



Surveillance and Evaluation Data Resources

for

Comprehensive Tobacco Control Programs

November 2001



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention



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Preface

Surveillance of tobacco use and evaluation of tobacco control programs are two keys to the success in reducing the prevalence of smoking since the U.S. Surgeon General first publicized the adverse consequences of tobacco use in a 1964 report.

In many areas of health promotion and disease prevention, the behavior of populations has been difficult to track. However, trends in tobacco use have been known since the beginning of the 20th century. Tobacco use rose inexorably from 1900 to 1965, declining only during the early years of the great depression and other economic downturns. These declines gave the first clue that pricing and taxing could significantly affect tobacco use. But price is not the only factor that affects tobacco use. The nonsmokers' rights movement and the Surgeon General's Report on the health hazards associated with secondhand tobacco smoke—as well as a doubling in the federal cigarette tax—all contributed to a decline in tobacco use that began in the mid-1970s.

In recent years, monitoring and evaluation of tobacco control activities in California, Massachusetts, and Oregon have shown that aggressive and comprehensive tobacco control programs are effective in reducing cigarette smoking. For example, California was the first state to implement a comprehensive tobacco control program and is now seeing changes in long-term health outcomes, notably a 4.8% decline in lung cancer rates among men and women from 1988 to 1997, while rates in other regions increased by 13.2%. In Oregon, the smoking prevalence among 8th graders declined for the first time in recent history (from 21% in 1998 to 15% in 1999) after the state implemented a comprehensive tobacco control program that included hard-hitting media messages, innovative cessation programs, and widespread efforts to promote smoke-free workplaces. Massachusetts established a comprehensive tobacco control program in 1993 and saw a 30% decline in per capita cigarette purchases from 1992 to 1998. These and other findings led to the development of CDC's *Best Practices for Comprehensive Tobacco Control Programs*, which stipulates

that surveillance and evaluation, along with eight other elements are necessary to ensure that tobacco control programs achieve their goals.

Comprehensive tobacco use prevention and control programs use the research data and strategies described in CDC's *Best Practices*, the 2000 Surgeon General's Report *Reducing Tobacco Use*, and the Task Force on Community Preventive Services' tobacco-related recommendations. Using these three publications in conjunction with data from the sources listed in this publication will create a strong foundation for generating action at the state level and achieving the *Healthy People 2010* tobacco objectives within the next decade.

About this Book

Surveillance and Evaluation Data Resources is an at-a-glance compilation of sources of data useful for tobacco control programs that are conducting surveillance or evaluation. Our objective is to provide basic information on each data source to assist state tobacco control programs identify data that are relevant to planning, monitoring, and evaluation. The data sources listed here provide a wide variety of tobacco-related information. For example, the NTCP Chronicle and local program monitoring have useful data on programmatic activities; restaurant and work-site surveys, key informant surveys, and third-party payer surveys have data on environmental policies and indicators; the Youth Tobacco Survey, Adult Tobacco Survey, and media evaluation surveys have data on individual knowledge, attitudes, and behaviors; and the cancer registries and hospital discharge records have data on health outcomes.

Data sources checked as “used frequently and comparable across states” are often used to help states develop tobacco program objectives. Data from these sources can be used to compare program impact and outcomes with those of other states and the nation as a whole.

The data sources are organized under major categories: national and state surveys and tools, registries and vital statistics, and topic-specific tools. The columns in each table provide the following information:

Column 1: Data Source

- Name of the data source.
- General description of the data source.

Column 2: Tobacco-Related Indicators

- Topics on which information is available. For example, environmental tobacco smoke, tobacco-related policies, brand preferences, type of tobacco product (cigarette, cigar, pipe, smokeless tobacco, kretek, or bidi).

- The range in the number of tobacco-related questions included in the survey instrument, or—if applicable—within the core instrument, modules, or supplements.

Column 3: Sampling Frame

- The level of information available: national, state, community, or local.
- Details on target or study population (e.g., adults, pregnant women) or factors that were studied (e.g., media campaigns, number of telephone calls, hospital records).

Column 4: Methodology (a); Frequency (b); Years Completed (c)

- (a) Study design and data collection mode (e.g., random sample, telephone survey; convenience sample, unannounced interviews).
- (b) How often surveys are conducted (e.g., annually, periodically).
- (c) The years when data were collected.

Column 5: Comments

- Additional useful information.

Column 6: Contact

- Phone number or Internet address of the organization where you can obtain more information.

Not all of the data sources are available in every state. Consequently, some states may consider investing funds to develop systems to address gaps in data. New data collection systems should be directly relevant to state programmatic goals, objectives, and activities. However, prior to choosing data sources or investing resources to develop new data systems, programs should consider some of the following issues: timeliness, frequency, comparability, credibility, and available resources. For more information on these considerations, please see CDC's 2001 publication *An Introduction to Evaluation: Planning, Implementation and Use*, or contact the CDC's Office on Smoking and Health's State Surveillance and Evaluation Team (telephone: 770-488-5703).

