

Chapter 5

Tobacco Control and Education Efforts Among Members of Four Racial/Ethnic Minority Groups

Introduction 259

- Principles for Developing Culturally Appropriate Tobacco Control Strategies 259
- Information Needs 262
- Research and Development Limitations 263

Primary Prevention Efforts 266

- Efforts to Restrict Youth Access to Tobacco 266
- School-Based Health Education Approaches 269
 - Project SMART (Self-Management and Resistance Training) 271
 - Life Skills Training Program 271
 - Project SHOUT (Students Helping Others Understand Tobacco) 271
 - Southwestern Cardiovascular Curriculum Project and Pathways to Health 272
 - Other Primary Prevention and Intervention Efforts 272
- Mass Media Efforts to Prevent Tobacco Use 273

Smoking Cessation Programs 274

- Self-Help Approaches 275
 - Rompa Con el Vicio: Una Guía Para Dejar de Fumar (Break the Habit: A Guide to Stop Smoking)* 275
 - Pathways to Freedom* 276
 - Làm Thê' Nào Đê Bỏ Hút Thuô'c? (How to Quit Smoking)* 276
 - It's Your Life—It's Our Future* 276
 - Victory Over Smoking—A Guide to Smoking Cessation for You and Your Family* 277
 - Smoking: Facts and Quitting Tips Series* 277
 - Hot Lines 277
- Group Approaches 277
- Community Approaches 278
 - Stanford Five-City Multifactor Risk Reduction Project 279
 - Programa Latino Para Dejar de Fumar (Hispanic Program to Quit Smoking) 279
 - Sí Puedo (Yes, I Can) 280
 - Pathways to Freedom Community Demonstration Project 280
 - Quit Today! 280
 - Chicago Lung Association's Multifaceted Smoking Cessation Intervention 281
 - Chicago Community-Based Interventions for Low-Income African Americans 281
 - Freedom from Smoking® for You and Your Family on TV/Por Su Salud y Su Familia 281
 - A Su Salud (To Your Health) 282
 - University of North Carolina/North Carolina Mutual *Quit for Life Guide* 282
 - Legends 282
 - Great American Smokeout 283
 - Suc Khoe La Vang! (Health is Gold!) 283

Involvement of Health Care Providers	283
For You and Your Family	284
American Indian Cancer Control Project	286
Involvement of Employers	286
Involvement of Nontraditional Providers	286
Environmental Tobacco Smoke and Clean Indoor Air Policies	287
Economic Efforts to Reduce Tobacco Use	292
Efforts to Control Tobacco Advertising and Promotion	293
Tobacco Product Regulations	298
Conclusions	299
References	301

Introduction

Various approaches have been used to prevent and control tobacco use among racial/ethnic minority groups in the United States. This chapter addresses six major approaches to tobacco control: (1) primary prevention efforts, (2) smoking cessation programs, (3) environmental tobacco smoke (ETS) and clean indoor air policies, (4) economic efforts to reduce tobacco use, (5) efforts to control tobacco advertising, and (6) tobacco product regulations (Satcher and Eriksen 1994). Each section presents a selection of interventions and focuses on activities that reflect the specific characteristics of given racial/ethnic groups.

Because most of these efforts are relatively new among racial/ethnic group members and many have been developed or applied in predominantly white communities, little information is available about the ease and feasibility of their implementation or replication in racial/ethnic contexts. Although data exist on the overall effectiveness of programs that do not differentiate racial/ethnic minority groups from whites, data are limited on the effectiveness of racial/ethnic-specific tobacco control efforts, because results of their evaluations are just beginning to appear in the literature. Although an increasing number of tobacco control programs are being implemented among various racial/ethnic groups, many of these programs lack evaluation components. To remedy the lack of information, culturally appropriate research and evaluations need to be conducted in the future, and more professionals need to be trained in culturally appropriate research and evaluation methodologies. Moreover, the types of tobacco control efforts that are most effective, easiest to implement, and most cost-effective among racial/ethnic groups must be identified (Fiore et al. 1996). In some instances, smoking cessation treatments that have been shown to be effective with non-Hispanic whites also have produced positive effects with racial/ethnic populations (Fiore et al. 1996). It is already well known that preventing tobacco use is of paramount importance because cessation is difficult.

Tobacco control infrastructures in white and racial/ethnic minority communities have developed differently, although the reasons are not well understood. This development has been influenced by many factors: immigration; the historical and current role of the tobacco industry in the economic, political, social, and cultural life of the community; and the resources invested in communities for research and the establishment of tobacco control programs (Robinson et al.

1995; Shelton et al. 1995). Robinson and colleagues developed an index to measure the capacity of racial/ethnic communities to engage in, develop, and implement tobacco control initiatives. The researchers then applied the index to racial/ethnic communities on a national level. They defined capacity in the index as being made up of four broad components, each of which is composed of numerous elements: (1) research, (2) infrastructure, (3) diffusion of programs, and (4) internalization of policy initiatives. The index assumes that a logical order exists among these components, that is, that a community's ability to gather data and assess its needs precedes program development and dissemination. During this process, it is likely that a community's capacity grows through the evolution of new leaders, establishment of more communication networks, and emergence of a deeper understanding and acceptance of community needs and interventions to meet those needs. Robinson and colleagues (1995) concluded that racial/ethnic communities have fewer resources and less infrastructure to develop and implement tobacco control initiatives than the white community. In addition, racial/ethnic communities were compared with one another, and findings demonstrated variability among communities. The index can be considered a preliminary but important step in providing a useful framework for evaluating the relative tobacco control capacity of racial/ethnic minority communities. Mature tobacco control infrastructures provide leadership, advocacy for a smoke-free environment, communication systems, established research initiatives, effective tobacco control programs, and environmental norms; these elements enable communities and their residents to counter tobacco industry marketing strategies and the appeal of an addictive substance.

Principles for Developing Culturally Appropriate Tobacco Control Strategies

To be culturally appropriate, interventions must properly reflect the characteristics of the group members; that is, programs must recognize that cultural groups—whether they are based on race/ethnicity, national origin, or other characteristics—are not monolithic entities. Behavior can be affected by not only demographic characteristics, such as gender, employment status, educational level, literacy, income, and

age but also such variables as national background (i.e., the place of birth of individuals, their parents, or grandparents); acculturation (with its correlates of generational history, time of migration, and language preference); and large social circumstances such as racism, discrimination, and poverty. In particular, and as discussed in Chapter 4, tobacco prevention and control strategies must respond to the historical context of racial/ethnic communities as well as to their current needs (Ellis et al. 1995). Those attitudes and behaviors that have been shaped by the historical relationship between the community on one hand and tobacco and the tobacco industry on the other need to be considered when tobacco control strategies are developed.

Although few tobacco control programs targeting racial/ethnic groups have been culturally appropriate, they are increasing, and their evaluation will further guide the development of culturally appropriate tobacco control strategies. Such programs would address these racial/ethnic groups' differing psychosocial and large social factors related to tobacco use.

Development of culturally appropriate interventions also must go beyond language translations and adaptations of materials (e.g., Rogler et al. 1987; Marín 1993; Bayer 1994) and should do more than simply include contemporary, group-specific traditions or ancestral symbols and traditions. In addition, planners should not assume that the involvement of community leaders and organizations will automatically guarantee a program's success. Marín (1993, p. 149) has argued that to be culturally appropriate, an intervention must meet these requirements: "(1) it is based on the cultural values of the group, (2) the strategies that make up the intervention reflect the subjective culture (attitudes, expectancies, norms) of the group, and (3) the components that make up these strategies reflect the behavioral preferences and expectations of the group's members."

Recent studies have identified numerous intergroup differences in beliefs, attitudes, expectancies, and norms that are useful in designing effective tobacco control programs by identifying optimal messages or techniques that are culturally appropriate. Racial/ethnic cultural values are often an asset in tobacco control efforts. For example, Marín and colleagues (1990a) found that Hispanic smokers were more likely than white smokers to think that an effective motivator to quit smoking was the knowledge that adults who smoke set a bad example for children and endanger children's health. According to Robinson and colleagues (1992), African Americans responded to the use of prayer during smoking cessation

programs, and Hodge and colleagues showed that American Indians were unresponsive to confrontational approaches for curtailing tobacco use (American Indian Cancer Control Project 1991). Materials developed for Chinese Americans have offered the use of martial arts as a behavioral alternative to cigarette smoking (Chinese Community Smoke-Free Project 1992). Another example of a culturally appropriate message is a billboard used by the California Department of Health Services to target Hispanics (Figure 1). The billboard makes use of a basic Hispanic value (*familialism*) within the context of a message that is an important motivator to Hispanics to quit smoking—quitting to protect the health of the family (Marín et al. 1989, 1990a). More recently, in an analysis of a population-based survey of Californians 18 years of age and older, researchers found that African Americans and Hispanics were more likely than whites to plan to quit smoking in the near future and to have tried to quit at least one time (Kaplan et al. 1993). In a comparison of smoking cessation intentions and behaviors among white and African American smokers, white smokers were more likely to set quitting smoking as a goal, whereas African Americans were more likely to focus on a goal of reducing the number of cigarettes they smoked per day or making other changes in smoking behavior (Hahn et al. 1990). Another study found that intentions to breast-feed predicted smoking cessation among African American pregnant women (O'Campo et al. 1992).

Other recent studies of smoking cessation programs indicate that members of most racial/ethnic groups tend to be very interested in quitting smoking. In the 1993 National Health Interview Survey (NHIS), current smokers in all racial/ethnic groups said they were willing to quit smoking (Table 1) (National Center for Health Statistics [NCHS], public use data tape, 1993). African Americans (71.4 percent) reported the desire to quit in greater proportions than members of the other racial/ethnic groups, whereas Asian Americans and Pacific Islanders (60.2 percent) showed the least interest in quitting. In all four racial/ethnic groups, women were more likely than men to want to stop smoking. Moreover, data from the Community Intervention Trial for Smoking Cessation's (COMMIT) initial survey in 10 U.S. communities showed that more African Americans than whites, both men and women, said they wanted "a lot" to quit (Royce et al. 1993). In a San Francisco study, Hispanics considered a high interest in quitting smoking to be more desirable than did whites (Marín et al. 1989).

Despite their interest in smoking cessation, members of these racial/ethnic minority groups have been

Figure 1. Billboard used by the California Department of Health Services in targeting Hispanics to quit smoking*



*Translation: If you smoke, she smokes.

Source: California Department of Health Services, Tobacco Control Media Education Campaign, Sacramento, 1993.

Table 1. Percentage of adult smokers who would like to stop smoking,* by race/ethnicity and gender, National Health Interview Survey, United States, 1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Total	71.4	4.8	65.0	14.6	60.2	12.2	68.7	5.8	70.4	1.8
Men	68.6	7.3	57.3	23.4	58.3	14.6	63.8	7.8	67.8	2.6
Women	74.9	5.4	70.3	16.1	65.3	22.6	79.3	8.1	72.4	2.1

*In response to the question, "Would you like to completely stop smoking cigarettes?"

†95% confidence interval.

Source: National Center for Health Statistics, public use data tape, 1993.

less likely than whites to actually quit. In a study of 786 adult smokers in the Minneapolis-St. Paul area, Hahn and colleagues (1990) found that 52 percent of African American men had tried to quit smoking in the previous year, compared with 63 percent of white men. They also found that 56 percent of African American women had tried to quit, compared with 58 percent of white women. In a recent survey conducted in California, African Americans, Asian Americans, and Hispanics were more likely than whites to report that they tried to quit smoking in the previous year; however, relapses were more common among African

Americans (49.5 percent), Asian Americans (39.8 percent), and Hispanics (37.8 percent) than among whites (35.0 percent) (Burns and Pierce 1992). NHIS data from 1991 that were statistically adjusted for gender, age, education, and poverty status indicate that African Americans and Hispanics were more likely than whites to quit for a day during the previous year but that African Americans who tried to quit were more likely than whites to relapse (Centers for Disease Control and Prevention [CDC] 1993b). In another study—conducted in Milwaukee, Wisconsin; Minneapolis, Minnesota; and Seattle and Spokane, Washington—

American Indians who were patients at Indian Health Service (IHS) clinics reported a moderate desire to quit smoking (mean of 5.97 on a scale of 0 to 10) but a high rate of relapse (70 percent) (Lando et al. 1992). These data suggest the need for culturally appropriate programs that not only help smokers stop smoking but also support them in their efforts to maintain a smoke-free lifestyle and to avoid relapses.

In addition to considering intergroup differences, tobacco control programs targeting members of racial/ethnic groups must involve culturally competent staff—persons with the academic and interpersonal skills needed to understand and appreciate racial/ethnic groups' cultural differences and similarities and to respect these groups' beliefs, attitudes, norms, and behaviors (Cross et al. 1989; Roberts 1990; Orlandi 1992). Such staff must have the skills to understand their own cultural beliefs and values, to understand the dynamics of cultural differences, and to translate that understanding into culturally appropriate behaviors. Cross and colleagues (1989) and Davis and Voegtle (1994) propose that culturally competent health care systems—and by implication culturally competent staff—should (1) be aware and accepting of cultural differences, (2) have the capacity for cultural self-assessment, (3) be conscious of the dynamics inherent when cultures interact, (4) have relevant cultural knowledge of the targeted group, and (5) have skills that promote adaptation to diversity. Other authors, such as Corcoran and Robinson (1994), assert that public health professionals need to actively include the community by establishing planning teams composed of key community leaders and that staff be willing to redefine the project as community needs change.

Furthermore, persons designing and implementing tobacco control programs ideally should determine whether theoretical models and approaches originally developed for certain populations would be relevant to the racial/ethnic groups being targeted. Most current theoretical approaches to health promotion have been developed by white researchers who work primarily with white populations. Some researchers have questioned the overall validity and usefulness of these theoretical approaches because the approaches that are developed do not necessarily reflect the cultural values shared by other racial/ethnic groups and do not consider how variables such as acculturation, racism, and poverty may affect peoples' health behaviors (Prochaska 1992; Robinson and Sutton, in press). This concern can be addressed only through an empirical approach that analyzes the usefulness of theories initially developed for groups other than the ones being targeted by an intervention (Orlandi 1992).

Information Needs

To ensure that prevention and cessation programs will provide members of a racial/ethnic minority group with the information that they need most, program designers must find out three things. (1) Do members of the community need basic information about the harmful health effects of tobacco use? (2) What culture-specific experiences directly influence the role of tobacco and the tobacco industry and how can they be addressed in health promotion messages? (3) Which media and information sources would be most effective in conveying information to the targeted group?

Because information about the dangers of cigarette smoking has been provided to the public for more than 30 years, most U.S. citizens and residents are well aware of these health consequences. American Indians, for example, tend to have a high level of knowledge about the hazards of smoking. In a study of 1,369 northern California American Indians who were patients at IHS clinics, Hodge and colleagues (1995) found that most American Indians knew about the health effects of tobacco use, particularly its relationship with cancer and the dangers of smoking while pregnant.

Conversely, this basic information may not have reached persons who have limited English proficiency, who have recently arrived in the United States, or who may not have been exposed to media and information sources that traditionally have carried messages about the dangers of cigarette smoking. It is possible for example, that Asian Americans, Pacific Islanders, and Hispanics who have recently immigrated to the United States are not familiar with the dangers of cigarette smoking. Less acculturated Asian Americans, Pacific Islanders, and Hispanics who have resided in the United States for several years may not have benefited from large-scale public education campaigns directed at persons who are proficient in English and those who interact frequently with mainstream society. To help address this need, the Agency for Health Care Policy and Research translated the consumer cessation guide "You Can Quit Smoking" into Cambodian, Laotian, Vietnamese, Tagalog, Korean, and Chinese (U.S. Department of Health and Human Services [USDHHS] 1996 and 1997). Chen and colleagues (1993) reported that less than 40 percent of Cambodian, Laotian, and Vietnamese smokers in Columbus, Ohio, had heard that smoking caused heart disease. Earlier, Jenkins and colleagues (1990) reported that only 74 percent of Vietnamese adults surveyed in San Francisco knew that smoking caused cancer. Nevertheless, Campbell and Kaplan (1997) found that both less acculturated and more acculturated Hispanic women (as measured by language orientation) agreed that cigarette smoking is harmful

to children's health. However, less acculturated Hispanic women were more likely to agree that it is safe to smoke for a year or two.

Even long-term U.S. residents who have been receiving information on the dangers of tobacco smoke for many years may have limited or incorrect information. For example, in a study of Chicago women living in subsidized housing, 46 percent of African American women agreed that the chances of getting lung cancer were the same for smokers and nonsmokers, compared with 27 percent of white women (Manfredi et al. 1992). In that study, African American women also reported that the causes of lung cancer were unknown or that lung cancer was the result of environmental pollution (Lacey et al. 1993). Conversely, in a multivariate analysis, African Americans compared with whites were found to have higher levels of knowledge about the benefits of not using tobacco and the health consequences of tobacco use, but blue collar status emerged as the most significant predictor of lower levels of knowledge (Robinson et al. 1991). In another study, African American residents of urban Missouri areas recognized the harmful effects of ETS but were less likely than whites to know the health risks associated with active smoking, particularly its link with heart disease (Brownson et al. 1992).

In a 1989 survey of Hispanic and white clients of a San Francisco health maintenance organization (HMO), Hispanics had numerous misconceptions about the causes of cancer, but a similar proportion of Hispanics (97.5 percent) and whites (98.4 percent) knew that cigarette smoking caused cancer (Pérez-Stable et al. 1992). Similarly, Vander Martin and colleagues (1990) surveyed patients of primary care physicians and found that African Americans (87.8 percent) and Asian Americans (86.5 percent) were significantly less likely than whites (92.1 percent) and Hispanics (91.6 percent) to recognize that cigarettes had harmful health effects. They also found that African American (58.9 percent), Asian American (56.3 percent), and Hispanic (60.1 percent) smokers were less likely than white smokers (80.3 percent) to recognize that they were addicted to cigarettes. In the 1992 NHIS, members of racial/ethnic groups were generally less likely than whites to indicate concern over the carcinogenic characteristics of cigarette smoking, although they expressed the same level of agreement as whites regarding the need for pregnant women not to smoke and about the harmfulness of ETS (Table 2) (NCHS, 1992 Cancer Control Supplement, public use data tape). In addition, racial/ethnic group members were less likely than whites to believe that there were health benefits to quitting smoking.

Once program planners decide what information needs to be conveyed, they must consider which media would be most effective in reaching the targeted audience. Many researchers have suggested employing the media most frequently used by the targeted ethnic group. To reach African American smokers, for example, Stotts and colleagues (1991) suggest that smoking cessation programs should use African American broadcast and print media to address this group's information and motivational needs.

