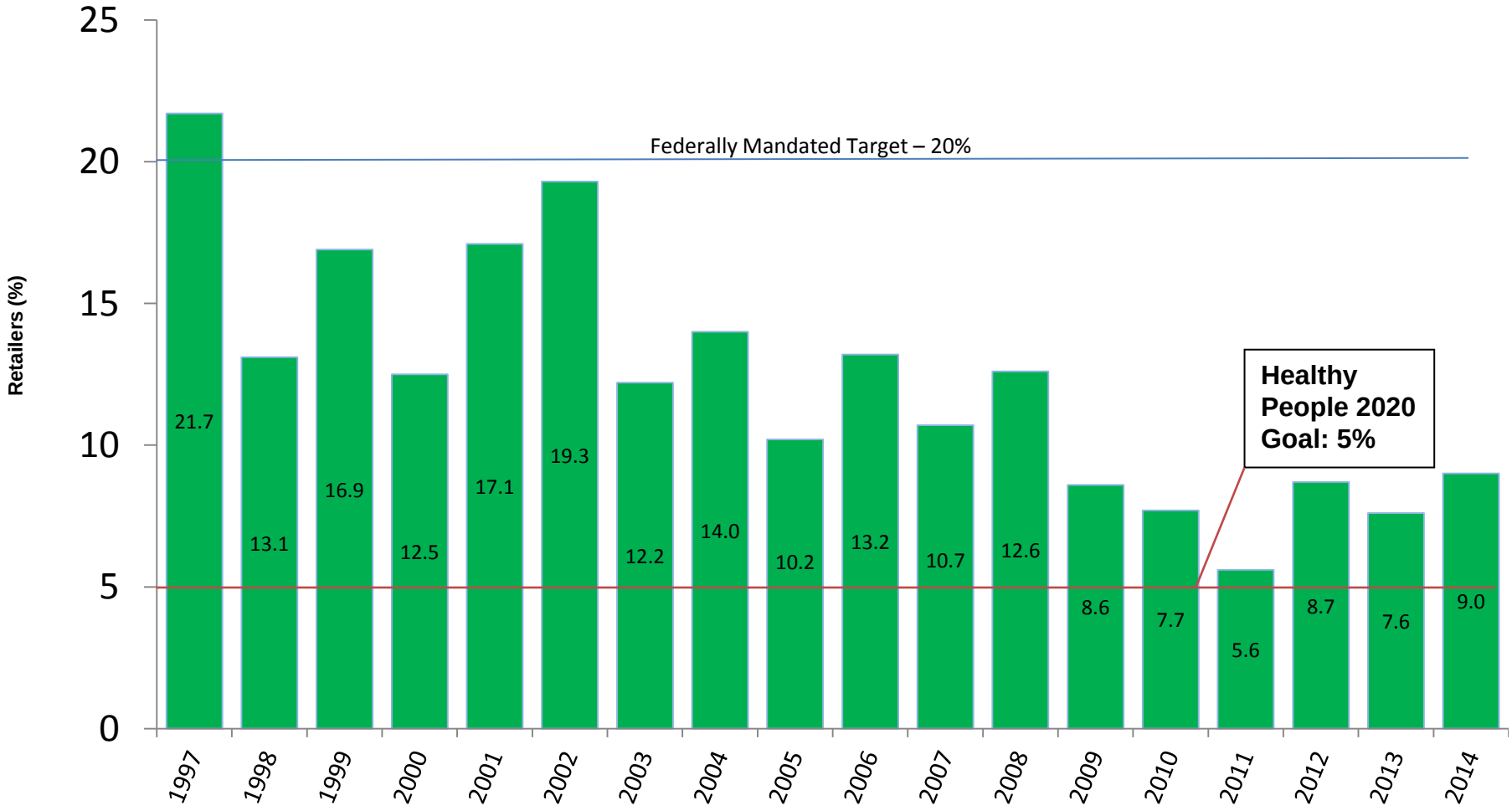



Source: California Tobacco Advertising Survey (CTAS), 2011.

Subsection 5C.

