

## KEY OUTCOME INDICATORS

FOR EVALUATING COMPREHENSIVE TOBACCO CONTROL PROGRAMS

May 2005





An **OUTCOME INDICATOR** is a specific, observable, and measurable characteristic or change that will represent achievement of the outcome.

From: United Way of America. *Measuring Program Outcomes: A Practical Approach.* Alexandria, VA: United Way of America; 1996.

For more information, contact CDC Office on Smoking and Health 770-488-5703

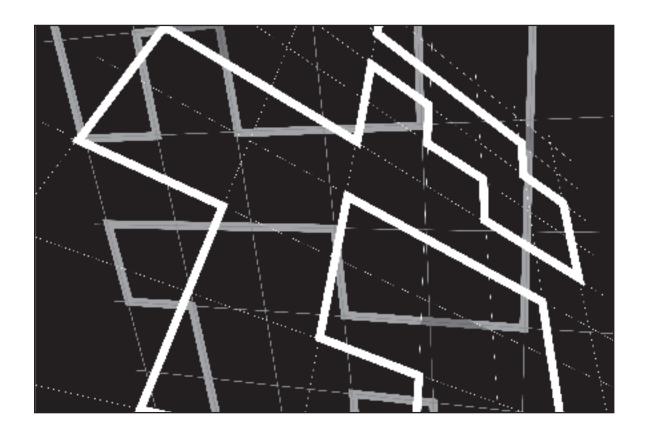
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Naming of surveillance systems, databases, and evaluation tools is for example purposes only and does not constitute endorsement by the Centers for Disease Control and Prevention or the U.S. Department of Health and Human Services.

### **Evaluating Comprehensive Tobacco Control Programs**



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### **Preface**

If the United States were to meet the *Healthy People 2010* goal of reducing smoking prevalence to 12% among adults and 16% among young people aged 14 through 17 years, more than 7 million premature deaths after 2010 could be prevented. <sup>1,2</sup> Studies show that investing in state tobacco control programs and implementing effective tobacco control policies significantly reduces cigarette consumption and improves health outcomes. <sup>3-9</sup> To continue funding state programs, however, legislators, policy makers, and other funders of state programs want to see evidence that the program is effective and that resources are being used wisely.

To produce such evidence, state tobacco control programs must evaluate their programs. Good evaluation is the key to persuading policy makers that your program is producing results that will lead to improved health for the community.

If good evaluation is key to proving that your program is effective, then selecting the right indicators to measure is key to a good evaluation. That's where this book will help.

This publication is a companion to the 2001 publication *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, which is based on the Centers for Disease Control and Prevention's (CDC's) *Framework for Program Evaluation*. <sup>10,11</sup> In *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, we discuss in detail the six steps of a good evaluation as they apply to tobacco prevention and control programs:

- 1. Engage stakeholders.
- 2. Describe the program.
- 3. Focus the evaluation.
- 4. Gather credible evidence.
- 5. Justify your conclusions.
- 6. Ensure evaluation findings are used and share lessons learned.

This new publication provides information on selecting indicators and linking them to outcomes, the main focus of step 3 (focus the evaluation) and step 4 (gather credible evidence).

In *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, we described how to select indicators to measure program outcomes. We also gave examples of indicators and suggested sources of data on those indicators. <sup>10</sup> This publication goes further. Here we discuss in detail 120 evidence-based key indicators that have been scientifically linked to program outcomes. We also document the evidence that shows the value of using these indicators to measure the progress of a state tobacco control program.

To help you make informed choices about which indicators are most suitable for your program, we engaged a panel of experts in the field of tobacco control to rate each indicator on various criteria, including overall quality, resources needed, strength of evaluation evidence, utility, accepted practice, and face validity to policy makers. The ratings will help the reader decide, for example, which indicators can be measured within budget or which indicators are likely to carry the most weight with policy makers. In essence, this publication is a consumer's guide to tobacco control indicators for program managers and evaluators.

In this publication we provide examples of data sources and survey questions that evaluators can use to gather data from their programs' target populations. We were particularly careful about our choice of example data sources and survey questions. Most come from commonly used state and national surveys and surveillance systems, and using them will allow managers and evaluators to compare their findings with data from other states and over time.

Evaluation of key indicators over time will help monitor progress toward expected outcomes and refine program activities as needed. Using well designed evaluation methods will increase your program's and your evaluation's chance of success. We encourage you to read more about the multiple purposes of program evaluation in *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs.*<sup>10</sup>

We also hope that this publication will help to advance national evaluation and surveillance efforts by encouraging managers and evaluators of state tobacco control programs to use standard questions from commonly used state or national surveys or surveillance systems. If states use comparable indicators, questions, and collection methods, we will be better able to assess the national impact of state tobacco control programs.

#### **Technical Assistance**

CDC is ready to help state and territorial health departments plan, implement, and evaluate tobacco prevention and control programs. To contact CDC's Office on Smoking and Health, please call (770) 488–5703 or e-mail at tobaccoinfo@cdc.gov.

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### How This Book Is Organized

The chart below shows the layout of this book.

#### **General Information**

**Preface** 

How This Book Is Organized

#### **Chapter 1: Introduction**

- ▶ Purpose
- ► Audience
- ► The National Tobacco Control Program
- ► Logic Models
- ▶ Outcome Components
- ▶ Indicators

► Using This Book to Plan a State Tobacco Control Program Evaluation

Merging program planning and evaluation planning for state tobacco control programs. Included is a hypothetical example.

#### First Three Goals of the National Tobacco Control Program

#### Chapter 2: Goal Area 1

Preventing Initiation of Tobacco Use Among Young People

#### Chapter 3: Goal Area 2

Eliminating Nonsmokers' Exposure to Secondhand Smoke

#### Chapter 4: Goal Area 3

Promoting Quitting Among Adults and Young People

#### Each goal area has three major sections

#### Logic Model

Depicts causal pathways that link outcome components

#### **Indicators**

A list of indicators for each outcome component in the logic model

#### **Outcome Component**

- Outcome overview: Empirical support
- ➤ Key indicators: Measurable characteristics
- ► Indicator rating table: Indicator ratings by criterion
- ▶ Indicator profiles: Indicator details

#### **Additional Information**

#### **Chapter 5: Future Directions**

- ▶ Develop process indicators
- ► Identify indicators to measure tobacco-related disparities
- ► Encourage evaluation research

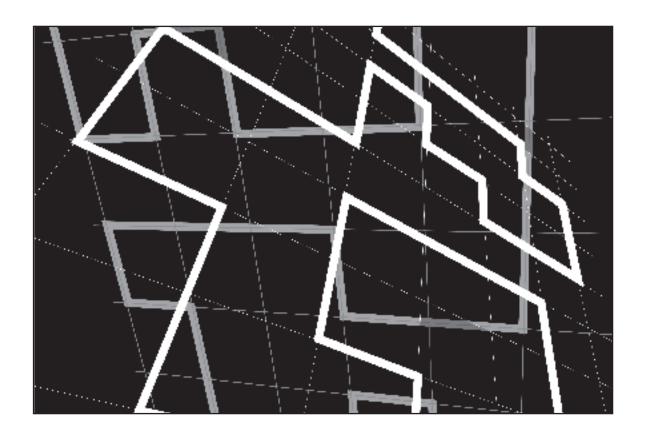
#### **Appendices**

- A. National Tobacco Control Program
- B. Selecting and Rating the Indicators
- C. Expert Panel Members
- D. Data Source Indicator Table

#### Glossary

Definitions of words and terms used in this book

### Introduction



### Introduction

#### **Purpose**

CDC developed this publication to help state and territorial health departments plan and evaluate state tobacco control programs. This publication is a companion to Best Practices for Comprehensive Tobacco Control Programs, Introduction to Program Evaluation for Comprehensive Tobacco Control Programs, and Surveillance and Evaluation Data Sources for Comprehensive Tobacco Control Programs.<sup>1–3</sup>

#### **Audience**

The primary audiences for this publication are (1) planners, managers, and evaluators of state programs to prevent or control tobacco use and (2) CDC's national partners in the fight against tobacco use.

#### **The National Tobacco Control Program**

As part of its mission to reduce the incidence of tobacco-related disease and preventable death, CDC created the National Tobacco Control Program (NTCP) to encourage coordinated, nationwide activities. The goal of the NTCP is to reduce tobacco-related disease, disability, and death. This overarching goal is subdivided into four goal areas:

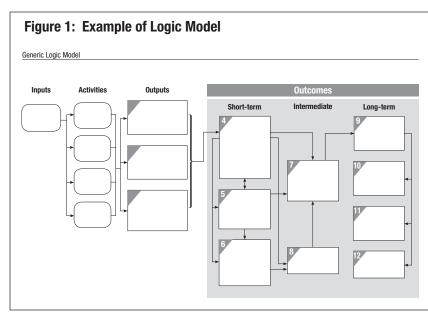
- ▶ Preventing initiation of tobacco use among young people.
- ▶ Eliminating nonsmokers' exposure to secondhand smoke.
- ▶ Promoting quitting among adults and young people.
- ▶ Identifying and eliminating tobacco-related disparities.

For more information on the NTCP, see Appendix A.

#### **Logic Models**

As explained in *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*, logic models depict the presumed causal pathways that connect program inputs, activities, and outputs with short-term, intermediate, and long-term outcomes.<sup>2</sup> An example of a basic logic model is provided in Figure 1.

To help tobacco control programs with planning and evaluation, we updated logic models previously published in the *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*.



We numbered the outputs (direct results of program activities) and outcomes in each logic model to allow for easy reference in discussing the links between logic model components.

The logic models for the NTCP's goal areas can be used in several ways:

- ▶ To see the links between program activities; outputs; and short-term, intermediate, and long-term outcomes.
- ▶ To identify relevant short-term, intermediate, and long-term outcomes.
- ▶ To assist in selecting indicators to measure outcomes.

#### **Outcome Components**

The outcome components in the logic models are categorized as short-term, intermediate, or long-term to indicate a presumed causal sequence.

For each outcome component, we provide an outcome overview in which we summarize the scientific evidence in support of the assumption that implementing the program activities shown in the NTCP logic model for a particular goal area will lead to the short-term or intermediate outcomes shown in the same NTCP logic model. In turn, achieving the short-term and intermediate outcomes will affect the long-term outcomes in the logic model. For example, if a program is working with the example logic model shown in Figure 1 and the program selects outcome component 7 as its intermediate outcome, program activities designed to achieve changes in short-term outcomes 4, 5, and 6 (linked vertically on the logic model) should lead to changes in outcome 7 (linked horizontally with outcomes 4, 5, and 6 on the logic model). Indeed, not only will changes to outcomes 4, 5, and 6 affect outcome 7, but they will also affect intermediate outcome 8 as well as long-term outcomes 9 and 10 and distal outcomes 11 and 12. Distal outcomes are the last two outcomes in each logic model. They are the longest-term outcomes and are the same for the first three NTCP goal areas.

#### **Indicators**

Outcome indicators are specific, observable, and measurable characteristics or changes that represent achievement of an outcome.<sup>4</sup>

For example, if your program is trying to increase restrictions on young people's access to tobacco and you measured the proportion of jurisdictions with policies that control the location, number, and density of retail outlets that sell cigarettes, the result would indicate the extent of your progress toward creating restricted access policies in all jurisdictions.

Most indicators we discuss in this publication are useful for measuring progress toward reducing cigarette use. However, we encourage programs to broaden their surveillance and evaluation activities to include measuring all forms of tobacco use, including spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll your own).

In this publication, indicators are organized by outcome component in the logic models for goal areas 1, 2, and 3 of the NTCP. We list indicators for only the first three NTCP goal areas because the logic models for these goal areas focus on evaluating and measuring the *effects* of a state tobacco prevention and control program. The focus of the logic model for goal area 4 (page 271) is on developing and increasing organizational capacity to plan and implement activities to identify and eliminate tobacco-related disparities. Currently, few well-established, evidence-based indicators are available for measuring a program's success in increasing organizational capacity in this area. See Chapter 5 for more details.

Indicators to measure distal outcomes in each goal area (i.e., reduced tobaccorelated morbidity, mortality, and disparities) are not included in this book for two reasons. First, the research base establishing linkage between behavioral outcomes (e.g., reductions in tobacco consumption and tobacco use prevalence) and the distal outcomes is well established. Therefore, tobacco control programs need to demonstrate only an effect on behavioral outcomes and they can assume that these will lead to favorable health effects. Second, we determined that the greatest expressed needs of the states for evaluation assistance would be addressed by identifying short-term and intermediate outcome indicators.

This does not mean that programs should not monitor their effect on the distal outcomes in the NTCP logic models. Although some tobacco-related diseases (e.g., lung cancer) are slow to be affected by tobacco prevention and control programs, many positive health effects are realized relatively quickly (e.g., reductions in the risk of cardiovascular disease and low birthweight in babies). Some long-standing programs (e.g., California Tobacco Control Program) have been able to show an effect on long-term outcomes, but most states have not had comprehensive programs in place long enough to show such effects. 6-8

We also do not intend to imply that measuring outcomes is sufficient for evaluating a tobacco control program. It is not. Equally important is process evaluation, which focuses on measuring program implementation. (See *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs* for information on process evaluation.)<sup>2</sup> CDC has begun researching indicators for use in process evaluation. See Chapter 5 for a brief discussion of this topic.

Program managers and evaluators who want to evaluate their progress toward NTCP goal area 4 (identifying and eliminating tobacco-related disparities) can do so by using the indicators for the other three goal areas and analyzing the data gathered by race, ethnicity, or tobacco-related disparity. For example, by measuring the level of confirmed awareness of media messages on the dangers of secondhand smoke (indicator 2.3.1) across various racial populations, evaluators can learn whether the messages' reach varied among racial groups.

#### **Indicator Selection and Rating**

CDC proposed a set of outcome indicators and engaged a panel of 16 experts in tobacco control practice, evaluation, and research to assess each indicator on the basis of the following criteria: strength of evaluation evidence, utility, face validity to policy makers, conformity with accepted practice, uniqueness, overall quality, and how essential the indicator is for evaluating state tobacco control programs.

The experts also indicated the level of resources needed to collect and analyze data on the indicator. In addition to rating the indicators that CDC proposed, the experts suggested other indicators and sources of data for those indicators.

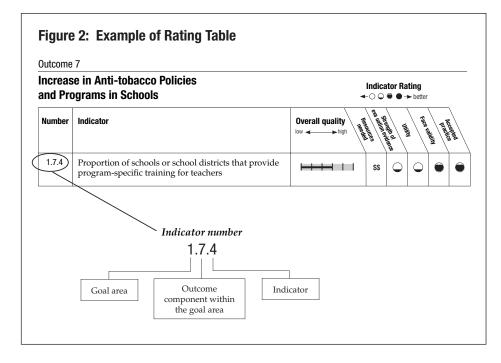
CDC reviewed the experts' responses, comments, and suggestions and compiled the results into an individual rating across criteria for each indicator. A few indicators, however, have no ratings because they were added at the suggestion of the experts after the rating process was complete. These indicators have the symbol NR after their numbers.

In addition, the experts' ratings showed that the criterion "essential for evaluation" was highly correlated with "overall quality" and is therefore omitted from the indicator rating tables described below. Likewise, the "uniqueness" criterion was used only to narrow the indicator lists (see Appendix B).

For a list of expert panel members, see Appendix C.

Because some reviewers said they were not familiar with all the research on all goal areas, we do not report their ratings on the "strength of evaluation evidence" criterion. Instead, under contract with CDC, the Battelle Centers for Public Health Research and Evaluation rated the strength of scientific evidence that supports using each indicator to measure a downstream outcome of a tobacco control program. This information can be found in the indicator rating tables (described below) for each outcome in the related logic model.

For detailed information on how CDC selected indicators, how the expert panelists and Battelle Centers for Public Health Research and Evaluation went about their tasks, and how the ratings were calculated, see Appendix B. Also in Appendix B is a full explanation of how CDC compiled the indicator ratings.



#### **Indicator Rating Tables**

For each outcome component of the logic models, we provide an indicator rating table. In each table is a list of all the indicators associated with the outcome component and the ratings for each indicator by criterion. Using this table makes it easy to compare all the indicators for one outcome. The number and name of each relevant indicator is provided in each table, as are graphic displays of the criteria scores for each indicator.

An example of an indicator rating and an explanation of how to read it is provided in Figure 2.

The following are definitions of the criteria on which the ratings are based:

- ▶ Overall quality. The general worth of the indicator as it relates to evaluating state tobacco control programs.
- ▶ **Resources needed.** Dollar signs show the amount of resources (funds, time, and effort) needed to collect and analyze data on the indicator using the most commonly available data source: the more dollar signs (maximum four), the more resources needed. The dollar signs do not represent specific amounts because the actual cost of measuring and analyzing an indicator varies according to the existing capacity of a state health department or organization to evaluate its programs.
- ▶ Strength of evaluation evidence. The degree to which scientific evidence supports the assumption that implementing interventions to effect change in a given indicator (e.g., proportion of schools or school districts that provide program-specific training for teachers) will lead to measurable downstream outcome (e.g., reduced susceptibility to experimentation with tobacco products).
- ▶ **Utility.** The extent to which the indicator is useful for answering evaluation questions for comprehensive state tobacco control programs.
- ▶ **Face validity.** The degree to which data on the indicator would appear valid to tobacco program stakeholders, such as policy makers.
- ▶ **Accepted practice.** The degree to which using the indicator to measure a tobacco control program's progress is consistent with accepted practice.

In addition, certain symbols are associated with some of the ratings:

- An asterisk (\*) indicates low reviewer response: if less than 75% of experts rated the indicator or if more than 75% of experts gave a certain criterion an invalid rating (e.g., "don't know"), we considered the indicator to have low reviewer response. A low response suggests a high degree of uncertainty among raters. An example of such an indicator is 2.3.2: Level of receptivity to media messages about secondhand smoke.
- A dagger (†) indicates a low level of agreement among reviewers: if less than 75% of the valid ratings were within one point of each other, we considered the rating to have a low level of agreement. An example of an indicator with a low level of agreement is 1.6.3: Proportion of students who would ever wear or use something with a tobacco company name or picture. This low level of agreement represents a relatively high degree of variability in the raters' responses for the criterion.
- ▶ A diamond (⟨⟩) indicates that the "resources needed" rating for this indicator was modified by CDC after the experts provided their ratings for this criterion. An example of such an indicator is 1.9.1: Extent and type of retail tobacco advertising and promotions.

#### **Indicator Profiles**

Each indicator listed in this publication is associated with one short-term, intermediate, or long-term outcome component in a specific logic model for each of the NTCP's first three goal areas. Several indicators, however, are associated with more than one NTCP goal area. These indicators may have different indicator ratings, depending on the NTCP goal area and logic model component. In addition, the number of indicators for each logic model component varies considerably; some have only one indicator, while others have many.

