The Cost of Smoking in California, 2009

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Highlights

- The economic burden of smoking in California in 2009 amounted to $18.1 billion.
- The cost of smoking in California was $487 per Californian and $4,603 per smoker.
- The cost of smoking per resident varies among counties, from $374 in Orange County to $1,002 in Lake County.
- While there are fewer smokers in California than there were a decade ago, 3.9 million Californians still smoke. Included are nearly 3.8 million adults and 146,000 adolescents.
- More adult males than females smoke in California – 2.4 million or 17.2 percent of adult men compared to 1.4 million or 10.1 percent of adult women. Adolescent males smoke at higher rates than adolescent females – 5.8 percent vs. 3.2 percent.
- A majority of adult current smokers in California are light smokers, who smoke some days or fewer than 10 cigarettes per day. This includes 59.7% of male and 61.0% of female current smokers. Only 17.7% and 11.3% of adult current male and female smokers respectively are heavy smokers, smoking a pack a day or more (20+ cigarettes).
- The cost of smoking for men is greater than that for women – $11.7 billion compared to $6.4 billion. Direct costs and indirect lost productivity costs due to illness are 35% and 46% greater for men respectively, while indirect costs of lost productivity from premature death are more than 3 times greater for men than for women.
- Direct healthcare costs of smoking account for 54.4 percent of the total cost of smoking in California – $9.8 billion. Lost productivity due to illness comprises 7.9 percent of the total, or $1.4 billion, and lost productivity from premature death comprises the remaining 37.6 percent, or $6.8 billion.
- Expenditures for hospital care of current and former smokers amount to $4.3 billion, or 43.9 percent of total healthcare costs attributable to smoking; ambulatory care services amount to $2.1 billion or 20.9 percent; nursing home care amounts to $1.5 billion or 15.4 percent; prescription drugs amount to $1.1 billion; and home health care amounts to $794 million.
- Almost 15% of deaths in California in 2009 are attributed to smoking, for a total of 34,363 deaths. This represents $6.8 billion in lost productivity and 587,000 years of potential life lost, or 17.1 years lost per death.
- Men account for 59.8% of deaths attributed to smoking, 60.3% of years of potential life lost, and 76.0% of the value of lost productivity.
- Total costs of smoking increased by 15% compared to the costs in 1999 – from $15.8 billion to $18.1 billion. However, real costs which adjust for inflation actually decreased by 22% between 1999 and 2009.

Background: Economic Aspects of Smoking

Introduction

The health hazards of smoking have been known and documented for many years, beginning with the 1964 landmark report of the Surgeon General of the United States (U.S. Department of Health, Education, and Welfare (US DHEW), 1964). Smoking prevalence in the United States and in California has declined substantially. In 2009, 20.6 percent of the adult population 18 years of age and over in the U.S. smoked cigarettes (Dube et al., 2010) down from 42.4 percent in 1965 (Centers for Disease Control and Prevention (CDC), 2014a). In California, 13.1 percent of adults smoked in 2009, down from 24.9 percent in 1984 (California Department of Public Health (CDPH), 2010). In California there is a considerable difference in smoking behaviors among counties, with 2008 adult smoking prevalence ranging from 7.3 percent in Marin County to 22.8 percent in Tehama County (Al-Delaimy et al., 2010).

Cigarette smoking is known to be the leading cause of preventable death in the United States and in California, accounting for one out of five deaths. It leads to substantial health costs and lost productivity from illness and premature death (Max, Rice, Sung, Zhang, & Miller, 2004; Max, Sung, Tucker, & Stark, 2010; Max, Sung, Tucker, & Stark, 2011; Max, 2001a; Miller, Zhang, Novotny, Rice, & Max, 1998a; Miller, Zhang, Rice, & Max, 1998b; Zhang, Miller, Max, & Rice, 1999b). In addition to the impact of smoking on active smokers, nonsmokers who are exposed to secondhand smoke (SHS) also suffer ill health effects and increased mortality. These negative health impacts have been recently documented in several substantial reports which summarize the literature linking SHS exposure to respiratory effects in children, and adult effects on cancer, cardiovascular disease, and respiratory disease (Oberg, Jaakkola, Woodward, Peruga, & Pruss-Ustun, 2011; U.S. Department of Health and Human Services (US DHHS), 2006; California Environmental Protection Agency (CA EPA), 2005; US DHHS, 2014). In addition to health effects, SHS exposure results in premature death and excess healthcare costs (Max, Sung, & Shi, 2012; Max, Sung, & Shi, 2014).

Smoking prevalence has been falling in California over the years. In 2010, 11.9 percent of the state's adults smoked, down from 13.1 percent in 2009, reaching the federal Healthy People 2020 target of reducing the adult smoking prevalence rate to 12 percent (CDPH, 2011). In addition, there has been a decline in cigarettes smoked per day among those who still smoke, with the average number of cigarettes smoked per day among daily smokers falling from 19.3 in 1992 to 14.5 in 2008 (Al-Delaimy et al., 2010). There has also been a shift from daily to nondaily smoking: nondaily smokers represented 14.8 percent of California smokers in 1992 and increased to 28.1 percent in 2008 (Al-Delaimy et al., 2010). Studies report that even occasional smoking still has a negative impact on health and is not a safe alternative for daily smoking. (Luoto, Uutela, & Pushka, 2000).

Previous Estimates of the Cost of Smoking for California

Several cost of smoking studies have been conducted for the state, including some studies for the U.S. which disaggregate findings by state.

- The early studies relied on epidemiologic approaches in which mortality or health care utilization was used to determine the proportion of healthcare expenditures attributable to smoking (Office of Technology Assessment, 1985; Rice, Hodgson, Sinsheimer, Browner, & Kopstein, 1986; Kaplan & Wright, 1988; US DHHS, 1990; Rice & Max, 1992). Estimates for direct and indirect costs in California ranged from $5.8 billion in 1985 (US DHHS, 1990) to $7.6 billion in 1989 (Rice & Max, 1992). Healthcare and mortality costs were $13.7 billion in California for 2002 (Max et al., 2010).

- Leonard Miller and colleagues estimated state-by-state totals of total medical expenditures (Miller et al., 1998b), Medicaid costs (Miller et al., 1998a), and Medicare costs (Zhang et al., 1999b) attributed to cigarette smoking for 1993. These studies used an econometric national model that described the relationship between smoking and medical expenditures controlling for sociodemographic, economic, and behavioral factors. Total smoking-attributable medical expenditures in 1993 for California amounted to $8.7 billion.

- Vincent Miller and colleagues (Miller, Ernst, & Collin, 1999) also employed an econometric model to estimate the medical care costs of smoking by state. Smoking-attributable medical expenditures in 1993 for California amounted to $5.4 billion. The CDC (2014a) updated these estimates and found that smoking-attributable medical expenditures in 2004 for California amounted to $9.6 billion.

- Max and colleagues (Max, Rice, Zhang, & Miller, 2002; Max et al., 2004) updated their earlier estimates of county-level costs using an econometric modeling approach. The total cost of smoking in the state was found to total $15.8 billion for 1999, including $8.6 billion for direct costs, $1.5 billion for the lost productivity of those living with tobacco-related illnesses, and $5.7 billion for lost productivity from smoking-caused premature death. They have extended the models to look at African Americans (Max et al., 2010) and Hispanics (Max et al., 2011) in California, and the impact of tobacco control expenditures on healthcare expenditures in the state (Max, Sung, & Lightwood, 2013). Max and colleagues have also developed a dynamic model of the impact of smoking behavior on mortality, morbidity, health status and healthcare expenditures in California over time that evaluates the economic impact of the California Tobacco Control Program (Miller, Max, Sung, Rice, & Zaretsky, 2010).

- Estimates of SHS exposure (Max et al., 2012; National Cancer Institute (NCI), 1999) and resulting economic burden in California have been reported in recent studies. Max and colleagues (Max et al., 2014) estimated that healthcare costs for Californian nonsmokers exposed to SHS at home totaled $241 million in 2009, with the largest proportion of costs attributable to ischemic heart disease among adults. The value of SHS-attributable lost productivity from premature mortality amounted to $119 million.

Contributions of this report

This report is the third report in a series on California smoking-attributable costs, following reports done for 1989 (Rice & Max, 1992) and 1999 (Max et al., 2002). The estimates presented here build upon our previous studies:

- The models are based on the most recently available data, which reflect a number of changes that have occurred in California over the last decade, including
    - shifts in the racial/ethnic population mix, particularly an increase in California's Hispanic population
    - changes in smoking behavior, particularly an increase in nondaily smokers (compared to daily smokers) and a decrease in cigarettes smoked per day among daily smokers
- The estimates are 10 years more current than the previous county estimates, and allow for comparisons to the cost of smoking over the last 2 decades
- The direct cost of smoking models now incorporate intensity of smoking among current smokers (light, moderate, heavy, and daily/nondaily smokers)

Methods

This report contains estimates of the economic impact of the health effects of smoking using three measures.

- Direct costs include expenditures for hospital care, ambulatory care, prescription drugs, home health care, and nursing home services. Direct costs of smoking are estimated for smokers aged 18 and older.

- Indirect costs of lost productivity from illness represent the value of time lost from work and household production that are attributed to smoking. Indirect costs of lost productivity from illness are estimated for smokers aged 18 and older.

- Indirect mortality costs from premature death attributed to smoking are estimated as the present value of lost earnings, including both paid employment and household production hat are lost over the expected remaining lifetime as a result of smoking. Indirect mortality costs of smoking are estimated for adults aged 35 and older because the negative effects of smoking on mortality usually show up after many years of smoking with one exception. We count deaths from perinatal illnesses due to in utero exposure to maternal smoking for children under age 1. We also include deaths from 3 causes related to SHS exposure among adults – lung cancer, ischemic heart disease, and asthma.

The study uses a prevalence-based, annual cost approach, in which the annual cost is estimated for all smoking-related illness, death, or healthcare expenditures regardless of when a person first became ill. Estimation of the three measures of economic burden of smoking relies on a common conceptual approach. In each case, a smoking-attributable fraction (SAF) is estimated and then applied to the total measure of interest to obtain the smoking-attributable measure for each county. For example, the SAF for hospitalization expenditures represents the proportion of hospitalization expenditures that are attributable to smoking. This SAF is multiplied by the total hospitalization expenditures to obtain smoking-attributable hospital expenditures.

18 California Regions. Smoking prevalence is estimated for 18 regions in the state rather than for each of the 58 counties, due to the small data samples in many of the individual counties. The 18 regions consist of the 10 largest counties (Los Angeles, San Diego, Orange, Santa Clara, San Bernardino, Alameda, Riverside, Sacramento, Contra Costa, San Francisco) plus eight regions comprised of groups of the other 48 counties (see page 47 for details of what counties are in each of the these eight regions). County groupings consist of those with similar characteristics that are mostly contiguous. The SAF is computed by region rather than by individual county to obtain a large enough sample for statistical validity (Gilpin et al., 2001), and then applied to county-specific data for each individual county within a region.

Smoking-Related Diseases

The direct costs of smoking are estimated using an econometric modeling approach which predicts each individual's total annual healthcare costs for all diseases instead of selective smoking-related diseases. Using this excess cost approach, costs are predicted for smokers and for never smokers, controlling for other ways in which they may differ from each other. The difference is the cost attributed to smoking. Similarly, indirect costs of lost productivity from illness that are attributed to smoking are also estimated using an econometric model for all diseases. Therefore, neither the calculation of the smoking-attributable direct costs, nor the indirect costs of lost productivity from illness for smokers, are limited to certain diseases.

For smoking-attributable mortality, we use the 19 smoking-related underlying causes of death identified as causally linked to cigarette smoking based on the Cancer Prevention Study II (CPS-II) for the period 1982–1988 (US DHHS, 2014, Table 12.1; CDC, 2014b). We also include 3 additional adult diseases – hypertension, respiratory tuberculosis (TB), and asthma – based on the CPS-II for the period 1982–1986 (Shultz, Novotny, & Rice, 1991; US DHHS, 1989), as well as 4 perinatal diseases for children under age 1 (CDC, 2014b). The smoking-attributable diseases included are shown in Table 3 on page 38. For SHS-related mortality, we include 3 SHS-associated causes of death for adults which were identified as causally linked to secondhand exposure by the California Environmental Protection Agency (2005) or the Surgeon General (US DHHS, 2006).

Data Sources

A number of datasets were analyzed in this study, including three California data sources and two national surveys.

California Health Interview Survey (CHIS). The CHIS includes information about individual's smoking history, SHS exposure, other risk behaviors, and demographic and socioeconomic characteristics. The 2009 CHIS contained 47,614 adults which comprise a representative sample of California's race/ethnic population. Data from 2007 and 2009 were pooled to obtain an adequate sample size for adolescents (n=7,017). Information from the CHIS was input into the estimated national models of cost of smoking to compute the predicted smoking-attributable healthcare expenditures and the predicted smoking-attributable lost productivity from illness for Californians. It was also used for the estimation of county-level smoking prevalence by age and gender.

***California Mortality File*.** This data file is a compilation of all death certificates in the state. The underlying cause of death is coded using ICD-10 codes. The data file for 2009 was used as the source of deaths from smoking-related diseases. It contained death certificates for 231,764 Californians for 2009.

California Patient Discharge and Hospital Financial Data. These datasets are released by the California Office of Statewide Health Planning and Development (OSHPD). The Patient Discharge dataset contains discharge abstracts for all acute care hospitals licensed by the state. Each hospital in the state is required to submit semiannual data for every

patient discharged from the facility, including demographic data, diagnostic information, procedure codes, and total charges with expected principal source of payments. The Hospital Financial dataset contains each hospital's total annual charges and costs, and we use it to convert the charges reported in the Patient Discharge data into costs. The 2009 datasets were used to estimate county-level hospital expenditures.

Medical Expenditure Panel Survey (MEPS). The MEPS is a nationally representative survey containing detailed information on each individual's healthcare utilization, expenditures, sources of payment, and the associated ICD-9 diagnostic codes for each type of healthcare services used for the U.S. civilian noninstitutionalized population. It also contains information about individual's health insurance coverage, health status, medical conditions, and demographic and socioeconomic characteristics. The MEPS survey uses the National Health Interview Survey (NHIS - described below) as its sampling frame. Each year a new MEPS panel is established drawing randomly from the previous year's NHIS households and this panel is followed for a two-year period (Agency for Healthcare Research and Quality, 2011). Thus, each year's MEPS data contain two panels which are linked to the previous two years' NHIS data (Agency for Health Care Policy and Research, 1997). While the MEPS does not include questions about individual's smoking history, the NHIS does contain individual smoking history and other risk behaviors for adults aged 18 years and older. Therefore, we linked the MEPS data to the NHIS Sample Adult file to estimate the national models of smoking-attributable healthcare expenditures. To increase the sample size for the smoking-attributable healthcare cost analysis, we pooled the linked MEPS-NHIS data from 2004-2009. The final sample contains nearly 60,000 adults. The sample size by race/ethnicity and year is shown in Table A below.

Table A. Unweighted sample sizes for the MEPS dataset by year and linkage to the NHIS files

	2004	2005	2006	2007	2008	2009	2004-2009
Adult Cases, MEPS	34,403	33,961	34,145	30,964	33,066	36,855	203,394
Linked Cases, MEPS-NHIS	10,384	10,267	10,221	9,167	9,359	10,090	59,488
Race/Ethnicity:							
Non-Hisp. Whites	6,203	6,015	5,977	5,368	4,885	5,174	33,622
Hispanics	2,026	1,970	1,879	1,627	1,909	2,080	11,491
Non-Hisp. Blacks	1,567	1,679	1,782	1,597	1,862	2,051	10,538
Non-Hisp. Asians	343	355	345	380	495	571	2,489
Non-Hisp. Others	245	248	238	195	208	214	1,348

National Health Interview Survey (NHIS). The NHIS is a nationally representative cross-sectional face-to-face household interview survey conducted annually by the National Center for Health Statistics. Approximately 100,000 people in 40,000 households are surveyed each year. One adult from each household is randomly selected to participate in

the Sample Adult survey. Data collected include sociodemographic information, employment status, smoking status, limitation of activity including the number of days missed from work due to illness or injury and days spent in bed due to illness or injury, health status, use of healthcare services, and acute and chronic conditions. The 2002-2008 NHIS data were linked to the 2004-2009 MEPS data to obtain smoking status for the MEPS sample as described above. The 2009 NHIS Sample Adult was used to estimate smoking-attributable work loss days for working people and bed disability days for those who are not in the labor force but mainly keeping house. It contains 27,731 adults.

Smoking-Attributable Fraction (SAF)

The SAF is the proportion of illness, death, lost productivity, or healthcare cost that can be attributed to smoking. In order to estimate the SAF, two types of data are necessary: relative risk and smoking prevalence.

Relative risk. Relative risk (RR) is the ratio of the rates of illness or death in the exposed population to the rates in the unexposed population. Thus the relative risk for current and former smokers is:

$$RR_c = r_c/r_n \quad \text{and} \quad RR_f = r_f/r_n \qquad \text{(Eq.1)}$$

where r_c = rate of illness or death for current smokers
r_f = rate of illness or death for former smokers
r_n = rate of illness or death for never smokers
RR_c = relative risk for current smokers relative to never smokers
RR_f = relative risk for former smokers relative to never smokers

Smoking prevalence. Smoking prevalence is the percentage of smokers in California. Smoking prevalence is shown in Table 18 and is estimated from the 2009 CHIS data. Californians are categorized as current, former, or never smokers. Prevalence of current, former, and never smoking is estimated for the 18 regions of California, by gender and by age group (adolescents aged 12-17, and adults aged 18 and older). An adolescent is considered a current smoker if he or she has ever smoked cigarettes, and smoked cigarettes for at least one day in the past 30 days. He or she is categorized as a former smoker if he or she indicates that they have ever smoked cigarettes, but did not smoke at all in the past 30 days. A never smoker is someone who reports never having smoked cigarettes in his or her lifetime. For adults, a current smoker is someone who reports smoking at least 100 cigarettes in their lifetime and who smokes everyday or some days at the time of the survey. A former smoker is someone who has smoked 100 cigarettes in their lifetime but did not smoke at the time of the survey. A never smoker is someone who has not smoked 100 cigarettes during their lifetime. Adult current smokers are further categorized by smoking intensity as light (smoked fewer than 10 cigarettes per day or smoked some days), moderate (smoked 10-19 cigarettes per day), and heavy (smoked 20 or more cigarettes per day) smokers.

Calculating the SAF. Once the relative risk and smoking prevalence have been determined, the smoking-attributable fraction can be calculated. For example, the SAF for

mortality is estimated using an adaptation of the standard epidemiological formula for attributable risk (Lilienfeld & Stolley, 1994):

$$SAF = \frac{[(p_n + p_c(RR_c) + p_f(RR_f)] - 1}{[(p_n + p_c(RR_c) + p_f(RR_f)]} = \frac{p_c(RR_c - 1) + p_f(RR_f - 1)}{[(p_n + p_c(RR_c) + p_f(RR_f)]} \qquad \text{(Eq. 2)}$$

where p_n = percentage of never smokers in the region
p_c = percentage of current smokers in the region
p_f = percentage of former smokers in the region
RR_c = relative risk of death for current smokers compared to never smokers
RR_f = relative risk of death for former smokers compared to never smokers

Direct Cost

Direct costs include the personal healthcare expenditures for five types of services: hospitalizations, ambulatory care, prescription drugs, home health care, and nursing home care. Hospitalizations include room and board and inpatient physician services. Ambulatory care includes office-based medical provider visits, outpatient visits, and emergency department visits. Prescriptions include prescription drugs, glasses, and other medical nondurables.

Direct costs of smoking are the excess healthcare expenditures for smokers compared to never smokers. We estimated the direct costs of smoking using an econometric modeling approach developed and refined over many years (Bartlett, Miller, Rice & Max, 1994; Miller et al., 1998a and 1998b; Zhang et al., 1999b; Max et al., 2002; Max et al., 2010; Max et al., 2011). After modeling healthcare expenditures as a function of smoking status/intensity and other covariates, we used the estimated parameters to generate two sets of predicted healthcare expenditures for each smoker: one for a factual case, and one for a counterfactual case – that is for someone who has all the same characteristics as the smoker except that they are assumed to be a never smoker. The difference between the factual and the counterfactual predictions among all smokers is the excess cost of smoking. This excess cost divided by total predicted healthcare expenditures for all individuals (including smokers and never smokers) is the smoking-attributable fraction. This SAF was calculated for each of the 18 regions and was then applied to the county-level total healthcare expenditures by type of healthcare services to obtain smoking-attributable healthcare expenditures for each of the 58 counties. The models for the direct costs of smoking were estimated separately for each of six subgroups stratified by age (18-34, 35-64, 65+) and gender (female, male).

SAF for hospitalization, ambulatory care, prescription drugs, and home health costs. In the econometric model for hospital care, ambulatory care, prescription drugs, and home health care, a series of equations predict how smoking status and smoking intensity affects healthcare expenditures, as described briefly below. Smoking status and intensity for four groups of smokers (current light, current moderate, current heavy, and former smokers) are

compared with never smokers (the reference group) in the model. More details about the model specification are shown in the Technical Appendix 1.

- The disease model predicts the probability of having a smoking-related disease as a function of smoking status/intensity, sociodemographics (age, race/ethnicity, region, education, and marital status), and risk behaviors (obesity, and binge drinking).

- The health status model predicts the probability of poor health as a function of smoking status/intensity, sociodemographics, risk behaviors, and the predicted probability of having a smoking-related disease.

- For each type of healthcare expenditures, a two-part model (Duan, Manning, Morris, & Newhouse, 1983) is used. In the first-part equation, the probability of having positive expenditures is estimated as a function of smoking status/intensity, sociodemographics, risk behaviors, family poverty status, health insurance coverage, and the predicted probability of poor health. In the second-part equation, the logarithmic level of expenditure for those with positive expenditures is estimated as a function of the same independent variables as specified in the first-part equation.

These models were estimated with national data from the linked 2004-2009 MEPS-NHIS, because data on smoking behavior and healthcare expenditures are not available in any dataset for California. After the national models were estimated, we applied the estimated parameters to the 2009 CHIS data to calculate the SAF for each type of healthcare expenditure. The SAF can be decomposed into two components: one for current smokers, and one for former smokers as specified below:

$$SAF = SAF_c + SAF_f \qquad \text{(Eq. 3)}$$

$$SAF_c = \frac{\sum_{c=1}^{Ncl}(EXP_{cl} - EXP_{cl\to n}) + \sum_{c=1}^{Ncm}(EXP_{cm} - EXP_{cm\to n}) + \sum_{c=1}^{Nch}(EXP_{ch} - EXP_{ch\to n})}{\sum_{n=1}^{Nn}(EXP_n) + \sum_{c=1}^{Ncl}(EXP_{cl}) + \sum_{c=1}^{Ncm}(EXP_{cm}) + \sum_{c=1}^{Nch}(EXP_{ch}) + \sum_{f=1}^{Nf}(EXP_f)} \qquad \text{(Eq. 4)}$$

$$SAF_f = \frac{\sum_{f=1}^{Nf}(EXP_f - EXP_{f\to n})}{\sum_{n=1}^{Nn}(EXP_n) + \sum_{c=1}^{Ncl}(EXP_{cl}) + \sum_{c=1}^{Ncm}(EXP_{cm}) + \sum_{c=1}^{Nch}(EXP_{ch}) + \sum_{f=1}^{Nf}(EXP_f)} \qquad \text{(Eq. 5)}$$

Where SAF_c = smoking-attributable fraction for all current smokers including current light, moderate, and heavy smokers

SAF_f = smoking-attributable fraction for former smokers

EXP_n = predicted expenditures for a never smoker n

EXP_{cl}, EXP_{cm}, EXP_{ch} = predicted expenditures for a current light smoker cl, current moderate smoker cm, or current heavy smoker ch

EXP_f = predicted expenditures for a former smoker f

$EXP_{cl\rightarrow n}$, $EXP_{cm\rightarrow n}$, $EXP_{ch\rightarrow n}$ = predicted expenditures for a hypothetical "nonsmoking current" light smoker cl, moderate smoker cm, or heavy smoker ch who has the identical characteristics of a current smoker except that he/she is assumed to be a never smoker

$EXP_{f\rightarrow n}$ = predicted expenditures for a hypothetical "nonsmoking former smoker" f who has the identical characteristics of a former smoker except that he/she is assumed to be a never smoker

N_n = total number of never smokers

N_{cl}, N_{cm}, N_{cm} = total number of current light smokers, current moderate smokers, or current heavy smokers

N_f = total number of former smokers

The SAF Equations (3–5) can be rewritten in terms of the relative risk (RR) and smoking prevalence by first replacing each summation by the product of its mean value and its sample size, then normalizing each sample size with total population (i.e., sum of never smokers, current smokers, and former smokers), and lastly normalizing each mean value by the mean predicted expenditure for never smokers. Therefore, the SAF equations can be transformed into:

$$SAF_c = \frac{(P_{cl})(RR_{cl} - RR_{cl\rightarrow n}) + (P_{cm})(RR_{cm} - RR_{cm\rightarrow n}) + (P_{ch})(RR_{ch} - RR_{ch\rightarrow n})}{(P_n) + (P_{cl})(RR_{cl}) + (P_{cm})(RR_{cm}) + (P_{ch})(RR_{ch}) + (P_f)(RR_f)} \quad \text{(Eq. 6)}$$

$$SAF_f = \frac{(P_f)(RR_f - RR_{f\rightarrow n})}{(P_n) + (P_{cl})(RR_{cl}) + (P_{cm})(RR_{cm}) + (P_{ch})(RR_{ch}) + (P_f)(RR_f)} \quad \text{(Eq. 7)}$$

where P_n = prevalence of never smokers (=N_n / total population)

P_{cl}, P_{cm}, P_{ch} = prevalence of current light, current moderate, or current heavy smokers (=N_{ch} / total population)

P_f = prevalence of former smokers (=N_f / total population)

RR_{cl}, RR_{cm}, RR_{ch} = relative risk of healthcare expenditures for current light, moderate, or heavy smokers compared to never smokers

RR_f = relative risk of healthcare expenditures for former smokers compared to never smokers

$RR_{cl\rightarrow n}$, $RR_{cm\rightarrow n}$, $RR_{ch\rightarrow n}$ = relative risk of healthcare expenditures for a hypothetical "nonsmoking current" light, moderate, or heavy smoker compared to never smokers

$RR_{f\rightarrow n}$ = relative risk of expenditures for healthcare expenditures for hypothetical "nonsmoking former smokers" compared to never smokers

The RR measures described in Equations (6–7) were estimated for each age and gender subgroup by applying the estimated parameters from the national models to the 2009 CHIS data. Thus, once the prevalence rates for current light, current moderate, current heavy, former, and never smokers for each region are determined, the SAFs for each region are determined.

SAF for nursing home cost. Smoking-attributable nursing home expenditures were estimated following the conceptual model developed by Zhang (1999a). This model considers two ways in which smoking influences nursing home expenditures. Patients may be admitted to a nursing because they, themselves, suffer from smoking-related illnesses (the disability effect) or they may be forced to move to a nursing home when their caregiver dies from a smoking-related illness and there is no one to care for them (the mortality effect). Both of these effects combine to cause an increase in nursing home expenditures that is attributed to smoking. The RRs estimated by Zhang were used along with smoking prevalence estimated from the 2009 CHIS for each region to determine the SAF for nursing home care for each region, using Equation (2) above.

Estimation of county-level healthcare expenditures. County-level expenditures were estimated in several steps. For ambulatory care, prescription drugs, and home health care (separately), a national model to predict the annual expenditures was estimated using data from the 2009 MEPS for adults aged 18 and older. These prediction models controlled for age, gender, race/ethnicity, region, education, marital status, and family poverty status. The estimated parameters were then applied to the 2009 CHIS adult data to predict the expenditures for each adult for each type of health care services. These predictions were aggregated by age (18-34, 35-64, 65+) and gender for each region and averaged to obtain per person annual expenditures for each subgroup for each region. Per person expenditures by region were then multiplied by the 2009 county-level resident population for the corresponding subgroup aged 18 and older to derive the total healthcare expenditures for each county. The estimates of these expenditures reflect the actual age distribution of Californians, who are relatively younger than the U.S. population.

Hospitalization expenditures were estimated using the 2009 California OSHPD Patient Discharge data. First, the charge for each hospitalization from the Patient Discharge data was converted to cost using hospital-specific cost-to-charge ratios obtained from the 2009 OSHPD Hospital Financial data. Then, the costs of the hospitalization were aggregated by age (18-34, 35-64, 65+) and gender for each county to derive the total hospital expenditures for each county.

Per person nursing home expenditures by region for males and females aged 55 and older were derived from our previous Report (Max et al., 2002). The per person expenditures were applied to the 2009 county-level resident population for males and females aged 55 and older to derive the unadjusted total nursing home expenditures for each county.

For each of five types of healthcare services, an adjustment was made so that the sum of California expenditures across all counties equals the state expenditure estimates as published by the Centers for Medicare and Medicaid Services (CMS, 2011)

Estimation of smoking-attributable direct costs. Smoking-attributable healthcare expenditures for each county were estimated separately for males and females for each of the five types of health care services by multiplying the appropriate SAF by the corresponding predicted county-level health care expenditure. For example, the SAF for ambulatory care for males aged 35-64 in Los Angeles County is .0748. Total ambulatory

care expenditures for males aged 35-64 for Los Angeles County in 2009 is $3,720 million after adjustment to the CMS-reported levels. Thus, the estimated smoking-attributable ambulatory care expenditures for males aged 35-64 in Los Angeles County are $278 million (.0748 x $3,720 million).

Lost Productivity Due to Illness

People with smoking-related diseases miss days of work and are unable to perform their usual activities due to illness. The resulting lost productivity includes days lost from work for people who are working, and bed-disability days for those who are not in the labor force but are keeping house. While those who are working undoubtedly lose some days in addition to the reported work loss days, these days are not included to avoid double-counting of days. In order to estimate the number of smoking-attributable work loss days or bed-disability days, the SAF was calculated, the total number of days lost determined, and the two were multiplied to obtain smoking-attributable days lost. The resulting smoking-attributable days lost were then valued using mean daily earnings and an imputed value for household production.

SAF for lost productivity due to illness. A two-part model (Duan et al., 1983) is used to predict how smoking status affects the number of work-loss days or bed-disability days. In the first-part equation, the probability of having positive days is estimated as a function of smoking status, demographics (age, gender, race/ethnicity, region, education, and marital status), and risk behaviors (obesity, and binge drinking). In the second-part equation, the logarithmic level of days for those with positive days is estimated as a function of the same independent variables as specified in the first-part equation. In the model, smoking status is classified as current smokers and former smokers to compare with never smokers (reference group). More details about the model specification are shown in the Technical Appendix 2.

These models were estimated for adults aged 18 and older using national data from the 2009 NHIS, because data on smoking status and work-loss days or bed-disability days are not available in any dataset for California. Due to small sample sizes, we combined males and females into one set of models. After the national models were estimated, we applied the estimated parameters to the 2009 CHIS data to calculate the California-specific SAF for work-loss days or bed-disability days.