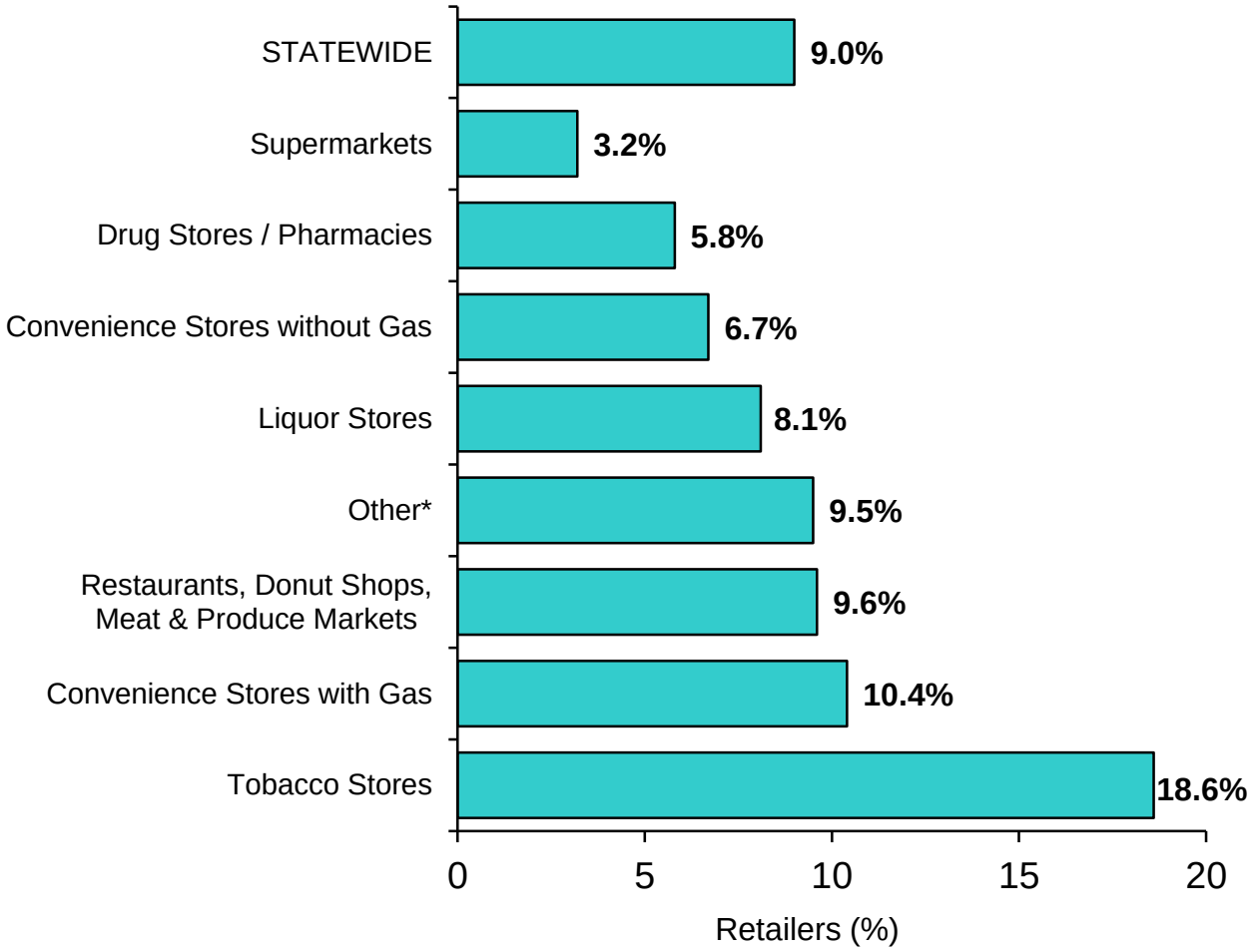
# TOBACCO SALES TO MINORS

# Figure 5C.1 Percent of retailers selling tobacco to