



## **Morbidity and Mortality Weekly Report**

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### Great American Smokeout — November 17, 2005

Approximately 20.9% of U.S. adults are current smokers (*I*), and an estimated 70% of smokers want to quit smoking (*2*). Since 1977, the American Cancer Society (ACS) has sponsored the Great American Smokeout each year on the third Thursday in November. Smokers are encouraged to quit for 24 hours straight in the hope they might quit permanently.

Effective interventions for increasing cessation success rates include sustained media campaigns; price increases for tobacco products; increased insurance coverage for treatment; individual, group, or telephone counseling; and approved medications. Telephone quitlines are a cost-effective and accessible way to provide smokers with counseling about cessation strategies (3,4). The National Network of Quitlines, a collaborative effort of CDC, the National Cancer Institute, state quitlines, and the North American Quitline Consortium, maintains a national telephone number (800-QUIT-NOW) that links callers to free quitlines serving their areas.

Information about the Great American Smokeout is available from ACS at telephone, 800-227-2345, or from a local ACS office. Information on smoking cessation is also available at http://smokefree.gov.

#### References

- 1. CDC. Cigarette smoking among adults—United States, 2004. MMWR 2005;54:1121–4.
- 2. CDC. Cigarette smoking among adults—United States, 2000. MMWR 2002;51:642–5.
- CDC. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems. MMWR 2000;49(No. RR-12).
- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2000.

# Cigarette Smoking Among Adults — United States, 2004

One of the national health objectives for 2010 is to reduce the prevalence of cigarette smoking among adults to ≤12% (objective no. 27-1a) (1). To assess progress toward this objective, CDC analyzed self-reported data from the 2004 National Health Interview Survey (NHIS) sample adult core questionnaire. This report describes the results of that analysis, which indicated that, in 2004, approximately 20.9% of U.S. adults were current smokers. This prevalence is lower than the 21.6% prevalence among U.S. adults in 2003 and is significantly lower than the 22.5% prevalence among adults in 2002 (2). The prevalence of heavy smoking (≥25 cigarettes per day) has also declined during the past 11 years, from 19.1% of smokers in 1993 to 12.1% of smokers in 2004. Tobacco-use prevention and control measures appear to be decreasing both the prevalence of cigarette smoking and the proportion of heavy smokers, who are at high risk for tobacco-related morbidity and mortality. However, to further decrease smoking prevalence among adults and to meet the national health objective, effective comprehensive tobacco-control programs that address both initiation and cessation of smoking should be fully implemented in every state and territory.

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#### Notifiable Disease Morbidity and 122 Cities Mortality Data

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The 2004 NHIS adult core questionnaire was administered by personal interview to a nationally representative sample (n = 31,326) of the noninstitutionalized U.S. civilian population aged ≥18 years; the overall survey response rate for the sample was 72.5%. Respondents were asked, "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Ever smokers were defined as those who reported having smoked ≥100 cigarettes during their lifetime. Current smokers were defined as those reporting having smoked ≥100 cigarettes during their lifetime and currently smoking every day or some days. Current smokers who reported that they smoked every day also reported the average number of cigarettes smoked per day. Former smokers were defined as those who reported smoking ≥100 cigarettes during their lifetime but who currently did not smoke. Data were adjusted for nonresponse and weighted to provide national estimates of cigarette smoking prevalence and the number of cigarettes smoked per day. Confidence intervals were calculated using statistical analysis software to account for the survey's multistage probability sample design.

In 2004, an estimated 20.9% (44.5 million) of U.S. adults were current smokers; of these, 81.3% (36.1 million) smoked every day, and 18.7% (8.3 million) smoked some days. Among those who currently smoked every day, 40.5% (14.6 million) reported that they had stopped smoking for at least 1 day during the preceding 12 months because they were trying to quit. Among the estimated 42.4% (90.2 million) of persons who had ever smoked, 50.6% (45.6 million) were former smokers.

The prevalence of current cigarette smoking varied substantially across population subgroups (Table). Current smoking was higher among men (23.4%) than women (18.5%). Among racial/ethnic populations, Asians (11.3%) and Hispanics (15.0%) had the lowest prevalence of current smoking; American Indians/Alaska Natives had the highest prevalence (33.4%), followed by non-Hispanic whites (22.2%) and non-Hispanic blacks (20.2%). By education level, current smoking prevalence was highest among adults who had earned a General Educational Development (GED) diploma (39.6%) and among those with a 9th–11th grade education (34.0%) and generally decreased with increasing years of education. Persons aged ≥65 years had the lowest prevalence of current cigarette smoking (8.8%) among all adults. Current smoking prevalence was higher among adults living below the poverty level (29.1%) than among those at or above the poverty level (20.6%).

