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tobacco

MEMORANDUM

TO: Melanne Verveer

FR: Chris Jennings

RE: Attached Document

Attached is set of materials that Chris Cerf prepared for Harold, Erskine, and Jack on the tobacco/FDA regulations issue. I thought you might be interested in reviewing, or at least having on hand.

Ten Hard-Nosed Reasons Why The White House and Congressional Democrats Should Embrace With Open Arms David Kessler's Efforts to Protect Children from Tobacco Manufacturer Exploitation and Addiction

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Co-Director
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February 16, 1995

Sometime this Spring, FDA Commissioner David Kessler is likely to make a formal finding that cigarette and smokeless tobacco marketers have 1) deliberately manipulated and carefully controlled nicotine levels in their products because of nicotine's pharmacological effect on consumers; yet 2) had ample capacity to produce products that do not create drug dependency, i.e., addiction, for years but have consciously chosen not to do so; and 3) therefore, have knowingly and intentionally manufactured and marketed their products as drug delivery devices. Since scientific evidence supports these conclusions, FDA will have no choice but to assert its jurisdiction over the manufacture, sale, and distribution of these products.

While tobacco lobbyists have sought to generate hyperventilating outrage by charging that Kessler is hell-bent to ban the sale of tobacco products, Kessler has said time and again that he has no such plan or desire. Instead, it is probable that Kessler will focus his agency's attention on the role of the manufacturers in addicting children and on the need for the FDA to prevent another generation of children from becoming hooked. Initiatives he is likely to consider may include:

- restrictions designed to limit youth access to tobacco (already illegal), such as barring the sale of cigarettes in unattended vending machines;

- limited restraints on those tobacco advertising and promotion techniques which make tobacco use attractive to children, i.e., limiting such advertising to words, rather than seductive images;

- the inclusion of information about the addictive nature of nicotine and/or the other potentially harmful additives and constituents in tobacco products, and

- an educational program targeted at children.

Tobacco lobbyists, gleeful at the election returns, are hard at the dirty work of persuading the President that his hostility toward tobacco was a major cause of the Congressional Democrats' disastrous losses in the tobacco South, and that only by publicly halting and repudiating Kessler do the President and the Democrats have a prayer of reclaiming Southern votes in 1996. Here are ten reasons why the President should resist this pressure:

1. **Kessler's proposed action is totally consistent with the President's principled support for reasonable tobacco use prevention among children**: This President has been the most forthright President in history in addressing the magnitude of the problem posed by tobacco use in the United States -- from Hillary Clinton declaring the White House smoke-free, to the $1.00 cigarette excise tax and OSHA smoke-free workplace rule initiatives, to comments he made in conjunction with the health care reform debate. It has been a principled, consistent stand and one that has been popular among those (relatively few) aware of it.

Standing tall against the industry's lobbying -- firmly supporting Kessler -- provides a rare opportunity for the President to demonstrate, and publicize, his challenged constancy in

adherence to a principled action which is itself popular. Caving in to the tobacco lobby, by contrast, would reinforce public perceptions and fears that the waffling President has no principled core. The inevitable leaks of White House dithering would create a festering spectacle, give comfort and encouragement to the tobacco lobby, and demean the President.

2. **Support for Kessler is consistent with themes that cut across party lines and political persuasion -- protect children's health; fight drug addiction; prevent exploitation of children**: The framing of the issue as expected by the FDA's rests on shared liberal and conservative values all of which focus on children: defending children's health; freedom for children from commercial exploitation; freedom of children from enticement to addiction. The key themes focus on tobacco as a children's problem, the deprivation of free choice through the intentional manipulation of nicotine, and corporate exploitation of our most vulnerable among us, our children.

3. **The public supports stricter controls on tobacco, despite current generalized antipathy to government regulation**: The November 1994 elections confirmed public support for strong measures to discourage tobacco use. Defying general anti-tax sentiment, voters in conservative Arizona supported a major increase in its tobacco tax. (An outspoken supporter of the Arizona tax referendum was former Senator Barry Goldwater.) While Californians were electing a conservative slate of candidates and voting for the anti-immigrant referendum, they rejected, by a 70-30% drubbing, an effort by the tobacco industry to weaken California's laws protecting non-smokers.

4. **Support for tobacco control measures is at least as strong if not stronger among the conservative middle class which Democrats lost in 1994**: According to a poll recently released by the Robert Wood Johnson Foundation (Mathematica Policy Research, Inc., December 1994), "conservative Democrats consistently demonstrated greater support for tobacco control measures than other groups." Even conservative Republicans vote against tobacco companies: In 1994, by 70%-30%, notoriously conservative Orange County, California voted against the ballot initiative sponsored by Philip Morris to moderate the state's smoking control laws.

5. **Surprisingly, support for tobacco control cuts across geographic lines and is as strong in the South as in other regions**: 75.4% of the Southerners in the Robert Wood Johnson poll favored the banning of cigarette vending machines, 1.5% more than the national average. Even Greensboro, North Carolina, the home of an RJR manufacturing facility, adopted a strong smoke-free ordinance - and then defeated an industry-led recall initiative. Will caving in to the tobacco industry win Democrats the South? Not likely. This last election was not about tobacco and the next one will not be turned around by pandering to the tobacco lobby (a special interest that is not going to support the President no matter what position he takes with FDA.) Helms, North, Dole, Bliley, tobacco supporters are not likely to be convinced that Clinton is a more reliable ally.

6. **Support for tobacco control is as intense as it is broad**: The Robert Wood Johnson poll reveals that 44% of the population believe they have lost family members or close friends to

tobacco related diseases - and this significant percentage of the populace is markedly more supportive of policies designed to limit access by tobacco marketers to minors.

7. **Support for tobacco control measures perceived to be designed to reduce tobacco use among children are particularly popular**: Polling data consistently shows overwhelming public support for restricting access of children to tobacco products (e.g., the Robert Wood Johnson poll shows 91% support a ban on vending machines "which are accessible to kids;" 73% believe "tombstone" advertising would reduce the appeal of cigarette ads).

8. **FDA is trusted, even popular**: Of all the functions of the federal government, protection of health and safety enjoys the highest support, and FDA is one agency that symbolizes that support. Even a poll commissioned by the right wing Citizens for a Sound Economy, whose questions were designed to evoke chords of discontent with FDA, could not shake the confidence that most people express in FDA. Two thirds of those polled held a favorable opinion of FDA. Even Gingrich acknowledged, in a letter to the Coalition on Smoking OR Health two years ago, that FDA regulation of cigarettes was a reasonable exercise of FDA's responsibilities.

9. **The tobacco industry, by contrast, is in chronically low repute - and that ill repute rubs off on politicians who consort with the tobacco lobby**: Nothing more deflates the new Republican Congressional leadership's claim to speak for "the people" than its sordid ties to the tobacco lobby." Several print and TV investigative reporters and teams are now gleefully at work preparing exposes of the close intertwining between the tobacco lobby and the new leaders of Congress (as well as the old). *Newsweek* already heralded the election results as the triumph of the "Merchants of Death," tobacco, booze and guns. Let the Republicans, not the White House, be seen as tools of this most detested special interest.

And, finally...

10. **There are more votes to be gained by a principled stand on this issue than an unprincipled one**: It's the right thing to do. Tobacco, after all, kills over 400,000 people a year -- more than from alcohol, heroin, cocaine, all other illegal drugs, homicides, suicides, car crashes, and fires combined. The President knows this. Congress knows this. And the secret industry documents that leaked out all last year demonstrated that the industry knows this.

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ROBERT WOOD JOHNSON FOUNDATION YOUTH ACCESS SURVEY: RESULTS OF A NATIONAL HOUSEHOLD SURVEY TO ASSESS PUBLIC ATTITUDES ABOUT POLICY ALTERNATIVES FOR LIMITING MINOR'S ACCESS TO TOBACCO PRODUCTS

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EXECUTIVE SUMMARY

The primary purpose of the survey is to assess public opinion about policy alternatives to curb minors' access to tobacco products and to restrict various types of advertising and promotions that may encourage them to use tobacco. Although other surveys have obtained public opinion about selected minors' access and advertising issues from state or regional samples, this survey is unique in its focus on national opinion concerning a broad range of policies designed to limit minors' access to tobacco products. In addition, the survey obtained public views on selected proposals to assist smokers attempting to quit and to regulate the nicotine content of tobacco products.

The survey was conducted by computer-assisted telephone interview with 2,345 persons 18 and older from October 5 to November 3, 1994, and interviews were conducted in English or Spanish. The survey sample was selected using random digit dialing methods, and African-Americans (n=486), Hispanics (n=402), and California residents (n=465) were oversampled. The survey results were weighted to adjust for differences in sampling and response rates. The margin of sampling error (95 percent confidence interval) for estimates made for the total sample is approximately plus or minus 2.5 percent, and is somewhat higher for subgroups.

Findings by issue area are summarized below:

Broadly Based Support. Support for several policies designed to limit minors' access to tobacco products is broadly based. Given the political shift in the last election, it is noteworthy that support for these policies cuts across age, sex, ethnicity, ideology, party, and region. Measures receiving broadly-based support include banning or restricting vending machines, verifying identification of youthful customers, banning self-service displays, and banning coupon promotions featuring items appealing to youth or offering free cigarettes by mail, sale of single cigarettes, and distribution of free cigarettes.

Youth Access Policies. Although the sale of tobacco products to minors is illegal, the public recognizes that it is relatively easy for minors to purchase cigarettes and other tobacco products and will support specific policies that limit minors' access to those products. Sixty-eight percent of adults believe that it is very or somewhat easy for minors to buy cigarettes and other tobacco products in their communities. More importantly, young adults (18 to 24 years of age) who may have a more realistic perception of this problem, are much more likely (81 percent) to believe that it is easy for minors to buy tobacco products.

Assuming that the public believes that the objective of these policies is to reduce minors' access to tobacco products, rather than to limit the rights of adults to purchase tobacco products, there is broadly-based support for a ban on all cigarette vending machines (74 percent), on vending machines accessible to minors (91 percent), on self-service displays (78 percent), and a requirement to verify the identification of anyone appearing to be under age before selling cigarettes or tobacco products (94 percent). However, the public was less likely to support increasing age limits to 19 or 21 for tobacco purchases (50 and 49 percent, respectively) and limiting tobacco sales to certain types of retailers (46 percent).

Tobacco Advertising and Promotions. The public is more likely to support bans on tobacco promotions than advertising. From 70 to 88 percent support bans on coupon promotions featuring items appealing to kids or offering free cigarettes, sales of single cigarettes, and distribution of free cigarettes on public streets. Support varied more for prohibiting tobacco companies from paying to show their products in movies and videos (60 percent) and from sponsoring sports or entertainment events where

their brand names are featured (55 percent), with males and young adults being least supportive. Overall, 59 percent of all adults supported a ban on billboard advertising and 51 percent a ban on advertising through newspapers and magazines. However, restrictions on advertising appear to be polarizing, with males and young adults, in particular, demonstrating weaker support for these policies.

We also assessed public views on the impact of limited advertising restrictions (tombstone advertising and plain packaging) on minors. Tombstone advertisements would limit the tobacco company's message to text, with pictures and cartoons prohibited. Plain packaging of cigarettes and smokeless tobacco products would mean that the package would include only the brand name and warning label in black letters against a white background. Most adults (73 percent) believe that tombstone advertising would make smoking less appealing to minors, but only about half (47 percent) believe that plain packaging would reduce the appeal of cigarettes to this group. Tobacco users, in particular, were skeptical about the impact of plain packaging on young smokers' purchasing decisions.

Proposals to Regulate Tobacco Products and Assist with Smoking Cessation. The overwhelming majority (92 percent) of the public, including current smokers who do not plan to quit (85 percent), believe that nicotine is addicting. Nearly all (93 percent) support requiring tobacco companies to list additives on package labels and most (71 percent) also support extending government regulation of nicotine products, such as patches and gum, to cigarettes. The public also would support policies requiring tobacco companies to reduce the amount of nicotine in cigarettes (79 percent) and insurance companies to cover the cost of programs to quit smoking (65 percent). Support for these proposals crosses ideology and party.

Differences in Level of Support by Population Characteristics. Although support for many measures to curb minors' access to tobacco products is broadly based, we observed that women, older adults, African-Americans and Hispanics were more supportive of most policies. Among political groups, conservative democrats consistently demonstrated greater support for tobacco control measures than other groups. Adults who believe they have lost family members or friends to tobacco related diseases, a group representing 44 percent of the population, were more supportive of policies designed to limit access to minors. Like many other surveys on public attitudes toward tobacco control policies, we observed that non-users were more supportive than users. However, current tobacco users who indicated they plan to quit in the next six months expressed levels of support for youth access policies that were more similar to non-users than users who do not plan to quit.

I. INTRODUCTION

The primary purpose of the survey is to assess public opinion about policy alternatives to curb minors' access to tobacco products and to restrict various types of advertising and promotions that may encourage them to use tobacco. Although other surveys (discussed below) have obtained the public's views about selected minors' access and advertising issues from state or regional samples, this survey is unique in its focus on national opinion concerning a broad range of access and advertising issues. In addition, the survey obtained public assessments of selected proposals to assist smokers attempting to quit and to regulate the nicotine content of tobacco products. The survey was conducted by computer-assisted telephone interview with 2,345 persons 18 and older from October 5 to November 3, 1994, and interviews were conducted in English or Spanish. The survey sample was selected using list-assisted random digit dialing methods, and African-Americans (n=486), and Hispanics (n=402) were oversampled. California residents (n=465) also were oversampled to obtain separate estimates for a state in which tobacco control policies have received considerable attention in recent years. The survey results were weighted to adjust for differences in sampling and response rates.

In the remainder of this chapter, we describe the background for the survey, instrument design, and sample characteristics. Chapter II describes responses to policy alternatives to limit minors' access and to restrict tobacco advertising and promotions, and Chapter III describes the public's views of proposals to regulate the nicotine content of tobacco products and to assist smokers who want to quit. Our conclusions are summarized in Chapter IV. The sample design, procedures for constructing weights and estimating sampling errors, and tables showing confidence intervals and minimum differences required for comparisons between subgroups, are included in Appendix A; English and Spanish versions of the questionnaire are included in Appendix B; tables showing responses to each question by demographic, socioeconomic, political, and tobacco use characteristics are included in Appendix C. In general, the responses of California residents were similar to those of the rest of the country; the few issues where Californians had different views are summarized in Appendix D.

A. BACKGROUND

Few people begin smoking as adults; 89 percent of adults who have ever smoked daily began smoking by age 18, and the average age when they first tried a cigarette was 14.6. Seventy-one percent of them became daily smokers by age 18 (CDC 1994, 1991 National Household Surveys on Drug Abuse, p. 65). Similar results have been provided by surveys of adolescents. The average teen smoker starts smoking at age 13 and becomes a daily smoker by age 14.5 (Teenage Attitudes and Practices Survey II, 1993, unpublished data.). It has been estimated that over 500 million packs of cigarettes are consumed by minors, and that at least half are sold illegally to the minors (Cummings 1994, pp. 300-302).

Although all states prohibit the sale of tobacco to minors, few states enforce their access laws; the secretary of health and human services estimates that three-fourths of the approximately one million outlets sell tobacco to minors (Lynch and Bonnie 1994, p. 201). Surveys of youth and industry studies have supported these assessments. The University of Michigan's Monitoring the Future Study found that 75 percent of eighth graders and 89 percent of tenth graders reported that cigarettes would be fairly or very easy to get (Johnston, 1994). A 1990 survey of ninth grade students, conducted as part of the National Cancer Institutes's COMMIT trial showed that two-thirds of current smokers buy their own cigarettes (Cummings 1992). A survey conducted by the vending machine industry also reported that 72 percent of teenage smokers purchased their own cigarettes (Response Research 1989). Trials designed to measure the prevalence of retail tobacco sales to minors have supported survey findings. In thirteen studies of over-the-counter sales, the weighted average of the percentage of minors able to purchase tobacco was 67 percent (range from 32 to 87 percent) (CDC, p. 249).

Research on the relationship between advertising and other promotions and tobacco use by minors was reviewed by the Institute of Medicine's (IOM) Committee on Preventing Nicotine Addiction in Children and Youths (Lynch and Bonnie, Chapter 4). The Committee cites three recent trends that have increased attention by public health officials to this issue, including (1) initial use at ever younger ages,

(2) increased use of smokeless products, and (3) a reduction in the rate at which smoking prevalence by youths has been decreasing.

They also reviewed studies indicating that legal restrictions on advertising and promotional activities have reduced smoking prevalence, with the strongest evidence based on a study commissioned by the government of New Zealand to assess trends in 33 countries between 1970 and 1986. The study focused mainly on adult consumption, but also noted that, "In countries where advertising has been totally banned or severely restricted, the percentage of young people who smoke has decreased more rapidly than in countries where tobacco promotion has been less restricted." (New Zealand 1989).

In the United States, many state and local governments and government agencies have enacted legislation to restrict certain forms of cigarette advertising (Bierig, et al., 1994). For example, some communities are banning cigarette billboards in sports facilities in order to keep cigarette ads from young sports fans. Other communities have banned cigarette advertisements throughout their mass transit systems.

The tobacco industry has denied that advertising and promotion causally affect the decisions of young people to begin smoking, and the Committee acknowledged that it is not feasible to conduct case control studies in an environment free of tobacco marketing to determine the independent causal effect of advertising and promotion on tobacco consumption. However, they argue that "... the preponderance of evidence suggests that features of advertising and promotion tend to encourage youths to smoke and that this is sufficient basis for action." (Lynch and Bonnie, pp. 130-131).

A number of surveys have assessed public support for various legislative actions to prevent or limit minors' access to tobacco products and to ban or restrict advertising and promotions. Several of these have been reviewed by the surgeon general and are summarized in Tables I.1 and I.2 (CDC, pp. 212-214). Most people do not believe that laws prohibiting the sale of tobacco to minors are adequately

TABLE I.1

PUBLIC OPINION ABOUT DIFFERENT LEGISLATIVE ACTIONS TO PREVENT MINORS' ACCESS TO TOBACCO, UNITED STATES, 1987-1991

Source and Year of Survey	Description of Survey	Questions or Statements	Responses
University of Minnesota 1987 (Forster et al. 1991)	Telephone survey of a random sample of adults (aged 18-74 years) in seven communities in Minnesota (N=821)	Do you favor or oppose suspending a retailer's tobacco license for sale to minors?	75% favored suspending the license
		Do you favor or oppose eliminating all cigarette vending machines?	57% favored eliminating the machines
		Do you favor or oppose eliminating cigarette vending machines where teenagers gather?	80% favored eliminating the machines
American Cancer Society 1989 (Marcus et al., in press)	Telephone survey of a random sample of adults (aged $\geq$ 18 years) in four states: Arizona (N = 294), Pennsylvania (N = 291), Texas (N = 303), and Michigan (N = 98)	Do you think there should be laws to ban the sale of cigarettes through vending machines?	Support for a ban across the four states sampled: 60%-68%
National Cancer Institute 1989 (Centers for Disease Control 1991b)	Telephone survey of a random sample of 300 to 400 adults (aged 25-64 years) in each of 10 U.S. COMMIT* intervention communities	Tobacco products should be as strictly controlled as alcohol products.	Agreement across the 10 communities sampled: 51%-75%
		Merchants who sell tobacco to minors should be fined.	77%-93%
		Cigarette vending machines should be eliminated in places where teens gather.	76%-89%
California Department of Health Services (California Department of Health Services 1991)	Telephone survey of a random sample of adults (aged $\geq$ 18 years) in California (N = 6,600)	Do you think cigarette vending machines that are accessible to minors should be allowed or banned?	82% favored a ban (74% smokers; 87% nonsmokers)

*COMMIT = Community Intervention Trial for Smoking Cessation.

Source: CDC (1994) Table 2, p. 214.

TABLE I.2

PUBLIC OPINION ABOUT RESTRICTING OR BANNING DIFFERENT TYPES OF TOBACCO ADVERTISING AND PROMOTIONS, UNITED STATES, 1987-1991

Source and Year of Survey	Description of Survey	Questions or Statements	Responses
University of Minnesota 1987 (Forster et al. 1991)	Telephone survey of a random sample of adults (aged 18-74 years) in seven communities in Minnesota (N=821)	Do you favor or oppose prohibiting tobacco signs and billboards?	73% favored a prohibition
		Do you favor or oppose prohibiting tobacco advertising in magazines and newspapers?	70% favored prohibition
American Cancer Society 1989 (Marcus et al., in press)	Telephone survey of a random sample of adults (aged $\geq$ 18 years) in four states: Arizona (N = 294), Pennsylvania (N = 291), Texas (N = 303), and Michigan (N = 98)	Advertising of cigarettes should be banned in newspapers, magazines, and outdoor posters or billboards.	Agreement across the four states sampled: 61%-69%
		Tobacco companies should be prohibited from distributing free tobacco samples on public property or through the mail.	73%-81%
		Tobacco companies should be prohibited from sponsoring sports events or advertising their products at these events.	49%-59%
National Cancer Institute 1989 (Centers for Disease Control 1991b)	Telephone survey of random sample of 300 to 400 adults (aged 25-64 years) in each of 10 U.S. COMMIT* intervention communities	Tobacco companies should not be allowed to sponsor sporting and cultural events.	Agreement across the 10 communities sampled: 31%-56%
California Department of Health Services 1990 (California Department of Health Services 1991)	Telephone survey of a random sample of adults (aged $\geq$ 18 years) in California (N = 6,600)	Do you think advertising of tobacco products on outdoor billboards should be allowed or banned?	54% favored a ban (42% smokers; 62% nonsmokers)
		Do you think advertising of tobacco products through newspapers and magazines should be allowed or banned?	49% favored a ban (38% smokers; 57% nonsmokers)
		Do you think sponsorship of sporting or cultural events by tobacco companies should be allowed or banned?	52% favored a ban (39% smokers; 61% nonsmokers)
		Do you think that distribution of free cigarettes and tobacco products on public property should be allowed or banned?	75% favored a ban (62% smokers; 84% nonsmokers)
		Do you think that distribution of free tobacco samples or coupons to obtain free samples by *mail* should be allowed or banned?	67% favored a ban (52% smokers; 78% nonsmokers)

*COMMIT = Community Intervention Trial for Smoking Cessation.