Moreover, prevention and cessation programs should use the information channels (e.g., radio, television, and newspapers) and information sources (e.g., physicians, peers, and actors) that members of the targeted racial/ethnic group perceive to be trustworthy and reliable. Unfortunately, little is known about how credible the various media and information sources are perceived to be by members of racial/ethnic groups. In one of the few studies focusing on this issue—research involving African Americans in Columbia, South Carolina; Durham, North Carolina; Hartford, Connecticut; and Springfield, Massachusetts—television was perceived as the most trustworthy information channel (by 70 percent of participants), followed by newspapers (59 percent), radio (53 percent), and magazines (53 percent) (Cernada et al. 1989–1990). A recent study among Hispanics (Marín 1996) showed that the most credible channels for disseminating information about cigarette smoking among Hispanics are (in descending order) books, newspaper articles, pamphlets, magazine articles, and television news shows; the least credible were *fotonovelas* (illustrated comic-book type of booklet targeting adults) and *telenovelas* (Spanish-language soap operas). The same study found that the most credible sources of cigarette smoking information among Hispanics were (in descending order) a physician, a cancer patient, and a peer of the respondent; the least credible sources of information were a politician, a singer, an actor, and a child.

Research and Development Limitations

In a recent analysis of racial/ethnic minority groups' expertise for engaging in tobacco control efforts, Robinson and colleagues (1995) suggested that African American, American Indian, Alaska Native, Asian American, Pacific Islander, and Hispanic groups all have been significantly limited in conducting research and developing program and policy initiatives for tobacco control. According to Robinson and colleagues, these limitations may exist, in part, because racial/ethnic groups tend to have fewer resources for tobacco control activities than whites.

Table 2. Adults' beliefs about the health effects of smoking, by race/ethnicity, gender, and smoking status, National Health Interview Survey, United States, 1992

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI*	%	±CI	%	±CI	%	±CI	%	±CI
So many things cause cancer that it does not really matter if you smoke.										
Overall										
Total	28.6	3.0	25.6	9.6	27.3	7.0	30.7	3.0	16.5	1.0
Men	27.8	4.7	30.7	14.1	25.2	10.5	28.1	4.3	18.0	1.5
Women	29.3	3.6	21.3	11.3	29.3	8.4	33.2	3.9	15.2	1.2
Nonsmokers										
Total	25.2	3.6	18.7	7.8	22.9	6.6	25.4	3.1	10.9	1.0
Men	23.7	6.2	19.9	14.6	15.3	9.2	23.3	4.6	11.8	1.5
Women	26.3	4.1	17.7	11.0	28.1	8.6	27.3	4.1	10.0	1.2
Smokers										
Total	38.2	5.6	39.4	21.9	47.6	18.9	50.5	7.0	32.5	2.3
Men	36.4	7.9	54.1	28.5	45.9	21.0	43.3	9.2	33.7	3.2
Women	40.2	7.3	27.4	24.2	64.9	34.7	58.8	9.9	31.2	3.1
Smoking by a pregnant woman may harm the baby.										
Overall										
Total	90.7	1.7	90.8	6.1	92.3	3.9	92.0	1.9	92.5	0.7
Men	90.5	2.6	86.0	10.4	91.9	6.3	92.9	2.7	91.4	1.0
Women	90.9	2.0	94.9	6.4	92.6	4.7	91.2	2.4	93.5	0.8
Nonsmokers										
Total	92.6	1.7	94.5	5.2	92.2	4.5	93.2	2.0	94.9	0.6
Men	92.2	2.7	87.8	10.5	91.1	8.8	92.5	3.2	93.7	1.0
Women	92.9	2.2	100.0	0.0	93.0	4.8	93.8	2.4	96.0	0.7
Smokers										
Total	90.1	2.9	89.1	11.6	94.3	6.1	92.1	4.2	89.5	1.5
Men	90.1	4.0	92.7	14.3	95.6	6.1	95.0	4.7	88.5	2.2
Women	90.2	3.8	86.2	17.4	81.2	24.7	88.8	6.9	90.5	1.8
The smoke from other people's cigarettes is harmful to you.										
Overall										
Total	82.1	2.2	79.8	9.1	80.3	6.2	86.7	2.2	85.2	0.9
Men	81.5	3.4	77.1	16.2	83.8	7.4	85.4	3.4	82.8	1.4
Women	82.7	2.7	82.2	10.9	76.9	9.4	87.9	2.7	87.4	1.1
Nonsmokers										
Total	89.7	2.0	94.9	4.2	81.1	7.1	89.8	2.3	91.6	0.8
Men	90.0	3.2	92.8	6.0	86.1	9.4	88.9	3.5	89.7	1.3
Women	89.4	2.4	96.6	6.5	77.6	9.8	90.6	2.8	93.4	0.9
Smokers										
Total	66.8	5.2	57.6	20.8	78.4	11.7	80.0	5.1	71.0	2.2
Men	67.8	7.0	57.8	29.7	80.6	12.5	76.3	7.9	68.4	3.1
Women	65.7	7.5	57.4	29.5	56.4	36.4	84.3	6.1	73.7	2.9

*95% confidence interval.

Source: National Center for Health Statistics, 1992 Cancer Control Supplement, public use data tape.

Table 2. Continued

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI
Most deaths from lung cancer are caused by cigarette smoking.										
Overall										
Total	73.7	2.9	79.3	10.4	77.1	6.1	77.4	2.8	75.0	1.1
Men	74.9	4.6	75.5	15.6	79.9	8.4	76.7	4.3	73.9	1.7
Women	72.8	3.4	82.6	10.5	74.3	8.7	78.2	3.5	76.1	1.3
Nonsmokers										
Total	80.0	2.9	84.6	9.0	79.1	6.8	79.4	3.2	81.7	1.1
Men	81.6	5.2	71.2	18.0	83.4	10.2	78.5	4.9	80.3	1.7
Women	78.8	3.5	95.6	5.8	76.1	8.8	80.3	3.7	82.9	1.4
Smokers										
Total	61.5	5.6	74.1	18.4	69.4	14.2	73.8	6.2	59.8	2.3
Men	64.6	7.6	91.2	16.8	74.5	14.6	71.8	8.8	60.4	3.5
Women	57.7	7.7	60.3	28.6	19.1	25.3	76.2	7.8	59.3	3.1
Even if a person has smoked for more than 20 years, there is a health benefit to quitting.										
Overall										
Total	82.6	2.5	81.3	9.1	78.2	6.3	80.9	2.9	91.4	0.4
Men	82.0	3.9	80.7	11.2	78.6	8.7	82.0	4.2	91.1	1.0
Women	83.0	3.0	81.7	14.1	77.8	9.1	79.8	3.5	91.7	0.9
Nonsmokers										
Total	85.5	2.8	79.6	12.3	78.9	7.1	82.1	3.1	93.9	0.7
Men	85.5	4.6	81.8	11.9	80.6	10.8	82.2	4.6	94.0	1.0
Women	85.4	3.3	77.8	19.8	77.7	9.3	82.1	3.9	93.8	1.0
Smokers										
Total	79.0	4.5	88.2	11.0	76.6	13.1	80.3	5.8	88.0	1.7
Men	77.7	6.8	87.8	17.0	76.0	14.6	82.9	8.2	86.9	2.4
Women	80.7	5.9	88.5	14.0	81.9	24.3	77.2	8.0	89.2	2.0

Overcoming these limitations will be imperative in future years because the need for culturally appropriate tobacco control programs will likely grow. Numerous researchers have argued that culturally appropriate health promotion efforts need to be developed for racial/ethnic groups (Rogler et al. 1987; Edwards and MacMillan 1990; Nestle and Cowell 1990; Gonzalez et al. 1991; Robinson et al. 1991; Uba 1992; Vega 1992; Alcalay et al. 1993; Marín 1993). Early outcome data on interventions targeting racial/ethnic groups further indicate the need for such strategies (Chen et al. 1994; Pérez-Stable et al. 1994; Marín and Pérez-Stable 1995). Moreover, in a National Cancer Institute (NCI) analysis of self-guided strategies for smoking cessation, Glynn and colleagues (1990) sup-

ported the need for targeted programs and suggested that the availability of self-guided smoking cessation materials tailored to the needs of a racial/ethnic group "enhances their adoption and may positively affect quit rates" (p. 11). Therefore, culturally appropriate interventions may prove to be more acceptable and easier to implement and also may have increased effectiveness (Fiore et al. 1996). Cultural values, in fact, often support the messages given in effective tobacco control programs. In addition, if the development process includes community leaders and researchers who represent the community, the process itself will enhance the existing tobacco control infrastructure (Robinson et al. 1995).

Primary Prevention Efforts

Most of the programs that seek to prevent tobacco use among racial/ethnic minority groups focus on children and adolescents. These interventions include efforts to restrict minors' access to tobacco products, school-based health education programs, and mass media efforts.

Efforts to Restrict Youth Access to Tobacco

A comprehensive national effort to address the problem of minors' access to tobacco was made in 1992 with the passage of the Synar Amendment to the Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (Public Law 102-321), which amended the Public Health Service Act. The draft regulations were made final in 1996. These regulations require the 50 states, the District of Columbia, and U.S. jurisdictions to enact and enforce legislation restricting the sale and distribution of tobacco products to minors, as a condition of receiving federal block grant funds for substance abuse and treatment. As a result, all states now designate an agency to enforce their minimum-age laws on purchase of tobacco products. Many local governments have attempted over the years to limit access to tobacco among youths under the age of 18 years by enacting or strictly enforcing legislation that limits minors' ability to purchase tobacco over the counter and through vending machines, whereas others have opted to educate retailers and encourage them to voluntarily comply with legislation that limits the sale of tobacco products to minors (Lynch and Bonnie 1994; USDHHS 1994). Studies show that over-the-counter sales of tobacco to adolescents under the age of 18 years are indeed widespread, although all states prohibit such sales (Altman et al. 1989; Jason et al. 1991; NCI 1991; DiFranza and Brown 1992; Forster et al. 1992). Despite laws in every state that prohibit the sale of tobacco products to persons under 18 years of age, underage buyers in 1996 were able to purchase tobacco products from retail outlets a median of 40 percent of the time, according to reports from states, compared with rates ranging from 60 to 90 percent in previous studies (USDHHS 1998).

In addition to requirements of the Synar Amendment, the recent regulations on tobacco products proposed by the Food and Drug Administration (FDA) and made final on August 23, 1996, sought to reduce

both minors' access to tobacco products and the appeal those products have to minors (see Efforts to Control Tobacco Advertising and Promotion later in this chapter). Three key provisions address minors' access to tobacco: (1) requiring vendors to check a photograph identification as proof of age and prohibiting sales to those under age 18, (2) prohibiting most vending machines and self-service displays of cigarettes except in facilities totally inaccessible to persons under age 18, and (3) prohibiting free samples of cigarettes and sales of individual cigarettes or packs of fewer than 20 cigarettes (so-called kiddie packs). Both the Synar Amendment and the FDA regulations hold promise for reducing tobacco use by all young people, including those who are members of racial/ethnic groups.

In general, adults in the four racial/ethnic groups perceive that minors have fairly easy access to tobacco products. In the 1992-1993 Current Population Survey,¹ a greater proportion of white respondents (55.6 percent) said that it was very easy for minors to purchase tobacco products, compared with American Indians and Alaska Natives (52.6 percent), Hispanics (49.8 percent), African Americans (49.0 percent), and Asian Americans and Pacific Islanders (44.3 percent) (Table 3) (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992-1993). Men and non-smokers were more likely than women and smokers to think that minors had easy access to tobacco products. Data from the 1989 Teenage Attitudes and Practices Survey (TAPS) showed that most youths 12-18 years old who reported cigarette smoking bought their cigarettes primarily at small stores or through cigarette vending machines (Allen et al. 1993). For example, 86.9 percent of white adolescents reported often or sometimes buying their cigarettes from small stores, compared with 80.0 percent of African Americans and 90.0

¹ The Current Population Survey (CPS) is a continuous monthly survey conducted by the U.S. Bureau of the Census and focuses primarily on labor force indicators for the civilian noninstitutionalized U.S. population aged 15 years and older. Questions on smoking and tobacco use (NCI Tobacco Use Supplement) were added to the CPS for the September 1992, January 1993, and May 1993 surveys. About 57,000 eligible households are surveyed each month and yield approximately 110,000 interviews; interviews are conducted with a knowledgeable household respondent who responds for all household members aged 15 years and older. The knowledge, attitude, and belief questions described in this report were asked only of self-respondents.

percent of Hispanics. In contrast, 51.4 percent of white smokers reported often or sometimes buying cigarettes from large stores, compared with 56.6 percent of Hispanics and 39.8 percent of African Americans.

Data from a 1993 follow-up survey (TAPS-II) that were statistically adjusted for participant correlation

and age showed that African Americans were less likely than whites to have ever been asked to show proof of age when buying or trying to buy cigarettes; Hispanics were less likely than non-Hispanics to ever have been asked to show proof of age (CDC 1996). In 1989, 12- to 17-year-old whites who smoked were

Table 3. Adults' beliefs about minors' ease in purchasing cigarettes and other tobacco products,* by race/ethnicity, smoking status, and gender, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Total										
Very easy	49.0	0.7	52.6	3.3	44.3	1.6	49.8	0.9	55.6	0.3
Somewhat easy	15.4	0.5	15.9	2.4	16.6	1.2	15.4	0.6	17.6	0.2
Men										
Very easy	52.5	1.2	55.6	4.9	46.0	2.3	51.9	1.3	57.4	0.4
Somewhat easy	16.1	0.9	14.5	3.5	17.6	1.8	15.7	1.0	18.7	0.3
Women										
Very easy	46.8	0.9	50.1	4.5	42.6	2.2	48.1	1.2	54.0	0.4
Somewhat easy	14.9	0.7	17.0	3.4	15.7	1.6	15.2	0.9	16.7	0.3
All nonsmokers										
Very easy	50.9	0.9	51.4	4.2	44.1	1.7	50.4	1.0	57.2	0.3
Somewhat easy	16.1	0.6	16.2	3.1	17.2	1.3	15.5	0.7	17.9	0.2
All smokers										
Very easy	44.2	1.4	54.2	5.3	45.5	4.1	47.1	2.1	50.9	0.6
Somewhat easy	13.4	1.0	15.4	3.8	13.8	2.8	15.1	1.5	17.0	0.4
Nonsmokers										
Men										
Very easy	54.8	1.4	52.2	6.6	46.4	2.6	53.3	1.5	58.9	0.5
Somewhat easy	16.7	1.0	14.3	4.6	18.5	2.0	15.6	1.1	19.0	0.4
Women										
Very easy	48.6	1.1	50.7	5.6	42.3	2.3	48.3	1.3	55.7	0.4
Somewhat easy	15.7	0.8	17.5	4.2	16.1	1.7	15.5	0.9	16.9	0.3
Smokers										
Men										
Very easy	47.8	2.1	59.3	7.4	45.4	4.9	47.7	2.7	53.6	0.8
Somewhat easy	14.8	1.5	14.9	5.3	14.9	3.5	16.3	2.0	18.0	0.6
Women										
Very easy	41.0	1.9	49.1	7.5	45.8	7.5	46.4	3.3	48.4	0.8
Somewhat easy	12.2	1.3	15.9	5.5	11.3	4.7	13.2	2.3	16.0	0.6

*In response to the question, "In your opinion, how easy is it for minors to buy cigarettes and other tobacco products in your community?" Response categories included "very easy," "somewhat easy," "somewhat difficult," "very difficult," and "don't know."

†95% confidence interval.

Source: U.S. Bureau of the Census, public use data tapes, 1992–1993.

more likely (58.7 percent) than same-aged African Americans who smoked (43.3 percent) to report that they usually bought their own cigarettes. By 1993, however, 62.1 percent of whites who smoked and 64.1 percent of African Americans who smoked reported that they usually bought their own cigarettes. In 1989, 12- to 17-year-old non-Hispanics who smoked were more likely (59.0 percent) than Hispanics of the same age who smoked (41.3 percent) to report that they usually bought their own cigarettes. By 1993, however, 62.4 percent of non-Hispanics who smoked and 59.1 percent of Hispanics who smoked reported that they usually bought their own cigarettes (CDC 1996). In a study in San Bernardino and Riverside Counties, California, Klonoff and colleagues (1994) found that the purchase of single cigarettes by minors was more frequent in ethnic communities (71.2 percent of minors) than in white neighborhoods (34.4 percent of minors).

Klonoff and colleagues (1997) used a factorial design to study the sale of cigarettes to minors in 72 stores in African American, Hispanic, and white communities. Purchase attempts (N = 1,296) were made in 24 stores in each community. There were two participants in each age (ages 10, 14, and 16 years), gender, and race/ethnicity category.

Sales were made most often to 16-year-old African Americans, regardless of gender. A gender effect existed for Hispanics, and more frequent sales occurred to Hispanic girls. Another report based on the same data analyzed purchase attempts by 14- and 16-year-old African American and white participants in African American and white communities (Landrine et al. 1997). Racial- and ethnic-specific sales rates were similar in white communities. In African American communities, however, sales rates were higher for African American youths than for white youths. Of the 41 packs of cigarettes sold to African American youths, only 7 percent were sold by African American vendors. The rest were sold by Asian (67 percent), white (13 percent), and Hispanic (13 percent) vendors, according to participants' reports. Unfortunately, vendor-specific sales rates and comparable sales data by vendor race/ethnicity for the white community were not provided. A limitation of this study is that the apparent age of the minors, an important correlate of sales (DiFranza et al. 1996), was not assessed by independent raters.

A community-based study conducted after passage and enforcement of legislation limiting minors' access to tobacco products showed a reduction in the proportion of merchants who sell cigarettes to minors and the proportion of adolescents who smoke (Jason et al. 1991; Jason et al. 1996). Nevertheless, many merchants—fully aware of legislation prohibiting sales

of tobacco to minors—continue to sell these products to underage customers. For example, in a 1991 study of 156 tobacco retailers in central Massachusetts, 80 percent of the merchants who displayed state-mandated warning signs specifying that it was illegal for minors to purchase tobacco products were still willing to illegally sell cigarettes to youths (DiFranza and Brown 1992). Likewise, a 1994 Massachusetts study reported the ineffectiveness of the tobacco industry-sponsored "It's the Law" voluntary compliance program for stores to prevent underage youths from purchasing tobacco (DiFranza et al. 1996). The results of surveys and sting operations conducted by community action groups affiliated with such organizations as Stop Teenage Addiction to Tobacco (STAT) show that before public awareness campaigns, 32 to 87 percent of U.S. adolescents who tried to buy cigarettes in various communities were able to do so. These figures decreased dramatically (by 10 to 93 percent) when merchants were informed of the law, fined for selling tobacco products to minors, or told that their behavior would be monitored by law enforcement agents (Altman et al. 1989; Feighery et al. 1991; Forster et al. 1992).

