Adult Tobacco Use and Exposure,
Colorado 2012

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Community Epidemiology & Program Evaluation Group
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**Brief summary of findings**

This report focuses on changes in tobacco-related attitudes and behaviors during 2008-12, and new or remaining disparities in 2012. The emphasis is on groups that were identified in 2001 as having disparately large tobacco burdens; these populations have been designated for priority attention by the state’s tobacco control program. The report also looks closely at men and young adult nonstudents (aged 18-24), two groups that also have elevated tobacco burdens.

Rates shown throughout the report represent estimates for the corresponding Colorado adult population group during the year cited. Unless otherwise noted, changes represent 2012 rates compared to 2008 rates, adjusted (standardized) to match the 2012 Colorado adult population in age, sex, ethnicity, and education.*

**Significant† changes since 2008, and disparities in 2012**

**General population**

- Cigarette smoking prevalence declined from 19.1% to **17.3%**.
- Among current smokers, daily smoking decreased from 74.7% to **69.8%**, and cigarettes per day (CPD) decreased from 15.4 to **13.7**.
- QuitLine use among white non-Latino (Anglo) past-year quit-attempters fell by almost half, from 8.6% to 4.4% among men and from 12.9% to 6.8% among women.
- Chantix® use in past-year quit attempts declined from 6.8% to **5.0%**.
- Among smokers who saw a health provider in the past year, advice to quit increased from 62.6% to **68.0%**.
- The popularity of smokefree rules in homes and personal vehicles increased: smokefree homes increased from 84.5% to **87.1%**, and smokefree personal vehicles increased from 71.3% to **76.1%**.
- Smokefree home rules remained much less common in 2012 among households with smokers compared to households without smokers (69.5% vs. 93.3%).
- Smokers with smokefree vehicles increased from 19.8% to **24.6%** but remained far less common than nonsmokers with smokefree vehicles (86.6%).
- For the first time, a majority of Coloradans (55.8%) reported being bothered by exposure to smoke outside of work and home —especially in public parks. More than one in four asked someone not to smoke around them or their family.
- Ever-use of a hookah declined from 14.9% to **9.9% overall**; from 20.3% to **15.6% among men**, and from 31.8% to **24.2% among current smokers**.

**People with low socioeconomic status‡ (SES)**

- Smoking prevalence in 2012 was nearly three times as high (27.1%) as it was among the rest of the population (9.4%).
- Low SES homes were less likely than other homes to have smoke free rules (80.7% vs. 93.1%) and three times as likely to report recent smoking in the home (13.8% vs. 4.3%).
- Smoking prevalence remained elevated among nonstudent young adults (aged 18-24) while it declined among student young adults.*

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* For 2008, estimates in this report may not match previously published estimates; the current figures reflect an improved method that takes education into account when weighting the sample to represent the population.
† "Significant" means less than 5% likely ($p<0.05$) to be an accidental difference (sampling error).
‡ Low SES means uninsured, income below 200% of federal poverty level, no high school diploma (may have GED), or disabled/unable to work. [Nationally and in Colorado, tobacco burdens are similar among GED holders and people who don't complete high school.]
Latino population

- Among English-dominant† adults, current smoking prevalence remained higher than among Anglos (21.8% vs. 16.7%), although daily smoking decreased from 66.1% to 56.8% of current smokers.
- Latino smokers were more likely than Anglo smokers to make a quit attempt (65.7% vs. 50.7%).
- Latino quit-attempters were less than half as likely as Anglo quit-attempters to use NRT (11.7% vs. 24.5%).
- Latino smokers were less likely than Anglo smokers to have ever used the QuitLine (16.8% vs. 20.6%), and ever-use decreased among Spanish-dominant Latino smokers from 8.3% to 7.0%.

Black/African-American (black/AA) population

- Smoking prevalence was higher than among Anglo adults (23.7% vs. 16.7%) and unchanged from 2008.
- Smoking frequency increased among nondaily smokers from 16.6 to 19.9 days per month and from 6.1 to 8.1 CPD.
- NRT use increased from 22.3% to 30.2% of past-year quit attempts.
- Quit-attempters had much less success than their Anglo counterparts (1.6% vs. 9.8%).
- Fewer homes had smokefree rules (79.7% vs. 88.4% of Anglo homes), and recent smoking in the home was more common (12.9% vs. 8.4% in Anglo homes).

American Indian/Alaska Native (AI/AN) population

- Smoking prevalence was higher than among Anglos (29.3% vs. 16.7%).
- Daily smoking increased among smokers from 78.9% to 84.3%.
- CPD decreased from 15.0 to 12.5
- Ever-use of the Colorado QuitLine decreased from 26.2% to 19.8% of smokers.