For each indicator, we provide an indicator profile. These profiles provide detailed information about each indicator, as follows:

- ▶ Indicator number and name. Each indicator is uniquely identified by three numbers. The first number represents the goal area, the second number represents the outcome component within the goal area logic model, and the third number represents the indicator. For example, indicator 1.6.3 is number 3 on the list of indicators associated with outcome component 6 in the logic model for NTCP goal area 1.
- ▶ Outcome component. The title of the outcome component (i.e., logic model box) is provided in the logic model.
- What to measure. A description is included of what to measure in order to gather data on the indicator.
- ▶ Why this indicator is useful. The rationale is provided for using the indicator as a measure of a specific outcome in the logic model.
- ▶ Example data source(s). Listed are some example surveys and sources of data to measure the indicator as well as the population from which the data could be collected (if not apparent from the title). Most sources we list are well known and widely used state or national surveys or surveillance systems.³ We also list non-standardized topic-specific data sources (e.g., media tracking, policy tracking, worksite surveys, environmental scans, and other tobacco-related state surveys) that may not be widely used by state tobacco programs but can be useful for evaluation. If similar survey questions are in multiple data sources, we list the data source most commonly available to state tobacco control programs. In addition to measuring the suggested indicator, evaluators may want to collect demographic data such as survey respondents' age, sex, race, ethnicity, and city or county of residence.
- ▶ **Population group(s).** The population group(s) include(s) the individuals from which data about this indicator are most commonly collected, if applicable.
- ▶ Example survey question(s). These are usually survey questions from state or national surveys or surveillance systems. When appropriate, the range of possible responses to the survey questions is also given. If no state or national survey has an appropriate question, we created an example question.
- ▶ Comments. Here we provide any additional information we have on this indicator. For example, we may suggest other uses for the indicator, the indicator's limitations (if any) as a measure of a program's progress, or sources of information on data collection methods.

▶ Reviewers' ratings. The rating tables include the criterion ratings given to the indicator by the panel of experts and Battelle Centers for Public Health Research and Evaluation ("strength of evaluation evidence" criterion only).

#### Using This Book to Plan a State Tobacco Control Program Evaluation

State tobacco control program managers need to evaluate their programs to demonstrate their effects, account for their funding, and improve their programs. Effective tobacco control programs require careful planning, implementation, and evaluation. To develop a successful program and a useful evaluation, program staff and program evaluators must work collaboratively on program planning and evaluation planning. A strong evaluation will not salvage a weak program, and a strong program cannot be proven effective without a defensible evaluation.

Managers and evaluators can use this publication to help them select the program's outcomes and the key indicators for evaluating the program's success in achieving the selected outcomes. Programs need to avoid two common pitfalls: (1) choosing interventions without sufficient plans or funds for evaluation; and (2) only selecting indicators primarily for research purposes rather than for program evaluation.<sup>1</sup>

Seven major steps are involved in planning an effective program and program evaluation. The order in which each step is taken can vary depending on the program's circumstances. For example, the first step of a program with limited funds for evaluation might be to examine the indicator rating tables to see which indicators require the fewest resources for data collection and analysis. Alternatively, the first step might be to review Appendix D (Data Source Indicator Table) to determine which indicators are being measured by surveillance and evaluation methods already in place in the state. Another program might be given funds specifically to reduce nonsmokers' exposure to secondhand smoke. Since the funders selected this program's long-term outcome, the planners' first step could be to examine the logic model of goal area 2 (eliminating nonsmokers' exposure to secondhand smoke) to select the short-term and intermediate outcomes they will work toward achieving.

Below are the seven major steps involved in planning and evaluating a state tobacco control program. This book provides assistance for steps 1–4 and step 7.

States are not restricted to addressing one goal area. In fact, we encourage programs to work across several goal areas. However, it is best to go through the steps separately for each selected goal area and then consider program strategies and indicators across goal areas. This approach can help produce efficiencies of scale in both operating programs and in evaluating them.

#### Step 1. Select the NTCP goal area that suits your program best.

Look at the logic models for each NTCP goal area carefully, keeping in mind that we do not list outcome indicators for goal area 4 in this publication (see page 5 in this chapter and page 269 in Chapter 5 for an explanation). For program planning, it is often helpful to read logic models backward; that is, begin with the long-term outcomes and trace a causal pathway back through intermediate outcomes, to short-

term outcomes, to program outputs and program activities. After reviewing the logic models and your state's circumstances (e.g., political situation, resources, and tobacco-related statistics), select the goal area(s) that best fit your state's needs.

#### Step 2. Select long-term outcomes for your program.

Read the outcome overviews for the long-term outcome components in the selected goal area's logic model. This information will help you understand the rationale and empirical support for the logic model pathway that links specific program activities with specific outcomes. If you need more information, read some of the related articles listed after the references for each outcome overview in the section titled "For Further Reading." Then, on the basis of this information, select one or more long-term outcomes, again keeping in mind your state's circumstances, resources, and needs.

#### Step 3. Select short-term and intermediate outcomes for your program.

Read the outcome overviews for each short-term and intermediate outcome component that is linked to your selected long-term outcomes. If you need more information, read some of the related articles listed after the references for each outcome overview in the section titled "For Further Reading." Based on what you have read and your program's circumstances, select short-term and intermediate outcomes that will lead to your selected long-term outcomes.

### Step 4. Select indicators of progress toward your selected short-term, intermediate, and long-term outcomes.

Examine the indicator rating tables relevant to the long-term, intermediate, and short-term outcomes you have selected. Compare ratings pertaining to the indicators' overall quality, resources needed, strength of evaluation evidence, utility, face validity, and accepted practice. Select candidate indicators and learn more about them by reading each indicator profile. On the basis of your reading and your program's circumstances, select indicators to show progress toward your selected short-term, intermediate, and long-term outcomes.

#### Step 5. Select or design activities to achieve your selected outcomes.

Program activities should be designed to achieve intended outcomes. To learn more about designing, planning, and implementing evidence-based tobacco control activities, managers and evaluators should refer to several evidence-based publications, such as:

- ▶ Best Practices for Comprehensive Tobacco Control Programs¹
- ▶ Reducing Tobacco Use: A Report of the Surgeon General<sup>5</sup>
- ► The Guide to Community Preventive Services: Tobacco Use Prevention and Control<sup>6</sup>
- ▶ Treating Tobacco Use and Dependence: Clinical Practice Guideline<sup>7</sup>

- ▶ The Health Consequences of Smoking: A Report of the Surgeon General<sup>8</sup>
- ▶ Preventing Tobacco Use Among Young People: A Report of the Surgeon General9
- ▶ Women and Smoking: A Report of the Surgeon General<sup>10</sup>
- ► Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General<sup>12</sup>

We also encourage managers and evaluators to contact their state's program consultant at CDC.

#### Step 6. Implement your selected intervention activities.

Program staff should implement intervention activities and monitor them to determine the degree to which activities have been implemented as intended.<sup>11</sup>

#### Step 7. Evaluate your progress toward achieving your selected outcomes.

Monitor indicators selected in step 4 to assess your program's progress over time and to compare your data with those of other states. Focus your evaluation design on answering your evaluation questions within your state context by creating program objectives. Good program objectives are SMART (i.e., they are specific, measurable, achievable, relevant, and time-bound). An example of a SMART objective is increasing the percentage of young people in a given state who have confirmed awareness of anti-tobacco messages on the dangers of secondhand smoke from 25% in January 2005 to 50% in January 2006. For more information on creating SMART objectives, see *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*.<sup>2</sup>

### The Importance of Merging Program and Evaluation Planning Early in the Program Planning Process

When a program is organized and planned on the basis of the goal area's logic model, managers and evaluators essentially have an outline of their outcome evaluation plan early in the program planning process. As the program evolves, managers and staff can make adjustments to program activities and, at the same time, the evaluation plan. Evaluation data can be used to show the program's effect and to inform planning and implementation of program activities.

For information on program planning, see the publications listed in step 5 (page 10).

### Steps for Planning and Evaluating a State Tobacco Control Program

- 1. Select the NTCP goal area that suits your program best.
- 2. Select long-term outcomes for your program.
- 3. Select short-term and intermediate outcomes for your program.
- 4. Select indicators of progress toward your selected short-term, intermediate, and long-term outcomes.
- 5. Select or design activities to achieve your selected outcomes.
- 6. Implement your selected intervention activities.
- 7. Evaluate your progress toward achieving your selected outcomes.

#### Planning an Evaluation of a State Tobacco Control Program: A Hypothetical Example

In this example, assume that recent data from a state's adult tobacco survey show an increase in nonsmokers' exposure to secondhand smoke among adults, and state legislators are concerned about this increase. The legislators let it be known that new funds may become available if the state tobacco program can show that it is effective in reducing nonsmokers' exposure to secondhand smoke.

On the basis of these factors, the state tobacco control program follows the steps described above:

#### Step 1. Select the NTCP goal area that suits your program best.

The legislature is providing funds specifically to eliminate nonsmokers' exposure to secondhand smoke. Therefore, the state tobacco control program chooses NTCP goal area 2: Eliminating nonsmokers' exposure to secondhand smoke.

#### Step 2. Select long-term outcomes for your program.

Program staff and evaluators review the logic model for NTCP goal area 2 (page 123) and select two long-term outcomes that they aim to achieve:

- Outcome 7. Reduced exposure to secondhand smoke
- Outcome 8. Reduced tobacco consumption

To learn about these long-term outcomes, they study the relevant outcome component overviews (pages 174 and 184) and read several articles listed after the references for each overview in the section titled "For Further Reading."

#### Step 3. Select short-term and intermediate outcomes for your program.

Following our recommendations, the program planners and evaluators read the logic model for NTCP goal area 2 backward (starting at long-term outcomes) to select intermediate and short-term outcomes. They select one intermediate outcome:

Outcome 6. Compliance with tobacco-free policies

This outcome serves as a funnel between the long-term outcomes (selected in step 2) and three short-term outcomes in the logic model of NTCP goal area 2:

- Outcome 3. Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies
- Outcome 4. Creation of tobacco-free policies
- Outcome 5. Enforcement of tobacco-free public policies

The program planners and evaluators understand that achieving one or more of these short-term and intermediate outcomes will lead to achieving the selected long-term outcomes and then to the distal outcomes of reducing tobacco-related morbidity and mortality and decreasing tobacco-related disparities. The planners and evaluators select the suggested short-term and intermediate outcomes with the intention of learning more about them before making a final decision about which outcomes are most relevant to their program.

The planners and evaluators read the outcome component overviews on the candidate short-term outcomes (pages 127, 147, 159) and intermediate outcome (page 165). They also read several of the articles listed after the references for each outcome component overview in the section titled "For Further Reading" to determine the degree to which selected outcomes are relevant to their program.

### Step 4. Select indicators of progress toward your selected short-term, intermediate, and long-term outcomes.

Next, the planners and evaluators look at the list of indicators associated with each selected outcome component (3–8), and they begin with outcome 3.

First the planners and evaluators examine the indicator rating table for outcome 3 (page 131). By doing so, they can assess which indicators meet the criteria (e.g., overall quality, resources needed, strength of evaluation evidence, utility, face validity, and accepted practice) that are most important to the program. Because the available funds are not sufficient for an expensive evaluation, the planners pay special attention to the "resources needed" criterion in the indicator rating table to avoid selecting indicators that are too costly to measure. In addition, since the state legislature expressed an interest in this effort, program managers want to select indicators that have a high rating for face validity to policy makers.

Before making a decision about which indicators to select, however, the planners and evaluators read the information in the indicator profiles associated with outcome component 3 (pages 132–146).

The planners and evaluators realize that data collection for all the indicators would be equally expensive if they were to design and implement a new survey. But, because they have studied the indicator information carefully, they realize that three indicators associated with outcome component 3 can be measured using CDC Recommended Questions in the State's Adult Tobacco Survey:

- 2.3.5 Proportion of the population that thinks secondhand smoke is harmful
- 2.3.6 Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women
- 2.3.7 Level of support for creating tobacco-free policies in public places and workplaces

Another indicator can be measured using CDC's Recommended Questions in Supplemental Section D: Environmental Tobacco Smoke in the State's Adult Tobacco Survey:

2.3.4 Proportion of the population willing to ask someone not to smoke in their presence

In addition, another indicator can be measured using the CDC's Recommended Questions in Supplemental Section F: Policy Issues in the State's Adult Tobacco Survey:

2.3.10<sup>NR</sup> Level of support for creating policies in schools

The planners and evaluators also understand that short-term changes in the knowledge and attitudes of young people are important contributors to successful enforcement of, and compliance with, tobacco-free policies. They therefore decide to monitor indicator 2.3.5, which can be measured using CDC's Recommended Core Questions in the State's Youth Tobacco Survey:

2.3.5. Proportion of the population that thinks secondhand smoke is harmful

The planners and evaluators use the same process to select indicators for each of the other selected outcome components (4, 5, 6, 7, and 8).

#### Step 5. Select or design activities to achieve your selected outcomes.

The program planners select and design evidence-based interventions, such as countermarketing campaigns focused on the dangers of secondhand smoke; activities to create tobacco-free school, home, and workplace policies; and activities to mobilize decision makers to promote bans on secondhand smoke. See Appendix A for more information on program strategies.

#### Step 6. Implement your selected intervention activities.

The program staff implements the intervention activities and continuously monitors (1) whether the activities are being implemented as intended and (2) the extent to which the program is reaching its target audiences.

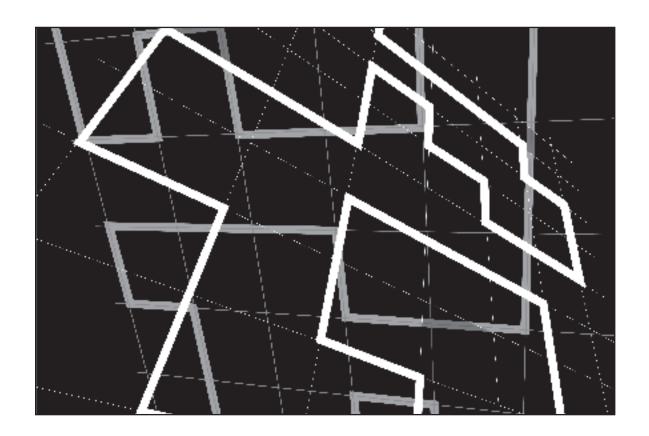
#### Step 7. Evaluate your progress toward achieving your selected outcomes.

The planners and evaluators translate indicators into SMART program objectives. For example, for indicator 2.3.7 (level of support for creating tobacco-free policies in public places and workplaces), they create the following objective: Increase the percentage of adults in the state who believe that smoking should not be allowed at all in indoor workplaces from 20% in January 2005 to at least 50% in June 2006. In addition, the planners and evaluators measure the selected indicators, track changes over time, and compare their data to data from similar states.

#### References

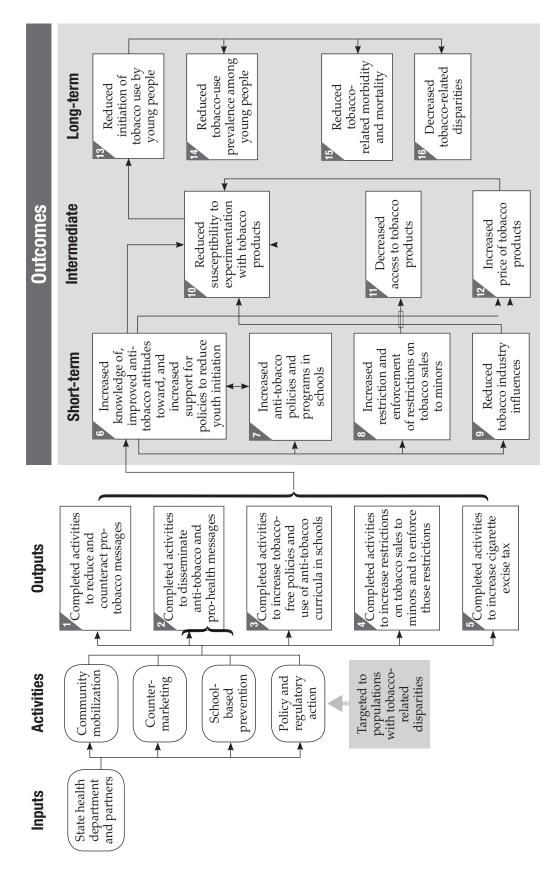
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# Goal Area 1: Preventing Initiation of Tobacco Use Among Young People



Goal Area 1

Preventing Initiation of Tobacco Use Among Young People



#### **Preventing Initiation of Tobacco Use Among Young People**

#### **Short-term Outcomes**

- Outcome 6: Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation
  - ▶ 1.6.1 Level of confirmed awareness of anti-tobacco media messages
  - ▶ 1.6.2 Level of receptivity to anti-tobacco media messages
  - ▶ 1.6.3 Proportion of students who would ever wear or use something with a tobacco company name or picture
  - ▶ 1.6.4 Level of support for policies, and enforcement of policies, to decrease young people's access to tobacco
  - ▶ 1.6.5 Level of support for increasing excise tax on tobacco products
  - ▶ 1.6.6 Level of awareness among parents about the importance of discussing tobacco use with their children
  - ▶ 1.6.7<sup>NR</sup> Level of support for creating policies in schools
  - ▶ **1.6.8**<sup>NR</sup> Proportion of young people who think that the cigarette companies try to get young people to smoke

#### ■ Outcome 7: Increased anti-tobacco policies and programs in schools

- ▶ 1.7.1 Proportion of schools or school districts reporting the implementation of 100% tobacco-free policies
- ▶ 1.7.2 Proportion of schools or school districts that provide instruction on tobacco-use prevention that meets CDC guidelines
- ▶ 1.7.3 Proportion of schools or school districts that provide tobacco-use prevention education in grades K–12
- ▶ 1.7.4 Proportion of schools or school districts that provide program-specific training for teachers
- ▶ 1.7.5 Proportion of schools or school districts that involve families in support of school-based programs
- ▶ 1.7.6 Proportion of schools or school districts that support cessation interventions for students and staff who use tobacco
- ▶ 1.7.7 Proportion of schools or school districts that assess their tobacco-use prevention program at regular intervals
- ▶ 1.7.8 Proportion of students who participate in tobacco-use prevention activities

- ▶ 1.7.9 Level of reported exposure to school-based tobacco-use prevention curricula that meet CDC guidelines
- ▶ 1.7.10 Perceived compliance with tobacco-free policies in schools
- ▶ 1.7.11 Proportion of schools or school districts with policies that regulate display of tobacco industry promotional items

#### Outcome 8: Increased restriction and enforcement of restrictions on tobacco sales to minors

- ▶ 1.8.1 Proportion of jurisdictions with policies that ban tobacco vending machine sales in places accessible to young people
- ▶ 1.8.2 Proportion of jurisdictions with policies that require retail licenses to sell tobacco products
- ▶ 1.8.3 Proportion of jurisdictions with policies that control the location, number, and density of retail outlets
- ▶ **1.8.4** Proportion of jurisdictions with policies that control self-service tobacco sales
- ▶ 1.8.5 Number of compliance checks conducted by enforcement agencies
- ▶ 1.8.6 Number of warnings, citations, and fines issued for infractions of public policies against young people's access to tobacco products
- ▶ 1.8.7 Changes in state tobacco control laws that preempt stronger local tobacco control laws