youth, 1997-2014.



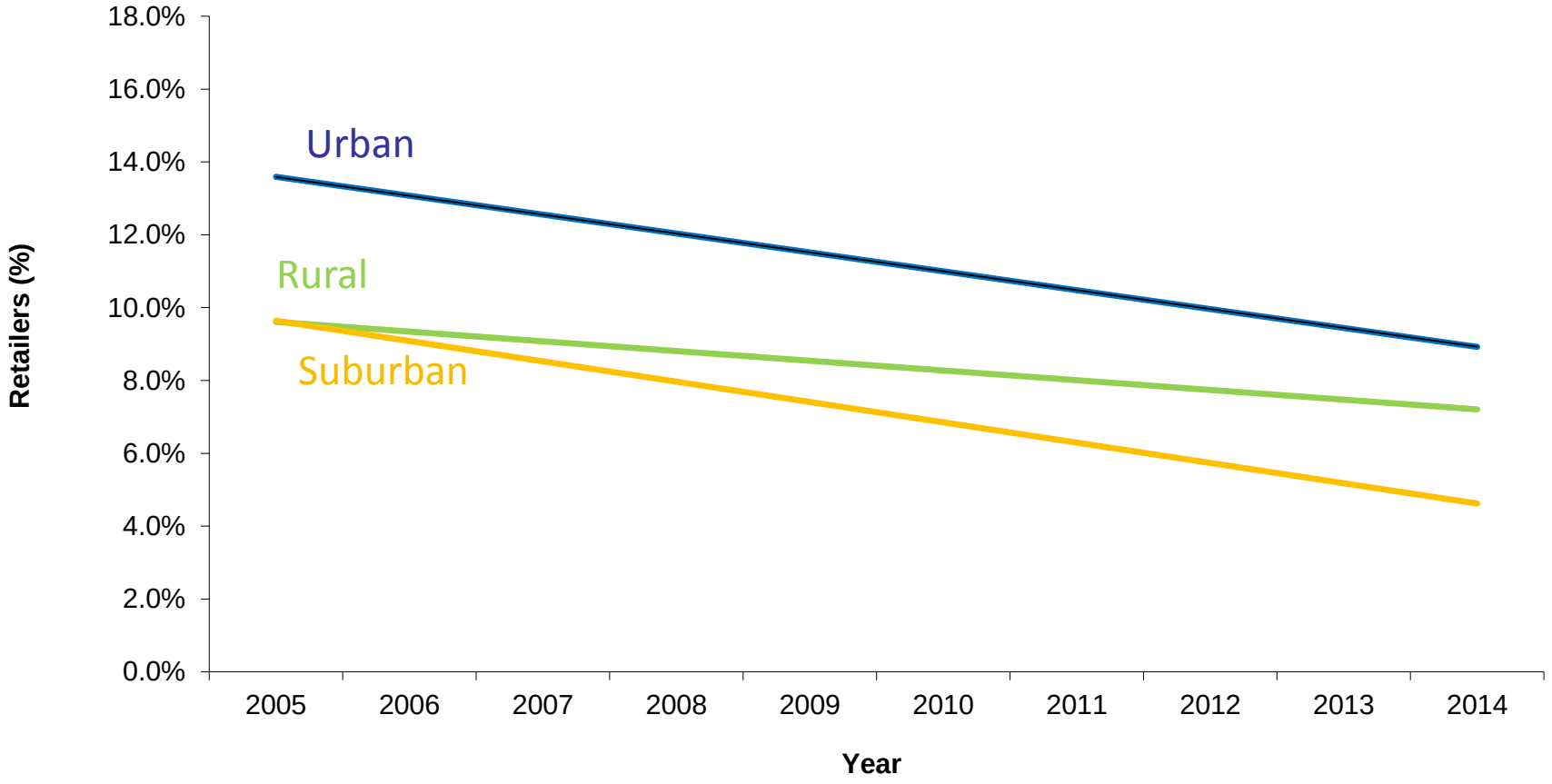

Source: Youth Tobacco Purchase Survey (YTPS), 1997-2014.