Similar to Equations (6–7) above, the SAFs for work loss days or bed-disability days can specified as:

$$SAF_c = \frac{(P_c)(RR_c - RR_{c\rightarrow n})}{(P_n) + (P_c)(RR_c) + (P_f)(RR_f)} \qquad \text{(Eq. 8)}$$

$$SAF_f = \frac{(P_f)(RR_f - RR_{f\rightarrow n})}{(P_n) + (P_c)(RR_c) + (P_f)(RR_f)} \qquad \text{(Eq. 9)}$$

where P_n = prevalence of never smokers
P_c = prevalence of current smokers
P_f = prevalence of former smokers
RR_c, RR_f = relative risk of work-loss days or bed-disability days for current or former smokers compared to never smokers
$RR_{c\rightarrow n}$, $RR_{f\rightarrow n}$ = relative risk of work-loss days or bed-disability days for hypothetical "nonsmoking current smokers" or "nonsmoking former smokers" relative to never smokers

All the RR measures described in Equations (8–9) were estimated by applying the estimated parameters from the national models to the 2009 CHIS data. Applying the RR estimates to the smoking prevalence rates for each region using Equations (8) and (9), the SAF of days for each region is determined.

Estimation of county-level work loss days and bed-disability days. County level days were estimated in three steps. First, the average annual work loss days per U.S. working adult was estimated for each of the eight subgroups stratified by gender and age (18-34, 35-54, 55-64, 65+), using the 2009 NHIS data. Similarly, the average annual bed-disability days per adult who was not in the labor force but was keeping house was estimated for each of the eight subgroups. Second, the labor force participation rates and the proportion of California adults who were not in the labor force but whose main activity was keeping house were estimated for each subgroup for each of the 18 regions in California using the 2009 CHIS data. Third, these region-specific specific labor force participation rates or housekeeping rates were multiplied by the average days per person and the resident population in each California county for each subgroup to derive the total county-level days lost from work and bed-disability days.

Estimation of the value of smoking-attributable lost productivity from illness. The SAFs for days lost were applied to the total number of days lost to obtain smoking-attributable days of lost productivity. For those working in the labor market, work loss days were valued using mean daily earnings estimated from the 2009 CHIS data and an imputed value for housekeeping services for each subgroup. Labor market earnings include an adjustment for fringe benefits. Household work was valued based on time-motion studies of housekeepers in which the number of hours in each activity is calculated on a task-by-task basis. In this study, the methodology developed by Douglass, Kenney, and Miller (1990) was used to derive the imputed value for housekeeping services. For those not in the labor force but engaged in housekeeping, a mean daily imputed value for housekeeping services was applied to smoking-attributable bed days.

Lost Productivity Due to Premature Death

Three measures of the losses associated with premature death from smoking or SHS-related diseases are calculated: deaths attributed to smoking, years of potential life lost (YPLL), and the value of smoking-attributable productivity.

For SHS exposure, we report only the number of deaths at the state level. The numbers of deaths at the county level are small and hence may not be reliable. However, the estimates for the entire state are useful. We previously estimated the SHS-attributable deaths, YPLL, value of lost productivity, and the SHS-attributable healthcare costs (Max et al., 2014).

Deaths attributed to smoking and SHS exposure. For each of the 22 smoking-related causes of death shown in Table 3, the SAF was first calculated by gender among adults aged 35 and older for each region in California according to Equation (2). Then, the region-specific SAFs were applied to the corresponding number of deaths to determine the number of smoking -attributable deaths for each county. The total numbers of deaths by gender for each cause of death in each county were obtained from the 2009 California Mortality file.

In addition to deaths of smokers, nonsmokers including former and never smokers may die of causes that result from their exposure to SHS (NCI, 1999; US DHHS, 2006; CA EPA, 2005). Based on our previous research on the costs of SHS exposure (Max et al., 2014), we included 7 SHS-associated causes of death (4 perinatal and 3 adult causes) as shown in Table B below. The SHS-attributable fractions for these causes of death were calculated by gender and age group for each region in California according to Equation (2) using the RRs published in California Environmental Protection Agency report (2005) and the Surgeon General report (US DHHS, 2006) for the adult conditions and the RRs reported in the Maternal and Child Health Smoking-Attributable Mortality, Morbidity, and Economic Cost (CDC, 2014c) for the perinatal conditions, and the region-specific SHS exposure prevalence rates estimated from the 2009 CHIS data. The RRs by SHS-associated cause of death are shown in Table B. The SAFs for SHS exposure were calculated for each region in California and applied to total deaths for each cause of death and age group among nonsmokers for each county. While deaths are not reported by smoking status in the 2009 California Mortality file, it is possible to determine nonsmoker deaths following the approach used by three recent studies (Gan, Smith, Hammond, & Hu, 2007; Oberg et al., 2011; Max et al., 2014). This approach involves subtracting the excess number of deaths attributable to smoking in current smokers from the total number of deaths for the diseases of interest. It is then assumed that the other deaths are distributed among current smokers and nonsmokers according to their proportions in the population.

Table B. Relative risk of secondhand smoke-associated death by cause of death and age

Cause of death	Age	Source	Relative Risk (95% CI)
Short Gestation, Low Birth Weight	<1	CDC, 2014c	1.83 (*)
Sudden Infant Death Syndrome	<1	CDC, 2014c	2.29 (*)
Respiratory Distress Syndrome	<1	CDC, 2014c	1.3 (*)
Respiratory Conditions of Newborn	<1	CDC, 2014c	1.41 (*)
Lung Cancer	18+	CA EPA, 2005	1.29 (1.04-1.60)
Ischemic Heart Disease	18+	US DHHS, 2006	1.25 (1.12-1.40)
Asthma	18+	CA EPA, 2005	1.97 (1.19-3.25)

*95% Confidence intervals not available.

Years of Potential Life Lost (YPLL). When Californians die of a smoking -related disease, the years they would have lived had they not smoked or been exposed to SHS are lost. The number of YPLL is defined as the average number of years of life remaining at the age of death, which is obtained from the most recently available life tables for California (California Department of Health Services (CA DHS), 2007). Smoking-attributable YPLL is calculated by multiplying smoking -attributable deaths (by gender and five-year age group) by the number of YPLL. Thus:

$$\text{Smoking-attributable YPLL} = (\text{smoking-attributable deaths}) \times \text{YPLL} \qquad \text{(Eq. 10)}$$

Estimation of the value of smoking-attributable lost productivity from premature death. The value of lost productivity from lives lost due to smoking is estimated using the human capital approach, which estimates a person's expected lifetime labor market earnings, and/or the imputed value for a person's lifetime household production. The present discounted value of lifetime earnings (PVLE) for a person of gender g and age y is calculated as:

$$PVLE = \sum_{n=y}^{85} P_{y,g}(n) \; [Y_g(n)\, E_g(n) + Y^h_g(n)\, E^h_g(n)] * (1+p)^{n-y} \;/\; (1+r)^{n-y} \qquad \text{(Eq. 11)}$$

where $P_{y,g}(n)$ = probability that a person of gender g and age y will survive to age n

n = the age of the person in the future

y = the age of the person at present

g = the gender of the person

$Y_g(n)$ = mean annual labor market earnings of an employed person of gender g and age n

$E_g(n)$ = proportion of the population of gender g and age n who are employed in the labor market

$Y^h_g(n)$ = mean annual imputed value of household production for a person of gender g and age n

$E^h_g(n)$ = proportion of the population of gender g and age n who are keeping house

p = annual growth rate in labor productivity

r = real discount rate

PVLE was calculated using a computer program maintained at the University of California at San Francisco (Max, Rice, Michel, & Sung, 2001b). The calculation considers labor market earnings, an imputed value for housekeeping, and the probability that a person will be in the labor market or keeping house for each age group. California specific data on probabilities of survival by gender and age was used (CA DHS, 2007). Mean earnings for Californians was obtained by adjusting U.S. mean earnings by the ratio of California to U.S. mean earnings. Annual mean earnings by age and gender were also adjusted for wage supplements such as employer contributions for social security, health insurance, and private pensions. Cross-sectional profiles of mean earnings by age (five-year age group from age 0 to age 85 or above) and gender are used to estimate lifetime earnings, assuming

that the future pattern of earnings will follow the current pattern. The proportion of males and females of each age group who were employed (or who were keeping house) was estimated from the 2009 NHIS data. A discount rate of 3% was used to convert all dollars to their present value equivalent in 2009 dollars (Gold, Siegel, Russell, & Weinstein, 1996). Resulting estimates of the PVLE by gender and age are shown in Table C below.

Table C. Present value of lifetime earnings* by age and gender: California, 2009

Age	Male	Female
Under 1	$ 1,238,291	$ 1,028,452
1-4	1,302,533	1,081,490
5-9	1,423,872	1,182,057
10-14	1,571,498	1,304,514
15-19	1,723,278	1,424,459
20-24	1,822,258	1,484,814
25-29	1,822,271	1,446,227
30-34	1,737,540	1,340,674
35-39	1,578,400	1,195,395
40-44	1,358,864	1,022,484
45-49	1,114,273	831,885
50-54	851,414	624,429
55-59	582,479	420,838
60-64	349,326	239,831
65-69	185,646	109,747
70-74	84,956	45,038
75-79	30,578	18,782
80-84	14,149	8,609
85 and older	2,449	1,729

*Discounted at 3 percent.
Assumed annual growth in productivity of 1 percent.

The cost to society of smoking-related mortality is calculated as the product of the number of smoking-related deaths and the PVLE for each death.

Comparison with Previous Cost Estimates

This study updates our previous estimates of the economic costs of smoking in California by county for 1989 (Rice & Max 1992) and 1999 (Max et al., 2002). This section compares the cost estimates for the present study with our 1999 estimates. The 1999 report (Max et al., 2002) contains a comparison of the 1989 and 1999 estimates. Summary estimates are shown in Table D.

There are several reasons why costs would be expected to differ over the last decade. Total costs would increase due to inflation and population growth, and direct costs would reflect an increase in healthcare costs as well. In fact, personal healthcare expenditures nearly doubled between 1999 and 2009 (CMS, 2011) and part of the reason for this increase is due to the increasing Consumer Price Index for medical care by 50% during this period (US BLS, 2014a). Costs also reflect any changes in smoking prevalence during the same period. Indirect losses in productivity due to illness and premature death are sensitive to wage rates, and compensation per hour increased by 45% during this period (US BLS, 2014b). The differences in cost estimates between 1999 and 2009 are described next, followed by a discussion of the reasons for these differences.

The 2009 estimate for total economic cost of smoking is 15% higher than the 1999 estimate, $18.1 billion compared to $15.8 billion in current dollars, as shown in Table D below. The distribution of total costs by type of cost was very similar for 1999 and 2009. Direct costs accounted for 54% of total costs in 1999 and 2009. Indirect productivity losses due to illness and premature death accounted for 46% of total costs in 1999 and 2009.

Direct Costs. The total direct cost of smoking in 2009 is 15% higher than the estimate for 1999. This is well below the increase in both personal healthcare expenditures and the increase in the medical care component of the Consumer Price Index. Thus, in real terms, the healthcare cost of smoking in CA decreased over the decade from 1999 to 2009.

However, the changes among the cost categories range from almost no change for ambulatory care services to 813% higher for home health. These differences result from two factors. First, although the growth rate for overall personal health care expenditures in California was 97% during this 10-year period, there is a wide variation in growth rates by type of healthcare service, ranging from the highest growth rate of 353% for home health care, to 136% for prescription drugs, 95% for nursing home care, 110% for hospital care, and 66% for ambulatory care (CMS, 2011). Second, the smoking-attributable fraction (SAF) estimates for 2009 in general were smaller than the SAF estimates for 1999 for all types of healthcare expenditures except home health care, reflecting declining smoking prevalence rates. In 1999, the SAF estimates were .05, .10, .12, .04, and .23 for ambulatory care, prescription drugs, hospital care, home health care, and nursing home care, respectively. In 2009, the corresponding SAFs were .03, .04, .06, .09, and .14 for ambulatory care, prescription drugs, hospital care, home health care, and nursing home care, respectively. Therefore, the SAF for home health care almost doubled during the 10-year period, while the SAFs for other health services were approximately cut in half.

Table D. Cost of smoking in California: 1999 and 2009			
Type of Cost	**Amount (in millions)**		**Percent Change 1999-2009**
	1999	**2009**	
Total Cost	$15,760	$18,058	15
Direct Healthcare Costs	8,565	9,830	15
Hospital	4,017	4,311	7
Ambulatory Care	2,060	2,058	0
Nursing Homes	1,267	1,517	20
Prescriptions	1,133	1,150	2
Home Health	87	794	813
Indirect Costs from Lost Productivity	7,195	8,228	14
Illness	1,512	1,431	-5
Premature Death	5,683	6,797	20
Note: All costs are in actual dollars (e.g. 1999 costs are in 1999 dollars)			

Indirect Productivity Losses Due to Illness. The smoking-attributable productivity losses due to illness decreased slightly by 5% between 1999 and 2009, mainly driven by declining smoking prevalence.

Indirect Productivity Losses Due to Premature Deaths. The increase in the value of productivity losses due to premature death between 1999 and 2009 was 20%, well below the increase in hourly compensation of 45% during this period. In 1999, the number of smoking-related deaths was estimated at 43,137; the number in 2009 was 34,362, a 20% decrease. The same method for calculating losses for this cost category was used for both sets of estimates. The mean years of life lost per death rose from 12.4 years in 1999 to 17.1 years in 2009. Lifetime earnings were discounted at 3% in both 1999 and 2009 but the value of lost productivity from premature death increased from $131,741 in 1999 to $197,800 in 2009 because of the increase in PVLE during the period, resulting from higher earnings and longer life expectancy.

Comparison of the cost estimates in real value. We adjusted the nominal values for 1999 into 2009 dollars using the increase in the Consumer Price Index for medical care to adjust healthcare costs (US BLS, 2014a) and the Index of Hourly Compensation in the Business Sector for indirect productivity losses (US BLS, 2014b). By doing this, the real value of the 1999 total cost of smoking expressed in 2009 constant dollars is estimated to be $23.3 billion. Therefore, while the nominal cost of smoking in California increased by 15% during 1999-2009, the real costs of smoking after taking inflation into account actually decreased by 22% during this period.

Findings: The Cost of Smoking in California in 2009

What is the total cost of smoking in California?

- $18.1 billion, including the direct healthcare costs and indirect costs from lost productivity due to illness and premature death

What is the cost of smoking for each Californian?

- $487

How much does smoking cost per smoker?

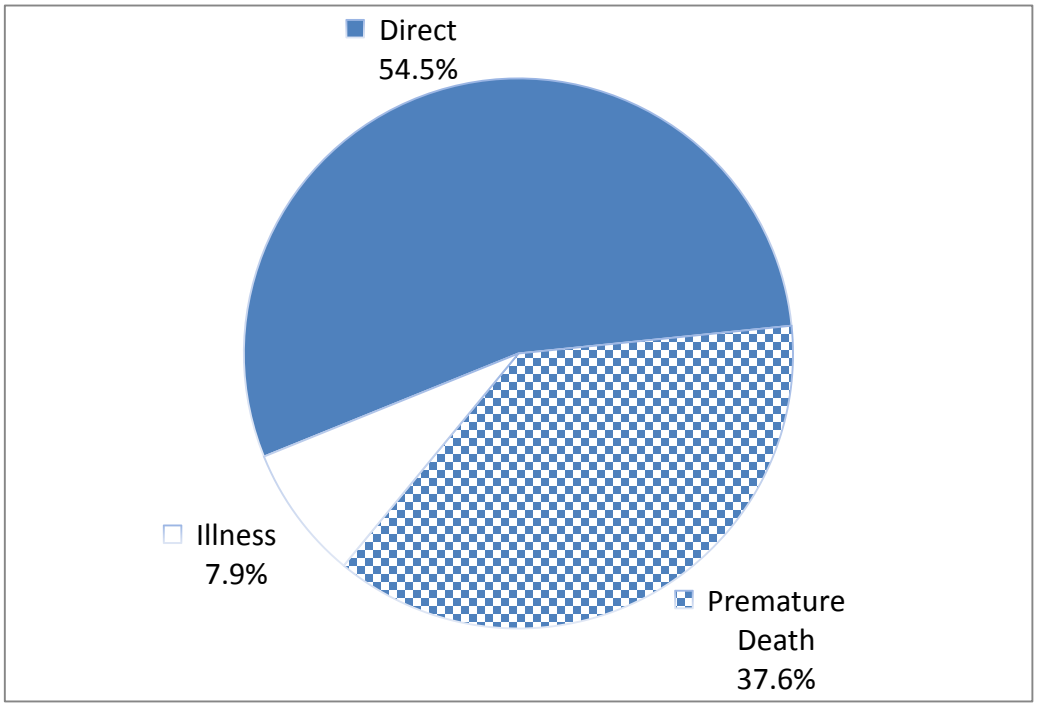
- $4,603 including $2,505 in direct healthcare costs and $2,097 in indirect costs from lost productivity from illness and premature death

How are the healthcare costs of smoking incurred?

- The healthcare costs for smoking total over $9.8 billion. This represents 54.5% of the total cost of smoking. Hospital care accounts for the largest proportion of these costs (44%). The costs by type of healthcare services are:
  - $4.3 billion for hospital care
  - $2.1 billion for ambulatory care
  - $1.5 billion for nursing home care
  - $1.1 billion for prescriptions
  - $794 million for home health care

What are the indirect costs of smoking?

- Indirect costs represent lost productivity due to illness and premature death from smoking-related diseases.
- Lost productivity from smoking-related illness accounts for 7.9% of the cost of smoking and lost productivity from premature death accounted for an additional 37.6% of the cost.



How many people in California smoke cigarettes?

- 3.9 million Californians smoke:
  - Adults age 18 and over – 3.8 million persons or 13.6% of adults
    - Men – 2.4 million men (17.2%)
    - Women – 1.4 million women (10.1%)
  - Adolescents age 12 to 17 – 146,000 persons or 4.5 percent of adolescents
    - Boys – 95,000 boys (5.8%)
    - Girls – 51,000 girls (3.2%)

What are the patterns of smoking intensity among adult current smokers in California?

- A majority of adult current smokers in California are light smokers, who smoke some days or fewer than 10 cigarettes per day. This includes 59.7% of male and 61.0% of female current smokers.
- Only 17.7% and 11.3% of adult current male and female smokers respectively are heavy smokers, smoking a pack a day or more (20+ cigarettes).

How do smoking rates in California compare to those in the U.S. for 2009?

- Californians smoke less.

	Adults	Adolescents
California	13.6%	4.5%
United States	20.6%	8.9%

How do smoking rates in 2009 compare to those in 1999 in California?

- Smoking rates in 2009 are lower.

	Adults		Adolescents	
	Male	Female	Male	Female
1999	22.1%	15.3%	7.7%	7.4%
2009	17.2%	10.1%	5.8%	3.2%

How do California's smoking costs compare to cigarette sales tax revenues?

- Smoking cost $18.1 billion in 2009 and state cigarette excise tax revenues generated $863 million in 2009.
- Smoking cost $21 for every dollar of cigarette tax revenue generated.

What is the cost of smoking per pack in California?

- The healthcare costs of smoking are $9.23 per pack.
- The indirect costs from smoking-caused productivity losses are an additional $8.23 per pack.

How do costs for men and women compare?

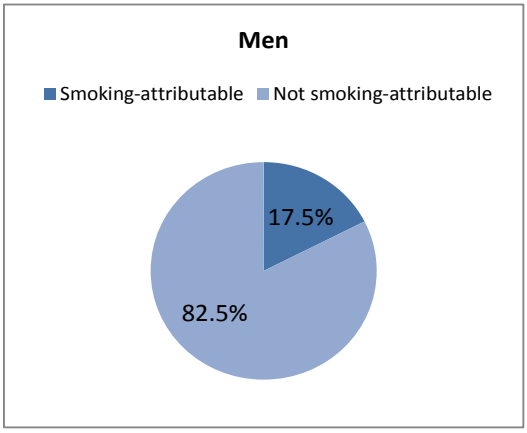
- The total cost of smoking for men is 82.1% higher than that for women. However, the difference between men and women varies by type of costs:
  - The healthcare cost of smoking is 34.7% higher for men than women
  - Lost productivity from illness is 45.6% higher for men than women
  - Lost productivity from premature death is 216.8% higher for men than women

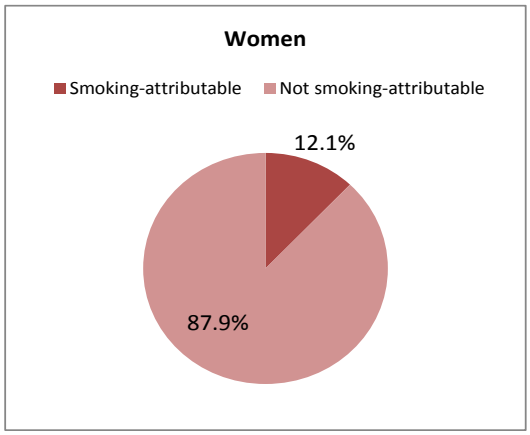
How many deaths in Californian are attributed to smoking?

- 34,363 deaths in 2009

What proportion of deaths in California is attributed to smoking?

- 14.8 percent of all deaths are attributed to smoking in 2009.
- The proportion of deaths attributed to smoking is greater for men (17.5%) than for women (12.1%).
- Smoking-attributable deaths for males (20,565) are more than those for females (13,799).



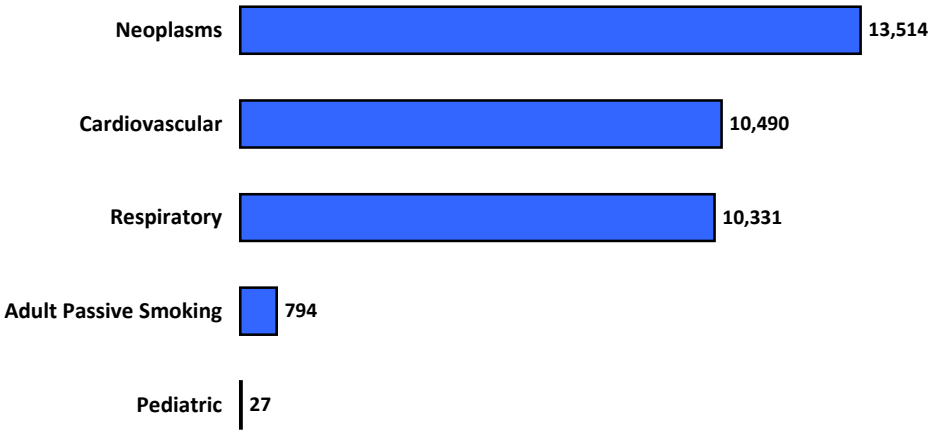


How do smoking-attributable deaths compare to deaths from other causes in California?

- Smoking accounts for more deaths (34,363) than deaths from many other causes:
  17 times the deaths from AIDS
  5 times the deaths from diabetes
  5 times the deaths from influenza and pneumonia
  3 times the deaths from unintentional injuries
  3 times the deaths from Alzheimer's disease

What do California smokers and SHS-exposed nonsmokers die of?

- The leading cause of smoking-attributable death is cancer (13,514 deaths), followed by cardiovascular disease (10,490 deaths), respiratory diseases (10,331 deaths), and pediatric disease (27 deaths).
- Similar to the U.S., cancer has now surpassed cardiovascular disease as the leading cause of smoking-attributable death.
- In addition, SHS exposure caused 794 adult deaths including 81 dying from lung cancer, 700 from IHD, and 13 from asthma.



How much productivity is lost due to premature deaths attributed to smoking?

- The smoking-attributable productivity losses per premature death averages $198,000 and 17.1 years of potential life lost.

	Total	**Male**	**Female**
Value of life lost (billions)	$6.8	$ 5.2	$1.6
Loss per death	$198,000	$251,000	$118,000
Years of potential life lost (YPLL)	587,000	354,000	233,000
YPLL per death	17.1	17.2	16.9

How do the costs of smoking vary across the counties in California?

- Per resident losses range from $374 in Orange County to $1,002 in Lake County.
- Total smoking-related costs varied from $0.33 million in Alpine County to $4.4 billion in Los Angeles County.

How do the deaths and costs attributed to smoking in California in 2009 compare to those in 1999?

- The number of smoking-attributable deaths decreased from 43,137 deaths in 1999 to 34,363 deaths in 2009, a reduction by 20%.
- The nominal value of total cost of smoking increased by 15% from $15.8 billion in 1999 to $18.1 billion in 2009.
- After taking inflation into account, the total cost of smoking in the 2009 actually decreased by 22% compared to the value of total cost of smoking in 1999.

Conclusion

The economic burden of smoking is high in California, amounting to $18.1 billion in 2009. However, there is evidence that the state's tobacco control efforts are having a positive impact, resulting in fewer smoking-attributable deaths, reduced real costs of smoking, and lower smoking prevalence rates. The wide variation in costs of smoking across the counties suggests that there are many geographic areas of the state that would benefit from targeted efforts aimed at reducing smoking.

California Tables

Table 1

Cost of Smoking by Type of Cost and Gender, California, 2009

Type of Cost & Gender	Amount (thousands)	Percent Distribution	Per Resident	Per Smoker
Total	$18,058,012	100.0	$487	$4,603
Direct Cost	9,830,115	54.4	265	2,505
Hospital	4,310,875	23.9	116	1,099
Ambulatory*	2,058,077	11.4	56	525
Nursing home care	1,517,363	8.4	41	387
Prescriptions	1,149,527	6.4	31	293
Home Health	794,273	4.4	21	202
Indirect Lost Productivity	8,227,898	45.6	222	2,097
Illness	1,430,618	7.9	39	365
Premature Death**	6,797,280	37.6	183	1,732
Men, Total	11,657,133	100.0	632	4,760
Direct Cost	5,642,380	48.4	306	2,304
Hospital	2,754,518	23.6	149	1,125
Ambulatory*	986,548	8.5	53	403
Nursing home care	862,695	7.4	47	352
Prescriptions	583,343	5.0	32	238
Home Health	455,277	3.9	25	186
Indirect Lost Productivity	6,014,753	51.6	326	2,456
Illness	848,214	7.3	46	346
Premature Death**	5,166,538	44.3	280	2,110
Women, Total	6,400,879	100.0	344	4,340
Direct Cost	4,187,734	65.4	225	2,840
Hospital	1,556,356	24.3	84	1,055
Ambulatory*	1,071,529	16.7	58	727
Nursing home care	654,668	10.2	35	444
Prescriptions	566,185	8.8	30	384
Home Health	338,996	5.3	18	230
Indirect Lost Productivity	2,213,145	34.6	119	1,501
Illness	582,404	9.1	31	395
Premature Death**	1,630,741	25.5	88	1,106

Note: Numbers may not add to total due to rounding.
* Includes Physician and other Professional Services
** Discounted at 3 percent

Table 2

Smoking Prevalence by Gender, Age, and Smoking Status, California, 2009

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	3,923,433	12.7	6,748,739	21.8	20,327,558	65.6
Male	2,448,736	16.0	3,878,930	25.3	9,012,707	58.8
Female	1,474,697	9.4	2,869,809	18.3	11,314,851	72.3
Age <18	146,033	4.5	327,026	10.1	2,757,338	85.4
Male	95,246	5.8	178,456	10.8	1,381,906	83.5
Female	50,787	3.2	148,570	9.4	1,375,431	87.3
Age 18+	3,777,400	13.6	6,421,713	23.1	17,570,221	63.3
Male	2,353,490	17.2	3,700,474	27.0	7,630,801	55.8
Female	1,423,910	10.1	2,721,239	19.3	9,939,420	70.6

Source: Prevalence rates: CHIS 2009; Population: US Bureau of the Census

Table 3

Relative Risk for Current and Former Smokers by Cause of Death and Gender, California,

Cause of Death	ICD-10 Code	Men		Women	
		Currently Smoke	Formerly Smoked	Currently Smoke	Formerly Smoked
Neoplasms					
Lip, oral cavity, pharynx	C00–C14	10.89	3.40	5.08	2.29
Esophagus	C15	6.76	4.46	7.75	2.79
Stomach	C16	1.96	1.47	1.36	1.32
Pancreas	C25	2.31	1.15	2.25	1.55
Larynx	C32	14.60	6.34	13.02	5.16
Trachea, lung, bronchus	C33–C34	23.26	8.70	12.69	4.53
Cervix, uterus	C53			1.59	1.14
Urinary bladder	C67	3.27	2.09	2.22	1.89
Kidney, other urinary	C64–C65	2.72	1.73	1.29	1.05
Acute Myeloid Leukemia	C92.0	1.86	1.33	1.13	1.38
Cardiovascular disease					
Hypertension	I10-I15	1.85	1.32	1.69	1.16
Ischemic Heart Disease (IHD)	I20–I25				
35-64 years		2.80	1.64	3.08	1.32
65 years plus		1.51	1.21	1.60	1.20
Other heart disease	I00–I09, I26–I51	1.78	1.22	1.49	1.14
Cerebrovascular disease	I60–I69				
35-64 years		3.27	1.04	4.00	1.30
65 years plus		1.63	1.04	1.49	1.03
Atherosclerosis	I70	2.44	1.33	1.83	1.00
Aortic aneurysm	I71	6.21	3.07	7.07	2.07
Other arterial diseases	I72–I78	2.07	1.01	2.17	1.12
Respiratory Diseases					
Respiratory TB	A16-A19	1.99	1.56	2.18	1.38
Pneumonia, influenza	J10–J18	1.75	1.36	2.17	1.10
Bronchitis, emphysema	J40–J42, J43	17.10	15.64	12.04	11.77
Asthma	J45-J46	1.99	1.56	2.18	1.38
Chronic airways obstruction	J44	10.58	6.80	13.08	6.78
Pediatric Diseases					
Short gestation, low birth weight	P07	1.83	1.83	1.83	1.83
Sudden infant death syndrome	R95	2.29	2.29	2.29	2.29
Respiratory distress syndrome	P22	1.30	1.30	1.30	1.30
Respiratory conditions of newborn	P23-P28	1.41	1.41	1.41	1.41

Note: Among adults aged 35 years and older, except for pediatric conditions (aged <1)
Source: Centers for Disease Control and Prevention, 2014b; 2014c

Table 4

Total Deaths and Deaths Attributed to Smoking by Cause of Death, California, 2009