Some of the campaigns aimed at increasing merchants' awareness of the law's provisions have concentrated on small, urban convenience stores where many youths purchase their own cigarettes (Davis 1991). As a result of a merchant public awareness campaign in San Diego County, tobacco sales to minors declined in Hispanic and Asian American neighborhoods but not in African American communities (Keay et al. 1993). Additional data are needed to determine the reasons that shopkeepers sell tobacco to minors (Landrine et al. 1994) and also the effectiveness of various approaches among youths of different racial/ethnic minority groups and among owners of convenience stores located in racial/ethnic neighborhoods. Information about the tobacco-purchasing patterns among youths of various racial/ethnic groups also is limited; additional research in this area would be particularly useful in designing programs to curtail youths' access to tobacco products.

Cigarette vending machines are another way minors obtain tobacco products, because the machines are rarely supervised by adults. Tobacco control advocates have recommended banning cigarette vending machines, locking them, or moving them to places where adults could check the ages of purchasers. Results from the 1992 California Tobacco Survey showed that a large proportion of Hispanics (93.8 percent), African Americans (91.1 percent), Asian Americans and Pacific Islanders (87.9 percent), and whites (84.2

percent) were willing to ban cigarette vending machines that are accessible to minors (Pierce et al. 1994a).

Strong support for banning cigarette vending machines accessible to youths also was found in the 1994 Robert Wood Johnson Foundation (RWJF) Youth Access Survey, a national household survey to assess public attitudes about policy alternatives for limiting youths' access to tobacco products. This survey of 2,345 adults, including 486 African Americans, 402 Hispanics, and 1,341 whites, showed that there was willingness to ban cigarette vending machines accessible to youths (Table 4) and strong support for banning all cigarette vending machines (Nancy Kaufman et al., unpublished data).

Although most adults believe that it is relatively easy for youths to obtain cigarettes, the RWJF Youth Access Survey found that African Americans (57.5 percent) were somewhat less likely than Hispanics (67.4 percent) and whites (70.0 percent) to believe that tobacco products were very or somewhat easy for youths to buy in their communities. Even so, African Americans and Hispanics were more supportive than whites of increasing retailing restrictions that would limit youths' access to tobacco, with Hispanics being the most supportive. The retail measure with the broadest public support is the proposal to eliminate self-service tobacco displays, requiring retailers to keep tobacco products behind the counter. Hispanics and African Americans differ from whites in their beliefs about the potential results of raising the age at which tobacco products can be legally purchased. Sixty-five percent of Hispanics and 61.4 percent of African Americans, compared with only 44.3 percent of whites, believe that raising the age of legal purchase to 21 would prevent smoking initiation. Similar results were observed when 19 was proposed as the legal age of purchase.

School-Based Health Education Approaches

In the past decade, numerous programs to prevent tobacco use have been developed for use in schools with a substantial number of white students (Lynch and Bonnie 1994). Rather than consider the specific cultural characteristics of targeted students, most of these programs have been theory-driven or intuitively designed and directed toward students at large. Although youths from various racial/ethnic groups have been included in numerous studies, their responses and behaviors have rarely been separately analyzed or reported in the literature. In a review of school-based smoking-prevention programs, an NCI

panel of experts concluded that, in general, children from the major racial/ethnic groups and those of low-socioeconomic status were the least likely to have been reached by smoking-prevention programs in schools (Glynn 1989). In 1991, the NCI Advisory Panel on Tobacco-Use Reduction Among High-Risk Youth (Glynn et al. 1991) recommended that entire schools be the target of efforts to identify high-risk youth and that a broader approach (such as identifying a school with a large proportion of economically disadvantaged youth) may be more cost-effective and reach the greatest number of high-risk youth without detrimentally labeling individuals the way a more focused approach might. To support the development of effective school-based interventions, the CDC published a set of guidelines for school health programs to prevent tobacco use and addiction (CDC 1994). These guidelines incorporate findings from a number of studies on tobacco use and addiction, call for school-based tobacco-use prevention programs to be provided for students from all racial/ethnic groups, and indicate that such programs should be "sensitive to, and representative of, a student population that is multicultural, multiethnic, and socio-economically diverse" (p. 4).

One significant challenge is the difficulty of implementing a targeted, culturally appropriate intervention in a typical urban classroom that includes students from many cultural and racial/ethnic groups. Another problem with school-based interventions is that teachers in most school districts are overworked and do not have the time, resources, or training to perform these additional activities as part of their daily lessons (Perry et al. 1990). Teachers often have difficulty making tobacco control a high-priority area for instruction when they must also deal with basic educational issues and serious community problems such as crime, illegal drug use, and substandard housing. In addition, high dropout rates in some racial/ethnic minority communities make it impossible for school-based programs to reach many children. For example, a recent analysis of 1990 census data (U.S. General Accounting Office [GAO] 1994) showed that a large proportion of Hispanic dropouts have abandoned formal schooling within the grades (sixth through ninth) when adolescents are vulnerable to cigarette smoking initiation (USDHHS 1994). The GAO report showed that among all Hispanic dropouts, 14 percent had left formal school by the fourth grade and 56 percent had left by the ninth grade.

To overcome these challenges, new school-based tobacco control programs continue to be developed and implemented. ASSIST, the American Stop Smoking Intervention Study, for example, has a youth component, and at some sites such as North Carolina, the

Table 4. Public support for and beliefs about policies regarding tobacco access and marketing, by selected characteristics, Robert Wood Johnson Foundation Youth Access Survey, 1994

Characteristic	African American* (N = 486)		Hispanic (N = 402)		White* (N = 1,341)	
	%	±CI†	%	±CI	%	±CI
Favor banning the sale of cigarettes in vending machines	74.9	3.5	84.5	3.1	72.5	3.1
Favor banning cigarette vending machines that are accessible to youths	93.7	2.0	93.0	2.2	90.7	2.0
Think retailers should keep tobacco products behind the counter to prevent shoplifting by minors	82.6	3.0	88.9	2.7	75.5	3.0
Favor allowing the sale of cigarettes only in certain stores, just as is done with alcohol	46.9	4.0	72.9	3.9	43.1	3.4
Believe that restricting the sale of cigarettes to persons aged 21 years and older will help reduce the number of kids under 21 who begin smoking	61.4	3.9	65.4	4.2	44.3	3.4
Believe that restricting the sale of cigarettes to persons aged 19 years and older will help reduce the number of kids in high school who begin smoking	56.9	3.9	66.5	4.1	47.1	3.5
Favor banning tobacco product advertising on billboards	61.8	3.9	68.9	4.1	57.3	3.4
Favor banning tobacco product advertising in newspapers or magazines	57.4	3.9	62.3	4.3	49.1	3.5
Think tombstone advertising would make smoking less appealing to youths	72.1	3.6	74.9	3.8	72.8	3.1
Favor requiring plain packaging to make cigarettes less attractive to youths	48.0	4.0	61.8	4.3	44.9	3.5
Favor not allowing coupons in cigarette packs to obtain promotional items appealing to youths	76.5	3.4	82.1	3.4	67.8	3.3
Favor not allowing coupon promotions to obtain free cigarettes by mail	79.5	3.2	89.8	2.7	80.4	2.8
Favor not allowing tobacco companies to sponsor sporting or entertainment events in which their brand names are featured	65.1	3.8	71.7	3.9	51.9	3.5
Think that it is very or somewhat easy for youths to buy cigarettes	57.5	3.9	67.4	4.1	70.0	3.2

*Non-Hispanic.

†95% confidence interval.

Source: Nancy Kaufman et al., unpublished data. Ethnic differences in public attitudes about policy alternatives for limiting youth access to tobacco products: results of a national household survey, 1994.

program teaches students to serve as peer counselors who can provide information on smoking prevention and cessation to other high school students. However, little information is available on the counselors' success in racial/ethnic communities.

Some of the largest experimental school-based programs that have included children from racial/ethnic minority groups are briefly described in this section. This listing is not exhaustive because previous reports have reviewed this type of program (Lynch and Bonnie 1994; USDHHS 1994). These interventions represent the variety of school-based approaches used in racial/ethnic neighborhoods.

Project SMART (Self-Management and Resistance Training)

Project SMART is an in-school program designed to encourage junior high school students to resist pressure to use cigarettes and other drugs by teaching them stress-reduction skills, social-resistance skills, and personal decision-making skills. Implemented in 12 sessions, Project SMART provides the students with role-playing opportunities and offers specific techniques for resisting cigarettes, alcohol, marijuana, and other drugs. In an assessment of this program, Graham and colleagues (1990) interviewed seventh graders in 16 California schools between 1982 and 1986. Approximately 6 percent of the participants were Asian American, 20 percent were African American, 31 percent were Hispanic, and 43 percent were white. The program materials, dissemination channels, and evaluation procedures were not tailored specifically for any of these racial/ethnic groups. Differential effects for cigarette smoking on the basis of participants' gender and racial/ethnic minority background were found. Overall, seventh-grade girls were more positively affected by the program than were seventh-grade boys, and Asian Americans were more likely than other racial/ethnic groups to be affected by the intervention. Hispanics and whites were marginally affected by the program, whereas African Americans did not appear to be affected at all.

Life Skills Training Program

The Life Skills Training (LST) Program is a tobacco-use prevention curriculum that teaches adolescents positive life options and social-resistance skills. The program aims to help students enhance their self-esteem, resist tobacco advertising appeals, cope with anxiety, and develop verbal and nonverbal communication skills as well as social and assertiveness skills, including techniques to resist social pressures to smoke

(Botvin et al. 1989a, 1992; Dusenbury and Botvin 1992). Program lessons focus on (1) tobacco information, (2) social skills, (3) personal skills, and (4) self-improvement. Each program includes instruction, behavior modeling and rehearsal, and group feedback. The LST curriculum was initially developed for use with white youths, but the curriculum was later modified for use with Hispanics and African Americans, following consultations with psychologists, educators, reading specialists, and urban adolescents from various racial/ethnic groups. To assess its feasibility, acceptability, and effectiveness in an urban African American population, the LST curriculum was tested in a pilot study involving 608 African American seventh-graders in New Jersey (Botvin et al. 1989a). The study found that the curriculum was acceptable to African American teachers and students and could be implemented with little difficulty in an urban setting. Three months after the intervention, investigators found a 56 percent reduction in the proportion of adolescents who reported that they had smoked in the previous 30 days. In an earlier study, Botvin and colleagues (1989b) found that the use of the LST curriculum was feasible and acceptable among Hispanic seventh-graders attending urban schools in northern New Jersey and in New York City.

More recently, researchers studied the LST curriculum's effectiveness among Hispanic students in the New York City area and found significant changes in knowledge, smoking behavior, and normative expectations concerning peer and adult smoking among students in the schools targeted by the intervention, compared with students in control schools that did not implement the curriculum (Botvin et al. 1992). Consistency in the findings varied, however, because of implementation difficulties across schools. General problems, such as limited resources and stressful conditions in urban schools, may have contributed to these difficulties.

Project SHOUT (Students Helping Others Understand Tobacco)

Project SHOUT was a three-year tobacco-use prevention program that began in 1988 and targeted San Diego students who were in the seventh grade at the beginning of the program (Sallis et al. 1990; Elder et al. 1993b). About 51 percent of the students who participated in the program for all three years were white, and 28 percent were Hispanic. The program consisted of lessons and activities, led by college undergraduate students, on such topics as the consequences of tobacco use, refusal and decision-making skills, and the antecedents and social consequences of tobacco use. Efficacy of the program was measured

with preintervention and postintervention questionnaires administered to students at the end of grades seven, eight, and nine. In addition, the efficacy of the program was tested by using a physiological measurement to detect cigarette smoking and an audiotaped skills assessment of the students' ability to refuse offers of cigarettes (Sallis et al. 1990). Follow-up telephone calls and mailings were made during the last year of the intervention to reinforce the program. The proportion of Project SHOUT students who reported smoking in the previous month increased from 8.3 percent at the end of the seventh grade to 13.2 percent at the end of the ninth grade. In comparison, 9.2 percent of control students reported smoking in the previous month at the end of the seventh grade, and 19.8 percent reported smoking in the previous month at the end of the ninth grade. When researchers used logistic regressions to analyze the prevalence of cigarette smoking during the previous month among ninth graders, comparing control and experimental groups, the results were statistically significant for whites but not for Hispanics (Elder et al. 1993b). When researchers considered cigarette smoking during the previous week, they found statistically significant results for both Hispanic and white respondents. When offered a cigarette in a mock situation, students who received refusal skills training provided more appropriate responses than those who did not receive the training (Sallis et al. 1990).

Southwestern Cardiovascular Curriculum Project and Pathways to Health

In 1990, the University of New Mexico began a series of projects designed to educate Navajo and Pueblo youths about cardiovascular health and the prevention of cancer. The Southwestern Cardiovascular Curriculum Project, founded by the National Heart, Lung, and Blood Institute, provides fifth-grade Navajo and Pueblo youths with information on the health effects of tobacco use and helps them develop skills to resist social pressures (Davis et al. 1995b). An evaluation of the program showed that among students who had tried cigarette smoking at baseline, boys who were randomly assigned to the program reported decreasing their cigarette smoking more than those not participating.

The Pathways to Health program, developed with funding from the NCI, involves fifth and seventh graders in nine Navajo and Pueblo schools in rural northwest New Mexico (Davis et al. 1995a). This 16-lesson curriculum is designed to improve Navajo and Pueblo Indian children's decision-making

abilities regarding health (Cunningham-Sabo and Davis 1993). The curriculum includes skill acquisition, self-discovery, and class discussion, and it blends traditions of Navajo and Pueblo Indians. Overall, the project promotes a diet low in fat and high in fiber, fruits, and vegetables, and it teaches students to avoid both cigarettes and smokeless tobacco (Cunningham-Sabo and Davis 1993). Results of the baseline testing showed that a large proportion of fifth (30.6 percent) and seventh (60.4 percent) graders had tried cigarette smoking (Davis et al. 1995a). Although 64.5 percent of fifth-grade girls and 41.0 percent of fifth-grade boys expressed intentions to never smoke, by the time they became seventh graders, only 37.8 percent of seventh-grade girls and 24.5 percent of seventh-grade boys reported intentions to never smoke. Tribal differences were also noted. Pueblo students reported higher use of cigarettes, and Navajos reported higher use of chewing tobacco and snuff.

Other Primary Prevention and Intervention Efforts

Other primary prevention and intervention programs have been relatively small in scale and have directly targeted members of a given racial/ethnic minority group. For example, Cella and colleagues (1992) recently designed a smoking-prevention curriculum for 309 mostly African American (57 percent) and Hispanic (19 percent) sixth- and seventh-graders from the Chicago area. The program included two assemblies that were attended by all students. The first assembly featured a rap video developed by African American adolescents in Richmond, California, and a talk by an African American oncologist on the health risks of smoking and social pressures to smoke. The second assembly featured a rap contest in which students performed original rap songs they had written to convey messages about smoking prevention. After the first assembly, students who participated in small follow-up groups were found to have more negative attitudes toward smoking, compared with students attending the larger assembly. There were no differences in attitudes towards smoking between students who decided to participate in the rap contest and those who did not. No data were collected on the intervention's possible effects on rates of smoking initiation or continuation.

Another small-scale tobacco-use prevention effort targeted American Indian children from two Washington State reservations (Schinke et al. 1988). American Indian children participating in the project, who were an average of 11.8 years of age, received

training in communication, coping, and cognitive decision-making skills from a bicultural perspective. At a six-month follow-up, children who participated in the program were less likely than children in a control group to report that they had smoked tobacco or used smokeless tobacco within the previous 14 days.

A prevention project now under way in American Indian communities in the northeastern United States involves 260 American Indian adolescents in an after-school cancer education program (Schinke et al. 1996). The intervention merges tribal culture with an educational approach that uses storytellers and role models from the community. The curriculum provides students with information on problem-solving skills, the historical use of tobacco among northeastern Indian tribes, and health and media literacy to show how lifestyle habits are heavily promoted through mass media. Problem-solving skills, the historical use of tobacco among northeastern Indian tribes, and American Indians' heritage are celebrated through such activities as making story bags (bags containing mementos that are reminders of the story) and dance sticks. A preliminary evaluation of the project has shown that American Indian youths who received the tobacco use curricula or the combined tobacco use and dietary curricula had more knowledge and understanding of the health problems associated with tobacco use. In addition, students receiving the tobacco use or the combined curricula were more aware of the role of peers, relatives, and the media in shaping people's dietary and tobacco preferences (Schinke et al. 1996). In another program, involving American Indian children in the northwestern states, Moncher and Schinke (1994) have shown that a culturally appropriate skills-learning curriculum can be more effective when combined with community involvement in the prevention of tobacco use.

Schinke and colleagues (1994) recently developed a program targeting American Indian youths. Based on a legend of the Seneca Nation, the program features an interactive software package entitled *Boy and Woman Bear*, which provides culturally appropriate information on how young people can reduce their risk of cancer via good nutrition and only very limited, nonhabitual use of tobacco. The effectiveness of the software was measured with 368 American Indian youths, aged 10–14 years, in the southeastern United States. As expected, the youths who participated in the program were more knowledgeable about nutrition and tobacco-related facts than were nonparticipants. Further research by these authors (Schinke et al. 1996) has shown the strong effects of multitopic interventions with American Indians.

The Alaska Area Native Health Service of the Public Health Service conducted a pilot study of a school-based intervention targeting 240 Alaska Native children in grades two through six in three Eskimo villages (Bruerd et al. 1994). The curriculum, a modification of previously developed programs, was delivered in 12–15 lessons and involved the children's families in some of the activities. The evaluation of the program showed a decrease in cigarette smoking and in the use of snuff in two of the three villages that participated. The program was most effective when teachers attended training sessions and fully implemented the curriculum. Another program sponsored by the Alaska Area Native Health Service, the Great Alaska Spit-Out, educates Alaska Native schoolchildren and adults about the health risks associated with smokeless tobacco use (Burhansstipanov and Dresser 1993). Schoolchildren in rural Alaska communities prepare essays and public service announcements regarding the health problems associated with tobacco use. All children who submit entries receive certificates. Monetary awards are given for the best essays, and trips to Washington, D.C., are awarded to the first-place winners.

As an adjunct to tobacco control curricula, cigarette smoking bans on school grounds have been imposed in some states (recent federal legislation, Public Law 103–227, Part C, mandates that schools receiving federal monies be tobacco-free). Although some states and school districts have prohibited students from using tobacco on school campuses, they have excluded administrators, teachers, and volunteers from such policies, most likely because some adults are resistant to tobacco-use bans. Data from the 1992 California Tobacco Survey showed that a relatively low proportion of California adults and youths favored banning cigarette smoking on school grounds (Pierce et al. 1994a). Whites (22.3 percent) were the most willing to ban smoking on school grounds, followed by Asian Americans and Pacific Islanders (16.5 percent), African Americans (16.3 percent), and Hispanics (11.1 percent).