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
✓ Adult Tobacco Survey (ATS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, bidi, kretek, and smokeless tobacco use. ■ ETS exposure and policies. ■ Cessation behaviors. ■ Health and social influences, parental involvement, media exposure, and other policy issues. <p>Number of questions: From 64 to 168.</p>	<p>State level.</p> <p>Subjects: Adults aged 18 or older.</p>	<p>a) Random design, telephone survey. b) Periodic.</p>	<p>State tobacco programs should work with BRFSS coordinators to design and implement an ATS.</p> <p>Centers for Disease Control and Prevention (CDC), Office on Smoking and Health has developed a standardized instrument and optional questions for state use.</p>	<p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703.</p>
Adult Use of Tobacco Survey (AUTS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, smokeless tobacco use. ■ Age of initiation. ■ Exposure to ETS. ■ Brand preference. ■ Cessation behavior. ■ Knowledge and attitudes. <p>Provides descriptive information on knowledge, attitudes, and behaviors related to tobacco use prevention and control.</p>	<p>National level.</p> <p>Subjects: Adults aged 18 or older.</p>	<p>a) Random design, telephone survey. b) Periodic. c) 1964, 1966, 1970, 1986.</p>	<p>Most recent survey was completed in 1986.</p> <p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703.</p>	<p>National Technical Information Service. (703) 605-6585. www.ntis.gov</p>
✓ Behavioral Risk Factor Surveillance System (BRFSS)	<p>Topics:</p> <p>The tobacco topics vary by year. In 2001, they were—</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, smokeless tobacco, pipe, and bidi use. ■ Age of initiation. ■ Cessation behaviors. ■ ETS policies and rules. <p>Provides descriptive data on health risk behaviors, including tobacco use and preventive health measures in general.</p> <p>The survey began in 1984 with 15 states participating. Since 1996, all 50 states have participated.</p>	<p>State level.</p> <p>Subjects: Adults age 18 or older.</p>	<p>a) Random design, telephone survey. b) Annual. c) 1984-present.</p>	<p>1996; CDC changed its definition of a <i>cigarette smoker</i>. 1998: tobacco topics added to the optional modules, in addition to those in the core questionnaire. State tobacco programs should work with BRFSS coordinators to have tobacco-related questions added to state survey.</p>	<p>Division of Adult and Community Health, Centers for Disease Control and Prevention. (770) 488-2455. www.cdc.gov/nccdp/BRFSS</p>

Table 1

✓Data are frequently used and comparable across states.
Abbreviations: ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Cancer Prevention Study (CPSII)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette use. ■ Age of initiation. ■ Brand preference. ■ Degree of inhalation. <p>Number of questions: From 3 to 9.</p> <p>Provides data on age and cause of death for a prospective cohort of 1.2 million people nationwide since 1982.</p> <p>Information about tobacco use, medical history, dietary habits, environment, and other health determinants are recorded and related to causes of death.</p>	<p>Subjects:</p> <p>Adults aged 35 or older.</p>	<p>National level.</p> <p>a) Cohort study with convenience sample, self-administered survey.</p> <p>b) Biennial follow-up.</p> <p>c) September 1982–present.</p>	<p>More representative of middle class, white Americans (96% of sample) than the national population as a whole.</p>	American Cancer Society. (404) 329-7762. www.cancer.org
✓ Current Population Survey (CPS)	<p>Topics:</p> <p>Periodic measures have included—</p> <ul style="list-style-type: none"> ■ Cigarette, pipe, cigar, and smokeless use. ■ Age of initiation. ■ ETS exposure. ■ Cessation behavior. <p>Number of questions: From 5 to 46.</p> <p>Provides a comprehensive body of data on the employment and unemployment experience of the U.S. population, classified by age, sex, race, and a variety of other characteristics.</p> <p>Periodic supplements have included tobacco-related measures.</p>	<p>Subjects:</p> <p>People aged 15 or older.</p>	<p>National and state levels.</p> <p>a) Random design, household interview with telephone follow-up.</p> <p>b) Periodic.</p> <p>c) 1968–present.</p>	<p>Includes self-reported and proxy-reported data, data from Tobacco Use Supplement available 1992–1993, 1995–1996, and 1998–1999.</p>	<p>National Cancer Institute. (301) 435-3848. http://appliedresearch.cancer.gov/RiskFactor/tobacco/index.html</p> <p>U.S. Census Bureau. (301) 457-4100. www.census.gov/apsd/techdoc/cps/cps-main.html</p>

Table 1 (continued)

✓Data are frequently used and comparable across states.