Source: CDC (1994) Table 2, p. 214.

enforced and majorities of both non-smokers and smokers have supported stronger measures to limit youth access to tobacco products. Some surveys have assessed public support for specific measures to limit youth access, such as licensing retailers, penalizing merchants who sell to minors, and eliminating or restricting the location of vending machines. Strong majorities have favored suspending retailers' licenses for sales to minors, and several surveys have shown support for controlling tobacco as strictly as alcohol products. There has also been support for banning the sale of cigarettes through vending machines (57 to 68 percent in the University of Minnesota and American Cancer Society surveys cited in Table I.1). Moreover, support increases (76 to 89 percent) for vending machine bans in areas that are accessible to minors.

Several surveys have also assessed support for limiting specific types of tobacco advertising and promotions (see Table I.2). There has been strong support for banning the distribution of free cigarettes and tobacco products on public property or by mail (75 and 67 percent, respectively in a large California Department of Health Survey and 73 to 81 percent in an American Cancer Society Survey, cited in I.2). Support for prohibiting tobacco advertising in newspapers, magazines, and billboards and prohibiting sponsorship of sporting and cultural events by tobacco companies is more variable across surveys.

B. INSTRUMENT DESIGN

The surveys described above included selected questions assessing public support for actions intended to curb youth access to tobacco products; however, the main focus of these surveys was on broader tobacco control issues and they were based on state or community samples. The Robert Wood Johnson Foundation's (RWJF) Youth Access Survey is different in that its scope is national and its primary focus is on a broad range of policy alternatives intended to limit minors' access to tobacco products and to prohibit or reduce the effect of advertising and promotional campaigns.

The survey topics and questions were developed by RWJF and Mathematica Policy Research, Inc. (MPR), pretested with 20 respondents, and modified as a result of the pretest before being fielded. We reviewed questions used in the surveys cited above and the first five state surveys conducted for the

RWJF SmokeLess States program (results not yet published). We developed new questions for issues that had not previously been included on surveys and revised wording of existing questions, where necessary, to clearly indicate to respondents that the objective of these policies was to reduce youth access to tobacco products or to make tobacco products less appealing to youth, rather than to limit the rights of adults to purchase tobacco products.

For example, many surveys have asked whether or not vending machines should be banned. However, before asking the question itself, we indicated that the objective of this ban was to reduce youth access.

- *Next, I am going to ask for your opinion about several proposals intended to make it more difficult for kids to get cigarettes.* Do you think the sale of cigarettes in vending machines should be allowed or banned? (a2) [IF NO, WE ALSO ASKED] Do you think vending machines which are accessible to kids should be allowed or banned? (a3)

We also incorporated research results into questions. For example, we cited research that has demonstrated that most smokers begin as adolescents before asking opinions on increasing legal age limits.

- *Research has shown that most adult smokers begin smoking before they are 21.* Do you think that restricting the sale of cigarettes to people 21 and older will help reduce the number of kids under 21 who begin smoking? (a8a)

Similarly, before asking opinions on advertising and promotional restrictions, we indicated that the purpose of these proposals was to restrict the use of methods that may encourage youth to smoke.

- Cigarette companies currently use many different advertising and promotion methods. I am going to ask for your opinion concerning several proposals designed to restrict promotions or advertisements that *may encourage kids to smoke*. (a9)

Questions on public support for banning specific promotions or restricting advertising methods also mentioned the objective of limiting youth access to cigarettes and other tobacco products (see questions a11, a13, a14, a15, and a18).

The policy alternatives included in the survey are summarized below; the full text of questions is included in Appendix B.

Youth Access[1]

- Ease of access (a1)
- Ban or restrict location of cigarette vending machines (a2-3)
- Verification of youthful customers IDs by retailers (a4)
- Ban self-service displays (a5)
- Limit cigarette sales to selected retail outlets (a6)
- Increase legal age of purchase to 19 or 21 (a8a and a8b)

Advertising

- Ban billboard advertising (a9)
- Ban newspaper advertising (a10)
- Support for tombstone advertising (a11)
- Support for plain packaging (a13)

Promotions

- Prohibit coupons in cigarette packs (a14)
- Prohibit coupon promotions to obtain free cigarettes (a15)
- Prohibit sale of single cigarettes (a16)
- Prohibit distribution of free cigarettes on public streets (a17)
- Prohibit tobacco companies from paying to display their products in movies or videos (a19)
- Prohibit tobacco companies from sponsoring sporting or entertainment events where their brand names are featured (a18)

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[1]We did not include questions on methods for enforcing compliance by retailers. This issue is complex and there was insufficient time to develop appropriate questions to adequately assess it in a national survey.

Nicotine and Smoking Cessation Policies

- Perception of nicotine addiction (a29)
- Awareness of nicotine manipulation (a30-a30a)
- Require tobacco companies to gradually reduce the amount of nicotine in cigarettes (a32a)
- Require insurance companies to cover the cost of programs to quit smoking (a32b)
- Require tobacco companies to list additives on package labels (a34a)
- Government should regulate cigarettes, since it regulates other products containing nicotine (a34b)

C. SAMPLE CHARACTERISTICS

The characteristics of the survey sample are shown in Table I.3. The survey included questions on demographic characteristics (age, sex, ethnicity, and whether there are any children in the household), socioeconomic background (education, occupation, and income), political characteristics (ideology, party, and political activity), tobacco use, and the perception of having lost a family member or close friend to tobacco related diseases. Region was determined by mapping telephone exchanges into census regions.

Conventional categories were used for most characteristics. For tobacco use, we differentiated among persons living in tobacco-free households, non-tobacco users living in households in which other household members use tobacco, current tobacco users who indicated they plan to quit within the next six months, and current users who do not plan to quit within the next six months. We chose this categorization for two reasons. First, current users who plan to quit are a key group for questions on smoking cessation issues and may have different views from other tobacco users on other questions. Second, it was not obvious whether the views of non-tobacco users who are living with tobacco users would conform with other tobacco users, non-tobacco users, or fall between the two groups. Tobacco use was defined to include persons who currently smoke cigarettes every day or some days or currently use pipes, cigars, chewing tobacco, or snuff on a regular basis.

TABLE I.3

SAMPLE CHARACTERISTICS[a]

Characteristics	Percent
Sex	
Male	47.8
Female	52.2
Age	
18-24	12.6
25-34	22.4
35-54	37.5
55 and older	27.4
Ethnicity	
White Non-Hispanic	77.3
African American Non-Hispanic	11.0
Hispanic	8.4
Other	3.2
Not Ascertained	0.1
Region	
Northeast	19.1
Midwest	24.1
South	37.1
West	19.7
Have Children in Household	
Yes	43.7
No	56.2
Not Ascertained	0.1
Education	
High School or Less	54.5
Some College	24.5
College Graduate or Higher	20.7
Not Ascertained	0.2

TABLE I.3 *(continued)*

Characteristics	Percent
Occupation	
Professional	23.5
Clerical	14.7
Blue Collar	24.7
Not in Labor Force	35.6
Not Ascertained	1.4
Income	
Less than $20,000	21.1
$20,000 to less than $50,000	46.5
$50,000 or More	21.1
Not Ascertained	11.4
Ideology	
Liberal	19.4
Moderate	31.9
Conservative	39.6
Not Ascertained	9.1
Party Affiliation	
Democrat	36.3
Independent	28.1
Republican	28.2
Not Ascertained	7.4
Ideology and Party Affiliation[b]	
Liberal Democrat	9.7
Liberal Independent	6.3
Liberal Republican	2.8
Moderate Democrat	12.7
Moderate Independent	11.7
Moderate Republican	5.8
Conservative Democrat	10.6
Conservative Independent	8.5
Conservative Republican	18.4
Not Ascertained	13.5

TABLE I.3 *(continued)*

Characteristics	Percent
Political Activities	
Candidate or Worked on Campaign	10.6
Contributed Money or Wrote Letters to Politicians	27.1
Voted	39.9
None of the Above/Not Known	22.4
Tobacco Use	
Current User, Plans to Quit in 6 Months	11.3
Current User, No Plans to Quit in 6 Months	15.5
Non-User; Other Household Member is a User	13.3
Non-User; No Tobacco Users in Household	59.9
Lost Family Member or Close Friend to Tobacco-Related Diseases	
Yes	44.3
No	53.3
Not Ascertained	2.3

[a]All distributions are weighted; weighting procedures are described in Appendix A.

[b]For tables interacting ideology and party affiliation, we combined independents and republicans, both because of small subgroup sample sizes and because republicans and independents had similar distributions, after controlling for ideology. However, Appendix C shows separate distributions for each political group defined by ideology and party.

We also asked respondents whether they have ever lost a family member or close friend to diseases caused by smoking. While this question is clearly based on perception, it is not unlikely that perceived loss of a loved one may affect views on tobacco control policies.[2]

In subsequent sections, we highlight important patterns for major subgroups, defined by selected demographic and political characteristics and tobacco use. In general, we did not discuss patterns by socioeconomic measures (income, occupation, and education). These characteristics are highly correlated with each other and with demographic characteristics, and we did not perform multivariate analyses on these data to attempt to isolate their relationships to youth access policies.[3] An exception is questions on awareness of the nicotine spiking issue, where responses were strongly related to education. A full set of tables crosstabulating each question by these characteristics is included in Appendix C.

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[2]As will be shown below, respondents who indicated that they have lost family or friends to tobacco-related diseases were more likely to support policies designed to curb youth access to tobacco products than other respondents. We did not investigate the demographic characteristics of this group, but will do so in the future.

[3]In subsequent papers, we expect to use multivariate methods to analyze differences in support for policies to reduce tobacco use by subgroups of the population.

II. YOUTH ACCESS, ADVERTISING AND PROMOTIONS

A. YOUTH ACCESS TO TOBACCO PRODUCTS

Most adults believe that it is relatively easy for minors' to obtain cigarettes. Overall, 68 percent of the public believe that it is very or somewhat easy for minors to purchase cigarettes or other tobacco products in their communities (Table II.1). More importantly, young adults (18 to 24 years of age), who may have a more realistic perception of this problem, are much more likely to believe that it is easy for minors to buy tobacco products. Eighty-one percent believe that it is very or somewhat easy to obtain tobacco products, compared with 67 percent for those 25 to 34, 70 percent of those 35 to 54, and 60 percent for those 55 and older. Young adults also are more likely to believe that it is *very* easy to obtain tobacco products than are older respondents (52 percent compared with 38 to 42 percent for other age groups).

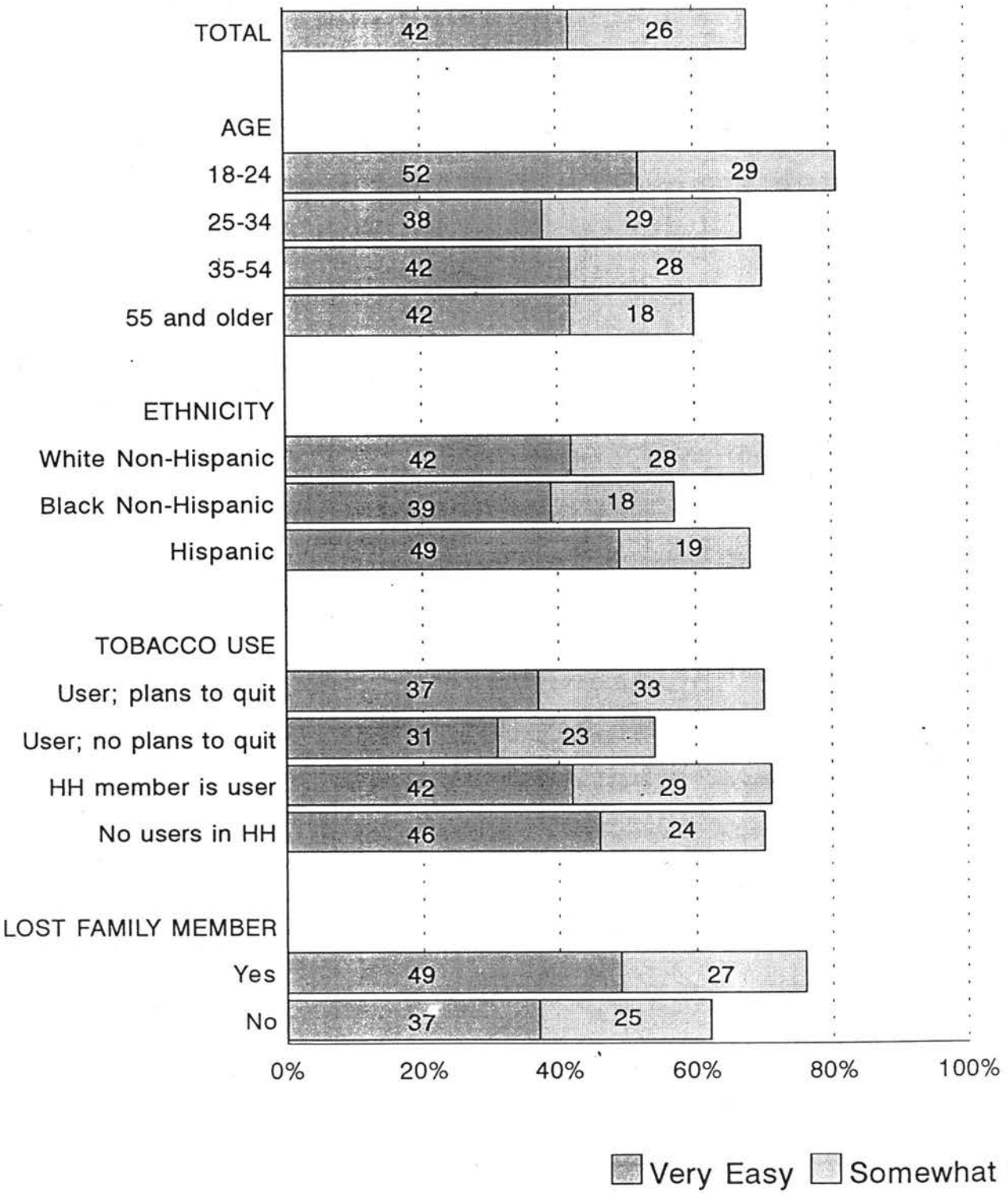
African-American respondents were somewhat less likely to believe that tobacco products were very or somewhat easy to buy in their communities (57 percent versus 68 percent for Hispanics and 70 percent for white non-Hispanic respondents).

Tobacco use and having lost a family member or close friend to diseases caused by smoking were related to perceptions of youth access. Current tobacco users who do not plan to quit in the next six months were considerably less likely to believe that minors can easily obtain cigarettes in their communities (54 percent), compared with non-users and users who plan to quit (about 70 percent for each group). Adults who indicated they have lost friends or relatives to tobacco related diseases also are more likely to believe that minors have easy access to tobacco products than those who have not experienced a personal loss (76 versus 62 percent). Persons who have experienced personal losses have particularly strong beliefs about this issue, as 49 percent indicated they believe it is very easy for minors to buy cigarettes and other tobacco products in their communities (compared with 37 percent for those who indicated they did not lose anyone to tobacco-related diseases).

TABLE II.1

EASE OF ACCESS [a]

(Percent)



[a] In your opinion, how easy is it for kids to buy cigarettes and other tobacco products in your community -- very easy, somewhat easy, somewhat difficult, or very difficult?

We assessed public support for five proposals designed to limit access to tobacco products:

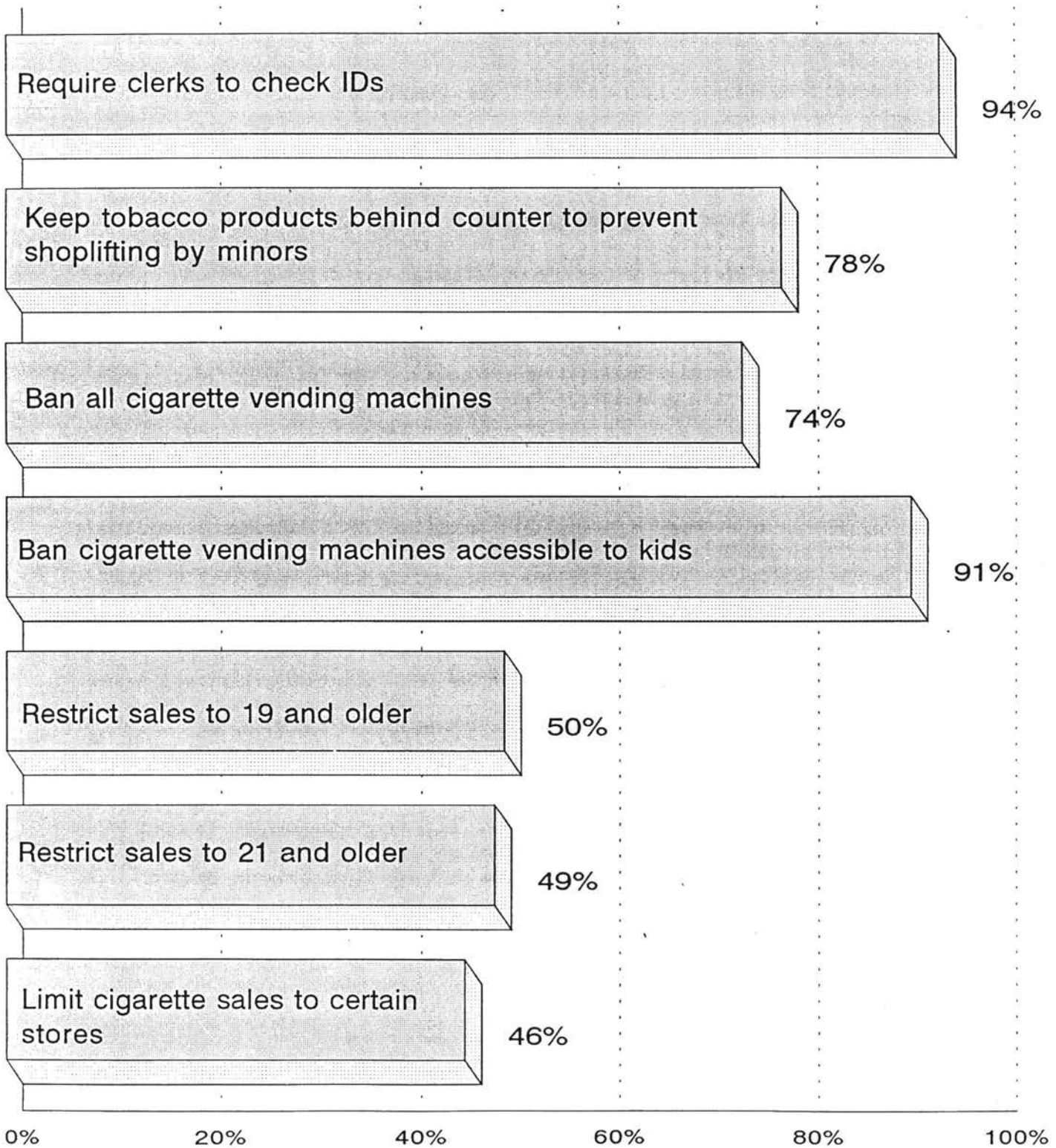
- Banning or restricting cigarette vending machines (a2-3)
- Verifying the identification of young customers by retailers (a4)
- Banning self-service displays (a5)
- Limiting cigarette sales to selected retail outlets (a6)
- Increasing the legal age of purchase to 19 or 21 (a8a and a8b)

The public showed strong support for restricting cigarette vending machines (74 percent supporting a total ban and 91 percent a ban on vending machines "which are accessible to kids," banning self-service displays (78 percent), and requiring retailers to verify the identification of young customers (94 percent), but weaker support for increasing the legal age of purchase to age 19 or 21 (50 percent and 49 percent, respectively), or limiting licensing to selected outlets (46 percent) (see Table II.2). The strong support for vending machine restrictions mirrors the findings of an American Cancer Society survey, in which 73 percent of voters reported that they would favor banning cigarette vending machines because of concern with children's easy access to the machines (Marttila and Kiley 1993). Other surveys also have shown that the public supports restrictions or bans on cigarette vending machines (see Table I.1 above). Moreover, many areas of the country have imposed at least some limitations on cigarette vending machines; a recent report by the Office of the Inspector General states that restrictions have been adopted by 21 states, Washington D.C., and 170 local communities (Office of the Inspector General, 1992).