Hispanic (10.9%) and Asian (4.8%) women, women with less than an 8th-grade education (10.5%), women with undergraduate (10.1%) or graduate (8.1%) degrees, men with

TABLE. Percentage of persons aged ≥18 years who were current smokers,\* by sex and selected characteristics — National Health Interview Survey, United States, 2004

	Men (n = 13,903)		Women (n = 17,423)		Total (n = 31,326)	
Characteristic	% (95% CI†)		% (95% CI)		% (95% CI)	
Race/Ethnicity§						
White, non-Hispanic	24.1	(±1.1)	20.4	$(\pm 0.9)$	22.2	(±0.8)
Black, non-Hispanic	23.9	$(\pm 2.4)$	17.2	(±2.1)	20.2	(±1.7)
Hispanic	18.9	(±1.9)	10.9	$(\pm 1.3)$	15.0	(±1.2)
American Indian/						
Alaska Native <sup>¶</sup>	37.3	(±12.1)	28.5	(±11.4)	33.4	$(\pm 8.3)$
Asian**	17.8	$(\pm 4.4)$	4.8	(±2.1)	11.3	(±2.4)
Education <sup>††</sup>						
0-12 yrs (no diploma)	31.5	$(\pm 2.4)$	21.2	$(\pm 2.0)$	26.2	(±1.6)
<8 yrs	23.5	(±3.2)	10.5	(±2.0)	16.7	(±2.0)
9–11 yrs	38.3	$(\pm 3.7)$	29.8	(±3.1)	34.0	(±2.4)
12 yrs (no diploma)	29.9	(±6.5)	21.9	$(\pm 4.6)$	25.5	(±3.8)
GED <sup>§§</sup> diploma	42.1	$(\pm 5.9)$	36.6	$(\pm 5.9)$	39.6	$(\pm 4.4)$
High school graduate	27.2	$(\pm 1.8)$	21.1	$(\pm 1.4)$	24.0	(±1.1)
Associate degree	24.6	$(\pm 3.1)$	18.0	$(\pm 2.1)$	20.9	(±1.9)
Some college	24.6	$(\pm 1.8)$	20.3	$(\pm 1.3)$	22.2	(±1.1)
Undergraduate degree	13.5	$(\pm 1.7)$	10.1	$(\pm 1.4)$	11.7	(±1.1)
Graduate degree	7.9	$(\pm 1.5)$	8.1	$(\pm 1.5)$	8.0	(±1.0)
Age group (yrs)						
18–24	25.6	$(\pm 2.9)$	21.5	$(\pm 2.3)$	23.6	(±2.0)
25-44	26.3	(±1.5)	21.4	(±1.2)	23.8	(±1.0)
45–64	25.0	$(\pm 1.6)$	19.8	$(\pm 1.2)$	22.4	(±1.0)
≥65	9.8	$(\pm 1.4)$	8.1	$(\pm 1.0)$	8.8	(±0.8)
Poverty status <sup>¶¶</sup>						
At or above	23.5	(±1.1)	17.7	$(\pm 0.9)$	20.6	(±0.7)
Below	31.9	(±3.3)	27.1	(±2.2)	29.1	(±2.0)
Unknown	20.8	(±1.6)	17.4	(±1.4)	19.0	(±1.1)
Total	23.4	(±0.9)	18.5	(±0.7)	20.9	(±0.6)

- \* Persons who reported smoking ≥100 cigarettes during their lifetime and at the time of interview reported smoking every day or some days. Excludes 349 respondents whose smoking status was unknown.
- † Confidence interval.
- § Excludes 332 respondents of unknown or multiple racial/ethnic category or whose racial/ethnic category was unknown.
- ¶ Wide variances in estimates reflect small sample sizes.
- \*\* Does not include native Hawaiians or other Pacific Islanders.
- <sup>††</sup> Among persons aged ≥25 years. Excludes 345 persons whose education level was unknown.
- §§ General Educational Development.
- Based on family income reported by respondents and 2003 poverty thresholds published by the U.S. Census Bureau.

graduate degrees (7.9%), men aged  $\geq$ 65 years (9.8%), and women aged  $\geq$ 65 years (8.1%) all had smoking prevalence rates below the national health objective of  $\leq$ 12% (Table).

From 1993 through 2004, the percentage of daily smokers who smoked ≥25 cigarettes per day (cpd) (i.e., heavy smokers) decreased steadily, from 19.1% to 12.1% (Figure). During the same period, the percentage of daily smokers who smoked 1–4 cpd and 5–14 cpd increased, from 2.9% to 4.8% and from 20.6% to 28.4%, respectively. The mean number of cpd among daily smokers in 1993 was 19.6 (21.3 cpd for men and 17.8 cpd for women) and in 2004 was 16.8 (18.1 cpd for men and 15.3 cpd for women). Among current smokers, the overall percentage of some-day smokers remained stable at approximately 18%–19% during the same period.