Abbreviations: ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Monitoring the Future (MTF) ■ Provides annual data on behaviors, knowledge, attitudes, and values related to the use of an array of psychoactive substances, both illicit and licit among American secondary school students, college students, and young adults.	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette use. ■ Age of initiation. ■ Cessation behavior. ■ Brand preference. ■ Youth access. ■ Enforcement. ■ Media awareness. <p>Number of questions: From 3 to 64.</p>	<p>National level.</p> <p>Subjects:</p> <ul style="list-style-type: none"> ■ 8th, 10th, and 12th grade students, and young adults. 	<p>a) Random design, self-administered school-based survey, follow-up survey mailed to cohort population.</p> <p>b) Annual.</p> <p>c) 1975–present.</p>	<p>12th graders surveyed since 1975, and 8th and 10th graders surveyed since 1991.</p> <p>Annual follow-up questionnaires are mailed to a nationally representative sample of each high school graduating class for a number of years after their initial participation.</p> <p>Prevalence and trend data available for cohort population that is now between 25–40 years old.</p>	<p>National Institute on Drug Abuse. (888) 741-7242. www.monitoringthefuture.org www.isr.umich.edu</p>
National Health and Nutrition Examination Survey (NHANES) ■ Provides data on the health and diet of the U.S. population nationwide. Includes information on the prevalence of selected diseases and risk factors; the population's awareness, knowledge and attitudes, and prevention and control of selected diseases. The survey also includes a medical examination for participants and a laboratory component.	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, smokeless tobacco use. ■ ETS exposure. ■ Cessation behavior. ■ Brand preference. ■ Serum continue measurements. <p>Number of questions: From 35–62.</p>	<p>National level.</p> <p>Subjects:</p> <ul style="list-style-type: none"> ■ Households, families, and individuals aged 4 or older. 	<p>a) Random design; household and mobile unit survey. (b and c) Periodic:</p> <ul style="list-style-type: none"> ■ 1971–75 (NHANES I). ■ 1976–80 (NHANES II). ■ 1988–94 (NHANES III). <p>Annual: ■ 1999–present.</p>	<p>This is the only major survey that provides serum cotinine measurements (for subjects age 4 and older).</p> <p>Low income persons, adolescents 12–19 years, persons 60+ years of age, African Americans and Mexican Americans are oversampled to provide significant data for these groups.</p>	<p>National Center for Health Statistics, Centers for Disease Control and Prevention. (301) 458-4681. www.cdc.gov/NCHS/nhanes</p>

Table 1 (continued)

Abbreviations: ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
National Health Interview Survey (NHIS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, bidi, smokeless tobacco use. ■ Age of initiation. ■ Cessation behavior. ■ ETS policies. ■ Exposure. <p>Number of questions: From 18–55.</p> <p>Provides data on U.S. health issues, including incidence and prevalence of acute and chronic conditions and people's knowledge and attitudes about health status and health care use. This is the primary source of data on current health issues in the United States. In addition to the basic survey protocol, each year there are supplements to the survey to collect information on specific topics.</p>	<p>Subjects:</p> <ul style="list-style-type: none"> ■ Adults aged 18 or older. In 1997, questionnaire redesign was fully implemented. <p>National level.</p>	<p>a) Random design, household survey. (b and c) Periodic.</p> <ul style="list-style-type: none"> ■ 1965–1987. ■ Annual. ■ 1990–present. 	<p>Tobacco measures are located in core questionnaire and optional modules.</p> <p>1997 redesign tripled state-specific sample size.</p> <p>Hispanics and African Americans are oversampled.</p> <p>Data from NHIS is used to monitor progress in achieving national Healthy People 2010 tobacco objectives related to adults.</p>	<p>National Center for Health Statistics, Centers for Disease Control and Prevention. (301) 458-4001. www.cdc.gov/nchs/data/</p>
National Household Survey on Drug Abuse (NHSDA)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, and smokeless tobacco use. ■ Age of initiation. <p>Number of questions: From 6–12.</p> <p>Provides data on the prevalence, patterns, knowledge and attitudes, and consequences of drug and alcohol use and abuse in the U.S. (including tobacco).</p>	<p>Subjects:</p> <ul style="list-style-type: none"> ■ People aged 12 or older (12–17, 18–35, ≥36). In 1998, direct state-level estimates were produced for 8 states, and indirect estimates were produced for others. <p>National level.</p>	<p>a) Random design, household survey. (b and c) Periodic.</p> <ul style="list-style-type: none"> ■ 1971–1988. ■ Annual. ■ 1990–present. 	<p>The survey provides estimates of the rate and number of tobacco users by gender, race/ethnicity, and region.</p> <p>State estimates are available for prevalence of tobacco use only.</p>	<p>Substance Abuse and Mental Health Services Administration. (301) 443-6239. www.samhsa.gov/statistics</p>

Table 1 (continued)

✓Data are frequently used and comparable across states.
Abbreviations: ATS = Adult Tobacco Survey. BRFSS = Behavioral Risk Factor Surveillance System. ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
National Youth Tobacco Survey (NYTS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, bidi, kretek, smokeless tobacco use. ■ ETS exposure. ■ Media awareness. ■ Cessation behavior. ■ Youth access. <p>Number of questions: From 57–76.</p>	<p>Subjects:</p> <p>National level. Students grades 6–12.</p>	<p>a) Random design, self-administered in classroom.</p> <p>b) Annual.</p> <p>c) 1999–present.</p>	<p>Includes students in public and private schools.</p> <p>Serves as a national comparison to state YTS results.</p>	American Legacy Foundation. (202) 454-5555. www.americanlegacy.org
National Tobacco Control Program (NTCP) Chronicle	<p>Topics:</p> <p>Using both quantitative and qualitative indicators, program progress is measured for the key goal areas—</p> <ul style="list-style-type: none"> ■ Preventing initiation and promoting quitting among youth. ■ Promoting quitting among adults. ■ Eliminating exposure to ETS. ■ Identifying and eliminating disparities. 	<p>Subjects:</p> <p>State level. Tobacco control programs in 50 states and the District of Columbia.</p>	<p>a) Census, Web-based program monitoring system.</p> <p>b) Completed twice yearly; reporting on previous 6 months of activity.</p> <p>c) Fiscal Year 1999–present.</p>	<p>The NTCP Chronicle collects information on comprehensive tobacco control activities.</p>	<p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703.</p> <p>State health departments.</p>