Cause of Death	Deaths	Attributed to Smoking Number	Attributed to Smoking Percent
All Causes	231,764	34,363 *	14.8
Neoplasms			
Lip, oral cavity, pharynx	875	521	59.5
Esophagus	1,251	790	63.2
Stomach	1,499	263	17.6
Pancreas	3,668	732	20.0
Larynx	309	239	77.4
Trachea, lung, bronchus	13,058	9,992	76.5
Cervix, uterus	439	34	7.8
Urinary bladder	1,325	487	36.8
Kidney, other urinary	1,250	286	22.9
Acute Myeloid Leukemia	1,219	170	13.9
Cardiovascular disease			
Hypertension	7,888	1,076	13.6
Ischemic heart disease			
0-34 years	92	0	0.0
35-64 years	6,970	2,135	30.6
65 years plus	33,296	3,819	11.5
Other heart disease	14,109	1,615	11.4
Cerebrovascular disease			
0-34 years	142	0	0.0
35-64 years	1,993	561	28.2
65 years plus	11,275	581	5.2
Atherosclerosis	806	115	14.3
Aortic aneurysm	925	496	53.6
Other arterial diseases	704	92	13.0
Respiratory Diseases			
Respiratory TB	94	19	20.6
Pneumonia, influenza	6,350	936	14.7
Bronchitis, emphysema	1,018	841	82.7
Asthma	415	68	16.4
Chronic airways obstruction	11,355	8,467	74.6
Pediatric Diseases			
Short gestation, low birth weight	349	13	3.8
Sudden infant death syndrome	186	11	6.0
Respiratory distress syndrome	57	1	1.3
Respiratory conditions of newborn	93	2	2.0
Passive Smoking--Lung Cancer	13,058	81	0.6
Passive Smoking--Ischemic Heart Disease	40,358	700	1.7
Passive Smoking - Asthma	415	13	3.3
All Other Causes	108,754		

Note: Numbers may not add to total due to rounding.
*Excludes passive smoking-attributable deaths

Table 5

Male: Total Deaths and Deaths Attributed to Smoking by Cause of Death, California, 2009

Cause of Death	Deaths	Attributed to Smoking Number	Attributed to Smoking Percent
All Causes	117,832	20,565 *	17.5
Neoplasms			
Lip, oral cavity, pharynx	589	406	68.9
Esophagus	953	637	66.8
Stomach	879	205	23.3
Pancreas	1,807	360	19.9
Larynx	246	196	79.6
Trachea, lung, bronchus	6,983	5,972	85.5
Cervix, uterus			
Urinary bladder	936	390	41.7
Kidney, other urinary	804	268	33.4
Acute Myeloid Leukemia	680	123	18.1
Cardiovascular disease			
Hypertension	3,514	665	18.9
Ischemic heart disease			
0-34 years	74		
35-64 years	5,311	1,757	33.1
65 years plus	16,516	2,235	13.5
Other heart disease	6,611	1,044	15.8
Cerebrovascular disease			
0-34 years	79		
35-64 years	1,105	314	28.4
65 years plus	4,429	311	7.0
Atherosclerosis	328	80	24.3
Aortic aneurysm	575	338	58.9
Other arterial diseases	318	45	14.1
Respiratory Diseases			
Respiratory TB	64	15	23.1
Pneumonia, influenza	3,091	565	18.3
Bronchitis, emphysema	533	466	87.5
Asthma	142	26	18.5
Chronic airways obstruction	5,332	4,131	77.5
Pediatric Diseases			
Short gestation, low birth weight	206	8	3.7
Sudden infant death syndrome	107	6	5.9
Respiratory distress syndrome	38	0	1.3
Respiratory conditions of newborn	56	1	2.0
Passive Smoking--Lung Cancer	6,983	44	0.6
Passive Smoking--Ischemic Heart Disease	21,901	368	1.7
Passive Smoking - Asthma	142	5	3.7
All Other Causes	55,526		

Note: Numbers may not add to total due to rounding.
*Excludes passive smoking-attributable deaths

Table 6

Female: Total Deaths and Deaths Attributed to Smoking by Cause of Death, California, 200

Cause of Death	Deaths	Attributed to Smoking Number	Attributed to Smoking Percent
All Causes	113,932	20,565 *	12.1
Neoplasms			
Lip, oral cavity, pharynx	286	115	40.2
Esophagus	298	153	51.4
Stomach	620	59	9.5
Pancreas	1,861	372	20.0
Larynx	63	43	69.0
Trachea, lung, bronchus	6,075	4,020	66.2
Cervix, uterus	439	34	7.8
Urinary bladder	389	97	24.8
Kidney, other urinary	446	17	3.9
Acute Myeloid Leukemia	539	47	8.7
Cardiovascular disease			
Hypertension	4,374	411	9.4
Ischemic heart disease			
0-34 years	18		
35-64 years	1,659	378	22.8
65 years plus	16,780	1,584	9.4
Other heart disease	7,498	571	7.6
Cerebrovascular disease			
0-34 years	63		
35-64 years	888	248	27.9
65 years plus	6,846	270	3.9
Atherosclerosis	478	35	7.4
Aortic aneurysm	350	157	45.0
Other arterial diseases	386	47	12.1
Respiratory Diseases			
Respiratory TB	30	5	15.2
Pneumonia, influenza	3,259	371	11.4
Bronchitis, emphysema	485	375	77.4
Asthma	273	42	15.4
Chronic airways obstruction	6,023	4,336	72.0
Pediatric Diseases			
Short gestation, low birth weight	143	6	3.9
Sudden infant death syndrome	79	5	6.2
Respiratory distress syndrome	19	0	1.4
Respiratory conditions of newborn	37	1	2.0
Passive Smoking--Lung Cancer	6,075	37	0.6
Passive Smoking--Ischemic Heart Disease	18,457	332	1.8
Passive Smoking - Asthma	273	8	3.1
All Other Causes	53,228		

Note: Numbers may not add to total due to rounding.
*Excludes passive smoking-attributable deaths

Table 7

Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking, California, 2009

Cause of Death	Number of Deaths	Years of Potential Life Lost *		Productivity Losses **	
		Number	Per Death	Amount `($1,000)	Per Death ($)
All Active Smoking-Related Causes	34,363	586,815	17.1	6,797,280	197,807
Neoplasms					
Lip, oral cavity, pharynx	521	10,955	21.0	188,506	361,841
Esophagus	790	15,269	19.3	229,985	291,029
Stomach	263	5,202	19.7	84,265	319,794
Pancreas	732	13,868	18.9	166,591	227,469
Larynx	239	4,563	19.1	66,564	278,288
Trachea, lung, bronchus	9,992	178,745	17.9	1,898,596	190,009
Cervix, uterus	34	1,035	30.4	18,289	537,356
Urinary bladder	487	7,107	14.6	63,738	130,872
Kidney, other urinary	286	5,630	19.7	92,091	322,319
Acute Myeloid Leukemia	170	3,248	19.1	47,502	279,537
Cardiovascular disease					
Hypertension	1,076	18,082	16.8	257,174	239,009
Ischemic heart disease					
35-64 years	2,135	63,719	29.8	1,545,337	723,714
65 years plus	3,819	45,186	11.8	133,242	34,893
Other heart disease	1,615	24,244	15.0	289,799	179,455
Cerebrovascular disease					
35-64 years	561	17,998	32.1	416,750	742,605
65 years plus	581	6,829	11.8	18,525	31,882
Atherosclerosis	115	1,444	12.6	9,763	84,856
Aortic aneurysm	496	8,547	17.2	117,840	237,693
Other arterial diseases	92	1,328	14.5	10,479	114,281
Respiratory Diseases					
Respiratory TB	19	367	19.0	5,992	310,154
Pneumonia, influenza	936	13,911	14.9	154,015	164,558
Bronchitis, emphysema	841	12,771	15.2	99,303	118,017
Asthma	68	1,482	21.7	24,933	365,618
Chronic airways obstruction	8,467	123,089	14.5	822,806	97,182
Pediatric Diseases					
Short gestation, low birth weight	13	1,068	81.4	17,135	1,305,551
Sudden infant death syndrome	11	913	81.4	14,585	1,301,475
Respiratory distress syndrome	1	61	81.0	993	1,322,478
Respiratory conditions of newborn	2	154	81.3	2,485	1,311,322

Note: Numbers may not add to total due to rounding.
* Based on life expectancy at death.
** Discounted at 3 percent

Table 8

Male: Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking, California, 2009

Cause of Death	Number of Deaths	Years of Potential Life Lost *		Productivity Losses **	
		Number	Per Death	Amount `($1,000)	Per Death ($)
All Active Smoking-Related Causes	20,565	353,752	17.2	5,166,538	251,235
Neoplasms					
Lip, oral cavity, pharynx	406	8,673	21.4	166,822	411,024
Esophagus	637	12,409	19.5	205,563	322,694
Stomach	205	3,964	19.4	69,304	338,509
Pancreas	360	6,808	18.9	108,253	300,647
Larynx	196	3,699	18.9	59,156	302,224
Trachea, lung, bronchus	5,972	102,771	17.2	1,322,274	221,401
Cervix, uterus					
Urinary bladder	390	5,599	14.3	54,830	140,410
Kidney, other urinary	268	5,289	19.7	89,049	331,785
Acute Myeloid Leukemia	123	2,257	18.3	36,178	293,829
Cardiovascular disease					
Hypertension	665	12,111	18.2	218,283	328,058
Ischemic heart disease					
35-64 years	1,757	51,643	29.4	1,349,650	768,173
65 years plus	2,235	26,297	11.8	106,897	47,827
Other heart disease	1,044	16,309	15.6	244,262	233,997
Cerebrovascular disease					
35-64 years	314	9,613	30.7	266,844	851,047
65 years plus	311	3,605	11.6	14,214	45,743
Atherosclerosis	80	1,016	12.7	8,400	105,181
Aortic aneurysm	338	6,034	17.8	101,715	300,576
Other arterial diseases	45	662	14.7	7,406	164,993
Respiratory Diseases					
Respiratory TB	15	272	18.4	4,947	335,157
Pneumonia, influenza	565	8,356	14.8	115,110	203,876
Bronchitis, emphysema	466	6,824	14.6	66,917	143,518
Asthma	26	587	22.4	13,601	518,901
Chronic airways obstruction	4,131	57,721	14.0	514,991	124,672
Pediatric Diseases					
Short gestation, low birth weight	8	603	79.3	10,703	1,408,168
Sudden infant death syndrome	6	500	79.3	8,875	1,408,168
Respiratory distress syndrome	0	39	79.3	685	1,408,168
Respiratory conditions of newborn	1	91	79.3	1,608	1,408,168

Note: Numbers may not add to total due to rounding.
* Based on life expectancy at death.
** Discounted at 3 percent

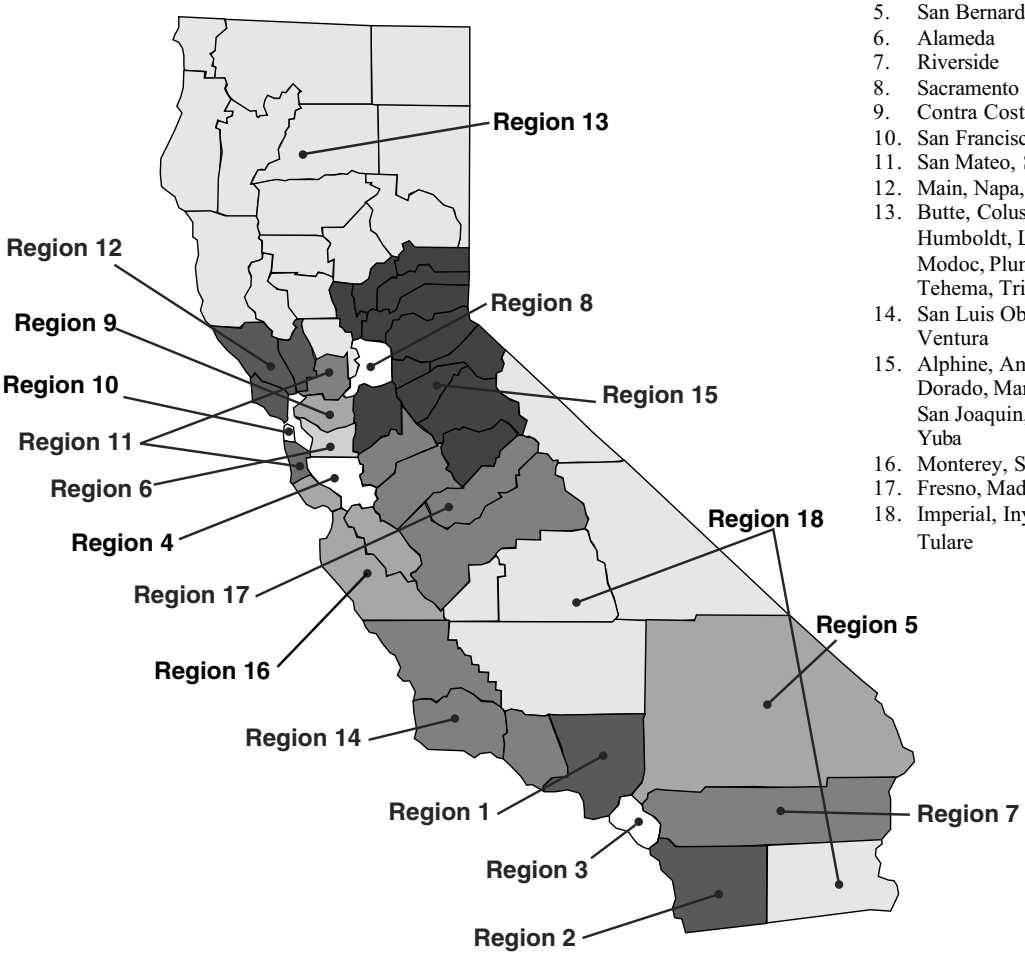
Table 9

Female: Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking, California, 2009

Cause of Death	Number of Deaths	Years of Potential Life Lost *		Productivity Losses **	
		Number	Per Death	Amount `($1,000)	Per Death ($)
All Active Smoking-Related Causes	13,799	233,064	16.9	1,630,741	118,182
Neoplasms					
Lip, oral cavity, pharynx	115	2,282	19.8	21,684	188,401
Esophagus	153	2,860	18.7	24,421	159,382
Stomach	59	1,238	21.1	14,961	254,594
Pancreas	372	7,060	19.0	58,338	156,695
Larynx	43	864	19.9	7,408	170,470
Trachea, lung, bronchus	4,020	75,974	18.9	576,322	143,369
Cervix, uterus	34	1,035	30.4	18,289	537,356
Urinary bladder	97	1,508	15.6	8,908	92,284
Kidney, other urinary	17	341	19.7	3,042	175,632
Acute Myeloid Leukemia	47	991	21.2	11,324	241,941
Cardiovascular disease					
Hypertension	411	5,971	14.5	38,890	94,711
Ischemic heart disease					
35-64 years	378	12,076	31.9	195,687	517,244
65 years plus	1,584	18,889	11.9	26,345	16,637
Other heart disease	571	7,935	13.9	45,537	79,748
Cerebrovascular disease					
35-64 years	248	8,385	33.9	149,906	605,308
65 years plus	270	3,224	11.9	4,311	15,949
Atherosclerosis	35	428	12.2	1,363	38,734
Aortic aneurysm	157	2,513	16.0	16,126	102,471
Other arterial diseases	47	666	14.2	3,074	65,657
Respiratory Diseases					
Respiratory TB	5	96	21.0	1,045	229,232
Pneumonia, influenza	371	5,555	15.0	38,904	104,774
Bronchitis, emphysema	375	5,947	15.9	32,386	86,324
Asthma	42	896	21.3	11,332	269,916
Chronic airways obstruction	4,336	65,368	15.1	307,814	70,992
Pediatric Diseases					
Short gestation, low birth weight	6	465	84.2	6,432	1,164,357
Sudden infant death syndrome	5	413	84.2	5,710	1,164,357
Respiratory distress syndrome	0	22	84.2	307	1,164,357
Respiratory conditions of newborn	1	63	84.2	876	1,164,357

Note: Numbers may not add to total due to rounding.
* Based on life expectancy at death.
** Discounted at 3 percent

County Tables



Region

1. Los Angeles
2. San Diego
3. Orange
4. Santa Clara
5. San Bernardino
6. Alameda
7. Riverside
8. Sacramento
9. Contra Costa
10. San Francisco
11. San Mateo, Solano
12. Main, Napa, Sonoma
13. Butte, Colusa, Del Norte, Glenn, Humboldt, Lake, Lassen, Mendocino, Modoc, Plumas, Shasta, Siskiyou, Tehema, Trinity, Yolo
14. San Luis Obispo, Santa Barbara, Ventura
15. Alphine, Amador, Calveras, El Dorado, Mariposa, Nevada, Placer, San Joaquin, Sierra, Sutter, Tuolumne, Yuba
16. Monterey, San Benito, Santa Cruz
17. Fresno, Madera, Merced, Stanislaus
18. Imperial, Inyo, Kern, Kings, Mono, Tulare

Note: Regions are used in order to obtain a large enough sample for statistical validity. The ten largest counties are designated as Regions one through ten and grouping of other geographically and demographically similar counties make up Regions 11-18. The counties in Regions 11 and 18 are not contiguous. Since data on the prevalence of smoking in California are available by region, it is assumed in the current report that the smoking prevalence for a multi-county region applies to each county in the region. Estimates for Alpine, Colusa, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Plumas, San Benito, Sierra, and Trinity Counties are based on 20 or fewer deaths and may not be reliable. Percents are per person estimates are based on nonrounded numbers. Years of potential life lost are based on life expectancy at death.

Table 10

Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
California	$18,058,012	$9,830,115	$1,430,618	$6,797,280
Alameda	$702,063	401,702	56,064	244,297
Alpine	$478	332	60	86
Amador	$34,317	17,002	1,833	15,482
Butte	$181,708	96,004	9,868	75,836
Calaveras	$35,016	20,146	2,083	12,787
Colusa	$13,088	7,362	919	4,807
Contra Costa	$540,362	334,548	45,783	160,031
Del Norte	$22,999	10,091	1,417	11,490
El Dorado	$109,486	66,744	8,432	34,310
Fresno	$421,195	216,941	32,408	171,846
Glenn	$20,786	10,940	1,220	8,625
Humboldt	$95,856	50,288	6,379	39,189
Imperial	$80,170	46,354	6,636	27,180
Inyo	$12,808	7,404	777	4,627
Kern	$458,699	224,281	31,628	202,791
Kings	$74,617	37,091	6,168	31,357
Lake	$64,549	33,723	3,098	27,727
Lassen	$18,802	10,328	1,868	6,606
Los Angeles	$4,408,555	2,318,269	357,129	1,733,158
Madera	$72,026	36,044	5,310	30,672
Marin	$138,354	94,700	13,474	30,179
Mariposa	$13,626	7,776	858	4,993
Mendocino	$73,786	37,234	4,223	32,329
Merced	$111,757	59,502	8,752	43,502
Modoc	$9,642	3,907	458	5,276
Mono	$5,467	3,599	656	1,211
Monterey	$190,190	115,063	15,094	60,033
Napa	$83,194	48,703	6,575	27,916
Nevada	$66,931	39,188	4,541	23,203
Orange	$1,122,009	615,714	105,690	400,605

Table 10 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
Placer	$191,720	116,003	$15,122	60,595
Plumas	$14,037	9,437	991	3,609
Riverside	$1,251,715	667,937	89,525	494,253
Sacramento	$790,670	416,692	57,368	316,610
San Benito	$26,292	13,868	2,077	10,347
San Bernardino	$974,858	472,138	76,670	426,050
San Diego	$1,458,123	813,490	118,904	525,729
San Francisco	$380,164	213,645	33,272	133,248
San Joaquin	$395,397	204,351	27,610	163,436
San Luis Obispo	$123,633	71,465	10,712	41,456
San Mateo	$375,791	238,408	29,556	107,828
Santa Barbara	$180,882	102,339	15,676	62,867
Santa Clara	$689,796	431,813	64,111	193,873
Santa Cruz	$136,011	73,842	10,451	51,718
Shasta	$148,643	75,742	8,240	64,661
Sierra	$2,617	1,414	161	1,042
Siskiyou	$39,754	18,434	2,139	19,180
Solano	$244,607	134,917	16,569	93,120
Sonoma	$277,741	156,589	23,899	97,254
Stanislaus	$278,274	142,936	18,633	116,705
Sutter	$56,304	30,384	3,842	22,077
Tehama	$48,862	24,917	2,867	21,078
Trinity	$12,716	6,544	699	5,473
Tulare	$218,086	109,370	15,886	92,830
Tuolumne	$44,121	25,439	2,536	16,146
Ventura	$360,857	204,423	31,970	124,465
Yolo	$106,770	59,722	8,858	38,190
Yuba	$47,037	22,875	2,876	21,286

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 11

Male: Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
California	$11,657,133	$5,642,380	$848,214	$5,166,538
Alameda	448,873	232,185	32,836	183,852
Alpine	316	195	36	86
Amador	21,843	10,196	1,144	10,503
Butte	106,576	51,888	5,280	49,408
Calaveras	22,617	11,450	1,152	10,015
Colusa	8,444	3,886	502	4,056
Contra Costa	326,407	181,739	25,353	119,316
Del Norte	13,779	5,551	867	7,361
El Dorado	65,126	36,641	4,634	23,851
Fresno	271,325	124,305	20,030	126,991
Glenn	13,967	5,895	659	7,413
Humboldt	58,806	26,213	3,463	29,131
Imperial	52,405	27,425	3,722	21,258
Inyo	7,975	4,379	438	3,159
Kern	297,889	133,345	17,833	146,712
Kings	48,971	22,883	3,983	22,105
Lake	39,680	18,298	1,647	19,735
Lassen	12,343	6,044	1,300	5,000
Los Angeles	2,930,270	1,339,345	219,938	1,370,987
Madera	48,351	20,326	3,107	24,918
Marin	76,585	47,195	6,976	22,415
Mariposa	7,647	4,360	489	2,797
Mendocino	45,510	19,895	2,266	23,349
Merced	64,970	33,910	5,414	25,646
Modoc	5,823	2,188	246	3,389
Mono	3,719	2,204	386	1,130
Monterey	121,578	65,897	9,757	45,924
Napa	49,206	25,129	3,495	20,583
Nevada	39,911	21,607	2,495	15,810
Orange	727,104	341,260	67,438	318,406

Table 11 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
Placer	118,408	$62,689	$8,132	47,586
Plumas	8,135	4,908	524	2,704
Riverside	801,455	377,221	51,646	372,587
Sacramento	476,355	219,634	30,702	226,020
San Benito	17,717	7,870	1,288	8,560
San Bernardino	620,598	263,596	46,717	310,285
San Diego	955,549	485,216	68,421	401,912
San Francisco	293,289	157,144	22,768	113,377
San Joaquin	245,246	110,643	15,001	119,603
San Luis Obispo	76,465	39,348	6,438	30,679
San Mateo	246,357	145,925	17,077	83,355
Santa Barbara	111,851	55,755	9,237	46,858
Santa Clara	486,925	290,182	38,775	157,968
Santa Cruz	88,430	41,533	6,547	40,350
Shasta	91,262	40,271	4,307	46,684
Sierra	1,650	761	91	798
Siskiyou	24,939	9,898	1,128	13,913
Solano	163,930	84,408	9,737	69,785
Sonoma	158,287	76,386	12,525	69,376
Stanislaus	181,925	80,827	11,423	89,675
Sutter	35,264	16,528	2,084	16,652
Tehama	30,237	13,321	1,520	15,396
Trinity	8,436	3,830	383	4,223
Tulare	140,969	63,381	8,638	68,950
Tuolumne	26,220	14,558	1,513	10,149
Ventura	216,466	107,304	18,478	90,683
Yolo	62,397	31,043	4,658	26,696
Yuba	30,353	12,368	1,576	16,409

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 12

Female: Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
California	$6,400,879	$4,187,734	$582,404	$1,630,741
Alameda	253,190	169,518	23,228	60,444
Alpine	161	137	25	0
Amador	12,475	6,806	690	4,979
Butte	75,132	44,116	4,589	26,428
Calaveras	12,398	8,696	931	2,772
Colusa	4,645	3,476	418	751
Contra Costa	213,954	152,809	20,430	40,715
Del Norte	9,220	4,540	550	4,130
El Dorado	44,360	30,103	3,797	10,459
Fresno	149,870	92,636	12,378	44,856
Glenn	6,818	5,045	561	1,212
Humboldt	37,050	24,075	2,916	10,059
Imperial	27,765	18,929	2,915	5,922
Inyo	4,833	3,026	339	1,468
Kern	160,810	90,936	13,795	56,079
Kings	25,646	14,208	2,185	9,252
Lake	24,868	15,425	1,452	7,992
Lassen	6,459	4,284	568	1,606
Los Angeles	1,478,285	978,923	137,190	362,171
Madera	23,675	15,718	2,203	5,753
Marin	61,768	47,506	6,498	7,764
Mariposa	5,980	3,416	369	2,196
Mendocino	28,276	17,339	1,957	8,980
Merced	46,787	25,592	3,339	17,857
Modoc	3,819	1,720	212	1,887
Mono	1,748	1,396	271	81
Monterey	68,612	49,166	5,337	14,109
Napa	33,988	23,574	3,080	7,334
Nevada	27,020	17,581	2,046	7,393
Orange	394,905	274,454	38,252	82,199

Table 12 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
		(thousands)		
Placer	73,312	$53,315	$6,990	13,008
Plumas	5,902	4,529	467	905
Riverside	450,260	290,715	37,879	121,666
Sacramento	314,315	197,058	26,667	90,590
San Benito	8,575	5,999	789	1,787
San Bernardino	354,260	208,542	29,953	115,765
San Diego	502,574	328,274	50,483	123,817
San Francisco	86,875	56,501	10,504	19,871
San Joaquin	150,151	93,708	12,609	43,834
San Luis Obispo	47,168	32,117	4,274	10,776
San Mateo	129,433	92,483	12,479	24,472
Santa Barbara	69,032	46,585	6,439	16,008
Santa Clara	202,872	141,631	25,336	35,905
Santa Cruz	47,581	32,309	3,904	11,368
Shasta	57,381	35,471	3,933	17,978
Sierra	967	653	70	244
Siskiyou	14,815	8,536	1,011	5,268
Solano	80,677	50,509	6,832	23,336
Sonoma	119,455	80,203	11,374	27,878
Stanislaus	96,349	62,108	7,211	27,030
Sutter	21,040	13,856	1,758	5,426
Tehama	18,624	11,596	1,347	5,682
Trinity	4,280	2,714	316	1,250
Tulare	77,117	45,988	7,248	23,880
Tuolumne	17,901	10,881	1,023	5,997
Ventura	144,392	97,118	13,492	33,782
Yolo	44,373	28,678	4,200	11,495
Yuba	16,684	10,507	1,300	4,877

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 13

Per Resident Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
California	$487	$265	$39	$183
Alameda	467	267	37	162
Alpine	405	281	51	73
Amador	905	449	48	408
Butte	829	438	45	346
Calaveras	769	442	46	281
Colusa	615	346	43	226
Contra Costa	518	321	44	153
Del Norte	805	353	50	402
El Dorado	609	371	47	191
Fresno	456	235	35	186
Glenn	741	390	43	307
Humboldt	717	376	48	293
Imperial	463	268	38	157
Inyo	694	401	42	251
Kern	552	270	38	244
Kings	492	244	41	207
Lake	1,002	524	48	431
Lassen	541	297	54	190
Los Angeles	450	236	36	177
Madera	480	240	35	204
Marin	551	377	54	120
Mariposa	745	425	47	273
Mendocino	843	425	48	369
Merced	440	234	34	171
Modoc	1,001	406	48	548
Mono	388	256	47	86
Monterey	460	278	36	145
Napa	613	359	48	206
Nevada	680	398	46	236
Orange	374	205	35	134

Table 13 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
Placer	557	337	44	176
Plumas	700	470	49	180
Riverside	580	309	41	229
Sacramento	560	295	41	224
San Benito	477	252	38	188
San Bernardino	482	233	38	211
San Diego	474	264	39	171
San Francisco	474	266	41	166
San Joaquin	581	300	41	240
San Luis Obispo	461	266	40	155
San Mateo	525	333	41	151
Santa Barbara	428	242	37	149
Santa Clara	389	243	36	109
Santa Cruz	519	282	40	197
Shasta	840	428	47	366
Sierra	807	436	50	322
Siskiyou	884	410	48	427
Solano	593	327	40	226
Sonoma	578	326	50	202
Stanislaus	543	279	36	228
Sutter	597	322	41	234
Tehama	774	395	45	334
Trinity	923	475	51	397
Tulare	497	249	36	212
Tuolumne	798	460	46	292
Ventura	441	250	39	152
Yolo	535	299	44	191
Yuba	655	319	40	296

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 14

Male: Per Resident Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
California	$632	$306	$46	$280
Alameda	608	315	44	249
Alpine	519	320	58	141
Amador	1,055	492	55	507
Butte	984	479	49	456
Calaveras	994	503	51	440
Colusa	775	357	46	372
Contra Costa	640	357	50	234
Del Norte	870	351	55	465
El Dorado	725	408	52	266
Fresno	587	269	43	275
Glenn	987	417	47	524
Humboldt	879	392	52	435
Imperial	588	308	42	239
Inyo	863	474	47	342
Kern	695	311	42	342
Kings	563	263	46	254
Lake	1,231	568	51	612
Lassen	553	271	58	224
Los Angeles	606	277	45	283
Madera	669	281	43	345
Marin	618	381	56	181
Mariposa	825	470	53	302
Mendocino	1,040	454	52	533
Merced	509	266	42	201
Modoc	1,199	451	51	698
Mono	493	292	51	150
Monterey	572	310	46	216
Napa	727	371	52	304
Nevada	819	444	51	325
Orange	489	230	45	214

Table 14 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
Placer	704	373	48	283
Plumas	811	489	52	270
Riverside	747	351	48	347
Sacramento	689	318	44	327
San Benito	642	285	47	310
San Bernardino	617	262	46	308
San Diego	618	314	44	260
San Francisco	721	386	56	279
San Joaquin	723	326	44	353
San Luis Obispo	557	286	47	223
San Mateo	699	414	48	237
Santa Barbara	527	263	44	221
Santa Clara	546	325	43	177
Santa Cruz	676	318	50	309
Shasta	1,050	463	50	537
Sierra	1,005	463	55	486
Siskiyou	1,115	443	50	622
Solano	795	409	47	338
Sonoma	669	323	53	293
Stanislaus	718	319	45	354
Sutter	753	353	45	356
Tehama	962	424	48	490
Trinity	1,188	539	54	595
Tulare	642	289	39	314
Tuolumne	896	497	52	347
Ventura	532	264	45	223
Yolo	641	319	48	274
Yuba	839	342	44	454

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 15

Female: Per Resident Cost of Smoking by California County, 2009

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
California	$344	$225	$31	$88
Alameda	331	221	30	79
Alpine	283	240	43	0
Amador	725	396	40	290
Butte	677	398	41	238
Calaveras	544	381	41	122
Colusa	448	335	40	72
Contra Costa	401	286	38	76
Del Norte	725	357	43	325
El Dorado	494	335	42	116
Fresno	324	201	27	97
Glenn	490	363	40	87
Humboldt	554	360	44	150
Imperial	330	225	35	70
Inyo	525	329	37	159
Kern	399	226	34	139
Kings	395	219	34	143
Lake	773	480	45	248
Lassen	518	344	46	129
Los Angeles	297	197	28	73
Madera	304	202	28	74
Marin	485	373	51	61
Mariposa	664	379	41	244
Mendocino	646	396	45	205
Merced	370	202	26	141
Modoc	800	360	44	395
Mono	268	214	42	12
Monterey	341	244	27	70
Napa	500	347	45	108
Nevada	544	354	41	149
Orange	261	181	25	54