#### ■ Outcome 9: Reduced tobacco industry influences

- ▶ 1.9.1 Extent and type of retail tobacco advertising and promotions
- ▶ 1.9.2 Proportion of jurisdictions with policies that regulate the extent and type of retail tobacco advertising and promotions
- ▶ **1.9.3** Extent of tobacco advertising outside of stores
- ▶ 1.9.4 Proportion of jurisdictions with policies that regulate the extent of tobacco advertising outside of stores
- ▶ 1.9.5 Extent of tobacco industry sponsorship of public and private events
- ▶ 1.9.6 Proportion of jurisdictions with policies that regulate tobacco industry sponsorship of public events
- ▶ 1.9.7 Extent of tobacco advertising on school property, at school events, and near schools
- ▶ 1.9.8 Extent of tobacco advertising in print media

- ▶ 1.9.9 Amount and quality of news media stories about tobacco industry practices and political lobbying
- ▶ 1.9.10 Number and type of Master Settlement Agreement violations by tobacco companies
- ▶ 1.9.11 Extent of tobacco industry contributions to institutions and groups
- ▶ 1.9.12 Amount of tobacco industry campaign contributions to local and state politicians

#### **Intermediate Outcomes**

### ■ Outcome 10: Reduced susceptibility to experimentation with tobacco products

- ▶ 1.10.1 Proportion of young people who think that smoking is cool and helps them fit in
- ▶ 1.10.2 Proportion of young people who think that young people who smoke have more friends
- ▶ 1.10.3 Proportion of young people who report that their parents have discussed not smoking with them
- ▶ 1.10.4 Proportion of parents who report that they have discussed not smoking with their children
- ▶ 1.10.5 Proportion of young people who are susceptible never-smokers

#### Outcome 11: Decreased access to tobacco products

- ▶ 1.11.1 Proportion of successful attempts to purchase tobacco products by young people
- ▶ **1.11.2** Proportion of young people reporting that they have been sold tobacco products by a retailer
- ▶ **1.11.3** Proportion of young people reporting that they have been unsuccessful in purchasing tobacco products from a retailer
- ▶ 1.11.4 Proportion of young people reporting that they have received tobacco products from a social source
- ▶ 1.11.5 Proportion of young people reporting that they purchased cigarettes from a vending machine
- ▶ 1.11.6<sup>NR</sup> Proportion of young people who believe that it is easy to obtain tobacco products

#### ■ Outcome 12: Increased price of tobacco products

▶ **1.12.1** Amount of tobacco product excise tax

#### **Long-term Outcomes**

- Outcome 13: Reduced initiation of tobacco use by young people
  - ▶ 1.13.1 Average age at which young people first smoked a whole cigarette
  - ▶ 1.13.2 Proportion of young people who report never having tried a cigarette
- Outcome 14: Reduced tobacco-use prevalence among young people
  - ▶ 1.14.1 Prevalence of tobacco use among young people
  - ▶ 1.14.2 Proportion of established young smokers

### Increased Knowledge of, Improved Anti-tobacco Attitudes Toward, and Increased Support for Policies to Reduce Youth Initiation

The theory of change associated with preventing young people from starting to use tobacco begins with increasing their knowledge of the dangers of tobacco use, changing their attitudes toward tobacco use, and increasing public support for policies that reduce the likelihood that young people will use tobacco. The tobacco industry spends more than \$12.5 billion per year on marketing.¹ Adolescents are bombarded with pro-tobacco messages in and around retail stores, in magazines, in movies, and by smokers around them. Evidence shows that anti-tobacco media campaigns, when combined with other interventions, are effective in reducing tobacco use by adolescents.² For example, the "truth" anti-tobacco media campaign in Florida achieved nearly 93% confirmed awareness of the message among young people and was associated with improved anti-tobacco attitudes.³ After one year, both susceptibility to smoking and cigarette use declined more among Florida's young people than among young people in the rest of the nation.³

In addition to changing young people's attitudes toward tobacco use, it is necessary to increase adult support for implementing and enforcing policies that reduce the likelihood that young people will begin smoking. Such policies include increasing tobacco excise taxes, passing and enforcing strong laws that decrease young people's access to tobacco, and implementing tobacco-free school policies. Policies such as these eventually create an environment that supports a smoke-free lifestyle among young people.

Listed below are the indicators associated with this outcome:

- ▶ 1.6.1 Level of confirmed awareness of anti-tobacco media messages
- ▶ 1.6.2 Level of receptivity to anti-tobacco media messages
- ▶ **1.6.3** Proportion of students who would ever wear or use something with a tobacco company name or picture
- ▶ **1.6.4** Level of support for policies, and enforcement of policies, to decrease young people's access to tobacco
- ▶ 1.6.5 Level of support for increasing excise tax on tobacco products
- ▶ 1.6.6 Level of awareness among parents about the importance of discussing tobacco use with their children
- ▶ 1.6.7<sup>NR</sup> Level of support for creating policies in schools
- ▶ 1.6.8<sup>NR</sup> Proportion of young people who think that the cigarette companies try to get young people to smoke

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### Increased Knowledge of, Improved Anti-tobacco Attitudes Toward, and Increased Support for Policies to Reduce Youth Initiation

Indicator Rating

←○○●●→ better

Number	Indicator	Overall quality	Strens enuces	Utilles de la conce	Face ver	practice	Control
1.6.1	Level of confirmed awareness of anti-tobacco media messages		\$\$	•	•	•	
1.6.2	Level of receptivity to anti-tobacco media messages		\$\$	•	•		•
1.6.3	Proportion of students who would ever wear or use something with a tobacco company name or picture	, , , , , , , , , , , , , , , , , , ,	\$\$	•	•	•	
1.6.4	Level of support for policies, and enforcement of policies, to decrease young people's access to tobacco		\$\$	Ø			
1.6.5	Level of support for increasing excise tax on tobacco products		\$\$ <sup>†</sup>	Ø	•	•	•
1.6.6	Level of awareness among parents about the importance of discussing tobacco use with their children	t	\$\$	•	0	○ <sup>†</sup>	0
1.6.7 <sup>NR</sup>	Level of support for creating policies in schools		Ø	Ø	Ø	Ø	$\Diamond$
1.6.8 <sup>NR</sup>	Proportion of young people who think that the cigarette companies try to get young people to smoke		Ø	Ø	Ø	Ø	$\Diamond$

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

 <sup>□</sup> Denotes no data.

 $<sup>^{\</sup>rm NR}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

### Indicator 1.6.1

<b>Level of Confirm</b>	ned Awareness	of Anti-tol	oacco Media	a Messag	es						
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people							
Outcome 6	Increased knowle for policies to red			co attitudes t	toward, and incr	eased support					
What to measure	Proportion of the	target popula	ition that can ac	ccurately rec	all a media mess	sage					
Why this indicator is useful	Evaluators should awareness of thes about the message	e messages b									
Example data source(s)	Legacy Media Tra Information on Ll			acco.rti.org/	data/lmts.cfm						
Population group(s)	Young people age	Young people aged less than 18 years									
Example survey question(s)	From LMTS  Have you recently seen an anti-smoking or anti-tobacco ad on TV that shows										
Comments	The example questions could be asked of adults.  Evaluators may want to categorize awareness of the medium (e.g., billboard, television, print) through which respondents learned of the anti-tobacco message.  Programs may want to evaluate confirmed awareness of an advertisement by respondents' smoking status (current, former, or never) and addiction level (e.g., light, moderate, or heavy), because awareness levels may differ significantly among groups with different levels of addiction.  Evaluators should work closely with countermarketing campaign managers to (1) develop a separate series of questions for each main media message and (2) coordinate data collection with the timing of the media campaign.										
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice					
		\$\$									
				<b>←</b> ○○	● → better						

<sup>1.</sup> Sly DF, Heald GR, Ray S. The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control*. 2001;10(1):9–15.

<b>Level of Recept</b>	ivity to Anti-tob	acco Medi	ia Messages	6					
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people					
Outcome 6	Increased knowle for policies to red			co attitudes t	toward, and incr	eased suppor			
What to measure	The level of recep generally defined message. In tobac receptivity is the made them think	as the extent co control eve extent to which	to which peoplaluation, however ch people believe	le are willing ver, the defir ve that the m	g to listen to a pe nition is narrowe nessage was conv	ersuasive r; vincing,			
Why this indicator is useful	Message awarene attitudes, and inte if their messages a message helps en- to anti-tobacco me to smoke. <sup>6</sup>	entions of you reach and res sure campaig	ing people. Me onate with the in preffectiveness.	dia campaig intended aud <sup>2–5</sup> One stud	ns are effective of dience. A well-re y found that rece	only ceived eptivity			
Example data source(s)	Legacy Media Tracking Survey (LMTS), 2003 Information on LMTS available at: http://tobacco.rti.org/data/lmts.cfm								
Population group(s)	Young people age	Young people aged less than 18 years							
Example survey question(s)	From LMTS  Tell me how much you agree or disagree with the following statement: This ad is convincing. Would you say you:  ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree ☐ Have no opinion ☐ Don't know								
	Would you say the ad gave you good reasons not to smoke?  ☐ Yes ☐ No ☐ Don't know  Did you talk to your friends about this ad?  ☐ Yes ☐ No ☐ Don't know								
Comments	The example quest Evaluators may we learned of the me	ant to assess	receptivity by t	the medium	through which i	respondents			
	Evaluators should (1) develop a sepa (2) coordinate dat	ırate series of	questions for e	ach main m	edia message an				
Rating	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$				•			
				<b>←</b> ○○(	● → better				

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### Proportion of Students Who Would Ever Wear or Use Something with a Tobacco Company Name or Picture

Goal area 1	Preventing initiati	on of tobacco	o use among yo	ung people					
Outcome 6		Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation							
What to measure		Proportion of students who are willing to buy or receive a cigarette promotional item (e.g., sports gear, clothing, lighters, or sunglasses)							
Why this indicator is useful	or use tobacco pro cigarettes. 1-5 Young twice as likely to b	Evidence suggests a causal relationship between adolescents' willingness to wear or use tobacco promotional items and the likelihood that they will experiment with cigarettes. 1-5 Young people who are highly receptive to tobacco marketing are more than twice as likely to become established smokers as those with a low level of receptivity to tobacco marketing. 3							
Example data source(s)	Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004								
Population group(s)	Young people age	d less than 18	8 years						
Example survey question(s)	From YTS  Would you ever u on it, such as a ligi □ Definitely yes	hter, t-shirt, l	nat, or sunglass	es?	1 ,	or picture			
Comments	None								
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	†	\$\$							
				<b>←</b> ○○(	● → better				
	† Denotes low agre	nament among	r raviaware: that i	e fawar than	75% of the valid re	atings for this			

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indicator were within one point of each other (see Appendix B for an explanation).

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#### Indicator 1.6.4

### Level of Support for Policies, and Enforcement of Policies, to Decrease Young People's Access to Tobacco

Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people					
Outcome 6	Increased knowle for policies to red			co attitudes t	oward, and incre	eased support			
What to measure	Proportion of adu people's access to	lts who supp tobacco prod	ort policies and lucts	l enforcemen	at of policies rest	ricting young			
Why this indicator is useful	Tobacco-free policy makers, an retail tobacco sale the passage of loc	d the general s licensing po	public. <sup>1–4</sup> In Ca plicies has grow	llifornia, for o n since 1990,	example, public , and this has co	support for			
Example data source(s)	Adult Tobacco Su Policy Issues, 2003		CDC Recommen	nded Questio	ons: Supplemen	tal Section F:			
Population group(s)	Adults aged 18 ye	Adults aged 18 years or older							
Example survey question(s)	From ATS  How important is it that communities keep stores from selling tobacco products to teenagers? Would you say it is  □ Very important □ Somewhat important □ Not very important □ Not important at all □ No opinion/Don't know □ Refused  How strongly do you agree or disagree with the following statement: Store owners should be required to have a license to sell tobacco products, similar to alcohol, so that teens can't buy tobacco products. Would you say it is □ Very important □ Somewhat important □ Not very important □ Not important at all □ No opinion/Don't know □ Refused								
Comments	The example ques Evaluators may w access to tobacco	ant to analyz	ze the level of su	apport for cr		) decrease			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$	$\triangleright$						
				<b>←</b> ○○(	● → better				
	Denotes no data	a.							

- 1. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta. GA: Centers for Disease Control and Prevention; 2000.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
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- Gilpin EA, Emery SL, Farkas AJ, Distefan JM, White MM, Pierce JP. The California Tobacco Control Program: a decade of progress, results from the California tobacco surveys, 1990–1998. La Jolla, CA: University of California, San Diego; 2001. Available from: http://repositories.cdlib.org/tc/surveys/CTS1999/. Accessed December 2004.

Level of Suppor	Dunnantin - tutti ti	lan aft-1							
Goal area 1	Preventing initiati	ion of tobacco	o use among yo	ung people					
Outcome 6	Increased knowle for policies to red			co attitudes t	oward, and incre	eased support			
What to measure	Proportion of adu of tax increase the		ort an increase	in excise tax	on cigarettes an	d the amount			
Why this indicator is useful	Public opinion is a on tobacco production business owners, support for a tax i increase. <sup>5</sup>	cts. Ťobacco p policy maker	policies are unli es, and the gene	kely to be ad ral public. <sup>1-4</sup>	lopted without s Measuring polic	upport from cy makers'			
Example data source(s)		Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section F: Policy Issues, 2003							
Population group(s)	Adults aged 18 ye	Adults aged 18 years or older							
Example survey question(s)	From ATS  How much additional tax on a pack of cigarettes would you be willing to support if some or all the money raised was used to support tobacco control programs?  □ More than two dollars a pack □ Less than fifty cents a pack								
	☐ Two dollars a pack ☐ No tax increase ☐ One dollar a pack ☐ Don't know/Not sure ☐ Fifty to ninety-nine cents a pack ☐ Refused								
Comments	The example questions could be asked of decision makers or opinion leaders.  Evaluators may want to analyze the level of support for increasing an excise tax on tobacco products according to the smoking status of the respondent.								
	To gather more complete data on tobacco use, evaluators can also ask questions about the use of other tobacco products such as spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll-your-own).								
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$ <sup>†</sup>	$\emptyset$						
		•		<b>←</b> ○○	● → better				
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).  © Denotes no data.								

- 1. U.S. Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 2. U.S. Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. Thompson GW, Wilson N. Public attitudes about tobacco smoke in workplaces: the importance of workers' rights in survey questions. *Tobacco Control*. 2003;13:206–8.
- 4. Howard KA, Rogers T, Howard-Pitney B, Flora JA, Norman GJ, Ribisl KM. Opinion leaders' support for tobacco control policies and participation in tobacco control activities. *American Journal of Public Health.* 2000;90(8):1283–7.

  5. O'Connell P. Tobacco control in the land of the golden leaf. Has political perception kept pace with reality? *North Carolina*
- Medical Journal. 2002;63(3):175-6.

### Indicator 1.6.6

### Level of Awareness Among Parents About the Importance of Discussing Tobacco Use with Their Children

	Preventing initiation of tobacco use among young people								
Outcome 6		Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation							
What to measure	Proportion of pare is important	ents who belie	eve that discuss	sing tobacco	use with their cl	hildren			
Why this indicator is useful	Although studies tobacco use, many awareness among is an important ste	parents do n parents of the	ot discuss toba e importance o	cco use with f discussing	their children.¹¹ tobacco use witl	<sup>-3</sup> Increasing			
Example data source(s)	No commonly use	No commonly used data sources were found							
Population group(s)	Parents of young people aged less than 18 years								
Example survey question(s)	How important is say it is  ☐ Very important ☐ Not important	□ Son	newhat importa	ant 🗆 l	r child(ren)? Wo Not very import Refused to answ	ant			
Comments	The authors create used data source.	ed this examp	le question. It c	does not com	ne from any com	monly			
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	†	\$\$			○ <sup>†</sup>				
		_		<b>←</b> ○○(	● → better				

- 1. Clark PI, Scarisbrick-Hauser A, Gautam SP, Wirk SJ. Anti-tobacco socialization in homes of African-American and white parents, and smoking and nonsmoking parents. *Journal of Adolescent Health*. 1999;24:329–39.
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- 3. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

<b>Level of Suppor</b>	t for Creating Policies in Schools							
Goal area 1	Preventing initiation of tobacco use among young people							
Outcome 6	Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation							
What to measure	Proportion of adults who support creating and actively enforcing tobacco-free policies in schools							
Why this indicator is useful	Young people's attitudes about the acceptability of smoking are influenced by what they see their peers and educators doing at school. Strong school anti-tobacco policies require the support of parents, teachers, principals, policy makers, and the general public. <sup>1</sup>							
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section F: Policy Issues, 2003</li> <li>University of California at San Diego, California Tobacco Survey (CTS): Adult Attitudes and Practices, 1996         Information on CTS available at:         <ul> <li>http://ssdc.ucsd.edu/tobacco</li> <li>http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm</li> </ul> </li> <li>Behavioral Risk Factor Surveillance System (BRFSS), Tobacco Use Prevention Module, 2000</li> </ul>							
Population group(s)	Adults aged 18 years or older							
Example survey question(s)	From ATS  How strongly do you agree or disagree with the following statement: Tobacco use by adults should not be allowed on school grounds or at any school events.  ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree ☐ No opinion/Don't know ☐ Refused							
	From CTS  Do you think schools should prohibit students from wearing clothing or bringing gear with tobacco brand logos to school?  ☐ Yes ☐ No							
	From BRFSS  Do you think that smoking should be allowed in all areas of schools, restaurants, day care, and indoor work areas, some areas, or not allowed at all?  ☐ All areas ☐ Some areas ☐ Not allowed ☐ Refused to answer							
Comments	The example questions could also be asked of decision makers.  Evaluators may want to analyze the level of support for creating tobacco-free policies in schools based on the respondent's tobacco use.  This indicator was not rated by the panel of experts and, therefore, no rating information is provided. See Appendix B for an explanation.							

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		$\Diamond$	$\bigotimes$	$\Diamond$	$\bigotimes$	$\bigotimes$	
				<b>←○○</b>	● → better		

 $<sup>^{\</sup>mbox{\scriptsize NR}}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

<sup>1.</sup> Task Force on Community Preventive Services Meeting. February 25, 2004. Meeting minutes available at www.thecommunityguide.org.

# **Proportion of Young People Who Think That the Cigarette Companies Try to Get Young People to Smoke**

Goal area 1	Preventing initiat	ion of tobacco	o use among yo	oung people					
Outcome 6	Increased knowled for policies to red	Increased knowledge of, improved anti-tobacco attitudes toward, and increased support for policies to reduce youth initiation							
What to measure	Proportion of you people to start sm		ho believe that	cigarette con	npanies try to ge	t young			
Why this indicator is useful	If young people a to start smoking, marketing tactics	they may bec							
Example data source(s)	Information avail	California Independent Evaluation: Youth Survey, 2000 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm							
Population group(s)	Young people age	Young people aged less than 18 years							
Example survey question(s)	From California Indep Do tobacco comp that are attractive  Yes, definitely	anies try to go to young peo	et young people ople?			dvertisements			
Comments	This indicator wa	s not rated by Appendix B fo	the panel of exor an explanation	xperts and, tl	nerefore, no ratir	ng informatior			
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		$\bigotimes$	$\bigotimes$	$\Diamond$	$\bigotimes$	$\bigotimes$			
				<b>←</b> ○○	● → better				
	□ Denotes no dat	a.							