# Figure 5C.2 Percent of retailers selling tobacco to youth by store type, 2014.



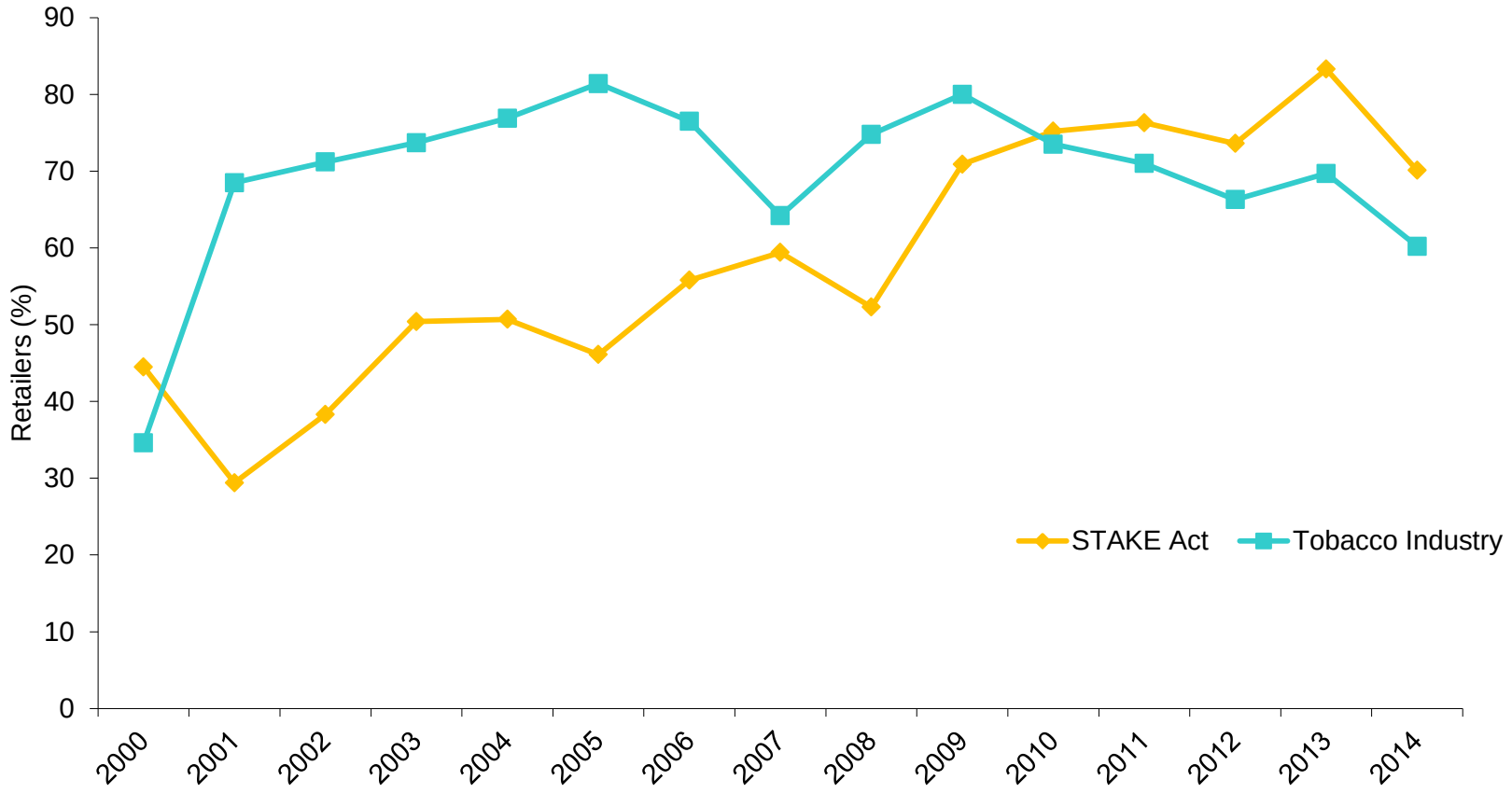

Source: Youth Tobacco Purchase Survey (YTPS), 2014.
*Other includes gas stations without convenience stores, gift and discount stores, and others.
Sales rates are standardized to an equal distribution of youth's gender and age.

# Figure 5C.3 Percent of retailers selling tobacco to youth by urban, suburban and rural, 2005-2014.




Source: Youth Tobacco Purchase Survey (YTPS), 2005-2014.
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.

# Figure 5C.4 Proportion of retailers displaying tobacco industry age-of-sale warning signs and STAKE Act age-of-sale warning signs, 2000-2014.




Source: Youth Tobacco Purchase Survey (YTPS), 2000-2014.
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.

SECTION 6.