Table 15 (Continued)

County	Total	Direct	Indirect Lost Productivity	
			Illness	Premature Death*
Placer	417	303	40	74
Plumas	588	451	47	90
Riverside	415	268	35	112
Sacramento	437	274	37	126
San Benito	312	218	29	65
San Bernardino	349	205	29	114
San Diego	328	214	33	81
San Francisco	220	143	27	50
San Joaquin	440	274	37	128
San Luis Obispo	361	245	33	82
San Mateo	356	254	34	67
Santa Barbara	328	222	31	76
Santa Clara	230	160	29	41
Santa Cruz	363	246	30	87
Shasta	638	394	44	200
Sierra	604	408	44	152
Siskiyou	656	378	45	233
Solano	391	245	33	113
Sonoma	490	329	47	114
Stanislaus	372	240	28	104
Sutter	443	291	37	114
Tehama	588	366	42	179
Trinity	642	407	47	187
Tulare	352	210	33	109
Tuolumne	689	419	39	231
Ventura	351	236	33	82
Yolo	434	280	41	112
Yuba	468	295	36	137

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent

Table 16

Direct Healthcare Cost of Smoking by Type of Cost and California County, 2009

County	Total	Hospital	Ambulatory*	Nursing Home	Prescription	Home Health
			(thousands)			
California	$9,830,115	$4,310,875	$2,058,077	$1,517,363	$1,149,527	$794,273
Alameda	401,702	190,414	71,693	69,433	39,884	30,279
Alpine	332	46	103	92	60	30
Amador	17,002	7,107	3,433	3,256	2,068	1,138
Butte	96,004	45,206	19,395	12,599	11,512	7,291
Calaveras	20,146	7,993	4,162	4,092	2,507	1,392
Colusa	7,362	3,024	1,716	988	1,012	621
Contra Costa	334,548	147,059	69,167	64,129	36,368	17,825
Del Norte	10,091	3,452	2,597	1,547	1,544	952
El Dorado	66,744	26,436	15,032	12,070	8,725	4,481
Fresno	216,941	95,863	44,931	28,112	26,207	21,827
Glenn	10,940	4,859	2,354	1,444	1,405	879
Humboldt	50,288	19,539	11,976	7,481	7,011	4,281
Imperial	46,354	20,171	9,686	5,850	5,579	5,068
Inyo	7,404	3,358	1,308	1,098	818	823
Kern	224,281	106,525	44,564	25,675	25,231	22,287
Kings	37,091	16,390	8,102	4,234	4,514	3,851
Lake	33,723	16,273	6,421	4,578	3,924	2,527
Lassen	10,328	2,807	3,091	1,584	1,786	1,060
Los Angeles	2,318,269	1,030,866	434,291	398,524	240,984	213,604
Madera	36,044	14,358	7,863	5,158	4,671	3,994
Marin	94,700	36,135	23,093	16,539	12,918	6,016
Mariposa	7,776	2,924	1,672	1,617	1,006	557
Mendocino	37,234	15,056	8,356	5,703	5,005	3,113
Merced	59,502	27,571	11,979	7,240	6,954	5,758
Modoc	3,907	1,209	973	728	602	396
Mono	3,599	1,068	929	592	534	476
Monterey	115,063	59,922	20,724	15,849	11,268	7,301
Napa	48,703	20,656	11,176	7,776	6,192	2,902
Nevada	39,188	14,106	8,782	8,256	5,220	2,824
Orange	615,714	254,653	132,955	111,601	73,357	43,148

Table 16 (Continued)

County	Total	Hospital	Ambulatory*	Nursing Home	Prescription	Home Health
			(thousands)			
Placer	116,003	43,403	27,369	21,043	15,904	8,285
Plumas	9,437	3,379	2,152	1,695	1,333	878
Riverside	667,937	265,292	145,446	111,109	85,628	60,460
Sacramento	416,692	192,811	89,905	52,875	49,888	31,213
San Benito	13,868	6,577	2,798	2,023	1,512	958
San Bernardino	472,138	216,260	104,235	54,425	57,823	39,395
San Diego	813,490	357,047	192,204	92,530	104,295	67,414
San Francisco	213,645	102,540	40,315	35,500	20,795	14,496
San Joaquin	204,351	88,221	46,370	30,602	26,144	13,013
San Luis Obispo	71,465	26,133	17,595	12,727	9,909	5,101
San Mateo	238,408	109,056	50,573	34,889	27,186	16,704
Santa Barbara	102,339	40,145	24,971	16,358	13,862	7,004
Santa Clara	431,813	196,397	90,247	64,694	50,630	29,844
Santa Cruz	73,842	35,097	14,355	11,673	7,760	4,958
Shasta	75,742	31,276	16,717	11,217	10,106	6,426
Sierra	1,414	498	312	314	187	102
Siskiyou	18,434	5,775	4,568	3,439	2,814	1,837
Solano	134,917	65,705	27,541	18,513	14,493	8,665
Sonoma	156,589	58,229	39,760	26,942	21,721	9,936
Stanislaus	142,936	72,020	26,172	16,573	15,383	12,788
Sutter	30,384	12,928	6,735	4,869	3,861	1,991
Tehama	24,917	9,750	5,749	3,736	3,474	2,208
Trinity	6,544	2,428	1,474	1,136	911	596
Tulare	109,370	47,896	22,897	13,780	13,058	11,739
Tuolumne	25,439	11,339	4,882	4,665	2,930	1,623
Ventura	204,423	82,927	49,751	30,936	27,480	13,328
Yolo	59,722	22,019	15,639	7,956	8,858	5,249
Yuba	22,875	10,681	4,821	3,299	2,714	1,360

Note: Numbers may not add to total due to rounding.
*Includes Physician and other Professional Services

Table 17

Per Resident Direct Healthcare Cost of Smoking by Type of Cost and California County, 2009

County	Total	Hospital	Ambulatory*	Nursing Home	Prescription	Home Health
California	$265	$116	$56	$41	$31	$21
Alameda	267	127	48	46	27	20
Alpine	281	39	88	78	51	26
Amador	449	187	91	86	55	30
Butte	438	206	88	57	52	33
Calaveras	442	175	91	90	55	31
Colusa	346	142	81	46	48	29
Contra Costa	321	141	66	61	35	17
Del Norte	353	121	91	54	54	33
El Dorado	371	147	84	67	49	25
Fresno	235	104	49	30	28	24
Glenn	390	173	84	51	50	31
Humboldt	376	146	90	56	52	32
Imperial	268	116	56	34	32	29
Inyo	401	182	71	59	44	45
Kern	270	128	54	31	30	27
Kings	244	108	53	28	30	25
Lake	524	253	100	71	61	39
Lassen	297	81	89	46	51	30
Los Angeles	236	105	44	41	25	22
Madera	240	96	52	34	31	27
Marin	377	144	92	66	51	24
Mariposa	425	160	91	88	55	30
Mendocino	425	172	95	65	57	36
Merced	234	108	47	28	27	23
Modoc	406	125	101	76	63	41
Mono	256	76	66	42	38	34
Monterey	278	145	50	38	27	18
Napa	359	152	82	57	46	21
Nevada	398	143	89	84	53	29
Orange	205	85	44	37	24	14

Table 17 (Continued)

County	Total	Hospital	Ambulatory*	Nursing Home	Prescription	Home Health
Placer	337	126	80	61	46	24
Plumas	470	168	107	84	66	44
Riverside	309	123	67	51	40	28
Sacramento	295	137	64	37	35	22
San Benito	252	119	51	37	27	17
San Bernardino	233	107	52	27	29	19
San Diego	264	116	62	30	34	22
San Francisco	266	128	50	44	26	18
San Joaquin	300	130	68	45	38	19
San Luis Obispo	266	97	66	47	37	19
San Mateo	333	152	71	49	38	23
Santa Barbara	242	95	59	39	33	17
Santa Clara	243	111	51	36	29	17
Santa Cruz	282	134	55	45	30	19
Shasta	428	177	95	63	57	36
Sierra	436	154	96	97	58	31
Siskiyou	410	128	102	77	63	41
Solano	327	159	67	45	35	21
Sonoma	326	121	83	56	45	21
Stanislaus	279	141	51	32	30	25
Sutter	322	137	71	52	41	21
Tehama	395	154	91	59	55	35
Trinity	475	176	107	83	66	43
Tulare	249	109	52	31	30	27
Tuolumne	460	205	88	84	53	29
Ventura	250	101	61	38	34	16
Yolo	299	110	78	40	44	26
Yuba	319	149	67	46	38	19

* Includes Physician and Other Professional Services

Table 18

Smoking Prevalence (Percent) by Gender, Smoking Status, and California County, 2009

	Adults(18+)						Teens(12-17)	
	Male			Female			Male	Female
County	Currently Smoke	Formerly Smoked	Never Smoked	Currently Smoke	Formerly Smoked	Never Smoked	Currently Smoke	Currently Smoke
California	17.2	27.0	55.8	10.1	19.3	70.6	5.8	3.2
Alameda	14.6	22.4	62.9	9.1	17.5	73.4	4.2	6.3
Alpine	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Amador	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Butte	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Calaveras	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Colusa	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Contra Costa	15.2	31.9	52.9	8.9	23.4	67.6	9.6	0.4
Del Norte	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
El Dorado	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Fresno	17.1	28.9	54.0	11.5	17.0	71.4	8.5	2.0
Glenn	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Humboldt	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Imperial	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Inyo	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Kern	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Kings	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Lake	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Lassen	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Los Angeles	16.9	27.0	56.1	9.7	15.5	74.8	4.3	1.8
Madera	17.1	28.9	54.0	11.5	17.0	71.4	8.5	2.0
Marin	16.6	37.9	45.5	11.4	26.8	61.8	8.1	4.5
Mariposa	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Mendocino	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Merced	17.1	28.9	54.0	11.5	17.0	71.4	8.5	2.0
Modoc	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Mono	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Monterey	18.2	28.0	53.8	5.7	20.2	74.1	6.2	2.5
Napa	16.6	37.9	45.5	11.4	26.8	61.8	8.1	4.5
Nevada	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Orange	12.5	27.4	60.1	6.3	20.2	73.5	9.1	3.7

Table 18 (continued)

	Adults(18+)						Teens(12-17)	
	Male			Female			Male	Female
County	Currently Smoke	Formerly Smoked	Never Smoked	Currently Smoke	Formerly Smoked	Never Smoked	Currently Smoke	Currently Smoke
Placer	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Plumas	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Riverside	19.0	26.3	54.7	15.1	19.8	65.1	3.8	1.6
Sacramento	18.5	24.3	57.2	14.0	18.9	67.1	11.6	5.4
San Benito	18.2	28.0	53.8	5.7	20.2	74.1	6.2	2.5
San Bernardino	21.7	25.9	52.4	8.6	22.9	68.5	6.0	2.0
San Diego	16.5	26.4	57.1	9.4	21.5	69.2	3.8	2.9
San Francisco	18.1	26.5	55.5	4.7	20.3	75.1	0.3	1.1
San Joaquin	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
San Luis Obispo	13.7	30.1	56.2	8.8	22.0	69.2	3.1	3.7
San Mateo	24.2	22.7	53.1	8.7	21.8	69.5	3.1	7.4
Santa Barbara	13.7	30.1	56.2	8.8	22.0	69.2	3.1	3.7
Santa Clara	18.5	20.0	61.5	9.5	18.8	71.6	8.6	10.8
Santa Cruz	18.2	28.0	53.8	5.7	20.2	74.1	6.2	2.5
Shasta	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Sierra	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Siskiyou	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Solano	24.2	22.7	53.1	8.7	21.8	69.5	3.1	7.4
Sonoma	16.6	37.9	45.5	11.4	26.8	61.8	8.1	4.5
Stanislaus	17.1	28.9	54.0	11.5	17.0	71.4	8.5	2.0
Sutter	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Tehama	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Trinity	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Tulare	19.6	28.6	51.8	15.1	17.2	67.7	4.1	3.9
Tuolumne	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8
Ventura	13.7	30.1	56.2	8.8	22.0	69.2	3.1	3.7
Yolo	21.2	30.0	48.8	13.8	25.8	60.5	7.0	5.2
Yuba	15.4	30.1	54.5	13.4	22.4	64.1	6.2	2.8

Note: Percentages may not add to 100% total due to rounding.
Smoking Prevalence for multi-county regions are applied to each county in the region
Source: Adults data were derived from 2009 CHIS, teens/children data from 2007 and 2009 CHIS combined.

Table 19

Prevalence of Heavy, Moderate, and Light Smoking (%) among Adult Smokers by Gender and California County, 2009

County	Male			Female		
	Heavy Smoking (daily 20+)	Moderate Smoking (daily 10-19)	Light Smoking (daily <10, or some days)	Heavy Smoking (daily 20+)	Moderate Smoking (daily 10-19)	Light Smoking (daily <10, or some days)
California	17.7	22.6	59.7	11.3	27.8	61.0
Alameda	10.6	24.0	65.5	3.7	14.6	81.6
Alpine	33.9	25.5	40.6	14.3	29.5	56.1
Amador	33.9	25.5	40.6	14.3	29.5	56.1
Butte	23.5	40.0	36.5	17.1	33.7	49.2
Calaveras	33.9	25.5	40.6	14.3	29.5	56.1
Colusa	23.5	40.0	36.5	17.1	33.7	49.2
Contra Costa	6.4	29.3	64.3	6.1	34.9	59.0
Del Norte	23.5	40.0	36.5	17.1	33.7	49.2
El Dorado	33.9	25.5	40.6	14.3	29.5	56.1
Fresno	16.8	21.7	61.5	16.7	37.4	45.9
Glenn	23.5	40.0	36.5	17.1	33.7	49.2
Humboldt	23.5	40.0	36.5	17.1	33.7	49.2
Imperial	30.2	22.8	47.0	12.5	38.9	48.6
Inyo	30.2	22.8	47.0	12.5	38.9	48.6
Kern	30.2	22.8	47.0	12.5	38.9	48.6
Kings	30.2	22.8	47.0	12.5	38.9	48.6
Lake	23.5	40.0	36.5	17.1	33.7	49.2
Lassen	23.5	40.0	36.5	17.1	33.7	49.2
Los Angeles	11.0	21.7	67.3	8.0	26.1	65.9
Madera	16.8	21.7	61.5	16.7	37.4	45.9
Marin	9.6	23.0	67.4	8.5	32.0	59.5
Mariposa	33.9	25.5	40.6	14.3	29.5	56.1
Mendocino	23.5	40.0	36.5	17.1	33.7	49.2
Merced	16.8	21.7	61.5	16.7	37.4	45.9
Modoc	23.5	40.0	36.5	17.1	33.7	49.2
Mono	30.2	22.8	47.0	12.5	38.9	48.6
Monterey	15.9	19.8	64.3	8.6	28.4	63.0
Napa	9.6	23.0	67.4	8.5	32.0	59.5
Nevada	33.9	25.5	40.6	14.3	29.5	56.1
Orange	13.9	23.5	62.5	9.8	28.2	62.0

Table 19 (continued)

County	Male			Female		
	Heavy Smoking (daily 20+)	Moderate Smoking (daily 10-19)	Light Smoking (daily <10, or some days)	Heavy Smoking (daily 20+)	Moderate Smoking (daily 10-19)	Light Smoking (daily <10, or some days)
Placer	33.9	25.5	40.6	14.3	29.5	56.1
Plumas	23.5	40.0	36.5	17.1	33.7	49.2
Riverside	30.7	19.9	49.4	11.6	18.4	70.0
Sacramento	17.2	28.1	54.7	15.0	29.8	55.3
San Benito	15.9	19.8	64.3	8.6	28.4	63.0
San Bernardino	17.1	24.6	58.3	18.9	39.7	41.4
San Diego	24.4	14.0	61.5	16.9	29.2	53.9
San Francisco	21.9	6.8	71.3	3.5	2.6	93.8
San Joaquin	33.9	25.5	40.6	14.3	29.5	56.1
San Luis Obispo	14.9	24.3	60.8	15.3	20.0	64.6
San Mateo	31.7	39.3	28.9	9.1	30.6	60.3
Santa Barbara	14.9	24.3	60.8	15.3	20.0	64.6
Santa Clara	8.0	12.0	80.0	4.4	18.7	76.9
Santa Cruz	15.9	19.8	64.3	8.6	28.4	63.0
Shasta	23.5	40.0	36.5	17.1	33.7	49.2
Sierra	33.9	25.5	40.6	14.3	29.5	56.1
Siskiyou	23.5	40.0	36.5	17.1	33.7	49.2
Solano	31.7	39.3	28.9	9.1	30.6	60.3
Sonoma	9.6	23.0	67.4	8.5	32.0	59.5
Stanislaus	16.8	21.7	61.5	16.7	37.4	45.9
Sutter	33.9	25.5	40.6	14.3	29.5	56.1
Tehama	23.5	40.0	36.5	17.1	33.7	49.2
Trinity	23.5	40.0	36.5	17.1	33.7	49.2
Tulare	30.2	22.8	47.0	12.5	38.9	48.6
Tuolumne	33.9	25.5	40.6	14.3	29.5	56.1
Ventura	14.9	24.3	60.8	15.3	20.0	64.6
Yolo	23.5	40.0	36.5	17.1	33.7	49.2
Yuba	33.9	25.5	40.6	14.3	29.5	56.1

Note: Percentages may not add to 100% total due to rounding.
Smoking Prevalence for multi-county regions are applied to each county in the region
Source: Adults data were derived from 2009 CHIS, teens/children data from 2007 and 2009 CHIS combined.

Table 20

Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking by California County, 2009

County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
California	34,363	586,815	17.1	6,797,280	$197,807
Alameda	1,199	20,629	17.2	244,297	$203,744
Alpine	1 **	14	16.4	86	$99,602
Amador	69	1,278	18.4	15,482	$223,137
Butte	403	6,881	17.1	75,836	$188,215
Calaveras	79	1,291	16.4	12,787	$162,505
Colusa	25	436	17.2	4,807	$189,959
Contra Costa	992	16,013	16.1	160,031	$161,246
Del Norte	51	954	18.8	11,490	$226,026
El Dorado	204	3,433	16.8	34,310	$167,904
Fresno	813	14,236	17.5	171,846	$211,288
Glenn	39	702	18.1	8,625	$221,926
Humboldt	196	3,467	17.6	39,189	$199,467
Imperial	114	2,069	18.1	27,180	$238,065
Inyo	30	460	15.3	4,627	$154,101
Kern	893	16,514	18.5	202,791	$227,145
Kings	118	2,281	19.3	31,357	$265,173
Lake	150	2,613	17.5	27,727	$185,348
Lassen	31	573	18.2	6,606	$210,130
Los Angeles	8,270	142,077	17.2	1,733,158	$209,576
Madera	143	2,508	17.6	30,672	$214,759
Marin	228	3,396	14.9	30,179	$132,634
Mariposa	28	498	17.5	4,993	$175,758
Mendocino	148	2,697	18.2	32,329	$217,814
Merced	223	3,883	17.4	43,502	$195,062
Modoc	20 **	391	19.2	5,276	$259,694
Mono	5 **	80	17.4	1,211	$265,253
Monterey	304	5,154	16.9	60,033	$197,183
Napa	187	2,936	15.7	27,916	$148,900
Nevada	138	2,293	16.6	23,203	$167,865
Orange	2,275	36,837	16.2	400,605	$176,093

Table 20 (Continued)

County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
Placer	405	6,312	15.6	60,595	$149,551
Plumas	33	484	14.9	3,609	$110,854
Riverside	2,439	42,249	17.3	494,253	$202,684
Sacramento	1,487	26,534	17.8	316,610	$212,899
San Benito	46	816	17.8	10,347	$225,523
San Bernardino	1,899	34,633	18.2	426,050	$224,366
San Diego	2,753	46,012	16.7	525,729	$190,981
San Francisco	668	11,052	16.5	133,248	$199,443
San Joaquin	705	12,884	18.3	163,436	$231,943
San Luis Obispo	302	4,615	15.3	41,456	$137,467
San Mateo	664	10,588	16.0	107,828	$162,512
Santa Barbara	395	6,234	15.8	62,867	$159,031
Santa Clara	1,119	17,810	15.9	193,873	$173,185
Santa Cruz	251	4,322	17.2	51,718	$206,308
Shasta	366	6,201	16.9	64,661	$176,727
Sierra	9 **	142	16.7	1,042	$122,319
Siskiyou	102	1,777	17.5	19,180	$188,726
Solano	425	7,618	17.9	93,120	$218,921
Sonoma	592	9,584	16.2	97,254	$164,279
Stanislaus	512	9,332	18.2	116,705	$227,888
Sutter	127	2,110	16.7	22,077	$174,303
Tehama	111	1,933	17.4	21,078	$190,024
Trinity	36	580	16.2	5,473	$153,089
Tulare	434	7,698	17.7	92,830	$213,705
Tuolumne	94	1,579	16.8	16,146	$171,805
Ventura	727	11,975	16.5	124,465	$171,227
Yolo	200	3,484	17.4	38,190	$190,699
Yuba	86	1,661	19.4	21,286	$248,337

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent
**Estimates based on 20 or fewer deaths may be unreliable.

Table 21

Male: Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking by California County, 2009

County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
California	20,565	353,752	17.2	5,166,538	$251,235
Alameda	715	12,371	17.3	183,852	257,118
Alpine	1 **	14	16.4	86	99,602
Amador	34	645	19.1	10,503	310,459
Butte	207	3,521	17.0	49,408	238,249
Calaveras	49	805	16.5	10,015	205,165
Colusa	16 **	282	17.4	4,056	250,700
Contra Costa	554	9,007	16.3	119,316	215,536
Del Norte	28	503	17.9	7,361	262,301
El Dorado	114	1,847	16.2	23,851	208,783
Fresno	488	8,539	17.5	126,991	260,269
Glenn	27	483	18.2	7,413	279,322
Humboldt	113	2,009	17.8	29,131	257,385
Imperial	77	1,369	17.8	21,258	275,797
Inyo	17 **	253	15.3	3,159	190,367
Kern	536	9,695	18.1	146,712	273,645
Kings	71	1,340	18.8	22,105	309,727
Lake	86	1,466	17.1	19,735	230,780
Lassen	19 **	357	18.3	5,000	256,975
Los Angeles	5,142	90,087	17.5	1,370,987	266,622
Madera	96	1,674	17.5	24,918	260,003
Marin	120	1,836	15.3	22,415	186,561
Mariposa	15 **	225	15.3	2,797	189,790
Mendocino	82	1,489	18.1	23,349	284,546
Merced	130	2,071	15.9	25,646	197,230
Modoc	10 **	195	19.3	3,389	335,261
Mono	3 **	61	18.8	1,130	347,658
Monterey	183	3,137	17.1	45,924	250,308
Napa	108	1,670	15.5	20,583	190,971
Nevada	78	1,248	16.0	15,810	202,484
Orange	1,370	22,804	16.6	318,406	232,408

Table 21 (Continued)

County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
Placer	241	3,802	15.8	47,586	$197,858
Plumas	20 **	286	14.4	2,704	136,686
Riverside	1,444	25,152	17.4	372,587	257,967
Sacramento	812	14,542	17.9	226,020	278,377
San Benito	32	575	18.1	8,560	269,034
San Bernardino	1,102	20,081	18.2	310,285	281,598
San Diego	1,681	28,255	16.8	401,912	239,161
San Francisco	487	8,149	16.7	113,377	232,730
San Joaquin	409	7,487	18.3	119,603	292,212
San Luis Obispo	170	2,618	15.4	30,679	180,793
San Mateo	379	6,116	16.1	83,355	219,861
Santa Barbara	216	3,494	16.2	46,858	216,882
Santa Clara	729	11,704	16.1	157,968	216,749
Santa Cruz	146	2,622	17.9	40,350	276,088
Shasta	211	3,563	16.9	46,684	220,771
Sierra	6 **	87	15.9	798	145,127
Siskiyou	61	1,026	16.9	13,913	229,389
Solano	262	4,656	17.8	69,785	266,584
Sonoma	314	5,112	16.3	69,376	220,676
Stanislaus	309	5,705	18.4	89,675	289,861
Sutter	71	1,206	17.0	16,652	234,048
Tehama	67	1,138	17.0	15,396	229,516
Trinity	26	404	15.4	4,223	160,789
Tulare	259	4,582	17.7	68,950	265,986
Tuolumne	57	899	15.6	10,149	176,555
Ventura	399	6,580	16.5	90,683	227,037
Yolo	111	1,893	17.0	26,696	240,024
Yuba	53	1,012	19.0	16,409	308,250

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent
**Estimates based on 20 or fewer deaths may be unreliable.

Table 22

Female: Deaths, Years of Potential Life Lost, and Productivity Losses Attributed to Smoking by California County, 2009

County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
California	13,799	233,064	16.9	1,630,741	$118,182
Alameda	484	8,258	17.1	60,444	124,888
Alpine	0 **	0	-	0	-
Amador	36	633	17.8	4,979	140,043
Butte	196	3,360	17.2	26,428	135,152
Calaveras	30	486	16.3	2,772	92,797
Colusa	9 **	155	16.9	751	82,268
Contra Costa	439	7,005	16.0	40,715	92,769
Del Norte	23	451	19.8	4,130	181,328
El Dorado	90	1,586	17.6	10,459	116,078
Fresno	325	5,697	17.5	44,856	137,844
Glenn	12 **	219	17.8	1,212	98,326
Humboldt	83	1,458	17.5	10,059	120,767
Imperial	37	700	18.9	5,922	159,655
Inyo	13 **	207	15.4	1,468	109,299
Kern	357	6,820	19.1	56,079	157,241
Kings	47	941	20.1	9,252	197,350
Lake	64	1,147	17.9	7,992	124,716
Lassen	12 **	216	18.0	1,606	134,063
Los Angeles	3,128	51,990	16.6	362,171	115,792
Madera	47	834	17.8	5,753	122,462
Marin	107	1,560	14.5	7,764	72,300
Mariposa	14 **	273	19.9	2,196	160,627
Mendocino	66	1,208	18.2	8,980	135,308
Merced	93	1,811	19.5	17,857	192,030
Modoc	10 **	196	19.2	1,887	184,855
Mono	1 **	19	14.2	81	61,634
Monterey	121	2,017	16.7	14,109	116,618
Napa	80	1,266	15.9	7,334	92,009
Nevada	60	1,045	17.4	7,393	122,924
Orange	905	14,034	15.5	82,199	90,835

Table 22 (Continued)

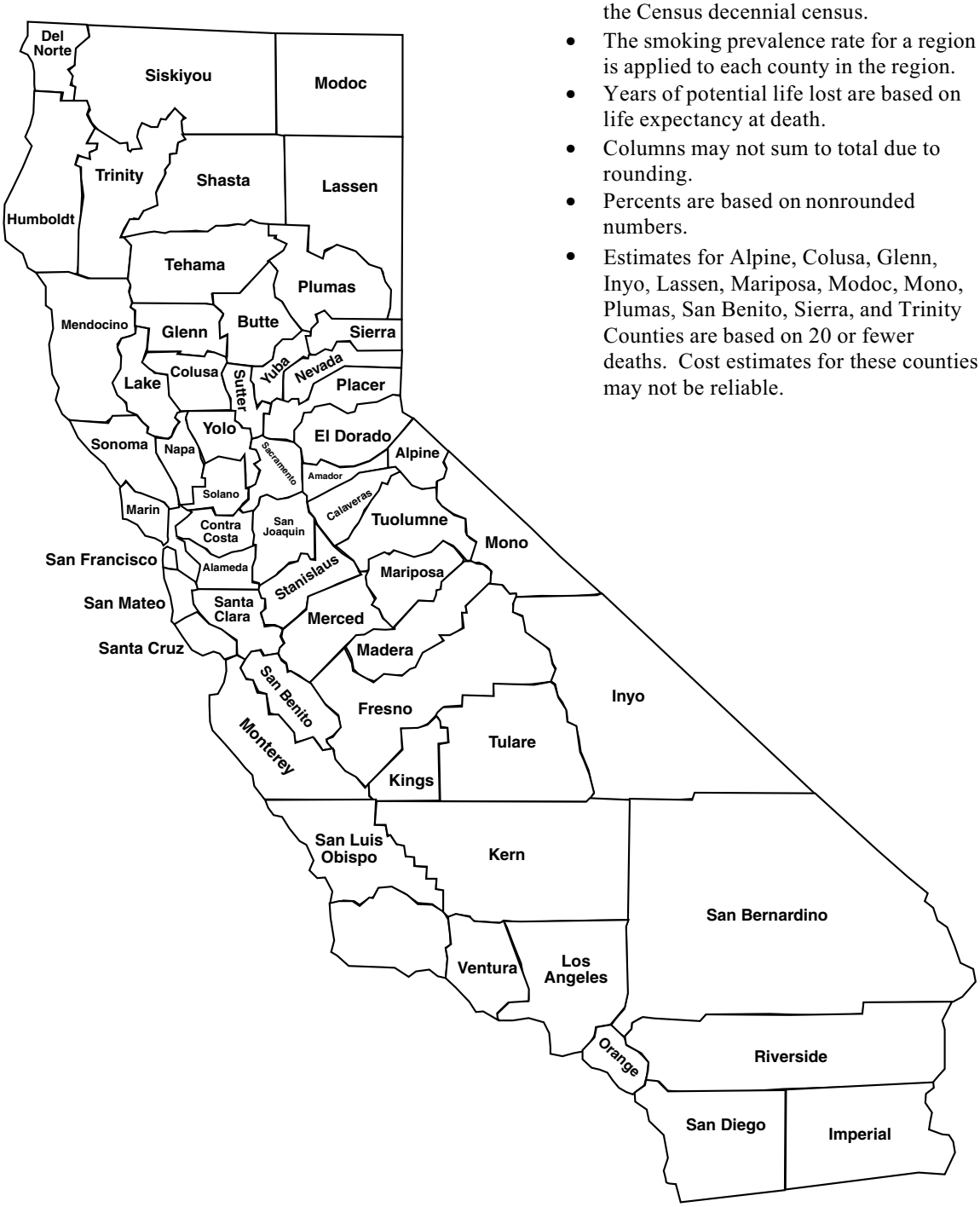
County	Number of Deaths	Years of Potential Life Lost		Productivity Losses*	
		Number	Per Death	Amount (thousands)	Per Death
Placer	165	2,510	15.2	13,008	$78,997
Plumas	13 **	198	15.5	905	70,860
Riverside	994	17,096	17.2	121,666	122,374
Sacramento	675	11,992	17.8	90,590	134,165
San Benito	14 **	241	17.1	1,787	127,087
San Bernardino	797	14,552	18.3	115,765	145,244
San Diego	1,072	17,757	16.6	123,817	115,471
San Francisco	181	2,904	16.0	19,871	109,820
San Joaquin	295	5,397	18.3	43,834	148,418
San Luis Obispo	132	1,997	15.1	10,776	81,716
San Mateo	284	4,472	15.7	24,472	86,055
Santa Barbara	179	2,739	15.3	16,008	89,304
Santa Clara	391	6,106	15.6	35,905	91,911
Santa Cruz	105	1,700	16.3	11,368	108,750
Shasta	154	2,638	17.1	17,978	116,416
Sierra	3 **	55	18.2	244	80,771
Siskiyou	41	750	18.3	5,268	128,544
Solano	164	2,962	18.1	23,336	142,650
Sonoma	278	4,472	16.1	27,878	100,415
Stanislaus	203	3,627	17.9	27,030	133,322
Sutter	56	904	16.3	5,426	97,736
Tehama	44	795	18.1	5,682	129,599
Trinity	9 **	176	18.6	1,250	131,772
Tulare	175	3,116	17.8	23,880	136,334
Tuolumne	36	680	18.6	5,997	164,323
Ventura	327	5,395	16.5	33,782	103,157
Yolo	89	1,592	17.9	11,495	129,089
Yuba	32	649	20.0	4,877	150,143

Note: Numbers may not add to total due to rounding.
* Discounted at 3 percent
**Estimates based on 20 or fewer deaths may be unreliable.