Asian American/Pacific Islander (AA/PI) population

- Smoking prevalence was lower than among Anglos (10.7% vs. 16.7%).

People with mental illness‡ and/or mental limitations§ (MI/ML)

- Smoking prevalence was more than twice as common as it was among the rest of the population (32.9% vs. 14.8%).
- Fewer households had smokefree home rules (79.6% vs. 88.7% of non-MI/ML households); recent smoking in the home was twice as common (16.5% vs. 7.3%), and fewer adults had smoke-free personal vehicles (62.7% vs. 78.1%).

Smokeless tobacco use

- Current use was higher among rural men than among urban men (13.3% vs. 5.6%).**

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* Nonstudent young adults, also called "straight-to-work young adults," have lower SES on average than student young adults.
† Represented by Latino respondents who were interviewed in English and reported English (or English and Spanish equally) as the primary language at home.
‡ adults who report having a diagnosed mental illness
§ adults who report that their activity is limited by a mental or emotional condition
** Fewer than one percent of Colorado adult women use smokeless tobacco.
Gay, lesbian, or bisexual* (GLB) population

- Smoking was nearly twice as common as among heterosexuals (33.4% vs. 17.2%).
- QuitLine ever-use was less common than among heterosexual smokers (17.8% vs. 20.3%).
- Fewer homes had smokefree rules (77.3% vs. 87.8% of heterosexual households); recent smoking in the home was more common (14.9% vs. 8.6%), and fewer adults had smokefree vehicles rules (62.6% vs. 76.2%).

Men

- Smoking prevalence was one-third higher than among women (19.8% vs. 14.8%).
- CPD was higher than among women (14.7 vs. 12.4) for daily smokers.
- QuitLine ever-use was one-third less common as among female smokers (16.3% vs. 25.2%).

* TABS asks respondents to self-identify as gay/lesbian, bisexual, heterosexual/straight, or other.
The Attitudes and Behaviors Survey on Health

Every three to four years, The Attitudes and Behaviors Survey (TABS) on Health randomly selects and interviews thousands of Colorado adults to learn about the health of the state's population. The most recent wave, administered in 2012, collected information on tobacco use, diabetes, high blood pressure, and high cholesterol. Previous waves (2001, 2005, 2008) focused on tobacco and were known as the Tobacco Attitudes and Behaviors Survey (TABS). The survey was funded in 2001 by tobacco litigation settlement proceeds and in 2005, 2008 and 2012 by a voter-approved tobacco tax increase.

In each wave, approximately 12,000 to 15,000 adults (aged 18+) are randomly selected from all Colorado households with telephones, and consenting respondents are interviewed in their choice of English or Spanish. Certain groups are oversampled to obtain better health information about them. In 2012, the sample was expanded to include approximately 3,000 non-Colorado U.S. adults, in order to compare the health of Coloradans with the rest of the nation. Starting with the 2008 wave, TABS has sampled both landline and cell phone numbers, in order to represent the growing number of households that rely mainly or only on cell service. In 2012, an estimated 35.8% of Colorado households had only cell phone service (15.2% did in 2008).

About this report

The current report describes tobacco use* in 2012 compared to 2008, identifying areas of progress and current challenges. The report includes some trends since 2001. Topics include cigarette smoking and quitting, attitudes about tobacco-related policies, and use of non-cigarette tobacco products.

The report relies on a 95% confidence measure (p<0.05) to identify significant changes and differences – the ones that are less than 5% likely to be chance findings caused by sampling error. The rates published in the report represent the Colorado adult population in the respective year for which they are reported. Comparisons are adjusted (standardized) to match the 2012 Colorado population on age, sex, ethnicity and education level.

Where a 2012 rate is significantly different from 2008, it appears in bold typeface in tables and charts. Other significant differences, i.e., comparing 2001 and 2012 or two population groups, are presented in the narrative or noted in tables and charts. Rates described as “unchanged” or "similar" are not significantly different.†

* A separate report discusses 2012 findings related to diabetes, high blood pressure, and high cholesterol.
† Comparisons with 2001 or 2008 are adjusted (standardized) to match the 2012 Colorado adult population in age, sex, ethnicity, and education. For 2008, estimates in this report may not match previously published estimates due to an improved weighting method that takes education into account to better represent the population.
Introduction

An estimated 43.8 million Americans, 19.0% of U.S. adults aged 18 years and older, currently smoke cigarettes. Tobacco smoking remains the leading cause of preventable death in the United States. Each year, approximately 443,000 deaths – one in five deaths – are attributed to cigarette smoking.