Mass Media Efforts to Prevent Tobacco Use

A few programs have developed mass media materials to prevent tobacco use among children in racial/ethnic minority groups. Most of these programs use television commercials and videotapes to present prevention messages in a targeted fashion. *Stop Before You Drop*, a 10-minute videotape developed by African American adolescents in Richmond, California (American Lung Association [ALA] 1990b), presents a

preventive message through stories, rap songs, and dancing; this videotape is available through local affiliates of the ALA. *It's No Joke, Don't Smoke!* is a 30-minute videotape that openly discusses tobacco use among children and young adolescents in racial/ethnic minority groups (California Department of Health Services, Tobacco Control Section 1993). Other mass media prevention approaches include theatrical works presented at school assemblies or during community events and the distribution of newsletters and newspapers in schools and through other community outlets.

No data on the effectiveness of these and similar prevention efforts are available because these activities are relatively new. Although these efforts incorporate the musical preferences of young adolescents (for example, as reflected in programming on MTV [Music Television]) and feature actors from the racial/ethnic groups being targeted, rarely do the messages properly reflect the attitudes, expectations, and normative beliefs of the targeted children. Instead, most of these efforts have allowed untrained scriptwriters (often children from the targeted group) to produce the text. Although this approach benefits from the use of words and expressions that are familiar to the targeted children, it fails to incorporate attitudinal change strategies and the results of studies identifying predictors of tobacco use (see Chapter 4).

Also problematic is the lack of information regarding the best media outlet to use in presenting smoking-prevention campaigns to youths in various racial/ethnic groups, both in terms of frequency of use and in their perceived credibility and motivating power. In a study of 349 Chicago youths aged 5–15

years, Blosser (1988) found differences across racial/ethnic groups in the quantity, frequency, and access to various media. For example, 70.8 percent of African Americans in the sample reported watching television during dinner, compared with 64.6 percent of Puerto Ricans, 58.8 percent of whites, and 58.1 percent of Mexican Americans. Racial/ethnic group differences were also found for access to various media; large proportions of youths reported that they owned a television set (100 percent of whites, 99.0 percent of African Americans, and 97.7 percent of Hispanics), but varying proportions of youths reported that they owned an audiocassette player (80.0 percent of whites, 77.1 percent of Mexican Americans, 62.5 percent of African Americans, and 54.8 percent of Puerto Ricans). In a recent survey of Los Angeles children 8–12 years of age, Raymond J. Gamba (unpublished data) found that children perceived some media channels to be more believable than others when information on tobacco was presented. Overall, respondents perceived talks at school (63 percent), books and pamphlets (54 percent), television programs (54 percent), radio commercials (52 percent), and television commercials (52 percent) to be highly credible in presenting information about tobacco use. Students' perceptions varied by ethnic group. For example, a large proportion of African Americans perceived books and pamphlets to be the most credible channels of information, followed by billboards, posters, newspapers, and television programs and commercials. A large proportion of Asian Americans and Hispanics, however, perceived talks at school to be highly credible, followed by television and radio commercials.

Smoking Cessation Programs

Most structured smoking cessation programs directed at members of racial/ethnic minority groups have emphasized a self-help approach with some supportive adjuncts, such as motivational messages in the mass media or the use of peers or relatives as motivators and supporters (Stotts et al. 1991). This emphasis on self-help may be a direct result of the fact that most smokers quit on their own (Fiore et al. 1990). Some programs have successfully used materials developed

for whites, with little or no adaptation for the racial/ethnic group being targeted. Though there is currently little research on the development of culturally appropriate smoking cessation programs, culture-specific tailoring or the development of culturally appropriate programs may be necessary in order to enhance effectiveness. At a minimum, programs must be communicated in a language understood by the target audience (Fiore et al. 1996).

In this section, six major intervention approaches are described: (1) self-help programs, (2) group programs, (3) community interventions, (4) programs in health care settings, (5) employer-sponsored programs, and (6) nontraditional provider interventions. When available, the results of outcome evaluations of the projects or strategies are mentioned. Because most of these projects are relatively new, there is a paucity of research measuring the effectiveness of the various strategies and programs. These descriptions provide an overview of the different approaches that have been used; the list is not complete and does not necessarily represent the most effective interventions or model programs. Future research efforts should consider the components of culturally appropriate interventions (Marin 1993) and conduct proper process and outcome evaluations to provide a better understanding of the effectiveness of various targeted intervention approaches.

Self-Help Approaches

In the United States, most people who quit smoking do so without the help of formal programs, therapy, or nicotine replacement (Pierce et al. 1989; Fiore et al. 1990; Stotts et al. 1991). Members of racial/ethnic minority groups, however, generally seem to have less success with self-help approaches than whites. For example, recent analyses of the 1986 Adult Use of Tobacco Survey showed that African Americans tended to be less successful at quitting smoking than whites (Fiore et al. 1990).

A number of self-help cessation materials and programs have been developed for members of racial/ethnic groups who want to quit on their own. Some of these materials and programs are adaptations of materials and programs previously developed for whites, usually by federal agencies such as the NCI or voluntary associations such as the ALA. Other programs and materials have been developed specifically for members of these racial/ethnic groups; however, only a few studies report on the success of these programs in helping members of racial/ethnic groups quit smoking.

Smokers from racial/ethnic minority groups tend to favor relying on willpower alone to quit smoking. In a 12-state survey of 1,163 low- to middle-income African American insurance policyholders aged 21–60 years, Orleans and colleagues (1989) found that 89.3 percent of those who were former smokers reported relying primarily on willpower to quit smoking and 21.7 percent reported relying primarily on prayer and meditation. These former smokers also reported seldom

using cessation aids of any type, including smoking cessation groups (0.4 percent) or books and guides (3.2 percent). Likewise, Hispanic smokers surveyed in San Francisco perceived willpower as the most effective technique for quitting smoking (Marín et al. 1990a).

Rompa Con el Vicio: Una Guía Para Dejar de Fumar (Break the Habit: A Guide to Stop Smoking)

The first self-help manual designed specifically for a U.S. racial/ethnic group was developed in 1988 in San Francisco as part of the Programa Latino Para Dejar de Fumar (Hispanic Program to Quit Smoking). The manual was distributed by the NCI under the name *Guía Para Dejar de Fumar* (Sabogal et al. 1988) and was based on a significant number of studies that identified group-specific attitudes, norms, expectancies, and values related to cigarette smoking and smoking cessation among Hispanics and whites (Marín et al. 1990a,b). Initial versions of the manual (hereafter referred to as the *Guía*) were thoroughly pretested to identify optimal formats, designs, photographs, typefaces, and publication format and size. In 1991, a revised version, *El Fumar, Un Juego Peligroso: Guía Para Dejar de Fumar*, was published and distributed in California with funding from Proposition 99 tax revenues earmarked for tobacco control activities (Programa Latino Para Dejar de Fumar de San Francisco 1992). In 1993, the NCI published and distributed nationally the third edition, *Rompa Con el Vicio: Una Guía Para Dejar de Fumar* (Programa Latino Para Dejar de Fumar de San Francisco 1993).

The *Guía* is a 24-page, 8½-by-11-inch, full-color booklet printed on glossy paper and featuring photographs of numerous Hispanic individuals demonstrating various cessation techniques as well as their testimonials about quitting smoking. All text is in broadcast Spanish—that is, conversational Spanish used by television broadcasters and easily understood by all Spanish-speaking Hispanics. The first section of the *Guía* describes the short- and long-term effects of cigarette smoking, including health problems among smokers and their relatives and the negative social effects, such as bad breath and bad-smelling clothes. The second section presents possible methods a smoker can follow to quit, particularly approaches that Hispanic smokers perceive to be effective (Marín et al. 1990a). In addition, this section offers suggestions and verbal scripts for dealing with social pressures to smoke as well as for dealing with stress or depression. The third section presents strategies to follow after a relapse. The final section lists ways relatives and friends can motivate and support smokers who are trying to quit.

The effectiveness of the first edition of the *Guía* was evaluated in a study of 431 Hispanic smokers who volunteered to participate after they picked up the manual at community stores or clinics in San Francisco (Pérez-Stable et al. 1991). More than 21 percent of the participants reported that they had quit smoking 2.5 months after reading the *Guía*; however, this percentage declined to 18.6 percent after more than 8 months and to 13.7 percent after 14 months.

Pathways to Freedom

Pathways to Freedom: Winning the Fight Against Tobacco is a self-help manual targeting African Americans (Robinson et al. 1992). The manual and a companion 12-minute videotape were developed by the Fox Chase Cancer Center in Philadelphia with funding from the NCI and assistance from a number of African American churches and other community groups. The manual was designed to emphasize quitting and community mobilization. In the early stages of the manual's development, focus group participants and community leaders who were interviewed suggested that the manual should include graphics depicting African Americans representing everyday people of all ages, should provide strong visuals illustrating the health consequences of cigarette smoking, and should target smokers and nonsmokers. Persons in the interviews and focus groups also suggested that the manual and videotape include information on targeted advertising and that they identify the tobacco industry as the enemy.

The resulting manual, *Pathways to Freedom*, is a 36-page, 8½-by-11-inch, glossy publication with numerous color photographs and line drawings. The first part of the manual discusses the characteristics of cigarette smoking among African Americans; the tobacco industry's influence on the community through advertising and promotional campaigns; and the effects of stressors, such as unemployment and racism, that promote cigarette smoking behavior. The second part provides instructions on how to quit smoking and help smokers quit, and the third part shows how communities can combat tobacco dependence by working together. The manual addresses the tobacco-related concerns of African American smokers as well as other community members. It covers such topics as cigarette-smoking patterns among African Americans, culturally appropriate strategies to quit smoking, messages that nonsmoking friends and relatives can use to help smokers quit, and the role of prayer and faith in helping people quit and avoid a relapse. The manual was distributed nationally as part of the

Legends campaign carried out in 1993 and 1994 by CDC and the National Medical Association (NMA). As part of an American Cancer Society Pathways to Freedom Community Demonstration Project launched in 1992, 285 African American smokers who received the manual agreed to participate in postintervention evaluations. About 71 percent of respondents read some or all of the guide, and 56 percent of those who did reported trying to quit smoking. Approximately 75 percent of those who tried to quit reported being able to stay off cigarettes for at least 24 hours. Most respondents reported that the manual was easy to read, that the graphics were appropriate, and that it was useful overall (C. Tracy Orleans et al., unpublished data). For more information on the evaluation project, see the discussion later in this chapter under "Community Approaches."

Làm Thế Nào Để Bỏ Hút Thuốc? (How to Quit Smoking)

Làm Thế Nào Để Bỏ Hút Thuốc? is a self-help, smoking cessation manual developed in 1990 to help Vietnamese smokers quit (Vietnamese Community Health Promotion Project 1990). The 30-page, 8½-by-11-inch manual was developed as part of the Vietnamese Community Health Promotion Project based at the University of California, San Francisco. The manual's format is similar to that of the *Guía* and covers topics such as reasons for quitting smoking, the health effects of cigarette smoking, approaches to quitting, dietary concerns while quitting, and suggestions for avoiding and coping with relapse. The manual, available through the California Department of Health Services' Tobacco Control Section, features full-color photographs.

It's Your Life—It's Our Future

It's Your Life—It's Our Future is a 28-page smoking cessation, self-help manual targeting American Indian adults (American Indian Cancer Control Project 1991). The manual was developed by the American Indian Cancer Control Project in Berkeley, California, with NCI funding. The two-color, spiral-bound manual is printed on high-quality paper. The first section of the manual provides motivational information on quitting smoking, including the negative effects of smoking and the positive effects of quitting. The second section presents techniques to help smokers reduce the number of cigarettes smoked per day and offers suggestions on what to do before and after quitting and how to deal with withdrawal symptoms. The last section

of the manual provides suggestions on how to stay free of cigarettes, such as how to deal with pressure to smoke from family and friends, how to control stress, and how not to gain weight. The contents of the manual, the presentation of the materials, and the approach to quitting that is promoted in this manual reflect the values of American Indians and their emphasis on the family and the community. The manual is formatted for easy reading; for example, the sections have bulleted headings, and the text is printed in large type. American Indian artwork and pictures are featured throughout the manual. A 16-minute videotape was produced to further motivate smokers to quit and to remain smoke-free (American Indian Cancer Control Project 1991).

Victory Over Smoking—A Guide to Smoking Cessation for You and Your Family

The Chinese Community Smoke-Free Project of the Chinese Hospital in San Francisco produced a 46-page smoking cessation manual entitled *Victory Over Smoking* (Chinese Community Smoke-Free Project 1992) with funding from California's Proposition 99 tobacco tax initiative. The 8½-by-11-inch manual is printed on glossy paper and has black-and-white photographs of Chinese Americans and line drawings. The manual is written in Chinese, and it describes a number of suggested attitudes and behaviors that are specific to and consonant with Chinese culture. For example, "living long enough to see one's grandchildren grow" is presented as a possible benefit to quitting, and martial arts is suggested as a possible alternative to smoking. The five-part manual was pre-tested with focus groups of San Francisco's Chinese American residents. The first section describes cigarette smoking among Chinese Americans, and the second section describes common health effects of cigarette smoking. The third section presents steps smokers can take as they prepare to quit. The next section describes alternatives to smoking as well as techniques and activities for remaining smoke-free. The final section provides suggestions on how to maintain abstinence, such as through physical exercise, deep breathing exercises, and diet.

Smoking: Facts and Quitting Tips Series

In 1992, the NCI produced two small brochures, *Smoking: Facts and Quitting Tips for Black Americans* (NCI 1992b) and *Smoking: Facts and Quitting Tips for Hispanics* (NCI 1992a). Despite the difference in titles, the brochures are basically identical in content. The

major difference between the brochures is that the one targeting Hispanics includes text in both English and Spanish. No information is yet available on their effectiveness.

Hot Lines

Hot lines for smokers who want to quit provide callers with short-term counseling over the telephone and self-help materials via the mail. Probably the most prominent of these hot lines is the Cancer Information Service (CIS), funded by the NCI, which provides services and information to persons wishing to quit smoking. The CIS provides services in English as well as in Spanish in states with high concentrations of Hispanics. The CIS also provides Spanish-speaking counselors and callers with Spanish-language materials, including copies of the *Guía*.

Some states have implemented their own smoking cessation hot lines. For example, California recently funded a hot line to help smokers quit by providing short-term telephone counseling. Between August 1992 and December 1993, the California hot line received calls from more than 18,000 smokers (Pierce et al. 1994b). Most of these calls came from whites (56.8 percent), followed by Hispanics (20.6 percent), African Americans (16.1 percent), and Asian Americans (2.4 percent). These figures show that the proportion of African American and Hispanic smokers reached by the California hot line was similar to or higher than the proportion of African American smokers (7.0 percent) and Hispanic smokers (18.6 percent) in the state, whereas the proportion of Asian American smokers reached by the hot line was lower than the proportion of Asian American smokers in California (5.0 percent).

Group Approaches

In general, smoking cessation programs that are group-based have had difficulty attracting participants, and attrition rates are often high. The scant data available for racial/ethnic groups indicate that similar difficulties may exist to an even greater extent. For example, Hispanics and Asian Americans rarely participate in smoking cessation groups (Pérez-Stable et al. 1993). The same is true for African Americans (Hymowitz et al. 1996). The possible reasons are varied (Glynn 1989; Stotts et al. 1991; Lichtenstein and Glasgow 1992):

- They may have difficulty accessing primary health care facilities that offer smoking cessation services (because of eligibility criteria or physical distance).

- They may be unable to afford the high cost of some group interventions.
- They may perceive such efforts to be inconvenient (e.g., requiring transportation and child care) and time consuming.
- They may prefer to deal with personal problems alone or in the family rather than to seek professional or other help outside of the home.
- They may lack access to linguistically appropriate services.
- They may distrust researchers and health care providers who are not members of their racial/ethnic groups or who are unaware of their culture and behavioral expectations and traditions.
- If they have physically demanding jobs or heavy caregiving responsibilities, they may be too exhausted to attend program meetings.

The difficulty in obtaining enough individuals to participate in smoking cessation groups or even to continue their participation after a few initial sessions has been a problem for many ethnic smoking cessation programs, including those targeting Hispanics in San Francisco, California (Pérez-Stable et al. 1993) and Queens, New York (Nevid and Javier 1992), African Americans in Atlanta, Georgia (Ahluwalia and McNagny 1993), and Chinese restaurant workers in Boston, Massachusetts (Betty Lee Hawks, personal communication, 1993). As a result, many programs have stopped using cessation groups as a possible intervention strategy and as a way to deliver information personally.

As an alternative to group approaches, intervenors in San Francisco began offering personal consultation over the telephone and face-to-face (Pérez-Stable et al. 1993). Trained individuals provide information and support to smokers who want more information than is provided in a self-help manual. This approach (labeled *consultas*, or personal consultations), although demanding in terms of time and personnel, is considered culturally appropriate among Hispanics, who traditionally value personal attention. This alternative also allows telephone advisors to tailor the information to each person's needs. Another alternative program, which provides individual counseling to Southeast Asian smokers in their homes rather than in clinics, has been well received in Long Beach, California (Mary Anne Foo, personal communication, 1994).

Community Approaches

Most community smoking cessation programs targeting members of racial/ethnic groups have been conducted in fairly large urban communities and have used self-help materials together with mass media and outreach workers. In a recent overview of community-wide programs targeting cardiovascular disease, Winkleby (1994) noted the need to conduct focused studies with populations that have not been reached successfully in the past with large-scale projects, as is the case with members of the four racial/ethnic minority groups considered in this report.

Because so many racial/ethnic groups place a high value on the family and on the authority of older relatives (Sabogal et al. 1987), some community programs have employed family-centered interventions, working under the assumption that a smoker's children and other relatives can effectively intervene and that parents can be a child's best source of information regarding smoking-prevention programs. In Boston, the South Cove Community Health Center involved more than 350 Chinese elementary school children in a poster contest to depict the hazards of tobacco. Many of these posters depicted the father smoking at home and motivated children to discuss cigarette smoking in their homes (Esther Lee, personal communication, 1993). In a Vietnamese Saturday language school program in Sacramento, California, youths have been mobilized to carry antismoking messages to their families and to encourage them to avoid using tobacco (Debra Oto-Kent, personal communication, 1993). In another project, Asian American and Pacific Islander children were asked to compete in a "letter to my parents" writing contest, asking them not to smoke (Irene Linayao-Putman, personal communication, 1993). Anecdotal information about this and similar programs indicates that the children enjoy these activities and that their parents are seldom discomfited by the letters, particularly when they perceive the programs to be sanctioned by the school system. Nevertheless, the usefulness of such an approach may be limited in families that maintain strict patriarchal or matriarchal structures in which children's interventions may be perceived as a lack of respect toward adults or as a challenge to the parents' authority.