 $<sup>^{\</sup>mbox{\scriptsize NR}}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

<sup>1.</sup> Evans N, Farkas A, Gilpin E, Berry C, Pierce JP. Influence of tobacco marketing and exposure to smokers on adolescent susceptibility to smoking. *Journal of the National Cancer Institute*. 1995;87(20):1538–45.

### **Increased Anti-tobacco Policies and Programs in Schools**

To prevent and reduce tobacco use by young people, schools should implement comprehensive anti-tobacco policies and programs that reinforce tobacco-free norms. Young people spend much of their time in school and are influenced by school policies and programs and by the actions of their peers and of adults.¹ Evidence shows that education programs that include instruction on the short-and long-term physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms, and life skills can prevent or reduce tobacco use among students.²³ School-based interventions that are combined with mass media campaigns and additional community-wide educational anti-tobacco activities show evidence of effectiveness in reducing tobacco use among young people.³ The Community Guide to Preventive Services Task Force, however, states that insufficient evidence is available to indicate that either school-based education programs (e.g., classroom programs) or student-delivered community education (e.g., Students Working Against Tobacco [SWAT]) are effective when implemented alone, without other community activities to supplement or reinforce them.³

The demand for effective tobacco-use cessation interventions for young people has been growing.<sup>4</sup> As with all public health programs, such interventions must be based on evidence that proves that they work. Unfortunately, few rigorous scientific studies exist on which to base recommendations that would help young smokers quit.<sup>4</sup>

CDC provides guidelines for school health programs to prevent tobacco use and addiction.<sup>2</sup> The guidelines include recommendations on policies, curricula and instruction, teacher training, parental involvement, tobacco-use cessation, and evaluation. The guidelines are based on research, scientific theory, and practice.

Listed below are the indicators associated with this outcome:

- ▶ 1.7.1 Proportion of schools or school districts reporting the implementation of 100% tobacco-free policies
- ▶ 1.7.2 Proportion of schools or school districts that provide instruction on tobacco-use prevention that meets CDC guidelines
- ▶ 1.7.3 Proportion of schools or school districts that provide tobacco-use prevention education in grades K–12
- ▶ 1.7.4 Proportion of schools or school districts that provide program-specific training for teachers
- ▶ 1.7.5 Proportion of schools or school districts that involve families in support of school-based programs
- ▶ 1.7.6 Proportion of schools or school districts that support cessation interventions for students and staff who use tobacco
- ▶ 1.7.7 Proportion of schools or school districts that assess their tobacco-use prevention program at regular intervals

- ▶ 1.7.8 Proportion of students who participate in tobacco-use prevention activities
- ▶ 1.7.9 Level of reported exposure to school-based tobacco-use prevention curricula that meet CDC guidelines
- ▶ 1.7.10 Perceived compliance with tobacco-free policies in schools
- ▶ 1.7.11 Proportion of schools or school districts with policies that regulate display of tobacco industry promotional items

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- 2. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports*. 1994;43(RR-2):1–18. Available from: http://www.cdc.gov/mmwr/PDF/RR/RR4302.pdf. Accessed March 2005.
- 3. Task Force on Community Preventive Services Meeting. February 25, 2004. Meeting minutes available at www.thecommunityguide.org.
- 4. Milton MH, Maule CO, Yee SL, Backinger C, Malarcher AM, Husten CG. *Youth tobacco cessation: a guide for making informed decisions.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.

#### For Further Reading

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### Outcome 7

### **Increased Anti-tobacco Policies** and **Programs in Schools**

Indicator Rating

←○○● ●→ better

Number	Indicator	Overall quality	Strange entires	Toth of the state	Face V.	practice practice	nephed
1.7.1	Proportion of schools or school districts reporting the implementation of 100% tobacco-free policies		\$\$	•	•	•	•
1.7.2	Proportion of schools or school districts that provide instruction on tobacco-use prevention that meets CDC guidelines		\$\$	•	0	<b>●</b> <sup>†</sup>	
1.7.3	Proportion of schools or school districts that provide tobacco-use prevention education in grades K–12	<u> </u>	\$\$	•	•	•	<b>●</b> <sup>†</sup>
1.7.4	Proportion of schools or school districts that provide program-specific training for teachers		\$\$	0	0	•	•
1.7.5	Proportion of schools or school districts that involve families in support of school-based programs	<u> </u>	\$\$	0	0	•	
1.7.6	Proportion of schools or school districts that support cessation interventions for students and staff who use tobacco		\$\$	0	0	•	
1.7.7	Proportion of schools or school districts that assess their tobacco-use prevention program at regular intervals	<u> </u>	\$\$\$	0	•	<b>●</b> <sup>†</sup>	
1.7.8	Proportion of students who participate in tobacco-use prevention activities	†	\$\$	•	•	•	
1.7.9	Level of reported exposure to school-based tobacco-use prevention curricula that meet CDC guidelines		\$\$	•	•	•	
1.7.10	Perceived compliance with tobacco-free policies in schools		\$\$	Ø	•	•	•
1.7.11	Proportion of schools or school districts with policies that regulate display of tobacco industry promotional items		\$\$	•	•		

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

# Proportion of Schools or School Districts Reporting the Implementation of 100% Tobacco-free Policies

Goal area 1	Preventing initiation of tobacco use among young people								
Outcome 7	Increased anti-tobacco policies	and pr	ograms i	in schools				_	
What to measure	anyone from using tobacco at a	Proportion of schools or school districts that report having a policy that prohibits anyone from using tobacco at all times on school grounds, at all school-sponsored functions, and in school vehicles							
Why this indicator is useful	Young people spend much of the acceptability of smoking in and educators at school. <sup>1,2</sup>							_	
Example data source(s)	CDC School Health Profiles: S	chool F	Principal	Questionna	ire (Pro	ofiles), 20	002	_	
Population group(s)	School principals							_	
Example survey question(s)	From Profiles  Has this school adopted a polic  ☐ Yes ☐ No	cy proh	aibiting to	obacco use?				_	
	Does the tobacco prevention p product for each for the follow Type of tobacco product  Cigarettes Smokeless tobacco Cigars Pipes	ing gro		Faculty/S Yes I		visite Yes			
	Does the tobacco prevention p following times for each for the Time  • During school hours • During non-school hours	e follov		ups? Faculty/S Yes 1		visit Yes			
	Does the tobacco prevention p following locations for each of Location	the foll	pecifically lowing g lents No	roups? Faculty/S		ase in ea Visit Yes			
	<ul><li> In school buildings</li><li> On school grounds</li><li> In school buses or other vehicles used to transport</li></ul>								
	students  • At off-campus, school-								
	sponsored events								

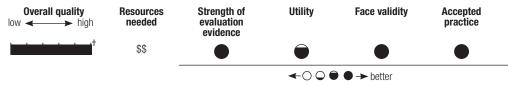
#### **Comments**

To measure this indicator fully, evaluators should use all four example questions, not just one or two.

Evaluators could also collect information on school districts in order to measure the proportion of students in the district who attend schools with anti-tobacco policies.

This indicator can be used to measure progress toward achieving Recommendation 1 of CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction." <sup>1</sup>

#### Rating



<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.
- 2. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

# Proportion of Schools or School Districts That Provide Instruction on Tobacco-use Prevention That Meets CDC Guidelines

Goal area 1	Preventing initiation of tobacco use among young people						
Outcome 7	Increased anti-tobacco policies and programs in schools						
What to measure	Proportion of schools or school districts that report providing instruction on physiologic and social consequences of tobacco use and (2) the social influent obacco use, peer norms, and life skills						
Why this indicator is useful	Evidence suggests that programs that include instruction on the short- and long-term physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms, and life skills can prevent or reduce tobacco use among students. <sup>1,2</sup>						
Example data source(s)	<ul> <li>CDC School Health Profiles: Lead Health Education Teacher Questionnaire (Profiles), 2002</li> <li>California Tobacco Use Prevention Education Evaluation: Teacher Survey, 2003 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm</li> </ul>						
Population group(s)	► Health education teachers						
	► Teachers and school administrators						
question(s)	During this school year, did teachers in this school teach each of the followin use prevention topics in a required health education course for students in an grades 6 through 12? Mark yes or no for each topic.  a. Short- and long-term health consequences of cigarette smoking (such as stained teeth, bad breath, heart disease, and cancer)  b. Benefits of not smoking cigarettes (including long- and short-term health benefits, social benefits, environmental benefits, and financial benefits)  c. Risks of cigar or pipe smoking  d. Short- and long-term health consequences of using smokeless tobacco  e. Benefits of not using smokeless tobacco  f. Addictive effects of nicotine in tobacco products  g. How many young people use tobacco  h. The number of illnesses and deaths related to tobacco use  i. Influence of families on tobacco use  k. Social or cultural influences on tobacco use  l. How to find valid information or services related to tobacco-use cessation  m. Making a personal commitment not to use tobacco  n. How students can influence or support others in efforts to prevent	ny of  Yes No  □ □					
	tobacco use  o. How students can influence or support others in efforts to quit						
	using tobacco p. How to say no to tobacco use						
	q. The health effects of environmental tobacco smoke (ETS) or second-hand smoke						

Example survey question(s) (cont.)	From California Tobacco Use Prevention Education Evaluation: Teacher Survey  During the last school year (2002–2003), which of the following topics did you cover in your tobacco use prevention lessons? (Mark all that apply).							
	<ul><li>☐ Behavioral ski</li><li>☐ General perso</li></ul>	cco on health oung people si young people iences of usin moke ces that prome lls for resistin nal and social communicati tion	moke e smoke eg tobacco ote tobacco use ng tobacco offer l skills (e.g., pro on, and goal se	s oblem solving	5,			
Comments	It would be usefu taught. Further in collected using a	formation on	the anti-tobacc					
	This indicator can of CDC's "Guidel Addiction." <sup>2</sup>	be used to m	reasure progres					
Rating	Overall quality low ← high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$			<b>●</b> <sup>†</sup>			
				<b>~</b> 000	● → better			
	† Denotes low agr	reement among	; reviewers: that i	s, fewer than	75% of the valid ra	ntings for this		

#### References

1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

indicator were within one point of each other (see Appendix B for an explanation).

2. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.

# Proportion of Schools or School Districts That Provide Tobacco-use Prevention Education in Grades K-12

Goal area 1	Preventing initiation of tobacco use among young people				
Outcome 7	Increased anti-tobacco policies and programs in schools				
What to measure	Proportion of schools or school districts that report providing tobacco-use prevention education in grades K–12				
Why this indicator is useful	Research, theory, and current practice demonstrate that the success of school-based prevention programs dissipates over time. CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction," therefore, calls for tobacco use prevention to be taught in each grade, with increasing intensity in middle school and reinforcement in high school grades. <sup>1</sup>				
Example data source(s)	CDC School Health Profiles: Lead Health Education Teacher Questionnaire (Profiles), 2002				
Population group(s)	Health education teachers				
Example survey question(s)	From Profiles  During the school year, in which of the following grades was information on tobaccouse prevention provided?  Yes No  Grade 6  Grade 7  Grade 8  Grade 9  Grade 10  Grade 11  Grade 12				
	Are required tobacco-use prevention units or lessons taught in each of the following courses in the school?  Course  Yes  No a. Science  Home economics or family and consumer education				
	c. Physical education				
Comments	This indicator can be used to measure progress toward achieving Recommendation 3 of CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction."				

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
	†	\$\$				<b>●</b> <sup>†</sup>
				<b>←</b> ○○€	● → better	

Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

#### Reference

1. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.

# **Proportion of Schools or School Districts That Provide Program-specific Training for Teachers**

	specific framing for reasoners
Goal area 1	Preventing initiation of tobacco use among young people
Outcome 7	Increased anti-tobacco policies and programs in schools
What to measure	Proportion of schools or school districts that report providing tobacco-use prevention education training for school educators
Why this indicator is useful	CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction" state that curriculum implementation and overall program effectiveness are improved when teachers are trained to deliver the program as designed. <sup>1</sup>
Example data source(s)	<ul> <li>CDC School Health Profiles: Lead Health Education Teacher Questionnaire, (Profiles), 2002</li> </ul>
	► California Tobacco Use Prevention Education Evaluation: Teacher Survey, 2003 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm
	<ul> <li>California Tobacco Use Prevention Education Evaluation: District Coordinator Survey, 2003</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm</li> </ul>
Population group(s)	► Health education teachers
	► Teachers
	▶ District coordinators
Example survey	From Profiles
question(s)	During the past two years, did you receive staff development (such as workshops, conferences, continuing education, or any other kind of in-service training) on each of the following topics? [22 health topics (letters a–v) are listed; tobacco-use prevention is one topic] Mark yes or no for each topic.
	Would you like to receive staff development on each of these [22] health education topics? Mark yes or no for each topic.
	From California Tobacco Use Prevention Education Evaluation: Teacher Survey
	During the past five years, how much tobacco use prevention training have you received?  ☐ None
	☐ More than one full day of in-service training
	<ul> <li>□ One full-day of in-service training</li> <li>□ Less than a full-day of in-service training</li> <li>□ I don't remember</li> </ul>
	During the past five years, were you trained to deliver a specific published to baccouse prevention curriculum? $\Box$ Yes $\Box$ No $\Box$ I don't remember

Example survey question(s) (cont.)	Overall, to what extent do you feel you are prepared to teach tobacco use prevention lessons?  □ A great deal □ Somewhat □ Not too much □ Not at all □ Does not apply						
	From California Tobac	co Use Preventio	n Education Evalua	tion: District 0	oordinator Survey		
	During the 2002–2 workshops, or sta attended? Number of I do not know/	iff developme trainings, wo		your school	district sponsor		
	If your district did or staff developm were represented Number of school	ent sessions d ?	luring the last s				
Comments	This indicator car CDC's "Guideline						
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		\$\$		$\bigcirc$			
		-		<b>←</b> ○○(	● → better		

<sup>1.</sup> Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.

# **Proportion of Schools or School Districts That Involve Families in Support of School-based Programs**

Preventing initiation of tobacco use among young peo	ple								
Increased anti-tobacco policies and programs in schools									
					or fan	nilies			
CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction" recognizes the important role that parents and families play in providing social and environmental support that will help young people remain tobacco-free. Families are part of the greater community to which schools should be connecting their programs. <sup>1,2</sup>									
➤ CDC School Health Profiles: Lead Health Education Teacher Questionnaire (Profiles), 2002									
Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm									
► Health education teachers									
► Teachers									
During this school year, has this school done each of the following activities?  Mark yes or no for each activity.  Provided families with information on the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program									
From California Tobacco Use Prevention Education Evaluation: Teac	cher S	urvey							
	invo	lved i	n toba	ссо					
Type of Involvement	(Ple	Get I ase ma Very small	Parents ork a res Small extent	s Invol sponse Modes	ved for eac Great extent	Very			
<ul> <li>Included parents in homework assignments</li> <li>Held meeting with parents of student smokers</li> <li>Distributed parent student handback that included</li> </ul>									
description of tobacco-free school policy									
to parents									
to parents									
Had tobacco education displays or discussions at open houses, meetings, health fairs									
<ul> <li>Invited parents to be guest speakers on tobacco issues</li> <li>Involved parents in school-related activities</li> </ul>						Ш			
	Increased anti-tobacco policies and programs in school Proportion of schools or school districts that attempt to involved in school-based tobacco-use prevention or cell involved in school-based tobacco-use prevention or cell color "Guidelines for School Health Programs to Pre recognizes the important role that parents and familie environmental support that will help young people repart of the greater community to which schools should be common to parents  CDC School Health Profiles: Lead Health Education (Profiles), 2002  California Tobacco Use Prevention Education Eval Information available at: http://www.dhs.ca.gov/gevaluation_Resources.htm  Health education teachers  Teachers  From Profiles  During this school year, has this school done each of the Mark yes or no for each activity.  Provided families with information on the health environment of the health education program  Invited family members to attend a health education from California Tobacco Use Prevention Education Evaluation: Tea To what extent have you tried to get students' parents use prevention education?  Type of Involvement  Included parents in homework assignments  Held meeting with parents of student smokers  Distributed parents in homework assignments  Held meeting with parents of student smokers  Distributed newsletters or educational materials to parents  Provided information on smoking cessation to parents  Had tobacco education displays or discussions	Proportion of schools or school districts that attempt to get involved in school-based tobacco-use prevention or cessati  CDC's "Guidelines for School Health Programs to Prevent recognizes the important role that parents and families platenvironmental support that will help young people remain part of the greater community to which schools should be of the Grofiles), 2002  CDC School Health Profiles: Lead Health Education Temperature (Profiles), 2002  California Tobacco Use Prevention Education Evaluation Information available at: http://www.dhs.ca.gov/ps/contents.ps/contents/ps/contents	Increased anti-tobacco policies and programs in schools  Proportion of schools or school districts that attempt to get stude involved in school-based tobacco-use prevention or cessation processory.  CDC's "Guidelines for School Health Programs to Prevent Tobact recognizes the important role that parents and families play in provironmental support that will help young people remain tobact part of the greater community to which schools should be connered (Profiles), 2002  CDC School Health Profiles: Lead Health Education Teacher (Profiles), 2002  California Tobacco Use Prevention Education Evaluation: Teacher (Profiles), 2002  Health education available at: http://www.dhs.ca.gov/ps/cdic/ccEvaluation_Resources.htm  Health education teachers  Teachers  From Profiles  During this school year, has this school done each of the following Mark yes or no for each activity.  Provided families with information on the health education program  Invited family members to attend a health education class  From California Tobacco Use Prevention Education Evaluation: Teacher Survey  To what extent have you tried to get students' parents involved in use prevention education?  Type of Involvement  Extent  Provided parents in homework assignments  Held meeting with parents of student smokers  Distributed parent-student handbook that included description of tobacco-free school policy  Distributed newsletters or educational materials to parents  Provided information on smoking cessation to parents  Had tobacco education displays or discussions	Increased anti-tobacco policies and programs in schools  Proportion of schools or school districts that attempt to get students' prinvolved in school-based tobacco-use prevention or cessation programs.  CDC's "Guidelines for School Health Programs to Prevent Tobacco Use recognizes the important role that parents and families play in providir environmental support that will help young people remain tobacco-fre part of the greater community to which schools should be connecting to the greater community to which schools should be connecting to CDC School Health Profiles: Lead Health Education Teacher Quest (Profiles), 2002  California Tobacco Use Prevention Education Evaluation: Teacher Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS Evaluation_Resources.htm  Health education teachers  Teachers  From Profiles  During this school year, has this school done each of the following active Mark yes or no for each activity.  Provided families with information on the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program  Invited family members to attend a health education class  From California Tobacco Use Prevention Education Evaluation: Teacher Survey  To what extent have you tried to get students' parents involved in toba use prevention education?  Type of Involvement  Extent That York Small at all small extent extent  Included parents in homework assignments  Held meeting with parents of student smokers  Distributed parent-student handbook that included description of tobacco-free school policy  Distributed parent-student handbook that included description of fobacco-free school policy  Distributed information on smoking cessation to parents  Had tobacco education displays or discussions	Increased anti-tobacco policies and programs in schools  Proportion of schools or school districts that attempt to get students' parents involved in school-based tobacco-use prevention or cessation programs  CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and a recognizes the important role that parents and families play in providing soci environmental support that will help young people remain tobacco-free. Fam part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater community to which schools should be connecting their part of the greater survey Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html, Evaluation_Resources.htm  Prom Profiles  During this school year, has this school done each of the following activities?  Mark yes or no for each activity.  Provided families with information on the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program to a truth a health education features.  From California Tobacco Use Prevention Education Evaluation: Teacher Survey  To what extent have you tried to get students' parents involved in	Increased anti-tobacco policies and programs in schools  Proportion of schools or school districts that attempt to get students' parents or faminvolved in school-based tobacco-use prevention or cessation programs  CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addict recognizes the important role that parents and families play in providing social and environmental support that will help young people remain tobacco-free. Families a part of the greater community to which schools should be connecting their program  CDC School Health Profiles: Lead Health Education Teacher Questionnaire (Profiles), 2002  California Tobacco Use Prevention Education Evaluation: Teacher Survey, 2003 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm  Health education teachers  Teachers  From Profiles  During this school year, has this school done each of the following activities? Mark yes or no for each activity.  Provided families with information on the health education program  Met with a parents' organization such as the PTA or PTO to discuss the health education program  Invited family members to attend a health education class  From California Tobacco Use Prevention Education Evaluation: Teacher Survey  To what extent have you tried to get students' parents involved in tobacco use prevention education?  Type of Involvement  Extent That You Tried to Get Parents Involved (Please mark a response for each Not Very Small Modest Great at all small extent exten			

#### **Comments**

The example survey questions are limited to the perspective of educators. They cannot be used to assess parents' actual involvement or desire to be involved in school-based tobacco control activities.