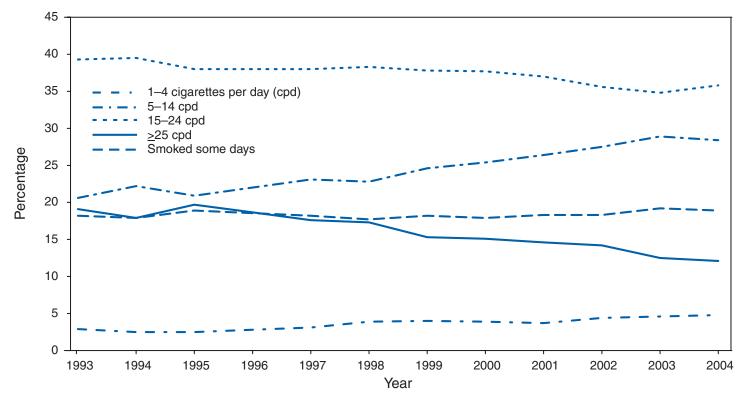
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Editorial Note: The findings in this report indicate that cigarette smoking continues to decrease among U.S. adults overall. Nationally and in 34 states, Puerto Rico, and the U.S. Virgin Islands (3), the majority of adults who ever smoked have now quit smoking. However, the rate of decrease in cigarette smoking among adults is not sufficient to meet the national health objective for 2010, which is to reduce the prevalence of cigarette smoking to ≤12%. Furthermore, although the decline in smoking has been observed nationally, smoking prevalence remains high among certain segments of the population. For example, in 2004, the smoking prevalence among persons with a GED diploma was approximately 40%, and approximately one in three persons with a 9th−11th grade education smoked.

The findings in this report are subject to at least three limitations. First, estimates for cigarette smoking are based on self-reports and are not validated by biochemical tests. However, self-reported data on current smoking status have high validity (4). Second, the NHIS questionnaire is administered only in English and Spanish, which might result in imprecise estimates of smoking prevalence for racial/ethnic populations unable to respond to the survey because of language barriers. Finally, the small sample sizes in NHIS for certain population subgroups (e.g., Asians and American Indians/Alaska Natives) result in unstable single-year estimates for those groups.

In addition to the reduction in smoking prevalence in the adult U.S. population, the number of cigarettes smoked by daily smokers and the proportion of adults who were heavy smokers have also declined during the past 11 years. This study did not assess what proportion of the decline in the prevalence of heavy smokers was attributable to 1) smokers reducing their number of cigarettes per day, 2) smokers quitting, or 3) changes in cohorts of smokers over time in terms of their cigarette consumption. A recent longitudinal study in Denmark reported that smokers who reduced their smoking from an average of 20 to 10 cpd during a 5-10 year interval reduced their lung cancer risk by 25% (5). The risk for lung cancer declines steadily in persons who quit smoking. After 10 years of abstinence, the risk for lung cancer is approximately 30%–50% of the risk for continuing smokers (6). After 15 years of abstinence, the risk for coronary heart disease is similar to that of persons who have never smoked (7). Reduced consumption has not, however, reduced the risk for other diseases with substantial public health burdens, such as chronic obstructive pulmonary disease and coronary heart disease (6); in addition, some long-term studies have failed to show a decrease in overall mortality after cigarette reduction (8).

FIGURE. Percentage of daily\* and some-day<sup>†</sup> smokers among persons aged ≥18 years, by number of cigarettes smoked per day and year — National Health Interview Survey, United States, 1993–2004



<sup>\*</sup>Current smokers who reported smoking every day.

No level of tobacco use is safe; the best option for any smoker is to quit completely (6). Effective smoking cessation interventions are available, including brief clinical counseling, pharmacotherapy, and state quitlines (available by telephone, 800-QUIT NOW). Comprehensive tobacco-control programs must be fully implemented in every state and territory to accelerate the reduction in smoking prevalence among U.S. adults and decrease the public health burden of smoking-related disease (7,9).

#### References

- US Department of Health and Human Services. Healthy people 2010: understanding and improving health. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at http:// www.healthypeople.gov.
- CDC. Cigarette smoking among adults—United States, 2003. MMWR 2005;54:509–13.
- CDC. State-specific prevalence of cigarette smoking and quitting among adults—United States, 2004. MMWR 2005;54:1124–7.
- Patrick DL, Cheadle A, Thompson DC, Diehr P, Koepsell T, Kinne S. The validity of self-reported smoking: a review and meta-analysis. Am J Public Health 1994;84:1086–93.
- 5. Godtfredsen NS, Prescott E, Osler M. Effect of smoking reduction on lung cancer risk. JAMA 2005;294:1505–10.
- 6. US Department of Health and Human Services. The health benefits of smoking cessation: a report of the Surgeon General. Rockville, MD: US Department of Health and Human Services, CDC;1990.

- CDC. Best practices for comprehensive tobacco control programs. Atlanta, GA: US Department of Health and Human Services, CDC; 1999.
- 8. Godtfredsen NS, Holst C, Prescott E, Vestbo J, Osler M. Smoking reduction, smoking cessation, and mortality: a 16-year follow-up of 19,732 men and women from The Copenhagen Centre for Prospective Population Studies. Am J Epidemiol 2002;156:994–1001.
- Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. Am J Prev Med 2001;20(2 Suppl 1):1–87.