In 1998, the report Tobacco Use among U.S. Racial/Ethnic Minority Groups made clear that several large minority populations suffer disproportionately high burdens from tobacco. In 2006, Colorado received support from the Centers for Disease Control and Prevention (CDC) to develop a Tobacco Disparities Strategic Plan. The plan used TABS 2001 data and other sources to identify ten populations needing priority attention, because they had higher than average rates of tobacco use, less cessation treatment access and success, and/or more exposure to secondhand smoke. Many of these populations are also targeted by tobacco industry marketing.

In 2012, the Colorado Tobacco Program Review Committee adopted a strategic plan for the period 2012-20. The plan was based on a review of available data and identified five imperatives:

- Ensure quitters maintain long-term abstinence (turn more quit attempts into cessation successes).
- Decrease initiation and prevalence among all populations, particularly those disparately affected by tobacco use.
- Influence the sale and marketing of tobacco, including new products.
- Ensure protections from secondhand smoke exposure, particularly among low-income populations.
- Continue to promote the recognition that tobacco is still the leading preventable cause of death for Coloradans.

The data also indicated a need to focus on low SES populations of all ages and ethnicities, with seven goals for the year 2020:

- The cessation success gap affecting low SES youth and adult smokers decreases by 50 percent.
- A majority of people and health care systems in Colorado recognize and treat tobacco dependence as a chronic condition.
- A majority of Coloradans live, learn, work and play in communities that have effective policies and regulations that reduce youth and adult use and access to tobacco.
- Tobacco prevalence and initiation among young adults, especially straight-to-work, decreases by 50 percent.
- Initiation among youth, especially high burden and low SES populations, decreases by 50 percent.
- Exposure to secondhand smoke with an emphasis on low SES populations decreases by 50 percent.
- Colorado is among the 10 states with the highest price for tobacco products.

The emphasis on low SES reflects growing awareness that smoking prevalence is directly associated with socioeconomic disadvantage, which can be measured by low educational level, low income, and other indicators. Low SES smokers are less likely than other smokers to quit, even though they are not less likely to attempt quitting. Continued smoking remains more common in this population be-

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*The 10 priority populations were: Latinos; blacks/African Americans (black/AA); American Indians / Alaska Natives (AI/AN); Asian Americans/ Pacific Islanders (AA/PI); people with mental illness or mental limitations (MI/ML); people with substance abuse disorders; people with disabilities; people with low socioeconomic status (SES); smokeless tobacco users; people with gay, lesbian, bisexual, or transgender (GLBT) orientation. Most of these populations still bear disproportionate tobacco burdens, but more recent studies suggest that the low-SES segment in each priority population accounts for most of the elevated tobacco burdens.*
cause quit-attempts are more likely to end in relapse to smoking. The origins of this challenging disparity are not well understood.

The current report provides information from 2012 about Colorado's tobacco burdens, with an emphasis on disparities that afflict low SES adults across virtually all age, ethnic, and other demographic groupings.
Current smoking prevalence

The prevalence of current smoking* has declined since 2008, but not uniformly across Colorado adult population groups (Table 1). Significant improvements extended positive trends since 2001 among women, and new progress emerged among young adult students, seniors, and people without a mental illness or mental limitation (MI/ML). At the same time, the gap between low SES† and other adults widened. Smoking is now nearly three times as common among low SES populations as it is among other adults. Disparities by ethnicity and sexual orientation remained relatively unchanged. In summary, smoking generally continued to decline among groups that were already better off in 2008, while populations with elevated burdens in 2008 made little or no progress.