This indicator can be used to measure progress toward achieving Recommendation 5 of CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction."

#### Rating



Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.
- 2. Task Force on Community Preventive Services Meeting. February 25, 2004. Meeting minutes available at www.thecommunityguide.org.

### Proportion of Schools or School Districts That Support Cessation Interventions for Students and Staff Who Use Tobacco

into vontiono io	or Ottadorito aria	Otali Willo	OOO TOBUO	,,,				
Goal area 1	Preventing initiat	Preventing initiation of tobacco use among young people						
Outcome 7	Increased anti-tob	acco policies	and programs	in schools				
What to measure	Proportion of scho (e.g., counseling f programs)							
Why this indicator is useful	recommends that	CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction" recommends that schools support cessation for staff and students, either by providing referrals to cessation services or by sponsoring cessation programs. <sup>1,2</sup>						
Example data source(s)	CDC School Heal	CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002						
Population group(s)	School principals							
Example survey question(s)	From Profiles  Does your school following groups Group  Faculty and state Students	? Y	rals to tobacco	cessation pro	ograms for each	of the		
Comments	A survey question (2) the type of ces This indicator car CDC's "Guideline	sation progra I be used to m	ms to which str neasure progres	udents and fa s toward ach	aculty are referr nieving Recomm	ed. endation 6 of		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$	$\bigcirc$	$\bigcirc$				
		·		<b>←○○</b>	● → better			

- 1. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.
- 2. Milton MH, Maule CÖ, Yee SL, Backinger C, Malarcher AM, Husten CG. Youth tobacco cessation: a guide for making informed decisions. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

### Indicator 1.7.7

### **Proportion of Schools or School Districts That Assess Their Tobacco-use Prevention Program at Regular Intervals**

Goal area 1	Preventing initiation of tobacco use among young people						
Outcome 7	Increased anti-tob	acco policies	and programs	in schools			
What to measure	Proportion of scho place and using it						
Why this indicator is useful		CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction" recommend that schools assess their tobacco-use prevention programs at regular intervals. <sup>1</sup>					
Example data source(s)	No commonly use	ed data sourc	es were found				
Population group(s)	<ul><li>School princip</li><li>Health educat</li></ul>						
Example survey question(s)		Does your school (or school district) assess your tobacco-use prevention program at regular intervals?  ☐ Yes ☐ No ☐ Not sure					
Comments	The authors create data source.	ed this examp	ole question. It o	does not com	ne from any com	monly used	
	This indicator can CDC's "Guideline						
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
	†	\$\$\$	$\bigcirc$		<b>●</b> <sup>†</sup>		
	—————————————————————————————————————						

<sup>1.</sup> Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports*. 1994;43(RR-2):1–18.

### Indicator 1.7.8

addits will i ai	licipale ii	i iodacco-u	se Prever	ition Activition	es	
Preventing initiati	on of tobacco	use among yo	ung people			
Increased anti-tob	acco policies	and programs i	in schools			
		oort participatir	ng in at least	one tobacco-use	prevention	
An intervention with growing popularity is involving young people in anti-tobacco activities. These activities help reduce young people's susceptibility to experimenting with tobacco by changing the social norm regarding tobacco use. <sup>1,2</sup>						
Youth Tobacco Sur	rvey (YTS): (	CDC Recommer	nded Questio	ons: Core, 2004		
Young people age	d less than 18	3 years				
discourage people	e your age fro	om using cigaret	ttes, chewing			
Evaluators may choose to categorize data by grade level and type of school (elementary, middle, high school, private, parochial, public).						
		young people's	s awareness (	of anti-smoking	activities at	
Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
†	\$\$					
◆○ ○ ● ◆ better						
	Proportion of stude activity in the pass  An intervention wactivities. These activities. These activities. These activities. These activities are with tobacco by classification.  Young people age  From YTS  During the past 12 discourage people    ☐ Yes ☐ No, I  Evaluators may classification. Evaluators may we school and outside.	Increased anti-tobacco policies  Proportion of students who repactivity in the past 12 months  An intervention with growing activities. These activities help with tobacco by changing the s  Youth Tobacco Survey (YTS):   Young people aged less than 18  From YTS  During the past 12 months, had discourage people your age from Yes □ No, I did not know Evaluators may choose to categoridadle, high school, private, possible Evaluators may want to assess school and outside school.  Overall quality Resources needed	Proportion of students who report participating activity in the past 12 months  An intervention with growing popularity is in activities. These activities help reduce young price with tobacco by changing the social norm regard Youth Tobacco Survey (YTS): CDC Recommentary Young people aged less than 18 years  From YTS  During the past 12 months, have you participated discourage people your age from using cigare yes No, I did not know about any act Evaluators may choose to categorize data by grainddle, high school, private, parochial, public Evaluators may want to assess young people's school and outside school.  Overall quality Resources needed Strength of evaluation evidence	An intervention with growing popularity is involving your activities. These activities help reduce young people's susce with tobacco by changing the social norm regarding tobacco.  Youth Tobacco Survey (YTS): CDC Recommended Question  Young people aged less than 18 years  From YTS  During the past 12 months, have you participated in any condiscourage people your age from using cigarettes, chewing Yes No, I did not know about any activities  Evaluators may choose to categorize data by grade level at middle, high school, private, parochial, public).  Evaluators may want to assess young people's awareness of school and outside school.  Overall quality Resources Strength of evaluation evidence  Overall quality Resources reduced evaluation evidence	Increased anti-tobacco policies and programs in schools  Proportion of students who report participating in at least one tobacco-use activity in the past 12 months  An intervention with growing popularity is involving young people in ant activities. These activities help reduce young people's susceptibility to expend with tobacco by changing the social norm regarding tobacco use. 1,2  Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004  Young people aged less than 18 years  From YTS  During the past 12 months, have you participated in any community activities discourage people your age from using cigarettes, chewing tobacco, snuff, Yes No, I did not know about any activities  Evaluators may choose to categorize data by grade level and type of school middle, high school, private, parochial, public).  Evaluators may want to assess young people's awareness of anti-smoking school and outside school.  Overall quality Resources needed Evaluation evidence  \$\$\$\$ Evaluation Vilility Face validity evaluation evidence	

- 1. Unger JB, Rohrbach LA, Howard KA, Boley Cruz T, Johnson CA, Chen X. Attitudes toward anti-tobacco policy among California youth: associations with smoking status, psychosocial variables and advocacy actions. *Health Education Resources*. 1999;14(6):751–63.
- 2. Winkleby MA, Feighery E, Dunn M, Kole S, Ahn D, Killen JD. Effects of an advocacy intervention to reduce smoking among teenagers. *Archives of Pediatrics & Adolescent Medicine*. 2004;158(3):269–75.

### Indicator 1.7.9

### Level of Reported Exposure to School-based Tobacco-use Prevention Curricula That Meet CDC Guidelines

		ODO dala					
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people			
Outcome 7	Increased anti-tob	acco policies	and programs i	in schools			
What to measure	Proportion of stud	dents who rep	oort receiving to	bacco preve	ention education	in class	
Why this indicator is useful	Measuring studer and saliency. <sup>1</sup>	nts' recall of to	obacco educatio	n helps veri	fy curriculum de	elivery	
Example data source(s)	<ul> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>California Independent Evaluation: Youth Survey, 2000         Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm     </li> </ul>						
Population group(s)	Young people age	ed less than 18	3 years				
Example survey question(s)	classes (for examp	From YTS  During this school year, did you practice ways to say NO to tobacco in any of your classes (for example, by role-playing)?  ☐ Yes ☐ No ☐ Not sure					
	During this school year, were you taught in any of your classes about the dange of tobacco use?  ☐ Yes ☐ No ☐ Not sure						
	From California Indep	endent Evaluatio	n: Youth Survey				
	During the last year (12 months), did you discuss the reasons why people your age smoke during any of your classes?  ☐ Yes ☐ No ☐ I don't know/I'm not sure						
	During the last year (12 months), did you discuss how many people your age smoke during any of your classes?  ☐ Yes ☐ No ☐ I don't know/I'm not sure						
Comments	Evaluators may a (elementary, midd					chool	
	Student perception who perceive the not perceive it as	education as					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		\$\$					

- Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction.
   *Morbidity and Mortality Weekly Report Recommendations and Reports.* 1994;43(RR-2):1–18.
   Huang TTK, Unger JB, Rohrbach LA. Exposure to, and perceived usefulness of, school-based tobacco prevention
- 2. Huang TTK, Unger JB, Rohrbach LA. Exposure to, and perceived usefulness of, school-based tobacco prevention programs: associations with susceptibility to smoking among adolescents. *Journal of Adolescent Health*. 2000;27(4): 248–54.

Perceived Comp	pliance with Tobacco-free Policies in Schools						
Goal area 1	Preventing initiation of tobacco use among young people						
Outcome 7	Increased anti-tobacco policies and programs in schools						
What to measure	Proportion of students who report that the school population is complying with the school's tobacco-free policy						
Why this indicator is useful	Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies. <sup>1,2</sup> If tobacco-free policies are not observed, they are not likely to be effective in changing social norms or inhibiting tobacco use among young people.						
Example data source(s)	<ul> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>CDC Youth Risk Behavior Surveillance System (YRBSS), 2003</li> <li>California Independent Evaluation: Youth Survey, 2000         Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm     </li> </ul>						
Population group(s)	Young people aged less than 18 years						
Example survey question(s)	From YTS and YRBSS  During the past 30 days, on how many days did you smoke cigarettes on school property?  □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days  During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property? □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days						
	From California Independent Evaluation: Youth Survey  Is there a rule at your school that no one is allowed to smoke cigarettes in the						
	school building or on the school yard?  Yes No I don't know/I'm not sure						
	Have you seen any students break that rule? □ Yes □ No □ My school does not have a no-smoking rule □ I don't know/I'm not sure						
	How many students who are smokers break that rule? □ None □ A few □ Some □ Most □ All of them □ My school does not have a no-smoking rule □ I don't know/I'm not sure						
	Have you seen adults break that rule? □ Yes □ No □ My school does not have a no-smoking rule □ I don't know/I'm not sure						
	Is there a rule at your school that no one is allowed to use chewing tobacco or snuff in the school building or on the school yard? $\Box$ Yes $\Box$ No $\Box$ I don't know/I'm not sure						

#### **Comments**

If students report on the YTS or YRBSS instruments (1) the existence of a tobacco-free school policy and (2) having personally used tobacco products more than 1 day on school property, they are considered noncompliant.

Evaluators may categorize data by grade level and type of school (elementary, middle, high school, private, parochial, public).

Evaluators should determine the scope of the tobacco-free policies before evaluating perceived compliance with them.

The example survey questions could be asked of teachers and principals.

#### **Rating**

Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	\$\$	$\bigotimes$						
		← ○ ○ ● → better						

Denotes no data.

- 1. Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's smoke-free workplace law among bars and restaurants in Los Angeles County. *Tobacco Control*. 2003;12:269–73.

### Proportion of Schools or School Districts with Policies That Regulate Display of Tobacco Industry Promotional Items

Preventing initiation of tobacco use among young people									
Increased anti-tobacco policies and programs in schools									
Proportion of schools and school districts that have policies that regulate the display of tobacco advertising in the school, on school grounds, on school vehicles, or in school publications. This policy should cover apparel and other merchandise showing tobacco logos.									
Studies have consistently associated possession of or willingness to use tobacco industry promotional items with increased smoking among youth. <sup>1,2</sup> Restrictions on the display of these promotional items at school contribute to an anti-tobacco social norm.									
CDC School Healt	th Profiles: So	chool Principal (	Questionnai	re (Profiles), 2002	<u> </u>				
School principals									
Location  In the school be On the school the building, of On school buse. In school public Is tobacco advertise. Are students at you apparel or carryin cartoon characters. Does your school specified distance.	puilding grounds, inclon playing fie es or other versions sing through our school programmer chanding on it?	luding on the oulds, or other are chicles used to the sponsorship of ohibited from where with tobacco arking a tobacco grounds where	atside of eas of the can ransport stude school event rearing tobac company na	npus dents  ts prohibited? cco brand-name ames, logos, or zone (that is, a	Yes	No			
Evaluators may also choose to categorize data by grade level and type of school (elementary, middle, high school, private, parochial, public).									
Overall quality	Resources needed	Strength of evaluation	Utility	Face validity	Accep practi				
low <b>←</b> high		evidence							
	Increased anti-tob  Proportion of school of tobacco advertise school publication tobacco logos.  Studies have conspromotional items these promotional items these promotional items these promotional.  CDC School Health School principals  From Profiles  Is tobacco advertise Location  In the school be On the school the building, conschool bus In school publication in school publication carrying cartoon characters. Does your school specified distance faculty and staff, at Evaluators may all (elementary, middentification).	Increased anti-tobacco policies  Proportion of schools and school of tobacco advertising in the school publications. This policy tobacco logos.  Studies have consistently associated promotional items with increase these promotional items at school principals  From Profiles  Is tobacco advertising prohibited Location  In the school building  On the school grounds, include building, on playing file  On school buses or other vere  In school publications  Is tobacco advertising through Are students at your school propagated or carrying merchandic cartoon characters on it?  Does your school post signs may specified distance from school faculty and staff, and visitors is Evaluators may also choose to (elementary, middle, high school	Increased anti-tobacco policies and programs in Proportion of schools and school districts that of tobacco advertising in the school, on school school publications. This policy should cover a tobacco logos.  Studies have consistently associated possession promotional items with increased smoking ame these promotional items at school contribute to CDC School Health Profiles: School Principal of School principals  From Profiles  Is tobacco advertising prohibited in each of the Location  In the school building  On the school grounds, including on the outher building, on playing fields, or other are On school buses or other vehicles used to the In school publications  Is tobacco advertising through sponsorship of Are students at your school prohibited from wapparel or carrying merchandise with tobacco cartoon characters on it?  Does your school post signs marking a tobacco specified distance from school grounds where faculty and staff, and visitors is not allowed?)  Evaluators may also choose to categorize data (elementary, middle, high school, private, paro	Increased anti-tobacco policies and programs in schools  Proportion of schools and school districts that have policie of tobacco advertising in the school, on school grounds, on school publications. This policy should cover apparel and tobacco logos.  Studies have consistently associated possession of or willing promotional items with increased smoking among youth. It these promotional items at school contribute to an anti-tobacco DCC School Health Profiles: School Principal Questionnai School principals  From Profiles  Is tobacco advertising prohibited in each of the following be Location  In the school building  On the school grounds, including on the outside of the building, on playing fields, or other areas of the cane. On school buses or other vehicles used to transport sture. In school publications  Is tobacco advertising through sponsorship of school event. Are students at your school prohibited from wearing tobacco apparel or carrying merchandise with tobacco company na cartoon characters on it?  Does your school post signs marking a tobacco-free school specified distance from school grounds where tobacco use faculty and staff, and visitors is not allowed?)  Evaluators may also choose to categorize data by grade leve (elementary, middle, high school, private, parochial, publice)	Increased anti-tobacco policies and programs in schools  Proportion of schools and school districts that have policies that regulate the of tobacco advertising in the school, on school grounds, on school vehicles, school publications. This policy should cover apparel and other merchandist tobacco logos.  Studies have consistently associated possession of or willingness to use tobe promotional items with increased smoking among youth. 12 Restrictions on these promotional items at school contribute to an anti-tobacco social norm.  CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002  School principals  From Profiles  Is tobacco advertising prohibited in each of the following locations?  Location  In the school building  On the school grounds, including on the outside of the building, on playing fields, or other areas of the campus  On school buses or other vehicles used to transport students  In school publications  Is tobacco advertising through sponsorship of school events prohibited?  Are students at your school prohibited from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters on it?  Does your school post signs marking a tobacco-free school zone (that is, a specified distance from school grounds where tobacco use by students, faculty and staff, and visitors is not allowed?)  Evaluators may also choose to categorize data by grade level and type of sc (elementary, middle, high school, private, parochial, public).	Increased anti-tobacco policies and programs in schools  Proportion of schools and school districts that have policies that regulate the disple of tobacco advertising in the school, on school grounds, on school vehicles, or in school publications. This policy should cover apparel and other merchandise show tobacco logos.  Studies have consistently associated possession of or willingness to use tobacco incompromotional items with increased smoking among youth. 1-2 Restrictions on the disple these promotional items at school contribute to an anti-tobacco social norm.  CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002  School principals  From Profiles  Is tobacco advertising prohibited in each of the following locations?  Location Yes  In the school grounds, including on the outside of the building, on playing fields, or other areas of the campus  On school buses or other vehicles used to transport students  In school publications  Is tobacco advertising through sponsorship of school events prohibited?  Are students at your school prohibited from wearing tobacco brand-name apparel or carrying merchandise with tobacco company names, logos, or cartoon characters on it?  Does your school post signs marking a tobacco-free school zone (that is, a specified distance from school grounds where tobacco use by students, faculty and staff, and visitors is not allowed?)  Evaluators may also choose to categorize data by grade level and type of school (elementary, middle, high school, private, parochial, public).			