County Profiles

Notes to County Profiles

- Mortality cost is discounted at 3 percent.
- Population is from the U.S. Bureau of the Census decennial census.
- The smoking prevalence rate for a region is applied to each county in the region.
- Years of potential life lost are based on life expectancy at death.
- Columns may not sum to total due to rounding.
- Percents are based on nonrounded numbers.
- Estimates for Alpine, Colusa, Glenn, Inyo, Lassen, Mariposa, Modoc, Mono, Plumas, San Benito, Sierra, and Trinity Counties are based on 20 or fewer deaths. Cost estimates for these counties may not be reliable.



California

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$18,058,012	$487	$4,603
	Direct	9,830,115	265	2,505
	Lost Productivity	8,227,898	222	2,097
	Illness	1,430,618	39	365
	Premature Death	6,797,280	183	1,732
	Male	$11,657,133	$632	$4,760
	Direct	5,642,380	306	2,304
	Lost Productivity	6,014,753	326	2,456
	Illness	848,214	46	346
	Premature Death	5,166,538	280	2,110
	Female	$6,400,879	$344	$4,340
	Direct	4,187,734	225	2,840
	Lost Productivity	2,213,145	119	1,501
	Illness	582,404	31	395
	Premature Death	1,630,741	88	1,106

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$9,830,115	$265	$2,505
	Hospital	4,310,875	116	1,099
	Ambulatory	2,058,077	56	525
	Nursing Home Care	1,517,363	41	387
	Prescriptions	1,149,527	31	293
	Home Health	794,273	21	202

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	37,077,145	9,307,811	9,147,916	14,429,942	4,191,476
	Male	18,444,195	4,759,431	4,716,542	7,149,946	1,818,277
	Female	18,632,950	4,548,381	4,431,374	7,279,996	2,373,199

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	3,923,433	12.7	6,748,739	21.8	20,327,558	65.6	
Male	2,448,736	16.0	3,878,930	25.3	9,012,707	58.8	
Female	1,474,697	9.4	2,869,809	18.3	11,314,851	72.3	
Age 12-17	146,033	4.5	327,026	10.1	2,757,338	85.4	
Male	95,246	5.8	178,456	10.8	1,381,906	83.5	
Female	50,787	3.2	148,570	9.4	1,375,431	87.3	
Age 18+	3,777,400	13.6	6,421,713	23.1	17,570,221	63.3	
Male	2,353,490	17.2	3,700,474	27.0	7,630,801	55.8	
Female	1,423,910	10.1	2,721,239	19.3	9,939,420	70.6	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	231,764	34,363	14.8	
Male	117,832	20,565	17.5	
Female	113,932	13,799	12.1	

California

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	586,815	17.1	
Male	353,752	17.2	
Female	233,064	16.9	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$6,797,280	$197,807	
Male	5,166,538	251,235	
Female	1,630,741	118,182	

Alameda

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$702,063	$467	$4,920
Direct	401,702	267	2,815
Lost Productivity	300,360	200	2,105
Illness	56,064	37	393
Premature Death	244,297	162	1,712
Male	$448,873	$608	$5,290
Direct	232,185	315	2,736
Lost Productivity	216,688	294	2,554
Illness	32,836	44	387
Premature Death	183,852	249	2,167
Female	$253,190	$331	$4,377
Direct	169,518	221	2,930
Lost Productivity	83,672	109	1,446
Illness	23,228	30	402
Premature Death	60,444	79	1,045

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$401,702	$267	$2,815
Hospital	190,414	127	1,334
Ambulatory	71,693	48	502
Nursing Home Care	69,433	46	487
Prescriptions	39,884	27	279
Home Health	30,279	20	212

Population 2009	All Ages	<18	18-34	35-64	65+
Total	1,503,826	342,208	375,631	621,162	164,824
Male	738,082	175,484	187,694	304,745	70,159
Female	765,744	166,724	187,937	316,418	94,665

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	142,704	11.2	243,491	19.1	888,713	69.7	
Male	84,852	13.7	129,651	20.9	406,136	65.4	
Female	57,851	8.8	113,840	17.4	482,577	73.8	
Age 12-17	5,921	5.2	12,275	10.8	95,095	83.9	
Male	2,448	4.2	3,511	6.0	52,082	89.7	
Female	3,473	6.3	8,764	15.9	43,012	77.9	
Age 18+	136,783	11.8	231,217	19.9	793,619	68.3	
Male	82,404	14.6	126,140	22.4	354,054	62.9	
Female	54,378	9.1	105,076	17.5	439,565	73.4	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	8,874	1,199	13.5	
Male	4,371	715	16.4	
Female	4,503	484	10.7	

Alameda

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	20,629	17.2	
Male	12,371	17.3	
Female	8,258	17.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$244,297	$203,744	
Male	183,852	257,118	
Female	60,444	124,888	

Alpine

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$478	$405	$3,477
Direct	332	281	2,414
Lost Productivity	146	124	1,063
Illness	60	51	438
Premature Death	86	73	625
Male	$316	$519	$4,065
Direct	195	320	2,506
Lost Productivity	121	199	1,559
Illness	36	58	456
Premature Death	86	141	1,103
Female	$161	$283	$2,708
Direct	137	240	2,293
Lost Productivity	25	43	414
Illness	25	43	414
Premature Death	0	0	0

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$332	$281	$2,414
Hospital	46	39	337
Ambulatory	103	88	752
Nursing Home Care	92	78	666
Prescriptions	60	51	437
Home Health	30	26	222

Population 2009	All Ages	<18	18-34	35-64	65+
Total	1,179	253	174	595	157
Male	610	119	89	318	83
Female	569	134	85	277	74

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	137	13.7	254	25.3	611	61.0	
Male	78	14.8	151	28.7	297	56.5	
Female	60	12.5	103	21.6	314	65.9	
Age 12-17	3	4.4	9	11.1	65	84.5	
Male	2	6.2	3	9.3	30	84.5	
Female	1	2.8	5	12.7	35	84.5	
Age 18+	134	14.5	245	26.5	546	59.0	
Male	76	15.4	148	30.1	267	54.5	
Female	58	13.4	98	22.4	279	64.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	7	1	12.3	
Male	4	1	21.6	
Female	3	0	0.0	

Alpine

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	14	16.4	
Male	14	16.4	
Female	0	-	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$86	$99,602	
Male	86	99,602	
Female	0	-	

Amador

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$34,317	$905	$7,345
	Direct	17,002	449	3,639
	Lost Productivity	17,315	457	3,706
	Illness	1,833	48	392
	Premature Death	15,482	408	3,314
	Male	$21,843	$1,055	$7,904
	Direct	10,196	492	3,690
	Lost Productivity	11,647	562	4,215
	Illness	1,144	55	414
	Premature Death	10,503	507	3,801
	Female	$12,475	$725	$6,535
	Direct	6,806	396	3,566
	Lost Productivity	5,668	330	2,969
	Illness	690	40	361
	Premature Death	4,979	290	2,608

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$17,002	$449	$3,639
	Hospital	7,107	187	1,521
	Ambulatory	3,433	91	735
	Nursing Home Care	3,256	86	697
	Prescriptions	2,068	55	443
	Home Health	1,138	30	244

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	37,904	6,661	6,108	17,486	7,650
	Male	20,707	3,425	3,810	9,805	3,667
	Female	17,197	3,236	2,298	7,680	3,983

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	4,672	13.7	8,637	25.4	20,745	60.9	
Male	2,763	14.7	5,345	28.4	10,724	56.9	
Female	1,909	12.5	3,292	21.6	10,021	65.8	
Age 12-17	132	4.7	304	10.8	2,375	84.5	
Male	97	6.2	144	9.3	1,310	84.5	
Female	35	2.8	160	12.7	1,065	84.5	
Age 18+	4,541	14.5	8,333	26.7	18,370	58.8	
Male	2,667	15.4	5,201	30.1	9,414	54.5	
Female	1,874	13.4	3,132	22.4	8,955	64.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	403	69	17.2	
Male	196	34	17.3	
Female	207	36	17.2	

Amador

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	1,278	18.4	
Male	645	19.1	
Female	633	17.8	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$15,482	$223,137	
Male	10,503	310,459	
Female	4,979	140,043	

Butte

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$181,708	$829	$5,773
Direct	96,004	438	3,050
Lost Productivity	85,704	391	2,723
Illness	9,868	45	313
Premature Death	75,836	346	2,409
Male	$106,576	$984	$5,674
Direct	51,888	479	2,762
Lost Productivity	54,687	505	2,911
Illness	5,280	49	281
Premature Death	49,408	456	2,630
Female	$75,132	$677	$5,919
Direct	44,116	398	3,475
Lost Productivity	31,016	280	2,443
Illness	4,589	41	361
Premature Death	26,428	238	2,082

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$96,004	$438	$3,050
Hospital	45,206	206	1,436
Ambulatory	19,395	88	616
Nursing Home Care	12,599	57	400
Prescriptions	11,512	52	366
Home Health	7,291	33	232

Population 2009	All Ages	<18	18-34	35-64	65+
Total	219,286	44,334	62,242	79,313	33,397
Male	108,319	22,539	32,359	38,942	14,479
Female	110,967	21,795	29,884	40,371	18,918

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	31,478	16.4	51,079	26.7	108,852	56.9
Male	18,784	20.0	26,863	28.5	48,457	51.5
Female	12,694	13.0	24,216	24.9	60,394	62.1
Age 12-17	1,009	6.1	2,350	14.3	13,097	79.6
Male	584	7.0	1,131	13.6	6,609	79.4
Female	426	5.2	1,218	15.0	6,489	79.8
Age 18+	30,469	17.4	48,729	27.9	95,754	54.7
Male	18,200	21.2	25,731	30.0	41,848	48.8
Female	12,268	13.8	22,998	25.8	53,906	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	2,220	403	18.1
Male	1,064	207	19.5
Female	1,156	196	16.9

Butte

Years of Potential Life Lost

	Number of Years	Per Death
Total	6,881	17.1
Male	3,521	17.0
Female	3,360	17.2

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$75,836	$188,215
Male	49,408	238,249
Female	26,428	135,152

Calaveras

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$35,016	$769	$6,479
Direct	20,146	442	3,728
Lost Productivity	14,870	326	2,751
Illness	2,083	46	385
Premature Death	12,787	281	2,366
Male	$22,617	$994	$7,809
Direct	11,450	503	3,953
Lost Productivity	11,167	491	3,856
Illness	1,152	51	398
Premature Death	10,015	440	3,458
Female	$12,398	$544	$4,943
Direct	8,696	381	3,467
Lost Productivity	3,703	162	1,476
Illness	931	41	371
Premature Death	2,772	122	1,105

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$20,146	$442	$3,728
Hospital	7,993	175	1,479
Ambulatory	4,162	91	770
Nursing Home Care	4,092	90	757
Prescriptions	2,507	55	464
Home Health	1,392	31	258

Population 2009	All Ages	<18	18-34	35-64	65+
Total	45,561	9,342	6,294	20,277	9,647
Male	22,764	4,847	3,307	9,900	4,711
Female	22,797	4,496	2,988	10,377	4,936

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	5,404	13.4	9,930	24.7	24,852	61.8	
Male	2,896	14.5	5,588	27.9	11,543	57.6	
Female	2,508	12.4	4,342	21.5	13,309	66.0	
Age 12-17	183	4.6	432	10.9	3,353	84.5	
Male	132	6.2	195	9.3	1,782	84.5	
Female	51	2.8	236	12.7	1,570	84.5	
Age 18+	5,221	14.4	9,498	26.2	21,499	59.4	
Male	2,765	15.4	5,392	30.1	9,760	54.5	
Female	2,457	13.4	4,105	22.4	11,739	64.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	489	79	16.1	
Male	270	49	18.1	
Female	219	30	13.6	

Calaveras

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	1,291	16.4	
Male	805	16.5	
Female	486	16.3	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$12,787	$162,505	
Male	10,015	205,165	
Female	2,772	92,797	

Colusa

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$13,088	$615	$4,790
	Direct	7,362	346	2,694
	Lost Productivity	5,726	269	2,095
	Illness	919	43	336
	Premature Death	4,807	226	1,759
	Male	$8,444	$775	$5,039
	Direct	3,886	357	2,319
	Lost Productivity	4,558	418	2,720
	Illness	502	46	299
	Premature Death	4,056	372	2,420
	Female	$4,645	$448	$4,394
	Direct	3,476	335	3,289
	Lost Productivity	1,168	113	1,106
	Illness	418	40	395
	Premature Death	751	72	710

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$7,362	$346	$2,694
	Hospital	3,024	142	1,107
	Ambulatory	1,716	81	628
	Nursing Home Care	988	46	362
	Prescriptions	1,012	48	370
	Home Health	621	29	227

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	21,269	6,474	4,630	7,694	2,471
	Male	10,897	3,393	2,425	3,920	1,159
	Female	10,372	3,080	2,205	3,775	1,312

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	2,733	16.1	4,448	26.1	9,836	57.8
Male	1,676	19.3	2,413	27.7	4,608	53.0
Female	1,057	12.7	2,035	24.5	5,228	62.8
Age 12-17	137	6.2	316	14.2	1,768	79.6
Male	84	7.0	162	13.6	948	79.4
Female	54	5.2	154	15.0	820	79.8
Age 18+	2,595	17.5	4,131	27.9	8,069	54.5
Male	1,592	21.2	2,251	30.0	3,661	48.8
Female	1,003	13.8	1,881	25.8	4,408	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	123	25	20.6
Male	59	16	27.4
Female	64	9	14.3

Colusa

Years of Potential Life Lost

	Number of Years	Per Death
Total	436	17.2
Male	282	17.4
Female	155	16.9

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$4,807	$189,959
Male	4,056	250,700
Female	751	82,268

Contra Costa

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$540,362	$518	$5,526
Direct	334,548	321	3,421
Lost Productivity	205,814	197	2,105
Illness	45,783	44	468
Premature Death	160,031	153	1,637
Male	$326,407	$640	$5,315
Direct	181,739	357	2,959
Lost Productivity	144,669	284	2,356
Illness	25,353	50	413
Premature Death	119,316	234	1,943
Female	$213,954	$401	$5,883
Direct	152,809	286	4,202
Lost Productivity	61,145	115	1,681
Illness	20,430	38	562
Premature Death	40,715	76	1,120

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$334,548	$321	$3,421
Hospital	147,059	141	1,504
Ambulatory	69,167	66	707
Nursing Home Care	64,129	61	656
Prescriptions	36,368	35	372
Home Health	17,825	17	182

Population 2009	All Ages	<18	18-34	35-64	65+
Total	1,043,500	263,755	209,896	441,836	128,013
Male	509,624	134,949	105,731	213,744	55,199
Female	533,876	128,806	104,165	228,091	72,814

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	97,779	11.2	219,139	25.1	556,189	63.7	
Male	61,413	14.5	120,992	28.6	240,486	56.9	
Female	36,366	8.1	98,147	21.8	315,703	70.1	
Age 12-17	4,791	5.1	4,625	5.0	83,947	89.9	
Male	4,623	9.6	1,454	3.0	42,140	87.4	
Female	168	0.4	3,171	7.0	41,807	92.6	
Age 18+	92,988	11.9	214,514	27.5	472,242	60.6	
Male	56,790	15.2	119,538	31.9	198,346	52.9	
Female	36,198	8.9	94,976	23.4	273,896	67.6	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	6,962	992	14.3	
Male	3,444	554	16.1	
Female	3,518	439	12.5	

Contra Costa

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	16,013	16.1	
Male	9,007	16.3	
Female	7,005	16.0	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$160,031	$161,246	
Male	119,316	215,536	
Female	40,715	92,769	

Del Norte

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$22,999	$805	$5,536
Direct	10,091	353	2,429
Lost Productivity	12,908	452	3,107
Illness	1,417	50	341
Premature Death	11,490	402	2,766
Male	$13,779	$870	$4,969
Direct	5,551	351	2,002
Lost Productivity	8,228	520	2,967
Illness	867	55	313
Premature Death	7,361	465	2,655
Female	$9,220	$725	$6,673
Direct	4,540	357	3,286
Lost Productivity	4,680	368	3,387
Illness	550	43	398
Premature Death	4,130	325	2,989

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$10,091	$353	$2,429
Hospital	3,452	121	831
Ambulatory	2,597	91	625
Nursing Home Care	1,547	54	372
Prescriptions	1,544	54	372
Home Health	952	33	229

Population 2009	All Ages	<18	18-34	35-64	65+
Total	28,558	6,270	6,506	11,948	3,833
Male	15,838	3,157	4,148	6,807	1,726
Female	12,720	3,113	2,358	5,141	2,107

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	4,155	16.9	6,613	26.9	13,840	56.2	
Male	2,773	20.0	3,963	28.6	7,117	51.4	
Female	1,382	12.8	2,650	24.6	6,723	62.5	
Age 12-17	142	6.1	331	14.3	1,846	79.6	
Male	82	7.0	159	13.6	930	79.4	
Female	60	5.2	172	15.0	916	79.8	
Age 18+	4,012	18.0	6,281	28.2	11,994	53.8	
Male	2,691	21.2	3,804	30.0	6,187	48.8	
Female	1,322	13.8	2,478	25.8	5,807	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	258	51	19.7	
Male	133	28	21.1	
Female	125	23	18.2	

Del Norte

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	954	18.8	
Male	503	17.9	
Female	451	19.8	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$11,490	$226,026	
Male	7,361	262,301	
Female	4,130	181,328	

El Dorado

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$109,486	$609	$5,338
	Direct	66,744	371	3,254
	Lost Productivity	42,742	238	2,084
	Illness	8,432	47	411
	Premature Death	34,310	191	1,673
	Male	$65,126	$725	$5,904
	Direct	36,641	408	3,322
	Lost Productivity	28,485	317	2,582
	Illness	4,634	52	420
	Premature Death	23,851	266	2,162
	Female	$44,360	$494	$4,679
	Direct	30,103	335	3,175
	Lost Productivity	14,257	159	1,504
	Illness	3,797	42	401
	Premature Death	10,459	116	1,103

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$66,744	$371	$3,254
	Hospital	26,436	147	1,289
	Ambulatory	15,032	84	733
	Nursing Home Care	12,070	67	588
	Prescriptions	8,725	49	425
	Home Health	4,481	25	218

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	179,700	42,746	29,807	81,360	25,787
	Male	89,824	21,822	15,680	40,134	12,188
	Female	89,876	20,923	14,127	41,226	13,599

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	20,511	13.3	37,769	24.6	95,443	62.1	
Male	11,030	14.4	21,264	27.8	44,318	57.8	
Female	9,481	12.3	16,505	21.4	51,125	66.3	
Age 12-17	763	4.5	1,835	10.9	14,170	84.5	
Male	538	6.2	798	9.3	7,274	84.5	
Female	225	2.8	1,038	12.7	6,896	84.5	
Age 18+	19,749	14.4	35,934	26.2	81,272	59.3	
Male	10,492	15.4	20,466	30.1	37,044	54.5	
Female	9,256	13.4	15,468	22.4	44,229	64.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	1,336	204	15.3	
Male	670	114	17.1	
Female	666	90	13.5	

El Dorado

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	3,433	16.8	
Male	1,847	16.2	
Female	1,586	17.6	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$34,310	$167,904	
Male	23,851	208,783	
Female	10,459	116,078	

Fresno

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$421,195	$456	$4,327
	Direct	216,941	235	2,228
	Lost Productivity	204,254	221	2,098
	Illness	32,408	35	333
	Premature Death	171,846	186	1,765
	Male	$271,325	$587	$4,616
	Direct	124,305	269	2,115
	Lost Productivity	147,020	318	2,501
	Illness	20,030	43	341
	Premature Death	126,991	275	2,161
	Female	$149,870	$324	$3,885
	Direct	92,636	201	2,401
	Lost Productivity	57,234	124	1,484
	Illness	12,378	27	321
	Premature Death	44,856	97	1,163

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$216,941	$235	$2,228
	Hospital	95,863	104	985
	Ambulatory	44,931	49	462
	Nursing Home Care	28,112	30	289
	Prescriptions	26,207	28	269
	Home Health	21,827	24	224

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	923,894	277,470	238,360	316,070	91,993
	Male	461,948	141,887	122,611	157,478	39,972
	Female	461,946	135,583	115,749	158,592	52,022

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	97,350	13.1	159,247	21.5	484,519	65.4	
Male	58,774	15.9	99,718	27.1	210,043	57.0	
Female	38,576	10.4	59,529	16.0	274,476	73.7	
Age 12-17	5,026	5.3	11,271	11.9	78,395	82.8	
Male	4,097	8.5	7,307	15.1	37,070	76.5	
Female	929	2.0	3,964	8.6	41,325	89.4	
Age 18+	92,324	14.3	147,976	22.9	406,124	62.8	
Male	54,678	17.1	92,411	28.9	172,973	54.0	
Female	37,647	11.5	55,565	17.0	233,151	71.4	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	6,089	813	13.4	
Male	3,064	488	15.9	
Female	3,025	325	10.8	

Fresno

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	14,236	17.5	
Male	8,539	17.5	
Female	5,697	17.5	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$171,846	$211,288	
Male	126,991	260,269	
Female	44,856	137,844	

Glenn

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$20,786	$741	$5,664
Direct	10,940	390	2,981
Lost Productivity	9,845	351	2,683
Illness	1,220	43	332
Premature Death	8,625	307	2,350
Male	$13,967	$987	$6,268
Direct	5,895	417	2,645
Lost Productivity	8,073	571	3,622
Illness	659	47	296
Premature Death	7,413	524	3,327
Female	$6,818	$490	$4,730
Direct	5,045	363	3,500
Lost Productivity	1,773	127	1,230
Illness	561	40	389
Premature Death	1,212	87	841

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$10,940	$390	$2,981
Hospital	4,859	173	1,324
Ambulatory	2,354	84	641
Nursing Home Care	1,444	51	393
Prescriptions	1,405	50	383
Home Health	879	31	239

Population 2009	All Ages	<18	18-34	35-64	65+
Total	28,055	8,126	5,895	10,259	3,775
Male	14,149	4,158	3,098	5,172	1,722
Female	13,906	3,968	2,798	5,087	2,053

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	3,670	16.0	5,983	26.1	13,241	57.8
Male	2,228	19.3	3,207	27.8	6,103	52.9
Female	1,441	12.7	2,775	24.4	7,138	62.9
Age 12-17	183	6.2	423	14.3	2,359	79.6
Male	109	7.0	210	13.6	1,228	79.4
Female	74	5.2	212	15.0	1,131	79.8
Age 18+	3,487	17.5	5,560	27.9	10,882	54.6
Male	2,120	21.2	2,997	30.0	4,874	48.8
Female	1,367	13.8	2,563	25.8	6,007	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	219	39	17.7
Male	114	27	23.3
Female	105	12	11.7

Glenn

Years of Potential Life Lost

	Number of Years	Per Death
Total	702	18.1
Male	483	18.2
Female	219	17.8

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$8,625	$221,926
Male	7,413	279,322
Female	1,212	98,326

Humboldt

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$95,856	$717	$4,973
	Direct	50,288	376	2,609
	Lost Productivity	45,568	341	2,364
	Illness	6,379	48	331
	Premature Death	39,189	293	2,033
	Male	$58,806	$879	$5,054
	Direct	26,213	392	2,253
	Lost Productivity	32,594	487	2,801
	Illness	3,463	52	298
	Premature Death	29,131	435	2,503
	Female	$37,050	$554	$4,849
	Direct	24,075	360	3,151
	Lost Productivity	12,974	194	1,698
	Illness	2,916	44	382
	Premature Death	10,059	150	1,316

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$50,288	$376	$2,609
	Hospital	19,539	146	1,014
	Ambulatory	11,976	90	621
	Nursing Home Care	7,481	56	388
	Prescriptions	7,011	52	364
	Home Health	4,281	32	222

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	133,765	26,621	37,139	52,713	17,292
	Male	66,902	13,597	19,152	26,508	7,645
	Female	66,863	13,025	17,987	26,205	9,646

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	19,277	16.6	31,176	26.8	65,807	56.6	
Male	11,636	20.1	16,622	28.7	29,698	51.2	
Female	7,641	13.1	14,554	25.0	36,109	61.9	
Age 12-17	560	6.1	1,301	14.3	7,255	79.6	
Male	326	7.0	632	13.6	3,693	79.4	
Female	234	5.2	669	15.0	3,563	79.8	
Age 18+	18,717	17.5	29,875	27.9	58,551	54.6	
Male	11,310	21.2	15,990	30.0	26,006	48.8	
Female	7,407	13.8	13,885	25.8	32,546	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	1,222	196	16.1	
Male	635	113	17.8	
Female	587	83	14.2	

Humboldt

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	3,467	17.6	
Male	2,009	17.8	
Female	1,458	17.5	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$39,189	$199,467	
Male	29,131	257,385	
Female	10,059	120,767	

Imperial

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$80,170	$463	$3,643
	Direct	46,354	268	2,106
	Lost Productivity	33,816	195	1,536
	Illness	6,636	38	302
	Premature Death	27,180	157	1,235
	Male	$52,405	$588	$4,104
	Direct	27,425	308	2,148
	Lost Productivity	24,979	280	1,956
	Illness	3,722	42	291
	Premature Death	21,258	239	1,665
	Female	$27,765	$330	$3,005
	Direct	18,929	225	2,048
	Lost Productivity	8,836	105	956
	Illness	2,915	35	315
	Premature Death	5,922	70	641

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$46,354	$268	$2,106
	Hospital	20,171	116	916
	Ambulatory	9,686	56	440
	Nursing Home Care	5,850	34	266
	Prescriptions	5,579	32	254
	Home Health	5,068	29	230

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	173,240	51,105	42,516	61,531	18,088
	Male	89,075	25,916	23,677	31,299	8,182
	Female	84,165	25,189	18,839	30,232	9,906

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	22,009	15.7	30,760	21.9	87,460	62.4	
Male	12,768	17.7	19,266	26.7	40,252	55.7	
Female	9,241	13.6	11,494	16.9	47,208	69.5	
Age 12-17	723	4.0	2,577	14.2	14,794	81.8	
Male	370	4.1	1,218	13.3	7,539	82.6	
Female	352	3.9	1,359	15.2	7,256	80.9	
Age 18+	21,287	17.4	28,182	23.1	72,666	59.5	
Male	12,398	19.6	18,048	28.6	32,713	51.8	
Female	8,889	15.1	10,134	17.2	39,953	67.7	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	904	114	12.6	
Male	525	77	14.7	
Female	379	37	9.8	

Imperial

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	2,069	18.1	
Male	1,369	17.8	
Female	700	18.9	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$27,180	$238,065	
Male	21,258	275,797	
Female	5,922	159,655	

Inyo

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$12,808	$694	$5,000
Direct	7,404	401	2,890
Lost Productivity	5,404	293	2,109
Illness	777	42	303
Premature Death	4,627	251	1,806
Male	$7,975	$863	$5,541
Direct	4,379	474	3,042
Lost Productivity	3,597	389	2,499
Illness	438	47	304
Premature Death	3,159	342	2,194
Female	$4,833	$525	$4,306
Direct	3,026	329	2,696
Lost Productivity	1,807	196	1,610
Illness	339	37	302
Premature Death	1,468	159	1,308

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$7,404	$401	$2,890
Hospital	3,358	182	1,311
Ambulatory	1,308	71	511
Nursing Home Care	1,098	59	428
Prescriptions	818	44	320
Home Health	823	45	321

Population 2009	All Ages	<18	18-34	35-64	65+
Total	18,447	4,024	3,133	7,743	3,547
Male	9,242	2,069	1,630	3,910	1,634
Female	9,205	1,955	1,503	3,834	1,913

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	2,562	16.1	3,513	22.0	9,873	61.9	
Male	1,439	18.1	2,152	27.1	4,350	54.8	
Female	1,122	14.0	1,360	17.0	5,523	69.0	
Age 12-17	61	4.0	217	14.2	1,247	81.8	
Male	31	4.1	103	13.3	635	82.6	
Female	30	3.9	115	15.2	612	80.9	
Age 18+	2,501	17.3	3,296	22.8	8,627	59.8	
Male	1,408	19.6	2,050	28.6	3,715	51.8	
Female	1,093	15.1	1,246	17.2	4,911	67.7	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	200	30	15.0	
Male	113	17	14.7	
Female	87	13	15.4	

Inyo

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	460	15.3	
Male	253	15.3	
Female	207	15.4	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$4,627	$154,101	
Male	3,159	190,367	
Female	1,468	109,299	

Kern

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$458,699	$552	$4,412
Direct	224,281	270	2,157
Lost Productivity	234,418	282	2,255
Illness	31,628	38	304
Premature Death	202,791	244	1,951
Male	$297,889	$695	$4,929
Direct	133,345	311	2,206
Lost Productivity	164,544	384	2,722
Illness	17,833	42	295
Premature Death	146,712	342	2,427
Female	$160,810	$399	$3,695
Direct	90,936	226	2,089
Lost Productivity	69,874	174	1,605
Illness	13,795	34	317
Premature Death	56,079	139	1,288

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$224,281	$270	$2,157
Hospital	106,525	128	1,025
Ambulatory	44,564	54	429
Nursing Home Care	25,675	31	247
Prescriptions	25,231	30	243
Home Health	22,287	27	214

Population 2009	All Ages	<18	18-34	35-64	65+
Total	831,133	254,562	211,480	290,703	74,388
Male	428,434	129,672	115,107	150,196	33,459
Female	402,699	124,890	96,372	140,507	40,929

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	103,965	15.7	145,394	21.9	413,525	62.4	
Male	60,439	17.6	91,267	26.6	191,223	55.8	
Female	43,526	13.6	54,127	16.9	222,302	69.5	
Age 12-17	3,448	4.0	12,283	14.2	70,582	81.8	
Male	1,791	4.1	5,895	13.3	36,480	82.6	
Female	1,656	3.9	6,388	15.2	34,102	80.9	
Age 18+	100,518	17.4	133,111	23.1	342,943	59.5	
Male	58,648	19.6	85,372	28.6	154,743	51.8	
Female	41,870	15.1	47,739	17.2	188,200	67.7	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	5,241	893	17.0	
Male	2,827	536	19.0	
Female	2,414	357	14.8	