Table 1 (continued)

Abbreviations: ETS = environmental tobacco smoke. YTS = Youth Tobacco Survey.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
✓ Pregnancy Risk Assessment Monitoring System (PRAMS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette use before and during pregnancy and in the child's early infancy. ■ ETS exposure. ■ Cessation counseling <p>Number of questions: From 6-9.</p>	<p>Subjects:</p> <ul style="list-style-type: none"> Mothers of infants 2-4 months old. 	<p>a) Random design, mail survey with telephone follow-up. b) Annual. c) 1988-present.</p>	<p>This is an ongoing survey. Availability of data depends on when states began participating.</p>	<p>Division of Reproductive Health, Centers for Disease Control and Prevention. (770) 488-5227. www.cdc.gov/nccdphp/drh</p>
✓ School Health Education Profiles (SHEP)	<p>Topics:</p> <p>The core survey includes all the tobacco questions— (6 questions on the lead health educator questionnaire and 13 questions on the principal questionnaire).</p> <ul style="list-style-type: none"> ■ Provides information on health education policies and programs through a survey for the lead health educator and a separate survey for the school principal. ■ Formerly a School Tobacco Survey (STS) module for lead health educators and school principals was used to assess tobacco policies and programs. ■ In 2001 the tobacco module was combined with the core surveys for lead health educators and school principals. <p>Number of questions: From 3-39.</p>	<p>Subjects:</p> <ul style="list-style-type: none"> Middle/junior and senior high schools. 	<p>a) Random design, mail survey sent to school principles and lead health educators. b) Biennial (even years). c) 1994-present.</p>	<p>Office on Smoking and Health, Centers for Disease Control and Prevention. (888) 231-6405. www.cdc.gov/nccdphp/dash</p> <p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco</p>	<p>Different indicators are measured on different versions of the questionnaire.</p>

Table 1 (continued)

✓ Data are frequently used and comparable across states.
Abbreviations: ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
School Health Policies and Programs Study (SHPSS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ School tobacco policies. ■ Educational programs and curriculum. ■ Health services. <p>Number of questions: From 3-35.</p> <p>Subjects: Elementary, middle/junior high, and high schools.</p> <p>State-level information provided by this survey includes only state education policies. Sample size: 1,500 middle schools/ 1,500 high schools.</p>	State, district, school, classroom levels.	<p>a) Random sample of school districts, schools, and classrooms of public and private schools grades K-12 using mail surveys at district level and on-site structured interviews at school and classroom level.</p> <p>b) Periodic.</p> <p>c) 1994 and 2000.</p>		Division of Adolescent and School Health, Centers for Disease Control and Prevention. (888) 231-6405. www.cdc.gov/nccdphp/dash/SHPSS
✓ Smoking Attributable Morbidity, Mortality, & Economic Costs (SAMMEC), software version 3.0	<p>Topics:</p> <ul style="list-style-type: none"> ■ Calculates smoking-attributable mortality (SAM), years of potential life lost (YPLLs), direct medical expenditures and indirect productivity costs from cigarette smoking among adults. ■ The SAMMEC software programs are Internet-based products designed to calculate the health and economic burden of smoking for adults and infants. ■ The two types of software, Adult SAMMEC and Maternal and Child Health SAMMEC, employ the latest scientific evidence on smoking-related diseases, risks associated with current and former smoking, and the economic costs of smoking. 	National and state levels.	<p>a) Current Population Survey data are used to calculate YPLLs and productivity costs associated with SAM.</p> <p>Subjects: Adults aged 35 or older (Adult SAM-MEC) and infants aged 1 year or younger (MCH SAMMEC).</p> <p>■ Direct medical care expenditures are estimated using National Medical Expenditure Survey data.</p> <p>■ Maternal smoking data from PRAMS is used to calculate perinatal SAMs and YPLLs.</p> <p>■ Health care utilization data from PRAMS and medical claims data are used to calculate smoking-attributable neonatal medical expenditures.</p> <p>■ The MCH SAMMEC software calculates SAMs and YPLLs from low birth weight and Sudden Infant Death Syndrome (SIDS), and neonatal medical expenditures.</p>	<p>SAMMEC requires a population of at least 400,000 to create statistically valid estimates, and is therefore not useful for producing local-level estimates or estimates of population subgroups (e.g., by race/ethnicity).</p> <p>Internet version will be available by late November 2001.</p> <p>c) CDC provides estimates of average annual smoking-attributable mortality and years of potential life lost from 1995-99 for the nation and 1999 data for states. Direct medical expenditures and mortality-related productivity loss estimates are provided for the nation and states for 1999.</p>	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco

Table 1 (continued)

✓Data are frequently used and comparable across states.