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## Increased Restriction and Enforcement of Restrictions on Tobacco Sales to Minors

Activities to decrease young people's access to tobacco products are recognized components of a comprehensive approach to reducing the number of young people who start smoking. Efforts to reduce young people's access to tobacco products are based on the rationale that making it more difficult for young people to obtain tobacco products will discourage them from beginning or continuing to use tobacco and thus reduce the prevalence of tobacco use. One strategy is to attempt to reduce retail tobacco sales to minors through activities such as (1) passing laws that restrict young people's access to tobacco (including laws barring the sale of tobacco products to minors, bans on self-service displays of tobacco products, and bans or restrictions on tobacco vending machines), (2) educating merchants about these laws, (3) enforcing compliance with these laws, (4) educating the community and the media about the value of these laws, and (5) mobilizing the community to support these laws.

Experience shows that adoption and sustained enforcement of strong laws are prerequisites for reducing young people's access to tobacco. Although this approach is necessary for success, it is not sufficient. Compliance checks show that laws against selling tobacco products to young people, when accompanied by retailer education and enforcement, can reduce the proportion of retailers who are willing to sell these products to minors. But, these reductions do not automatically translate into reductions in young people's self-reported or perceived access to tobacco products, or into reductions in their tobacco use—the ultimate goal of youth access interventions.¹ Some studies suggest that even if only a few retail outlets in a community sell tobacco to minors, young people who use tobacco are likely to know of these outlets and to frequent them.²

According to the *Guide to Community Preventive Services*, the most effective approach to preventing young people from gaining access to tobacco products (as measured by minors' self-reported tobacco purchase or use behaviors) consists of a combination of strong local and state laws, vigorous and sustained enforcement of these laws, retailer education, and—most importantly—community mobilization to generate community support for efforts to reduce youth access to tobacco products.<sup>3</sup> As with other aspects of tobacco control, community mobilization may play a particularly important role because of its ability to change social norms—in this case, norms regarding the social acceptability of selling or otherwise providing tobacco products to minors. The *Guide to Community Preventive Services* indicates that none of the interventions listed above have been shown to be effective when implemented in isolation, in particular when implemented without a strong link to community mobilization initiatives.<sup>3</sup>

Moreover, even if illegal sales to minors were eliminated completely, young people could still acquire tobacco products through other, noncommercial or social sources, including shoplifting, stealing from parents and other relatives, borrowing from friends and relatives, and asking older friends or strangers to buy tobacco products for them. In fact, younger children (who have less success than older children in

purchasing tobacco products at retail outlets) often rely on these alternative sources to obtain tobacco products. Thus, even interventions that are successful in reducing young people's self-reported or perceived access to tobacco products through commercial sources will not necessarily reduce their overall access to or use of these products. Accordingly, as rates of retail sales to minors decline, interventions to address these other sources of access will become increasingly important.

Listed below are the indicators associated with this outcome:

- ▶ 1.8.1 Proportion of jurisdictions with policies that ban tobacco vending machine sales in places accessible to young people
- ▶ **1.8.2** Proportion of jurisdictions with policies that require retail licenses to sell tobacco products
- ▶ 1.8.3 Proportion of jurisdictions with policies that control the location, number, and density of retail outlets
- ▶ 1.8.4 Proportion of jurisdictions with policies that control self-service tobacco sales
- ▶ 1.8.5 Number of compliance checks conducted by enforcement agencies
- ▶ 1.8.6 Number of warnings, citations, and fines issued for infractions of public policies against young people's access to tobacco products
- ▶ 1.8.7 Changes in state tobacco control laws that preempt stronger local tobacco control laws

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## **Increased Restriction and Enforcement of Restrictions on Tobacco Sales to Minors**

Indicator	Rating
	- hotte

Number	Indicator	Overall quality	Street on evices	Uthing the state of the state o	Face V.	practice	accepted
1.8.1	Proportion of jurisdictions with policies that ban tobacco vending machine sales in places accessible to young people		\$\$\$		0		•
1.8.2	Proportion of jurisdictions with policies that require retail licenses to sell tobacco products		\$\$\$		•		
1.8.3	Proportion of jurisdictions with policies that control the location, number, and density of retail outlets		\$\$\$	0	_*	0	_*
1.8.4	Proportion of jurisdictions with policies that control self-service tobacco sales		\$\$\$	•	•		
1.8.5	Number of compliance checks conducted by enforcement agencies	<u> </u>	\$\$\$	•	•	•	
1.8.6	Number of warnings, citations, and fines issued for infractions of public policies against young people's access to tobacco products	<u> </u>	\$\$\$	•			
1.8.7	Changes in state tobacco control laws that preempt stronger local tobacco control laws	<u> </u>	\$	Ø	•		•

<sup>\*</sup> Denotes low reviewer response: that is, greater than 75% of the experts either did not rate the indicator, or gave the criterion an invalid rating (see Appendix B for an explanation).

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

# **Proportion of Jurisdictions with Policies That Ban Tobacco Vending Machine Sales in Places Accessible to Young People**

Goal area 1	Preventing initiation of tobacco use among young people							
Outcome 8	Increased restricts	on and enfor	cement of restri	ctions on tol	pacco sales to mi	nors		
What to measure	Proportion of local jurisdictions that have enforceable policies banning tobacco vending machine sales in locations accessible to minors							
Why this indicator is useful	used by even the restricted minors'	Accessible vending machines provide virtually unrestricted access to tobacco and can be used by even the youngest children. As of 2004, 46 states and the District of Columbia restricted minors' access to tobacco through vending machines, and 30 states and the District of Columbia banned vending machines in locations that are accessible to young people. <sup>1</sup>						
Example data source(s)	Information o  American Lur	: Nonsmokers n ANR availa ng Association	s' Rights (ANR) ible at: http://w n's State Legisla lable at: http://s	ww.no-smo	on Tobacco Issue	es (SLATI)		
Population group(s)	Not applicable. To local tobacco laws			d by tracking	g and monitoring	g pertinent		
Example survey question(s)	Not applicable							
Comments	Evaluators may v (e.g., restrictions of				tobacco vending	g machines		
	Evaluators may a population affect	lso choose to ed by the rele	gather data on vant laws or or	the size and dinances.	demographics o	f the		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$\$				<b>●</b> <sup>†</sup>		
				<b>←</b> ○○(	● → better			
					75% of the valid ra 3 for an explanation			

<sup>1.</sup> Centers for Disease Control and Prevention. *State Tobacco Activities Tracking and Evaluation (STATE) system.* Atlanta, GA: Centers for Disease Control and Prevention. Online database. Available from: http://www.cdc.gov/tobacco/statesystem. Accessed February 2005.

# **Proportion of Jurisdictions with Policies That Require Retail Licenses to Sell Tobacco Products**

Goal area 1	Preventing initiat	ion of tobacc	o use among yo	ung people						
Outcome 8	Increased restricti	on and enfor	cement of restri	ictions on tol	oacco sales to mi	nors				
What to measure	Proportion of local jurisdictions that have public policies requiring retailers to have a license in order to sell tobacco products									
Why this indicator is useful	suspension or rev obey the law. <sup>1</sup> Rec tobacco merchant fees can be used t District of Colum tobacco sales and	Licensing laws that include graduated penalties for illegal sales and provisions for suspension or revocation for repeated violations may be an incentive for merchants to obey the law. Requiring licenses allows evaluators to develop a comprehensive list of tobacco merchants that can be used to conduct compliance checks. In addition, licensing fees can be used to support the cost of compliance checks. As of 2004, 39 states and the District of Columbia required tobacco retailers to obtain a license for over-the-counter tobacco sales and 27 states and the District of Columbia had laws in place identifying circumstances in which retail licenses can be suspended or revoked.								
Example data source(s)		Nonsmoker	s' Rights (ANR) able at: http://w		ke.org					
Population group(s)	Not applicable. The local tobacco laws				g and monitoring	g pertinent				
Example survey question(s)	Not applicable									
Comments	Evaluators may a population affects				demographics o	f the				
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$								
				<b>←</b> ○○(	● → better					

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## Proportion of Jurisdictions with Policies That Control the Location, Number, and Density of Retail Outlets

Goal area 1	Preventing initiat	Preventing initiation of tobacco use among young people								
Outcome 8	Increased restrict	Increased restriction and enforcement of restrictions on tobacco sales to minors								
What to measure	Proportion of local jurisdictions that have public policies controlling the location, number, and density of tobacco retail outlets									
Why this indicator is useful	products and the fewer stores need	Limiting the number of retail tobacco outlets decreases the availability of tobacco products and the number of pro-tobacco messages in a community. It also means that fewer stores need to be monitored for compliance with laws that prohibit young people's access to tobacco. <sup>1,2</sup>								
Example data source(s)	Americans for	<ul> <li>Policy tracking system</li> <li>Americans for Nonsmokers' Rights (ANR)         Information on ANR available at: http://www.no-smoke.org     </li> </ul>								
Population group(s)	Not applicable. To local tobacco laws			d by tracking	g and monitoring	g pertinent				
Example survey question(s)	Not applicable									
Comments	Evaluators may a population affect				demographics o	f the				
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$		_*		_*				
				<b>←○○</b>	● → better					
	* Denotes low re	viewer respon	se: that is, greate	er than 75% o	of the experts eith	er did not rate				

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Proportion of Ju	ırisdictions with	n Policies	That Contro	l Self-ser	vice Tobacco	Sales				
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	oung people						
Outcome 8	Increased restricti	Increased restriction and enforcement of restrictions on tobacco sales to minors								
What to measure	Proportion of local jurisdictions that have public policies controlling self-service tobacco sales (i.e., sales that allow customers to handle tobacco products before purchasing them)									
Why this indicator is useful	in stores; they also are more common	Self-service displays contribute to the visibility of tobacco and pro-tobacco messages in stores; they also make shoplifting tobacco products easier for minors. Illegal sales are more common when young people can access tobacco products directly through self-service displays rather than having to ask clerks for assistance. <sup>1,2</sup>								
Example data source(s)	<ul><li>Policy tracking</li><li>Americans for Information o</li></ul>	Nonsmokers	s' Rights (ANR) ble at: http://w	) vww.no-smo	ke.org					
Population group(s)	Not applicable. To local tobacco laws				g and monitoring	g pertinent				
Example survey question(s)	Not applicable									
Comments	Evaluators may a population affects				demographics o	f the				
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$								
				<b>←○○</b>	● → better					

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Number of Com Goal area 1								
	Preventing initiation of tobacco use among young people							
Outcome 8	Increased restriction and enforcement of restrictions on tobacco sales to minors							
What to measure	The number of checks conducted by enforcement agencies (e.g., police, health department inspectors, or building inspectors) to assess the level of retailer compliance with laws, regulations, or ordinances related to the sale of tobacco to minors							
Why this indicator is useful	ance checks, which ing rates of complethe message that p	An effective means of enforcing tobacco-free public policies is to conduct regular compliance checks, which reduce illegal sales. Compliance checks are also a method of assessing rates of compliance with laws regulating tobacco sales to minors. Such checks convey the message that policy makers and the public care about tobacco-free policies and are serious about enforcing them. <sup>2,3</sup>						
Example data source(s)	<ul> <li>Enforcement Agency Survey</li> <li>California Independent Evaluation: Policy Enforcement Survey: Youth Access to Tobacco, 2000</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm</li> </ul>							
Population group(s)	Agency represent	atives respon	sible for enforc	ement				
Example survey question(s)	From California Indep During the past 1: to enforce PC §30	2 months, ho	w many sting o	perations di				
Comments	Survey responder	nts may not h	ave access to al	l requested i	nformation.			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
	†	\$\$\$						
				<b>←</b> ○○(	● → better			
					75% of the valid ra B for an explanation			

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## Number of Warnings, Citations, and Fines Issued for Infractions of Public Policies Against Young People's Access to Tobacco Products

Goal area 1	Preventing initiation of tobacco use among young people								
Outcome 8	Increased restricti	Increased restriction and enforcement of restrictions on tobacco sales to minors							
What to measure	The number of warnings, citations, and fines issued to retailers for infractions of public policies against young people's access to tobacco								
Why this indicator is useful	people results in s	Studies show that aggressive enforcement of laws regulating tobacco sales to young people results in significantly reduced sales to minors and may also result in reduced smoking prevalence among teenagers. <sup>1-3</sup>							
Example data source(s)	Enforcement A		•	Enforcem	ont Surv	ew. Vouth 4	Access to		
	<ul> <li>California Independent Evaluation: Policy Enforcement Survey: Youth Access to Tobacco, 2000</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm</li> </ul>								
Population group(s)	Agency represent	Agency representatives responsible for enforcement							
Example survey question(s)	From California Independent Evaluation: Policy Enforcement Survey: Youth Access to Tobacco  In the past year, how often has your agency conducted any of the following types of enforcement activities related to Penal Code §308?								
				Never	Rarely	Very often	Don't know		
	<ul><li>Responded to selling tobacco</li><li>Issued warning</li></ul>	products to r	ninors						
	tobacco produc	cts to minors							
	<ul> <li>Issued citations sales of tobacco</li> </ul>	s to merchant o products to	s for illegal minors						
Comments	Evaluators may want to assess the effects that different penalties (e.g., graduated fines, loss of license to sell tobacco) have on illegal tobacco sale to minors.								
	Data must be inte either high levels					of citations	may indicate		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Fac	e validity	Accepted practice		
	†	\$\$\$							
				<b>←</b> 0 C	• • →	oetter			

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indicator were within one point of each other (see Appendix B for an explanation).

# **Changes in State Tobacco Control Laws That Preempt Stronger Local Tobacco Control Laws**

Goal area 1	Preventing initiat	Preventing initiation of tobacco use among young people								
Outcome 8	Increased restricti	on and enfor	cement of restri	ictions on tol	pacco sales to mi	nors				
What to measure	Any change in legislation that prevents local jurisdictions from enacting restrictions that are more stringent than the state's restrictions on minors' access to tobacco or tobacco-related marketing									
Why this indicator is useful	tobacco control or tobacco control or aggressively push tobacco in various As of September 1 restrictions.3 As of cessfully repealed Preemptive laws p mobilization, and a process that can rier to local enforce less likely to enforce	Preemptive legislation is the tobacco industry's chief strategy for eradicating local tobacco control ordinances.¹ Because of the striking increase in the number of local tobacco control ordinances from the mid-1980s to the mid-1990s, the tobacco industry aggressively pushed for states to pass legislation that preempted local regulation of tobacco in various areas, including minors' access, smoke-free indoor air, and marketing.² As of September 1998, 21 states preempted at least one provision of local minors' access restrictions.³ As of December 31, 2004, only two states, Maine and Delaware, have successfully repealed preemption laws in their entirety in any area of tobacco control policy. Preemptive laws prevent communities from engaging in the process of public education, mobilization, and debate that occurs when a local ordinance is under consideration, a process that can increase awareness and change social norms. They also pose a barrier to local enforcement, because communities and local enforcement agencies may be less likely to enforce state laws that they were not directly involved in adopting than to enforce local ordinances.²								
Example data source(s)	CDC State Tobacc Data available at									
Population group(s)	Not applicable. The control laws.	nis indicator i	is best measure	d by tracking	g and monitoring	g state tobacco				
Example survey question(s)	Not applicable									
Comments	None									
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
	†	\$	$\bigotimes$							
				<b>←</b> ○○	● → better					
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).  © Denotes no data.									

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## **Reduced Tobacco Industry Influences**

According to the most recent Federal Trade Commission tobacco report, the U.S. tobacco industry spent almost \$12.5 billion in 2002 to advertise and promote its products. It is not surprising, therefore, that studies show that a high percentage of young people are exposed to, aware of, and able to recall tobacco advertising. Moreover, researchers have found that receptivity to tobacco industry marketing is associated with susceptibility towards tobacco use, that teenagers are three times more sensitive to cigarette advertising than adults, and that young people who approve of tobacco advertising and identify with the images portrayed in the advertisements are more likely than non-approving young people to start smoking. In addition, tobacco advertising can distort young people's perceptions of tobacco use. An indirect result of heavy tobacco industry advertising is the dampening effect it has on the number and quality of media stories about the health risks of smoking. By promoting smoking, the tobacco industry undermines the ability of parents to prevent adolescents from starting to smoke.

Many of the tobacco industry's advertising expenditures are in retail stores.<sup>1</sup> Retail stores are saturated with pro-tobacco signage, branded objects, and tobacco displays. Many of these objects are clustered around the cash registers, making it virtually impossible for anyone, including children, not to be exposed to pro-tobacco messages. Signage visible outside the stores exposes entire communities to tobacco marketing. The result is that many U.S. children grow up surrounded by pro-tobacco messages.<sup>10</sup>

The tobacco industry also spends considerable resources to sponsor or support public events, the arts, and other worthy causes. It is clear that the tobacco industry influences policy makers through contributions and lobbying, which results in a more favorable, pro-tobacco policy environment. In

Listed below are the indicators associated with this outcome:

- ▶ 1.9.1 Extent and type of retail tobacco advertising and promotions
- ▶ **1.9.2** Proportion of jurisdictions with policies that regulate the extent and type of retail tobacco advertising and promotions
- ▶ **1.9.3** Extent of tobacco advertising outside of stores
- ▶ **1.9.4** Proportion of jurisdictions with policies that regulate the extent of tobacco advertising outside of stores
- ▶ 1.9.5 Extent of tobacco industry sponsorship of public and private events
- ▶ 1.9.6 Proportion of jurisdictions with policies that regulate tobacco industry sponsorship of public events
- ▶ 1.9.7 Extent of tobacco advertising on school property, at school events, and near schools

- ▶ 1.9.8 Extent of tobacco advertising in print media
- ▶ 1.9.9 Amount and quality of news media stories about tobacco industry practices and political lobbying
- ▶ 1.9.10 Number and type of Master Settlement Agreement violations by tobacco companies
- ▶ 1.9.11 Extent of tobacco industry contributions to institutions and groups
- ▶ 1.9.12 Amount of tobacco industry campaign contributions to local and state politicians

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## Outcome 9

## **Reduced Tobacco Industry Influences**

### **Indicator Rating ←**○ ○ • • better

Number	Indicator	Overall quality	Strengen enuces	undit of the control	Face VC	Practice	Accepted
1.9.1	Extent and type of retail tobacco advertising and promotions		\$\$\$\$				
1.9.2	Proportion of jurisdictions with policies that regulate the extent and type of retail tobacco advertising and promotions		\$\$\$				•
1.9.3	Extent of tobacco advertising outside of stores		\$\$\$\$ <sup>◊</sup>	•			
1.9.4	Proportion of jurisdictions with policies that regulate the extent of tobacco advertising outside of stores		\$\$\$ <sup>†</sup>		•	•	
1.9.5	Extent of tobacco industry sponsorship of public and private events		\$\$\$\$		•	•	
1.9.6	Proportion of jurisdictions with policies that regulate tobacco industry sponsorship of public events		\$\$\$ <sup>†</sup>		•	•	•
1.9.7	Extent of tobacco advertising on school property, at school events, and near schools		\$\$\$	Ø	•	•	•
1.9.8	Extent of tobacco advertising in print media		\$\$\$				•
1.9.9	Amount and quality of news media stories about tobacco industry practices and political lobbying		\$\$\$	$\otimes$	•	•	
1.9.10	Number and type of Master Settlement Agreement violations by tobacco companies	<u> </u>	\$\$\$\$ <sup>◊</sup>	0	•	•	
1.9.11	Extent of tobacco industry contributions to institutions and groups		\$ <sup>◊</sup>	Ø	0	<b>●</b> <sup>†</sup>	•
1.9.12	Amount of tobacco industry campaign contributions to local and state politicians	<u> </u>	\$ <sup>◊</sup>	$\otimes$		•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation). Denotes that the experts' rating was modified (see Appendix B for an explanation).