| Table 1. Changing and unchanged burdens: Current cigarette smoking among Colorado adults, 2001-08-12 |
|---|---|---|---|---|---|---|
| | number that smoked | % that smoked | 2001 | 2008 | 2012 | 2001 | 2008 | 2012 |
| all adults | 613,984 | 701,980 | 667,500 | 19.7 | 19.1 | 17.3 |
| LOW SOCIOECONOMIC STATUS (SES)‡ |
| no | 250,982 | 211,567 | 145,203 | 14.2 | 12.6 | 9.4 |
| yes | 277,875 | 426,619 | 413,578 | 33.1 | 28.9 | 27.1 |
| SEX |
| women | 296,187 | 313,604 | 286,866 | 19.1 | 17.1 | 14.5 |
| men | 317,798 | 388,376 | 380,634 | 20.3 | 21.1 | 19.8 |
| AGE GROUP |
| 18-24 | 126,710 | 132,160 | 114,448 | 30.2 | 26.3 | 21.5 |
| student | 26,284 | 49,348 | 34,078 | 21.9 | 19.3 | 12.3 |
| nonstudent | 100,338 | 78,919 | 76,680 | 33.8 | 34.1 | 31.9 |
| 25-44 | 285,981 | 296,551 | 301,706 | 20.9 | 20.9 | 21.5 |
| 45-64 | 164,568 | 228,125 | 209,343 | 17.8 | 18.2 | 15.4 |
| 65+ | 36,725 | 45,144 | 42,003 | 9.2 | 9.2 | 7.4 |
| ETHNICITY |
| Anglo | 459,915 | 505,765 | 473,593 | 19.1 | 18.4 | 16.7 |
| Latino (English-dominant) | 88,547 | 93,302 | 91,843 | 22.1 | 24.9 | 21.8 |
| Latino (Spanish-dominant) | 10,354 | 34,216 | 23,103 | 18.4 | 13.4 | 9.0 |
| Black/African American | 19,713 | 30,208 | 33,080 | 17.8 | 23.9 | 23.7 |
| American Indian | 15,445 | 13,283 | 15,084 | 36.4 | 44.6 | 29.3 |
| Asian American | 9,731 | 9,606 | 7,549 | 16.4 | 14.8 | 10.7 |
| All Other | 10,279 | 15,601 | 23,248 | 9.2 | 9.2 | 7.4 |
| SEXUAL ORIENTATION‡ |
| heterosexual | n/a | 613,759 | 597,763 | n/a | 18.9 | 17.2 |
| gay/lesbian/bisexual | n/a | 36,289 | 43,565 | n/a | 39.7 | 33.4 |
| MENTAL ILLNESS and/or LIMITATIONS‡ |
| no | n/a | 572,137 | 464,772 | n/a | 17.7 | 14.8 |
| yes | n/a | 110,803 | 172,008 | n/a | 34.3 | 32.9 |

* Current smoking prevalence = percentage of a population that now smokes cigarettes daily or some days.
† Low SES: no HS diploma (may have GED), no health insurance, <200% federal poverty level, or with a disability.
‡ Number that smoked does not match total number because people with unknown status are not shown.
§ English-dominant respondents were interviewed in English and reported English, or English and Spanish equally, as their primary language at home. Spanish-dominant respondents chose to be interviewed in Spanish and/or reported Spanish as their primary language at home.
The stall in progress looks starker when demographic groups are combined according to their smoking trend during 2001-12 (Figure 1). After evaluating all major demographic groupings (results not shown), the only significant divisions fall between low vs. other SES and men vs. women.* Take Colorado adults who graduated from high school, had health insurance, had household income at or above 200% of the federal poverty level (FPL)† and had no disability – this group of men and women made substantial gains against the tobacco epidemic. At the same time, low SES women made only a small gain, and low SES men made no detectable progress at all.

These SES patterns of smoking emerged at a time when Colorado's population was losing socioeconomic ground. The growing adult population also experienced a decline in SES, with 32.2% classified as low SES in 2001 to 49.7% of Colorado adults classified as low SES in 2012.* The declining SES trend converged with a lack of meaningful progress among low SES smokers; as a result, smoking is more identifiably a low SES burden today than it already was: In 2001, 52.5% of Colorado smokers were classified as low SES; today, 74.1% are.*

From here forward, progress against the tobacco epidemic requires a commitment to figure out how to engage low SES smokers and support them in cessation efforts. Both national and Colorado evidence suggests that new strategies will be needed – including finding ways to reach and serve a large population that shares low SES but represents the broad spectrum of American ethnic and sexual cultures and identities.

* Respondents with unknown SES are excluded (16.2% of adults in 2001, 20.3% of adults in 2012; 13.9% of smokers in 2001, 16.3% of smokers in 2012).
† In 2012, 200% FPL was $46,100 for a family of four.
** Results exclude Spanish-dominant Latinas, who represent a small fraction of the smoker population and whose smoking prevalence sharply declined during 2001-12 (from 18.3% to 3.0%); the most likely explanation for the decline is not cessation but in-migration of nonsmokers from Mexico, where few women smoke.
The low SES-smoking connection may also be analyzed by the conditions that together represent low SES – lower income, no health insurance, no high school diploma, and disability (Table 2). The biggest difference between smokers and nonsmokers is household income: More than half of smokers are poor or near-poor, compared to less than one-third of nonsmokers. Smokers are also more often male; young adult non-students or aged 25-44; English-dominant Latino, Black/AA or AI/AN; GLB; MI/ML; disabled; poor or near-poor; without health insurance, and not high school graduates.