Self-service displays allow customers to help themselves to cigarettes and other tobacco products and present them to a clerk for purchase. Several studies have shown that these displays invite shoplifting by underage customers. For example, a 1992 survey of 7,891 ninth grade students in Erie County, New York showed 44 percent of daily smokers reported having shoplifted cigarettes (Roswell Park 1993). We assessed support for actions to ban self-service displays by asking respondents which of the following statements they agreed with:

TABLE II.2

PUBLIC OPINION ABOUT POLICIES TO LIMIT MINOR'S ACCESS TO TOBACCO PRODUCTS



- Retailers have the right to display tobacco products wherever they want. OR
- Retailers should keep all tobacco products behind the counter to prevent shoplifting by minors.

Seventy-eight percent indicated support for a ban on self-service displays by selecting the second option.

Nearly everyone (94 percent) favored requiring clerks to check the identification of anyone appearing to be under age before selling them cigarettes or smokeless tobacco. However, the key issue here is enforcement. The Office of the Inspector General (1992) found that state and local officials generally do not enforce laws intended to restrict sales of tobacco products to minors. The IOM Committee on Preventing Nicotine Addiction in Children and Adults recommended monitoring violations of youth access legislation by using 16 and 17-year olds, who are representative of the ethnic makeup of their communities, to conduct random purchase attempts (Lynch and Bonnie, p. 222). We did not test public response to this approach in this survey, but recommend that it be tested in states considering this type of enforcement mechanism.

Support for increasing age limits for tobacco purchases was weaker. After informing respondents that, "Research has shown that most adult smokers begin smoking before they are 21," we asked, "Do you think that restricting the sale of cigarettes to people 21 and older would help reduce the number of kids under 21 who begin smoking?" A follow-up question asked, "Do you think that restricting the sale of cigarettes to people 19 and older will help reduce the number of kids in high school who begin smoking?" For both proposals, support was about equally divided between those who agreed and those who did not.

In its recently published report on youth access issues, the IOM Committee recommended against increasing the minimum age for purchase above 18 (Lynch and Bonnie, p. 224). The Committee argued that the main argument for an age higher than 18 is to minimize use by 16 and 17 year olds. However, they believed that this argument is not strong enough to overcome the presumptive case for an 18-year old minimum age for purchase of tobacco products. They also pointed out that a higher age limit would

be ignored by many retailers, undermining compliance with the youth access ban. The response to these proposals suggests that the public also is not strongly supportive of an increase in the minimum age for purchase.

Support for limiting cigarette sales to specific types of retail outlets also was limited (46 percent). The question was phrased in general terms, "Do you favor or oppose allowing the sale of cigarettes only in certain stores, just as is done with alcohol?" to provide an assessment of overall national support. An alternative approach, which may be used in community or state-based surveys, might focus on specific restrictions, such as tobacco-free zones near schools or bans on pharmacy sales. The IOM Committee argued that tobacco-free zones near schools would reinforce educational efforts directed toward students and bans on pharmacy sales would support the message that tobacco use is incompatible with health (Lynch and Bonnie, pp. 224-225).

Support for policies to limit youth access to tobacco products is broadly based (Table II.3). Given the political shift in the last election, it is noteworthy that strong support for banning or restricting cigarette vending machines, verifying identification of youthful customers, and banning self-service displays was demonstrated across all political groups and regions of the country. Although men and women were both strongly supportive of all three measures, women consistently showed higher levels of support for banning cigarette vending machines and self-service displays. Support from women on these two issues was 11 to 12 percentage points greater than from men. Hispanics (on both issues), and African Americans (on self-service displays), were more supportive of these proposals than white non-Hispanics. Nevertheless, about three-fourths of white non-Hispanics supported both proposals.

Tobacco users, who do not plan on quitting in the next six months, were less supportive of a vending machine ban (52 percent) than users who plan to quit or non-users (70 to 80 percent). Since current tobacco users would be adversely affected by a cigarette vending machine ban, this result is hardly

TABLE II.3

PUBLIC SUPPORT FOR POLICIES TO LIMIT MINORS' ACCESS TO TOBACCO
BY SELECTED CHARACTERISTICS
(Percent)

		Sex[a]		Age[b]				Ethnicity[c]		
	Total	Male	Female	18-24	25-34	35-54	55+	White Non-Hispanic	Black Non-Hispanic	Hispanic
Ban the sale of cigarettes in vending machines (a2)	74	68	79	73	75	73	74	73	75	85
Ban vending machines which are accessible to kids (a3)[a]	91	88	94	92	95	91	88	91	94	93
Require clerks to check IDs of anyone appearing to be under age before selling cigarettes or smokeless tobacco (a4)	94	93	94	95	96	94	91	94	92	93
Retailers should keep tobacco products behind the counter to prevent shoplifting by minors (a5)	78	71	83	78	78	77	77	76	83	89
Favor allowing sale of cigarettes only in certain stores, just as is done with alcohol (a6)	46	39	53	53	45	46	45	43	47	73
Restrict sale of cigarettes to 21 and older (a8a)	49	47	50	43	51	50	47	44	61	65
Restrict sale of cigarettes to 19 and older (a8b)	50	49	51	44	53	51	50	47	57	67

NOTE: Respondents who supported a total ban on vending machines were skipped over the question on banning vending machines accessible to youth. In this table, we have assumed that respondents supporting a total ban also would support a partial ban.

[a] Differences significant ($\alpha = .05$, 2 tail) for a2, a3, a5, a6.

[b] Differences between 18-24 and other age groups significant ($\alpha = .10$) for a6; differences between 18-24 and 25-34 significant ($\alpha = .10$) for a8a and a8b.

[c] Differences between white non-Hispanics and Hispanics significant ($\alpha = .05$) for a2, a5, a6, a8a, a8b; between black non-Hispanics and Hispanics ($\alpha = .05$) for a2, a5, a6, a8b; between white non-Hispanics and black non-Hispanics ($\alpha = .05$), a8a, a8b.

TABLE II.3 *(continued)*

	Region[d]				Tobacco Use[e]						Lost Family Member[f]	
					User			Non-User				
	Northeast	Midwest	South	West	Plans to Quit in Six Months	Does Not Plan to Quit	All	Other HH Member Uses Tobacco	No Tobacco Users in Household	All	Yes	No
Ban the sale of cigarettes in vending machines (a2)	75	72	75	73	70	52	60	73	80	79	80	70
Ban vending machines which are accessible to kids (a3)[a]	93	93	92	88	90	79	84	94	94	94	95	89
Require clerks to check IDs of anyone appearing to be under age before selling cigarettes or smokeless tobacco (a4)	92	95	94	94	95	91	93	93	94	94	96	92
Retailers should keep tobacco products behind the counter to prevent shoplifting by minors (a5)	77	77	78	78	73	69	71	83	79	80	80	75
Favor allowing sale of cigarettes only in certain stores, just as is done with alcohol (a6)	51	41	47	48	30	24	26	49	55	54	53	41
Restrict sale of cigarettes to 21 and older (a8a)	50	45	50	50	47	28	36	47	55	53	53	45
Restrict sale of cigarettes to 19 and older (a8b)	49	49	51	51	47	33	39	45	56	54	52	48

[d] Difference between midwest and northeast significant ($\alpha = .05$) for a6; differences between midwest and south and west, respectively, significant ($\alpha = .10$) for a6.

[e] Differences between users who plan to quit and those who don't significant ($\alpha = .05$) for a2, a3, a8a; differences significant ($\alpha = .10$) for a4; differences between two non-user groups significant ($\alpha = .05$) for a2, a8b ($\alpha = .10$) for a8b; differences between all users and all non-users significant ($\alpha = .05$) for a2, a3, a5, a6, a8a, a8b.

[f] Differences significant ($\alpha = .05$) for all questions except a8b.

TABLE II.3 *(continued)*

	Ideology[g]			Party Affiliation[h]			Ideology and Party Affiliation[i]					
							Liberals		Moderates		Conservatives	
	Liberal	Moderate	Conservative	Dem	Rep	Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.
Ban the sale of cigarettes in vending machines (a2)	75	72	76	76	74	71	76	73	75	69	81	75
Ban vending machines which are accessible to kids (a3)[a]	93	91	92	92	91	92	91	94	92	90	93	92
Require clerks to check IDs of anyone appearing to be under age before selling cigarettes or smokeless tobacco (a4)	97	95	93	95	94	94	97	97	96	95	94	93
Retailers should keep tobacco products behind the counter to prevent shoplifting by minors (a5)	75	75	79	79	75	78	78	73	77	73	81	78
Favor allowing sale of cigarettes only in certain stores, just as is done with alcohol (a6)	47	46	47	51	43	45	53	42	48	44	54	44
Restrict sale of cigarettes to 21 and older (a8a)	44	47	53	52	50	43	47	40	51	46	58	50
Restrict sale of cigarettes to 19 and older (a8b)	43	52	53	53	52	45	44	42	55	50	59	51

[g] Differences between all liberals and all conservatives significant ($\alpha = .05$) for a8a and a8b and between moderates and conservatives for a8a.

[h] Differences between democrats and independents significant ($\alpha = .05$) for a8a and a8b, and between democrats and republicans significant ($\alpha = .05$) for a6. Differences between democrats and independents significant ($\alpha = .10$) for a6.

[i] Differences between liberal democrats and liberal rep/ind. significant ($\alpha = .05$) for a6; between conservative democrats and conservative rep/ind. significant ($\alpha = .05$) for a6 and ($\alpha = .10$) for a8a and a8b.

surprising. However, even tobacco users who do not intend to quit in the next six months are supportive of a ban on vending machines which are accessible to kids (79 percent). Both tobacco users planning to quit (73 percent) and those not planning to quit (69 percent) were supportive of banning self-service displays.

The ambivalence of the public toward increasing the legal age of purchase was also broadly based, with the notable exceptions of African Americans, Hispanics, and conservative democrats. Sixty-five percent of Hispanics and 61 percent of African Americans, compared with only 44 percent of white non-Hispanics, agreed that the legal age should be increased to 21. Similarly, 58 percent of conservative democrats also supported increasing the age of purchase to 21, compared with 50 percent of republican and independent conservatives, and less than 50 percent of liberals and moderates, regardless of party.

Hispanics also were strongly in favor of allowing the sale of cigarettes only in certain stores, just as is done with alcohol (73 percent), compared with less than half of African Americans and white non-Hispanics. No other subgroup of the population was strongly supportive of this measure.

B. RESTRICTING OR BANNING VARIOUS TYPES OF TOBACCO ADVERTISING

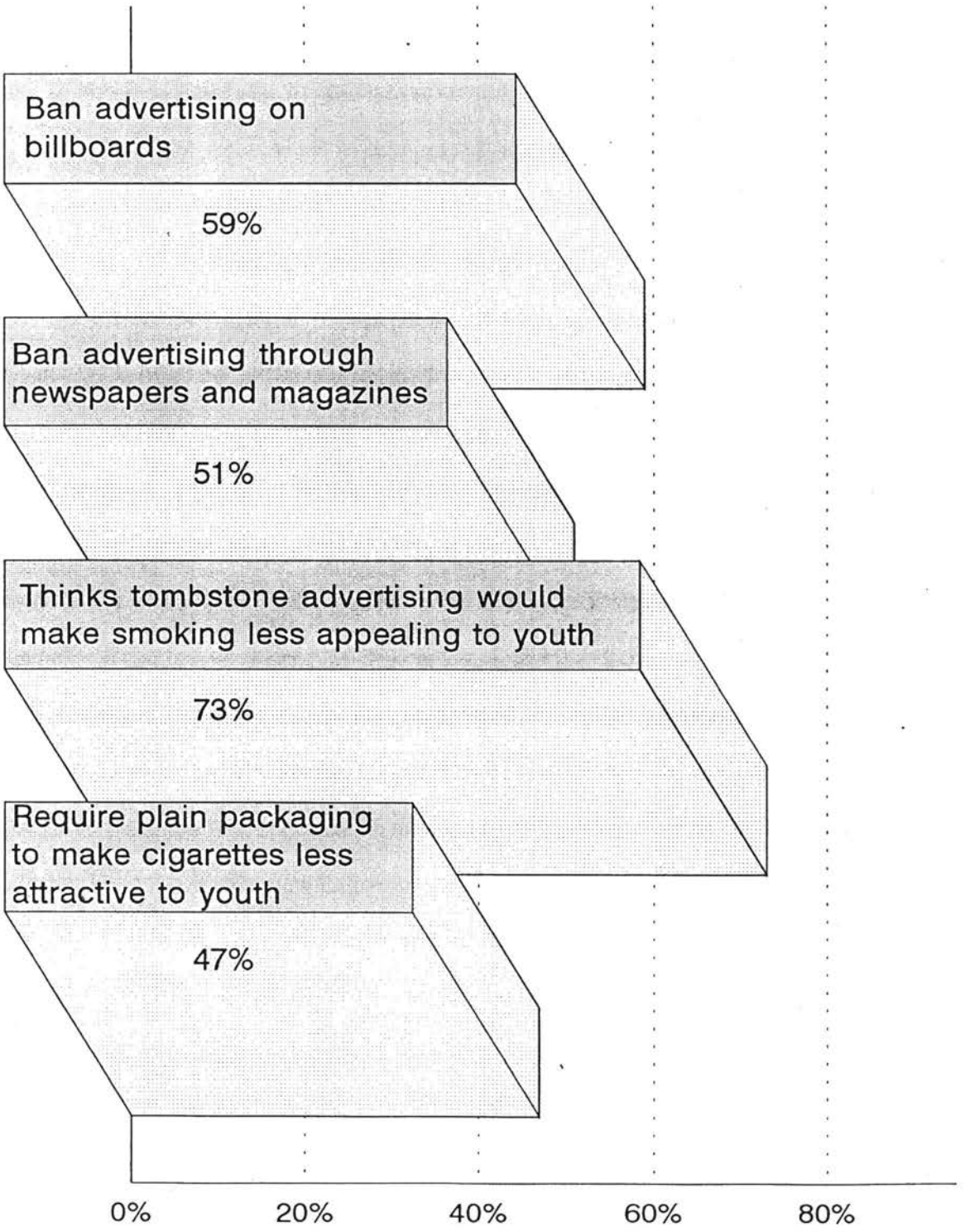
The public is ambivalent about a total ban on tobacco advertising--59 percent supporting a ban on billboard advertising and 51 percent a ban on advertising in newspapers and magazines (see Table II.4). We also asked respondents whether they believed limited advertising restrictions--tombstone advertising and plain packaging--would reduce the appeal of cigarette advertising to minors. These questions are shown below:

- Assuming that tobacco advertising is not banned, do you think limiting tobacco advertisements to words only, with pictures and cartoons prohibited, would make smoking less appealing to kids?

- Plain packaging of cigarettes and smokeless products would mean that the package would include only the brand name and warning label in black letters against a white background. To make cigarettes appear less attractive to kids, should tobacco companies be required to use plain packaging for their products or should plain packaging not be required?

TABLE II.4

PUBLIC OPINION ABOUT RESTRICTING OR BANNING VARIOUS TYPES OF ADVERTISING



Approximately three-fourths of the public (73 percent) indicated that they believed tombstone advertising would reduce the appeal of cigarette advertisements. However, less than half (47 percent) believed that requiring plain packaging would make cigarettes less attractive to kids. This suggests that a majority of the public agrees with researchers and public health officials who have maintained that minors are sensitive to image advertising (Lynch and Bonnie 1994 and CDC 1994). Tombstone advertising would prohibit the use of visual appeals embodied in many cigarette advertisements. However, less than half the public believes that modifying cigarette packaging itself would affect youthful behavior.

The demographic differences described above for youth access issues are also reflected in responses to advertising proposals (Table II.5). Women are more likely than men to support a total ban on billboard advertising (66 versus 52 percent) and newspaper or magazine advertising (57 versus 45 percent). Similarly, Hispanics and African Americans are also more likely than white non-Hispanics to support both proposals. Sixty-nine percent of Hispanics support a ban on billboard advertising and 62 percent a ban on newspaper and magazine advertising. Support for these two proposals among African Americans is 62 and 57 percent, respectively, and is 57 and 49 percent, respectively, among white non-Hispanics. Adults who have lost a family member to tobacco-related diseases are far more likely to support these proposals than those who have not (by 15 percentage points for banning billboard advertising and 15 percentage points for banning magazine and newspaper advertising). Support also increases with age, with those 55 and older demonstrating the strongest support for both restrictions (71 percent for the billboard advertising ban and 63 percent for the newspaper and magazine advertising ban).

Support for both measures lags in the midwest compared with other regions. Fifty-four percent of mid-westerners supported a billboard advertising ban, compared with 58 percent in the south, 62 percent in the northeast, and 64 percent in the west. Similarly, only 47 percent of mid-westerners supported a newspaper advertising ban, whereas, 52 to 54 percent of adults in other regions supported such a ban.

TABLE II.5

PUBLIC SUPPORT FOR RESTRICTING OR BANNING VARIOUS TYPES OF ADVERTISING
BY SELECTED CHARACTERISTICS
(Percent)

		Sex[a]		Age[b]				Ethnicity[c]		
	Total	Male	Female	18-24	25-34	35-54	55+	White Non-Hispanic	Black Non-Hispanic	Hispanic
Ban advertising on billboards (a9)	59	52	66	46	50	60	71	57	62	69
Ban advertising through newspapers or magazines (a10)	51	45	57	41	41	53	63	49	57	62
Thinks tombstone advertising would make smoking less appealing to kids (a11)	73	69	77	72	75	74	71	73	72	75
Require plain packaging to make cigarettes less attractive to kids (a13)	47	42	51	48	45	47	48	45	48	62

[a] Differences significant ($\alpha = .05$) for all questions.

[b] Differences between 18-24 and 35-54, and 55+, respectively, and between 25-34 and 35-54, and 55+, respectively, significant ($\alpha = .05$) for a9 and a10.

[c] Differences between white non-Hispanics and Hispanics significant ($\alpha = .05$) for a9, a10, and 13 and between black non-Hispanics and Hispanics for a9, and a13. Differences between white and black non-Hispanics significant ($\alpha = .05$) for a10 and ($\alpha = .10$) for a9. Difference between black non-Hispanics and Hispanics significant ($\alpha = .10$) for a10.

TABLE II.5 *(continued)*

	Region[d]				Tobacco Use[e]						Lost Family Member[f]	
					User			Non-User				
	Northeast	Midwest	South	West	Plans to Quit in Six Months	Does Not Plan to Quit	All	Other HH Member Uses Tobacco	No Tobacco Users in Household	All	Yes	No
Ban advertising on billboards (a9)	62	54	58	64	52	34	42	62	66	65	67	52
Ban advertising through newspapers or magazines (a10)	53	47	53	54	48	27	36	57	57	57	60	45
Thinks tombstone advertising would make smoking less appealing to kids (a11)	78	68	73	75	68	58	62	75	78	77	78	69
Require plain packaging to make cigarettes less attractive to kids (a13)	48	43	50	46	41	33	36	44	52	51	54	41

[d] Differences between midwest and northeast and west, respectively, significant ($\alpha = .10$) for a9 and a11. Difference between northeast and west significant ($\alpha = .10$) for a10. Difference between south and west significant ($\alpha = .10$) for a9. Difference between midwest and south significant ($\alpha = .10$) for a13.

[e] Differences between users who plan to quit and users who do not plan to quit significant ($\alpha = .05$) for a9, a10, and a11 and significant ($\alpha = .10$) for a13. Differences between two groups of non-users significant ($\alpha = .10$) for a13. Differences between all users and all non-users significant ($\alpha = .05$) for all variables.

[f] All differences significant ($\alpha = .05$).

TABLE II.5 *(continued)*

	Ideology[a]			Party Affiliation[b]			Ideology and Party Affiliation[i]					
							Liberals		Moderates		Conservatives	
	Liberal	Moderate	Conservative	Dem	Rep	Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.
Ban advertising on billboards (a9)	53	57	64	66	54	54	63	43	64	50	70	61
Ban advertising through newspapers or magazines (a10)	49	48	55	57	49	46	56	43	52	44	63	52
Thinks tombstone advertising would make smoking less appealing to kids (a11)	72	71	78	74	77	69	74	71	74	69	79	77
Require plain packaging to make cigarettes less attractive to kids (a13)	46	44	49	49	41	50	48	45	46	42	52	48

[a] Differences between liberals and conservatives significant ($\alpha = .05$) for a9 and ($\alpha = .10$) for a10 and a11 and between moderates and conservatives ($\alpha = .05$) for a9, a10, and a11.

[b] Differences between democrats and republicans significant ($\alpha = .05$) for a9, a10, and a13. Differences between democrats and independents significant ($\alpha = .05$) for a9 and a10 and significant ($\alpha = .10$) for a11. Differences between republicans and independents significant ($\alpha = .05$) for a11 and a13.

[i] Differences between liberal democrats and liberal rep/ind. significant ($\alpha = .05$) for a9 and a10, between moderate democrats and rep/ind. significant ($\alpha = .05$) for a9 and ($\alpha = .10$) for a10 and differences between conservative democrats and rep/ind. significant ($\alpha = .05$) for a9 and a10.

Not surprisingly, support for banning cigarette advertising is greater among non-users than users; sixty-five percent of non-users support a ban on billboard advertising and 57 percent a ban in newspapers and magazines. (Differences between non-users living in tobacco free households and non-users living with tobacco users were not significant.) Tobacco users who do not plan to quit are least likely to support banning tobacco advertising on billboards (34 percent) or through newspapers or magazines (27 percent). Tobacco users who plan to quit are about evenly split on these issues--52 percent supporting a billboard advertising ban and 48 percent a newspaper and magazine ban.