Abbreviations: MCH = Maternal and Child Health. PRAMS = Pregnancy Risk Assessment Monitoring System.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
✓ State Tobacco Activities Tracking & Evaluation (STATE) System	<p>Topics:</p> <ul style="list-style-type: none"> ■ Adult and youth cigarette, cigar, pipe, and smokeless tobacco use. ■ ETS laws and policies. ■ Youth access laws. ■ Excise taxes. ■ Smoking attributable costs. <p>The STATE System is a data warehouse that provides comparable measures on tobacco use prevention and control from many different types of data sources, including legislative tracking, agricultural and manufacturing, and health consequences and costs.</p> <p>The system allows users to view comprehensive summary information on tobacco use in all 50 states and the District of Columbia.</p>	State level.	<p>a) Varies according to data source.</p> <p>c) Prevalence data from mid-1980 until 1999. Smoking attributable cost in 1993 only. Youth access laws and environmental laws from 1996 until 2000. Dates for excise taxes depend on year of enactment in the state.</p>	Provides comprehensive legislative and behavioral data.	<p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco</p>
Teenage Attitudes and Practices Survey (TAPS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette and smokeless tobacco use. ■ Brand preference. ■ Age of initiation. ■ Cessation behavior. ■ Media awareness. <p>Provides data on knowledge and attitudes such as perceived benefits and risks of tobacco use among teens.</p>	<p>National level.</p> <p>Subjects:</p> <ul style="list-style-type: none"> ■ Youth aged 12–18. ■ 1993 study includes youth aged 10–22. 	<p>a) Random design, household survey.</p> <p>b) Periodic.</p> <p>c) 1989 and 1993.</p>	<p>Limitations for this survey include a non-response bias for those re-interviewed in the second survey (those who were re-interviewed were less likely to have been smokers in 1989 than those who could not be re-interviewed).</p> <p>Also, the small number of African American and Hispanic adolescents in the second survey reduces the reliability of the brand preference estimates for those groups.</p> <p>The second survey (1993) included 87% of the respondents from the first survey, as well as youth from a new probability sample.</p>	<p>National Technical Information Service. (703) 605-6585. www.ntis.gov</p>

Table 1 (continued)

✓Data are frequently used and comparable across states.
Abbreviations: ETS = environmental tobacco smoke.

Table 1. National and State Surveys and Tools

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Youth Risk Behavior Surveillance System (YRBSS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, and smokeless tobacco use. ■ Age of initiation. ■ Youth access. ■ Enforcement. ■ Cessation behavior. <p>Number of questions: 12.</p> <p>1) tobacco use,</p> <p>2) alcohol and other drug use,</p> <p>3) sexual behaviors that contribute to unintended pregnancy and sexually transmitted disease,</p> <p>4) dietary behaviors,</p> <p>5) physical activity, and</p> <p>6) behaviors that result in violence and unintentional injuries.</p>	<p>Subjects:</p> <ul style="list-style-type: none"> National, state, and large city levels. Students in grades 9–12. <p>1990</p> <p>Biennial (odd years).</p> <p>1991–present.</p>	<p>a) Random design, self-administered in classroom.</p> <p>(b and c)</p> <p>1990</p>	<p>Data from YRBSS is used to monitor progress in achieving national Healthy People 2010 tobacco objectives related to young people.</p>	Division of Adolescent and School Health, Centers for Disease Control and Prevention. (888) 231-6405. www.cdc.gov/yrbs
Youth Tobacco Survey (YTS)	<p>Topics:</p> <ul style="list-style-type: none"> ■ Cigarette, cigar, pipe, and smokeless tobacco use. ■ Age of initiation ■ Media awareness. ■ Youth access. ■ Cessation behavior. ■ ETS exposure. ■ School curriculum. <p>Number of questions: 63.</p>	<p>Subjects:</p> <ul style="list-style-type: none"> State level. Students in grades 6–8 and 9–12. 	<p>a) Random design, self-administered in classroom.</p> <p>b) Conducted based on states' programmatic needs and in coordination with their surveillance and evaluation plans.</p>	<p>Schools selected with probability proportional to size, classrooms chosen randomly.</p> <p>Some states conduct the survey in middle schools or high schools only, some in both.</p> <p>It is recommended that states include state-added questions to the core questionnaire.</p>	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco

Table 1 (continued)

✓Data are frequently used and comparable across states.
Abbreviations: ETS = environmental tobacco smoke.