Kern

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	16,514	18.5	
Male	9,695	18.1	
Female	6,820	19.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$202,791	$227,145	
Male	146,712	273,645	
Female	56,079	157,241	

Kings

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$74,617	$492	$3,701
Direct	37,091	244	1,840
Lost Productivity	37,526	247	1,861
Illness	6,168	41	306
Premature Death	31,357	207	1,555
Male	$48,971	$563	$3,716
Direct	22,883	263	1,736
Lost Productivity	26,088	300	1,980
Illness	3,983	46	302
Premature Death	22,105	254	1,677
Female	$25,646	$395	$3,674
Direct	14,208	219	2,035
Lost Productivity	11,438	176	1,638
Illness	2,185	34	313
Premature Death	9,252	143	1,325

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$37,091	$244	$1,840
Hospital	16,390	108	813
Ambulatory	8,102	53	402
Nursing Home Care	4,234	28	210
Prescriptions	4,514	30	224
Home Health	3,851	25	191

Population 2009	All Ages	<18	18-34	35-64	65+
Total	151,793	41,365	43,108	55,486	11,834
Male	86,926	21,145	26,633	33,741	5,408
Female	64,867	20,220	16,475	21,745	6,427

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	20,159	16.3	28,314	22.9	74,910	60.7
Male	13,178	18.2	19,671	27.2	39,476	54.6
Female	6,981	13.7	8,644	16.9	35,434	69.4
Age 12-17	517	4.0	1,845	14.2	10,593	81.8
Male	265	4.1	873	13.3	5,405	82.6
Female	252	3.9	972	15.2	5,188	80.9
Age 18+	19,642	17.8	26,469	24.0	64,317	58.2
Male	12,913	19.6	18,797	28.6	34,071	51.8
Female	6,729	15.1	7,672	17.2	30,246	67.7

Deaths

		Due to Smoking	
	Total	Number	%
Total	792	118	14.9
Male	408	71	17.5
Female	384	47	12.2

Kings

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,281	19.3
Male	1,340	18.8
Female	941	20.1

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$31,357	$265,173
Male	22,105	309,727
Female	9,252	197,350

Lake

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$64,549	$1,002	$7,088
Direct	33,723	524	3,703
Lost Productivity	30,825	479	3,385
Illness	3,098	48	340
Premature Death	27,727	431	3,045
Male	$39,680	$1,231	$7,238
Direct	18,298	568	3,338
Lost Productivity	21,382	663	3,900
Illness	1,647	51	300
Premature Death	19,735	612	3,600
Female	$24,868	$773	$6,861
Direct	15,425	480	4,255
Lost Productivity	9,443	294	2,605
Illness	1,452	45	400
Premature Death	7,992	248	2,205

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$33,723	$524	$3,703
Hospital	16,273	253	1,787
Ambulatory	6,421	100	705
Nursing Home Care	4,578	71	503
Prescriptions	3,924	61	431
Home Health	2,527	39	277

Population 2009	All Ages	<18	18-34	35-64	65+
Total	64,395	14,100	11,201	27,432	11,663
Male	32,226	7,314	5,884	13,539	5,489
Female	32,168	6,786	5,317	13,892	6,173

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	9,107	16.4	14,780	26.6	31,744	57.1
Male	5,482	19.8	7,853	28.3	14,376	51.9
Female	3,625	13.0	6,926	24.8	17,368	62.2
Age 12-17	329	6.2	760	14.3	4,246	79.6
Male	196	7.0	380	13.6	2,223	79.4
Female	133	5.2	380	15.0	2,024	79.8
Age 18+	8,778	17.5	14,019	27.9	27,498	54.7
Male	5,286	21.2	7,473	30.0	12,154	48.8
Female	3,492	13.8	6,546	25.8	15,344	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	787	150	19.0
Male	416	86	20.6
Female	371	64	17.3

Lake

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,613	17.5
Male	1,466	17.1
Female	1,147	17.9

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$27,727	$185,348
Male	19,735	230,780
Female	7,992	124,716

Lassen

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$18,802	$541	$3,422
Direct	10,328	297	1,880
Lost Productivity	8,474	244	1,542
Illness	1,868	54	340
Premature Death	6,606	190	1,202
Male	$12,343	$553	$2,984
Direct	6,044	271	1,461
Lost Productivity	6,299	282	1,523
Illness	1,300	58	314
Premature Death	5,000	224	1,209
Female	$6,459	$518	$4,758
Direct	4,284	344	3,156
Lost Productivity	2,175	175	1,602
Illness	568	46	419
Premature Death	1,606	129	1,183

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$10,328	$297	$1,880
Hospital	2,807	81	511
Ambulatory	3,091	89	563
Nursing Home Care	1,584	46	288
Prescriptions	1,786	51	325
Home Health	1,060	30	193

Population 2009	All Ages	<18	18-34	35-64	65+
Total	34,772	6,240	9,957	15,138	3,437
Male	22,312	3,194	7,683	9,749	1,686
Female	12,460	3,046	2,274	5,389	1,751

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	5,494	17.8	8,497	27.5	16,880	54.7	
Male	4,137	20.4	5,891	29.1	10,240	50.5	
Female	1,357	12.8	2,606	24.6	6,640	62.6	
Age 12-17	143	6.1	335	14.3	1,862	79.6	
Male	81	7.0	156	13.6	913	79.4	
Female	62	5.2	178	15.0	949	79.8	
Age 18+	5,351	18.8	8,163	28.6	15,018	52.6	
Male	4,056	21.2	5,735	30.0	9,327	48.8	
Female	1,295	13.8	2,428	25.8	5,691	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	233	31	13.5	
Male	146	19	13.3	
Female	87	12	13.8	

Lassen

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	573	18.2	
Male	357	18.3	
Female	216	18.0	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$6,606	$210,130	
Male	5,000	256,975	
Female	1,606	134,063	

Los Angeles

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$4,408,555	$450	$4,398
Direct	2,318,269	236	2,313
Lost Productivity	2,090,287	213	2,085
Illness	357,129	36	356
Premature Death	1,733,158	177	1,729
Male	$2,930,270	$606	$4,683
Direct	1,339,345	277	2,140
Lost Productivity	1,590,925	329	2,542
Illness	219,938	45	351
Premature Death	1,370,987	283	2,191
Female	$1,478,285	$297	$3,925
Direct	978,923	197	2,599
Lost Productivity	499,362	100	1,326
Illness	137,190	28	364
Premature Death	362,171	73	962

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$2,318,269	$236	$2,313
Hospital	1,030,866	105	1,028
Ambulatory	434,291	44	433
Nursing Home Care	398,524	41	398
Prescriptions	240,984	25	240
Home Health	213,604	22	213

Population 2009	All Ages	<18	18-34	35-64	65+
Total	9,805,232	2,413,128	2,517,469	3,817,276	1,057,359
Male	4,836,100	1,233,567	1,280,896	1,872,474	449,164
Female	4,969,132	1,179,561	1,236,574	1,944,802	608,195

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	1,002,393	12.2	1,630,116	19.8	5,606,842	68.0	
Male	625,746	15.5	1,009,920	25.0	2,399,886	59.5	
Female	376,647	9.0	620,196	14.8	3,206,956	76.3	
Age 12-17	26,167	3.1	70,533	8.3	750,548	88.6	
Male	18,578	4.3	37,185	8.6	377,255	87.1	
Female	7,589	1.8	33,347	8.1	373,293	90.1	
Age 18+	976,226	13.2	1,559,583	21.1	4,856,294	65.7	
Male	607,167	16.9	972,734	27.0	2,022,631	56.1	
Female	369,059	9.7	586,849	15.5	2,833,663	74.8	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	57,629	8,270	14.4	
Male	29,346	5,142	17.5	
Female	28,283	3,128	11.1	

Los Angeles

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	142,077	17.2	
Male	90,087	17.5	
Female	51,990	16.6	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$1,733,158	$209,576	
Male	1,370,987	266,622	
Female	362,171	115,792	

Madera

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$72,026	$480	$4,523
Direct	36,044	240	2,263
Lost Productivity	35,982	240	2,259
Illness	5,310	35	333
Premature Death	30,672	204	1,926
Male	$48,351	$669	$5,245
Direct	20,326	281	2,205
Lost Productivity	28,026	388	3,040
Illness	3,107	43	337
Premature Death	24,918	345	2,703
Female	$23,675	$304	$3,530
Direct	15,718	202	2,344
Lost Productivity	7,957	102	1,186
Illness	2,203	28	329
Premature Death	5,753	74	858

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$36,044	$240	$2,263
Hospital	14,358	96	902
Ambulatory	7,863	52	494
Nursing Home Care	5,158	34	324
Prescriptions	4,671	31	293
Home Health	3,994	27	251

Population 2009	All Ages	<18	18-34	35-64	65+
Total	150,150	43,142	35,790	54,058	17,159
Male	72,263	22,183	17,222	24,834	8,023
Female	77,887	20,959	18,568	29,224	9,136

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	15,925	13.1	25,931	21.3	79,961	65.6
Male	9,218	15.9	15,641	27.0	33,061	57.1
Female	6,707	10.5	10,290	16.1	46,900	73.4
Age 12-17	803	5.4	1,780	12.0	12,227	82.6
Male	663	8.5	1,182	15.1	5,996	76.5
Female	140	2.0	598	8.6	6,231	89.4
Age 18+	15,122	14.1	24,152	22.6	67,734	63.3
Male	8,555	17.1	14,459	28.9	27,065	54.0
Female	6,567	11.5	9,692	17.0	40,669	71.4

Deaths

		Due to Smoking	
	Total	Number	%
Total	913	143	15.6
Male	516	96	18.6
Female	397	47	11.8

Madera

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,508	17.6
Male	1,674	17.5
Female	834	17.8

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$30,672	$214,759
Male	24,918	260,003
Female	5,753	122,462

Marin

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$138,354	$551	$4,814
Direct	94,700	377	3,295
Lost Productivity	43,653	174	1,519
Illness	13,474	54	469
Premature Death	30,179	120	1,050
Male	$76,585	$618	$4,560
Direct	47,195	381	2,810
Lost Productivity	29,391	237	1,750
Illness	6,976	56	415
Premature Death	22,415	181	1,335
Female	$61,768	$485	$5,169
Direct	47,506	373	3,976
Lost Productivity	14,262	112	1,194
Illness	6,498	51	544
Premature Death	7,764	61	650

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$94,700	$377	$3,295
Hospital	36,135	144	1,257
Ambulatory	23,093	92	803
Nursing Home Care	16,539	66	575
Prescriptions	12,918	51	449
Home Health	6,016	24	209

Population 2009	All Ages	<18	18-34	35-64	65+
Total	251,229	52,502	37,808	119,863	41,056
Male	123,945	26,823	20,519	58,500	18,104
Female	127,284	25,679	17,290	61,363	22,952

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	28,743	13.3	65,415	30.3	121,706	56.4	
Male	16,794	15.9	37,587	35.5	51,569	48.7	
Female	11,949	10.9	27,828	25.3	70,137	63.8	
Age 12-17	1,083	6.3	1,344	7.8	14,709	85.8	
Male	712	8.1	771	8.7	7,345	83.2	
Female	371	4.5	574	6.9	7,365	88.6	
Age 18+	27,659	13.9	64,071	32.2	106,997	53.8	
Male	16,081	16.6	36,816	37.9	44,225	45.5	
Female	11,578	11.4	27,255	26.8	62,772	61.8	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	1,692	228	13.4	
Male	801	120	15.0	
Female	891	107	12.1	

Marin

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	3,396	14.9	
Male	1,836	15.3	
Female	1,560	14.5	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$30,179	$132,634	
Male	22,415	186,561	
Female	7,764	72,300	

Mariposa

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$13,626	$745	$6,156
Direct	7,776	425	3,513
Lost Productivity	5,851	320	2,643
Illness	858	47	388
Premature Death	4,993	273	2,256
Male	$7,647	$825	$6,311
Direct	4,360	470	3,599
Lost Productivity	3,287	354	2,713
Illness	489	53	404
Premature Death	2,797	302	2,309
Female	$5,980	$664	$5,967
Direct	3,416	379	3,408
Lost Productivity	2,564	285	2,559
Illness	369	41	368
Premature Death	2,196	244	2,191

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$7,776	$425	$3,513
Hospital	2,924	160	1,321
Ambulatory	1,672	91	755
Nursing Home Care	1,617	88	730
Prescriptions	1,006	55	454
Home Health	557	30	252

Population 2009	All Ages	<18	18-34	35-64	65+
Total	18,280	3,377	2,858	8,226	3,819
Male	9,273	1,692	1,518	4,194	1,870
Female	9,007	1,685	1,341	4,032	1,949

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	2,214	13.6	4,075	25.0	9,981	61.3	
Male	1,212	14.7	2,344	28.4	4,695	56.9	
Female	1,002	12.5	1,731	21.6	5,287	65.9	
Age 12-17	61	4.5	151	11.0	1,155	84.5	
Male	42	6.2	62	9.3	565	84.5	
Female	19	2.8	89	12.7	591	84.5	
Age 18+	2,153	14.4	3,924	26.3	8,826	59.2	
Male	1,170	15.4	2,282	30.1	4,130	54.5	
Female	983	13.4	1,642	22.4	4,696	64.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	160	28	17.8	
Male	82	15	18.0	
Female	78	14	17.5	

Mariposa

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	498	17.5	
Male	225	15.3	
Female	273	19.9	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$4,993	$175,758	
Male	2,797	189,790	
Female	2,196	160,627	

Mendocino

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$73,786	$843	$6,013
Direct	37,234	425	3,035
Lost Productivity	36,552	417	2,979
Illness	4,223	48	344
Premature Death	32,329	369	2,635
Male	$45,510	$1,040	$6,155
Direct	19,895	454	2,691
Lost Productivity	25,615	585	3,464
Illness	2,266	52	306
Premature Death	23,349	533	3,158
Female	$28,276	$646	$5,798
Direct	17,339	396	3,556
Lost Productivity	10,937	250	2,243
Illness	1,957	45	401
Premature Death	8,980	205	1,842

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$37,234	$425	$3,035
Hospital	15,056	172	1,227
Ambulatory	8,356	95	681
Nursing Home Care	5,703	65	465
Prescriptions	5,005	57	408
Home Health	3,113	36	254

Population 2009	All Ages	<18	18-34	35-64	65+
Total	87,568	19,717	17,500	37,103	13,248
Male	43,774	10,111	9,229	18,424	6,011
Female	43,794	9,607	8,271	18,679	7,237

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	12,270	16.4	19,897	26.6	42,570	57.0
Male	7,394	19.9	10,584	28.4	19,263	51.7
Female	4,877	13.0	9,313	24.8	23,307	62.2
Age 12-17	424	6.2	982	14.3	5,481	79.6
Male	251	7.0	486	13.6	2,840	79.4
Female	173	5.2	496	15.0	2,641	79.8
Age 18+	11,846	17.5	18,915	27.9	37,090	54.7
Male	7,143	21.2	10,098	30.0	16,423	48.8
Female	4,703	13.8	8,817	25.8	20,666	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	802	148	18.5
Male	417	82	19.7
Female	385	66	17.2

Mendocino

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,697	18.2
Male	1,489	18.1
Female	1,208	18.2

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$32,329	$217,814
Male	23,349	284,546
Female	8,980	135,308

Merced

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$111,757	$440	$4,249
	Direct	59,502	234	2,262
	Lost Productivity	52,254	206	1,987
	Illness	8,752	34	333
	Premature Death	43,502	171	1,654
	Male	$64,970	$509	$4,068
	Direct	33,910	266	2,123
	Lost Productivity	31,059	243	1,945
	Illness	5,414	42	339
	Premature Death	25,646	201	1,606
	Female	$46,787	$370	$4,529
	Direct	25,592	202	2,477
	Lost Productivity	21,195	168	2,052
	Illness	3,339	26	323
	Premature Death	17,857	141	1,728

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$59,502	$234	$2,262
	Hospital	27,571	108	1,048
	Ambulatory	11,979	47	455
	Nursing Home Care	7,240	28	275
	Prescriptions	6,954	27	264
	Home Health	5,758	23	219

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	254,122	80,557	64,799	85,019	23,747
	Male	127,704	41,366	33,442	42,442	10,454
	Female	126,418	39,191	31,358	42,577	13,293

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	26,303	13.1	43,109	21.4	132,027	65.5
Male	15,971	15.8	27,107	26.9	57,716	57.3
Female	10,332	10.3	16,002	15.9	74,310	73.8
Age 12-17	1,491	5.4	3,330	11.9	23,052	82.7
Male	1,222	8.5	2,179	15.1	11,056	76.5
Female	270	2.0	1,151	8.6	11,996	89.4
Age 18+	24,811	14.3	39,779	22.9	108,975	62.8
Male	14,750	17.1	24,928	28.9	46,660	54.0
Female	10,062	11.5	14,851	17.0	62,314	71.4

Deaths

		Due to Smoking	
	Total	Number	%
Total	1,498	223	14.9
Male	762	130	17.1
Female	736	93	12.6

Merced

Years of Potential Life Lost

	Number of Years	Per Death
Total	3,883	17.4
Male	2,071	15.9
Female	1,811	19.5

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$43,502	$195,062
Male	25,646	197,230
Female	17,857	192,030

Modoc

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$9,642	$1,001	$7,092
Direct	3,907	406	2,874
Lost Productivity	5,734	595	4,218
Illness	458	48	337
Premature Death	5,276	548	3,881
Male	$5,823	$1,199	$7,056
Direct	2,188	451	2,651
Lost Productivity	3,635	749	4,405
Illness	246	51	298
Premature Death	3,389	698	4,107
Female	$3,819	$800	$7,148
Direct	1,720	360	3,219
Lost Productivity	2,099	440	3,929
Illness	212	44	397
Premature Death	1,887	395	3,532

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$3,907	$406	$2,874
Hospital	1,209	125	889
Ambulatory	973	101	716
Nursing Home Care	728	76	535
Prescriptions	602	63	443
Home Health	396	41	291

Population 2009	All Ages	<18	18-34	35-64	65+
Total	9,631	2,151	1,510	4,101	1,869
Male	4,856	1,112	764	2,052	928
Female	4,775	1,040	745	2,049	941

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	1,359	16.4	2,204	26.5	4,743	57.1	
Male	825	19.7	1,183	28.3	2,176	52.0	
Female	534	13.0	1,021	24.8	2,567	62.3	
Age 12-17	51	6.2	118	14.2	658	79.6	
Male	31	7.0	60	13.6	349	79.4	
Female	20	5.2	58	15.0	309	79.8	
Age 18+	1,308	17.5	2,087	27.9	4,085	54.6	
Male	794	21.2	1,123	30.0	1,827	48.8	
Female	514	13.8	963	25.8	2,258	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	120	20	16.9	
Male	72	10	14.0	
Female	48	10	21.3	

Modoc

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	391	19.2	
Male	195	19.3	
Female	196	19.2	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$5,276	$259,694	
Male	3,389	335,261	
Female	1,887	184,855	

Mono

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$5,467	$388	$2,699
Direct	3,599	256	1,777
Lost Productivity	1,868	133	922
Illness	656	47	324
Premature Death	1,211	86	598
Male	$3,719	$493	$3,011
Direct	2,204	292	1,784
Lost Productivity	1,516	201	1,227
Illness	386	51	312
Premature Death	1,130	150	915
Female	$1,748	$268	$2,212
Direct	1,396	214	1,767
Lost Productivity	352	54	445
Illness	271	42	343
Premature Death	81	12	103

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$3,599	$256	$1,777
Hospital	1,068	76	528
Ambulatory	929	66	459
Nursing Home Care	592	42	292
Prescriptions	534	38	264
Home Health	476	34	235

Population 2009	All Ages	<18	18-34	35-64	65+
Total	14,074	2,714	3,617	6,286	1,457
Male	7,551	1,331	2,101	3,343	776
Female	6,523	1,384	1,516	2,943	680

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	2,025	16.7	2,767	22.9	7,310	60.4	
Male	1,235	18.8	1,825	27.8	3,514	53.5	
Female	790	14.3	942	17.0	3,797	68.7	
Age 12-17	30	4.0	106	14.3	607	81.7	
Male	14	4.1	47	13.3	292	82.6	
Female	15	3.9	59	15.2	315	80.9	
Age 18+	1,996	17.6	2,661	23.4	6,703	59.0	
Male	1,221	19.6	1,777	28.6	3,222	51.8	
Female	775	15.1	883	17.2	3,482	67.7	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	42	5	10.9	
Male	25	3	13.0	
Female	17	1	7.7	

Mono

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	80	17.4	
Male	61	18.8	
Female	19	14.2	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$1,211	$265,253	
Male	1,130	347,658	
Female	81	61,634	

Monterey

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$190,190	$460	$4,956
Direct	115,063	278	2,999
Lost Productivity	75,127	182	1,958
Illness	15,094	36	393
Premature Death	60,033	145	1,564
Male	$121,578	$572	$4,122
Direct	65,897	310	2,234
Lost Productivity	55,681	262	1,888
Illness	9,757	46	331
Premature Death	45,924	216	1,557
Female	$68,612	$341	$7,729
Direct	49,166	244	5,538
Lost Productivity	19,446	97	2,190
Illness	5,337	27	601
Premature Death	14,109	70	1,589

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$115,063	$278	$2,999
Hospital	59,922	145	1,562
Ambulatory	20,724	50	540
Nursing Home Care	15,849	38	413
Prescriptions	11,268	27	294
Home Health	7,301	18	190

Population 2009	All Ages	<18	18-34	35-64	65+
Total	413,589	110,492	107,418	151,862	43,817
Male	212,451	56,366	58,273	78,693	19,119
Female	201,138	54,126	49,145	73,169	24,698

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	38,373	11.3	77,686	22.9	222,768	65.7
Male	29,496	16.9	45,458	26.1	99,242	57.0
Female	8,877	5.4	32,227	19.6	123,526	75.0
Age 12-17	1,571	4.4	4,240	11.9	29,920	83.7
Male	1,129	6.2	1,684	9.3	15,298	84.5
Female	441	2.5	2,556	14.5	14,622	83.0
Age 18+	36,802	12.1	73,446	24.2	192,848	63.6
Male	28,366	18.2	43,775	28.0	83,944	53.8
Female	8,436	5.7	29,671	20.2	108,904	74.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	2,255	304	13.5
Male	1,174	183	15.6
Female	1,081	121	11.2

Monterey

Years of Potential Life Lost

	Number of Years	Per Death
Total	5,154	16.9
Male	3,137	17.1
Female	2,017	16.7

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$60,033	$197,183
Male	45,924	250,308
Female	14,109	116,618

Napa

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$83,194	$613	$5,480
Direct	48,703	359	3,208
Lost Productivity	34,492	254	2,272
Illness	6,575	48	433
Premature Death	27,916	206	1,839
Male	$49,206	$727	$5,483
Direct	25,129	371	2,800
Lost Productivity	24,078	356	2,683
Illness	3,495	52	389
Premature Death	20,583	304	2,294
Female	$33,988	$500	$5,475
Direct	23,574	347	3,797
Lost Productivity	10,414	153	1,678
Illness	3,080	45	496
Premature Death	7,334	108	1,181

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$48,703	$359	$3,208
Hospital	20,656	152	1,361
Ambulatory	11,176	82	736
Nursing Home Care	7,776	57	512
Prescriptions	6,192	46	408
Home Health	2,902	21	191

Population 2009	All Ages	<18	18-34	35-64	65+
Total	135,663	32,324	27,500	55,500	20,339
Male	67,713	16,523	14,678	27,528	8,984
Female	67,950	15,801	12,822	27,972	11,355

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	15,182	13.1	34,342	29.7	65,929	57.1	
Male	8,974	15.6	19,943	34.8	28,440	49.6	
Female	6,208	10.7	14,399	24.8	37,489	64.5	
Age 12-17	763	6.3	949	7.8	10,402	85.9	
Male	498	8.1	538	8.7	5,130	83.2	
Female	266	4.5	411	6.9	5,272	88.6	
Age 18+	14,418	14.0	33,393	32.3	55,527	53.7	
Male	8,476	16.6	19,405	37.9	23,310	45.5	
Female	5,942	11.4	13,988	26.8	32,218	61.8	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	1,224	187	15.3	
Male	647	108	16.7	
Female	577	80	13.8	

Napa

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	2,936	15.7	
Male	1,670	15.5	
Female	1,266	15.9	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$27,916	$148,900	
Male	20,583	190,971	
Female	7,334	92,009	

Nevada

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$66,931	$680	$5,732
Direct	39,188	398	3,356
Lost Productivity	27,743	282	2,376
Illness	4,541	46	389
Premature Death	23,203	236	1,987
Male	$39,911	$819	$6,447
Direct	21,607	444	3,490
Lost Productivity	18,304	376	2,957
Illness	2,495	51	403
Premature Death	15,810	325	2,554
Female	$27,020	$544	$4,926
Direct	17,581	354	3,205
Lost Productivity	9,439	190	1,721
Illness	2,046	41	373
Premature Death	7,393	149	1,348

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$39,188	$398	$3,356
Hospital	14,106	143	1,208
Ambulatory	8,782	89	752
Nursing Home Care	8,256	84	707
Prescriptions	5,220	53	447
Home Health	2,824	29	242

Population 2009	All Ages	<18	18-34	35-64	65+
Total	98,431	19,969	15,580	43,986	18,897
Male	48,718	10,312	8,242	21,423	8,742
Female	49,713	9,656	7,339	22,563	10,155

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	11,677	13.5	21,437	24.7	53,521	61.8
Male	6,191	14.5	11,952	28.0	24,509	57.5
Female	5,485	12.5	9,485	21.6	29,012	66.0
Age 12-17	374	4.6	893	10.9	6,906	84.5
Male	265	6.2	393	9.3	3,588	84.5
Female	108	2.8	499	12.7	3,318	84.5
Age 18+	11,303	14.4	20,544	26.2	46,615	59.4
Male	5,926	15.4	11,559	30.1	20,921	54.5
Female	5,377	13.4	8,986	22.4	25,694	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	838	138	16.5
Male	429	78	18.2
Female	409	60	14.7

Nevada

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,293	16.6
Male	1,248	16.0
Female	1,045	17.4

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$23,203	$167,865
Male	15,810	202,484
Female	7,393	122,924

Orange

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$1,122,009	$374	$4,929
Direct	615,714	205	2,705
Lost Productivity	506,295	169	2,224
Illness	105,690	35	464
Premature Death	400,605	134	1,760
Male	$727,104	$489	$4,824
Direct	341,260	230	2,264
Lost Productivity	385,844	260	2,560
Illness	67,438	45	447
Premature Death	318,406	214	2,112
Female	$394,905	$261	$5,137
Direct	274,454	181	3,570
Lost Productivity	120,451	80	1,567
Illness	38,252	25	498
Premature Death	82,199	54	1,069

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$615,714	$205	$2,705
Hospital	254,653	85	1,119
Ambulatory	132,955	44	584
Nursing Home Care	111,601	37	490
Prescriptions	73,357	24	322
Home Health	43,148	14	190

Population 2009	All Ages	<18	18-34	35-64	65+
Total	2,998,815	739,150	709,451	1,206,415	343,798
Male	1,486,066	378,571	364,928	594,004	148,563
Female	1,512,749	360,579	344,523	612,411	195,235

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	227,618	9.0	559,462	22.2	1,734,380	68.8
Male	150,741	12.1	313,752	25.3	777,304	62.6
Female	76,877	6.0	245,709	19.2	957,076	74.8
Age 12-17	16,997	6.5	23,244	8.9	221,554	84.6
Male	12,267	9.1	10,484	7.8	111,553	83.1
Female	4,730	3.7	12,760	10.0	110,002	86.3
Age 18+	210,621	9.3	536,218	23.7	1,512,826	66.9
Male	138,475	12.5	303,269	27.4	665,752	60.1
Female	72,147	6.3	232,949	20.2	847,074	73.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	16,901	2,275	13.5
Male	8,308	1,370	16.5
Female	8,593	905	10.5

Orange

Years of Potential Life Lost

	Number of Years	Per Death
Total	36,837	16.2
Male	22,804	16.6
Female	14,034	15.5

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$400,605	$176,093
Male	318,406	232,408
Female	82,199	90,835

Placer

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$191,720	$557	$4,970
	Direct	116,003	337	3,007
	Lost Productivity	75,717	220	1,963
	Illness	15,122	44	392
	Premature Death	60,595	176	1,571
	Male	$118,408	$704	$5,869
	Direct	62,689	373	3,107
	Lost Productivity	55,719	331	2,762
	Illness	8,132	48	403
	Premature Death	47,586	283	2,359
	Female	$73,312	$417	$3,984
	Direct	53,315	303	2,897
	Lost Productivity	19,998	114	1,087
	Illness	6,990	40	380
	Premature Death	13,008	74	707

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$116,003	$337	$3,007
	Hospital	43,403	126	1,125
	Ambulatory	27,369	80	709
	Nursing Home Care	21,043	61	545
	Prescriptions	15,904	46	412
	Home Health	8,285	24	215

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	344,087	85,664	65,272	141,875	51,275
	Male	168,120	43,702	33,114	68,671	22,633
	Female	175,967	41,962	32,158	73,205	28,642

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	38,578	13.3	70,867	24.5	179,660	62.1
Male	20,174	14.4	38,894	27.8	80,991	57.8
Female	18,404	12.3	31,973	21.5	98,669	66.2
Age 12-17	1,392	4.5	3,362	11.0	25,929	84.5
Male	977	6.2	1,449	9.3	13,216	84.5
Female	415	2.8	1,913	12.7	12,713	84.5
Age 18+	37,186	14.4	67,505	26.1	153,731	59.5
Male	19,197	15.4	37,445	30.1	67,776	54.5
Female	17,989	13.4	30,060	22.4	85,956	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	2,517	405	16.1
Male	1,293	241	18.6
Female	1,224	165	13.5

Placer

Years of Potential Life Lost

	Number of Years	Per Death
Total	6,312	15.6
Male	3,802	15.8
Female	2,510	15.2

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$60,595	$149,551
Male	47,586	197,858
Female	13,008	78,997

Plumas

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$14,037	$700	$4,777
	Direct	9,437	470	3,211
	Lost Productivity	4,600	229	1,566
	Illness	991	49	337
	Premature Death	3,609	180	1,228
	Male	$8,135	$811	$4,587
	Direct	4,908	489	2,767
	Lost Productivity	3,228	322	1,820
	Illness	524	52	295
	Premature Death	2,704	270	1,525
	Female	$5,902	$588	$5,066
	Direct	4,529	451	3,888
	Lost Productivity	1,373	137	1,178
	Illness	467	47	401
	Premature Death	905	90	777

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$9,437	$470	$3,211
	Hospital	3,379	168	1,150
	Ambulatory	2,152	107	732
	Nursing Home Care	1,695	84	577
	Prescriptions	1,333	66	454
	Home Health	878	44	299