As with other regulatory measures, conservative democrats show the strongest support of any political group for bans on billboard advertising (70 percent) and newspaper advertising (63 percent). Liberal democrats (63 percent), moderate democrats (64 percent), and conservative republicans (61 percent) also demonstrated support for a ban on billboard advertising, with moderate republicans and independents (50 percent), and liberal republicans and independents (43 percent) showing less support. With the exception of conservative democrats (63 percent), other political groups were divided on support for a ban on newspaper advertising (support ranging from 43 to 56 percent). The lack of clear patterns among political groups (other than conservative democrats) for banning tobacco advertising on billboards and in newspapers suggests that other factors may be more highly correlated with views on tobacco advertising bans.

Perceptions of the effect of tombstone advertising and plain packaging on the appeal of smoking to youth are fairly consistent across demographic and political groups. The perceptions of tobacco users are particularly interesting since they are experienced in responding to tobacco advertising messages. Most (62 percent) believe that tombstone advertising would make smoking less appealing to youth, but relatively few (36 percent) think that plain packaging would have the same effect.

C. BANNING VARIOUS TYPES OF TOBACCO PROMOTIONS

Over the past twenty years, the tobacco industry's distribution of marketing resources has shifted from advertising to promotions, with about 83 percent of 1991 expenditures devoted to non-advertising

promotional activities (Lynch and Bonnie 1994, pp. 108-109). We assessed public support for banning several promotions appealing to youth. These included:

- Coupons included in cigarette packs that can be used to obtain promotional items appealing to kids, such as hats, tee shirts, jackets, or caps (a14)
- Coupon promotions that make it possible for anyone, regardless of age, to obtain free cigarettes by mail (a15)
- Sale of single cigarettes (a16)
- Distribution of free cigarettes on public streets (a17)
- Tobacco companies paying to display their products in movies or videos (a19)
- Tobacco companies sponsoring sporting or entertainment events where their brand names are featured (a18)

Support is strong for banning both coupon promotions, the sale of single cigarettes, and the distribution of free cigarettes on public streets (70 to 88 percent), but is weaker for prohibiting tobacco companies from promoting their products in movies or videos or sports and other entertainment events (60 and 55 percent, respectively) (see Table II.6).

Again, the pattern of support for promotional bans is similar to advertising bans (Table II.7). Support is broadly based for promotions unrelated to sports, entertainment, or media programming (a14-17), although the gender and age gaps continue, with women and older persons demonstrating greater support for these proposals. Except for coupon promotions within cigarette packs, where white non-Hispanics are less supportive than African-Americans, the gap between those two groups closed. Hispanics continue to be more supportive of promotional bans than non-Hispanics. Support for these promotional bans is strongest in the northeast, but is strong in other regions, as well. Tobacco users who do not plan to quit are less supportive of banning non-entertainment promotions; however, the only promotion for which a majority of tobacco users oppose a ban is coupons included in cigarette packs that can be used to obtain promotional items, a promotion from which current smokers may personally

TABLE II.6

PUBLIC OPINION ABOUT RESTRICTING OR BANNING VARIOUS TYPES OF PROMOTIONS

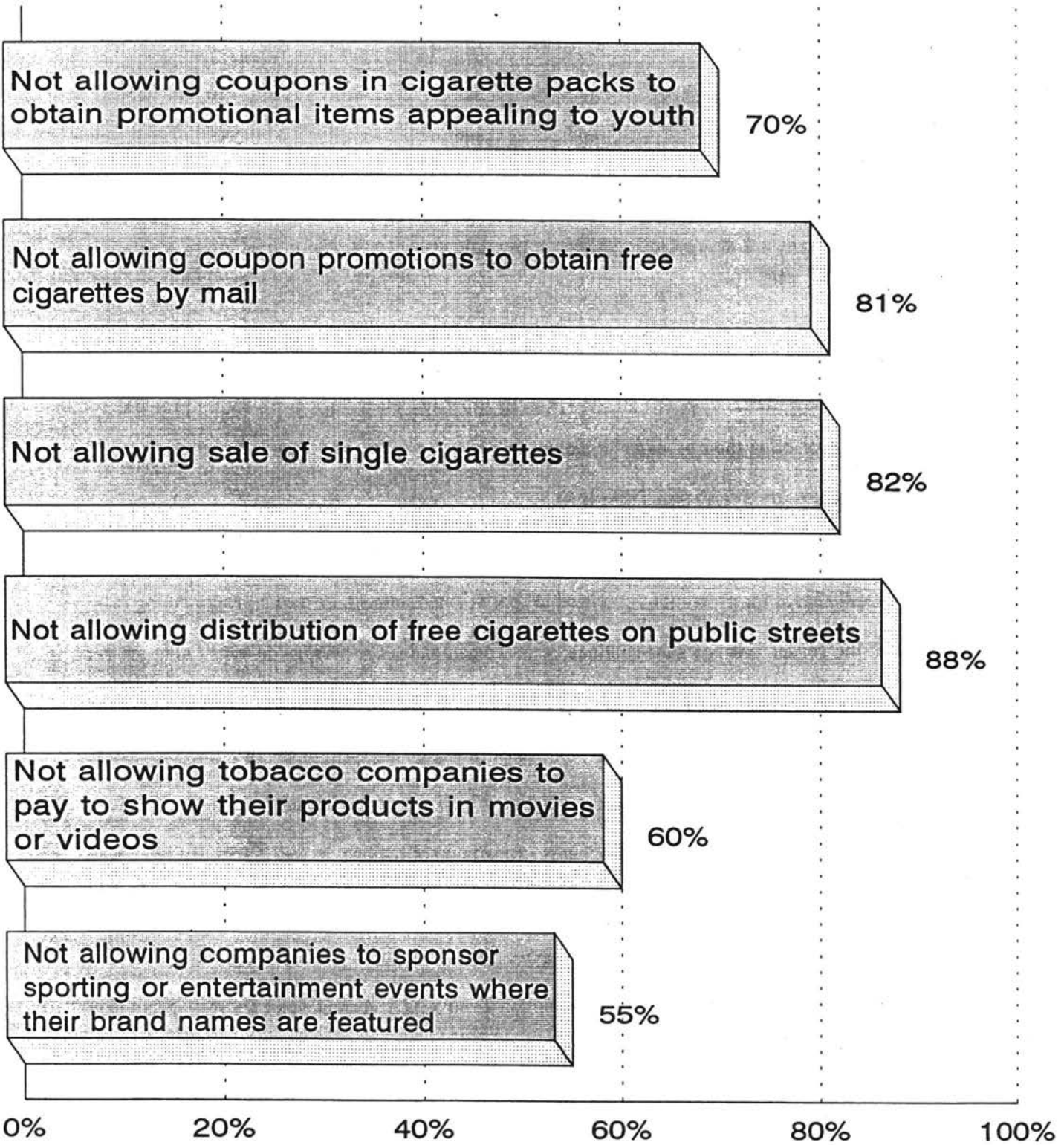


TABLE II.7

PUBLIC SUPPORT FOR BANNING VARIOUS TYPES OF PROMOTIONS
(Percent)

		Sex[a]		Age[b]				Ethnicity[c]		
	Total	Male	Female	18-24	25-34	35-54	55+	White Non-Hispanic	Black Non-Hispanic	Hispanic
Not allowing coupons in cigarette packs to obtain promotional items appealing to kids (a14)	70	61	79	60	62	70	82	68	77	82
Not allowing coupon promotions to obtain free cigarettes by mail (a15)	81	78	84	78	82	79	85	80	80	90
Not allowing sale of single cigarettes (a16)	82	76	87	77	78	81	89	82	82	86
Not allowing distribution of free cigarettes on public streets (a17)	88	81	94	87	87	86	90	87	87	93
Not allowing tobacco companies to pay to show their products in movies or videos (a19)	60	53	67	46	55	61	71	60	60	69
Not allowing tobacco companies to sponsor sporting or entertainment events where their brand names are featured (a18)	55	47	63	47	49	54	66	52	65	72

[a] All differences significant ($\alpha = .05$).

[b] Differences between 18-24 and 55+, significant ($\alpha = .05$) for a14, a16, a19, and a18, and ($\alpha = .10$) for a15; differences between 25-34 and 55+, significant ($\alpha = .05$) for a14, a19, and a18; differences between 35-54 and 55+ significant ($\alpha = .05$) for a14, a15, a16, a19 and a18; differences between 18-24 and 25-34 significant ($\alpha = .10$) for a19; differences between 35-54 and 55+ significant ($\alpha = .05$) for all variables; ($\alpha = .10$) for a17.

[c] Differences between white non-Hispanics and Hispanics and between black non-Hispanics and Hispanics significant ($\alpha = .05$) for a14, a15, a17, a19, and a18 and significant ($\alpha = .10$) for a16.

TABLE II.7 *(continued)*

	Region[d]				Tobacco Use[e]						Lost Family Member[f]	
					User			Non-User				
	Northeast	Midwest	South	West	Plans to Quit in Six Months	Does Not Plan to Quit	All	Other HH Member Uses Tobacco	No Tobacco Users in Household	All	Yes	No
Not allowing coupons in cigarette packs to obtain promotional items appealing to kids (a14)	75	68	69	70	60	42	50	74	78	78	73	68
Not allowing coupon promotions to obtain free cigarettes by mail (a15)	82	81	81	82	73	56	63	87	88	88	87	77
Not allowing sale of single cigarettes (a16)	88	83	82	74	78	71	74	85	85	85	85	79
Not allowing distribution of free cigarettes on public streets (a17)	88	86	88	89	84	72	77	90	92	91	91	85
Not allowing tobacco companies to pay to show their products in movies or videos (a19)	65	61	57	60	53	37	44	64	67	66	67	54
Not allowing tobacco companies to sponsor sporting or entertainment events where their brand names are featured (a18)	56	55	55	55	48	28	36	60	63	62	62	49

[d] Differences between northeast and other regions significant ($\alpha = .10$) for a14 and a16 and differences between northeast and south significant ($\alpha = .10$) for a19. Differences between west and midwest and south, respectively, significant ($\alpha = .05$) for a16.

[e] All differences except a16 between user planning to quit and user not planning to quit significant ($\alpha = .05$); all differences between all users and all non-users significant ($\alpha = .05$).

[f] All differences significant ($\alpha = .05$).

TABLE II.7 *(continued)*

	Ideology[a]			Party Affiliation[b]			Ideology and Party Affiliation[c]					
							Liberals		Moderates		Conservatives	
	Liberal	Moderate	Conservative	Dem	Rep	Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.	Dem	Rep/ Ind.
Not allowing coupons in cigarette packs to obtain promotional items appealing to kids (a14)	71	68	72	75	67	66	77	65	74	63	77	70
Not allowing coupon promotions to obtain free cigarettes by mail (a15)	77	81	84	84	78	79	82	72	85	78	87	81
Not allowing sale of single cigarettes (a16)	81	79	84	83	80	82	82	81	82	77	86	83
Not allowing distribution of free cigarettes on public streets (a17)	87	87	89	89	88	87	89	86	88	86	90	88
Not allowing tobacco companies to pay to show their products in movies or videos (a19)	58	59	62	64	58	57	62	56	63	54	63	61
Not allowing tobacco companies to sponsor sporting or entertainment events where their brand names are featured (a18)	50	52	60	63	50	49	58	41	58	46	72	55

[a] Differences between liberals and conservatives significant ($\alpha = .05$) for a15 and a18 and between moderates and conservatives for a18; difference between moderates and conservatives significant ($\alpha = .10$) for a15.

[b] Differences between democrats and republicans and independents, respectively, significant ($\alpha = .05$) for a14, a15, a19, and a18.

[c] Differences between liberal democrats and liberal rep/ind. significant ($\alpha = .05$) for a14, a15, and a18; between moderate democrats and moderate rep/ind. significant ($\alpha = .05$), for a14, a19, and a18 and significant ($\alpha = .10$) for a15; differences between conservative democrats and conservatives rep/ind. significant ($\alpha = .05$) for a18 and ($\alpha = .10$) for a14 and a15.

benefit. Conservative democrats again are the political group that is most supportive of promotional bans, but support for these policies is strong across other political groups, as well.

Public support is more divided on the two proposals to ban tobacco companies from promoting their products in sports and entertainment events and in the media. Approximately two-thirds of women, but only about one-half of men support these proposals. Support for these proposals also increases with age. Less than half of 18 to 24 year olds support them, with support increasing steadily for each age group. Although we did not examine the combined relationship of age and sex to these proposals, it is not unlikely that young males are the most resistent to restrictions on tobacco company support for entertainment and sports events and product displays in movies and videos. Hispanic respondents again are more supportive of these proposals than non-Hispanics. Differences among political groups are smaller than among demographic groups, with conservative democrats again demonstrating greater support for restrictions, particularly for not allowing tobacco companies to sponsor sporting or entertainment events where their brand names are shown (72 percent); no other political group, based on ideological and party affiliation, exceeded 58 percent support for this measure. Tobacco users who do not plan to quit are strongly opposed to both proposals.

III. NICOTINE AND SMOKING CESSATION POLICIES

Although the primary focus of the survey is on public attitudes toward policies designed to reduce youth access to and the appeal of tobacco products, we also included questions on public perceptions of nicotine addiction and support for proposals to regulate nicotine content and to assist smokers who want to quit.

A. NICOTINE ADDICTION

The public overwhelmingly believes that nicotine in cigarettes is addicting (92 percent, see Table III.1). Not surprisingly, 92 percent of tobacco users who indicated they plan to quit in the next six months indicated that they thought nicotine was addicting; however, 85 percent of tobacco users who do not plan to quit in the next six months also share this belief.[1]

We assessed the public's knowledge of the government's hearings on nicotine manipulation and their beliefs about whether or not tobacco companies deliberately adjusted nicotine levels to keep smokers addicted. First, respondents were asked if they had seen or heard anything in the last six months about tobacco companies and the amount of nicotine in cigarettes (a30). If they had, we asked what they recalled reading or hearing in an open-ended question and coded the responses (a30a). Then respondents were asked if they believed that cigarette companies deliberately adjusted nicotine levels (a31).

Public awareness of the nicotine manipulation issue is shown in Table III.2. Fifty-seven percent indicated that they were aware of the issue, with awareness varying by education--48 percent of those with a high school education or less, 60 percent of those with some college, and 76 percent of college graduates.

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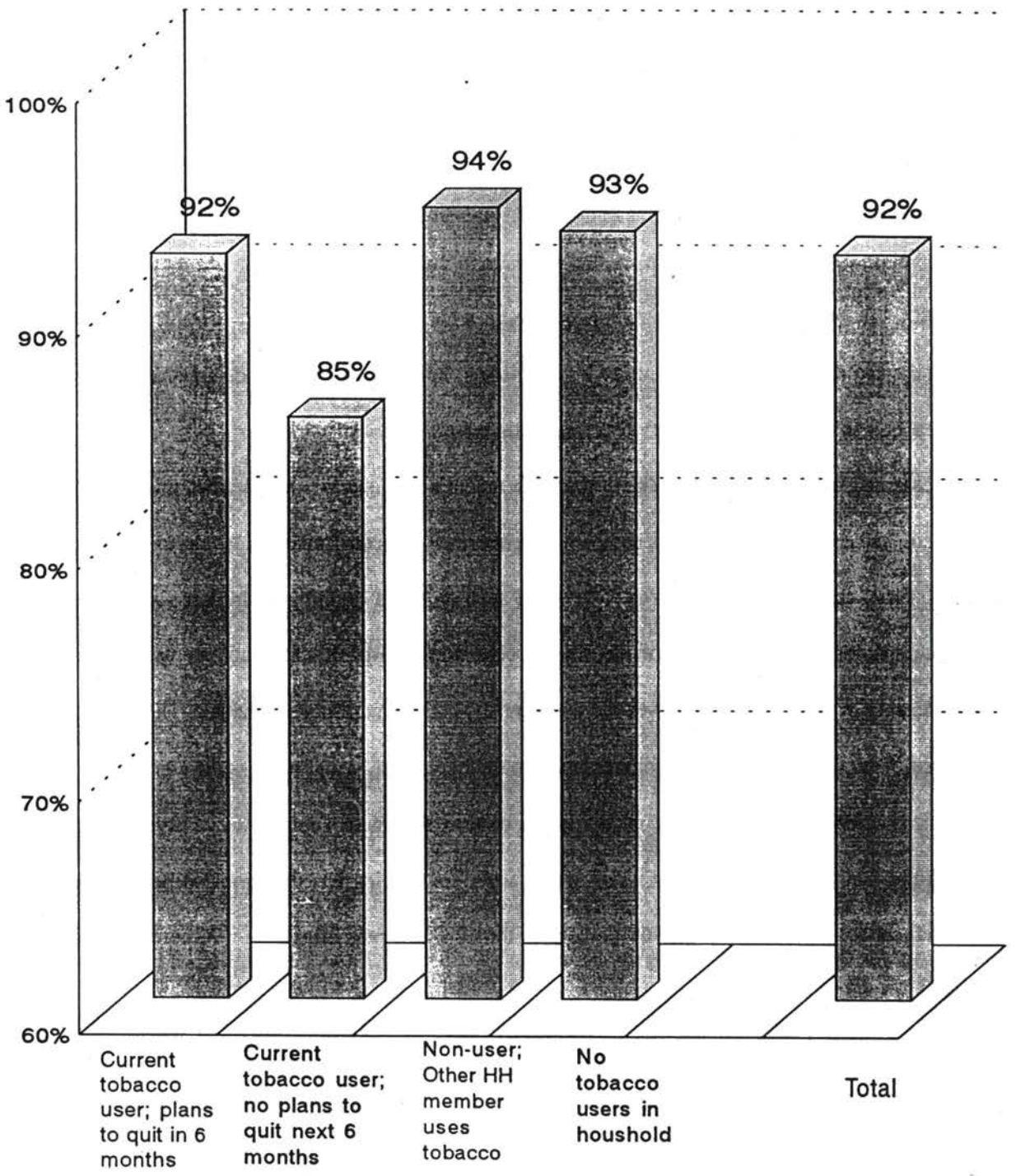
[1]These results are consistent across demographic, political, and socioeconomic groups. Distributions for all groups are included in Appendix C, Tables 20.1, 20.2., and 20.3.

TABLE III.1

PUBLIC'S BELIEFS ABOUT NICOTINE ADDICTION BY TOBACCO USE [a]



[a] Do you personally think nicotine in cigarettes is addicting or is it not addicting?

TABLE III.2

AWARENESS OF THE NICOTINE MANIPULATION ISSUE BY EDUCATION AND TOBACCO USE

	Total	Education			Tobacco Use			
		High School or Less	Some College	College Grad	Current User, Plans to Quit	Current User, No Plans to Quit	Other HH Member Uses Tobacco	No Tobacco User in HH
Seen or heard anything in last six months about tobacco companies and amount of nicotine in cigarettes? (a30)								
Yes	57	48	60	76	61	58	55	56
No/Don't Know	43	52	40	24	39	42	45	44
Total	100	100	100	100	100	100	100	100
IF YES: What did respondent recall reading or hearing about nicotine? (a30a)								
(1) Addictive or harmful	24	27	23	19	20	19	28	25
(2) Tobacco companies spiking or manipulating amount of nicotine	28	24	30	33	33	34	22	27
(3) Addictive or harmful and manipulating amount of nicotine	18	18	17	19	21	18	17	18
(4) Tobacco companies or other groups deny manipulation; some companies reducing amount of nicotine; anti-tobacco groups distorting issue	10	10	10	9	7	8	13	10
(5) Cites both government and tobacco industry positions on nicotine manipulation	5	2	7	9	4	4	3	6
(6) Could not recall relevant details/Don't Know/Refusal	15	19	14	11	16	18	19	14
Total	100	100	100	100	100	100	100	100

About half of the sample indicating awareness of the issue cited nicotine manipulation--28 percent citing only nicotine manipulation, 18 percent mentioning nicotine manipulation and adding that nicotine is addictive or harmful, and 5 percent citing both the government's position on nicotine manipulation and the industry's response. Twenty-four percent recalled they heard that nicotine was addictive or harmful, but did not mention anything about nicotine manipulation. Ten percent said they recalled that tobacco companies or other groups denied manipulating nicotine, that some companies were reducing the amount of nicotine in tobacco, or that anti-tobacco groups were distorting the issue. Fifteen percent who said they were aware of the issue could not recall relevant details about it.

Awareness of the nicotine manipulation issue varied by only a few percentage points, with respect to tobacco use (see Table III.2). However, of those who were aware of the issue, tobacco users were somewhat more likely to cite nicotine manipulation by the tobacco industry in their responses (summation of categories 2, 3, and 5). Fifty-eight percent of tobacco users who plan to quit and 56 percent of those who do not mentioned nicotine manipulation, compared with 41 percent of non-users living with tobacco users and 51 percent of non-users in smoke-free households.

Over half of the public (55 percent) believe that the cigarette industry deliberately adjusts nicotine levels to keep smokers addicted to cigarettes; 27 percent does not; and 18 percent indicated they could not answer the question.[2] Those who recalled hearing about the issue were more likely to believe that tobacco companies manipulated nicotine levels (65 percent), compared with 59 percent who recalled that nicotine is harmful or addictive (but did not mention nicotine manipulation), and 49 percent who did not recall anything or did not cite nicotine manipulation (see Table III.3). Tobacco users planning to quit were more likely to believe that tobacco companies manipulate nicotine levels (61 percent) than current users not planning to quit (41 percent). A majority of non-tobacco users, whether living in smoke-free households (58 percent) or with tobacco users (55 percent) also believe that cigarette companies deliberately manipulated nicotine levels.