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<th>low SES indicators</th>
<th>nonsmokers</th>
<th>smokers</th>
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<td>72.9</td>
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<td>27.1</td>
</tr>
</tbody>
</table>

Table 2. Characteristics of Colorado adults, 2012, by smoking status

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Colorado's low SES population: poorer, more multiple conditions

Colorado's low SES population has steadily grown, from one-third of adults in 2001 to one-half in 2012. And, low SES Coloradans are increasingly likely to report multiple low SES conditions.

<table>
<thead>
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<th>Percent of low SES adults in Colorado with ...</th>
<th>2001</th>
<th>2008</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;200% FPL</td>
<td>69.9</td>
<td>72.1</td>
<td>80.3</td>
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<td>no insurance</td>
<td>43.1</td>
<td>49.2</td>
<td>43.4</td>
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<td>no HS grad</td>
<td>23.1</td>
<td>34.4</td>
<td>35.2</td>
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<tr>
<td>disability</td>
<td>7.8</td>
<td>8.5</td>
<td>11.9</td>
</tr>
</tbody>
</table>

FPL = federal poverty level.
Among young adults (aged 18-24), nonstudents tend to have lower SES than students. Young adulthood
is also a period when smoking patterns are often not yet established. Most regular (dependent) smokers
try their first cigarette before age 18, but one-third\textsuperscript{30} to one-half\textsuperscript{31} started smoking \textit{regularly} only during
their young adult years. This age thus represents an important indicator of trends in smoking initiation.

During 2001-12, both ever-smoking\textsuperscript{*} and current smoking declined significantly among Colorado's young
adults (Figure 2). The SES gap was highly evident, however, as declines were limited to students (Figure
3). The current report takes a closer look at young adult nonstudents on page 17.

\textbf{Figure 2. Smoking (\%) among young adults (aged 18-24), Colorado 2001-12}
\begin{itemize}
\item ever-smoking
\item current smoking
\end{itemize}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Smoking (\%) among young adults (aged 18-24), Colorado 2001-12}
\end{figure}

\textbf{Figure 3. Smoking status (\%) among young adults, students vs. nonstudents}
\begin{itemize}
\item students
\item nonstudents
\end{itemize}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure3.png}
\caption{Smoking status (\%) among young adults, students vs. nonstudents}
\end{figure}

\textsuperscript{*} Smoked at least 100 cigarettes in lifetime.
Continuing smokers continued to smoke less

States with highly successful tobacco control programs have seen cigarette consumption decline among continuing smokers, even though current smoking prevalence may level out.\textsuperscript{32} Smokers who cut down often negatively compensate by inhaling more deeply or more often, or smoking each cigarette further down, but cutting down also encourages cessation\textsuperscript{33,34,35} and may reduce harm.\textsuperscript{36,37}

Three measures of cigarette consumption in Colorado showed improvement during 2008-2012:

**Daily smoking.** Fewer current smokers smoked every day (down from 74.7\% to 69.8\%), with a greater decline among English-dominant Latinos (down from 66.1\% to 56.8\%). Daily smoking increased among AI/AN smokers from 78.9\% to 84.3\% and daily smoking among smokers with a disability decreased from 84.2\% to 74.6\%.

**Cigarettes per day** (CPD). Daily smokers consumed fewer CPD, down from 15.4 to 13.7. The decline was seen among most population groups. Among nondaily smokers, CPD was unchanged overall (~4.1) but declined among men (from 5.4 to 4.1 CPD). Smoking frequency increased among black/AA nondaily smokers from 16.6 to 19.9 days per month and from 6.1 to 8.1 CPD. Male daily smokers had a higher CPD than women (14.7 vs. 12.4). In AI/AN daily smokers CPD decreased from 15.0 to 12.5.

**Heavy smoking** (25+ CPD). The proportion of daily smokers who smoked heavily continued to decline, from 12.5\% in 2001 to 8.6\% in 2008 and 5.1\% in 2012. It remained most common among Anglos (6.2\%) and blacks/AAAs (7.2\%).

**Cigarette sales.** Excise tax collections reported by the Colorado Department of Revenue continued to decline, and the volume of cigarettes sold per Coloradan (Figure 4) fell by 17.5\% between 2008 and 2012.