## State-Specific Prevalence of Cigarette Smoking and Quitting Among Adults — United States, 2004

After stagnating in the early 1990s, cigarette smoking prevalence among adults in the United States declined during the late 1990s and early 2000s (*I*). In 2002, for the first time, more than half of those who had ever smoked had quit smoking (*I*). To assess the prevalence of current and never cigarette smoking and the proportion of ever smokers who had quit smoking, CDC analyzed state/area data from the 2004

<sup>&</sup>lt;sup>†</sup>Current smokers who reported smoking some days.

Behavioral Risk Factor Surveillance System (BRFSS). This report summarizes the results of that analysis, which indicated substantial variation in current cigarette smoking prevalence among 49 states, the District of Columbia (DC), Puerto Rico (PR), and the U.S. Virgin Islands (USVI) (range: 9.5%–27.6%). In 44 states, DC, PR, and USVI, the majority of persons had never smoked. In 34 states, PR, and USVI, more than 50% of ever smokers had quit smoking. Effective, comprehensive tobacco-use prevention and control programs should be continued and expanded to further reduce initiation among young persons and to ensure that smokers have access to effective smoking-cessation services, including proactive telephone quitline counseling (2,3).

BRFSS is a state-based, random-digit—dialed, telephone health survey of the noninstitutionalized, civilian U.S. population aged ≥18 years. Estimates were weighted by age and sex distributions of each state/area population, and 95% confidence intervals were calculated using statistical analysis software. Because BRFSS data are state-specific, median prevalences are reported instead of national averages. The median response rate across 49 states and DC was 52.7% (range: 32.2% [New Jersey]–66.6% [Nebraska]).

Respondents were asked, "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Ever smokers were defined as those who reported having smoked ≥100 cigarettes during their lifetime. Current smokers were defined as those who reported having smoked ≥100 cigarettes during their lifetime and who currently smoked every day or some days. Never smokers were defined as those who reported not having smoked ≥100 cigarettes during their lifetime. Former smokers were defined as those who reported having smoked ≥100 cigarettes during their lifetime and who currently did not smoke at all. The percentage of ever smokers who had quit smoking was calculated by dividing the number of former smokers by the number of ever smokers.

### **Current Cigarette Smoking Prevalence**

In 2004, the median adult smoking prevalence among 49 states and DC was 20.9%, with a nearly three-fold difference between the lowest and highest prevalence (range: 10.5% [Utah]–27.6% [Kentucky]) (Table 1). Current smoking prevalence was highest in Kentucky (27.6%), West Virginia (26.9%), Oklahoma (26.1%), and Tennessee (26.1%), and was lowest in Utah (10.5%), California (14.8%), and Idaho (17.5%). Smoking prevalence was 9.5% in USVI and 12.7% in PR. Men generally had a higher smoking prevalence (median: 23.2% [range: 11.7%–29.3%]) than women (median: 19.2% [range: 9.4%–26.4%]) in 49 states and DC.

#### **Never Cigarette Smoking Prevalence**

In 2004, the median adult never smoking prevalence among 49 states and DC was 54.6% (Table 2). Never smoking prevalence was highest in Utah (73.7%) and California (61.1%) and lowest in Maine (47.7%) and West Virginia (48.0%). Never smoking prevalence was 72.2% in PR and 80.5% in USVI. Women had a higher never smoking prevalence (median: 59.5% [range: 52.1%–78.9%]) than men (median: 48.4% [range: 41.3%–68.4%]).

## Percentage of Ever Smokers Who Have Quit Smoking

In 2004, the median percentage of adult ever smokers who had quit among 49 states and DC was 52.4% (Table 2). Among all states/areas surveyed, 36 had percentages of ever smokers who had quit at ≥50%. Four states had percentages of ever smokers who had quit at ≥60%: Connecticut (62.5%), California (62.0%), Vermont (60.5%), and Utah (60.1%). The five states with the lowest percentages of ever smokers who had quit were Kentucky (42.5%), Mississippi (44.0%), Alabama (45.6%), Louisiana (45.9%), and Tennessee (45.9%).

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Editorial Note: One of the Healthy People 2010 objectives (objective no. 27-1a) is to reduce cigarette smoking prevalence to ≤12% (4). As of 2004, Utah and USVI achieved this goal in the population overall and among both men and women; California women also achieved this goal. The findings in this report indicate that in the majority of states, most adults have never been smokers and, among those who have ever smoked, the majority have quit. However, the rate of decline in current smoking is not rapid enough for most states to achieve the 2010 objective. Comprehensive tobaccocontrol programs are effective in preventing and reducing tobacco use, and the more funds states spend on such programs, the greater the reduction in smoking (5). Many states have reduced funding in recent years, and only four states (Colorado, Delaware, Maine, and Mississippi) funded their programs in fiscal year 2005 at even the minimum levels recommended by CDC (3,6).