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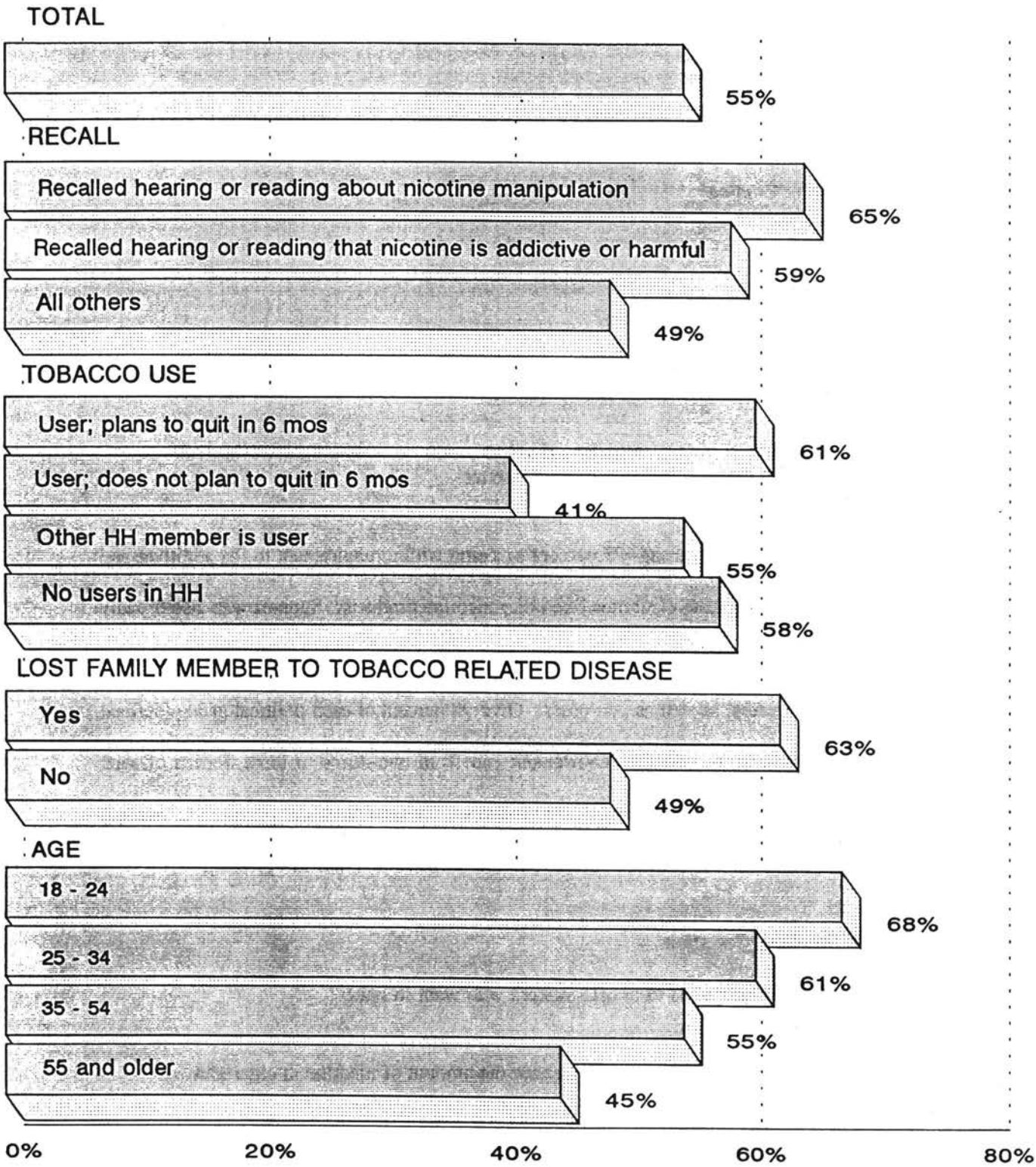
[2]See Appendix C, Tables 23.1, 23.2, and 23.3 for a complete set of distributions for this question.

TABLE III.3

PERCENT BELIEVING THAT CIGARETTE COMPANIES MANIPULATE NICOTINE LEVELS BY SELECTED CHARACTERISTICS [a]



[a] Do you believe that cigarette companies deliberately adjust nicotine levels to keep smokers addicted or do you believe that cigarette companies don't deliberately do this?

Skepticism regarding the industry's position that it is not manipulating nicotine levels was inversely related to age; young adults (18 to 24) were most likely to believe that tobacco companies were deliberately adjusting nicotine levels (68 percent). Support for this belief declines with age, as fewer than half (45 percent) of persons 55 and older believe that tobacco companies are deliberately doing this.

B. PROPOSALS TO REGULATE NICOTINE CONTENT AND TO ASSIST SMOKERS WHO WANT TO QUIT

1. Regulating Nicotine Content

Respondents were asked whether or not they agreed with two proposals to regulate cigarettes and other tobacco products (Table III.4):

- Tobacco companies should be required to list the additives on package labels the way food and drug companies are required to list ingredients.
- Since the government currently regulates all other products containing nicotine, such as nicotine patches and gum, it should regulate cigarettes.

Support for both proposals was strong--93 percent agreeing with a requirement to list additives and 71 percent with a proposal to regulate cigarettes like other nicotine products. Support was also broadly based, cutting across political party and ideology for both proposals and (for the additives requirement) embracing current tobacco users, as well as non-users. Over 90 percent of each political group (defined by party and ideology) support the additive requirement and from two-thirds to three-fourths of each group support regulating cigarettes like other nicotine products. Tobacco users not planning to quit had mixed views on nicotine regulation, with half agreeing to the proposal and half disagreeing.[3]

2. Assisting with Smoking Cessation

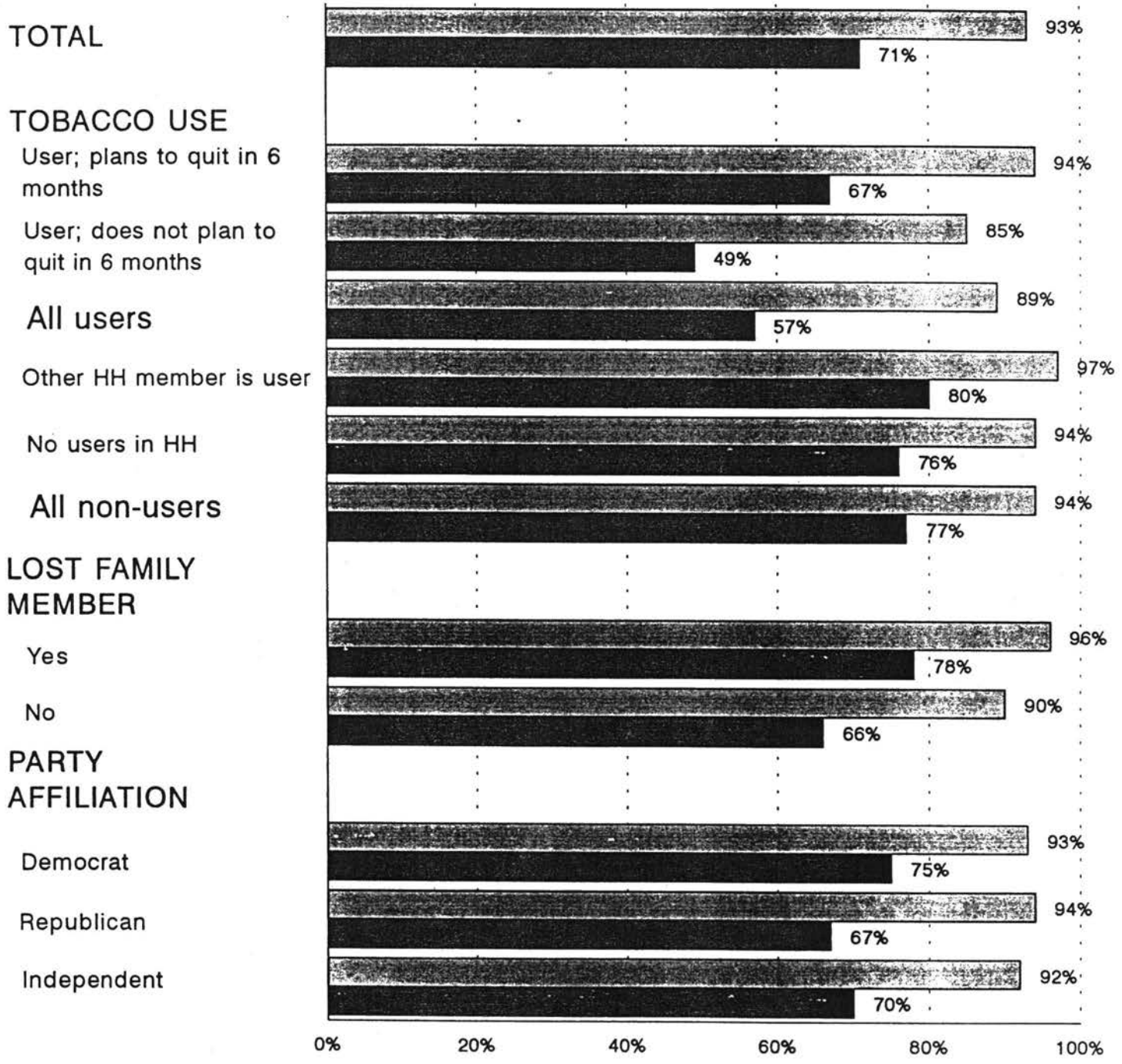
The survey included two proposals to assist smokers who want to quit:

- Requiring tobacco companies to gradually reduce the amount of nicotine in cigarettes

[3]Support was also consistent across demographic groups; see Appendix C, Tables 26.1, 26.2, and 26.3 for these distributions.

TABLE III.4

PERCENT AGREEING WITH PROPOSALS TO REGULATE TOBACCO PRODUCTS



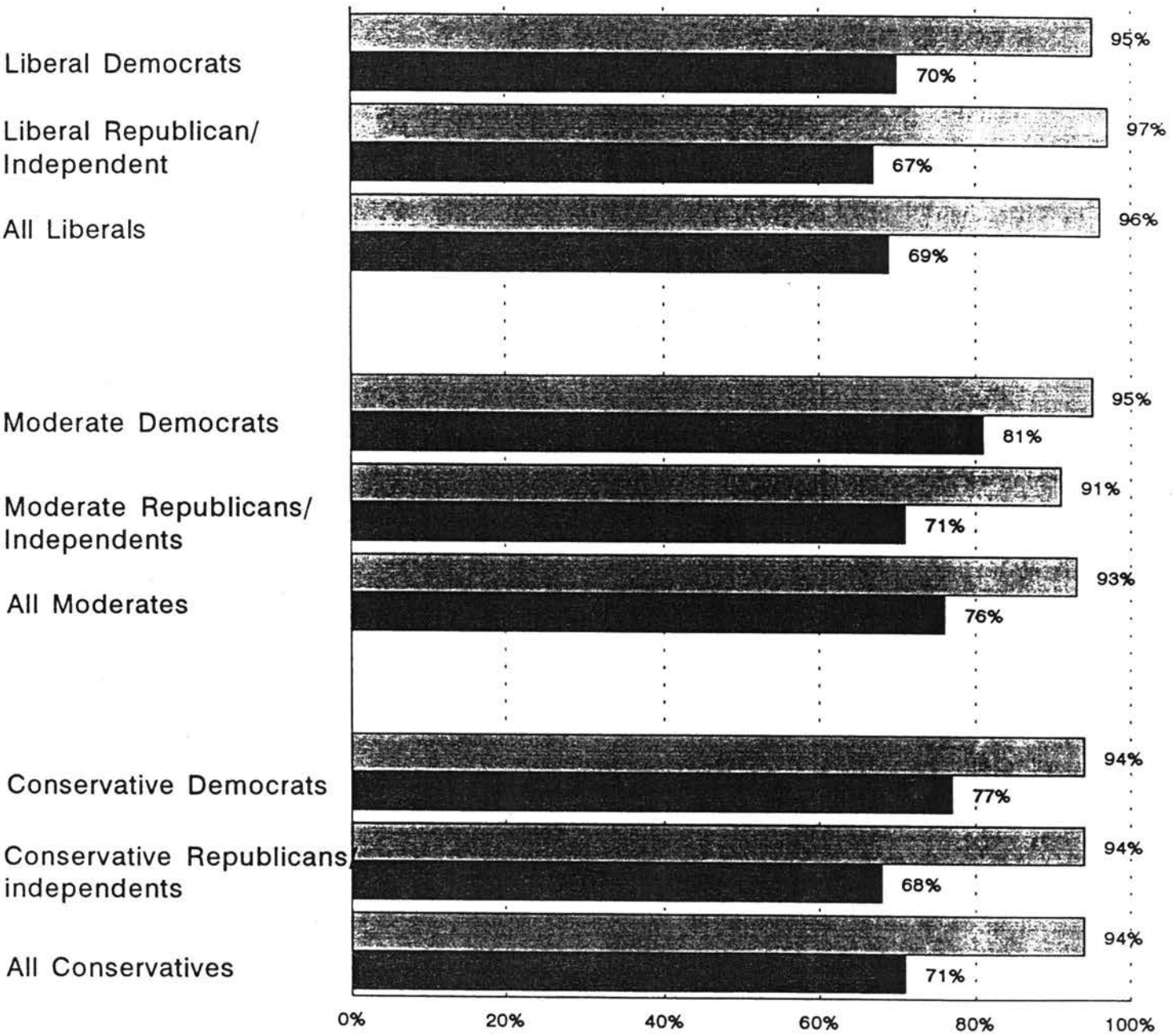
Tobacco companies should be required to list additives on package labels the way food and drug companies are required to list ingredients.

Since the government currently regulates all other products containing nicotine, such as nicotine patches and gum, it should regulate cigarettes too.

TABLE III.4

(Continued)

PERCENT AGREEING WITH PROPOSALS TO REGULATE TOBACCO PRODUCTS



Tobacco companies should be required to list additives on package labels the way food and drug companies are required to list ingredients.

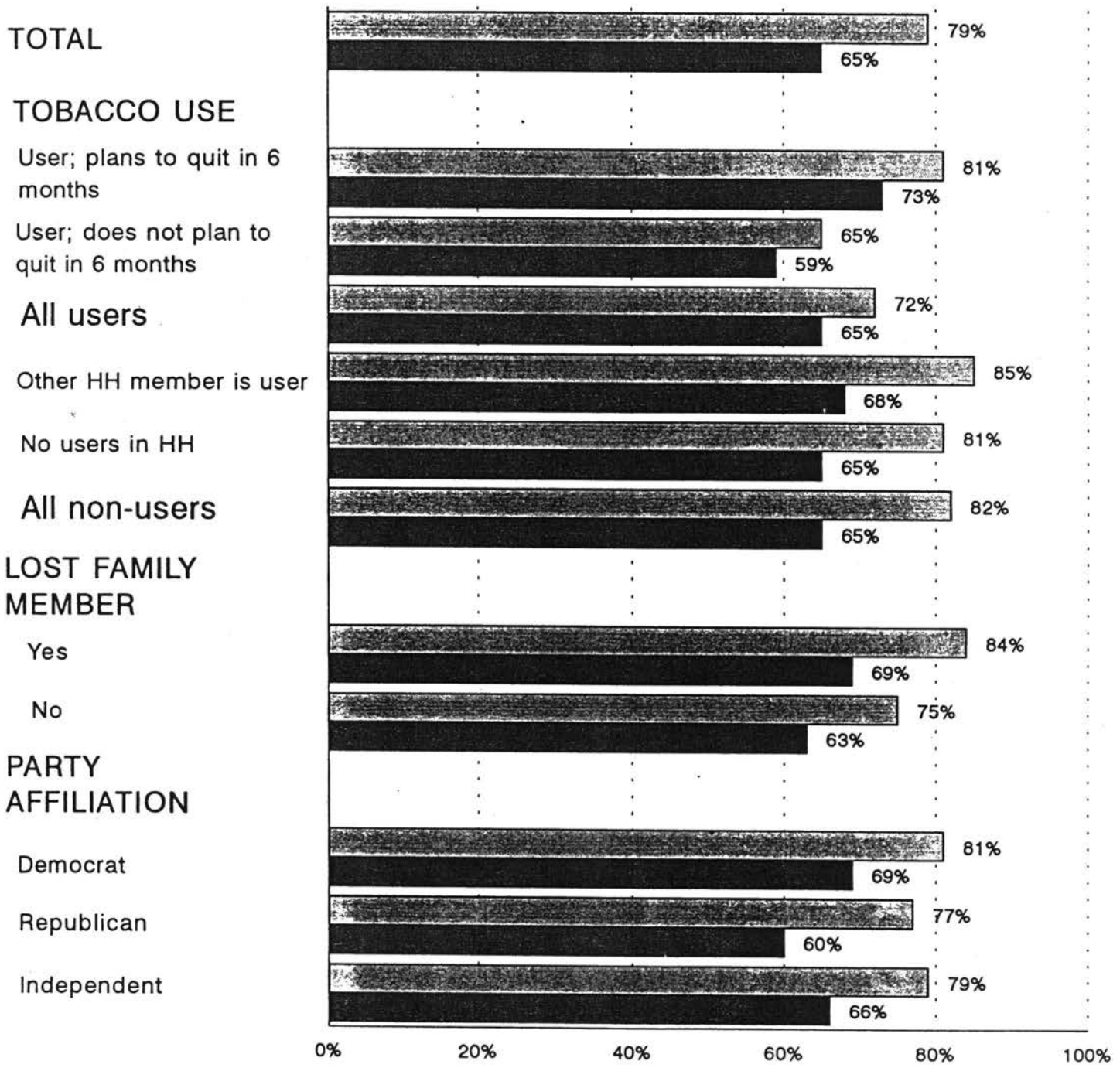
Since the government currently regulates all other products containing nicotine, such as nicotine patches and gum, it should regulate cigarettes too.

- Requiring insurance companies to cover the cost of programs to quit smoking

Again, support was strong and broadly based, as 79 percent supported the first proposal and 65 percent the second (Table III.5). As might be expected, current tobacco users who plan to quit in the next six months are very supportive of both proposals (81 and 73 percent). However, majorities of users who do not plan to quit and, to a slightly lesser extent, non-users, also favor these proposals. Persons who lost family members or friends to tobacco related diseases continue to show higher support for proposals to assist smokers who want to quit. Support also cuts across political party and ideological lines, with over three-fourths of each political group favoring a requirement that tobacco companies gradually reduce the amount of nicotine in cigarettes and somewhat smaller majorities of each group also supporting the insurance company requirement. However, conservative republicans and independents were slightly less likely to support a requirement that insurance companies cover the cost of smoking cessation programs (58 percent), compared with conservative democrats (68 percent), moderates (64 percent), or liberals (74 percent). Among moderates and liberals, differences by party were not significant.

TABLE III.5

PERCENT FAVORING PROPOSALS TO ASSIST WITH SMOKING CESSATION



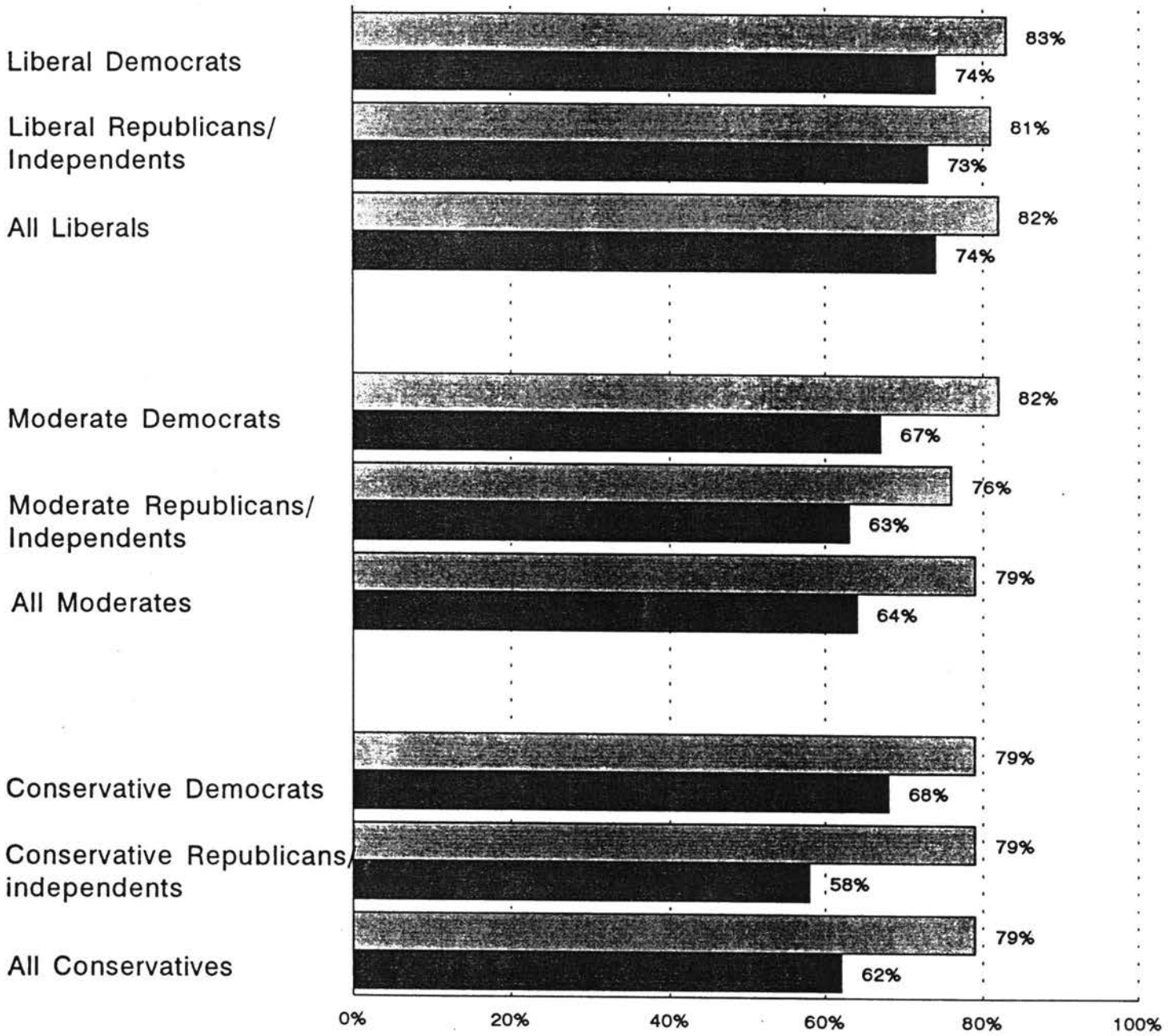
Require tobacco companies to gradually reduce the amount of nicotine in cigarettes.