As mentioned previously, large-scale community projects generally have used multiple strategies and channels to disseminate smoking cessation information and to motivate smokers to quit. A sample of programs targeting members of the four racial/ethnic groups is presented below. This listing represents the

variety of community approaches developed to help racial/ethnic smokers quit but should not necessarily be perceived as a list of model programs.

Stanford Five-City Multifactor Risk Reduction Project

Researchers at Stanford University developed the Stanford Five-City Multifactor Risk Reduction Project to examine cardiovascular disease and related risk factors over a nine-year period in five small communities in northern California. The project was based on behavior-change models and social-learning theory (Farquhar et al. 1985, 1990) and used television, mass-distributed print media, direct mailings, contests, correspondence courses, and school-based programs for youths. In the communities with very high concentrations of Hispanics, Spanish-language radio and newspaper columns were chosen as the primary methods of disseminating information. The decline of smoking rates was 13 percent greater in the treatment cities than in the control cities (Farquhar et al. 1990). Although researchers observed no differences in the proportion of experimental or control respondents who reported ever receiving advice from physicians on quitting smoking, whites (51.1 percent) were much more likely to report having received this advice than Hispanics (32.6 percent) (Frank et al. 1991).

Researchers found that the project was fairly successful in promoting the use of self-help smoking cessation materials among whites. A greater proportion of smokers in the experimental communities (22.1 percent) than in the control communities (15.0 percent) reported using smoking cessation materials in the 12 months before the interview (Jackson et al. 1991). In the experimental communities, Hispanics and whites did not differ in their reported use of materials to reduce cardiovascular risk. When asked about their use of tobacco control materials, 31.0 percent of Hispanic women and no Hispanic men reported using smoking cessation print materials during the previous 12 months, compared with 21.3 percent of white women and 13.7 percent of white men.

The project was less effective in promoting smoking cessation programs; no Hispanic smokers reported using such programs, compared with 6.3 percent of white smokers. More recent analyses of and comment on risk-reduction data from this and other community-based interventions suggest that such interventions can achieve more positive results by being coupled with policy initiatives, developing more focused studies, and broadening evaluation concepts (Winkleby et al. 1992; Fortmann et al. 1993; Winkleby 1994).

Programa Latino Para Dejar de Fumar (Hispanic Program to Quit Smoking)

The Programa Latino Para Dejar de Fumar was a community-based, culturally appropriate intervention designed specifically for Hispanic smokers in San Francisco (Pérez-Stable et al. 1993; Marín and Pérez-Stable 1995). Funded by the NCI for 1985–1995, the program was operated jointly by the University of California, San Francisco, and the University of San Francisco. To motivate Hispanic smokers to quit and to inform them of strategies to stop smoking, the program used mass media (primarily radio and television public service announcements), outreach efforts, and distribution of the *Guía*. Program planners developed the various versions of the *Guía*, implemented the *consultas* approach to deal with individual needs for counseling, and used a periodic raffle to reward individuals who quit smoking within a given period of time (Pérez-Stable et al. 1993). Intervention messages were based on research that identified the attitudes, norms, expectancies, and values of Hispanic smokers (Marín et al. 1990a,b). The strategies incorporate significant cultural values such as *familialism* (the normative and behavioral influence of relatives) (Sabogal et al. 1987) and *simpatía* (a social mandate for positive social relationships) (Triandis et al. 1984). For example, a key message of the program was that smokers should quit to protect the health of their children and to avoid setting a bad example for children. To incorporate *simpatía* into the program, planners developed intervention materials that emphasized the positive aspects of quitting and avoid confrontational approaches. This latter approach was similar to that used in materials developed for American Indians (American Indian Cancer Control Project 1991).

The Programa Latino Para Dejar de Fumar has been evaluated through a number of cross-sectional and longitudinal surveys as well as through smaller scale studies that have examined the effectiveness of specific strategies (Marín et al. 1990c, 1994; Pérez-Stable et al. 1993; Marín and Pérez-Stable 1995). The program has significantly increased Hispanics' knowledge about the dangers of smoking, awareness of the program, and participation in the program. Most important, the program has decreased the prevalence of smoking among Hispanics in San Francisco (Marín and Pérez-Stable 1995). These changes have been observed primarily among the less acculturated Hispanic smokers who make up the targeted group. For example, during the first year of the program, 24.9 percent of the less acculturated Hispanics in San Francisco reported awareness of the program; two years later, that

proportion had increased to 48.5 percent (Marín et al. 1990b; Marín and Pérez-Stable 1995). During the first year in which the *Guía* was available, 23 percent of the less acculturated Hispanic women and 12 percent of the less acculturated Hispanic men in San Francisco reported having a copy. One year later, the proportion of the less acculturated Hispanics who reported having a copy of the *Guía* had increased to 37.7 percent of the women and 34.1 percent of the men.

Sí Puedo (Yes, I Can)

Sí Puedo was an eight-week smoking cessation program designed specifically for Hispanic smokers in a largely Hispanic area of Queens, New York. The program used the *Guía* and other print materials, weekly bilingual group meetings, regular telephone calls to offer support to participants, and videotaped vignettes in which Hispanic actors conveyed smoking cessation messages. Persons were recruited through mass media advertising, direct mailings to Hispanic physicians and clergy, and fliers posted throughout the community. Most participants were from South America (57 percent); the rest were from the Caribbean (25.4 percent) or Central America (9 percent). Some people participated in all aspects of the program, whereas others used only the self-help materials. Preliminary figures show that 55.6 percent of the participants who took part in all components of the *Sí Puedo* smoking cessation program stopped smoking by the end of the program (Nevid and Javier 1992). In comparison, 21.7 percent of those who used only the self-help materials abstained from smoking.

Pathways to Freedom Community Demonstration Project

The American Cancer Society (ACS) used the *Pathways to Freedom* manual and videotape as part of a demonstration project to lower the prevalence of cigarette smoking among African Americans (Robinson et al. 1992; Robinson and Sutton, in press). During the first phase (1992–1993), the ACS provided funds to eight of its local units in Long Beach and central Los Angeles, California; Philadelphia, Pennsylvania; Delaware; the District of Columbia; Georgia; Kansas; and Texas. The ACS units developed programs to recruit African American smokers to quit smoking using the *Pathways to Freedom* materials and to expand the ACS's outreach into African American communities. Many of them planned their projects to coincide with the Great American Smokeout (GAS).

In the second phase of the project (1993–1994), the ACS provided funding to seven more local units

in Contra Costa and San Diego Counties, California; Maryland; Nebraska; Chattanooga and Memphis, Tennessee; and Utah. Cessation activities expanded to include efforts to mobilize African American communities and to identify more individuals and groups willing to become tobacco control advocates.

The process evaluation of the first phase showed that the program was easier to implement in communities with a previous history of community-based outreach efforts (Robert G. Robinson et al., unpublished data). Dissemination of the self-help manual was most difficult in multiethnic communities and areas of a city. Most ACS agencies used a variety of distribution channels, including churches, health care organizations, and recreation centers. The program helped the ACS to approach African Americans and to gain support from African American volunteers. Even though the project emphasized self-help approaches, several ACS units incorporated *Pathways to Freedom* materials into smoking cessation groups conducted in African American communities.

The outcome evaluation of the first phase consisted of telephone interviews with 763 smokers who returned a screening postcard that was attached to each *Pathways to Freedom* manual. Respondents reported a favorable impression of the manual and a 10 percent quit rate at 30 days. In addition, smokers who viewed the *Pathways to Freedom* videotape were significantly more likely than others to accept and use the self-help materials as well as to move from precontemplation to contemplation in the process of changes involved in smoking cessation.

Quit Today!

A two-part study funded by the NCI will evaluate the effectiveness of the *Pathways to Freedom* manual and videotape when incorporated into a community-based campaign targeting adult African American smokers. In the first phase of the project, the *Pathways to Freedom* videotape will be distributed communitywide, and paid radio announcements will be aired, encouraging smokers to call the CIS for help. In the second phase of the project, callers to the CIS will be randomly selected to receive either the *Pathways to Freedom* manual and smoking cessation counseling related to the manual or an NCI manual and standard CIS smoking cessation counseling. Results of this study should produce important information about the effectiveness of targeted self-help smoking cessation materials for African Americans combined with established services such as the CIS.

Chicago Lung Association's Multifaceted Smoking Cessation Intervention

In 1985, Warnecke and colleagues (1991) launched a multifaceted smoking cessation intervention on behalf of the Chicago Lung Association. Like a number of programs, this intervention used materials originally produced for whites to target members of other racial/ethnic minority groups. The program used televised messages on techniques for quitting smoking and avoiding relapse as well as the ALA self-help manual and smoking cessation groups. More than 325,000 smokers in the targeted population viewed televised messages featuring role models who encouraged them to obtain a self-help manual, *Freedom from Smoking in 20 Days*, by mail or at one of three locations—a local hardware store, an HMO, or the Chicago Lung Association. A total of 9,182 smokers (23 percent of whom were African American) registered to participate in the study and were followed for 24 months. The results showed that African American and white smokers responded differently to various smoking cessation strategies. For example, African Americans were more likely than whites to report seeing the televised messages on a daily basis and were more likely to recall the messages. However, African Americans were less likely than whites to attend smoking cessation groups.

As an adjunct to the Chicago Lung Association's program, Jason and colleagues (1988) studied the effects of a television program in the West Garfield Park neighborhood of Chicago, where 86 percent of the residents were African American. Before the television program aired, individuals who reported smoking were randomly assigned to a control group (91 percent were African American) or to an experimental group (96 percent were African American). Members of the control group viewed the program or read the self-help manual at their leisure, whereas members of the experimental group received motivational calls prompting them to view the television program and inviting them to attend smoking cessation meetings at a community health center three times during the 20-day program. Eight percent of the smokers in the experimental group reported quitting at the end of the program, compared with 1 percent of those in the control group. After four months, 20 percent of the smokers in the experimental group had quit, compared with 9 percent of those in the control group.

Chicago Community-Based Interventions for Low-Income African Americans

In conjunction with the smoking cessation television program sponsored by the Chicago Lung

Association, Lacey and colleagues (1991) designed community-based interventions for low-income African Americans living in four subsidized housing projects in Chicago. Residents were trained as lay health advisors to deliver smoking cessation messages to their neighbors. They made weekly home visits during the 20 days in which the television program was aired, and they used reminder cards to support the positive behaviors outlined in the program. A subsample of women in the housing projects watched the televised program and participated in six smoking cessation classes, which used a curriculum similar to the one presented in the television program. Health educators gave the women supplemental materials appropriate for them and tips on sources of social support for smoking cessation. Classes were held in the housing projects. Of the 235 residents who preregistered for the smoking cessation intervention, 141 attended at least one class or accepted at least one home visit. Of the 56 women who attended at least one class session, 11 percent quit smoking. About one-half of the 174 residents who registered for the home visitation accepted such a visit, but none quit smoking. Focus groups conducted in conjunction with the intervention indicated that residents of the housing projects perceived that they were not vulnerable to the negative health consequences of smoking, that smoking helped them to cope with stress, and that they had few environmental supports for quitting smoking.

Freedom from Smoking® for You and Your Family on TV/Por Su Salud y Su Familia

Like the Chicago Lung Association's intervention, the Freedom from Smoking® for You and Your Family Project in California featured role models in televised pieces and distributed self-help materials. In 1991, project planners produced special editions of the ALA *Freedom from Smoking® for You and Your Family* self-help manual and the *Guía* and placed them in a newspaper insert that was distributed throughout seven English-language television markets—Eureka, Fresno, Los Angeles, Sacramento, Santa Barbara, San Diego, and the San Francisco Bay area—and four Spanish-language television markets—Fresno, Los Angeles, Sacramento, and the San Francisco Bay area. In addition, locally produced television pieces in both English and Spanish were shown for seven days as part of the daily news. These news pieces included interviews with Hispanic and white experts on tobacco-use control and with four local residents who had volunteered to use the self-help materials to quit smoking. The program reached nearly 1.2 million

smokers (C. Anderson Johnson et al., unpublished data). The newspaper insert was most frequently read by white (22 percent), Asian American and Pacific Islander (18 percent), and African American (16 percent) smokers; smaller proportions of English-speaking Hispanics (14 percent) and Spanish-speaking Hispanics (10 percent) read the insert. The television pieces were viewed most frequently by Spanish-speaking Hispanics (25 percent), followed by African Americans (14 percent), Asian Americans and Pacific Islanders (9 percent), whites (9 percent), and English-speaking Hispanics (9 percent). A year after the intervention, 3.1 percent of the people who had read the English-language newspaper insert and had viewed the television piece were former smokers; this was true among all racial/ethnic minority groups except Spanish-speaking Hispanics. In comparison, 1.5 percent of the people who did not participate in the program were former smokers. By itself, neither the English-language television piece nor the newspaper insert was effective in promoting smoking cessation. Viewers of the Spanish-language television program, which used culturally appropriate materials, were more successful; 9 percent of viewers were former smokers at 12 months, compared with 2 percent of smokers who did not view the program.

A Su Salud (To Your Health)

A Su Salud was a mass media health promotion program conducted from 1985 through 1990 to reduce smoking among Mexican Americans residing along the U.S.-Mexico border in Eagle Pass and Del Rio, Texas (Ramirez and McAlister 1988; Amezcua et al. 1990). This mass media campaign used role models, an extensive media campaign, community volunteers, and behavioral modeling techniques grounded in the principles of Bandura's (1977) Social Learning Theory. It was modeled after a similar program implemented in North Karelia, Finland (McAlister et al. 1982; Puska et al. 1987). A Su Salud recruited individuals who wanted to quit smoking, organized focus groups to determine their needs and levels of awareness about tobacco use, and then featured community role models in a series of informational programs that were televised on local Spanish-language stations. The media messages were reinforced through a network of community volunteers who personally contacted the targeted population individually or in small groups. The volunteers delivered calendars with community events and stories about the role models. The program also produced *fotonovelas*—pictorial stories, presented in a comic-book format, which depicted smoking cessation behaviors.

The program resulted in a modest but notable increase in smoking cessation rates among community members. Out of the 17 percent of smokers who reported that they had quit smoking, 8 percent were verified (McAlister et al. 1992).

University of North Carolina/North Carolina Mutual Quit for Life Guide

The Quit for Life program used lay leaders to promote smoking cessation messages. The *Quit for Life Guide* was based on the ALA's Freedom from Smoking® for You and Your Family Project and targeted policyholders of the predominantly African American North Carolina Mutual Life Insurance Company (Schoenbach et al. 1988). The program was novel in that it was delivered by the company's life insurance sales agents, who discussed the health consequences of smoking with their customers and provided social support for quitting and avoiding relapse (Orleans et al. 1989). The Quit for Life program was moderately effective in promoting smoking cessation among the targeted low- to middle-income smokers. Over a two-year period, 2,042 smokers enrolled in the program. About 14.9 percent of the participants who received self-help materials, telephone counseling, and agent support quit smoking at 12 months, compared with 14.1 percent of the participants who received just self-help materials and agent support, and 12.3 percent of the control subjects, who received agent support only. Verifying these self-reported quit rates was impossible, however, because few respondents agreed to provide saliva samples for a cotinine test, which would have provided biochemical verification (Schoenbach et al. 1988).

In an eight-week follow-up study, the Quit for Life program targeted the insurance company's corporate employees in a large urban center. Preliminary results regarding policyholders in one sales district and lasting eight weeks showed that 8 of the 126 African American smokers enrolled in the program (6 percent) were nonsmokers six months after enrollment (Sandra W. Headen et al., unpublished data).

Legends

Beginning in 1993, the NMA and CDC began co-sponsoring the Legends campaign. Legends is the only national-level, mass media motivational campaign directed at African Americans who want to quit smoking. The campaign consists primarily of public service television and radio announcements that use famous African American leaders and historic figures, such as Martin Luther King, Jr., and Malcolm X, to motivate

smokers to quit. Individuals interested in quitting can request the *Pathways to Freedom* cessation guide by calling a toll-free telephone number; the Legends campaign generated more than 7,500 calls for the *Pathways to Freedom* guide within the first 18 months. The NMA has supported the campaign at the local level by promoting media and community outreach activities, including billboard advertisements, in 14 NMA-sponsored “Healthy People 2000” cities across the country.

Great American Smokeout

GAS is an annual ACS-sponsored event that encourages smokers to quit. The results of a 1991 Gallup poll indicated that smokers of various racial/ethnic minority groups may respond favorably to the GAS (CDC 1992). Fewer African Americans and Hispanics than whites reported being aware of the Smokeout. However, 25 percent of African Americans and Hispanics who were aware of the GAS reported participating in the project, and 14 percent of those who participated reported that they were not smoking cigarettes one to three days after the GAS (CDC 1992). The same poll estimated that during the 1991 GAS, approximately one-third of smokers in the United States participated, either by not smoking or by reducing the number of cigarettes they smoked (CDC 1992). Lieberman Research Inc. (1993) found that 26 percent of smokers from racial/ethnic communities (i.e., African Americans, Asian Americans, Hispanics, and others) participated in the 1993 GAS, compared with only 19 percent of white smokers. In interviews conducted 1 to 10 days after the GAS, however, similar proportions of racial/ethnic group members (18 percent) and whites (17 percent) reported that they had quit or that they were smoking less than before the GAS.

Suc Khoe La Vang! (Health is Gold!)

From 1990 to 1992, Suc Khoe La Vang! (Health is Gold!), the Vietnamese Community Health Promotion Project, conducted media-led smoking reduction campaigns targeting Vietnamese men in San Francisco and Alameda Counties and in Santa Clara County, California (McPhee et al. 1993, 1995; Jenkins et al. 1997). Both interventions used materials that were produced in Vietnamese. The programs included antitobacco counteradvertising campaigns that used billboard, print, and television advertisements; published articles in Vietnamese-language newspapers; a videotape that aired on Vietnamese-language television stations; health education materials such as brochures, a quit kit, posters, bumper stickers, and a calendar; a

continuing medical education course on smoking cessation counseling methods for Vietnamese physicians; and the distribution of printed “no smoking” signs and ordinances. Unlike the Santa Clara intervention, the San Francisco campaign was preceded by a 15-month pilot antitobacco media program and included a component for students and their families.

The evaluation of the programs showed that the Santa Clara intervention did not influence cigarette smoking prevalence or recent quitting status (quitting during the prior two years) (McPhee et al. 1995). However, a program effect was observed in the San Francisco trial, such that the odds of being a smoker were significantly lower and the odds of quitting recently were significantly higher in San Francisco than in a comparison community (Jenkins et al. 1997). The authors explained the difference in two ways, the longer duration of exposure to the antitobacco campaign in San Francisco (39 months) than in Santa Clara (24 months) and the added school- and family-based component of the San Francisco campaign.