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	20,062	3,776	3,111	8,987	4,187
	Male	10,026	1,924	1,638	4,389	2,075
	Female	10,036	1,852	1,474	4,598	2,113

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	2,939	16.5	4,759	26.7	10,114	56.8	
Male	1,774	20.0	2,536	28.6	4,570	51.5	
Female	1,165	13.0	2,223	24.9	5,543	62.1	
Age 12-17	94	6.1	218	14.3	1,214	79.6	
Male	55	7.0	106	13.6	618	79.4	
Female	39	5.2	112	15.0	596	79.8	
Age 18+	2,845	17.5	4,541	27.9	8,900	54.6	
Male	1,719	21.2	2,430	30.0	3,952	48.8	
Female	1,126	13.8	2,111	25.8	4,947	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	220	33	14.8	
Male	122	20	16.2	
Female	98	13	13.0	

Plumas

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	484	14.9	
Male	286	14.4	
Female	198	15.5	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$3,609	$110,854	
Male	2,704	136,686	
Female	905	70,860	

Riverside

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$1,251,715	$580	$4,704
Direct	667,937	309	2,510
Lost Productivity	583,778	270	2,194
Illness	89,525	41	336
Premature Death	494,253	229	1,857
Male	$801,455	$747	$5,443
Direct	377,221	351	2,562
Lost Productivity	424,233	395	2,881
Illness	51,646	48	351
Premature Death	372,587	347	2,531
Female	$450,260	$415	$3,788
Direct	290,715	268	2,446
Lost Productivity	159,545	147	1,342
Illness	37,879	35	319
Premature Death	121,666	112	1,024

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$667,937	$309	$2,510
Hospital	265,292	123	997
Ambulatory	145,446	67	547
Nursing Home Care	111,109	51	418
Prescriptions	85,628	40	322
Home Health	60,460	28	227

Population 2009	All Ages	<18	18-34	35-64	65+
Total	2,158,398	626,281	496,791	781,378	253,948
Male	1,073,424	319,590	251,959	388,579	113,297
Female	1,084,974	306,691	244,831	392,800	140,652

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	266,100	15.1	380,246	21.6	1,110,391	63.2
Male	147,234	16.9	213,937	24.6	507,572	58.4
Female	118,866	13.4	166,309	18.7	602,820	67.9
Age 12-17	6,080	2.7	27,708	12.3	190,832	85.0
Male	4,373	3.8	15,667	13.6	94,867	82.6
Female	1,707	1.6	12,041	11.0	95,965	87.5
Age 18+	260,020	17.0	352,538	23.0	919,559	60.0
Male	142,861	19.0	198,270	26.3	412,704	54.7
Female	117,160	15.1	154,268	19.8	506,855	65.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	13,769	2,439	17.7
Male	7,171	1,444	20.1
Female	6,598	994	15.1

Riverside

Years of Potential Life Lost

	Number of Years	Per Death
Total	42,249	17.3
Male	25,152	17.4
Female	17,096	17.2

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$494,253	$202,684
Male	372,587	257,967
Female	121,666	122,374

Sacramento

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$790,670	$560	$4,386
	Direct	416,692	295	2,311
	Lost Productivity	373,978	265	2,074
	Illness	57,368	41	318
	Premature Death	316,610	224	1,756
	Male	$476,355	$689	$4,720
	Direct	219,634	318	2,176
	Lost Productivity	256,721	371	2,544
	Illness	30,702	44	304
	Premature Death	226,020	327	2,240
	Female	$314,315	$437	$3,961
	Direct	197,058	274	2,483
	Lost Productivity	117,257	163	1,478
	Illness	26,667	37	336
	Premature Death	90,590	126	1,142

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$416,692	$295	$2,311
	Hospital	192,811	137	1,070
	Ambulatory	89,905	64	499
	Nursing Home Care	52,875	37	293
	Prescriptions	49,888	35	277
	Home Health	31,213	22	173

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	1,411,402	363,848	344,798	545,767	156,989
	Male	691,550	186,442	172,706	266,120	66,283
	Female	719,852	177,407	172,093	279,647	90,705

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	180,279	15.4	242,234	20.7	749,237	63.9
Male	100,923	17.7	136,814	24.0	331,495	58.2
Female	79,355	13.2	105,420	17.5	417,742	69.3
Age 12-17	10,709	8.6	16,676	13.4	96,810	77.9
Male	7,469	11.6	13,853	21.6	42,803	66.7
Female	3,240	5.4	2,823	4.7	54,008	89.9
Age 18+	169,569	16.2	225,558	21.5	652,427	62.3
Male	93,455	18.5	122,961	24.3	288,693	57.2
Female	76,115	14.0	102,596	18.9	363,734	67.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	9,770	1,487	15.2
Male	4,880	812	16.6
Female	4,890	675	13.8

Sacramento

Years of Potential Life Lost

	Number of Years	Per Death
Total	26,534	17.8
Male	14,542	17.9
Female	11,992	17.8

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$316,610	$212,899
Male	226,020	278,377
Female	90,590	134,165

San Benito

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$26,292	$477	$5,365
Direct	13,868	252	2,830
Lost Productivity	12,424	226	2,535
Illness	2,077	38	424
Premature Death	10,347	188	2,111
Male	$17,717	$642	$4,784
Direct	7,870	285	2,125
Lost Productivity	9,848	357	2,659
Illness	1,288	47	348
Premature Death	8,560	310	2,311
Female	$8,575	$312	$7,161
Direct	5,999	218	5,010
Lost Productivity	2,576	94	2,151
Illness	789	29	659
Premature Death	1,787	65	1,493

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$13,868	$252	$2,830
Hospital	6,577	119	1,342
Ambulatory	2,798	51	571
Nursing Home Care	2,023	37	413
Prescriptions	1,512	27	309
Home Health	958	17	195

Population 2009	All Ages	<18	18-34	35-64	65+
Total	55,092	16,074	12,001	21,793	5,225
Male	27,601	8,226	6,156	10,829	2,389
Female	27,491	7,848	5,845	10,963	2,835

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	4,901	11.0	10,077	22.5	29,769	66.5	
Male	3,704	16.6	5,706	25.6	12,893	57.8	
Female	1,197	5.3	4,371	19.5	16,876	75.2	
Age 12-17	253	4.4	679	11.8	4,798	83.7	
Male	183	6.2	272	9.3	2,473	84.5	
Female	70	2.5	406	14.5	2,325	83.0	
Age 18+	4,648	11.9	9,398	24.1	24,971	64.0	
Male	3,521	18.2	5,434	28.0	10,420	53.8	
Female	1,127	5.7	3,965	20.2	14,551	74.1	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	271	46	16.9	
Male	153	32	20.8	
Female	118	14	11.9	

San Benito

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	816	17.8	
Male	575	18.1	
Female	241	17.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$10,347	$225,523	
Male	8,560	269,034	
Female	1,787	127,087	

San Bernardino

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$974,858	$482	$4,373
Direct	472,138	233	2,118
Lost Productivity	502,720	249	2,255
Illness	76,670	38	344
Premature Death	426,050	211	1,911
Male	$620,598	$617	$3,914
Direct	263,596	262	1,662
Lost Productivity	357,002	355	2,252
Illness	46,717	46	295
Premature Death	310,285	308	1,957
Female	$354,260	$349	$5,505
Direct	208,542	205	3,241
Lost Productivity	145,718	143	2,264
Illness	29,953	29	465
Premature Death	115,765	114	1,799

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$472,138	$233	$2,118
Hospital	216,260	107	970
Ambulatory	104,235	52	468
Nursing Home Care	54,425	27	244
Prescriptions	57,823	29	259
Home Health	39,395	19	177

Population 2009	All Ages	<18	18-34	35-64	65+
Total	2,022,318	596,750	502,684	743,540	179,344
Male	1,006,601	305,770	256,867	365,412	78,551
Female	1,015,717	290,980	245,817	378,128	100,792

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	222,907	13.6	365,383	22.3	1,052,236	64.1	
Male	158,556	19.5	194,560	24.0	457,988	56.5	
Female	64,351	7.8	170,824	20.6	594,248	71.6	
Age 12-17	8,657	4.0	17,907	8.3	188,394	87.6	
Male	6,598	6.0	12,984	11.8	90,690	82.2	
Female	2,059	2.0	4,923	4.7	97,704	93.3	
Age 18+	214,250	15.0	347,476	24.4	863,841	60.6	
Male	151,958	21.7	181,575	25.9	367,298	52.4	
Female	62,293	8.6	165,901	22.9	496,544	68.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	11,869	1,899	16.0	
Male	6,227	1,102	17.7	
Female	5,642	797	14.1	

San Bernardino

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	34,633	18.2	
Male	20,081	18.2	
Female	14,552	18.3	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$426,050	$224,366	
Male	310,285	281,598	
Female	115,765	145,244	

San Diego

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$1,458,123	$474	$4,638
Direct	813,490	264	2,587
Lost Productivity	644,633	209	2,050
Illness	118,904	39	378
Premature Death	525,729	171	1,672
Male	$955,549	$618	$4,777
Direct	485,216	314	2,426
Lost Productivity	470,333	304	2,351
Illness	68,421	44	342
Premature Death	401,912	260	2,009
Female	$502,574	$328	$4,394
Direct	328,274	214	2,870
Lost Productivity	174,300	114	1,524
Illness	50,483	33	441
Premature Death	123,817	81	1,083

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$813,490	$264	$2,587
Hospital	357,047	116	1,136
Ambulatory	192,204	62	611
Nursing Home Care	92,530	30	294
Prescriptions	104,295	34	332
Home Health	67,414	22	214

Population 2009	All Ages	<18	18-34	35-64	65+
Total	3,077,632	707,815	839,547	1,181,845	348,425
Male	1,546,121	360,141	448,253	586,783	150,944
Female	1,531,511	347,675	391,293	595,062	197,481

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	314,399	12.1	595,070	22.8	1,696,520	65.1	
Male	200,033	15.3	329,125	25.2	777,288	59.5	
Female	114,366	8.8	265,945	20.5	919,232	70.7	
Age 12-17	7,975	3.4	27,864	11.8	200,334	84.8	
Male	4,614	3.8	16,047	13.3	99,806	82.8	
Female	3,361	2.9	11,817	10.2	100,528	86.9	
Age 18+	306,425	12.9	567,206	23.9	1,496,186	63.1	
Male	195,420	16.5	313,077	26.4	677,483	57.1	
Female	111,005	9.4	254,128	21.5	818,704	69.2	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	19,075	2,753	14.4	
Male	9,780	1,681	17.2	
Female	9,295	1,072	11.5	

San Diego

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	46,012	16.7	
Male	28,255	16.8	
Female	17,757	16.6	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$525,729	$190,981	
Male	401,912	239,161	
Female	123,817	115,471	

San Diego

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$380,164	$474	$4,739
Direct	213,645	266	2,663
Lost Productivity	166,519	208	2,076
Illness	33,272	41	415
Premature Death	133,248	166	1,661
Male	$293,289	$721	$4,583
Direct	157,144	386	2,456
Lost Productivity	136,145	335	2,127
Illness	22,768	56	356
Premature Death	113,377	279	1,772
Female	$86,875	$220	$5,354
Direct	56,501	143	3,482
Lost Productivity	30,374	77	1,872
Illness	10,504	27	647
Premature Death	19,871	50	1,225

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$213,645	$266	$2,663
Hospital	102,540	128	1,278
Ambulatory	40,315	50	503
Nursing Home Care	35,500	44	443
Prescriptions	20,795	26	259
Home Health	14,496	18	181

Population 2009	All Ages	<18	18-34	35-64	65+
Total	801,798	104,765	246,244	341,443	109,346
Male	406,809	53,163	123,563	182,744	47,339
Female	394,989	51,602	122,681	158,699	62,008

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	80,220	11.0	169,746	23.3	478,511	65.7
Male	63,994	17.3	96,619	26.2	208,856	56.5
Female	16,225	4.5	73,127	20.4	269,655	75.1
Age 12-17	226	0.7	6,665	21.2	24,552	78.1
Male	51	0.3	3,078	19.5	12,694	80.2
Female	175	1.1	3,587	23.0	11,859	75.9
Age 18+	79,994	11.5	163,081	23.4	453,958	65.1
Male	63,943	18.1	93,541	26.5	196,162	55.5
Female	16,051	4.7	69,540	20.3	257,796	75.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	5,541	668	12.1
Male	2,898	487	16.8
Female	2,643	181	6.8

San Francisco

Years of Potential Life Lost

	Number of Years	Per Death
Total	11,052	16.5
Male	8,149	16.7
Female	2,904	16.0

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$133,248	$199,443
Male	113,377	232,730
Female	19,871	109,820

San Joaquin

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$395,397	$581	$5,475
Direct	204,351	300	2,830
Lost Productivity	191,046	281	2,645
Illness	27,610	41	382
Premature Death	163,436	240	2,263
Male	$245,246	$723	$6,353
Direct	110,643	326	2,866
Lost Productivity	134,603	397	3,487
Illness	15,001	44	389
Premature Death	119,603	353	3,098
Female	$150,151	$440	$4,467
Direct	93,708	274	2,788
Lost Productivity	56,442	165	1,679
Illness	12,609	37	375
Premature Death	43,834	128	1,304

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$204,351	$300	$2,830
Hospital	88,221	130	1,222
Ambulatory	46,370	68	642
Nursing Home Care	30,602	45	424
Prescriptions	26,144	38	362
Home Health	13,013	19	180

Population 2009	All Ages	<18	18-34	35-64	65+
Total	680,420	201,478	159,510	249,221	70,211
Male	338,975	103,459	81,849	123,483	30,183
Female	341,445	98,019	77,661	125,737	40,028

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	72,219	13.2	133,165	24.2	343,776	62.6
Male	38,605	14.2	74,241	27.3	158,938	58.5
Female	33,614	12.1	58,924	21.2	184,837	66.6
Age 12-17	3,202	4.6	7,678	10.9	59,337	84.5
Male	2,266	6.2	3,360	9.3	30,642	84.5
Female	936	2.8	4,318	12.7	28,695	84.5
Age 18+	69,017	14.4	125,487	26.2	284,438	59.4
Male	36,339	15.4	70,881	30.1	128,296	54.5
Female	32,678	13.4	54,606	22.4	156,142	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	4,494	705	15.7
Male	2,304	409	17.8
Female	2,190	295	13.5

San Joaquin

Years of Potential Life Lost

	Number of Years	Per Death
Total	12,884	18.3
Male	7,487	18.3
Female	5,397	18.3

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$163,436	$231,943
Male	119,603	292,212
Female	43,834	148,418

San Luis Obispo

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$123,633	$461	$4,872
Direct	71,465	266	2,816
Lost Productivity	52,167	194	2,056
Illness	10,712	40	422
Premature Death	41,456	155	1,634
Male	$76,465	$557	$4,882
Direct	39,348	286	2,512
Lost Productivity	37,117	270	2,370
Illness	6,438	47	411
Premature Death	30,679	223	1,959
Female	$47,168	$361	$4,857
Direct	32,117	245	3,307
Lost Productivity	15,050	115	1,550
Illness	4,274	33	440
Premature Death	10,776	82	1,110

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$71,465	$266	$2,816
Hospital	26,133	97	1,030
Ambulatory	17,595	66	693
Nursing Home Care	12,727	47	502
Prescriptions	9,909	37	391
Home Health	5,101	19	201

Population 2009	All Ages	<18	18-34	35-64	65+
Total	268,223	49,841	72,634	105,551	40,197
Male	137,391	25,388	40,161	53,895	17,948
Female	130,832	24,453	32,473	51,656	22,249

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	25,374	10.7	58,644	24.8	152,789	64.5	
Male	15,663	12.9	34,900	28.7	70,882	58.4	
Female	9,711	8.4	23,744	20.6	81,907	71.0	
Age 12-17	621	3.4	1,500	8.1	16,303	88.5	
Male	292	3.1	1,169	12.4	7,980	84.5	
Female	329	3.7	331	3.7	8,323	92.6	
Age 18+	24,753	11.3	57,143	26.2	136,486	62.5	
Male	15,371	13.7	33,731	30.1	62,902	56.2	
Female	9,382	8.8	23,413	22.0	73,584	69.2	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	2,075	302	14.5	
Male	1,031	170	16.5	
Female	1,044	132	12.6	

San Luis Obispo

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	4,615	15.3	
Male	2,618	15.4	
Female	1,997	15.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$41,456	$137,467	
Male	30,679	180,793	
Female	10,776	81,716	

San Mateo

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$375,791	$525	$4,034
	Direct	238,408	333	2,559
	Lost Productivity	137,383	192	1,475
	Illness	29,556	41	317
	Premature Death	107,828	151	1,158
	Male	$246,357	$699	$3,706
	Direct	145,925	414	2,195
	Lost Productivity	100,433	285	1,511
	Illness	17,077	48	257
	Premature Death	83,355	237	1,254
	Female	$129,433	$356	$4,851
	Direct	92,483	254	3,466
	Lost Productivity	36,951	102	1,385
	Illness	12,479	34	468
	Premature Death	24,472	67	917

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$238,408	$333	$2,559
	Hospital	109,056	152	1,171
	Ambulatory	50,573	71	543
	Nursing Home Care	34,889	49	375
	Prescriptions	27,186	38	292
	Home Health	16,704	23	179

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	716,263	159,236	154,711	307,269	95,047
	Male	352,328	81,406	79,941	150,608	40,372
	Female	363,935	77,830	74,770	156,660	54,675

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	93,152	15.3	129,415	21.3	385,553	63.4	
Male	66,469	22.4	64,194	21.6	166,391	56.0	
Female	26,682	8.6	65,221	21.0	219,161	70.5	
Age 12-17	2,661	5.2	5,496	10.8	42,935	84.0	
Male	822	3.1	2,786	10.7	22,525	86.2	
Female	1,839	7.4	2,709	10.9	20,410	81.8	
Age 18+	90,491	16.2	123,919	22.2	342,618	61.5	
Male	65,648	24.2	61,408	22.7	143,866	53.1	
Female	24,843	8.7	62,511	21.8	198,751	69.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	4,491	664	14.8	
Male	2,225	379	17.0	
Female	2,266	284	12.5	

San Mateo

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	10,588	16.0	
Male	6,116	16.1	
Female	4,472	15.7	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	107,828	$163	
Male	83,355	220	
Female	24,472	86	

Santa Barbara

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$180,882	$428	$4,784
Direct	102,339	242	2,707
Lost Productivity	78,543	186	2,077
Illness	15,676	37	415
Premature Death	62,867	149	1,663
Male	$111,851	$527	$4,898
Direct	55,755	263	2,441
Lost Productivity	56,096	264	2,456
Illness	9,237	44	404
Premature Death	46,858	221	2,052
Female	$69,032	$328	$4,610
Direct	46,585	222	3,111
Lost Productivity	22,447	107	1,499
Illness	6,439	31	430
Premature Death	16,008	76	1,069

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$102,339	$242	$2,707
Hospital	40,145	95	1,062
Ambulatory	24,971	59	660
Nursing Home Care	16,358	39	433
Prescriptions	13,862	33	367
Home Health	7,004	17	185

Population 2009	All Ages	<18	18-34	35-64	65+
Total	422,422	97,138	120,506	150,898	53,880
Male	212,127	49,688	63,373	75,659	23,408
Female	210,295	47,450	57,133	75,240	30,472

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	37,811	10.5	87,558	24.3	234,217	65.1	
Male	22,838	12.7	51,103	28.4	106,130	58.9	
Female	14,973	8.3	36,454	20.3	128,087	71.4	
Age 12-17	1,156	3.4	2,798	8.2	30,347	88.5	
Male	545	3.1	2,183	12.4	14,903	84.5	
Female	611	3.7	614	3.7	15,444	92.6	
Age 18+	36,654	11.3	84,760	26.1	203,870	62.7	
Male	22,292	13.7	48,920	30.1	91,227	56.2	
Female	14,362	8.8	35,840	22.0	112,643	69.2	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	2,840	395	13.9	
Male	1,426	216	15.2	
Female	1,414	179	12.7	

Santa Barbara

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	6,234	15.8	
Male	3,494	16.2	
Female	2,739	15.3	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$62,867	$159,031	
Male	46,858	216,882	
Female	16,008	89,304	

Santa Clara

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$689,796	$389	$3,414
Direct	431,813	243	2,137
Lost Productivity	257,984	145	1,277
Illness	64,111	36	317
Premature Death	193,873	109	960
Male	$486,925	$546	$3,727
Direct	290,182	325	2,221
Lost Productivity	196,743	220	1,506
Illness	38,775	43	297
Premature Death	157,968	177	1,209
Female	$202,872	$230	$2,840
Direct	141,631	160	1,983
Lost Productivity	61,241	69	857
Illness	25,336	29	355
Premature Death	35,905	41	503

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$431,813	$243	$2,137
Hospital	196,397	111	972
Ambulatory	90,247	51	447
Nursing Home Care	64,694	36	320
Prescriptions	50,630	29	251
Home Health	29,844	17	148

Population 2009	All Ages	<18	18-34	35-64	65+
Total	1,774,889	430,094	424,886	725,338	194,571
Male	892,288	220,288	221,444	365,785	84,770
Female	882,601	209,806	203,442	359,553	109,801

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	202,055	13.6	271,792	18.3	1,007,798	68.0
Male	130,632	17.6	139,829	18.8	471,922	63.6
Female	71,423	9.7	131,962	17.9	535,875	72.5
Age 12-17	13,245	9.7	10,861	7.9	112,744	82.4
Male	6,065	8.6	5,440	7.7	58,880	83.7
Female	7,180	10.8	5,421	8.2	53,864	81.0
Age 18+	188,810	14.0	260,931	19.4	895,054	66.6
Male	124,568	18.5	134,389	20.0	413,042	61.5
Female	64,243	9.5	126,541	18.8	482,012	71.6

Deaths

		Due to Smoking	
	Total	Number	%
Total	8,927	1,119	12.5
Male	4,459	729	16.3
Female	4,468	391	8.7

Santa Clara

Years of Potential Life Lost

	Number of Years	Per Death
Total	17,810	15.9
Male	11,704	16.1
Female	6,106	15.6

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$193,873	$173,185
Male	157,968	216,749
Female	35,905	91,911

Santa Cruz

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$136,011	$519	$5,323
	Direct	73,842	282	2,890
	Lost Productivity	62,169	237	2,433
	Illness	10,451	40	409
	Premature Death	51,718	197	2,024
	Male	$88,430	$676	$4,580
	Direct	41,533	318	2,151
	Lost Productivity	46,897	359	2,429
	Illness	6,547	50	339
	Premature Death	40,350	309	2,090
	Female	$47,581	$363	$7,622
	Direct	32,309	246	5,176
	Lost Productivity	15,272	116	2,446
	Illness	3,904	30	625
	Premature Death	11,368	87	1,821

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$73,842	$282	$2,890
	Hospital	35,097	134	1,374
	Ambulatory	14,355	55	562
	Nursing Home Care	11,673	45	457
	Prescriptions	7,760	30	304
	Home Health	4,958	19	194

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	261,911	54,196	70,973	108,268	28,473
	Male	130,734	27,757	36,558	54,088	12,331
	Female	131,176	26,440	34,415	54,180	16,142

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	25,551	11.3	52,251	23.1	148,710	65.7
Male	19,308	17.2	29,765	26.5	63,421	56.4
Female	6,243	5.5	22,485	19.7	85,289	74.8
Age 12-17	826	4.4	2,231	11.9	15,740	83.7
Male	593	6.2	885	9.3	8,039	84.5
Female	232	2.5	1,346	14.5	7,702	83.0
Age 18+	24,725	11.9	50,020	24.1	132,970	64.0
Male	18,715	18.2	28,881	28.0	55,382	53.8
Female	6,010	5.7	21,139	20.2	77,588	74.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	1,700	251	14.7
Male	858	146	17.0
Female	842	105	12.4

Santa Cruz

Years of Potential Life Lost

	Number of Years	Per Death
Total	4,322	17.2
Male	2,622	17.9
Female	1,700	16.3

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$51,718	$206,308
Male	40,350	276,088
Female	11,368	108,750

Shasta

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$148,643	$840	$6,050
Direct	75,742	428	3,083
Lost Productivity	72,901	412	2,967
Illness	8,240	47	335
Premature Death	64,661	366	2,632
Male	$91,262	$1,050	$6,285
Direct	40,271	463	2,773
Lost Productivity	50,990	587	3,512
Illness	4,307	50	297
Premature Death	46,684	537	3,215
Female	$57,381	$638	$5,711
Direct	35,471	394	3,530
Lost Productivity	21,911	244	2,181
Illness	3,933	44	391
Premature Death	17,978	200	1,789

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$75,742	$428	$3,083
Hospital	31,276	177	1,273
Ambulatory	16,717	95	680
Nursing Home Care	11,217	63	457
Prescriptions	10,106	57	411
Home Health	6,426	36	262

Population 2009	All Ages	<18	18-34	35-64	65+
Total	176,880	40,905	35,515	71,106	29,353
Male	86,917	21,139	18,065	34,483	13,230
Female	89,963	19,767	17,450	36,623	16,123

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	24,567	16.2	40,043	26.4	86,844	57.3	
Male	14,520	19.7	20,823	28.2	38,470	52.1	
Female	10,047	12.9	19,219	24.8	48,374	62.3	
Age 12-17	953	6.2	2,207	14.3	12,319	79.6	
Male	564	7.0	1,092	13.6	6,380	79.4	
Female	390	5.2	1,115	15.0	5,939	79.8	
Age 18+	23,614	17.4	37,835	27.8	74,525	54.8	
Male	13,957	21.2	19,731	30.0	32,090	48.8	
Female	9,658	13.8	18,104	25.8	42,435	60.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	1,913	366	19.1	
Male	1,007	211	21.0	
Female	906	154	17.0	

Shasta

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	6,201	16.9	
Male	3,563	16.9	
Female	2,638	17.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$64,661	$176,727	
Male	46,684	220,771	
Female	17,978	116,416	

Sierra

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$2,617	$807	$6,573
Direct	1,414	436	3,551
Lost Productivity	1,203	371	3,022
Illness	161	50	403
Premature Death	1,042	322	2,619
Male	$1,650	$1,005	$7,638
Direct	761	463	3,521
Lost Productivity	889	542	4,117
Illness	91	55	420
Premature Death	798	486	3,697
Female	$967	$604	$5,310
Direct	653	408	3,587
Lost Productivity	314	196	1,723
Illness	70	44	383
Premature Death	244	152	1,340

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$1,414	$436	$3,551
Hospital	498	154	1,252
Ambulatory	312	96	784
Nursing Home Care	314	97	789
Prescriptions	187	58	470
Home Health	102	31	256

Population 2009	All Ages	<18	18-34	35-64	65+
Total	3,242	558	419	1,592	674
Male	1,642	293	220	799	330
Female	1,600	265	199	792	344

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	398	13.7	730	25.1	1,785	61.3
Male	216	14.6	418	28.3	842	57.1
Female	182	12.7	313	21.7	944	65.6
Age 12-17	11	4.7	25	10.8	194	84.5
Male	8	6.2	12	9.3	107	84.5
Female	3	2.8	13	12.7	87	84.5
Age 18+	387	14.4	705	26.3	1,591	59.3
Male	208	15.4	406	30.1	735	54.5
Female	179	13.4	300	22.4	856	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	45	9	18.9
Male	19	6	29.0
Female	26	3	11.6

Sierra

Years of Potential Life Lost

	Number of Years	Per Death
Total	142	16.7
Male	87	15.9
Female	55	18.2

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$1,042	$122,319
Male	798	145,127
Female	244	80,771

Siskiyou

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$39,754	$884	$6,236
Direct	18,434	410	2,892
Lost Productivity	21,319	474	3,345
Illness	2,139	48	336
Premature Death	19,180	427	3,009
Male	$24,939	$1,115	$6,527
Direct	9,898	443	2,591
Lost Productivity	15,040	673	3,937
Illness	1,128	50	295
Premature Death	13,913	622	3,641
Female	$14,815	$656	$5,801
Direct	8,536	378	3,343
Lost Productivity	6,279	278	2,459
Illness	1,011	45	396
Premature Death	5,268	233	2,063

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$18,434	$410	$2,892
Hospital	5,775	128	906
Ambulatory	4,568	102	717
Nursing Home Care	3,439	77	540
Prescriptions	2,814	63	441
Home Health	1,837	41	288

Population 2009	All Ages	<18	18-34	35-64	65+
Total	44,949	9,682	7,397	19,113	8,757
Male	22,360	5,007	3,862	9,321	4,170
Female	22,589	4,675	3,535	9,791	4,587

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	6,374	16.4	10,349	26.6	22,224	57.1
Male	3,821	19.8	5,474	28.3	10,036	51.9
Female	2,554	13.0	4,875	24.9	12,188	62.1
Age 12-17	228	6.2	524	14.2	2,929	79.6
Male	139	7.0	269	13.6	1,570	79.4
Female	89	5.2	255	15.0	1,359	79.8
Age 18+	6,147	17.4	9,826	27.9	19,295	54.7
Male	3,682	21.2	5,206	30.0	8,466	48.8
Female	2,465	13.8	4,620	25.8	10,829	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	551	102	18.4
Male	296	61	20.5
Female	255	41	16.1

Siskiyou

Years of Potential Life Lost

	Number of Years	Per Death
Total	1,777	17.5
Male	1,026	16.9
Female	750	18.3

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$19,180	$188,726
Male	13,913	229,389
Female	5,268	128,544

Solano

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$244,607	$593	$4,629
	Direct	134,917	327	2,553
	Lost Productivity	109,690	266	2,076
	Illness	16,569	40	314
	Premature Death	93,120	226	1,762
	Male	$163,930	$795	$4,318
	Direct	84,408	409	2,223
	Lost Productivity	79,522	385	2,095
	Illness	9,737	47	256
	Premature Death	69,785	338	1,838
	Female	$80,677	$391	$5,422
	Direct	50,509	245	3,394
	Lost Productivity	30,168	146	2,027
	Illness	6,832	33	459
	Premature Death	23,336	113	1,568

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$134,917	$327	$2,553
	Hospital	65,705	159	1,243
	Ambulatory	27,541	67	521
	Nursing Home Care	18,513	45	350
	Prescriptions	14,493	35	274
	Home Health	8,665	21	164

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	412,487	101,901	94,178	170,356	46,052
	Male	206,322	52,050	49,304	84,928	20,041
	Female	206,165	49,851	44,874	85,428	26,012

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	52,847	15.2	73,029	21.1	221,046	63.7	
Male	37,967	22.0	36,950	21.4	97,950	56.7	
Female	14,880	8.5	36,079	20.7	123,095	70.7	
Age 12-17	1,892	5.2	3,909	10.8	30,535	84.0	
Male	585	3.1	1,983	10.7	16,028	86.2	
Female	1,307	7.4	1,926	10.9	14,507	81.8	
Age 18+	50,955	16.4	69,121	22.3	190,510	61.3	
Male	37,382	24.2	34,968	22.7	81,922	53.1	
Female	13,573	8.7	34,153	21.8	108,588	69.5	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	2,800	425	15.2	
Male	1,429	262	18.3	
Female	1,371	164	11.9	