Require insurance companies to cover the cost of programs to quit smoking.

TABLE III.5

(Continued)

PERCENT FAVORING PROPOSALS TO ASSIST WITH SMOKING CESSATION



Require tobacco companies to gradually reduce the amount of nicotine in cigarettes.

Require insurance companies to cover the cost of programs to quit smoking.

IV. CONCLUSIONS

Although the sale of tobacco products to minors is illegal, the public recognizes that it is relatively easy for minors to purchase cigarettes and other tobacco products and will support specific policies that limit minors' access to these products. We observed broadly-based support for a ban on cigarette vending machines, self-service displays, and verification of youthful customers' identifications. However, we did not assess support for enforcement policies to ensure retailer compliance, an issue that is growing in importance in many states. The public was ambivalent about increasing age limits for tobacco purchases and limiting tobacco sales to certain types of retailers. We did not specify the types of retailers that should be restricted from selling tobacco products; future surveys on minors' access issues might assess support for creating tobacco-free zones near schools or bans on pharmacy sales.

The public is more likely to support bans on tobacco promotions than advertising, with strong majorities supporting bans on coupon promotions, sales of single cigarettes, and distribution of free cigarettes on public streets. Support was mixed for prohibiting tobacco companies from paying to show their products in movies and videos and from sponsoring sporting or entertainment events where their brand names are featured, with males and young adults being least supportive. Advertising bans on billboards and in newspapers and magazines appear to be polarizing, with males and young adults, in particular, demonstrating weaker support for these policies. Most of the public believe that tombstone advertising would make smoking less appealing to minors, but only about half believe that plain packaging would reduce the appeal of cigarettes to youth. Tobacco users, in particular, were skeptical about the impact of plain packaging on young smokers' purchasing decisions.

The overwhelming majority of tobacco users and non-users believe that nicotine is addicting, and support requiring tobacco companies to list additives on package labels. Most also support extending government regulation of nicotine products, such as patches and gum, to cigarettes. The public also would support policies requiring tobacco companies to reduce the amount of nicotine in cigarettes and insurance companies to cover the cost of programs to quit smoking. Support for these proposals crosses ideological and party lines.

Although support for many measures to curb minors' access to tobacco products is broadly based (receiving majority support across demographic and political groups, as well as region), we observed that women, older adults, African-Americans and Hispanics were more supportive of most policies. Among political groups, conservative democrats consistently demonstrated greater support for tobacco control measures than other groups. Adults who believe they have lost family members or friends to tobacco related diseases, a group representing 44 percent of the population, were more supportive of policies designed to limit access to youth. Like many other surveys on public attitudes toward tobacco control policies, we observed that non-users were more supportive than users. However, current tobacco users who indicated they plan to quit in the next six months expressed levels of support for youth access policies that were more similar to non-users than users who do not plan to quit.

REFERENCES

Bierig, Jack, Susan D. Weber, and T. Robert Scarborough. "Legal Analysis of Approaches to State and Local Regulation of Tobacco Advertising in the U.S." *Tobacco Control*, vol. 3, 1994, pp. 257-262.

Brick, J. Michael, J. Waksberg, D. Kulp, and A. Starer. "Bias in List-Assisted Telephone Surveys." Paper presented at the American Association of Public Opinion Research, May 1994.

Center for Disease Control and Prevention. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Washington, DC: U.S. Department of Health and Human Services, 1994.

Cummings, K. Michael, Terry Pechacek, and Donald Shopland. "The Illegal Sale of Cigarettes to U.S. Minors: Estimates by State." *American Journal of Public Health*, vol. 84, no. 2, 1994, pp. 300-302.

Cummings, K. Michael, Eva Sciandra, Terry F. Pechacek, Mario Orlandi, and William R. Lynn. For the COMMIT Research Group. "Where Teenagers Get Their Cigarettes: A Survey of the Purchasing Habits of 13-16 Year Olds in 12 U.S. Communities." *Tobacco Control*, vol. 1, 1992, pp. 264-267.

Johnson, L., J. Bachman, and P. O'Malley. "Monitoring the Future Study." Press release, The University of Michigan, Ann Arbor, January 27, 1994.

Lynch, Barbara S., and Richard J. Bonnie (ed). *Growing Up Tobacco Free*, Committee on Preventing Nicotine Addiction in Children and Youth, Division of Biobehavioral Sciences and Mental Disorders, Institute of Medicine, National Academy Press. Washington, DC, 1994.

Marttila & Kiley, Inc. *Highlights from an American Cancer Society Survey of U.S. Voter Attitudes Toward Cigarette Smoking*. Boston: September 1993.

New Zealand Toxic Substances Board. *Health or Tobacco: An End to Tobacco Advertising and Promotion*. Wellington, New Zealand: Department of Health, 1989, xxix.

Office of the Inspector General. *Youth Access to Tobacco*. Department of Health and Human Services, OEI 02-92-00880, December 1992.

Response Research, Inc. *Study of Teenage Cigarette Smoking and Purchasing Behavior*. For the National Automatic Merchandising Association. Chicago: June/July 1989.

Roswell Park Cancer Institute. *Survey of Alcohol, Tobacco and Drug Use: Ninth Grade Students in Erie County, 1992*. Buffalo, NY: Roswell Park Cancer Institute, Department of Cancer Control and Epidemiology, 1993.

Teenage Attitudes and Practices Survey II, Centers for Disease Control, National Center for Health Statistics, U.S. Department of Health and Human Services, 1993 (unpublished data).

APPENDIX A

SAMPLE DESIGN, WEIGHTING, AND ESTIMATION PROCEDURES

1. Sample Design

The survey employed a single-stage list-assisted[1] random-digit-dialing (RDD) sample purchased from a commercial vendor, Genesys Sampling Systems. The sample frame was stratified to facilitate oversampling of African-Americans, Hispanics and residents of California. Below we describe the sample frame, stratification, sample allocation, and data collection methods.

The Frame. The sample frame includes a subset of all possible telephone numbers in the contiguous United States (and the District of Columbia). The vendor has divided all area code/exchange combinations[2] currently assigned for use by telephone companies into banks of 100 consecutive numbers.[3] Those banks with one or more published household numbers are retained in the frame; the remaining banks are not used because they contain so few household numbers that including them would increase survey costs with little gain in coverage.[4]

Stratification. We used stratification to allow efficient oversampling of African-Americans, Hispanics, and residents of California. In addition to a national probability sample of approximately 1,500 adults, we wished to obtain approximately 500 interviews with African-Americans, 400 with Hispanics and 400 interviews with residents of California. We estimated that a national sample of 1,500

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[1]A distinct advantage of list-assisted frames is the ability to use single-stage, unclustered sample designs. A recent paper recommending the use of list-assisted RDD sample designs for national surveys was given at the American Association of Public Opinion Research (Brick, 1994).

[2]Of a ten-digit telephone number, (XXX) YYY-ZZZZ, the first three (XXX) are the area code, and YYY defines the exchange, also called the central office code.

[3]For example, (609) 799-3500 to (609) 799-3599 would comprise a bank.

[4]While the omitted banks may contain up to 5 percent of household telephone numbers, the likelihood of reaching a household in these banks is so low (less than 2 percent) that it is inefficient to include them.

adults with no oversampling would yield only about 180 African-Americans, 120 Hispanics and 160 Californians.

The design employed ten strata: the first level of stratification was between California and the remainder of the contiguous United States; within each of these two major strata, we formed five substrata based on the expected yield of African-Americans and Hispanics. The ten substrata are depicted in Table A.1. Each area code/exchange combination was assigned to one of the ten substrata, based on data provided by the vendor.

Sample Allocation and Respondent Selection. We made two allocations of sample. The purpose of the allocation for the first phase of interviewing was to obtain approximately 1,500 interviews from a nationally representative equal probability sample of households, supplemented by additional interviews in California resulting in a total of 400 interviews in that state. We attempted interviews with all households having at least one member 18 years of age or older; however, no screening on race or ethnicity was done in the first phase. For the second phase, we allocated sample based on estimated prevalences of African-Americans and Hispanics, oversampling strata with higher prevalences. Our prevalence estimates were based on figures provided by Genesys Sampling Systems, adjusted for experiences in the first phase. During the second phase, we screened households,[5] and did not attempt interviews in households in which the screening respondent was not African-American or Hispanic.

Within each sampled household we selected one adult at random. We used an abbreviated within-household selection method for households with up to three adults and full enumeration for households with more than three adults. The abbreviated method randomly picked the older or younger adult for a two-person household, and the oldest, youngest or next oldest adult in households with three adults.

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[5]The screener included questions on smoking status, as an ice-breaker, ethnicity, and whether or not Hispanic.

TABLE A.1

DEFINITIONS OF SAMPLING STRATA

Strata[a]		Description of Area Code
Non-California	California	Exchange/Combinations Included in Strata
0	5	Expected prevalence of African-American households at least 60 percent
1	6	Expected prevalence of African-American households 40-59 percent
2	7	Other exchanges, expected Hispanic prevalence at least 50 percent
3	8	Other exchanges, expected Hispanic prevalence 35-49 percent
4	9	Remaining exchanges

[a]The numbering in the table is consistent with that on the data files.

Data Collection Methods. The survey was conducted by computer assisted telephone interview (CATI). The CATI system was used to control the release of telephone numbers to interviewers, automatically dial telephone numbers, control the timing of calls to sampled households, select eligible respondents, control the sequencing and presentation of survey questions in English or Spanish, and produce clean data files. The scheduling program insured that a minimum of 12 calls were made to contact a sampled telephone number. Calls were spaced at different times, based on optional calling patterns for a general population. Sampled households that refused were contacted again by highly experienced interviewers, who were trained to respond to reluctant respondents.

2. Weights and Design Effects

Analysis of the survey data should use sample weights. Use of unweighted data could result in biased estimates, because the design oversampled some groups, resulting in a sample that is not distributed in the same way as the population being studied. Differences in non-response by subgroups in the population further increased the differences between the population and sample distributions. Below we describe the steps used to calculate the weights, discuss the design effects of weighting, and evaluate the impact of weighting.

Constructing the Weights. The sample weights are the product of three adjustment factors that correct for disproportionate sampling and response rates: (1) the inverse of each respondent's probability of selection; (2) the inverse of the response rate for a case's response cell (3) a series of ratio adjustments to better estimates of population totals.[6]

---

[6]Specifically, the weight is:

$$(1/P_{ihs}) * (1/RR_c) * RATIOADJ$$

where:

P_{ih} is the probability of the ith individual in the hth household in stratum s.

RR_c is the response rate for cell c.

RATIOADJ is the ratio adjustment factor.

As discussed in the text, P_{ihs} and RATIOADJ are themselves the products of multiple factors because sampling took place in stages, and the ratio adjustment was arrived at iteratively.

Probability of Selection. In calculating the probabilities of selection, we calculated three stages of selection: (1) selection of telephone numbers from the sample frame, (2) subsampling of numbers for actual calling; (3) selection of individuals within the household.[7] A respondent's probability of selection depended on the stratum to which his or her telephone number was assigned, the number of telephone numbers used by the household, whether he or she was African-American or Hispanic and the number of adults living in the household. The probabilities of selection for African-American and Hispanic households varied by substratum.[8] For households other than African-American and Hispanic households, probabilities of selection were greater in California than in other states, but were approximately equal across substrata.[9] Within households, individuals had a chance of selection that was inversely proportional to the number of adults living in the household.

---

[7]Thus $P_{ihs} = P1_s * P2_s * P(I)_h * np$

where:

$P1_s$ and $P2_s$ are the two stages of selecting the number within the stratum

$P(I)_h = 1/n_{ah}$ is the within household probability of an individual being selected.

n_{ah} is the number of adults in household H.

np is the number of telephones in the household.

[8]As discussed in the section on sample design, we oversampled strata with higher prevalences of African-American and Hispanic households. Thus, an African-American in a low-prevalence stratum would have a lower probability of selection than an African-American in a high-prevalence stratum.

[9]Respondents who were not African-American or Hispanic generally were selected only in the first phase when there was no oversampling, because we attempted to screen out persons who were not African-American or Hispanic during the second phase of sample release. However, seventeen persons were interviewed during the second phase who at the end of the interview identified themselves as non-Hispanic whites or Asians. In weighting, the probabilities of selection of these cases were computed as if they were African-American or Hispanic.

Response Rate Adjustment. We formed 12 cells for the response rate adjustment, based on stratum and racial/ethnic group. In California, we created one response rate cell for African-Americans and Hispanics and another cell for others, because most of the substrata had very few cases and we considered the stratum- specific response rates to be unreliable. Outside California we formed two cells (African-American, Hispanic/Other) per stratum. The response rate for a cell is defined as the ratio of the number of completed interviews to the estimated number of sampled households that are eligible.[10] As discussed above (A.4), the response rate adjustment is the inverse of the response rate.

Ratio Adjustments. To determine the need for further weighting adjustments, we computed a preliminary weight based on the probability of selection and response rate and compared the distribution of that sample to Census Bureau estimates of the study population. The preliminary weights did not fully correct for differences in sex, age, race, ethnicity, and education. We thus undertook a series of adjustments:

- First, by sex and whether Hispanic
- Second, by sex and race
- Third, by education

---

[10]Specifically,

$$RR_c = \frac{n_c}{(n_c + e_c + ER_c(dk_c))}$$

where

n_c = the number of completed interviews in cell c

e_c = the number of non-completed eligible households (household with a member at least 18 years old) in cell c

ER = $(n_c + e_c)/(n_c + e_c + ie_c)$

ie_c = the number of ineligible telephone numbers (non-residential and not-in-service)

dk_i = the number of cases where eligibility was not known

- Fourth, by age and sex

In each case, the adjustment was the ratio of the Census estimate of the population distribution to that of the sample, using weights derived in the previous iteration.[11]

Design Effects and Sampling Errors. Commonly used formulas for sampling error in most statistical software rely on simple random sampling assumptions. However, the oversampling used in this survey and the presence of differential response patterns require the use of sample weights, and the sampling error of a weighted sample is different from that of a simple random sample. Thus, the commonly used formulas will yield incorrect estimates of sampling error (standard errors, confidence intervals) for estimates and of levels of significance for tests of differences between groups of respondents.

The change in sampling error (usually an increase, but sometimes a decrease) relative to that expected from a simple random sample is called a design effect (DEFF).[12] We estimated design effects across subgroups for the study's main outcome variables.[13] We found that the design effect varied substantially, ranging from less than one for Blacks, Hispanics and residents of California to nearly two for the subgroup of respondents with a high school education or less. Tables A.2.A through A.2.F give 95 percent confidence intervals for percentages for several subgroups. Tables A.3 and A.4 give minimum differences required for observed differences in percentages to be considered statistically significant at the 5 and 10 percent levels.

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[11]For the first adjustment (ADJ1), we used for the sample estimate, the preliminary weight, $(1/P_{ih})*(1/RR_c)$. For the second adjustment (ADJ2) we used $(1/P_{ih})*(1/RR_c)*(ADJ1)$, and 80 on.

[12]$DEFF = VAR_{design}/VAR_{SRS}$

where:

VAR_{design} is the (weighted) sample variance for the actual design.

VAR_{SRS} is the sample variance estimated for a simple random sample of the same size.

[13]Estimates of design effects we computed using PROC CROSSTAB in SUDAAN, a software package developed by Research Triangle Institute.

Net Effects of Weighting. The use of unweighted data could lead to biased estimates. In addition, weights can introduce a design effect, or increase in sampling error relative to that of a simple random sample of the same size.

To check our hypothesis that weighting is needed for this survey, we examined several variables to determine: (1) whether a bias seemed to exist and (2) whether the use of weights increased the variance more than it decreased bias. Table A.5 shows the root mean error (RME)[14] and the estimated bias of using unweighted data for six key variables. All of the biases were relatively small, and one is almost negligible. However, the root mean errors are larger for the unweighted sample for five of the six variables, indicating that the weighting process is effective--it reduces bias more than it increases sampling error.

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[14]The Root Mean Error is the square root of the Mean Square Error (MSE), where the MSE is defined as (Sample Variance + Bias^2). For the weighted estimate the RME is the standard error (the square root of the sample variance) because we assume the weighted estimate to be unbiased. For the unweighted estimate we assume no design effect on the sample variance, while for the weighted estimate we use weighted the standard errors, which incorporate any design effects.

Thus, for a percentage (p):

$$RME\ (Unweighted) = \sqrt{\frac{p(100 - p)}{n - 1} + Bias^2}$$

$$RME\ (Weighted) = \sqrt{\frac{p(100 - p)\ DEFF}{n - 1}}$$

where Bias = p(unweighted) - p(weighted)

TABLE A.2.A

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): COLLEGE GRADUATES)

ASSUMING DEFF = 1.0

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	4.2%	5.6%	6.4%	6.8%	6.9%
300	3.4%	4.5%	5.2%	5.6%	5.7%
400	2.9%	3.9%	4.5%	4.8%	4.9%
500	2.6%	3.5%	4.0%	4.3%	4.4%
600	2.4%	3.2%	3.7%	3.9%	4.0%
700	2.2%	3.0%	3.4%	3.6%	3.7%
800	2.1%	2.8%	3.2%	3.4%	3.5%
900	2.0%	2.6%	3.0%	3.2%	3.3%
1000	1.9%	2.5%	2.8%	3.0%	3.1%
1100	1.8%	2.4%	2.7%	2.9%	3.0%
1200	1.7%	2.3%	2.6%	2.8%	2.8%
1300	1.6%	2.2%	2.5%	2.7%	2.7%
1400	1.6%	2.1%	2.4%	2.6%	2.6%
1500	1.5%	2.0%	2.3%	2.5%	2.5%
1600	1.5%	2.0%	2.2%	2.4%	2.5%
1700	1.4%	1.9%	2.2%	2.3%	2.4%
1800	1.4%	1.8%	2.1%	2.3%	2.3%
1900	1.3%	1.8%	2.1%	2.2%	2.2%
2000	1.3%	1.8%	2.0%	2.1%	2.2%
2100	1.3%	1.7%	2.0%	2.1%	2.1%
2200	1.3%	1.7%	1.9%	2.0%	2.1%
2300	1.2%	1.6%	1.9%	2.0%	2.0%
2400	1.2%	1.6%	1.8%	2.0%	2.0%

TABLE A.2.B

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): AFRICAN AMERICANS, HISPANICS, CALIFORNIA)

ASSUMING DEFF = 0.8

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	3.7%	5.0%	5.7%	6.1%	6.2%
300	3.0%	4.1%	4.6%	5.0%	5.1%
400	2.6%	3.5%	4.0%	4.3%	4.4%
500	2.4%	3.1%	3.6%	3.8%	3.9%
600	2.1%	2.9%	3.3%	3.5%	3.6%
700	2.0%	2.7%	3.0%	3.2%	3.3%
800	1.9%	2.5%	2.8%	3.0%	3.1%
900	1.8%	2.3%	2.7%	2.9%	2.9%
1000	1.7%	2.2%	2.5%	2.7%	2.8%
1100	1.6%	2.1%	2.4%	2.6%	2.6%
1200	1.5%	2.0%	2.3%	2.5%	2.5%
1300	1.5%	1.9%	2.2%	2.4%	2.4%
1400	1.4%	1.9%	2.1%	2.3%	2.3%
1500	1.4%	1.8%	2.1%	2.2%	2.3%
1600	1.3%	1.8%	2.0%	2.1%	2.2%
1700	1.3%	1.7%	1.9%	2.1%	2.1%
1800	1.2%	1.7%	1.9%	2.0%	2.1%
1900	1.2%	1.6%	1.8%	2.0%	2.0%
2000	1.2%	1.6%	1.8%	1.9%	2.0%
2100	1.1%	1.5%	1.8%	1.9%	1.9%
2200	1.1%	1.5%	1.7%	1.8%	1.9%
2300	1.1%	1.5%	1.7%	1.8%	1.8%
2400	1.1%	1.4%	1.6%	1.8%	1.8%

TABLE A.2.C

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): WOMEN, THOSE WITH SOME COLLEGE)