Involvement of Health Care Providers

A number of successful smoking cessation approaches use health care providers, primarily physicians and dentists, to inform patients about the urgency of quitting smoking and to suggest quitting strategies (Health and Public Policy Committee 1986; Flay et al. 1992; Reid et al. 1992; NCI 1994; Fiore et al. 1996). Although this approach may be effective with members of the four racial/ethnic minority groups studied in this report—particularly those groups that exhibit high *power distance* (i.e., the respect for and deference to authority figures such as physicians, teachers, and older people) (Hofstede 1980)—a number of structural characteristics limit the usefulness of this approach. The most important limitation is that a large proportion of members of these racial/ethnic minority groups lack access to primary care providers. This problem has been widely documented among adult members of racial/ethnic groups (Aday et al. 1993) and adolescents (Lieu et al. 1993), such as among African Americans (Hopkins 1993) and Hispanics (Treviño et al. 1991; GAO 1992; Pierce et al. 1994b).

Data from the 1990 California Tobacco Survey showed that 46.9 percent of Hispanic smokers had not visited a physician in the 12 months before the survey, compared with 42.0 percent of Asian Americans and Pacific Islanders, 26.7 percent of African Americans, and 33.4 percent of whites (Burns and Pierce 1992). According to the 1992 NHIS data on

cigarette smokers, 37.6 percent of Hispanics, 26.1 percent of African Americans, and 29.2 percent of whites had not visited a physician during the year preceding the survey (Tomar et al. 1996). Data from the 1989 NHIS on the number of annual visits per person to the dentist showed that African American men (1.0 visits) and women (1.4 visits) made fewer visits than Hispanic men (1.5 visits) and women (1.7 visits) and white men (2.1 visits) and women (2.4 visits) (Bloom et al. 1992). Among smokers, national data collected in 1992 showed that 42.6 percent of African Americans, 39.3 percent of Hispanics, and 54.4 percent of whites had visited a dentist during the preceding year (Tomar et al. 1996). In addition, because many health care providers lack linguistic skills and training in cultural sensitivity, they tend to be ineffective advocates of smoking cessation among members of ethnic groups. Equally problematic is the fact that few physicians have the necessary training, feel qualified and supported, or express interest in recommending quitting to smokers (Kottke et al. 1994).

Available data indicate that a large proportion of health care providers, primarily physicians, do not take advantage of office visits to encourage smokers to quit. In general, members of racial/ethnic groups are less likely than whites to receive advice on quitting smoking from their physicians, and they are even less likely to receive such advice from their dentists (e.g., Kogan et al. 1994; Winkleby et al. 1995; Hymowitz et al. 1996). According to data from the 1992–1993 CPS, about 42.4 percent of Hispanics and 45.4 percent of African Americans who had visited a physician during the previous year reported that within that year they had received a physician's advice on quitting smoking, compared with 50.4 percent of whites (Table 5) (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). In general, women reported receiving a physician's advice in greater proportions than men. When asked if they had ever received a physician's advice on quitting smoking, only 39.8 percent of Hispanics said they had, compared with 47.2 percent of African Americans, 45.7 percent of Asian Americans and Pacific Islanders, 54.5 percent of American Indians and Alaska Natives, and 58.1 percent of whites. Results of the 1991 NHIS show that whereas 38.2 percent of whites reported receiving advice to quit from a physician or other health care professional at any visit during the preceding 12 months (CDC 1993a), a percentage significantly higher than for Hispanics (30.6 percent), such advice was received by 34.4 percent of African Americans, 41.4 percent of American Indians and Alaska Natives, and 34.4 percent of Asian Americans and Pacific Islanders. According to the 1992 NHIS data on cigarette smok-

ers who had visited a physician during the previous year, 55.5 percent of whites, 50.2 percent of African Americans, and 35.1 percent of Hispanics reported that a physician had advised them to quit smoking during the preceding year; among smokers who had visited a dentist during the previous year, 23.4 percent of whites, 26.3 percent of African Americans, and 27.2 percent of Hispanics reported that a dentist had advised them to quit during the preceding year (Tomar et al. 1996). Because questions were worded differently about advice from health care providers on quitting smoking, estimates based on data from the 1991 NHIS and the 1992 NHIS are not directly comparable and cannot be interpreted as indicating a secular trend. Findings from other surveys show that among African Americans, pregnant women are the most likely to receive smoking cessation advice and services in a health care setting (O'Campo et al. 1992; Tiedje et al. 1992).

Results from the 1992 California Tobacco Survey showed that among smokers who visited a physician in the previous year, 60.9 percent of Hispanics did not receive advice on quitting smoking, compared with 56.0 percent of African Americans and 47.8 percent of whites (Pierce et al. 1994b). These figures are comparable to those found in the Stanford Five-City Multifactor Risk Reduction Project, in which 63.4 percent of Hispanic smokers reported never being advised to quit smoking by their physician, compared with 45.9 percent of whites (Frank et al. 1991). These differences seem to be particularly notable among less educated Hispanics (Winkleby et al. 1995).

Despite these limitations, the use of health care providers to promote smoking cessation can have promising results (Royce et al. 1995). The CDC has funded the design of protocols that will prescribe strategies health care providers can use when counseling patients in smoking cessation, using the *Guía* for Hispanics and the *Pathways to Freedom* program for African Americans. In addition, the NCI has produced a number of publications reviewing this approach (NCI 1994) as well as training materials to teach health care personnel how to promote smoking cessation (Glynn and Manley 1992), and a recent publication has evaluated the effectiveness of various smoking cessation approaches available to primary care clinicians (Fiore et al. 1996).

For You and Your Family

The For You and Your Family project provides tobacco-use prevention services to racial/ethnic communities in health care settings. The project, sponsored by California's Department of Health Services, was

Table 5. Percentage of adult smokers who have received advice to quit smoking from either a medical doctor or a dentist, by race/ethnicity and gender, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI*	%	±CI	%	±CI	%	±CI	%	±CI
Received advice from a medical doctor in past year[†]										
Total	45.4	1.7	48.3	6.2	49.6	5.3	42.4	2.6	50.4	0.7
Men	42.5	2.6	45.2	9.0	50.1	6.8	39.6	3.6	48.8	1.0
Women	47.3	2.2	51.0	8.5	48.8	8.6	45.5	3.8	51.7	0.9
Received advice from a medical doctor ever										
Total	47.2	1.4	54.5	5.3	45.7	4.1	39.8	2.0	58.1	0.6
Men	40.5	2.1	50.4	7.5	43.7	4.8	33.2	2.5	53.1	0.8
Women	53.1	2.0	58.6	7.4	50.4	7.5	50.0	3.3	63.1	0.8
Received advice from a dentist in past year[‡]										
Total	20.6	1.8	21.1	6.3	30.5	5.0	22.6	2.6	19.6	0.6
Men	22.0	2.8	28.5	10.1	36.3	6.4	23.3	3.6	21.4	0.9
Women	19.6	2.3	14.2	7.5	19.3	7.3	21.7	3.7	18.0	0.8
Received advice from a dentist ever										
Total	14.7	1.0	18.2	4.1	24.9	3.5	16.7	1.6	18.6	0.4
Men	15.4	1.5	21.2	6.1	26.7	4.3	15.7	2.0	19.4	0.6
Women	14.1	1.4	15.2	5.4	20.8	6.1	18.2	2.6	17.8	0.6

*95% confidence interval.

[†]Among persons who visited a medical doctor during the past year.[‡]Among persons who visited a dentist during the past year.

Source: U.S. Bureau of the Census, National Cancer Institute Tobacco Use Supplement, public use data tapes, 1992–1993.

developed recently by a team of California researchers. This multicultural perinatal project seeks to reduce cigarette smoking among pregnant women and to limit their exposure to ETS. The project includes a trainer's guide, a health care provider's guide, and targeted client education materials for African Americans, American Indians, Hispanics, and Asian Americans (i.e., Cambodians, Chinese, Koreans, and Laotians). Materials for clients differ in their content and format, depending on the racial/ethnic group being targeted; the materials range from a brochure for African Americans entitled *Hey, Girlfriend, Let's Talk About Smoking and You* to a four-color magazine entitled *La Mujer: La Familia y el Cigarrillo*, which

motivates Hispanic women to quit and provides suggestions and techniques for quitting and maintaining abstinence (Otero-Sabogal and Sabogal 1991).

The importance of developing smoking cessation programs for pregnant women of various races/ethnicities has been documented recently among American Indians (Bulterys et al. 1990). By using statistical models with information on the health status of American Indians in the Aberdeen IHS area, Bulterys and colleagues found that by quitting smoking, American Indian pregnant women would prevent 2.6 percent of all infant deaths, 3.7 percent of postneonatal deaths, and 1.2 percent of neonatal deaths.

American Indian Cancer Control Project

The American Indian Cancer Control Project in California used self-help techniques, individual counseling, and cultural interventions to help American Indian smokers quit. Access to American Indians over the age of 18 years was facilitated through 18 northern California clinics owned and operated by American Indians. Fourteen rural clinics located on or near reservations and four urban clinics participated in the project. The project has been testing a clinic-based, physician-initiated message enhanced by using American Indian community health representatives who also provide outreach support. Recent data indicate that the clinic-based procedures were an acceptable and accessible means of reaching the American Indian population in northern California (Hodge et al. 1995, 1996). Evidence from this project suggests the need for culturally appropriate smoking cessation programs (Hodge et al. 1995).

Involvement of Employers

Employer-provided smoking cessation programs could help to lower the prevalence of smoking, yet very few individuals report having such programs available to them. Data from the 1992–1993 CPS showed that 23.6 percent (95 percent confidence interval [CI] = ± 0.9 percent) of African Americans reported having such services at work, compared with 22.4 percent (CI ± 0.3 percent) of whites, 21.8 percent (CI ± 1.8 percent) of Asian Americans and Pacific Islanders, 18.8 percent (CI ± 3.6 percent) of American Indians and Alaska Natives, and 15.8 percent (CI ± 0.9 percent) of Hispanics (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). Among smokers, 25.0 percent (CI ± 1.8 percent) of African Americans, 19.7 percent (CI ± 0.6 percent) of whites, 18.4 percent (CI ± 4.1 percent) of Asian Americans and Pacific Islanders, 17.7 percent (CI ± 5.8 percent) of American Indians and Alaska Natives, and 14.3 percent (CI ± 1.9 percent) of Hispanics reported having access to employer-provided smoking cessation services (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993).

Involvement of Nontraditional Providers

Community members who traditionally have not been perceived as health promoters also have become involved in tobacco control efforts. For example, African American religious leaders have been involved

in tobacco control efforts as well as in other health promotion activities, such as the National High Blood Pressure Education Program (1992). These ministers and pastors carry great influence among African Americans and are responsible for dictating social and moral values. In addition, the church often has been central in mobilizing African American communities around issues of social justice. Examples of tobacco control efforts involving community members, including religious leaders, are presented in this section. Unfortunately, little evidence is available about the success or effectiveness of this type of intervenor.

Heart, Body, and Soul is a church-based intervention in east Baltimore, Maryland, a predominantly (88 percent) African American community (Stillman et al. 1993; Voorhees et al. 1996). Focus groups conducted before the intervention revealed that African American smokers were knowledgeable of the health risks of smoking but knew few strategies beyond quitting cold turkey. The smokers perceived little support for quitting from their friends and family, with the exception of their children, who tended to be strong motivators to quit smoking. The smokers participating in the focus groups did not approve of nicotine replacement and viewed it as substituting one addiction for another. The intervention phase of the study emphasized the importance of self-efficacy to promote behavior change and social actions that promote large, systemic, social changes as a strategy for affecting individual behavior. The project was carried out through a partnership with the local ministerial alliance. Of 130 churches in the area, 22 participated in the intervention.

After introductory activities, which included a health fair, churches were randomly assigned to receive either an intensive smoking cessation intervention or the minimal level of activity, which involved distribution of the ALA educational brochure *Don't Let Your Dreams Go Up in Smoke* (ALA 1990a). Churches participating in the intervention received the same brochure but also were involved in the following activities: (1) training of smoking cessation specialists, who conducted weekly support groups with a spiritual overtone; (2) a kickoff service that included an inspirational sermon, distribution of *One Day at a Time* (a Scripture-based book of inspirational messages for smokers), and an inspirational audiocassette on quitting smoking; and (3) reinforcement of successful quitting through recognition during church services and the provision of certificates to volunteers participating in the program. The program is now being extended to churches in 13 cities throughout the country. As a result of this program, a number of African American clergy have formed a coalition, Black Clergy

for Substance Abuse Prevention, to implement tobacco control programs and other substance abuse prevention efforts. The coalition is affiliated with the National Association of African Americans for Positive Imagery (NAAAPI). A recent study showed that church-based programs can be effective in moving individuals along the continuum of change toward quitting smoking (Schorling et al. 1997).

Innovative programs are also under way in California. In San Diego, the Union of Pan Asian Communities of San Diego County delivers antismoking messages through fortune cookies (Irene Linayao-Putman, personal communication, 1993). The St. Mary Medical Center and the United Cambodian Community, Inc., in Long Beach, California, developed audiocassettes that feature traditional Laotian and Cambodian music as well as antismoking messages. These audiocassettes are distributed through racial/

ethnic shops, health fairs, and other community events. Barbers and beauty parlor operators also have been trained to provide antismoking messages to their clients in small community programs in California and other states.

Although not all of these smoking cessation interventions are culturally appropriate, preliminary figures on the overall effectiveness of these massive interventions show that progress is being made in a number of areas. In California, for example, the overall prevalence of smoking has declined, more smoking cessation services are available, people are more aware of the dangers of cigarette smoking, and increases in adolescent smoking appear to have stopped (Breslow and Johnson 1993; Pierce et al. 1994b; Elder et al. 1996). These results are true for members of racial/ethnic minority groups as well as for whites.

Environmental Tobacco Smoke and Clean Indoor Air Policies

A large number of individuals from racial/ethnic groups work in the service industry (e.g., restaurants) and in blue-collar jobs (e.g., factories and repair shops)—areas of employment where cigarette smoking usually is allowed. Thus, they are probably heavily exposed to ETS.

Although the data are incomplete, a few studies indicate the extent to which nonsmokers, particularly those who are members of racial/ethnic groups, are exposed to ETS. Data from the 1993 California Tobacco Survey showed that 32.0 percent of nonsmoking Hispanics were exposed to ETS at indoor workplaces, compared with 19.1 percent of African Americans and 19.0 percent of whites (Pierce et al. 1994b).

Exposure to ETS at home is also a concern among members of racial/ethnic groups. Data from the 1992–1993 CPS (Table 6) showed that a majority of Asian Americans and Pacific Islanders (60.6 percent) and Hispanics (56.6 percent) did not allow cigarette smoking in their homes (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). In comparison, smaller proportions of whites (41.3 percent), African Americans (38.9 percent), and American Indians and Alaska Natives (35.6 percent) reported that they prohibited smoking at home. Minor gender differences were observed in the reporting

of such restrictions. Other surveys indicate that exposure to tobacco smoke at home is a valid concern.

An analysis of data from the Hispanic Health and Nutrition Examination Survey indicates that 31 to 62 percent of Mexican American nonsmoking women had household exposure to ETS (Pletsch 1994). In addition, 22 to 59 percent of Puerto Rican women and 40 to 53 percent of Cuban American women had such exposure.

In recent years, businesses and governments have adopted policies, laws, and ordinances that limit cigarette smoking in public places and in workplaces (Rigotti and Pashos 1991). The effects of these policies can be expected to benefit all U.S. residents, including members of racial/ethnic minority groups. In addition, systemwide antismoking policies are being promulgated. For example, no-smoking policies have been implemented in a number of federal workplaces, including IHS hospitals and clinics and Department of Defense installations. States have also been restricting smoking at a fairly rapid pace by banning smoking on public transportation vehicles as well as in health care offices and facilities, airports, other public buildings, and elevators (O'Connor 1992). A number of states also restrict smoking in indoor cultural and recreational facilities, including libraries, museums,

Table 6. Percentage of adults who reported that no one is allowed to smoke anywhere inside the home,* by race/ethnicity, smoking status, and gender, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Overall										
Total	38.9	0.7	35.6	3.2	60.6	1.6	56.6	0.9	41.3	0.3
Men	37.7	1.1	34.1	4.7	57.9	2.3	54.3	1.3	41.2	0.4
Women	39.6	0.9	36.8	4.3	63.2	2.2	58.5	1.2	41.4	0.4
Nonsmokers										
Total	49.9	0.9	53.4	4.2	67.3	1.6	64.5	1.0	51.7	0.3
Men	50.2	1.4	54.1	6.6	66.7	2.5	63.6	1.5	51.6	0.5
Women	49.8	1.1	52.9	5.5	67.8	2.2	65.2	1.2	51.8	0.4
Smokers										
Total	7.4	0.8	7.9	2.9	25.2	3.5	21.6	1.7	10.1	0.3
Men	9.2	1.2	8.7	4.2	28.5	4.4	26.7	2.4	12.4	0.5
Women	5.9	0.9	7.1	3.9	17.5	5.7	13.9	2.3	7.8	0.4

*Includes persons who reported having a rule that no one is allowed to smoke anywhere inside the home.

†95% confidence interval.

Source: U.S. Bureau of the Census, National Cancer Institute Tobacco Use Supplement, public use data tapes, 1992–1993.

theaters, galleries, shopping malls, sports arenas, and auditoriums. An ever-increasing number of states have restricted smoking in schools and on school grounds for students, school personnel, and other persons with access to the school; 27 states restrict smoking in child day-care centers. As of December 31, 1997, 41 states have some kind of restriction on smoking in government worksites, 21 have restrictions on smoking in private worksites, and 31 restrict smoking in restaurants (CDC, Office on Smoking and Health, State Tobacco Activities Tracking and Evaluation System, unpublished data).

An increasing number of employers are also restricting cigarette smoking. In the 1992–1993 CPS, a substantial proportion of respondents reported that their employers had policies prohibiting cigarette smoking in work areas and in indoor public areas, such as lobbies, rest rooms, and lunch rooms. Gerlach and colleagues (1997) used data from the 1992–1993 NCI Tobacco Use Supplement to the CPS to document the prevalence and restrictiveness of workplace smoking policies reported by African Americans, Asian Americans and Pacific Islanders, Hispanics, and whites who were employed in indoor workplaces. Their data

showed that 43.3 percent of African Americans, 51.4 percent of Asian Americans and Pacific Islanders, 45.1 percent of Hispanics, and 46.2 percent of whites worked for employers who provided smoke-free policies. In all four groups, women were more likely than men to be protected by smoke-free policies. Overall, about one-third of employees worked in places that either had no policy on smoking or allowed smoking in private work areas. These minimal policies were reported by 33.9 percent of African Americans, 29.7 percent of Asian Americans and Pacific Islanders, 37.3 percent of Hispanics, and 35.6 percent of whites. This report did not present data on American Indians and Alaska Natives.