The findings in this report are subject to at least three limitations. First, BRFSS does not survey persons in households without telephones, a population that might be more likely to smoke (7). BRFSS estimates that 97.6% of the U.S. population had telephones in 2003; however, noncoverage ranged from 1.1% in Connecticut and New Hampshire to 6.6% in Mississippi and 23.8% in Puerto Rico (8). Second, estimates

TABLE 1. Prevalence of current cigarette smoking among adults,\* by state/area and sex — Behavioral Risk Factor Surveillance System, 49 states, † District of Columbia, Puerto Rico, and the U.S. Virgin Islands, 2004

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		Men Women		Total		
State/Area	%	(95% CI§)	%	(95% CI)	%	(95% CI)
Alabama	29.0	$(\pm 3.0)$	21.2	( <u>+</u> 1.9)	24.9	( <u>+</u> 1.8)
Alaska	26.4	( <u>+</u> 3.6)	23.3	( <u>+</u> 3.0)	24.9	( <u>+</u> 2.4)
Arizona	19.7	( <u>+</u> 3.8)	17.6	( <u>+</u> 2.4)	18.6	( <u>+</u> 2.2)
Arkansas	28.1	( <u>+</u> 2.7)	23.4	( <u>+</u> 2.0)	25.7	( <u>+</u> 1.7)
California	18.5	( <u>+</u> 2.3)	11.1	( <u>+</u> 1.3)	14.8	( <u>+</u> 1.3)
Colorado	22.3	( <u>+</u> 2.5)	17.8	( <u>+</u> 1.7)	20.1	( <u>+</u> 1.5)
Connecticut	20.1	( <u>+</u> 2.1)	16.2	( <u>+</u> 1.5)	18.1	( <u>+</u> 1.3)
Delaware	28.4	$(\pm 3.3)$	20.9	( <u>+</u> 2.1)	24.5	( <u>+</u> 1.9)
District of Columbia	25.1	( <u>+</u> 3.6)	17.3	( <u>+</u> 2.2)	21.0	( <u>+</u> 2.1)
Florida	23.3	( <u>+</u> 2.5)	17.7	( <u>+</u> 1.6)	20.4	( <u>+</u> 1.5)
Georgia	22.4	( <u>+</u> 2.6)	17.9	( <u>+</u> 1.8)	20.1	( <u>+</u> 1.6)
Idaho	19.2	( <u>+</u> 2.1)	15.7	( <u>+</u> 1.5)	17.5	( <u>+</u> 1.3)
Illinois	26.1	( <u>+</u> 2.7)	18.6	( <u>+</u> 1.9)	22.2	( <u>+</u> 1.6)
Indiana	26.8	( <u>+</u> 2.0)	23.2	( <u>+</u> 1.5)	25.0	( <u>+</u> 1.2)
lowa	22.8	( <u>+</u> 2.3)	19.0	( <u>+</u> 1.6)	20.8	( <u>+</u> 1.4)
Kansas	22.1	(±1.7)	17.6	(±1.2)	19.8	(±1.0)
Kentucky	29.3	( <u>+</u> 3.0)	25.9	( <u>+</u> 2.0)	27.6	( <u>+</u> 1.8)
Louisiana	26.9	( <u>+</u> 2.0)	20.5	( <u>+</u> 1.3)	23.6	( <u>+</u> 1.1)
Maine	22.6	( <u>+</u> 2.7)	19.5	( <u>+</u> 2.1)	21.0	(±1.7)
Maryland	22.7	( <u>+</u> 2.9)	16.9	( <u>+</u> 1.8)	19.7	(±1.7)
Massachusetts	19.7	( <u>+</u> 2.0)	17.4	( <u>+</u> 1.4)	18.5	( <u>+</u> 1.2)