At the same time, the decline has been slowing since 2009, which suggests that the tax increase adopted by voters (in 2004) is losing its power to encourage cessation and lessen consumption.\textsuperscript{38}
Cessation attempts, success, strategies

Prevention of smoking initiation has the greatest long-term potential to end the tobacco epidemic, but cessation by current smokers has the largest immediate impact on smoking prevalence. Quit attempts often end in relapse, but many smokers try repeatedly before achieving lasting abstinence.39

During 2008-12, past-year quit attempts (at least one day without smoking) declined substantially, from 65.6% to 53.6%. Anglo smokers were least likely to have made a quit attempt (50.7%). Latino smokers were more likely than Anglo smokers to make a quit attempt (65.7% vs. 50.7%).

Among smokers who did try to quit, more than two-thirds (70.1%) tried two or more times during the year (median 2.6 attempts), including 38.0% who made four or more attempts.

Successful quit outcomes (at least three months without smoking when interviewed) held steady at 9.3%, and no population group showed significant improvement from 2008 to 2012. Small shifts slightly narrowed disparities by SES and between Anglos and blacks/As (Figure 5).

Several treatment methods increase the likelihood that a quit-attempt will succeed. Such evidence-based treatments include medicinal nicotine products (patch, gum, lozenge, etc.), counseling (in person or through a telephone quitline), and prescription medicines (bupropion and varenicline).40 Among Colorado smokers who made a past-year quit-attempt, nearly one-third (31.5%) used evidence-based treatment, a small increase from 30.1% in 2008.

**Colorado QuitLine.** Nearly three-fourths of smokers (74.0%) had heard of the QuitLine (telephone cessation counseling service), and ever-use increased from 14.7% in 2008 to 20.2%, but awareness declined from 81.3% in 2008. The decline in awareness was greatest among men and young adults. Among past-year quit-attempters, 6.1% used QuitLine for assistance, statistically unchanged from 2008. Use in a past-year quit attempt fell by almost half among Anglo men, from 8.6% to 4.4%, and Anglo women, from 12.9% to 6.8%. Among senior men (aged 65+), past-year use fell fivefold, from 9.0% to 1.8%. Latino smokers were less likely than Anglo smokers to have ever used the QuitLine (16.8% vs. 20.6%). Ever-use decreased among Spanish-dominant Latino smokers from 8.3% to 7.0% and AI/AN smokers 26.2% to 19.8%. QuitLine ever-use was more common in disabled smokers than it was among non-disabled smokers (31.4% vs. 18.3%). QuitLine ever-use was less common among GLB than among heterosexual adults who were smokers in the past year (17.8% vs. 20.3%). QuitLine ever-use was one-third less common in men as among women (16.3% vs. 25.2% of adults who were smokers in the past year).
Nicotine replacement therapy (NRT). NRT use remained unchanged in 2012 at 21.6% among past-year quit-attempters. Use was not statistically different between men and women (17.9% and 26.3%, respectively) and unchanged since 2008 in either group. Use also did not change across age groups, remaining lower among young adults than adults aged 25-64 (10.5% vs. 24.1%). Use was most common among black/AAs quit attempters (Figure 6), whose use increased from 22.3% to 30.2%. Use increased slightly among low SES quit-attempters, from 21.2% to 23.5%, eliminating a previous SES disparity. Latino quit-attempters were less than half as likely as Anglo quit-attempters to use NRT (11.7% vs. 24.5%).

![Figure 6. NRT use (%) among quit attempters, 2008 & 2012, by ethnicity](image)

Varenicline (Chantix®). Use declined from 6.8% to 5.0% of quit attempters and was similarly common across ethnicities, sexes, and SES indicators. The highest prevalence of use occurred among quit-attempters with Medicare insurance (16.9%) and the disabled (12.1%). Use was uncommon among young adults (0.1%), blacks/AAs (>0.1%), the uninsured (0.8%), and students (0.4%).

Cold turkey. In both 2008 and 2012, about half of current smokers (47.8% and 53.9% respectively) said their next quit attempt would be unaided ("cold turkey"), a consistent finding across demographic groups.

Health care visits, provider advice to quit, and cessation referral. Almost three-fourths (72.9%) of smokers saw a health care provider in the previous 12 months, unchanged from 2008; fewer smokers saw a dentist, down from 60.4% to 52.1%.

More than two-thirds of adults who were smokers in the past year (68.0%) who saw a healthcare provider were advised to quit, up from 62.6% in 2008. The rise was larger among young adults who were smokers in the past year who saw a healthcare provider, up from 48.3% to 69.4%. Advice to quit among senior adults who were smokers in the past year (aged 65+) has steadily risen for a decade, from 54.6% in 2001 to 66.0% in 2008 and 72.7% in 2012. Quit advice remained unchanged among black/AAs (75.5%) and Latino (53.7%) adults who was a smoker in the past year.