Members of the racial/ethnic minority groups considered in this report tend to favor restrictions on tobacco smoking (see Royce et al. 1993 for data on African Americans). In the 1992–1993 CPS, Asian Americans and Pacific Islanders and Hispanics were generally more likely to support the total restriction of cigarette smoking in restaurants, hospitals, indoor workplaces, and indoor shopping malls (Table 7) (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). Smokers were more

likely to agree with partial restrictions of cigarette smoking (limiting smoking to some areas within each enclosed space) than to support the total restriction of cigarette smoking in each of the public places included in the CPS. Results of an ABC News/*The Washington Post* poll conducted in February 1993 showed that larger proportions of African Americans (54.3 percent) and Hispanics (52.9 percent) favored banning smoking in public places, compared with whites (48.3 percent) (Roper Center for Public Opinion Research 1993). The same poll showed that fairly similar proportions of Hispanics (87.9 percent), African Americans (84.3 percent), and whites (84.1 percent) felt that ETS was a health risk. However, Hispanics (50.8 percent) and African Americans (44.2 percent) reported worrying more about ETS than whites (34.4 percent).

Data from the 1992 California Tobacco Survey showed that members of racial/ethnic groups had limited support for the complete ban of cigarette smoking in restaurants and in workplaces (Pierce et al. 1994a). For example, smoking bans in restaurants drew support from 53.5 percent of Hispanics, 41.9 percent of African Americans, 35.0 percent of Asian Americans and Pacific Islanders, and 34.7 percent of whites. The data on smoking bans in the workplace were similar. Hispanics (54.5 percent) were more likely to support banning cigarette smoking in the workplace than were Asian Americans and Pacific Islanders (43.5 percent), African Americans (40.2 percent), and whites (34.4 percent).

More recently, findings from a 1993 survey indicate that residents of eight California cities (Fresno, Hercules, Indio, Los Angeles, Paradise, Sacramento, San Bernardino, and San Diego) significantly supported strong ETS controls (Sherwood et al. 1994). In this 1993 survey, 78 percent of whites supported a complete ban on smoking in restaurants, compared with 91.4 percent of Asian Americans, 89.5 percent of Hispanics, 82.6 percent of American Indians, and 82.5 percent of African Americans. In addition, 84.5 percent of whites strongly supported a complete ban on smoking in the workplace, compared with 93.5 percent of Asian Americans, 92.0 percent of Hispanics, 87.9 percent of African Americans, and 85.6 percent of American Indians.

The degree to which existing no-smoking policies are enforced in racial/ethnic communities is unknown. In a recent survey of 39 American Indian tribes, Glasgow and colleagues (1995) found significant intertribal variations in the types of policies and places covered by clean indoor air policies. For

example, 64 percent of the tribes reported having a no-smoking policy that designated tribal schools, council meeting areas, and private offices as nonsmoking areas, but none banned smoking in bingo halls. Those tribes that received a specially developed policy workbook and direct consultation on ways to implement tobacco control policies were found to have adopted stringent policies within two years of having received the intervention materials (Lichtenstein et al. 1995). A recent observational study of American Indian facilities in California, Idaho, New Mexico, New York, Oregon, and Washington found that smoking policies and practices varied considerably across settings (Hall et al. 1995). Tribal schools and Indian health care facilities had the most restrictive policies. Tribal council meeting areas and private offices were less likely to be designated nonsmoking areas. No-smoking signs were observed most frequently in clinics (46 percent) and tribal offices (37 percent); no-smoking posters also were prominent in clinics (49 percent). Evidence of smoking (e.g., persons smoking, cigarette stubs, and ashtrays) was observed most frequently in tribal offices and cultural centers or community buildings (Hall et al. 1995).

A number of programs have tried to promote clean indoor air policies and practices among members of the racial/ethnic minority groups included in this report, but little information is available on their effectiveness. For example, Asian Americans for Community Involvement of Santa Clara County, based in San Jose, California, has targeted 400 Asian American restaurants and businesses to encourage them to have smoke-free areas. However, the researchers had difficulties assuring Asian American merchants that providing smoke-free areas would be good for business (Jung 1993).

Among American Indians, efforts have been made to help various tribes develop comprehensive smoke-free programs. For example, Glasgow and colleagues (1995) worked with 39 tribes in Washington, Oregon, and Idaho to review, modify, and develop tobacco-use policies that would protect tribal members from ETS. Tobacco policy committees were established to advise tribes during the policymaking process. A tobacco policy workbook also was developed to guide the tribes. Although tribal leaders expressed support for more stringent tobacco-use policies, changes in tobacco policies were not produced through the tobacco policy committees as the project had originally planned.

Table 7. Percentage of adults who think that smoking should be allowed in some areas or not allowed at all in selected public locations,* by race/ethnicity and smoking status, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Restaurants (allowed in some areas)										
Total	50.8	0.7	52.4	3.3	42.1	1.6	38.1	0.9	52.9	0.3
Nonsmokers	44.3	0.9	39.1	4.1	37.6	1.7	33.5	0.9	44.4	0.3
Smokers	69.5	1.3	73.4	4.7	66.4	3.9	58.8	2.1	78.6	0.5
Hospitals (allowed in some areas)										
Total	22.8	0.6	26.6	2.9	12.8	1.1	12.9	0.6	25.8	0.2
Nonsmokers	18.5	0.7	15.6	3.1	11.2	1.1	10.5	0.6	19.0	0.3
Smokers	35.0	1.4	44.3	5.3	21.7	3.4	23.4	1.8	46.3	0.6
Indoor work areas (allowed in some areas)										
Total	39.3	0.7	43.9	3.3	24.7	1.4	25.8	0.8	40.7	0.3
Nonsmokers	32.6	0.8	30.1	3.9	21.0	1.4	21.6	0.8	32.4	0.3
Smokers	58.5	1.4	65.8	5.0	44.3	4.1	44.1	2.1	65.5	0.5
Restaurants (not allowed)										
Total	45.3	0.7	42.5	3.3	54.5	1.6	58.8	0.9	43.1	0.3
Nonsmokers	53.0	0.9	58.7	4.2	59.8	1.7	64.2	1.0	52.9	0.3
Smokers	23.5	1.2	16.9	4.0	25.9	3.6	34.9	2.0	13.6	0.4
Hospitals (not allowed)										
Total	75.3	0.6	71.3	3.0	85.1	1.1	85.7	0.6	72.5	0.3
Nonsmokers	80.0	0.7	83.5	3.2	86.9	1.2	88.3	0.6	79.9	0.3
Smokers	62.0	1.4	51.8	5.3	75.8	3.5	74.2	1.8	50.6	0.6
Indoor work areas (not allowed)										
Total	57.0	0.7	52.2	3.3	71.8	1.4	70.9	0.8	55.7	0.3
Nonsmokers	64.6	0.8	68.3	4.0	75.8	1.5	75.7	0.9	65.1	0.3
Smokers	35.6	1.4	26.5	4.7	50.5	4.1	50.3	2.1	27.6	0.5

*In response to the question about each place, “Do you think that smoking should be allowed in all areas, in some areas, or not allowed at all?”

†95% confidence interval.

Source: U.S. Bureau of the Census, National Cancer Institute Tobacco Use Supplement, public use data tapes, 1992–1993.

Table 7. Continued

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI	%	±CI	%	±CI	%	±CI	%	±CI
Bars and cocktail lounges (allowed in some areas)										
Total	44.2	0.7	36.6	3.2	45.7	1.6	38.8	0.9	44.0	0.3
Nonsmokers	44.2	0.9	38.5	4.1	46.4	1.8	39.0	1.0	44.9	0.3
Smokers	44.3	1.4	33.3	5.0	42.2	4.0	37.8	2.0	41.3	0.6
Indoor sporting events (allowed in some areas)										
Total	30.3	0.7	25.8	2.9	23.0	1.4	22.4	0.7	28.7	0.3
Nonsmokers	27.1	0.8	17.9	3.3	21.1	1.4	20.2	0.8	23.9	0.3
Smokers	39.2	1.4	38.2	5.2	32.8	3.8	31.9	1.9	43.3	0.6
Indoor shopping malls (allowed in some areas)										
Total	39.9	0.7	40.8	3.3	32.3	1.5	28.2	0.8	41.6	0.3
Nonsmokers	35.7	0.8	31.7	4.0	29.1	1.6	25.2	0.9	35.2	0.3
Smokers	51.7	1.4	54.8	5.3	49.5	4.1	41.3	2.1	61.2	0.6
Bars and cocktail lounges (not allowed)										
Total	25.6	0.6	22.2	2.8	29.8	1.5	31.3	0.8	22.6	0.2
Nonsmokers	31.8	0.8	33.2	4.0	33.5	1.7	35.6	1.0	28.8	0.3
Smokers	8.1	0.8	5.2	2.4	9.6	2.4	12.1	1.4	4.0	0.2
Indoor sporting events (not allowed)										
Total	64.5	0.7	68.2	3.1	72.3	1.4	72.9	0.8	65.9	0.3
Nonsmokers	68.9	0.8	79.3	3.4	74.8	1.5	75.8	0.9	72.3	0.3
Smokers	52.5	1.4	50.5	5.3	59.5	4.0	60.0	2.0	46.5	0.6
Indoor shopping malls (not allowed)										
Total	54.4	0.7	52.3	3.3	62.7	1.6	67.2	0.8	52.6	0.3
Nonsmokers	59.7	0.8	65.2	4.0	66.5	1.7	70.8	0.9	60.6	0.3
Smokers	39.7	1.4	32.3	5.0	42.7	4.0	51.3	2.1	28.6	0.5

Economic Efforts to Reduce Tobacco Use

Numerous efforts have been made to reduce the use of cigarettes through excise and sales taxes. Because these taxes increase the price of cigarettes, higher tax rates generally curb the demand for cigarettes, and ultimately, tobacco consumption (Grossman 1989; Peterson et al. 1992; Keeler et al. 1993; Townsend et al. 1994). Peterson and colleagues (1992) evaluated the effects of state cigarette tax increases on cigarette sales in the 50 states from 1985 through 1988. The researchers found that state cigarette tax increases were associated with an average decline in cigarette consumption of three cigarette packs per capita (a decline of about 2.4 percent). Likewise, larger tax increases were associated with larger declines in consumption. In a recent study in Britain, Townsend and colleagues (1994) found that individuals of low-socioeconomic status were more responsive to changes in the price of cigarettes than those who were more affluent.

As of June 30, 1996, all states, the District of Columbia, and 451 localities currently impose taxes on cigarettes in addition to the federal tax (Tobacco Institute 1997). As of December 31, 1997, state taxes ranged from a low of 2.5 cents in Virginia to a high of \$1 in Alaska; the average state tax was 37.76 cents per pack (CDC, Office on Smoking and Health, State Tobacco Activities Tracking and Evaluation System, unpublished data).

Members of some racial/ethnic minority groups have supported increases in taxes for tobacco products. In a 1990 survey of California smokers, 29.1 percent of African American smokers and 34.5 percent of Hispanic smokers reported that they would support a cigarette tax increase (Burns and Pierce 1992). A much smaller proportion of whites who smoke (20.0 percent) supported such an increase. Recently, larger proportions of California adults have supported an increase in cigarette taxes. The 1992 California Tobacco Survey among both smokers and nonsmokers found that cigarette tax increases were supported by 60.2 percent of Asian Americans and Pacific Islanders, 50.4 percent of Hispanics, 49.5 percent of African Americans, and 49.8 percent of whites (Pierce et al. 1994a). Furthermore, a 1993 nationwide survey conducted for the ACS found that Hispanics (71 percent) and African Americans (63 percent) supported an increase of \$2 per pack to pay for a national health insurance program (Marttila & Kiley, Inc. 1993). These proportions were fairly similar to those found among whites (66 percent).

Although tobacco taxes are effective in discouraging smoking, some people consider increases in excise taxes to be regressive because the poorer members of society pay a higher proportion of their income in taxes. Wasserman (1992), for example, states:

With respect to excise tax increases, however, we must be mindful of the distributional consequences of higher taxes. More precisely, because low-income smokers do not appear to be any more responsive to higher cigarette prices than high-income smokers, higher excise taxes will result in disproportionate economic harm, and, in some cases, could lead poorer smokers to forgo food, shelter, and needed health care to fulfill the persistent and pernicious demands of their smoking habits. As a result, higher cigarette taxes should be accompanied by measures to compensate the poor for the larger burden that they will necessarily have to bear. For example, federal and state income tax structures could be modified to facilitate such compensation (p. 20).

A 1990 federal government report supported this argument by presenting data from the 1984–1985 Consumer Expenditure Survey Interview showing that families in the lowest income quintile spent 4 percent of their posttax income on tobacco products, compared with families in the highest quintile, who spent 0.5 percent of their posttax income on tobacco products (U.S. Congressional Budget Office 1990). On the other hand, some argue that the hardship of increased taxes on the poor is outweighed by the fact that smoking-related health costs and suffering decline among persons who smoke fewer cigarettes or stop smoking because of the higher taxes on tobacco. A group of economists meeting in 1995 concluded that additional research on costs is needed before an optimal cigarette excise tax from an economic perspective can be determined (Warner et al. 1995). These economists agreed that the strongest argument currently for increasing cigarette taxes is the protection of children.

The actual effects of excise tax initiatives on members of racial/ethnic minority groups are difficult to ascertain. Nevertheless, reductions in the consumption of tobacco products resulting from increases in excise taxes should ultimately benefit members of U.S. racial/ethnic groups by lowering their prevalence of

cigarette smoking and by limiting or lowering their exposure to ETS. California's experience after increasing the tax on cigarettes shows that a number of community-based projects, school-based interventions, and research activities, which directly benefit members of the racial/ethnic groups and could not have been funded from other sources of tax revenue, can be

funded through the revenue generated by the increased taxes (Breslow and Johnson 1993). In addition, given the need to help community-based programs and organizations rely less on tobacco industry support (Satcher and Robinson 1994), earmarked tax revenues may prove to be a viable alternative.

Efforts to Control Tobacco Advertising and Promotion

Tobacco products are heavily advertised in racial/ethnic publications and in racial/ethnic communities. Efforts to restrict the effects of advertising and promotion of tobacco products in racial/ethnic communities have been limited by various factors, including the communities' reliance on the tobacco industry (see Chapter 4), difficulties in mobilizing communities that are faced with problems perceived to be in need of more immediate attention (e.g., affordable housing, unemployment, unequal education, and racial/ethnic minority discrimination), the lack of trained community leaders interested in health issues, and possibly the lack of infrastructure for tobacco prevention and control initiatives in racial/ethnic communities (Robinson et al. 1995). As a result, persons residing in racial/ethnic communities are continually exposed to the advertising and promotion of tobacco products. A recent study in Los Angeles County, for example, examined the risk of exposure to outdoor advertising of cigarettes among residents of various communities (Ewert and Alleyne 1992). The results suggest that persons residing in the city of Los Angeles were more likely to be exposed to cigarette and alcohol billboard advertisements than residents of nearby suburbs. Cigarettes were advertised on 59 of the 299 billboards (19.7 percent) surveyed on 46.2 miles of streets. The number of cigarette advertisements was 4.6 times greater in the city of Los Angeles than in its suburbs.

Members of some racial/ethnic minority groups tend to be more likely than whites to support a ban on tobacco product advertisements (Table 8). Data from the 1992–1993 CPS showed that 37.5 percent of whites supported a ban on advertising tobacco products, compared with 44.7 percent of Hispanics, 39.5 percent of Asian Americans and Pacific Islanders, and 38.3 percent of African Americans (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). In each racial/ethnic group, women and

nonsmokers were more supportive of a total ban on tobacco advertising than were men and smokers. The 1992 California Tobacco Survey found that adult Californians supported the banning of such advertising in newspapers and magazines as well as on billboards (Table 9) (Pierce et al. 1994a). The same survey also showed support for banning tobacco companies from sponsoring cultural events. Hispanics tend to show the greatest level of support for these measures, whereas whites support them the least. Data from the 1992–1993 CPS also showed that fairly large percentages of racial/ethnic group members would support a ban on the free distribution of tobacco samples (Table 10) (U.S. Bureau of the Census, NCI Tobacco Use Supplement, public use data tapes, 1992–1993). Hispanics (59.4 percent) and Asian Americans and Pacific Islanders (57.5 percent) were the most likely respondents to state that they supported such a ban. In all groups, women and nonsmokers were more likely than men and smokers to favor the ban.

The 1994 RWJF Youth Access Survey (Table 4) found varying support for restricting or banning different types of tobacco advertising. Hispanics and African Americans were more likely than whites to support such proposals (Nancy Kaufman et al., unpublished data). Hispanics were more supportive of bans on billboard, newspaper, and magazine advertising than were African Americans and whites. Requiring plain packaging of tobacco products (brand name and warning label in black letters on white background) was supported substantially more by Hispanics than by African Americans or whites.

In recent years, the tobacco industry has shifted expenditures for advertising to promotional marketing, with 89 percent of 1995 expenditures devoted to nonadvertising promotions (Federal Trade Commission 1997). The RWJF Youth Access Survey found that broad-based support exists for eliminating coupon

Table 8. Percentage of adults who think that the advertising of tobacco products should be always allowed or not allowed at all,* by race/ethnicity, smoking status, and gender, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Total										
Always	17.3	0.6	21.5	2.7	12.6	1.1	13.7	0.6	21.4	0.2
Not at all	38.3	0.7	36.6	3.2	39.5	1.6	44.7	0.9	37.5	0.3
Men										
Always	19.8	0.9	24.0	4.2	15.6	1.7	16.8	1.0	25.5	0.4
Not at all	35.2	1.1	30.5	4.5	35.9	2.2	39.2	1.3	32.9	0.4
Women										
Always	15.7	0.7	19.4	3.5	9.7	1.3	11.2	0.8	17.9	0.3
Not at all	40.3	0.9	41.6	4.4	43.0	2.2	49.2	1.2	41.5	0.4
Nonsmokers										
Always	13.6	0.6	13.0	2.9	10.5	1.1	11.4	0.6	16.7	0.2
Not at all	42.2	0.8	44.3	4.2	41.8	1.7	47.8	1.0	42.0	0.3
Men										
Always	16.5	1.0	15.6	4.8	13.4	1.8	14.0	1.1	20.7	0.4
Not at all	38.3	1.4	38.1	6.4	38.3	2.5	42.3	1.5	37.0	0.5
Women										
Always	11.8	0.7	11.2	3.5	8.2	1.3	9.6	0.8	13.4	0.3
Not at all	44.5	1.1	48.7	5.6	44.7	2.4	51.6	1.3	46.3	0.4
Smokers										
Always	28.2	1.3	34.7	5.1	23.7	3.5	24.0	1.8	35.6	0.5
Not at all	27.2	1.3	24.3	4.6	27.5	3.6	31.1	1.9	23.9	0.5
Men										
Always	27.5	1.9	34.8	7.1	23.2	4.1	25.4	2.3	38.8	0.8
Not at all	28.1	1.9	20.1	6.0	28.1	4.4	29.9	2.5	21.5	0.7
Women										
Always	28.7	1.8	34.5	7.2	25.0	6.5	21.9	2.8	32.4	0.7
Not at all	26.5	1.7	28.5	6.8	26.1	6.6	32.9	3.1	26.2	0.7

*In response to the question, "Do you think advertising of tobacco products should be always allowed, allowed under some conditions, or not allowed at all?"