Michigan	25.0	( <u>+</u> 2.4)	21.8	( <u>+</u> 1.8)	23.4	( <u>+</u> 1.5)
Minnesota Mississippi	22.0	(±2.2)	19.5	(±1.9)	20.7	(±1.4)
Missouri	29.1 26.1	( <u>+</u> 2.5) (+2.6)	20.5 22.3	( <u>+</u> 1.6) (+2.1)	24.6 24.1	( <u>+</u> 1.5)
Montana	20.1	(±2.6) (+2.4)		·— ,	20.4	( <u>+</u> 1.7)
Nebraska	23.1	(±2.4) (±1.9)	20.2 17.7	( <u>+</u> 1.9) ( <u>+</u> 1.4)	20.4	( <u>+</u> 1.5) ( <u>+</u> 1.2)
Nevada	24.7	(±1.9) (±3.2)	21.7	(±1.4) (±3.0)	23.2	$(\pm 1.2)$ $(\pm 2.2)$
New Hampshire	24.0	(±3.2) (±2.3)	19.7	( <u>+</u> 3.0) ( <u>+</u> 1.8)	21.8	(±2.2) ( <u>+</u> 1.4)
New Jersey	20.1	( <u>+</u> 1.5)	17.8	( <u>+</u> 1.1)	18.9	(±0.9)
New Mexico	22.8	(±2.1)	17.9	( <u>+</u> 1.5)	20.3	(±1.3)
New York	21.2	( <u>+</u> 2.1)	19.0	( <u>+</u> 1.5)	20.0	(±1.3)
North Carolina	26.6	( <u>+</u> 1.6)	20.0	( <u>+</u> 1.0)	23.2	( <u>+</u> 0.9)
North Dakota	24.1	( <u>+</u> 2.8)	15.8	( <u>+</u> 2.0)	19.9	(±1.7)
Ohio	27.3	(±3.6)	24.7	( <u>+</u> 2.7)	25.9	(±2.2)
Oklahoma	28.1	( <u>+</u> 2.2)	24.2	( <u>+</u> 1.6)	26.1	( <u>+</u> 1.3)
Oregon	21.9	( <u>+</u> 2.2)	18.2	( <u>+</u> 1.6)	20.0	( <u>+</u> 1.4)
Pennsylvania	23.0	( <u>+</u> 2.1)	22.5	( <u>+</u> 1.6)	22.7	( <u>+</u> 1.3)
Rhode Island	23.7	( <u>+</u> 2.8)	19.2	( <u>+</u> 2.0)	21.3	(±1.7)
South Carolina	28.1	( <u>+</u> 2.2)	21.2	( <u>+</u> 1.5)	24.5	( <u>+</u> 1.3)
South Dakota	22.0	( <u>+</u> 2.0)	18.7	( <u>+</u> 1.7)	20.3	( <u>+</u> 1.3)
Tennessee	27.1	$(\pm 3.2)$	25.3	(±2.3)	26.1	( <u>+</u> 1.9)
Texas	23.7	( <u>+</u> 2.1)	17.5	( <u>+</u> 1.5)	20.6	( <u>+</u> 1.3)
Utah	11.7	( <u>+</u> 1.6)	9.4	( <u>+</u> 1.4)	10.5	( <u>+</u> 1.0)
Vermont	21.8	( <u>+</u> 1.9)	18.3	( <u>+</u> 1.4)	20.0	( <u>+</u> 1.2)
Virginia	22.4	( <u>+</u> 2.4)	19.5	( <u>+</u> 1.9)	20.9	( <u>+</u> 1.5)
Washington	20.1	( <u>+</u> 1.2)	18.3	( <u>+</u> 0.9)	19.2	( <u>+</u> 0.8)
West Virginia	27.4	( <u>+</u> 2.8)	26.4	( <u>+</u> 2.2)	26.9	( <u>+</u> 1.8)
Wisconsin	25.0	( <u>+</u> 2.5)	19.1	( <u>+</u> 1.8)	22.0	( <u>+</u> 1.5)
Wyoming	21.6	( <u>+</u> 2.3)	21.9	( <u>+</u> 1.9)	21.7	( <u>+</u> 1.5)
Median	23.2		19.2		20.9	
Puerto Rico	17.4	( <u>+</u> 2.5)	8.4	( <u>+</u> 1.4)	12.7	( <u>+</u> 1.4)
U.S. Virgin Islands	11.9	( <u>+</u> 2.5)	7.4	( <u>+</u> 1.4)	9.5	( <u>+</u> 1.4)