More than a third (38.6%) of adults who were smokers in the past year who saw a healthcare provider were referred to smoking cessation treatment, similar to the rate in 2008 except that such referrals declined sharply in rural areas, from 47.8% to 30.1%. The type of referral shifted from NRT to the Colorado QuitLine, as QuitLine referrals increased from 36.2% to 45.6% while NRT prescriptions decreased from 38.3% to 25.8%. This shift may reflect the fact that the Colorado QuitLine includes free NRT for many enrollees. Referrals to a smoking cessation class or group declined from 4.8% to 1.5%.

Smokers who were advised to quit were more likely to try quitting in 2012, up from 31.1% to 37.9% with larger increases among men, from 25.5% to 35.3%, and Medicare beneficiaries, from 33.9% to 54.3%.
Secondhand smoke (SHS): More protection, less exposure, continuing disparities

**Household smoking rules and behaviors.** Homes with smokefree rules increased from 84.5% to 87.1% (Figure 7). Low SES adults were less likely than other adults to have smokefree home rules (80.7% vs. 93.1%), as were adults with a disability compared to others (64.4% vs. 88.5%). Fewer black/AA homes had smokefree rules (79.7% vs. 88.4% of Anglo homes), and recent smoking in black/AA homes was more common (12.9% vs. 8.4% in Anglo homes). Fewer GLB homes had smokefree rules (77.3% vs. 87.8% of heterosexual households) and more had recent smoking (14.9% vs. 8.6%).

Past-30-day smoking inside homes decreased from 12.2% to 8.7% overall (Figure 8), with larger improvements among AI/AN adults, from 24.6% to 13.3%, and GLB adults, from 27.9% to 14.9%; the problem was three times as common among low SES adults as among other adults (13.8% vs. 4.3%).

**Personal vehicle smoking rules.** Colorado vehicle owners were more likely in 2012 than in 2008 to keep their vehicles smokefree (76.1%, up from 71.3%). Most nonsmoking vehicle owners (86.6%) had smokefree vehicles in 2012; among current smokers, one in four vehicle owners (24.6%) had a smokefree vehicle, an increase from one in five (19.8%) in 2008. GLB adults and fewer smokefree vehicles rules (62.6% vs. 76.2%) compared to heterosexuals.

**SHS exposure of children at home.** Children are highly vulnerable to illness from SHS exposure. Where a child lived with an adult smoker, past-30-day smoking in the home declined from 23.6% in 2008 to 18.4% but remained far more common than in homes where children lived with nonsmokers (1.5%).

Where low SES children lived with an adult smoker, smokefree rules were less common than in corresponding households with higher SES (73.4% vs. 90.8%).

**Indoor workplace smoking.** Past-30-day smoking decreased in workplaces from 5.7% to 3.8%. The improvement demonstrates continuing and widening compliance with the Colorado Clean Indoor Act of 2006, which requires workplaces that employ three or more people to be smokefree. Men were more likely than women to report past 30 day smoking in the workplace (5.6% vs. 2.2%), as were Latinos compared to Anglos (5.3% vs. 3.3%) and low SES vs. other SES indoor workers (6.3% vs. 1.8%).

**Smoking rules in commercial vehicles.** Rules increased from 73.1% to 78.8%, with no differences by age group or ethnicity. Those with low SES were less likely than others to report smokefree work vehicle rules (72.5% vs. 83.1%).
**Rejection of SHS exposure.** For the first time, a majority of Colorado adults (55.8%) said they had to "put up with" someone smoking around them outside their home or workplace, a substantial increase from 39.5% in 2008. More than one in four (29.1%) asked someone not to smoke around them or their family. Among those who had "put up with smoking," public parks were the most common location (Figure 9).

![Figure 9. Places where Coloradans "put up with smoking" in the previous six months (outside own home or workplace)](image-url)
Other forms of tobacco

About one-fourth of adults (28.4%) have ever used a non-cigarette tobacco product, unchanged from 2008. Current use of chewing tobacco or snuff was also unchanged (3.7% in 2012), remained predominantly a male behavior (7.1%), and was evenly split between daily and someday use. Current use was more common among rural than non-rural men (13.3% vs. 5.6%); Anglo than black/AA men (8.1% vs. 2.1%), and heterosexual than GLB men (7.5% vs. 3.0%).

Current cigar smoking (every day or some days) remained unchanged (2.5% in 2012). Few men (0.3%) smoked cigars daily. Current use was lower among heterosexual men that GLB (4.8% vs. 5.8%) and did not vary by ethnicity, SES status, or MI/ML.