Table 2. Registries and Vital Statistics

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Birth Certificate Data ■ Provides data on tobacco use by pregnant women.	Topics: ■ Indicators vary by state. ■ Smoking during pregnancy.	State level. Subjects: Women who recently gave birth.	a) Varies by state. Certificates completed by physicians, registered nurse, or patient at hospitals and clinics. Information may be obtained in person or based on patient's chart. b) Varies by state. c) Data is available since 1989 for some states.	Tobacco use may be under-reported. May be used at the sub-state level (i.e., counties, health districts).	State health departments. www.naaccr.org
Cancer Registry Data ■ Provides incidence data on smoking-related cancers. ■ Comprehensive, timely, and accurate data about cancer incidence, stage at diagnosis, first course of treatment, and deaths.	Topics: Indicators vary by state, since there are no national standards on reporting tobacco use history. ■ Smoking status. ■ Use of other tobacco products.	State level. Subjects: Adults and children.	a) Passive surveillance system from hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories. Data are collected in person. b) Varies by state.	The registry systems vary across states. There is potential for under-reporting since physicians complete the forms and may not have access to patients' full medical records.	North American Association of Central Cancer Registries. www.cancer.org Cancer Prevention and Control, Centers for Disease Control and Prevention. (888) 842-6355. www.cdc.gov/CANCER/npcr
Death Certificate Data ■ Provides data on causes of death. ■ Used to assess tobacco-related mortality.	Topics: Data on tobacco use varies by state. ■ ICD codes. ■ Tobacco use status.	State level. Subjects: Deceased adults and children.	a) Certificates completed by physicians at hospitals and clinics. Demographics provided by the funeral director. b) Federal efforts to standardize reporting began in 1946 in Bureau of the Census and moved to the National Center for Health Statistics in 1950.	Possible under-reporting of tobacco use because of physician bias. May be used at the sub-state level (i.e., counties, health districts) or in SAMMEC for estimates of state impact.	National Center for Health Statistics, Cancer Prevention and Control, Centers for Disease Control and Prevention. (301) 458-4681. www.cdc.gov/nchs

Table 2

Abbreviations: ICD = International Classification of Disease, SAMMEC = Smoking Attributable Morbidity, Mortality, and Economic Costs.

Table 3. Topic-Specific Tools: Health Systems and Clinical Settings

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Health Provider Surveys ■ Monitors medical practices and policies.	Topics: ■ Cessation policies. ■ Clinical practices related to tobacco use.	Subjects: Physicians, nurses, physician assistants, dentists.	a) Varies. b) Varies.	State health departments. State licensing bureau. State managed care association.	
Health Plan Employer Data and Information Set (HEDIS) ■ Provides a set of standardized performance measures designed to give purchasers and consumers the information they need to compare the performance of managed health care plans. ■ Health care providers who advise smokers to quit smoking is the performance measure of interest.	Topics: ■ Cigarette use. ■ Cessation counseling.	National level. Subjects: Commercial health plan members, Medicaid and Medicare recipients.	a) Random design. c) 1996–99.	Small sample size, low response rate, response bias, and recall bias. 1999 is the most recent data set. Archived data sets may be available for purchase.	National Committee for Quality Assurance. (888) 275-7585. www.ncqa.org
Hospital Discharge Data ■ Provides background information on patient and morbidity through discharge diagnoses, number of days of hospitalization, and treatment.	Topics: ■ Health effects. ■ Length of stay.	Hospital records.	a) Varies. b) Continuous.	Information on smoking status is usually not available or may be misclassified.	State health departments.

Table 3

Table 3. Topic-Specific Tools: Health Systems and Clinical Settings

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
MarketScan Database ■ Provides health data on private companies' insured employees and their dependents, early retirees, ex-employees still on COBRA, and Medicare-eligible retirees with employer-provided Medicare Supplemental plans.	Topics: ■ Paid claims and encounter data related to cessation services.	National level. Subjects: Employees and dependents insured by benefits plans of large employers.	a) Random design, hospital charts, and records. (b and c) ■ Fee for Service: 1987–present. ■ Encounter: 1994–present. ■ Medicare: 1995–present. ■ Benefit Plan Design (compilation of others): 1993–present.	The cost of obtaining the data sets may be prohibitive.	The Medstat Group. (734) 913-3000 www.medstat.com
Quitline Call Monitoring ■ Provides data on the number of calls to quitlines for counseling and referrals. ■ May provide information on success rates.	Topics: ■ Number of calls. ■ Sex and race/ethnicity of callers. ■ Type of cessation information provided.	State level or quitline service area.	a) Varies.	State health departments with quitlines.	
Third Party Payer Surveys ■ Tracks insurance coverage and reimbursement.	Topics: ■ Coverage for cessation services. ■ Health care provider policies related to tobacco.	National and state payers. Subjects: Medicaid, Medicare, private insurers.	a) Varies. b) Not applicable.	Health Care Financing Administration. (800)-Medicare. www.hcfca.gov State health departments.	

Table 3 (continued)

Abbreviations: COBRA = Consolidated Omnibus Budget Reconciliation Act.