ASSUMING DEFF = 1.3

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	4.8%	6.3%	7.3%	7.8%	7.9%
300	3.9%	5.2%	5.9%	6.3%	6.5%
400	3.4%	4.5%	5.1%	5.5%	5.6%
500	3.0%	4.0%	4.6%	4.9%	5.0%
600	2.7%	3.7%	4.2%	4.5%	4.6%
700	2.5%	3.4%	3.9%	4.1%	4.2%
800	2.4%	3.2%	3.6%	3.9%	4.0%
900	2.2%	3.0%	3.4%	3.7%	3.7%
1000	2.1%	2.8%	3.2%	3.5%	3.5%
1100	2.0%	2.7%	3.1%	3.3%	3.4%
1200	1.9%	2.6%	3.0%	3.2%	3.2%
1300	1.9%	2.5%	2.8%	3.0%	3.1%
1400	1.8%	2.4%	2.7%	2.9%	3.0%
1500	1.7%	2.3%	2.6%	2.8%	2.9%
1600	1.7%	2.2%	2.6%	2.7%	2.8%
1700	1.6%	2.2%	2.5%	2.7%	2.7%
1800	1.6%	2.1%	2.4%	2.6%	2.6%
1900	1.5%	2.1%	2.4%	2.5%	2.6%
2000	1.5%	2.0%	2.3%	2.4%	2.5%
2100	1.5%	2.0%	2.2%	2.4%	2.4%
2200	1.4%	1.9%	2.2%	2.3%	2.4%
2300	1.4%	1.9%	2.1%	2.3%	2.3%
2400	1.4%	1.8%	2.1%	2.2%	2.3%

TABLE A.2.D

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): TOTAL SAMPLE, INCOME $50K AND UP, GROUPS NOT SPECIFIED)

ASSUMING DEFF = 1.5

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	5.1%	6.8%	7.8%	8.3%	8.5%
300	4.2%	5.6%	6.4%	6.8%	6.9%
400	3.6%	4.8%	5.5%	5.9%	6.0%
500	3.2%	4.3%	4.9%	5.3%	5.4%
600	2.9%	3.9%	4.5%	4.8%	4.9%
700	2.7%	3.6%	4.2%	4.4%	4.5%
800	2.5%	3.4%	3.9%	4.2%	4.2%
900	2.4%	3.2%	3.7%	3.9%	4.0%
1000	2.3%	3.0%	3.5%	3.7%	3.8%
1100	2.2%	2.9%	3.3%	3.5%	3.6%
1200	2.1%	2.8%	3.2%	3.4%	3.5%
1300	2.0%	2.7%	3.1%	3.3%	3.3%
1400	1.9%	2.6%	2.9%	3.1%	3.2%
1500	1.9%	2.5%	2.8%	3.0%	3.1%
1600	1.8%	2.4%	2.8%	2.9%	3.0%
1700	1.7%	2.3%	2.7%	2.9%	2.9%
1800	1.7%	2.3%	2.6%	2.8%	2.8%
1900	1.7%	2.2%	2.5%	2.7%	2.8%
2000	1.6%	2.1%	2.5%	2.6%	2.7%
2100	1.6%	2.1%	2.4%	2.6%	2.6%
2200	1.5%	2.0%	2.3%	2.5%	2.6%
2300	1.5%	2.0%	2.3%	2.5%	2.5%
2400	1.5%	2.0%	2.2%	2.4%	2.5%

TABLE A.2.E

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): MEN, WHITES, INCOME LESS THAN $50K, NON-CALIFORNIA)

ASSUMING DEFF = 1.7

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	5.4%	7.2%	8.3%	8.9%	9.1%
300	4.4%	5.9%	6.8%	7.2%	7.4%
400	3.8%	5.1%	5.9%	6.3%	6.4%
500	3.4%	4.6%	5.2%	5.6%	5.7%
600	3.1%	4.2%	4.8%	5.1%	5.2%
700	2.9%	3.9%	4.4%	4.7%	4.8%
800	2.7%	3.6%	4.1%	4.4%	4.5%
900	2.6%	3.4%	3.9%	4.2%	4.3%
1000	2.4%	3.2%	3.7%	4.0%	4.0%
1100	2.3%	3.1%	3.5%	3.8%	3.9%
1200	2.2%	3.0%	3.4%	3.6%	3.7%
1300	2.1%	2.8%	3.2%	3.5%	3.5%
1400	2.0%	2.7%	3.1%	3.3%	3.4%
1500	2.0%	2.6%	3.0%	3.2%	3.3%
1600	1.9%	2.6%	2.9%	3.1%	3.2%
1700	1.9%	2.5%	2.8%	3.0%	3.1%
1800	1.8%	2.4%	2.8%	3.0%	3.0%
1900	1.8%	2.3%	2.7%	2.9%	2.9%
2000	1.7%	2.3%	2.6%	2.8%	2.9%
2100	1.7%	2.2%	2.6%	2.7%	2.8%
2200	1.6%	2.2%	2.5%	2.7%	2.7%
2300	1.6%	2.1%	2.4%	2.6%	2.7%
2400	1.6%	2.1%	2.4%	2.6%	2.6%

TABLE A.2.F

HALF WIDTH OF 95% CONFIDENCE INTERVAL FOR PERCENTAGES

(GROUP(S): THOSE WITH HIGH SCHOOL OR LESS)

ASSUMING DEFF = 2.0

Sample Size	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0% or 50.0%
200	5.9%	7.9%	9.0%	9.6%	9.8%
300	4.8%	6.4%	7.3%	7.9%	8.0%
400	4.2%	5.6%	6.4%	6.8%	6.9%
500	3.7%	5.0%	5.7%	6.1%	6.2%
600	3.4%	4.5%	5.2%	5.5%	5.7%
700	3.1%	4.2%	4.8%	5.1%	5.2%
800	2.9%	3.9%	4.5%	4.8%	4.9%
900	2.8%	3.7%	4.2%	4.5%	4.6%
1000	2.6%	3.5%	4.0%	4.3%	4.4%
1100	2.5%	3.3%	3.8%	4.1%	4.2%
1200	2.4%	3.2%	3.7%	3.9%	4.0%
1300	2.3%	3.1%	3.5%	3.8%	3.8%
1400	2.2%	3.0%	3.4%	3.6%	3.7%
1500	2.1%	2.9%	3.3%	3.5%	3.6%
1600	2.1%	2.8%	3.2%	3.4%	3.5%
1700	2.0%	2.7%	3.1%	3.3%	3.4%
1800	2.0%	2.6%	3.0%	3.2%	3.3%
1900	1.9%	2.5%	2.9%	3.1%	3.2%
2000	1.9%	2.5%	2.8%	3.0%	3.1%
2100	1.8%	2.4%	2.8%	3.0%	3.0%
2200	1.8%	2.4%	2.7%	2.9%	3.0%
2300	1.7%	2.3%	2.6%	2.8%	2.9%
2400	1.7%	2.3%	2.6%	2.8%	2.8%

TABLE A3

MINIMUM DIFFERENCES REQUIRED FOR COMPARISONS

BETWEEN GROUPS OF PERCENTAGES (P)

WITH ALPHA = 0.05, 2 TAIL TEST

	Groups Being Compared	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0%
SEX						
A1	Men, Women	3.1%	4.1%	4.7%	5.0%	5.1%
AGE						
B1	18-24, 25-34	5.5%	7.3%	8.3%	8.9%	9.1%
B2	18-24, 35-54	5.1%	6.9%	7.9%	8.4%	8.6%
B3	18-24, 55+	5.6%	7.5%	8.6%	9.2%	9.4%
B4	25-34, 35-54	3.8%	5.1%	5.8%	6.2%	6.4%
B5	25-34, 55+	4.4%	5.9%	6.8%	7.2%	7.4%
B6	35-54, 55+	4.0%	5.4%	6.2%	6.6%	6.7%
ETHNICITY						
C1	White, Black	3.2%	4.2%	4.8%	5.2%	5.3%
C2	White, Hispanic	3.4%	4.5%	5.1%	5.5%	5.6%
C3	Black, Hispanic	3.5%	4.7%	5.4%	5.8%	5.9%
HAVE CHILDREN						
D1	Yes, No	3.2%	4.2%	4.8%	5.2%	5.3%
EDUCATION						
E1	HS or Less, Some College	3.7%	4.9%	5.6%	6.0%	6.1%
E2	HS or Less, College Grad.	3.5%	4.6%	5.3%	5.7%	5.8%
E3	Some College, College Grad.	3.5%	4.7%	5.3%	5.7%	5.8%
OCCUPATION						
F1	Professional, Clerical	4.7%	6.3%	7.2%	7.7%	7.9%
F2	Professional, Blue Collar	4.3%	5.8%	6.6%	7.0%	7.2%
F3	Professional, NLF	3.8%	5.1%	5.9%	6.3%	6.4%
F4	Clerical, Blue Collar	4.9%	6.6%	7.5%	8.0%	8.2%
F5	Clerical, NLF	4.5%	6.0%	6.9%	7.4%	7.5%
F6	Blue Collar, NLF	4.1%	5.5%	6.2%	6.7%	6.8%
IDEOLOGY						
G1	Liberal, Moderate	4.2%	5.6%	6.4%	6.8%	7.0%
G2	Liberal, Conservative	4.1%	5.4%	6.2%	6.6%	6.8%
G3	Moderate, Conservative	3.6%	4.8%	5.5%	5.8%	6.0%

TABLE A.3 *(continued)*

	Groups Being Compared	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0%
POLITICAL AFFILIATION						
H1	Democrat, Rep. Or Ind.	3.8%	5.0%	5.7%	6.1%	6.3%
H2	Republican, Independent	4.2%	5.6%	6.4%	6.8%	7.0%
POLITICAL ACTIVITY						
I1	Campaign, Contribute	5.2%	6.9%	8.0%	8.5%	8.7%
I2	Campaign, Vote	4.9%	6.6%	7.5%	8.1%	8.2%
I3	Contribute, Vote	3.8%	5.0%	5.8%	6.1%	6.3%
TOBACCO USE						
J1	None in HH, Any Other Group	4.7%	6.3%	7.2%	7.7%	7.9%
J2	Any Other Two Groups	6.1%	8.2%	9.4%	10.0%	10.2%
J3	Smokers, Non-Smokers	3.5%	4.7%	5.3%	5.7%	5.8%
LOST FAMILY MEMBER						
K1	Yes, No	3.0%	4.0%	4.6%	4.9%	5.0%
GEOGRAPHIC						
L1	California, Rest of U.S.	3.0%	4.0%	4.6%	4.9%	5.0%
REGION						
M1	Northeast, Midwest	5.0%	6.6%	7.6%	8.1%	8.3%
M2	Northeast, South	4.5%	6.0%	6.9%	7.4%	7.5%
M3	Northeast, West	4.5%	6.0%	6.8%	7.3%	7.5%
M4	Midwest, South	4.3%	5.7%	6.5%	7.0%	7.1%
M5	Midwest, West	4.2%	5.7%	6.5%	6.9%	7.1%
M6	South, West	3.7%	4.9%	5.6%	6.0%	6.2%
IDEOLOGY BY PARTY						
N1	Liberals: Democrats, Others	6.7%	8.9%	10.2%	10.9%	11.1%
N2	Moderates: Democrats, Others	5.5%	7.4%	8.4%	9.0%	9.2%
N3	Conservatives: Democrats, Others	5.3%	7.1%	8.1%	8.7%	8.9%

TABLE A.4

MINIMUM DIFFERENCES REQUIRED FOR COMPARISONS

BETWEEN GROUPS OF PERCENTAGES (P)

WITH ALPHA = 0.10, 2 TAIL TEST

	Groups Being Compared	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0%
SEX						
A1	Men, Women	2.6%	3.4%	3.9%	4.2%	4.3%
AGE						
B1	18-24, 25-34	4.6%	6.1%	7.0%	7.5%	7.6%
B2	18-24, 35-54	4.3%	5.8%	6.6%	7.1%	7.2%
B3	18-24, 55+	4.7%	6.3%	7.2%	7.7%	7.9%
B4	25-34, 35-54	3.2%	4.3%	4.9%	5.2%	5.3%
B5	25-34, 55+	3.7%	5.0%	5.7%	6.1%	6.2%
B6	35-54, 55+	3.4%	4.5%	5.2%	5.5%	5.6%
ETHNICITY						
C1	White, Black	2.7%	3.6%	4.1%	4.4%	4.4%
C2	White, Hispanic	2.8%	3.8%	4.3%	4.6%	4.7%
C3	Black, Hispanic	3.0%	4.0%	4.5%	4.9%	5.0%
HAVE CHILDREN						
D1	Yes, No	2.7%	3.6%	4.1%	4.3%	4.4%
EDUCATION						
E1	HS or Less, Some College	3.1%	4.1%	4.7%	5.0%	5.1%
E2	HS or Less, College Grad.	2.9%	3.9%	4.4%	4.8%	4.9%
E3	Some College, College Grad.	2.9%	3.9%	4.5%	4.8%	4.9%
OCCUPATION						
F1	Professional, Clerical	4.0%	5.3%	6.0%	6.5%	6.6%
F2	Professional, Blue Collar	3.6%	4.8%	5.5%	5.9%	6.0%
F3	Professional, NLF	3.2%	4.3%	4.9%	5.3%	5.4%
F4	Clerical, Blue Collar	4.1%	5.5%	6.3%	6.7%	6.9%
F5	Clerical, NLF	3.8%	5.0%	5.8%	6.2%	6.3%
F6	Blue Collar, NLF	3.4%	4.6%	5.2%	5.6%	5.7%
IDEOLOGY						
G1	Liberal, Moderate	3.5%	4.7%	5.4%	5.7%	5.8%
G2	Liberal, Conservative	3.4%	4.6%	5.2%	5.6%	5.7%
G3	Moderate, Conservative	3.0%	4.0%	4.6%	4.9%	5.0%

TABLE A.4 *(continued)*

	Groups Being Compared	P Near 10.0% or 90.0%	P Near 20.0% or 80.0%	P Near 30.0% or 70.0%	P Near 40.0% or 60.0%	P Near 50.0%
POLITICAL AFFILIATION						
H1	Democrat, Rep. Or Ind.	3.2%	4.2%	4.8%	5.1%	5.3%
H2	Republican, Independent	3.5%	4.7%	5.4%	5.7%	5.9%
POLITICAL ACTIVITY						
I1	Campaign, Contribute	4.4%	5.8%	6.7%	7.1%	7.3%
I2	Campaign, Vote	4.1%	5.5%	6.3%	6.8%	6.9%
I3	Contribute, Vote	3.2%	4.2%	4.8%	5.2%	5.3%
TOBACCO USE						
J1	None in HH, Any Other Group	4.0%	5.3%	6.1%	6.5%	6.6%
J2	Any Other Two Groups	5.2%	6.9%	7.9%	8.4%	8.6%
J3	Smokers, Non-Smokers	2.9%	3.9%	4.5%	4.8%	4.9%
LOST FAMILY MEMBER						
K1	Yes, No	2.5%	3.4%	3.9%	4.1%	4.2%
GEOGRAPHIC						
L1	California, Rest of U.S.	2.5%	3.4%	3.9%	4.1%	4.2%
REGION						
M1	Northeast, Midwest	4.2%	5.6%	6.4%	6.8%	7.0%
M2	Northeast, South	3.8%	5.0%	5.8%	6.2%	6.3%
M3	Northeast, West	3.8%	5.0%	5.7%	6.1%	6.3%
M4	Midwest, South	3.6%	4.8%	5.5%	5.9%	6.0%
M5	Midwest, West	3.6%	4.7%	5.4%	5.8%	5.9%
M6	South, West	3.1%	4.1%	4.7%	5.1%	5.2%
IDEOLOGY BY PARTY						
N1	Liberals: Democrats, Others	5.6%	7.5%	8.6%	9.2%	9.4%
N2	Moderates: Democrats, Others	4.6%	6.2%	7.1%	7.6%	7.7%
N3	Conservatives: Democrats, Others	4.5%	5.9%	6.8%	7.3%	7.4%

TABLE A.5

ROOT MEAN ERROR (RME) FOR SELECTED VARIABLES (PERCENTAGES)

Question	Variable	Unweighted RME	Weighted RME	Bias of Unweighted Estimate
A2	Sale of cigarettes in vending machines should be allowed	1.80	1.11	-1.56
A3	Cigarette machines accessible to kids should be allowed[b]	1.34	2.33	-0.20
A4	Favor checking ID for cigarette sales	0.91	0.56	-0.74
A5	Retailers have right to display tobacco products where they want	1.99	1.08	-1.81
A9	Allow billboard advertising	2.29	1.28	-2.05
A10	Allow newspaper advertising	1.64	1.30	-1.27

[b]Only those responding "allowed" to QA2 were asked QA3.

APPENDIX B

SURVEY INSTRUMENT

(ENGLISH VERSION)

cat a.q.lp

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LIMITS TO ACCESS, ADVERTISING, AND PROMOTIONS
>thes< [allow 9]
>else< [allow 4]
>s< [allow 1]
>ss< [allow 1]
>a1< First, in your opinion, how easy is it for kids to buy cigarettes and other tobacco products in your community--very easy, somewhat easy, somewhat difficult, or very difficult?

<1> VERY EASY
<2> SOMEWHAT EASY
<3> SOMEWHAT DIFFICULT
<4> VERY DIFFICULT

<8> DON'T KNOW
<9> REFUSED

===>

>a2< Next, I am going to ask for your opinion about several proposals intended to make it more difficult for kids to get cigarettes.

Do you think the sale of cigarettes in vending machines should be allowed or banned?

<1> ALLOWED
<2> BANNED [goto a4]

<8> DON'T KNOW
<9> REFUSED

===>

>a3< Do you think cigarette vending machines which are accessible to kids should be allowed or banned?

<1> ALLOWED
<2> BANNED

<8> DON'T KNOW
<9> REFUSED

===>

>a4< Do you favor or oppose requiring store clerks to check the IDs of anyone appearing to be under age before selling them cigarettes or smokeless tobacco, just as they do with alcohol?

<1> FAVOR
<2> OPPOSE

<8> DON'T KNOW
<9> REFUSED

===>

>ta5< [if RAN2 eq <2> goto A5]

>a5< Which of the following statements do you agree with?

<1> Retailers have the right to display tobacco products wherever they want.

<2> Retailers should keep all tobacco products behind the counter to prevent shoplifting by minors.

<8> DON'T KNOW
<9> REFUSED

===>[goto a6]

>A5< Which of the following statements do you agree with?
[equiv a5]
<2> Retailers should keep all tobacco products behind the counter to prevent shoplifting by minors.

<1> Retailers have the right to display tobacco products wherever they want.

<8> DON'T KNOW
<9> REFUSED

===>

>a6< Do you favor or oppose allowing the sale of cigarettes only in certain stores, just as is done with alcohol?

<1> FAVOR
<2> OPPOSE

<8> DON'T KNOW
<9> REFUSED

===>

>a8a< Research has shown that most adult smokers begin smoking before they are 21. Do you think that restricting the sale of cigarettes to people 21 and older will help reduce the number of kids under 21 who begin smoking?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>a8b< Do you think that restricting the sale of cigarettes to people 19 and older will help reduce the number of kids in high school who begin smoking?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>a9< Cigarette companies currently use many different advertising and promotion methods. I am going to ask for your opinion concerning several proposals designed to restrict promotions or advertisements that may encourage kids to smoke.

Should advertising of tobacco products on billboards be allowed or banned?

<1> ALLOWED
<2> BANNED

<8> DON'T KNOW
<9> REFUSED

===>

>a10< Should advertising of tobacco products through newspapers and magazines be allowed or banned?

<1> ALLOWED
<2> BANNED

<8> DON'T KNOW
<9> REFUSED

===>

>a11< Assuming that tobacco advertising is not banned, do you think limiting tobacco ads to words only, with pictures and cartoons prohibited, would make smoking less appealing to kids?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>a13< Plain packaging of cigarettes and smokeless products would

mean that the package would include only the brand name and warning label in black letters against a white background. To make cigarettes appear less attractive to kids, should tobacco companies be required to use plain packaging for their products or should plain packaging not be required?

<1> YES, REQUIRED
<0> NO, NOT REQUIRED

<8> DON'T KNOW
<9> REFUSED

===>

>a14< Should tobacco companies be allowed to include coupons in cigarette packs that can be used to obtain promotional items appealing to kids, such as hats, tee shirts, jackets, or caps, or should this not be allowed?

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

>a15< Coupon promotions make it possible for anyone, regardless of age, to obtain free cigarettes by mail. Should coupon promotions be allowed or not allowed?

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

>a16< Should the sale of single cigarettes be allowed or not?

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

>a17< Should the distribution of free cigarettes on public streets be allowed or not?

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

>a18< Cigarette advertising on television is illegal. However, cigarette brand names are often seen on TV sports or other entertainment events that kids watch. Should tobacco companies be allowed to sponsor sporting or entertainment events, where their brand names are featured, or not?

PROBE: Examples of these events are the Virginia Slims tennis tournament and the Marlboro Racing Team.

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

>a19< Should tobacco companies be allowed to pay to show their products in movies or videos or not?

<1> ALLOWED
<2> NOT ALLOWED

<8> DON'T KNOW
<9> REFUSED

===>

TOBACCO USE AND SMOKING CESSATION

>a20< The next few questions are about tobacco use.

Have you smoked at least 100 cigarettes in your entire life?

<1> YES [goto a21]
<0> NO

<8> DON'T KNOW
<9> REFUSED

===> [goto a22]

>a21< Do you now smoke cigarettes every day, some days, or not at all?