<sup>♦</sup> Denotes that the example Denotes no data.

<b>Extent and Type</b>	of Retail Tobac	co Advert	ising and Pr	omotions	<b>3</b>					
Goal area 1	Preventing initiat	ion of tobacc	o use among yo	ung people						
Outcome 9	Reduced tobacco	industry infl	uences							
What to measure	the extent of indo	The level and type of tobacco advertising and promotion in and around retail stores and the extent of indoor and outdoor advertisements including promotions, price reductions, and strategic product placement								
Why this indicator is useful	and potential smo exposed to pro-to of tobacco advert more likely to sta tobacco marketing the odds of their	Retail stores have become the industry's primary communication channel to smokers and potential smokers. As a result, all shoppers, regardless of age or smoking status, are exposed to pro-tobacco messages. <sup>1,2</sup> Some studies show that young people who approve of tobacco advertising and identify with the image portrayed in the advertisements are more likely to start smoking. <sup>3,4</sup> Moreover, frequent (at least weekly) exposure to retail tobacco marketing among middle-school students is associated with a 50% increase in the odds of their ever smoking a cigarette, even after controlling for other known risk factors (e.g., parent smokes or friend smokes). <sup>5</sup>								
Example data source(s)	Operation Sto	refront: Yout vailable at: h	th Against Toba attp://www.dhs.	cco Advertis	tional practices i ing and Promoti cco/html/					
Population group(s)	Not applicable. T	his indicator	is best measured	d by observa	ation.					
Example survey question(s)	Not applicable									
Comments	Note that in <i>Lorilli</i> most regulations Labeling and Adv the extent and am	regarding cig vertising Act, nount of retai	arette advertisi which makes it l tobacco advert	ng are preem difficult for ising and pr	npted by the Fed states and locali comotion.	eral Cigarette ties to regulate				
		Evaluators may choose to gather and report their findings by type of retailer (e.g., grocery store, convenience store, or gas station).								
	States can track the data (obtained from and promotions.	om scanning j	product bar cod	es), which p	rovide informati	on on brand				
Rating	Overall quality low  high	Resources needed	Strength of evaluation	Utility	Face validity	Accepted practice				
		\$\$\$\$	evidence							
	<del></del> _			<del>-</del> 000	● → better					
	A 75		11.01	, , , , , , , , , , , , , , , , , , ,						

<sup>♦</sup> Denotes that the experts' rating was modified (see Appendix B for an explanation).

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- 2. Centers for Disease Control and Prevention. Point-of-purchase tobacco environments and variation by store type—United States, 1999. *Morbidity and Mortality Weekly Report*. 2002; 51(9):184–7.
- 3. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
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# **Proportion of Jurisdictions with Policies That Regulate the Extent and Type of Retail Tobacco Advertising and Promotions**

				<b>←○○</b> (	● → better				
		\$\$\$				•			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	Evaluators may a population affects	lso choose to ed by the rele	gather data on vant laws or or	the size and dinances.	demographics o	f the			
Comments	Note that in <i>Lorill</i> most regulations: Labeling and Adv the extent and am	regarding cig vertising Act,	arette advertisi which makes it	ng are preen difficult for	npted by the Fed states and locali	eral Cigarette			
Example survey question(s)	Not applicable								
Population group(s)		Not applicable. This indicator is best measured by tracking and monitoring pertinent local tobacco laws, ordinances, or regulations.							
Example data source(s)	Policy tracking sy	Policy tracking system							
Why this indicator is useful	including offering products. Regulat	The tobacco industry is increasingly shifting its advertising focus to retailer incentives including offering financial and trade benefits to retailers that sell and display tobacco products. Regulating retail advertising and promotions may significantly reduce young people's exposure to tobacco advertising. <sup>1</sup>							
What to measure		The proportion of local jurisdictions that have public policies that in some way regulate retail advertising and promotion of tobacco							
Outcome 9	Reduced tobacco	industry influ	iences						
Goal area 1	Preventing initiation of tobacco use among young people								

<sup>1.</sup> Feighery EC, Ribisl KM, Clark PI, Haladjian HH. How tobacco companies ensure prime placement of their advertising and products in stores: interviews with retailers about tobacco company incentive programmes. *Tobacco Control.* 2003;12(2):184–8.

<b>Extent of Tobac</b>	co Advertising (	Outside of	Stores							
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people						
Outcome 9	Reduced tobacco	industry influ	iences							
What to measure	The level and typ	e of tobacco a	dvertising on th	ne exteriors	of retail stores					
Why this indicator is useful	outside walls and tobacco advertising	Tobacco advertisements appear frequently outside U.S. stores. They can be on stores' outside walls and windows, in parking lots, or on the street.¹ The strategies for reducing tobacco advertising on the exteriors of retail establishments are often different from the strategies for reducing advertising and promotions inside stores.²								
Example data source(s)	Operation Sto Information a	<ul> <li>Environmental scan of tobacco advertising and promotional practices in retail outlets</li> <li>Operation Storefront: Youth Against Tobacco Advertising and Promotion Initiative Information available at: http://www.dhs.ca.gov/tobacco/html/Evaluation_Resources.htm</li> </ul>								
Population group(s)	Not applicable. T	his indicator i	s best measured	d by observa	tion.					
Example survey question(s)	Not applicable									
Comments	None									
Rating	Overall quality low high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$\$ <sup>◊</sup>								
					● → better					
	♦ Denotes that th	e experts' ratir	ng was modified	(see Append	lix B for an explai	nation).				

- 1. Centers for Disease Control and Prevention. Point-of-purchase tobacco environments and variation by store type—United States, 1999. *Morbidity and Mortality Weekly Report*. 2002;51(9):184–7.
- 2. Rogers T, Feighery EC, Tencati EM, Butler JL, Weiner L. Community mobilization to reduce point-of-purchase advertising of tobacco products. *Health Education Quarterly*. 1995;22(4);427–42.

## **Proportion of Jurisdictions with Policies That Regulate** the Extent of Tobacco Advertising Outside of Stores

	† Denotes low ag	reement amono	reviewers that i		● → better  75% of the valid ra	atings for this			
		\$\$\$ <sup>†</sup>		•					
Rating	Overall quality low ← high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	Evaluators may also choose to gather data on the size and demographics of the population affected by the relevant laws or ordinances.								
Comments	Note that in <i>Lorill</i> most regulations Labeling and Adv the extent and am	regarding cig vertising Act,	arette advertisii which makes it	ng are preem difficult for	pted by the Fed states and locali	eral Cigarette			
Example survey question(s)	Not applicable								
Population group(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent local tobacco laws, ordinances, or regulations.								
Example data source(s)	Policy tracking sy	Policy tracking system							
Why this indicator is useful	Reducing exterior exposure to tobac			and displays	will reduce you	ng people's			
What to measure	tobacco advertisii	The proportion of local jurisdictions that have public policies that in some way regulate tobacco advertising on the exteriors of retail outlets (for example, some jurisdictions limit the percentage of store windows that may be covered with advertisements) <sup>1</sup>							
Outcome 9	Reduced tobacco	Reduced tobacco industry influences							
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people					

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indicator were within one point of each other (see Appendix B for an explanation).

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<b>Extent of Tobac</b>	co Industry Spo	nsorship (	of Public an	d Private	Events				
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people					
Outcome 9	Reduced tobacco	industry influ	uences						
What to measure	The extent of tobacco industry sponsorship of public and private events (e.g., sports, recreation, music, family, or work-related events)								
Why this indicator is useful	This sponsorship	The tobacco industry spends considerable resources sponsoring visible public events. <sup>1</sup> This sponsorship increases exposure to advertisements for tobacco product advertising and buys legitimacy for the tobacco industry. <sup>1,2</sup>							
Example data source(s)	California Tol	<ul> <li>Event sponsorship tracking system</li> <li>California Tobacco Industry Monitoring Evaluation: Project SMART Money Information available at: http://www.ttac.org/enews/mailer09-30-03full.html#LinkF</li> </ul>							
Population group(s)	Not applicable. T	his indicator	is best measure	d by observa	ntion.				
Example survey question(s)	Not applicable								
Comments	Evaluators may v numbers of atten		the types of ev	ents that are	being sponsored	d and the			
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$\$\$							
				<b>←○○</b>	● → better				
	♦ Denotes that th	e experts' ratii	ng was modified	(see Append	lix B for an explai	nation).			

- 1. Rosenberg NJ, Siegel M. Use of corporate sponsorship as a tobacco marketing tool: a review of tobacco industry sponsorship in the USA, 1995–99. *Tobacco Control.* 2001;10(3):239–46.
- 2. Federal Trade Commission. Cigarette report for 2002. Washington, DC: Federal Trade Commission; 2004.

## Proportion of Jurisdictions with Policies That Regulate Tobacco Industry Sponsorship of Public Events

	† Denotes low agre	eement amono	reviewers that i		→ better  75% of the valid ra	atings for this		
		\$\$\$ <sup>†</sup>						
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
Comments	Evaluators may al population affecte				demographics o	f the		
Example survey question(s)	Not applicable							
Population group(s)	Not applicable. This indicator is best measured by tracking and monitoring pertinent local tobacco laws, ordinances, or regulations.							
Example data source(s)	Policy tracking system							
Why this indicator is useful	This sponsorship i	The tobacco industry spends considerable resources to sponsor highly publicized events. <sup>1</sup> This sponsorship increases exposure to tobacco-product advertising and buys legitimacy for the tobacco industry. <sup>1,2</sup>						
What to measure	The proportion of local jurisdictions with public policies that regulate tobacco industry sponsorship of public events							
Outcome 9	Reduced tobacco i	ndustry influ	iences					
Goal area 1	Preventing initiati	on of tobacco	o use among yo	ung people				

#### References

indicator were within one point of each other (see Appendix B for an explanation).

<sup>1.</sup> Rosenberg NJ, Siegel M. Use of corporate sponsorship as a tobacco marketing tool: a review of tobacco industry sponsorship in the USA, 1995–99. *Tobacco Control.* 2001;10(3):239–46.

<sup>2.</sup> Federal Trade Commission. Cigarette report for 2002. Washington, DC: Federal Trade Commission; 2004.

#### **Extent of Tobacco Advertising on School Property**, at School Events, and Near Schools Goal area 1 Preventing initiation of tobacco use among young people Outcome 9 Reduced tobacco industry influences What to measure The extent of tobacco advertising on school property, at school events off campus, and within a designated distance from schools Why this indicator Findings from a California study of retail tobacco advertising showed that stores near is useful schools (within 1,000 feet) had significantly more tobacco advertising and promotional materials overall and more advertising on their exteriors than stores not near schools.1 Stores near schools also had a significantly higher probability of having tobacco advertising or promotions near candy and low to the ground (at the eye level of children) than stores not near schools.1 **Example data** CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002 source(s) Environmental scan of tobacco advertising and promotional practices in retail outlets Operation Storefront: Youth Against Tobacco Advertising and Promotion Initiative Information available at: http://www.dhs.ca.gov/tobacco/html/ Evaluation\_Resources.htm Population group(s) School principals **Example survey** From Profiles question(s) Is tobacco advertising prohibited in each of the following locations? (Mark yes or no for each location.) Yes No In the school building On school grounds, including on the outside of the building, on playing fields, or other areas of the campus On school buses or other vehicles used to transport students In school publications (e.g., newsletters, newspapers, websites, in other school publications) Is tobacco advertising through sponsorship of school events prohibited? ☐ Yes ☐ No **Comments** None Rating Overall quality Strenath of Utility **Face validity** Accepted Resources needed evaluation practice evidence \$\$\$

<sup>1.</sup> Roeseler A, Rogers T, Feighery E, Gehrman J. *Operation storefront: youth against tobacco advertising and promotion.* Sacramento, CA: California Department of Health Services; 2003. pp. 1–4.

<b>Extent of Tobac</b>	co Advertising i	n Print Me	dia						
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people					
Outcome 9	Reduced tobacco	industry influ	iences						
What to measure	The extent of toba	icco advertise	ment in print n	nedia (e.g., n	nagazines or nev	vspapers)			
Why this indicator is useful	print media. How expenditures of th a youth focus. 1 Ar	The Master Settlement Agreement (MSA) regulated aspects of tobacco advertising in print media. However, one study found that after the MSA, the combined advertising expenditures of the four major tobacco companies increased in 19 magazines that have a youth focus. Another study found that 54% of teenagers' favorite magazines had cigarette advertisements.							
Example data source(s)	TNS Media In	<ul> <li>Media Tracking Service (e.g., clipping service)</li> <li>TNS Media Intelligence Competitive Media Reporting (CMR)         Information available at: http://www.tnsmi-cmr.com/products/index.html     </li> </ul>							
Population group(s)	Not applicable. This indicator is best measured by tracking tobacco advertisements in print media.								
Example survey question(s)	Not applicable								
Comments	Evaluators may want to assess tobacco advertising by type of print media (e.g., magazines targeted to adults or magazines targeted to adolescents).								
	Quantitative studies involve counting articles, measuring column-inches, or noting article placement. Qualitative studies require detailed content analyses to detect article themes. <sup>3,4</sup>								
	More information on how to collect data on this indicator is in reference 5 below.								
Rating	Overall quality low ← high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$							
		←○ ○ ● ◆ → better							

- 1. Hamilton WL, Turner-Bowker DM, Celebucki CC, Connolly GN. Cigarette advertising in magazines: the tobacco industry response to the Master Settlement Agreement and to public pressure. *Tobacco Control.* 2002;11(Suppl 2):ii54–8.
- 2. Schooler C, Feighery E, Flora JA. Seventh graders' self-reported exposure to cigarette marketing and its relationship to their smoking behavior. *American Journal of Public Health*. 1996;86(9):1216–21.
- 3. Lima JC, Siegel M. The tobacco settlement: an analysis of newspaper coverage of a national policy debate, 1997–98. *Tobacco Control*. 1999;8(3):247–53.
- 4. Menashe CL, Siegel M. The power of a frame: an analysis of newspaper coverage of tobacco issues—United States, 1985–1996. *Journal of Health Communication*. 1998;3(4):307–25.
- 5. Stillman F, Cronin K, Evans W, Ulasevich A. Can media advocacy influence newspaper coverage of tobacco: measuring the effectiveness of the American Stop Smoking Intervention Study's (ASSIST) media advocacy strategies. *Tobacco Control.* 2001;10(2):137–44.

## **Amount and Quality of News Media Stories About Tobacco Industry Practices and Political Lobbying**

	•		, ,						
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people					
Outcome 9	Reduced tobacco	Reduced tobacco industry influences							
What to measure	Media coverage o	Media coverage of tobacco industry practices and political lobbying							
Why this indicator is useful	Demonstrating the people's behavior manipulate behavior and increase over	:. <sup>1-3</sup> For examp vior may redu	ole, being aware ice young peop	e that the tob le's susceptil	pacco industry is pility to tobacco	trying to marketing			
Example data source(s)	Media Tracking S	Media Tracking Service (e.g., clipping service)							
Population group(s)	Not applicable. This indicator is best measured by monitoring and tracking pertinent media coverage of tobacco industry practices.								
Example survey question(s)	Not applicable								
Comments	Quantitative studies involve counting articles, measuring column-inches, or noting article placement. Qualitative studies require detailed content analyses to detect article themes. <sup>2,3</sup>								
	More information on how to collect data on this indicator is in reference 5 below.								
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$	$\bigotimes$						
				<b>←○○</b> (	● → better				
	Denotes no data	 a							

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- 2. Lima JC, Siegel M. The tobacco settlement: an analysis of newspaper coverage of a national policy debate, 1997–98. *Tobacco Control.* 1999;8(3):247–53.
- 3. Menashe CL, Siegel M. The power of a frame: an analysis of newspaper coverage of tobacco issues—United States, 1985–1996. *Journal of Health Communication*. 1998;3(4):307–25.
- 4. Hicks JJ. Crispin, Porter & Bogusky. The strategy behind Florida's truth campaign. Miami, FL: Truth Campaign; 2001. Online publication. Available from: http://www.tobaccofreedom.org/msa/articles/truth\_review.html.
- 5. Stillman F, Cronin K, Evans W, Ulasevich A. Can media advocacy influence newspaper coverage of tobacco: measuring the effectiveness of the American Stop Smoking Intervention Study's (ASSIST) media advocacy strategies. *Tobacco Control*. 2001;10(2):137–44.

Goal area 1	Preventing initiati	ion of tobacco	use among you	ung people				
Outcome 9	Reduced tobacco	industry influ	iences					
What to measure	The number and to by tobacco compa		r Settlement Ag	reement (M	SA) violations			
Why this indicator is useful	bans the tobacco oments. The compa	In 2000, all of the major tobacco manufacturers failed to comply with the MSA, which bans the tobacco companies from targeting young people through magazine advertisements. The companies are selectively increasing their magazine advertisements targeted to young people. Tracking these and other violations of the MSA will aid in the MSA's enforcement. <sup>2,3</sup>						
Example data source(s)	<ul> <li>Tobacco industry monitoring system</li> <li>California Tobacco Industry Monitoring Evaluation: Project SMART Money Information available at: http://www.ttac.org/enews/mailer09-30-03full.html#Linkl</li> </ul>							
Population group(s)	Not applicable. This indicator is best measured by monitoring and tracking tobacco industry practices.							
Example survey question(s)	Not applicable							
Comments	None							
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$\$\$ <sup>(</sup>	$\bigcirc$					
	←○ ○ ● ◆ better							

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<b>Extent of Tobac</b>	co Industry Con	tributions	to Institutio	ns and G	roups			
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people				
Outcome 9	Reduced tobacco	industry influ	uences					
What to measure	The amount of fur (e.g., the hospitali							
Why this indicator is useful	Studies show that and community o groups is directly to understand tob	rganizations. related to the	. The amount of e amount it cont	the tobacco	industry's influe	ence on these		
Example data source(s)	<ul><li>Public records</li><li>Information average</li><li>each state</li></ul>			e State Secre	tary or equivale	nt in		
	<ul> <li>Center for Responsive Politics (CRP)</li> <li>Information available at: http://www.opensecrets.org</li> </ul>							
	► Tobacco industry fiscal reports							
Population group(s)	Not applicable. This indicator is best measured by reviewing public and tobacco industry records.							
Example survey question(s)	Not applicable							
Comments	Evaluators may want to categorize their findings by type of business or organization (e.g., the hospitality industry, movie industry, sports organizations, or civic groups) that received funds from the tobacco industry.							
	More information	on how to co	ollect data on th	is indicator	is in reference 5	below.		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$	$\bigotimes$	$\bigcirc$	<b>●</b> <sup>†</sup>			
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation). ♦ Denotes that the experts' rating was modified (see Appendix B for an explanation). ♦ Denotes no data.							