Table 4. Topic-Specific Tools: Sales Data

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Food and Drug Administration (FDA) Compliance Checks	<p>Topics:</p> <ul style="list-style-type: none"> ■ Ability of minors to purchase tobacco products. <p>■ Provides data on retailers that complied with the prohibition of the sale of tobacco products to minors.</p> <p>■ Prior to March 21, 2000, the compliance check authorized state and local authorities to survey whether retailers followed the FDA regulation that prohibited the sale of cigarettes and smokeless tobacco to children younger than 18 years.</p>	<p>National and state levels.</p> <p>Subjects: Local to tobacco retailers.</p>	<p>a) Random, unannounced visits by state or local officials authorized by the FDA.</p> <p>b) Annual.</p> <p>c) 1997–2000.</p>	<p>Supreme Court ruled that FDA exceeded authority. Data collection suspended on March 21, 2000.</p> <p>Methodology may vary by state.</p>	<p>Food and Drug Administration. (888) 453-6332. www.fda.gov/opacom/campaigns/tobacco</p>
Scanner Data	<p>Topics:</p> <ul style="list-style-type: none"> ■ Dollar sales. ■ Unit sales. ■ Volume sales. ■ Sales share. ■ Average selling price. ■ Average promoted price. ■ Average list price. ■ Percentage of stores selling each product. <p>■ Provides market data on tobacco sales using universal product code numbers.</p>	<p>State or local levels.</p> <p>Subjects: Retailers using UPC scanners.</p>	<p>a) Varies.</p> <p>c) 1994–present.</p>	<p>Comparable data on grocery stores are available, but the cost of obtaining the data set may be prohibitive.</p>	<p>AC Nielsen and Company (770) 482-1939.</p> <p>Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco</p>
✓ Substance Abuse and Mental Health Services Administration (SAMHSA) Compliance Checks	<p>Topics:</p> <ul style="list-style-type: none"> ■ Ability of minors to purchase tobacco products. <p>■ Provides data on tobacco sales to minors through unannounced, annual inspections (includes location of establishments).</p> <p>■ This monitoring research was authorized through the Synar Legislation, which mandated the reduction of tobacco sales to minors.</p>	<p>State and local levels.</p> <p>Subjects: Tobacco retailers.</p>	<p>a) Random design.</p> <p>Unannounced visits.</p> <p>Methodology may vary by state.</p> <p>c) 1995–present.</p>	<p>Annual report details states' activities to enforce laws. Includes information on successes in reducing tobacco availability to young people, methods used to identify noncompliant retail outlets, inspection procedures, and plans for enforcing the law in the next fiscal year.</p> <p>Comparability of data may be affected by the race and sex of young inspectors.</p>	<p>Substance Abuse and Mental Health Services Administration. (301) 443-8956. www.samhsa.gov/csap</p>

Table 4

✓Data are frequently used and comparable across states.
Abbreviations: FDA = Food and Drug Administration. UPC = Universal Product Code.

Table 4. Topic-Specific Tools: Sales Data

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Tax Revenue Data ■ Provides sales information on tobacco products.	Topics: ■ Sales (number of cigarette packs, cartons, and pounds of tobacco) per capita for cigarettes and smokeless tobacco.	State level. Subjects: Wholesalers and distributors.	a) Receipts collected monthly. b) Varies by state. Usually begins the first year a state collects tobacco excise tax.	The Tobacco Institute was dismantled in 1999, but Orzechowski and Walker, an economic consulting firm financially supported by tobacco companies, has begun publishing an annual report on tobacco sales and consumption.	Orzechowski and Walker. (703) 351-5014. State departments of revenue.
Tobacco License Database ■ Provides data on establishments approved to sell tobacco products. ■ Can be used for monitoring and enforcement. ■ Provides a sample frame for compliance checks or population observation studies.	Topics: ■ Tobacco license or sales permit. ■ Retailer type.	State level. Subjects: Tobacco retailers.	a) Varies. b) Varies.	State enforcement or business regulations agency.	

Table 4 (continued)

Table 5. Topic-Specific Tools: National, State, and Local Policy Tracking

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Restaurant Surveys	<p>Topics:</p> <ul style="list-style-type: none"> ■ Type of restaurant. ■ Smoking policy. ■ Reasons for smoking policy. ■ Projected changes in smoking policy. ■ Presence of bar or lounge. ■ Configuration of seating areas. ■ Number of seats in restaurant. ■ Customer demand for smoking or non-smoking sections. ■ Attitudes about harmfulness of ETS. ■ Support for local smoke-free ordinances. ■ Tobacco use. 	State and local levels.	<p>a) Random design using business lists. Methodology may vary by state.</p> <p>c) Most of these surveys have been conducted in the last 10 years.</p>	A limited number of states have conducted this type of survey.	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco
Worksite Surveys	<p>Topics:</p> <ul style="list-style-type: none"> ■ Tobacco use. ■ Smoking policies in work areas. ■ Smoking policies in common/public places. ■ Attitudes about smoking indoors. ■ Perceptions of the harmfulness of ETS. ■ Cessation policies. ■ Cessation programs. 	State and local levels.	<p>a) Random design using business lists. Methodology may vary by state.</p> <p>b) Frequency varies by state.</p>	<p>A limited number of states have conducted this type of survey.</p> <p>b) Frequency varies by state.</p>	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco

Table 5

Abbreviations: ETS = environmental tobacco smoke.