<1> EVERY DAY

<2> SOME DAYS
<3> NOT AT ALL

<8> DON'T KNOW
<9> REFUSED

===>

>a22< Do you use pipes, cigars, chewing tobacco,
or snuff on a regular basis?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>ta23< [store <> in else]
[if a21 ge <1>] [if a21 le <2>] [store <else> in else] [endif] [endif]
[if a22 eq <1>] [store <else> in else] [endif]

>a23< Does anyone [fill else] in your household smoke?

<1> YES
<0> NO
<7> NOT APPLICABLE/ONE PERSON HOUSEHOLD [goto ta26]

<8> DON'T KNOW
<9> REFUSED

===>

>a24< Are there any children under the age of 18 currently
living in your household?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>ta25< [if a23 eq <1>] [if a24 eq <1> goto a25] [endif]
[goto ta26]
IF Q.28 = 1 and Q. 29=1, ASK 30; ELSE GOTO A.31

>a25< Does any household member under the age of 18 smoke?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>ta26< [if a21 eq <1> goto a26]
[if a21 eq <2> goto a26]
[if a22 eq <1> goto a26]
[goto a29]

>a26< Are you planning to quit smoking or using chewing tobacco or snuff in the next six months?

<1> YES[goto a29]
<0> NO

<8> DON'T KNOW
<9> REFUSED[goto a29]
===>

>a27< How likely are you to quit smoking or using chewing tobacco or snuff in the next five years-- very likely, somewhat likely, somewhat unlikely, very unlikely?

<1> VERY LIKELY
<2> SOMEWHAT LIKELY
<3> SOMEWHAT UNLIKELY
<4> VERY UNLIKELY

<8> DON'T KNOW
<9> REFUSED
===>

>a29< Do you personally think nicotine in cigarettes is addicting or is not addicting?

<1> YES, ADDICTING
<0> NO, NOT ADDICTING

<8> DON'T KNOW
<9> REFUSED

===>

NICOTINE AND SMOKING CESSATION POLICIES

>a30< Have you seen or heard anything in the last six months about tobacco companies and the amount of nicotine in cigarettes?

<1> YES [goto a30a]
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>[goto a31]

>a30a< What do you recall reading or hearing about nicotine?

TYPE <1> TO SPECIFY AND END WITH ///[specify]

<8> DON'T KNOW
<9> REFUSED

===>

>a31< Do you believe that cigarette companies deliberately adjust nicotine levels to keep smokers addicted to cigarettes or do you believe that cigarette companies do not deliberately do this?

<1> DELIBERATELY ADJUST NICOTINE
<2> DO NOT DELIBERATELY DO THIS

<8> DON'T KNOW
<9> REFUSED

===>

>a32a< Now I am going to mention a couple of proposals to help people who want to quit smoking. Please tell me whether you favor or oppose each one of these proposals.

Requiring tobacco companies to gradually reduce the amount of nicotine in cigarettes.

PROBE: Which way are you leaning?

<1> FAVOR
<2> OPPOSE

<8> DON'T KNOW
<9> REFUSED

===>

>a32b< Requiring insurance companies to cover the cost of programs to quit smoking.

PROBE: Which way are you leaning?

<1> FAVOR
<2> OPPOSE

<8> DON'T KNOW
<9> REFUSED

===>

>a34< Next, I am going to read two arguments that have been made in [r]favor[n] of regulating cigarettes. Please tell me whether you agree or disagree with each statement.

TYPE <g> TO CONTINUE===>

>ta34< [if RAN2 eq <2> goto a34b]
ROTATE

>a34a< Tobacco companies should be required to list additives on package labels the way food and drug companies are required to list ingredients.

<1> AGREE
<2> DISAGREE

<8> DON'T KNOW
<9> REFUSED

===>

>t34b< [if RAN2 eq <2> goto a40]

>a34b< Since the government currently regulates all other products containing nicotine, such as nicotine patches and gum, it should regulate cigarettes.

<1> AGREE
<2> DISAGREE

<8> DON'T KNOW
<9> REFUSED

===>

>t34c< [if RAN2 eq <2> goto a34a]

>a40< To the best of your knowledge, have you ever lost a family member or close friend to diseases caused by smoking?

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

```
$ cat e.q.lp

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        DEMOGRAPHICS

        >e1<    CODE SEX OF RESPONDENT WITHOUT ASKING UNLESS UNSURE

                <1> MALE
                <2> FEMALE

                ===>

        >e3<    Now some final questions for classification purposes.  In which
                category does your age fall?

                READ CATEGORIES

                <1> 18 to 24
                <2> 25 to 34
                <3> 35 to 44
                <4> 45 to 54
                <5> 55 to 64
                <6> 65 or older

                <8> DON'T KNOW
                <9> REFUSED

                ===>

        >e4<    What is the last grade or level of school you have completed?

                INTERVIEWER: READ LIST

                <1> Less than high school (grades 1-11)
                <2> High school graduate (grade 12)
                <3> Some college (grades 13-15)
                <4> College graduate

                <8> DON'T KNOW
                <9> REFUSED

                ===>

        >e5<    Are you now married, not married but living with a partner,
                widowed, divorced, separated, or have you never been married?

                INTERVIEWER: MARK RESPONSE WITH THE SMALLEST NUMBER THAT APPLIES

                <1> Married
                <2> Living with a partner
                <3> Widowed
                <4> Divorced/Annulled
                <5> Separated
                <6> Never married

                <8> DON'T KNOW
```

<9> REFUSED

===>

>e6< Which of the following categories [r]best[n] describes your present situation? Are you . . .

PROBE: REPEAT QUESTION EMPHASIZING "best"

<1> Retired
<2> A student (INCLUDES PERSONS WHO WORK TO PAY FOR SCHOOL)
<3> A homemaker (NOT EMPLOYED OUTSIDE THE HOME)
<4> Currently employed, or [goto e7]
<5> Currently unemployed, laid off, or looking for work? [goto e7]

<8> DON'T KNOW
<9> REFUSED

===> [goto e9]

>e7< Which of the following categories best describes your current or most recent job or occupation?

<1> Professional, administrative, or executive
<2> Clerical, administrative support, sales, or technical
<3> Crafts, trades, factory work, service, or labor

<8> DON'T KNOW/CANNOT BE CLASSIFIED
<9> REFUSED

===>

>e9< When it comes to most political issues, do you think of yourself as a liberal, a moderate, or a conservative?

<1> LIBERAL
<2> MODERATE
<3> CONSERVATIVE

<8> DON'T KNOW
<9> REFUSED

===>

>e10< And do you think of yourself as a Democrat, an Independent, or a Republican?

<1> DEMOCRAT
<2> INDEPENDENT
<3> REPUBLICAN
<4> OTHER (SPECIFY) [specify]

```
        <8> DON'T KNOW
        <9> REFUSED

        ===>


>e11<   I will now read a list of political activities.  Please tell me
        if you have done that particular activity at least once during
        the past two years.

        Have you...

        CODE ALL THAT APPLY.

      [r] [fill e11a:1] [n]  <1> voted, [goto e11a]
      [r] [fill e11b:1] [n]  <2> written a letter to a politician, [goto e11b]
      [r] [fill e11c:1] [n]  <3> contributed money to a candidate, [goto e11c]
      [r] [fill e11d:1] [n]  <4> worked on a campaign such as stuffing letters or[goto e11
            putting up signs, or
      [r] [fill e11e:1] [n]  <5> been a candidate for a political office?[goto e11e]

        <n> NONE OF THE ABOVE/NO OTHER RESPONSE
        <x> DELETE A RESPONSE [goto E11]
        <8> DON'T KNOW
        <9> REFUSED

        ===> [goto e12]

>e11a<  [allow 1] [store <1> in e11a] [store <> in e11] [goto e11]
>e11b<  [allow 1] [store <2> in e11b] [store <> in e11] [goto e11]
>e11c<  [allow 1] [store <3> in e11c] [store <> in e11] [goto e11]
>e11d<  [allow 1] [store <4> in e11d] [store <> in e11] [goto e11]
>e11e<  [allow 1] [store <5> in e11e] [store <> in e11] [goto e11]

>E11<   THIS SCREEN IS TO DELETE A RESPONSE.

      [r] [fill e11a:1] [n]  <1> voted, [goto e11A]
      [r] [fill e11b:1] [n]  <2> written a letter to a politician, [goto e11B]
      [r] [fill e11c:1] [n]  <3> contributed money to a candidate, [goto e11C]
      [r] [fill e11d:1] [n]  <4> worked on a campaign such as stuffing letters or[goto e11D
            putting up signs, or
      [r] [fill e11e:1] [n]  <5> been a candidate for a political office?[goto e11E]

        ===>

>e11A<  [store <> in e11a] [store <> in E11] [store <> in e11] [goto e11]
>e11B<  [store <> in e11b] [store <> in E11] [store <> in e11] [goto e11]
>e11C<  [store <> in e11c] [store <> in E11] [store <> in e11] [goto e11]
>e11D<  [store <> in e11d] [store <> in E11] [store <> in e11] [goto e11]
>e11E<  [store <> in e11e] [store <> in E11] [store <> in e11] [goto e11]

>e12<   Including yourself, how many people live in your household?

        <1>
        <2-20>
```

<98> DON'T KNOW
<99> REFUSED

===>

>e14< Do you consider yourself to be of Hispanic origin, such as Mexican, Puerto Rican, Cuban, or other Spanish background?

NOTE: CODE WITHOUT ASKING IF KNOWN FOR BLACK/HISPANIC OVERSAMPLE

<1> YES
<0> NO

<8> DON'T KNOW
<9> REFUSED

===>

>e15< Which of the following categories best describes your racial background? White, African American or Black, American Indian or Native American, Asian or Pacific Islander, or some other race?

NOTE: CODE WITHOUT ASKING IF KNOWN FOR BLACK/HISPANIC OVERSAMPLE

<1> WHITE
<2> AFRICAN AMERICAN OR BLACK
<3> AMERICAN INDIAN, NATIVE AMERICAN, ALASKA NATIVE (ALEUT/ESKIMO)
<4> ASIAN OR PACIFIC ISLANDER
<5> OTHER (SPECIFY) [specify]

<8> DON'T KNOW
<9> REFUSED

===>

>e16< For tabulation purposes only, please tell me which of the following income categories includes your total household income in 1993 before taxes--less than $20,000, $20,000 to $30,000, $30,000 to $40,000, $40,000 to $50,000, or over $50,000?

PROBE: The information you provide will be kept confidential and only be used in statistical summaries.

<1> LESS THAN $20,000
<2> $20,000 TO $29,999
<3> $30,000 TO $39,999
<4> $40,000 TO $49,999
<5> OVER $50,000?

<8> DON'T KNOW
<9> REFUSED

===>

>e19< Finally, do you have any other phone numbers in your home in addition to ([fill AREA]) [fill PRFX:0]-[fill SUFX:0]?

<1> YES
<0> NO [goto e22]

<8> DON'T KNOW [goto e22]
<9> REFUSED [goto e22]

===>

>e20< How many other telephone numbers are there in your home besides ([fill AREA]) [fill PRFX:0]-[fill SUFX:0]?

PROBE: Answers to these questions help us ensure that the survey accurately represents the people of your state.

<1> ONE OTHER NUMBER
<2> TWO OTHER NUMBERS
<3> THREE OR MORE OTHER NUMBERS

<8> DON'T KNOW
<9> REFUSED

===>

>te20< [if e20 eq <1>] [store <Is this> in thes] [store <> in s] [else] [store <Are these> in thes] [store <s> in s] [endif]

>e21< [fill thes] other phone number[fill s] for . . .

<1> Home use,
<2> Business and home use, or
<3> Business use only?

<8> DON'T KNOW
<9> REFUSED

===>

>e22< During the past 12 months, was there any time when you did not have a working telephone in your household for two weeks or more?

<1> YES [goto e23]
<0> NO

<8> DON'T KNOW
<9> REFUSED

===> [goto end]

>e23< For how many of the past 12 months did you not have a working telephone in your household?

<1-12>

<98> DON'T KNOW[goto e24]
<99> REFUSED

===>[goto end]

>e24< We would like your best estimate of the length of time that your household was without a working telephone during the past 12 months. Was it...

<1> less than a month,
<2> one to six months, or
<3> more than six months?

<8> DON'T KNOW
<9> REFUSED

===>

>end< [store <1> in CODE]
[if RFSL ge <1> goto CAMT]
[goto MOD7]

fdli Tobacco

CHILDREN AND TOBACCO: WHAT OTHERS SAY

"I figure if it's really so bad for you, they wouldn't be selling them everywhere. I mean, you walk into the Stop 'N' Go, and there's a whole wall of them right up front at the cash register. If they were really that bad for you, they'd make them less accessible."
- Brian Grindele, 18
The New York Times, July 30, 1995

"Given all that we know, the scientific case for protecting children from tobacco is indisputable. The moral imperative to act is imperative....This is not a Democratic or a Republican issue. It is a bipartisan, pro-child, pro-family, pro-health issue."
- President Jimmy Carter
USA Today, August 3, 1995

"The tobacco industry continues to insist that smoking is a simple matter of individual rights and adult choice. If that were true, I would be on their side. But we're not talking about adults. We're talking about keeping an addictive and lethal substance out of the hands of children. Neither the FDA nor anyone else is talking about prohibiting adults from smoking."
- Former U.S. Sen. Barry Goldwater
Wall Street Journal, August 8, 1995

"The American Medical Association reminds physicians, the public, and politicians that the damning evidence against tobacco makes opposition to its use a pressing, nonpartisan public health issue."
- Editorial
Journal of the American Medical Association, July 19, 1995

"The concept -- pediatric disease -- qualifies as an epiphany, given the acknowledged authority of society over a minor. He/she has to go to school, has to wait until a certain age before being allowed to drive, to vote, to drink beer. It yields no substantial libertarian ground to add to the list enforcement mechanisms designed to dissuade the 15-year-old from taking up a habit that brings on premature and painful death."
- William F. Buckley Jr.
Syndicated columnist, March, 1995

"We believe that current tobacco regulations, limited primarily to a ban on television advertising and the promotion of warning labels on packages, are insufficient in protecting America's children. The FDA should have authority to control tobacco by placing new limits on tobacco advertising, creating stricter licensing regulations for vendors, and banning cigarette vending machines."
- American Public Health Association
Letter to President Clinton from APHA, July 13, 1995

"What is most significant about teens and smoking, however, is that, from all indications, smoking is an addiction that is typically initiated during the teenage years or not at all. For the great majority of smokers, this addiction begins before they are old enough to purchase tobacco lawfully. In fact, 75 percent of all adult smokers report that they became addicted to tobacco before they were 18 years old. Very few smokers take up smoking for the first time as adults. If youth access can be controlled effectively, and the decision whether to smoke can be delayed until adulthood, then, over time, smoking will be greatly reduced as a major addiction in our society."
- "No Sale: Youth, Tobacco and Responsible Retailing"
Working Group of State Attorneys General, December, 1994

"The nation must commit itself to a vigorous public health initiative in tobacco control....The nation cannot reasonably expect to eliminate tobacco-related disease and death by 2010. However, by putting a youth-centered preventions strategy at the center of tobacco control efforts, and by implementing the initiatives proposed (to that end) in this report, the nation can take a firm and resolute step on that path."
- "Growing Up Tobacco Free"
Institute of Medicine, September, 1994

"... from a public-health standpoint, keeping kids away from cigarettes is the single most effective way to fight the nation's leading preventable cause of death."
- "Hooked on Tobacco: The Teen Epidemic"
Consumer Reports, March 1995

Further Reading:

"The Global Tobacco Epidemic"
Scientific American, May, 1995

"The Nicotine Connection"
Chemical and Engineering News, November 28, 1995

"Hooked on Tobacco: The Teen Epidemic"
Consumer Reports, March, 1995

"Nicotine Addiction in Young People"
The New England Journal of Medicine, July 20, 1995

CHILDREN AND TOBACCO: THE PROBLEM

Easy Access

Despite state laws prohibiting the sale of tobacco to minors, children can easily buy these products. One study estimated that teenagers annually consume 516 million packs of cigarettes and 26 million containers of chewing tobacco. A review of 13 studies of over-the-counter sales found that on average, children and adolescents were able to successfully buy tobacco products 67 percent of the time.

- **Vending machines** are a primary source of tobacco products for young smokers. A study by the vending machine industry found that 22 percent of 13-year-old smokers use vending machines compared with 2 percent of 17-year-old smokers. The 1994 Surgeon General's Report found that young people were able to buy cigarettes in vending machines an average of 88 percent of the time.

- **Mail-order sales** provide no sure way of verifying age. Current industry practice only asks the consumer to provide a birth date or check box to verify age.

- **Self-service displays** allow children to easily obtain tobacco products. The Institute of Medicine, in its landmark 1994 report, "Growing Up Tobacco Free," concluded that placing tobacco products "out of reach reinforces the message that tobacco products are not in the same class as candy or potato chips."

- **Free samples** are obtained by children, including those in elementary school, despite industry code prohibiting distribution to anyone under 21. Free samples occur on street corners, at shopping malls and sporting events. A New Jersey survey found that one-third of high school students who were smokers or ex-smokers reported receiving free samples before age 16.

Appealing to Children

Advertising and promotional activities can greatly influence a young person's decision to smoke or use smokeless tobacco products. Awareness of tobacco products and messages is very high among even the youngest children. Studies show that 30 percent of 3-year-olds and 91 percent of 6-year-olds could identify "Joe Camel" as a symbol for smoking. The Centers for Disease Control recently reported that 86 percent of underage smokers who purchase their own cigarettes purchase one of the three most heavily advertised brands: Marlboro, Camel and Newport.

- **Tobacco products are among the most heavily advertised products in the United States.** In 1993, the tobacco industry spent $6.2 billion on advertising and promoting cigarettes and smokeless tobacco. Tobacco advertising expenditures have increased more than 1,500 percent between 1970 (the year before television and radio advertising was banned) and 1992.

- **Promotion of tobacco products through non-tobacco items such as t-shirts, hats and gym bags and through sponsorship of events is reaching children.** A 1992 Gallup Survey found that half of adolescent smokers and one quarter of adolescents who do not smoke owned at least one tobacco promotional item such as a tee-shirt, cap, sporting good, or lighter. Another report found that one out of four 12- and 13-year-olds own one of these items. Used or worn by young people, these become "walking billboards," promoting these products in schools and other locations where tobacco advertising is usually prohibited. Sponsorship of events such as tennis tournaments, car races, and rodeos associate tobacco products with excitement and glamour, and provide a way for tobacco brands to be advertised on television despite the broadcast advertising ban.

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CHILDREN AND TOBACCO: THE FACTS

The Clinton Administration is proposing a comprehensive and coordinated set of measures to significantly reduce the number of children and adolescents who become addicted to nicotine in cigarettes and smokeless tobacco (snuff and chewing tobacco). Children are becoming addicted to these products, with more than 80 percent of smokers beginning to smoke by age 18. Smoking is the leading preventable cause of death in the United States, and health care costs associated with smoking soared to more than $50 billion in 1993, according to the Centers for Disease Control. While the proposed measures will continue to maintain the legal status of cigarettes and smokeless tobacco products for adults, they will reduce the easy access and strong appeal for children. Preventing children from smoking is key to reducing the deadly toll of smoking. The Clinton Administration's plan will help parents provide their children with an environment in which to grow up healthy.

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A Pediatric Disease

Children are becoming addicted to nicotine. The average teenage smoker starts at 14 1/2 years old and becomes a daily smoker before age 18. More than 80 percent of all adult smokers had tried smoking by their 18th birthday and more than half of them had already become regular smokers by that age. Studies show that if people do not begin to smoke as teenagers or children, it is unlikely they will ever do so.

Each and every day, another 3,000 young people become regular smokers, and nearly 1,000 of them will eventually die as a result of their smoking. Currently, more than 3 million children and adolescents smoke cigarettes, and 1 million adolescent boys currently use smokeless tobacco. Smoking by young people is rising sharply. Between 1991 and 1994, the percentage of eighth graders who smoke increased 30 percent, and the percentage of tenth graders who smoke increased 22 percent.

Children tend to vastly underestimate the likelihood that they will become addicted to these products. Although only 5 percent of daily smokers surveyed in high school said they would definitely be smoking five years later, close to 75 percent were smoking 7 to 9 years later. A survey conducted in 1992 found that approximately two-thirds of adolescents who smoked said they wanted to quit and 70 percent said they would not start smoking if they could make that choice again.

Smoking: Leading Cause of Avoidable, Premature Death

Tobacco use takes enormous, deadly toll each year. Tobacco products are responsible for more than 400,000 deaths each year due to cancer, respiratory illness, heart disease, and other health problems. Cigarettes kill more Americans each year than AIDS, alcohol, car accidents, murders, suicides, illegal drugs and fires combined. Smokers who die as a result of smoking would have lived on average 12 to 15 years longer if they had not smoked.

The health care costs associated with tobacco use are rising. The Centers for Disease Control estimated that in 1993 the health care costs associated with smoking totalled $50 billion: $26.9 billion for hospital costs; $15.5 billion for doctors; $4.9 billion in nursing home costs; $1.8 billion for prescription drugs and $900 million for home-health care expenditures. The Office of Technology Assessment calculated the social costs attributable to smoking in 1990 at $68 billion. That calculation was based on $20.8 billion in direct health care costs and $6.9 billion in lost productivity from disabilities and $40.3 billion in lost productivity from premature deaths.

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