Cigar smoking and chewing tobacco/snuff use were both more common among men younger than 45 than men aged 45+ (Figure 10). Among young adults, student status was unrelated to use.

No evidence was found to suggest that Colorado tobacco users are switching from cigarettes to smokeless products. Men who currently smoked cigarettes were more likely than former/non-smokers to also use chewing tobacco or snuff (12.5% vs. 5.8%), and chewing tobacco/snuff use did not increase overall among men of any smoking status.

Hookah (waterpipe) smoking decreased substantially, especially among young adults. Although advertised as safe, hookah smoke exposes users to both tobacco toxins and toxic chemicals from fuel used to burn the tobacco. Communicable diseases can be transmitted among users of shared mouthpieces or multiple mouthpieces connected to a single water bowl.41

Ever-use of a hookah declined from 14.9% to 9.9% overall and from 20.3% to 15.6% among men. Among Colorado cigarette smokers, roughly one in four (24.2%) has ever smoked a hookah. Ever-use declined substantially among young adults (from 39.1% to 25.8%; Figure 11), females (from 32.3% to 14.2%), and students (from 41.4% to 23.0%). GLB hookah use declined between 2008 and 2012 (from 30.3% to 15.7%).

Hookah ever-use is much less common among cigarette nonsmokers and former smokers (5.8% and 9.8%, respectively), with most common ever-use among:

- men compared to women (15.6% vs. 4.3%);
- GLB women than heterosexual women (18.3% vs. 3.9%);
- adults with vs. without MI/ML (17.0% vs.9.0%);
- adults with vs. without low SES (12.4% vs 7.2%).
E-cigarettes

Although electronic cigarettes first appeared in the United States in 2007, they received little media attention and only low-level marketing until 2013. But already in 2012, more than one-fourth (29.5%) of Colorado adult current smokers had tried e-cigarettes (as did 2.2% of non/former smokers). Among young adults, more than half of current smokers (53.7%) and 15.6% overall had tried e-cigarettes.

Recent national studies have found rapidly widening interest in, and use of, e-cigarettes among both smokers and nonsmoking adolescents and young adults. The devices are currently unregulated and are marketed largely by tobacco companies. E-cigarettes may or may not support cessation attempts, and they may deliver toxins to both users and bystanders. At present, their public health impact is unknowable, but fast-increasing visibility of their large, emotionally manipulative advertising campaigns threatens to make smoking – whether real or simulated – seem highly attractive again.
Young adult nonstudents: a closer look

Young adult nonstudents, also known as straight-to-work (STW) young adults, tend to have lower SES than those who continue their formal education after high school graduation. Compared to young adult students, Colorado STW young adults are more likely to be male (58.9% vs. 51.2%), non-Anglo (42.3% vs. 34.3%), resident in a rural area (17.9% vs. 14.3%), and lack health insurance (35.8% vs. 21.1%).

Compared to young adult students, STW young adults were more than twice as likely to be current smokers (31.9% vs. 12.3%) and less likely to have smokefree rules at home (80.0% vs. 85.3%) or in personal vehicles (51.6% vs. 70.5%).

Smoking and mental illness* / mental limitations†

About one in seven Colorado adults (14.4%) reported a diagnosed mental illness (MI) or mental limitation (ML). These adults were more likely than those not reporting an MI/ML to be ever-smokers and current smokers (57.8% vs. 38.9% and 32.9% vs. 14.8%, respectively). Cigarette consumption levels were similar between the groups, and neither quit-attempt nor quit-success rates differed by MI/ML.

MI/ML smokers were more likely than non-MI/ML smokers to have seen a health care provider in the past 12 months (80.9% vs. 69.7%), but the groups had similar rates of provider advice to quit smoking, referral to cessation assistance, QuitLine awareness, and QuitLine ever-use. MI/ML smokers were more likely than non-MI/ML smokers to have used NRT in the most recent quit-attempt (25.3% vs. 20.8%); prescription cessation medication use was similar between the two groups.

Smokefree home rules were less common among MI/ML vs. non-MI/ML adults (79.6% vs. 88.7%), as were smokefree personal vehicle rules (62.7% vs. 78.1%), and past-30-day smoking in the home was more common (16.5% vs. 7.3%).

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* adults who report having a diagnosed mental illness
† adults who report that their activity is limited by a mental or emotional condition
References


4. Israel Agaku, DMD, Brian King, PhD, Shanta R. Dube, PhD, 2013. Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, CDC/DC.