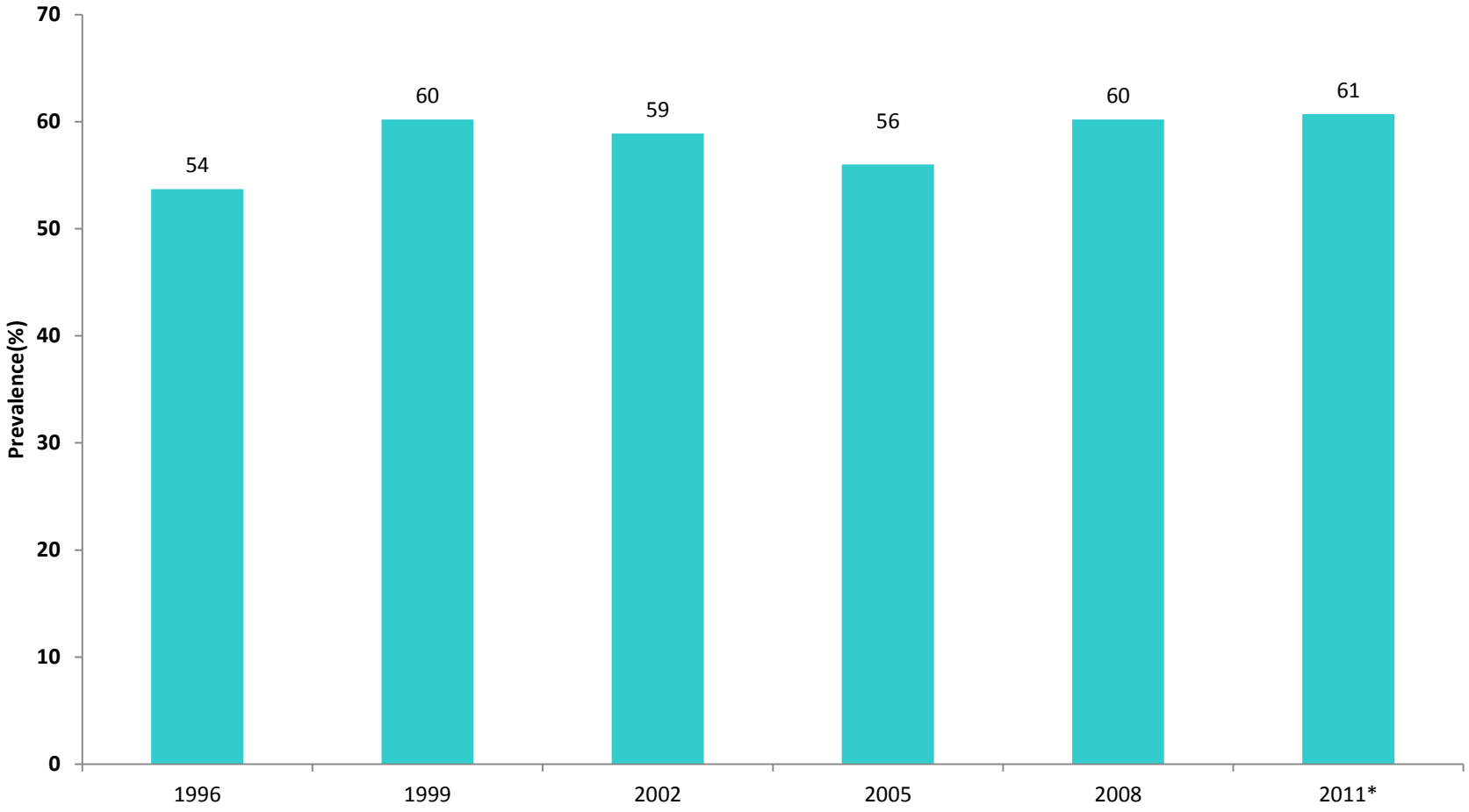
# SMOKING CESSATION

# Figure 6A.1 Methods to help quitting in the past 12 months.

| Method | % |
|---|---|
| **Quit cold turkey** | 31.6 |
| **Exercised more** | 26.8 |
| **Switched to light cigs** | 15.6 |
| **Tried to quit with a friend** | 13.8 |
| **Stopped hanging out with friends who smoke** | 11.2 |
| **Switched to smokeless tobacco** | 10.5 |
| **Called a telephone helpline** | 8.2 |
| **Used herbal remedies** | 6.7 |
| **Used acupuncture/hypnosis** | 2.8 |

Source: California Smokers Cohort (CSC) Study (Unpublished), 2011.

# Figure 6A.2 Percentage of smokers who made a quit attempt in the past year lasting at least 24 hours, 1996-2011.




Source: 1996-2008 data from the California Tobacco Surveys 2008.
*Data for the year 2011 is from the California Smokers Cohort (CSC) Study (Unpublished).