Table 6. Topic-Specific Tools: Pro-Tobacco Advertising and Promotions

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Event Sponsorship ■ Provides data on events sponsored by tobacco companies.	Topics: ■ Event sponsorship and funding.	State and local levels.	a) Observational. b) Varies.	A limited number of states have conducted this type of survey.	State health departments.
Nielsen Monitor Plus ■ Provides 24 hours per day tracking of paid commercial activity mainly for television, but also newspaper and radio in certain market regions. ■ Tobacco advertisements, traced by brand name.	Topics: ■ Dissemination and frequency of advertisements.	By market unit (there are 210 units in the country). Subjects: Target population of paid advertisements for all major television stations, and selected newspaper and radio stations.	a) Census of all full power commercial broadcasting stations. Convenience sample for newspaper and radio commercial activities. b) Ongoing since 1995.	Available to clients, distribution firm, or organization. The costs of obtaining the data sets may be prohibitive.	New Media Services. (212) 708-7500 or (212) 907-4220. www.nielsenmedia.com
Point-of-Purchase Survey ■ Provides contextual data on retail outlets that can show tobacco sales policies and practices in communities, including attitudes and behaviors.	Topics: ■ Product placement. ■ Advertising price. ■ Policies and practices of personnel and management.	State and local levels. Subjects: Retail outlets.	a) Random design. Unannounced visits. Methodology may vary by state. b) Varies.	Surveys may be conducted overtly or covertly.	State health departments. State enforcement agencies.
Product Give-Aways and Promotions ■ Provides data on tobacco promotions and product give-aways.	Topics: ■ Type of promotions and give-aways. ■ Monetary amount of promotion. ■ Frequency.	State and local levels. Subjects: Community events and entertainment venues.	a) Observational. b) Varies.	A limited number of states have conducted this type of survey.	State health departments.

Table 6

Table 7. Topic-Specific Tools: Advertising Tracking and Outcomes Measurement

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Arbitron					
■ Provides data on which radio stations have the largest reach for the target population.	Topics: ■ Time of day. ■ Amount of time listened. ■ Specific geographical locations. ■ Listener demographics.	Based on county level metropolitan markets.	a) Random design. Mail diary. b) Ongoing, since 1950s.	The biggest metropolitan markets are surveyed four times a year. Smaller markets are surveyed twice a year.	Arbitron. (770) 551-1400 or (800) 543-7300. www.arbitron.com
Media Campaign Activity Tracking					
■ Provides tracking data on counter-marketing advertisements on TV and radio.	Topics: ■ Gross rating point (GRP's) reach and frequency.	Media campaigns.	a) Varies. b) Varies.	This information is usually provided by the media campaign provider or contractor.	State health departments.
Media Evaluation Survey					
■ Provides data on the exposure, awareness, and impact of a paid media campaign.	Topics: ■ Confirmation of exposure. ■ Recall of specific advertisements. ■ Behavior change.	Target population of media campaign.	a) Random design Repeated follow-up telephone surveys. b) Varies.	Provides pre- and post-information before, during, and after a counter-marketing campaign. A number of states have mounted counter-marketing campaigns.	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco State health departments.
Nielsen Sigma Service					
■ Provides 24 hours per day tracking of paid and unpaid public service announcements and video news releases.	Topics: ■ Air time and frequency of advertisement.	Market unit level of advertisements.	a) Census of all full-power commercial broadcasting stations. b) Ongoing since 1989.	Available to ordering client, distribution firm, or organization. The costs obtaining the data sets may be prohibitive.	New Media Services. (727) 738-3060. www.nidsemmedia.com
Video Monitoring Service					
■ Tracks broadcast coverage of TV, radio, print, and outdoor advertisements.	Topics: ■ Tobacco key words.	Advertisements on TV, radio, print, and outdoors.	a) Census of full-power commercial broadcasting stations. b) Ongoing since 1996.	Number of media sources depends on region.	Video Monitoring Services. (212) 736-2010. www.vidmon.com

Table 7

Table 8. Topic-Specific Tools: Community

Data Source	Tobacco-Related Indicators	Sampling Frame	Methodology (a), Frequency (b), Years Completed (c)	Comments	Contact
Key Informant Surveys ■ Provides data on awareness and attitudes of leaders and influential persons on tobacco issues from various sectors of the community, including law enforcement, business, faith, education, etc.	Topics: ■ Importance of tobacco-related issues. ■ Investment in health.	Community level. Subjects: Leaders, potential partners, and other influential persons.	a) Varies: (e.g., snowball, quota sample, in-person, or telephone survey). b) Varies.	A limited number of states have conducted this type of survey.	State health departments.
Local Program Monitoring ■ Provides data on local tobacco control program infrastructure, staff, resources, and objectives.	Topics: ■ Staffing. ■ Resources. ■ Activities.	Local level. Subjects: Program manager and project coordinators.	a) Varies: (e.g., self-administered progress report). b) Varies.	A limited number of states have conducted this type of survey.	Office on Smoking and Health, Centers for Disease Control and Prevention. (770) 488-5703. www.cdc.gov/tobacco State health departments.

Table 8