†95% confidence interval.

Source: U.S. Bureau of the Census, National Cancer Institute Tobacco Use Supplement, public use data tapes, 1992–1993.

promotions, such as promotional gear or free cigarettes by mail (Nancy Kaufman et al., unpublished data). Hispanics continue to be more supportive of promotional bans than non-Hispanics, with 89.8 percent of Hispanics supporting elimination of coupons for obtaining free cigarettes by mail, compared with 79.5 percent of African Americans and 80.4 percent of whites. In addition, 82.4 percent of Hispanics favor elimination of cigarette pack coupons that can be exchanged for promotional items such as clothing, compared with 76.5 percent of African Americans and 67.8

percent of whites. The public is more ambivalent about not allowing tobacco company sponsorship of sporting or entertainment events in which their cigarette brand names are featured during television broadcasts. Hispanics were more supportive of such a ban than were African Americans and whites (Table 4).

Racial/ethnic minority communities have begun to respond to the tobacco industry's targeted advertising and marketing efforts by mobilizing against the industry. The strong community response in Philadelphia against the planned introduction of Uptown

Table 9. Percentage of Californians* who support curtailment of tobacco advertising and promotion efforts, by race/ethnicity, 1992

Curtailment	African Americans	Asian Americans/ Pacific Islanders	Hispanics	Whites
Ban advertising in newspapers and magazines	60.2	51.2	74.7	47.7
Ban advertising on billboards	64.9	57.6	78.1	54.9
Ban sponsorship of sporting or cultural events	63.7	59.4	70.1	50.7

*Data on American Indians and Alaska Natives are not reported because of small sample size.
Source: Pierce et al. 1994a.

cigarettes, a brand targeting African Americans, resulted in the cancellation of the test marketing of the cigarette by its producers and a renewed interest in tobacco control efforts among African Americans in Philadelphia (see Chapter 4). The Coalition Against Uptown Cigarettes, which led the campaign, succeeded by building on previous efforts by Philadelphia organizations and individuals to control tobacco use among the city's African Americans. These organizations include some African American clergy as well as voluntary associations, particularly the ALA and the ACS, the Fox Chase Cancer Center, the local Committee to Prevent Cancer among Blacks, and the Philadelphia chapter of the National Black Leadership Initiative on Cancer (NBLIC). Indeed, the NBLIC in Philadelphia served as a common meeting ground for leaders from various agencies and provided opportunities for the development of mutual trust needed during the campaign. The NBLIC had been formed several years before under the leadership of Louis W. Sullivan, M.D., then and now president of Morehouse School of Medicine. Subsequently, Dr. Sullivan provided strong support to the coalition's efforts in his role as Secretary of Health and Human Services. The fact that the Uptown coalition was led by African Americans in this historic benchmark in the tobacco control movement was central to its ultimate success. Moreover, the participation of Philadelphia's African American clergy and the participation of an African American minister as a key coalition spokesperson were critical in obtaining community support for the Coalition Against Uptown Cigarettes. This support added to the campaign's credibility and guaranteed its success as a grassroots communications vehicle.

The experience of the Coalition Against Uptown Cigarettes is significant not only for the result it

achieved but also because it provides a case study in community mobilization. The coalition focused its efforts primarily on African Americans—both smokers and nonsmokers—with the goal of derailing the introduction of Uptown cigarettes by convincing smokers to refuse to sample the new brand. To accomplish this, the coalition crafted messages that targeted R.J. Reynolds rather than smokers. In addition, the coalition aimed at forming a partnership among African American smokers and nonsmokers around the issue of limiting minors' access to this new tobacco product. Also central to the success of the Coalition Against Uptown Cigarettes was its strategic use of mass media (Robinson and Sutton, in press). Coalition leaders expanded the debate beyond health; identified the tobacco industry's major positions related to economics, civil rights, and self-determination; and developed specific counterarguments. For example, when tobacco industry supporters argued that tobacco control advocates were taking away smokers' right of free choice, coalition spokespersons countered by stating that the community had not asked for Uptown cigarettes, that excessive billboard advertising of cigarettes in African American communities did indeed take away choices, that smokers had the right to choose to reject Uptown cigarettes, and that communities had the right to choose what products entered their neighborhoods.

Another example of community mobilization in tobacco control occurred early in 1995, when a new mentholated cigarette brand named "X" being marketed in Boston was withdrawn by its manufacturer and distributor after protests by the African American community, led by the NAAAPI and Boston-based Churches Organized to Stop Tobacco (COST) (Jackson 1995). X cigarettes were packaged in the Afrocentric colors red, black, and green and featured a prominent

Table 10. Percentage of adults who think that giving away free tobacco samples should be always allowed or not allowed at all,* by race/ethnicity, smoking status, and gender, Current Population Survey, United States, 1992–1993

Characteristic	African Americans		American Indians/ Alaska Natives		Asian Americans/ Pacific Islanders		Hispanics		Whites	
	%	±CI†	%	±CI	%	±CI	%	±CI	%	±CI
Total										
Always	11.4	0.5	12.8	2.2	6.9	0.8	7.7	0.5	12.2	0.2
Not at all	49.9	0.7	49.9	3.3	57.5	1.6	59.4	0.9	54.3	0.3
Men										
Always	13.4	0.8	14.6	3.5	9.1	1.3	9.9	0.8	15.3	0.3
Not at all	46.8	1.2	46.4	4.9	52.2	2.3	53.8	1.3	48.9	0.4
Women										
Always	10.0	0.6	11.2	2.8	4.8	1.0	5.8	0.6	9.4	0.2
Not at all	52.0	0.9	52.9	4.5	62.7	2.2	63.9	1.2	59.1	0.4
Nonsmokers										
Always	7.7	0.5	6.8	2.1	5.3	0.8	5.9	0.5	8.4	0.2
Not at all	55.9	0.9	61.2	4.1	61.0	1.7	63.5	1.0	62.2	0.3
Men										
Always	9.4	0.8	8.1	3.6	7.1	1.3	7.8	0.8	11.2	0.3
Not at all	52.6	1.4	57.8	6.5	55.9	2.6	58.6	1.5	56.3	0.5
Women										
Always	6.8	0.5	5.8	2.6	3.9	0.9	4.6	0.5	6.0	0.2
Not at all	57.9	1.1	63.7	5.3	65.1	2.3	66.9	1.2	67.3	0.4
Smokers										
Always	21.8	1.2	22.1	4.4	15.7	3.0	15.5	1.5	23.6	0.5
Not at all	33.3	1.4	32.1	5.0	38.9	4.1	41.1	2.1	30.6	0.5
Men										
Always	22.5	1.8	22.8	6.3	16.5	3.6	16.4	2.0	26.9	0.7
Not at all	33.9	2.0	31.3	7.0	39.2	4.8	39.1	2.6	28.4	0.7
Women										
Always	21.1	1.6	21.3	6.2	13.8	5.2	14.1	2.3	20.5	0.6
Not at all	32.7	1.9	32.9	7.1	38.4	7.3	44.1	3.3	32.9	0.7

*In response to the question, “Do you think that giving away free samples by tobacco companies should be always allowed, allowed under some conditions, or not allowed at all?”

†95% confidence interval.

Source: U.S. Bureau of the Census, National Cancer Institute Tobacco Use Supplement, public use data tapes, 1992–1993.

“X,” a symbol associated with African American leader Malcolm X. Although X cigarettes were manufactured and distributed by two relatively small companies with modest marketing efforts, African American community leaders feared that even a small success could fuel the creation of similar products by major tobacco companies with larger resources for advertising and promotion. Unlike the case of Uptown cigarettes, however, both the manufacturer and the distributor of X cigarettes denied that their product was targeted to an African American market.

NAAAPI demanded in writing that X cigarettes be withdrawn. Extensive media coverage was given to NAAAPI leaders invited to speak, as part of Boston Black History Month events, to large audiences about the need for communities to mobilize against tobacco. As a result of NAAAPI’s organizing efforts, the creator and distributor of X cigarettes (Stowcroft Brook Distributors, Charlestown, Massachusetts) and the manufacturer (Star Tobacco Corporation, Petersburg, Virginia) received protests from around the country, including calls from organizations in the African

American Tobacco Control Network of California. This successful strategy demonstrated again the effectiveness of united action against tobacco within the African American community and the ability of NAAAPI and its African American tobacco control network to extend the achievements of the Uptown experience.

In other racial/ethnic communities, some groups have rejected billboards advertising tobacco products. In Detroit, for example, Wayne County Commissioner Alberta Tinsley-Williams founded the Coalition Against Billboard Advertising of Alcohol and Tobacco, which enlisted the support of churches, schools, and civic groups to seek the removal of such billboards. Other communities have gone even further. For example, inspired by the anonymous Chicagoan "Mandrake," who painted over tobacco and alcohol billboards in ethnic neighborhoods, Reverend Calvin Butts led parishioners on walking tours in New York City to document and whitewash billboards advertising tobacco and alcohol (Associated Press 1990). Such acts were emulated by Dallas County, Texas, Commissioner John Wiley Price and Chicago-based Reverend Michael L. Phleger (Collins 1990). These grassroots efforts culminated in a meeting of African American community leaders in Greensboro, North Carolina, in 1991. This meeting led to the founding of a national group to combat tobacco and alcohol advertising in ethnic communities, NAAAPI (*Food & Drink Daily* 1991). Chaired by the Reverend Jesse W. Brown, the NAAAPI aims to increase public awareness of the devastating effects of cigarette and alcohol advertising among African Americans. The NAAAPI has gained affiliates in various communities throughout the United States. In 1994, the association supported efforts to drape covers over cigarette billboards in African American communities and led memorial services for persons who had died because of tobacco use.

Another example of community mobilization against the advertising and promotion of tobacco products is taking place in California. To coordinate racial and ethnic-specific, state-funded activities supported by the increase in the cigarette sales tax, the California Department of Health Services's Tobacco Control Section developed and funded four racial/ethnic minority networks, the first of which was the Hispanic/Latino Tobacco Education Network. This network was hosted by the University of San Francisco through 1996 and has attracted more than 500 members. The other networks include the Asian Pacific Islander Tobacco Education Network (initially hosted by the Asian American Health Forum), which comprises approximately 200 organizations; the African American Tobacco Education Network (initially

sponsored by the Bay Area Urban League), which has approximately 300 members; and the American Indian Tobacco Education Network. These networks have been charged with coordinating and mobilizing tobacco control efforts among various communities and helping community agencies to better design and implement their programs. The various networks have different goals, responsibilities, and levels of funding, but one common thread is their commitment to ensuring that racial/ethnic communities take an active role in defining their own tobacco control needs. In general, the networks organize a variety of strategy and training sessions, media and advocacy campaigns, and technical assistance programs. They also help develop and evaluate resources on tobacco control and prevention and promote networking among their members. Although evaluations of these networks have not yet been completed, the networks' role as catalysts is already evident. Thus far, the networks have garnered the support of community agencies funded to carry out tobacco control efforts in California. For example, 70 percent of the funded community agencies in California reported attending meetings of these racial/ethnic minority networks during the summer of 1993 (Elder et al. 1993a).

One emergent network is the International Multicultural Partnership, which grew out of the ASSIST program and provides technical assistance to racial/ethnic communities interested in tobacco prevention and control. It is a consortium that includes members from over 31 states and several countries. Its mission is to develop and implement culturally appropriate health education programs and services that will effectively reach those population groups at highest risk of tobacco-related illness and death.

In addition to efforts to control tobacco advertising in specific racial/ethnic communities, the FDA regulations approved by President Clinton in August 1996 broadly support such activities in racial/ethnic and other communities in the form of the provisions that ban billboards advertising tobacco products within 1,000 feet of schools and playgrounds, limit in-store advertising (except in adult-only facilities) and billboards to black-and-white text, limit advertising to black-and-white text in publications with significant readership under age 18, prohibit brand logos on various promotional items, and prohibit sponsorship of sporting or entertainment events using brand or product identification. The FDA regulations are intended to reduce teenage access and attraction to tobacco products among all racial and racial/ethnic minority groups (*Federal Register* 1996).

Tobacco Product Regulations

An important approach to controlling and preventing tobacco use is the drafting and enacting of product regulations. These large social interventions range from the use of cigarette warning labels to the licensing of tobacco product sales, and they can regulate the product's packaging, its distribution, and even its components. Because most of these regulations affect all people residing in the United States, rather than just members of racial/ethnic communities, they are not described in detail here. The 1994 Youth Access Survey commissioned by RWJF found significant public support among all those surveyed for requiring

tobacco companies to list the additives to their products on package labels (African Americans, 88.9 percent; Hispanics, 90.4 percent; and whites, 93.6 percent). Most respondents also supported government regulation of cigarettes, although support was somewhat stronger among Hispanics (81.1 percent) than among African Americans (72.6 percent) and whites (69.5 percent) (Table 11).

Among the few tobacco product regulations to specifically target a racial/ethnic group are Spanish-language warning labels, which appear in cigarette advertisements and promotions in Spanish-language

Table 11. Public beliefs about and support for policies related to nicotine and tobacco product regulation, Robert Wood Johnson Foundation Youth Access Survey, 1994

Characteristic	African American* (N = 486)		Hispanic (N = 402)		White* (N = 1,341)	
	%	±CI†	%	±CI	%	±CI
Think nicotine in cigarettes is addictive	90.9	2.90	86.8	4.16	92.6	1.65
Believe that cigarette companies deliberately adjust nicotine levels to keep smokers addicted to cigarettes	57.5	5.41	56.8	5.62	54.9	3.06
Favor requiring tobacco companies to gradually reduce the amount of nicotine in cigarettes	77.7	4.68	84.8	4.02	79.1	2.43
Favor requiring insurance companies to cover the cost of programs to quit smoking	66.7	5.35	77.0	4.64	63.4	2.96
Favor requiring tobacco companies to list additives on package labels the way food and drug companies are required to list ingredients	88.9	3.64	90.4	3.41	93.6	1.63
Agree that because the government regulates all other products containing nicotine, such as nicotine patches and nicotine gum, the government should also regulate cigarettes	72.6	5.00	81.1	4.19	69.5	2.82

*Non-Hispanic.

†95% confidence interval.

Source: Nancy Kaufman et al., unpublished data. Ethnic differences in public attitudes about policy alternatives for limiting youth access to tobacco products: results of a national household survey, 1994.

publications or on billboards located in Hispanic communities. The use of warning labels is one of the earliest and best known mechanisms that the federal government has employed to inform the public about the health hazards of smoking. Warning labels have been required on cigarette packages and in cigarette advertising since 1966, and four rotating health warnings have been required on cigarette packages and advertisements since October 12, 1984, through Public Law 98-474. Warning labels are not required on cigarettes made for export, cigarettes manufactured abroad by U.S. tobacco companies, or other tobacco products, such as cigars, pipe tobacco, and roll-your-own cigarette tobacco. Warning labels on smokeless tobacco containers have been required since passage in 1986 of Public Law 99-252, which took effect in 1987.

Little is known about the level of awareness or effectiveness of cigarette warning labels among members of racial/ethnic groups or members of the U.S. population at large. A 1991 study of Hispanics in San

Francisco has shown that Hispanics are more aware of the presence of warning labels on cigarettes (69.3 percent) than on other products, such as diet soda (27.2 percent), wine (27.6 percent), beer (31.5 percent), and aspirin (36.7 percent) (Marín 1994). The same study also found that the level of awareness of cigarette warning labels was higher among highly acculturated Hispanics (76.5 percent) than among less acculturated Hispanics (65.5 percent). This finding may be attributable to the fact that highly acculturated Hispanics have greater fluency in English—the language used for most product warning labels and cigarette packages.

Support for warning labels does not seem to differ significantly across racial/ethnic minority groups. In a 1992 Louis Harris and Associates poll of 488 smokers, 65 percent of Hispanics, 58 percent of African Americans, and 56 percent of whites favored legislation that required stronger warning labels on cigarette packages than those currently required by law (Louis Harris and Associates, unpublished data).

Conclusions

1. More research is needed on the effect of culturally appropriate programs to reduce tobacco use among racial/ethnic minority groups. Interventions should be language appropriate; addressing psychosocial characteristics such as depression, stress, and acculturation may increase the acceptance of programs by members of racial/ethnic groups.
2. To be culturally appropriate, tobacco control programs must reflect the targeted racial/ethnic group's cultural values, consider the group's psychosocial correlates of tobacco use, and use strategies that are acceptable and credible to members of the group. Culturally competent program staff must be aware and accepting of cultural differences, be able to assess their own cultural values, be conscious of intercultural dynamics when persons of different cultures interact, be aware of a racial/ethnic group's relevant cultural characteristics, and have the skills to adapt to cultural diversity.
3. Numerous strategies are needed to control tobacco use among racial/ethnic youths: restricting minors' access to tobacco products, establishing culturally appropriate school-based programs, and designing mass media efforts geared to young people's interests, attitudes, expectations, and norms. Recent provisions of the Synar Amendment, designed to prevent minors' access to tobacco products, and the FDA regulations aimed at reducing the access to and appeal of tobacco products to young people are intended to reduce tobacco use among all youth, including members of racial/ethnic minority groups.
4. Members of racial/ethnic groups are less likely than the general population to participate in smoking cessation groups and to receive cessation advice from health care providers. Barriers to ethnic group participation include limited cultural competence of health care providers and a lack of transportation, money, and access to health care.

5. Available data indicate that racial/ethnic groups support smoking restrictions, such as increasing cigarette excise taxes, banning cigarette advertisements, restricting access to cigarette vending machines, raising the legal age of purchase, prohibiting sponsorship of events by tobacco companies, and establishing clean indoor air regulations. Additional research is needed to evaluate how best to build on this base of public opinion support to strengthen existing tobacco prevention and control programs within racial/ethnic communities.
6. Prevention and cessation efforts in racial/ethnic communities are limited by underdeveloped tobacco control infrastructures and low levels of resources for research, program development, and program dissemination. Greater resources are needed in racial/ethnic minority communities to build tobacco control infrastructures and to develop initiatives.

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