Solano

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	7,618	17.9	
Male	4,656	17.8	
Female	2,962	18.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$93,120	$218,921	
Male	69,785	266,584	
Female	23,336	142,650	

Amador

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$277,741	$578	$5,115
Direct	156,589	326	2,884
Lost Productivity	121,152	252	2,231
Illness	23,899	50	440
Premature Death	97,254	202	1,791
Male	$158,287	$669	$5,002
Direct	76,386	323	2,414
Lost Productivity	81,901	346	2,588
Illness	12,525	53	396
Premature Death	69,376	293	2,193
Female	$119,455	$490	$5,272
Direct	80,203	329	3,539
Lost Productivity	39,251	161	1,732
Illness	11,374	47	502
Premature Death	27,878	114	1,230

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$156,589	$326	$2,884
Hospital	58,229	121	1,072
Ambulatory	39,760	83	732
Nursing Home Care	26,942	56	496
Prescriptions	21,721	45	400
Home Health	9,936	21	183

Population 2009	All Ages	<18	18-34	35-64	65+
Total	480,597	107,640	105,532	202,146	65,278
Male	236,627	55,182	54,902	98,554	27,989
Female	243,970	52,458	50,630	103,592	37,290

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	54,302	13.2	123,175	29.9	234,032	56.9	
Male	31,642	15.7	70,510	35.0	99,107	49.2	
Female	22,660	10.8	52,665	25.0	134,925	64.2	
Age 12-17	2,436	6.3	3,024	7.8	33,093	85.8	
Male	1,599	8.1	1,730	8.7	16,486	83.2	
Female	837	4.5	1,293	6.9	16,608	88.6	
Age 18+	51,866	13.9	120,152	32.2	200,939	53.9	
Male	30,043	16.6	68,780	37.9	82,621	45.5	
Female	21,823	11.4	51,372	26.8	118,317	61.8	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	3,770	592	15.7	
Male	1,789	314	17.6	
Female	1,981	278	14.0	

Sonoma

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	9,584	16.2	
Male	5,112	16.3	
Female	4,472	16.1	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$97,254	$164,279	
Male	69,376	220,676	
Female	27,878	100,415	

Stanislaus

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$278,274	$543	$5,092
Direct	142,936	279	2,615
Lost Productivity	135,339	264	2,476
Illness	18,633	36	341
Premature Death	116,705	228	2,135
Male	$181,925	$718	$5,587
Direct	80,827	319	2,482
Lost Productivity	101,098	399	3,105
Illness	11,423	45	351
Premature Death	89,675	354	2,754
Female	$96,349	$372	$4,362
Direct	62,108	240	2,812
Lost Productivity	34,241	132	1,550
Illness	7,211	28	326
Premature Death	27,030	104	1,224

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$142,936	$279	$2,615
Hospital	72,020	141	1,318
Ambulatory	26,172	51	479
Nursing Home Care	16,573	32	303
Prescriptions	15,383	30	281
Home Health	12,788	25	234

Population 2009	All Ages	<18	18-34	35-64	65+
Total	512,051	147,604	122,425	187,842	54,181
Male	253,256	75,974	61,748	92,243	23,291
Female	258,795	71,629	60,677	95,599	30,890

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	54,650	13.1	89,232	21.4	272,191	65.4
Male	32,564	15.9	55,250	27.1	116,427	57.0
Female	22,086	10.4	33,982	16.0	155,763	73.5
Age 12-17	2,774	5.4	6,180	12.0	42,672	82.7
Male	2,278	8.5	4,064	15.1	20,618	76.5
Female	496	2.0	2,115	8.6	22,054	89.4
Age 18+	51,876	14.2	83,052	22.8	229,519	63.0
Male	30,286	17.1	51,186	28.9	95,809	54.0
Female	21,590	11.5	31,866	17.0	133,710	71.4

Deaths

		Due to Smoking	
	Total	Number	%
Total	3,428	512	14.9
Male	1,731	309	17.9
Female	1,697	203	11.9

Stanislaus

Years of Potential Life Lost

	Number of Years	Per Death
Total	9,332	18.2
Male	5,705	18.4
Female	3,627	17.9

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$116,705	$227,888
Male	89,675	289,861
Female	27,030	133,322

Amador

Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$56,304	$597	$5,507
	Direct	30,384	322	2,972
	Lost Productivity	25,920	275	2,535
	Illness	3,842	41	376
	Premature Death	22,077	234	2,159
	Male	$35,264	$753	$6,488
	Direct	16,528	353	3,041
	Lost Productivity	18,736	400	3,447
	Illness	2,084	45	384
	Premature Death	16,652	356	3,064
	Female	$21,040	$443	$4,393
	Direct	13,856	291	2,893
	Lost Productivity	7,184	151	1,500
	Illness	1,758	37	367
	Premature Death	5,426	114	1,133

Direct Cost of Smoking		Amount (1,000)	Per Resident	Per Smoker
	Total	$30,384	$322	$2,972
	Hospital	12,928	137	1,265
	Ambulatory	6,735	71	659
	Nursing Home Care	4,869	52	476
	Prescriptions	3,861	41	378
	Home Health	1,991	21	195

Population 2009		All Ages	<18	18-34	35-64	65+
	Total	94,371	26,235	21,490	34,719	11,926
	Male	46,825	13,493	11,002	17,094	5,236
	Female	47,546	12,742	10,488	17,625	6,690

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	10,224	13.3	18,811	24.4	48,016	62.3
Male	5,435	14.3	10,465	27.5	22,107	58.2
Female	4,789	12.3	8,347	21.4	25,910	66.4
Age 12-17	409	4.6	973	10.9	7,535	84.5
Male	292	6.2	433	9.3	3,949	84.5
Female	117	2.8	540	12.7	3,585	84.5
Age 18+	9,815	14.4	17,839	26.2	40,482	59.4
Male	5,143	15.4	10,032	30.1	18,158	54.5
Female	4,672	13.4	7,807	22.4	22,324	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	700	127	18.1
Male	355	71	20.0
Female	345	56	16.1

Sutter

Years of Potential Life Lost

	Number of Years	Per Death
Total	2,110	16.7
Male	1,206	17.0
Female	904	16.3

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$22,077	$174,303
Male	16,652	234,048
Female	5,426	97,736

Tehama

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$48,862	$774	$5,728
Direct	24,917	395	2,921
Lost Productivity	23,945	379	2,807
Illness	2,867	45	336
Premature Death	21,078	334	2,471
Male	$30,237	$962	$5,917
Direct	13,321	424	2,607
Lost Productivity	16,916	538	3,310
Illness	1,520	48	297
Premature Death	15,396	490	3,013
Female	$18,624	$588	$5,445
Direct	11,596	366	3,390
Lost Productivity	7,029	222	2,055
Illness	1,347	42	394
Premature Death	5,682	179	1,661

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$24,917	$395	$2,921
Hospital	9,750	154	1,143
Ambulatory	5,749	91	674
Nursing Home Care	3,736	59	438
Prescriptions	3,474	55	407
Home Health	2,208	35	259

Population 2009	All Ages	<18	18-34	35-64	65+
Total	63,121	16,245	12,308	24,622	9,946
Male	31,424	8,329	6,376	12,135	4,584
Female	31,697	7,916	5,932	12,486	5,362

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	8,531	16.2	13,894	26.4	30,291	57.5
Male	5,111	19.6	7,336	28.1	13,650	52.3
Female	3,420	12.8	6,559	24.6	16,641	62.5
Age 12-17	359	6.1	833	14.3	4,648	79.6
Male	210	7.0	408	13.6	2,383	79.4
Female	149	5.2	425	15.0	2,265	79.8
Age 18+	8,172	17.4	13,061	27.9	25,643	54.7
Male	4,900	21.2	6,928	30.0	11,267	48.8
Female	3,272	13.8	6,133	25.8	14,376	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	578	111	19.2
Male	316	67	21.2
Female	262	44	16.7

Tehama

Years of Potential Life Lost

	Number of Years	Per Death
Total	1,933	17.4
Male	1,138	17.0
Female	795	18.1

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$21,078	$190,024
Male	15,396	229,516
Female	5,682	129,599

Trinity

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$12,716	$923	$6,265
Direct	6,544	475	3,224
Lost Productivity	6,172	448	3,041
Illness	699	51	344
Premature Death	5,473	397	2,696
Male	$8,436	$1,188	$6,693
Direct	3,830	539	3,039
Lost Productivity	4,606	649	3,654
Illness	383	54	304
Premature Death	4,223	595	3,350
Female	$4,280	$642	$5,565
Direct	2,714	407	3,528
Lost Productivity	1,566	235	2,036
Illness	316	47	411
Premature Death	1,250	187	1,625

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$6,544	$475	$3,224
Hospital	2,428	176	1,196
Ambulatory	1,474	107	726
Nursing Home Care	1,136	83	560
Prescriptions	911	66	449
Home Health	596	43	294

Population 2009	All Ages	<18	18-34	35-64	65+
Total	13,770	2,615	2,075	6,351	2,729
12,805	7,101	1,336	1,131	3,238	1,397
12,006	6,669	1,280	944	3,113	1,332

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	2,030	16.6	3,271	26.8	6,914	56.6
Male	1,260	20.0	1,801	28.6	3,234	51.4
Female	769	13.0	1,469	24.8	3,680	62.2
Age 12-17	65	6.1	151	14.3	844	79.6
Male	37	7.0	72	13.6	421	79.4
Female	28	5.2	79	15.0	422	79.8
Age 18+	1,965	17.6	3,119	28.0	6,071	54.4
Male	1,223	21.2	1,729	30.0	2,813	48.8
Female	741	13.8	1,390	25.8	3,258	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	161	36	22.2
Male	92	26	28.5
Female	69	9	13.7

Trinity

Years of Potential Life Lost

	Number of Years	Per Death
Total	580	16.2
Male	404	15.4
Female	176	18.6

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$5,473	$153,089
Male	4,223	161
Female	1,250	132

Tulare

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$218,086	$497	$4,117
Direct	109,370	249	2,065
Lost Productivity	108,716	248	2,052
Illness	15,886	36	300
Premature Death	92,830	212	1,753
Male	$140,969	$642	$4,753
Direct	63,381	289	2,137
Lost Productivity	77,587	353	2,616
Illness	8,638	39	291
Premature Death	68,950	314	2,325
Female	$77,117	$352	$3,308
Direct	45,988	210	1,973
Lost Productivity	31,128	142	1,335
Illness	7,248	33	311
Premature Death	23,880	109	1,025

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$109,370	$249	$2,065
Hospital	47,896	109	904
Ambulatory	22,897	52	432
Nursing Home Care	13,780	31	260
Prescriptions	13,058	30	247
Home Health	11,739	27	222

Population 2009	All Ages	<18	18-34	35-64	65+
Total	438,407	143,747	107,915	145,601	41,144
Male	219,489	73,463	55,438	72,407	18,181
Female	218,918	70,284	52,477	73,194	22,963

	Currently Smoke		Formerly Smoked		Never Smoked		**Smoking Prevalence**
	Number	%	Number	%	Number	%	
Total	52,968	15.5	74,039	21.6	215,248	62.9	
Male	29,659	17.4	44,997	26.4	95,869	56.2	
Female	23,309	13.6	29,042	16.9	119,379	69.5	
Age 12-17	1,901	4.0	6,770	14.2	38,923	81.8	
Male	994	4.1	3,270	13.3	20,235	82.6	
Female	908	3.9	3,500	15.2	18,688	80.9	
Age 18+	51,067	17.3	67,269	22.8	176,325	59.8	
Male	28,665	19.6	41,727	28.6	75,634	51.8	
Female	22,401	15.1	25,541	17.2	100,691	67.7	

		Due to Smoking		**Deaths**
	Total	Number	%	
Total	2,659	434	16.3	
Male	1,381	259	18.8	
Female	1,278	175	13.7	

Tulare

	Number of Years	Per Death	**Years of Potential Life Lost**
Total	7,698	17.7	
Male	4,582	17.7	
Female	3,116	17.8	

	Amount (1,000)	Per Death	**Lost Productivity from Premature Death**
Total	$92,830	$213,705	
Male	68,950	265,986	
Female	23,880	136,334	

Tuolumne

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$44,121	$798	$6,536
Direct	25,439	460	3,768
Lost Productivity	18,682	338	2,767
Illness	2,536	46	376
Premature Death	16,146	292	2,392
Male	$26,220	$896	$6,808
Direct	14,558	497	3,780
Lost Productivity	11,662	398	3,028
Illness	1,513	52	393
Premature Death	10,149	347	2,635
Female	$17,901	$689	$6,174
Direct	10,881	419	3,753
Lost Productivity	7,020	270	2,421
Illness	1,023	39	353
Premature Death	5,997	231	2,068

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$25,439	$460	$3,768
Hospital	11,339	205	1,680
Ambulatory	4,882	88	723
Nursing Home Care	4,665	84	691
Prescriptions	2,930	53	434
Home Health	1,623	29	240

Population 2009	All Ages	<18	18-34	35-64	65+
Total	55,257	9,922	10,225	23,815	11,296
Male	29,272	5,143	6,172	12,680	5,277
Female	25,985	4,778	4,053	11,135	6,019

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	6,751	13.7	12,452	25.3	30,096	61.0
Male	3,851	14.7	7,452	28.5	14,877	56.8
Female	2,900	12.5	5,000	21.6	15,219	65.8
Age 12-17	181	4.6	433	10.9	3,349	84.5
Male	128	6.2	190	9.3	1,732	84.5
Female	53	2.8	243	12.7	1,617	84.5
Age 18+	6,570	14.5	12,019	26.5	26,747	59.0
Male	3,723	15.4	7,262	30.1	13,144	54.5
Female	2,847	13.4	4,757	22.4	13,603	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	555	94	16.9
Male	284	57	20.2
Female	271	36	13.5

Tuolumne

Years of Potential Life Lost

	Number of Years	Per Death
Total	1,579	16.8
Male	899	15.6
Female	680	18.6

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$16,146	$171,805
Male	10,149	176,555
Female	5,997	164,323

Ventura

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$360,857	$441	$5,111
Direct	204,423	250	2,895
Lost Productivity	156,434	191	2,216
Illness	31,970	39	453
Premature Death	124,465	152	1,763
Male	$216,466	$532	$5,136
Direct	107,304	264	2,546
Lost Productivity	109,161	268	2,590
Illness	18,478	45	438
Premature Death	90,683	223	2,151
Female	$144,392	$351	$5,074
Direct	97,118	236	3,413
Lost Productivity	47,273	115	1,661
Illness	13,492	33	474
Premature Death	33,782	82	1,187

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$204,423	$250	$2,895
Hospital	82,927	101	1,174
Ambulatory	49,751	61	705
Nursing Home Care	30,936	38	438
Prescriptions	27,480	34	389
Home Health	13,328	16	189

Population 2009	All Ages	<18	18-34	35-64	65+
Total	818,545	213,053	183,872	327,427	94,194
Male	407,005	108,699	95,943	161,317	41,046
Female	411,540	104,354	87,929	166,110	53,148

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	70,607	10.4	163,670	24.0	447,643	65.6
Male	42,150	12.5	94,690	28.1	200,654	59.5
Female	28,457	8.3	68,980	20.0	246,989	71.7
Age 12-17	2,577	3.4	6,225	8.1	67,625	88.5
Male	1,212	3.1	4,853	12.4	33,123	84.5
Female	1,365	3.7	1,373	3.7	34,502	92.6
Age 18+	68,030	11.2	157,445	26.0	380,017	62.8
Male	40,938	13.7	89,837	30.1	167,531	56.2
Female	27,092	8.8	67,608	22.0	212,487	69.2

Deaths

		Due to Smoking	
	Total	Number	%
Total	5,007	727	14.5
Male	2,452	399	16.3
Female	2,555	327	12.8

Ventura

Years of Potential Life Lost

	Number of Years	Per Death
Total	11,975	16.5
Male	6,580	16.5
Female	5,395	16.5

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$124,465	$171,227
Male	90,683	227,037
Female	33,782	103,157

Yolo

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$106,770	$535	$3,837
Direct	59,722	299	2,146
Lost Productivity	47,048	236	1,691
Illness	8,858	44	318
Premature Death	38,190	191	1,372
Male	$62,397	$641	$3,812
Direct	31,043	319	1,896
Lost Productivity	31,354	322	1,915
Illness	4,658	48	285
Premature Death	26,696	274	1,631
Female	$44,373	$434	$3,873
Direct	28,678	280	2,503
Lost Productivity	15,695	153	1,370
Illness	4,200	41	367
Premature Death	11,495	112	1,003

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$59,722	$299	$2,146
Hospital	22,019	110	791
Ambulatory	15,639	78	562
Nursing Home Care	7,956	40	286
Prescriptions	8,858	44	318
Home Health	5,249	26	189

Population 2009	All Ages	<18	18-34	35-64	65+
Total	199,696	44,827	67,723	67,952	19,194
Male	97,393	22,865	33,135	33,030	8,363
Female	102,303	21,962	34,588	34,922	10,831

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	27,828	16.3	45,314	26.6	97,401	57.1
Male	16,370	19.8	23,436	28.4	42,666	51.7
Female	11,458	13.0	21,879	24.8	54,735	62.1
Age 12-17	962	6.1	2,238	14.3	12,474	79.6
Male	557	7.0	1,080	13.6	6,307	79.4
Female	404	5.2	1,158	15.0	6,167	79.8
Age 18+	26,866	17.3	43,076	27.8	84,927	54.8
Male	15,813	21.2	22,356	30.0	36,359	48.8
Female	11,053	13.8	20,720	25.8	48,567	60.5

Deaths

		Due to Smoking	
	Total	Number	%
Total	1,112	200	18.0
Male	560	111	19.9
Female	552	89	16.1

Yolo

Years of Potential Life Lost

	Number of Years	Per Death
Total	3,484	17.4
Male	1,893	17.0
Female	1,592	17.9

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$38,190	$190,699
Male	26,696	240,024
Female	11,495	129,089

Yuba

Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$47,037	$655	$6,169
Direct	22,875	319	3,000
Lost Productivity	24,162	337	3,169
Illness	2,876	40	377
Premature Death	21,286	296	2,792
Male	$30,353	$839	$7,373
Direct	12,368	342	3,004
Lost Productivity	17,985	497	4,369
Illness	1,576	44	383
Premature Death	16,409	454	3,986
Female	$16,684	$468	$4,756
Direct	10,507	295	2,995
Lost Productivity	6,177	173	1,761
Illness	1,300	36	371
Premature Death	4,877	137	1,390

Direct Cost of Smoking	Amount (1,000)	Per Resident	Per Smoker
Total	$22,875	$319	$3,000
Hospital	10,681	149	1,401
Ambulatory	4,821	67	632
Nursing Home Care	3,299	46	433
Prescriptions	2,714	38	356
Home Health	1,360	19	178

Population 2009	All Ages	<18	18-34	35-64	65+
Total	71,795	21,038	17,796	25,687	7,274
Male	36,173	10,870	9,135	12,853	3,314
Female	35,622	10,168	8,661	12,834	3,959

Smoking Prevalence

	Currently Smoke		Formerly Smoked		Never Smoked	
	Number	%	Number	%	Number	%
Total	7,624	13.3	14,059	24.5	35,770	62.3
Male	4,117	14.3	7,930	27.6	16,657	58.0
Female	3,508	12.2	6,129	21.3	19,113	66.5
Age 12-17	303	4.5	734	11.0	5,659	84.5
Male	213	6.2	315	9.3	2,873	84.5
Female	91	2.8	419	12.7	2,786	84.5
Age 18+	7,321	14.4	13,325	26.3	30,111	59.3
Male	3,904	15.4	7,615	30.1	13,784	54.5
Female	3,417	13.4	5,710	22.4	16,327	64.1

Deaths

		Due to Smoking	
	Total	Number	%
Total	493	86	17.4
Male	256	53	20.8
Female	237	32	13.7

Yuba

Years of Potential Life Lost

	Number of Years	Per Death
Total	1,661	19.4
Male	1,012	19.0
Female	649	20.0

Lost Productivity from Premature Death

	Amount (1,000)	Per Death
Total	$21,286	$248,337
Male	16,409	308,250
Female	4,877	150,143

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Technical Appendix 1: The Econometric Models for Smoking-Attributable Healthcare Expenditures

This Appendix details the specification of econometric models that analyze the impact of smoking on healthcare expenditures. It was previously described in Max, Sung, and Lightwood (2013). The models consist of 10 equations which were estimated separately for each of the 6 subgroups stratified by age (18-34, 35-64, 65+) and gender (female, male). Each equation or group of equations is described below in terms of the functional form used, the dependent variable, and the independent variables.

(1) **Propensity of Ever Having Any Smoking-Related Diseases Model** (estimated as a binomial probit function)

Having smoking-related diseases = f_1 (smoking status/intensity (current light, current moderate, current heavy, former), age, race/ethnicity, region, education, marital status, obesity, binge drinking)

The smoking-related diseases are those for which incidence is identified in the 2004 US Surgeon General Report (US DHHS, 2004) as being causally related to cigarette smoking. Included are cardiovascular diseases (ischemic heart disease, other heart disease, cerebrovascular disease, atherosclerosis, aortic aneurysm, other circulatory diseases), respiratory diseases (pneumonia, Influenza, chronic bronchitis, emphysema, chronic airways obstruction), and cancer (of the urinary bladder; cervix uteri; esophagus; kidney and renal pelvis; larynx; stomach; lung, trachea, and bronchus; lip, oral cavity, and pharynx; pancreas; and acute myeloid leukemia). The ICD-10 codes for these diseases are shown in Table 3 on Page 38.

(2) Propensity of Having Poor Health Model (measured by health status of excellent, very good, good, fair, or poor; estimated as an ordered probit function)

Having poor health status = f_2 (smoking status/intensity, age, race/ethnicity, region, education, marital status, obesity, binge drinking, predicted propensity of ever having smoking-related diseases)

(3) – (6) Propensity of Having Positive Annual Expenditures Model (estimated separately for Hospitalization, Ambulatory Care, Prescription Drugs, and Home Health Care; estimated as a binomial probit function)

Having positive expenditures = f_i (smoking status/intensity, age, race/ethnicity, region, education, marital status, family poverty status, health insurance coverage, obesity, binge drinking, and predicted propensity of having poor health),

where i =3 (hospitalization), 4 (ambulatory care), 5 (prescription drugs), 6 (home health care.

(7) – (10) Logarithmic Level of Annual Expenditures among Individuals with Positive Expenditures Model (estimated separately for Hospitalization, Ambulatory Care, Prescription Drugs, and Home Health Care; estimated using ordinary least squares)

Logarithm of expenditures = f_j (smoking status/intensity, age, race/ethnicity, region, education, marital status, family poverty status, health insurance coverage, obesity, binge drinking, and predicted propensity of having poor health),

where i = 7 (hospitalization), 8 (ambulatory care), 9 (prescription drugs), 10 (home health care.

Note that when taking the anti-log of the predicted values from Equations (7)–(10), the smearing coefficient by smoking status/intensity was calculated to correct for retransformation bias.

The table below summarizes the age and gender subgroups for which each of the 10-equation models were estimated.

Model	**F 18-34**	**M 18-34**	**F 35-64**	**M 35-64**	**F 65 +**	**M 65 +**
1 Smoking-Related Disease	✔	✔	✔	✔	✔	✔
2 Poor Health Status	✔	✔	✔	✔	✔	✔
3 Positive Hospitalization Expenditures	✔	✔	✔	✔	✔	✔
4 Positive Ambulatory Care Expenditures	✔	✔	✔	✔	✔	✔
5 Positive Prescription Drugs Expenditures	✔	✔	✔	✔	✔	✔
6 Positive Home Health Expenditures	✔	✔	✔	✔	✔	✔
7 log (Hospitalization Expenditures)	✔	✔	✔	✔	✔	✔
8 log (Ambulatory care Expenditures)	✔	✔	✔	✔	✔	✔
9 log (Prescription Drugs Expenditures)	✔	✔	✔	✔	✔	✔
10 log (Home Health Expenditures)	✔	✔	✔	✔	✔	✔

Technical Appendix 2: The Econometric Models for Smoking-Attributable Lost Productivity from Illness

This Appendix details the specification of econometric models that analyze the impact of smoking on indirect costs due to lost productivity from illness. The models consist of four equations. Each equation is described below in terms of the functional form used, the dependent variable, and the independent variables.

(1) Propensity of Having a Positive Number of Days Lost from Work in the Past Year (estimated as a binomial probit function)

Having positive days = f_1 (smoking status (current, former), gender, age, race/ethnicity, region, education, marital status, obesity, binge drinking)

(2) Logarithmic Level of Annual Days Lost from Work among Individuals with Positive Work-Loss Days Model (estimated using ordinary least squares)

Logarithm of days = f_2 (smoking status, gender, age, race/ethnicity, region, education, marital status, obesity, binge drinking)

(3) Propensity of Having Positive Number of Bed-Disability Days in the Past Year (estimated as a binomial probit function)

Having positive days = f_3 (smoking status, gender, age, race/ethnicity, region, education, marital status, obesity, binge drinking)

(4) Logarithmic Level of Annual Bed-Disability Days among Individuals with Positive Bed-Disability Days Model (estimated using ordinary least squares)

Logarithm of days = f_4 (smoking status, gender, age, race/ethnicity, region, education, marital status, obesity, binge drinking)

Note that when taking the anti-log of the predicted values from Equations (2) and (4), the smearing coefficient by smoking status was calculated to correct for retransformation bias.

Glossary

Bed-Disability Day -- A day during which an individual stayed in bed more than half of the day due to illness or injury; bed-disability days may include those while an overnight patient in a hospital and may also be work loss days.

Cause of Death -- The underlying condition to which a death is attributed, based on information reported on the death certificate and utilizing the international rules for selecting the underlying cause of death from the reported conditions.

Current Smoker -- An adult, aged 18 years and over, who reports that he or she has smoked 100 or more cigarettes in their lifetime and who smokes every day or some days; an adolescent, aged 12-17 years, who reports that he or she ever smoked a cigarette, even 1 or 2 puffs, and smoked cigarettes for at least one day in the past 30 days.

Current Heavy Smoker – A current smoker, aged 18 years and over, who smoked 20 or more cigarettes per day.

Current Light Smoker – A current smoker, aged 18 years and over, who smoked fewer than 10 cigarettes per day or smoked some days.

Current Moderate Smoker – A current smoker, aged 18 years and over, who smoked 10−19 cigarettes per day.

Direct Cost -- The dollar expenditures for healthcare services for persons suffering from illness or disease, including amounts spent for hospital care, nursing home care, emergency department visits, physician and other office-based medical provider services, home health services, and prescription medications and medical nondurables.

Disability -- Any restriction or lack of ability to perform an activity in the manner, or in the range, considered normal.

Discount Rate -- A rate used to convert a future stream of dollars into the present value equivalent. The higher the discount rate, the lower the present value of a given stream of dollars.

Economic Cost of Smoking -- The value of all resources that are unavailable for other purposes due to smoking, including direct costs and indirect productivity losses due to smoking-related illness and premature death.

Former Smoker -- An adult, aged 18 years and over, who reports that he or she has smoked 100 cigarettes in their lifetime but does not smoke at the time of the survey; an adolescent, aged 12-17 years, who reports that they have ever smoked cigarettes even 1 or 2 puffs but did not smoke cigarettes in the past 30 days.

Human Capital Approach -- An approach to valuing life according to a person's productivity measured by his or her market earnings and an imputed value for housekeeping services.

Indirect Cost -- The value of lost output due to the reduced productivity caused by illness or disability, including the value of lost workdays and housekeeping days due to illness and disability, and the value of productivity losses due to premature death.

International Classification of Diseases (ICD) Codes -- A classification system of the nature (N-Codes) and external cause of illness and injuries (E-Codes), developed collaboratively by the World Health Organization and 10 international centers so that the medical terms reported by physicians, medical examiners, and coroners on death certificates can be grouped together for statistical purposes.

Labor Force Participation Rate -- The proportion or percent of the population employed at a given point in time.

Life Expectancy -- The average number of years of life remaining to a person at a particular age based on population-level age- and gender-specific death rates.

Market Earnings -- Wages and salaries earned in the labor market, including fringe benefit and supplements such as employer's contributions to social insurance.

Mortality -- Number of deaths.

Mortality Rate -- A measure derived by dividing the number of deaths in a population in a given period by the resident population at the middle of that period.

Never Smoker -- An adult, aged 18 years and over, who reports that he or she has not smoked 100 cigarettes during their lifetime; an adolescent, aged 12-17 years, who reports never having smoked cigarettes even 1 or 2 puffs in his or her lifetime.

Nonsmoker – someone who is either a former smoker or a never smoker.

Present Value of Lifetime Earnings (PVLE) -- The present discounted value of all the expected earnings, including market earnings and an imputed value for household production, summed over future years for the remaining life expectancy. These earnings are converted into the present value equivalent by applying the discount rate.

Prevalence-Based Approach -- A method of estimating the costs of diseases that are manifested during a year (i.e., prevalent diseases) but caused by cumulative exposure to smoking or other risk factors over many years in the past. These costs take into account the current annual costs for persons who receive medical treatment, are absent from work, or die of smoking-related illness during the year under study.

Productivity Loss -- The value of output not produced due to illness, disability, or premature death.

Relative Risk -- The ratio of the rates of illness, death, or healthcare expenditures in the exposed population (for example, current smokers) to the rates in the unexposed population (for example, never smokers).

Secondhand Smoke -- the tobacco smoke of a smoker which others are exposed to; also referred to as passive smoking and environmental tobacco smoke.

Secondhand Smoke Exposure -- (for this report) exposure to the tobacco smoke of someone else in the home, defined as living in a household in which smoking is allowed inside the home.

Secondhand Smoke Exposure Rate – (for this report) the proportion of nonsmokers exposed to the tobacco smoke of someone else in the home, defined as living in a household in which smoking is allowed inside the home.

Secondhand Smoke-Associated Cause of Death – A cause of death that is known to be causally linked to secondhand smoke exposure.

Smoking Prevalence Rate -- The proportion of the population who are current smokers.

Smoking Status -- Whether an individual currently smokes, formerly smoked, or never smoked.

Smoking-Attributable Fraction (SAF) -- The proportion of deaths, diseases, lost productivity, or healthcare costs that can be attributed to smoking.

Smoking-Related Disease -- An illness or disease that is known to be causally linked to cigarette smoking.

Value of Housekeeping Services -- An imputed value calculated by assigning the prevailing wage rate for performance of tasks similar to those performed by housekeepers. For example, time spent cooking might be valued using the prevailing wage rate for a cook.

Work-Loss Day -- A day during which a currently employed person aged 18 years or older missed more than half a day from a job or business because of illness or injury.

Years of Potential Life Lost (YPLL) -- The number of years that an individual would have lived in the absence of fatal illness or disease, based on the number of years of life expectancy remaining at the age of death. Note that many burden of disease studies include the years of life expectancy remaining to age 65 or age 80, but we did not limit years to a specific age.