<sup>\*</sup> Persons aged ≥18 years who reported having smoked ≥100 cigarettes

TABLE 2. Prevalence of never\* smoking cigarettes and percentage of ever smokers who have quit<sup>†</sup> among adults, by state/area — Behavioral Risk Factor Surveillance System, 49 states,§ District of Columbia, Puerto Rico, and the U.S. Virgin Islands, 2004

Virgin Islands, 2004					
	Prevalence of never smoking cigarettes		Percentage of ever smokers who have quit		
State/Area	%	(95% CI <sup>1</sup> )	%	(95% CI)	
Alabama	54.3	( <u>+</u> 2.0)	45.6	( <u>+</u> 2.9)	
Alaska	51.1	(+2.8)	49.1	(±3.9)	
Arizona	57.0	( <u>+</u> 2.7)	56.7	( <u>+</u> 4.1)	
Arkansas	49.7	( <u>+</u> 1.8)	48.9	( <u>+</u> 2.6)	
California	61.1	(±1.8)	62.0	( <u>+</u> 2.8)	
Colorado	55.5	( <u>±</u> 1.8)	54.9	( <u>+</u> 2.7)	
Connecticut	51.8	(±1.5)	62.5	( <u>+</u> 2.2)	
Delaware	50.4	( <u>+</u> 2.1)	50.7	(+3.1)	
District of Columbia	59.9	( <u>+</u> 2.3)	47.7	( <u>+</u> 3.6)	
Florida	53.8	( <u>+</u> 1.7)	55.9	( <u>+</u> 2.5)	
Georgia	58.9	( <u>+</u> 1.9)	51.1	(+2.9)	
Idaho	59.1	( <u>+</u> 1.7)	57.3	( <u>+</u> 2.6)	
Illinois	56.3	(±1.8)	49.2	( <u>+</u> 2.8)	
Indiana	52.4	(±1.4)	47.5	( <u>+</u> 2.0)	
Iowa	57.8	(+1.6)	50.6	( <u>+</u> 2.5)	
Kansas	58.5	( <u>+</u> 1.2)	52.3	( <u>+</u> 1.9)	
Kentucky	52.1	( <u>+</u> 2.0)	42.5	( <u>+</u> 2.7)	
Louisiana	56.5	(+1.3)	45.9	(±2.0)	
Maine	47.7	( <u>+</u> 2.0)	59.9	(+2.7)	
Maryland	57.1	( <u>+</u> 1.9)	54.1	( <u>+</u> 3.0)	
Massachusetts	54.5	(±1.5)	59.4	(±2.2)	
Michigan	51.5	(+1.7)	51.9	( <u>+</u> 2.4)	
Minnesota	52.5	( <u>+</u> 1.7)	56.4	( <u>+</u> 2.5)	
Mississippi	56.1	( <u>+</u> 1.7)	44.0	( <u>+</u> 2.5)	
Missouri	51.7	( <u>+</u> 1.9)	50.1	( <u>+</u> 2.8)	
Montana	54.6	( <u>+</u> 1.8)	55.1	( <u>+</u> 2.7)	
Nebraska	58.4	( <u>+</u> 1.4)	51.1	( <u>+</u> 2.1)	
Nevada	52.3	( <u>+</u> 2.7)	51.3	(±3.7)	
New Hampshire	49.8	( <u>+</u> 1.6)	56.7	( <u>+</u> 2.3)	
New Jersey	56.7	( <u>+</u> 1.1)	56.4	( <u>+</u> 1.7)	
New Mexico	55.6	( <u>+</u> 1.5)	54.3	( <u>+</u> 2.3)	
New York	55.9	( <u>+</u> 1.6)	54.6	( <u>+</u> 2.3)	
North Carolina	55.5	(±1.1)	47.8	(±1.6)	
North Dakota	56.5	( <u>+</u> 2.0)	54.3	( <u>+</u> 3.1)	
Ohio	51.9	( <u>+</u> 2.4)	46.1	(±3.5)	
Oklahoma	51.3	( <u>+</u> 1.4)	46.4	( <u>+</u> 2.1)	
Oregon	55.3	( <u>+</u> 1.6)	55.3	( <u>+</u> 2.4)	
Pennsylvania	53.3	( <u>+</u> 1.5)	51.3	(+2.1)	
Rhode Island	49.9	( <u>+</u> 2.0)	57.4	( <u>+</u> 2.7)	
South Carolina	53.7	( <u>+</u> 1.4)	47.1	( <u>+</u> 2.1)	
South Dakota	56.0	( <u>+</u> 1.6)	53.8	( <u>+</u> 2.3)	
Tennessee	51.7	( <u>+</u> 2.2)	45.9	( <u>+</u> 3.1)	
Texas	59.1	( <u>+</u> 1.5)	49.7	( <u>+</u> 2.4)	
Utah	73.7	(±1.5)	60.1	(±3.2)	
Vermont	49.5	( <u>+</u> 1.4)	60.5	( <u>+</u> 2.0)	
Virginia	55.8	( <u>+</u> 1.9)	52.8	( <u>+</u> 2.7)	
Washington	55.5	(±0.9)	56.9	( <u>+</u> 1.4)	
West Virginia	48.0	(±2.0)	48.3	( <u>+</u> 2.7)	
Wisconsin	53.7	( <u>+</u> 1.8)	52.5	( <u>+</u> 2.6)	
Wyoming	53.4	(±1.8)	53.4	( <u>+</u> 2.5)	
Median	54.6		52.4		
Puerto Rico	72.2	( <u>+</u> 1.8)	54.4	( <u>+</u> 3.9)	
U.S. Virgin Islands	80.5	( <u>+</u> 1.8)	51.3	( <u>+</u> 5.1)	
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<sup>\*</sup>Persons aged ≥18 years who reported not having smoked ≥100 tigarettes during their lifetime.

†Percentage of ever smokers aged ≥18 years who reported having quit

during their lifetime and who currently smoke every day or some days.

Hawaii completed 3 of 12 months of interviews in 2004; these data are § not available in the aggregate 2004 dataset. Confidence interval.

smoking.

§ Hawaii completed 3 of 12 months of interviews in 2004; these data are not available in the aggregate 2004 dataset.

Confidence interval.

for cigarette smoking are based on self-reports and are not validated by biochemical tests. However, self-reported data on current smoking status have high validity (7). Third, the median response rate was 52.7% (range: 32.2%–66.6%); lower response rates indicate a potential for response bias. However, BRFSS estimates for current cigarette smoking are generally comparable with smoking estimates from other surveys with higher response rates (7). Moreover, evidence suggests that telephone surveys with low response rates might not contain differential response bias compared with those with higher response rates (9).

In more than half of states, the majority of ever smokers have quit smoking; however, for every smoker who successfully quits each year, many more make attempts but do not succeed (10). Tobacco dependence is a chronic condition that often requires repeated intervention (10). Patients who are willing to quit should be provided with effective interventions, including brief interventions by clinicians at every patient visit (i.e., the five "A"s: ask about tobacco use, advise to quit, assess willingness to make a quit attempt, assist in the quit attempt, and arrange for follow-up) and pharmacotherapies for smoking cessation, including bupropion (sustained release), nicotine gum, nicotine inhaler, nicotine lozenge, nicotine nasal spray, and nicotine patch (10). Patients who are not ready to quit should be provided messages to increase the motivation to quit (10).

Although minimal clinical interventions (i.e., those lasting <3 minutes) increase overall tobacco cessation rates, a strong dose-response relation has been demonstrated between session length and successful cessation (10). Proactive telephone counseling is effective in increasing successful cessation and can reach substantial numbers of tobacco users. In November 2004, CDC, in partnership with the National Cancer Institute Cancer Information Service (NCI/CIS), created a new national network of quitlines. Through the network, states received funding as part of CDC's National Tobacco Control Program either to establish a quitline or to enhance existing quitline services, in addition to training and technical assistance from the North American Quitline Consortium. A national telephone number sponsored by NCI/CIS (800-QUIT-NOW) links callers to the free quitline serving the area where they live and is designed to ensure that proactive counseling services are available to all smokers who want to quit. These cessation interventions, combined with other elements of comprehensive programs, such as creating smoke-free worksites and public places, increasing tobacco excise taxes, implementing countermarketing campaigns, and increasing insurance coverage for tobacco-use treatment, all work to encourage cessation and prevent initiation (2,3). Implementing comprehensive state tobacco-control programs at CDC-recommended funding levels (3) should accelerate progress in reducing tobacco use.

#### References

- CDC. Cigarette smoking among adults United States, 2003. MMWR 2005;54:509–13.
- Task Force on Community Preventive Services. Guide to community preventive services: tobacco use prevention and control. Am J Prev Med 2001;20(2 Suppl 1):1–87. Available at http://www.thecommunityguide.org/ tobacco.
- CDC. Best practices for comprehensive tobacco control programs. Atlanta, GA: US Department of Health and Human Services, CDC; 1999.
- 4. US Department of Health and Human Services. Healthy people 2010: understanding and improving health. 2nd ed. Washington, DC: US Department of Health and Human Services; 2000. Available at http:// www.healthypeople.gov.
- 5. Farrelly MC, Pechacek TP, Chaloupka FJ. The impact of tobacco control program expenditures on aggregate cigarette sales: 1981–2000. Health Econ 2003;22:843–9.
- Campaign for Tobacco-Free Kids. State tobacco settlement: status of funding, 2004. Available at http://tobaccofreekids.org/reports/ settlements.
- Nelson DE, Holtzman D, Bolen J, Stanwyck CA, Mack KA. Reliability and validity of measures from the Behavioral Risk Factor Surveillance System (BRFSS). Social Prev Med 2001;46:S3–S42.
- 8. CDC. Behavioral Risk Factor Surveillance System. Notes for data users; 2003 data limitations. Available at http://www.cdc.gov/brfss/prevdata/usernote2003.htm.
- Keeter S, Miller C, Kohut A, Groves RM, Presser S. Consequences of reducing nonresponse in a national telephone survey. Public Opin Q 2000;64:125–48.
- Fiore MC, Bailey WC, Cohen SJ, et al. Treating tobacco use and dependence: clinical practice guideline. Rockville, MD: US Department of Health and Human Services, Public Health Service; 2000.

## Outbreak of Mesotherapy-Associated Skin Reactions — District of Columbia Area, January–February 2005

Mesotherapy is a treatment involving local subcutaneous injections of minute quantities of various substances (e.g., vitamins or plant extracts) for cosmetic purposes (e.g., fat and wrinkle reduction or body contouring) or relief of musculoskeletal pain. In February 2005, the Virginia Department of Health and CDC were notified of a cluster of skin reactions unresponsive to antimicrobial therapy among patients who had been administered mesotherapy by an unlicensed practitioner in the District of Columbia (DC) area. This report 1) summarizes the subsequent investigation by CDC and state and local health departments in Virginia, Maryland, and DC, which identified prolonged skin reactions in 14 patients, and 2) provides recommendations for practices related to mesotherapy. Patients should accept medical therapy only from licensed practitioners and should not permit