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Goal area 1	Preventing initiat	ion of tobacco	n lise among vo	ung people					
	Treventing initiat	1011 01 tobacco	- use uniong yo	erig people					
Outcome 9	Reduced tobacco	industry influ	iences						
What to measure	The amount of fu	The amount of funds contributed to local and state politicians by the tobacco industry							
Why this indicator is useful	Studies show an a and pro-tobacco l of the industry's l legislation. <sup>1,2</sup> Trac industry.	egislation. <sup>1–3</sup> [ political influ	Tobacco industr ence, including	y contributionitis influence	ons are a signific e on votes for tob	cant predictor acco-related			
Example data source(s)	<ul> <li>Public records of political contributions</li> <li>Information available from the Office of the State Secretary or equivalent in each state</li> </ul>								
	<ul><li>Federal Election Commission (FEC)</li><li>Searchable database available at: http://www.fec.gov</li></ul>								
	<ul><li>Center for Responsive Politics (CRP)</li><li>Information available at: http://www.opensecrets.org</li></ul>								
Population group(s)	Not applicable. T	his indicator i	s best measured	d by reviewi	ng public record	ls.			
Example survey question(s)	Not applicable								
Comments	More information	on how to co	ollect data on th	is indicator	is in references 4	and 5 below			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	†	\$ ◊	$\bigotimes$						
	—————————————————————————————————————								
	† Denotes low agr	reement among	reviewers: that is	s, fewer than	75% of the valid ra	atings for this			
					B for an explanatio dix B for an expla				

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## **Reduced Susceptibility to Experimentation with Tobacco Products**

Susceptibility to smoking is defined as the intention to smoke or the absence of a strong intention not to smoke.¹ Studies show that susceptibility to experimentation is a valid and reliable predictor of future smoking behavior.¹ Studies also show that susceptible young people (those who have not made a firm decision not to smoke) are more likely than other young people to experiment with smoking.¹ Furthermore, recent evidence suggests that even low levels of smoking experimentation (two to four cigarettes smoked by age 10 years) substantially increase the likelihood of daily smoking in late adolescence.² To reduce the percentage of young people who take up smoking, it is therefore necessary to prevent young people from becoming susceptible to experimenting with tobacco.³ In addition to tobacco industry influences, tobacco use by peers is strongly associated with early tobacco experimentation among children.⁴ Parental involvement in young people's decision making about tobacco use is also an important contributor to reduced susceptibility to tobacco use.⁵⁻⁻

Listed below are the indicators associated with this outcome:

- ▶ 1.10.1 Proportion of young people who think that smoking is cool and helps them fit in
- ▶ 1.10.2 Proportion of young people who think that young people who smoke have more friends
- ▶ 1.10.3 Proportion of young people who report that their parents have discussed not smoking with them
- ▶ 1.10.4 Proportion of parents who report that they have discussed not smoking with their children
- ▶ 1.10.5 Proportion of young people who are susceptible never-smokers

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## Reduced Susceptibility to Experimentation with Tobacco Products

Indicator Rating

←○○ ● ◆ better

Number	Indicator	Overall quality low → high	evaluation evices	University of the state of the	Face	Practice	Accepted
1.10.1	Proportion of young people who think that smoking is cool and helps them fit in		\$\$ <sup>†</sup>			•	
1.10.2	Proportion of young people who think that young people who smoke have more friends		\$\$			•	
1.10.3	Proportion of young people who report that their parents have discussed not smoking with them		\$\$	•	•	•	
1.10.4	Proportion of parents who report that they have discussed not smoking with their children		\$\$\$	Q	•	•	
1.10.5	Proportion of young people who are susceptible never-smokers		\$\$ <sup>†</sup>	•	•	•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

## Indicator 1.10.1

#### Proportion of Young People Who Think That Smoking Is Cool and Helps Them Fit In Goal area 1 Preventing initiation of tobacco use among young people Outcome 10 Reduced susceptibility to experimentation with tobacco products What to measure Proportion of young people who believe that smoking cigarettes will improve their social standing Why this indicator Data indicate that adolescent cigarette smokers are significantly more likely to believe that smokers are more socially adept than nonsmokers. 1-5 These data can be used to is useful estimate norms regarding the social desirability of smoking. **Example data** Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004 source(s) Population group(s) Young people aged less than 18 years **Example survey** From YTS question(s) Do you think smoking cigarettes makes young people look cool or fit in? ☐ Definitely yes ☐ Probably yes ☐ Probably not ☐ Definitely not **Comments** None Rating Utility Overall quality Strenath of **Face validity** Accepted Resources needed evaluation practice evidence \$\$<sup>†</sup> **←**○ ○ • • better Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this

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## **Proportion of Young People Who Think That Young People Who Smoke Have More Friends**

Goal area 1	Preventing initiation of tobacco use among young people							
Outcome 10	Reduced suscepti	bility to expe	rimentation wit	h tobacco pr	oducts			
What to measure	Proportion of you those who do not		ho believe that t	those who sr	noke have more	friends thar		
Why this indicator is useful	who smoke have	Data indicate that cigarette smokers are significantly more likely to believe that those who smoke have more friends than those who do not smoke. <sup>1-5</sup> These data can be used as an estimate of norms concerning the social desirability of smoking.						
Example data source(s)	Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004							
Population group(s)	Young people age	Young people aged less than 18 years						
Example survey question(s)	From YTS  Do you think you  □ Definitely yes	ng people wł □ Probably	no smoke cigare yes 🔲 Probal	ettes have mo	ore friends? Definitely not			
Comments	None							
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
				<b>←○○</b> (	● → better			

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## Indicator 1.10.3

## **Proportion of Young People Who Report That Their Parents Have Discussed Not Smoking with Them**

			9						
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people					
Outcome 10	Reduced suscepti	bility to expe	rimentation wit	h tobacco p	roducts				
What to measure		Proportion of young people who report that their parents have discussed the dangers of tobacco use with them in the past 12 months							
Why this indicator is useful	children take up s about smoking or	Parental involvement in their children's smoking decisions is a predictor of whether their children take up smoking. <sup>1-3</sup> Teenagers who report that their parents are unconcerned about smoking or do not talk to them about it are more likely than other teenagers to take up smoking and to become regular smokers. <sup>1-4</sup>							
Example data source(s)	Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004								
Population group(s)	Young people aged less than 18 years								
Example survey question(s)	From YTS  In the past 12 more dangers of tobacc □ Never □ Rar	o use with yo	ou?	C		d the			
Comments	Evaluators may w smoking and the Evaluators may a dangers of tobacc	perceived cor lso want to as	nsequences of b sk young people	eing caught e if their par	smoking.				
Rating	Overall quality low  → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$							
				<b>←</b> ○○	● ● → better				

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- 3. Sargent JD, Dalton M. Does parental disapproval of smoking prevent adolescents from becoming established smokers? *Pediatrics*. 2001;108(6):1256–62.
- 4. Pierce JP, Distefan JM, Jackson C, White MM, Gilpin EA. Does tobacco marketing undermine the influence of recommended parenting in discouraging adolescents from smoking? *American Journal of Preventive Medicine*. 2002;23(2):73–81.

## Proportion of Parents Who Report That They Have Discussed Not Smoking with Their Children

-		•				
Goal area 1	Preventing initiation of tobacco use among young people					
Outcome 10	Reduced susceptibility to experimentation with tobacco products					
What to measure	Proportion of parents who report that they talked to their children at least once in the previous 6 months about what their children may or may not do regarding tobacco use					
Why this indicator is useful	Parental involvement in their children's smoking decisions is a predictor of whether their children take up smoking. <sup>1-3</sup> In addition, asking parents about their children and smoking sensitizes parents to the importance of discussing tobacco use with their children. <sup>1-4</sup>					
Example data source(s)	Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section G: Parental Involvement, 2003					
Population group(s)	Parents of children aged less than 18 years					
Example survey question(s)	From ATS  During the last 6 months, how many times have you talked to your child about what he/she can or cannot do when it comes to tobacco?  □ Never □ Once □ Twice □ Three or more times □ Don't know/Not sure □ Refused  During the last 6 months, how many times have you told your child he/she cannot use tobacco? □ Never □ Once □ Twice □ Three or more times □ Don't know/Not sure □ Refused					
Comments	None					
Rating	Overall quality low high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$\$				
	←○ ○ ● ◆ → better					
	Denotes no dat	a				

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- 4. Pierce JP, Distefan JM, Jackson C, White MM, Gilpin EA. Does tobacco marketing undermine the influence of recommended parenting in discouraging adolescents from smoking? *American Journal of Preventive Medicine*. 2002;23(2):73–81.

Proportion of Yo	ung People Wh	o Are Susc	eptible Nev	er-smoke	ers			
Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people				
Outcome 10	Reduced suscepti	bility to expe	rimentation wit	th tobacco pr	oducts			
What to measure	Proportion of you a firm decision no		no have never t	ried a cigare	tte but have not	made		
Why this indicator is useful	Studies show that not to smoke) are	susceptible y more likely tl	oung people (t	hose who ha g people to e	ve not made a fi experiment with	rm decision smoking. <sup>1</sup>		
Example data source(s)	Youth Tobacco Su	rvey (YTS):(	CDC Recommen	nded Questi	ons: Core, 2004			
Population group(s)	Young people age	ung people aged less than 18 years						
Example survey question(s)	From YTS  Have you ever tried cigarette smoking, even one or two puffs?  ☐ Yes ☐ No							
	Do you think that you will try a cigarette soon? $\Box$ I have already tried smoking cigarettes $\Box$ Yes $\Box$ No							
	Do you think you will smoke a cigarette at any time during the next year?  ☐ Definitely yes ☐ Probably yes ☐ Probably not ☐ Definitely not							
	If one of your best friends offered you a cigarette, would you smoke it?  ☐ Definitely yes ☐ Probably yes ☐ Probably not ☐ Definitely not							
Comments	Evaluators should	l ask all four	example questi	ons to create	a susceptibility	index. <sup>1</sup>		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$ <sup>†</sup>		•	•	•		
					● → better			
					75% of the valid ra 3 for an explanatio			

<sup>1.</sup> Pierce JP, Choi WS, Gilpin EA, Farkas AJ, Merritt RK. Validation of susceptibility as a predictor of which adolescents take up smoking in the United States. *Health Psychology*. 1996;15(5):355–61.

#### **Decreased Access to Tobacco Products**

As noted in the discussion of logic model component 8 (increased restriction and increased enforcement of restrictions on tobacco sales to minors), adopting and enforcing strong laws that restrict young people's access to tobacco can reduce the proportion of retailers that illegally sell tobacco products to minors. As also noted in that discussion, reductions in illegal sales to minors may not automatically translate into reductions in minors' self-reported access to tobacco products through commercial sources. In addition, reductions in illegal sales to young people would not be expected to affect minors' access to tobacco products through noncommercial (social) sources. More importantly, it is unclear whether reductions in retail tobacco sales to minors result in reductions in the actual rate of tobacco use by young people. Although some studies indicate that this is the case, other studies fail to support such a link.<sup>1-3</sup> The data suggest that to be successful in reducing young people's tobacco use, efforts to reduce commercial access must achieve high levels of retailer compliance (perhaps as high as 90% or more).<sup>2</sup> In practice, these levels may not always be attainable.

According to the *Guide to Community Preventive Services*, the most effective approach to preventing young people from gaining access to tobacco (as measured by minors' self-reported tobacco purchase or use behaviors) includes a combination of strong local and state laws, vigorous and sustained enforcement of these laws, retailer education, and—most importantly—community mobilization to generate community support for efforts to reduce youth access to tobacco products.<sup>4</sup> The *Guide to Community Preventive Services* notes that none of these interventions has been shown to be effective when implemented in isolation, in particular when implemented without a strong link to community mobilization initiatives.<sup>4,5</sup>

The *Guide to Community Preventive Services* and *Reducing Tobacco Use: A Report of the Surgeon General* also underscore the importance of taking a comprehensive approach to reducing tobacco use among young people.<sup>4,5</sup> Such an approach includes interventions to reduce the appeal of, and demand for, tobacco products among young people, as well as to restrict their access to these products. In addition, because young people are influenced by the social norms and environmental cues that they observe in adult society, efforts to reduce their tobacco use should be integrated into the broader framework of a comprehensive tobacco control program that also addresses tobacco use by adults.

Listed below are the indicators associated with this outcome:

- ▶ 1.11.1 Proportion of successful attempts to purchase tobacco products by young people
- ▶ **1.11.2** Proportion of young people reporting that they have been sold tobacco products by a retailer
- ▶ 1.11.3 Proportion of young people reporting that they have been unsuccessful in purchasing tobacco products from a retailer
- ▶ 1.11.4 Proportion of young people reporting that they have received tobacco products from a social source

- ▶ 1.11.5 Proportion of young people reporting that they purchased cigarettes from a vending machine
- ▶ 1.11.6<sup>NR</sup> Proportion of young people who believe that it is easy to obtain tobacco products

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#### Outcome 11

#### **Decreased Access to Tobacco Products**

#### **Indicator Rating ←**○ ○ **● →** better

Number	Indicator	Overall quality	Stron evices evaluation evices	Uthing of the state of the stat	Face ver	practice	and the state of t
1.11.1	Proportion of successful attempts to purchase tobacco products by young people	†	\$\$\$ <sup>†</sup>			•	•
1.11.2	Proportion of young people reporting that they have been sold tobacco products by a retailer		\$\$		•		
1.11.3	Proportion of young people reporting that they have been unsuccessful in purchasing tobacco products from a retailer	†	\$\$	Ø	•		
1.11.4	Proportion of young people reporting that they have received tobacco products from a social source		\$\$				
1.11.5	Proportion of young people reporting that they purchased cigarettes from a vending machine		\$\$	Ø	0	0	
1.11.6 <sup>NR</sup>	Proportion of young people who believe that it is easy to obtain tobacco products		Ø	Q	Q	Q	Ø

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one 

NR Denotes an indicator that is not rated (see Appendix B for an explanation).

Goal area 1	Preventing initiation	on of tobacco	use among you	ung people			
Outcome 11	Decreased access to	o tobacco pro	oducts				
What to measure	The proportion of retailers not in compliance with policies prohibiting the sale of tobacco products to minors						
Why this indicator is useful	Decreasing the rate at which young people are successful in purchasing tobacco may contribute to a reduction in tobacco use by young people. <sup>1</sup>						
Example data source(s)	Substance Abuse and Mental Health Services Administration (SAMHSA) Compliance Checks Information available at: http://prevention.samhsa.gov/tobacco/guidance.asp						
Population group(s)	Tobacco retailers						
Example survey question(s)	Not applicable						
Comments	Evaluators must co of successful purch (e.g., number, type purchase attempts purchase tobacco. <sup>2</sup>	ase attempts , and location	s, including (1) n of stores), (2)	variations ir number of s	n the sampling fr uccessful and ur	ame nsuccessful	
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
	†	\$\$\$ <sup>†</sup>				<b>●</b> <sup>†</sup>	
	←○ ○ ● ◆ better						

- 1. Rigotti NA, DiFranza JR, Chang Y, Tisdale T, Kemp B, Singer DE. The effect of enforcing tobacco-sales laws on adoles-
- cents' access to tobacco and smoking behavior. *New England Journal of Medicine*. 1997;337:1044–51.

  2. DiFranza JR. Are the federal and state governments complying with the Synar Amendment? *Archives of Pediatrics &* Adolescent Medicine. 1999;153(10):1089-97.

### Proportion of Young People Reporting That They Have Been Sold Tobacco Products by a Retailer

Goal area 1	Preventing initiat	ion of tobacco	o use among y	oung people				
Outcome 11	Decreased access	to tobacco pr	oducts					
What to measure	The proportion of retailer in the prev			having been s	sold tobacco pro	ducts by a		
Why this indicator is useful	Even if most retai to young people a people's access to Young smokers w indicator helps de occurring. <sup>1</sup>	and only a few tobacco proc ill seek out th	v continue to lucts through ne retailers tha	sell tobacco pr retail stores m at are willing t	roducts to minor nay remain unac to sell to them. M	es, young ceptably high. Jeasuring this		
Example data source(s)	<ul><li>Youth Tobacco</li><li>CDC Youth Ri</li></ul>	•			estions: Core, 20 6), 2003	004		
Population group(s)	Young people age	Young people aged less than 18 years						
Example survey question(s)	From YTS  During the past 30  ☐ I did not buy a during the past ☐ A gas station ☐ A convenience ☐ A grocery store	pack of cigar t 30 days store	rettes [	Adrugstore Avending n	nachine m over the Inter			
	From YTS and YRBSS							
	During the past 30 days, how did you usually get your own cigarettes?  ☐ I did not smoke cigarettes during the past 30 days ☐ I bought them in a store such as a convenience store, supermarket, discount store, or gas station ☐ I bought them from a vending machine ☐ I gave someone else money to buy them for me							
Comments	None							
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
				<b>←</b> ○○	● → better			

<sup>1.</sup> Rigotti NA, DiFranza JR, Chang Y, Tisdale T, Kemp B, Singer DE. The effect of enforcing tobacco-sales laws on adolescents' access to tobacco and smoking behavior. *New England Journal of Medicine*. 1997;337:1044–51.

### Proportion of Young People Reporting That They Have Been Unsuccessful in Purchasing Tobacco Products from a Retailer

Goal area 1	Preventing initiat	ion of tobacco	use among yo	ung people				
Outcome 11	Decreased access	to tobacco pro	oducts					
What to measure	Proportion of you of their age during			ney were refu	used sale of cigar	rettes becaus		
Why this indicator is useful	Measuring this indicator helps determine the extent to which local and state policies and enforcement activities are reducing young people's access to tobacco products. <sup>1</sup>							
Example data source(s)	Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004							
Population group(s)	Young people aged less than 18 years							
Example survey question(s)	From YTS  During the past 30 of your age?  ☐ I did not try to ☐ Yes, someone r ☐ No, no one refu	buy cigarette efused to sell	es in a store dur me cigarettes b	ing the past	30 days y age	ıse		
Comments	Evaluators may a store, or grocery s				., gas station, con	nvenience		
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
	†	\$\$	$\bigotimes$	<b>●</b> <sup>†</sup>				
		•		<b>←</b> ○○	● → better			
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).  © Denotes no data.							

<sup>1.</sup> Jones SE, Sharp DJ, Husten CG, Crossett LS. Cigarette acquisition and proof of age among US high school students who smoke. *Tobacco Control*. 2002;11:20–5.

## **Proportion of Young People Reporting That They Have Received Tobacco Products from a Social Source**

Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people		
Outcome 11	Decreased access	to tobacco pr	oducts			
What to measure	Proportion of you as a friend, family					al source such
Why this indicator is useful	Although increase reduces illegal sal smokers report ol	les, studies als	so suggest that	more tȟan h		
Example data source(s)		•	S): CDC Recom	_	estions: Core, 20	004
Population group(s)	Young people age	ed less than 18	3 years			
Example survey question(s)	From YTS and YRBSS  During the past 3  I did not smok  I bought them discount store, I bought them I gave someon I borrowed (or A person 18 ye I took them from	e cigarettes d in a store suc or gas station from a vending e else money bummed) the ars old or old om a store or f	uring the past 3 h as a convenie n ng machine to buy them for em from someo ler gave them to	60 days nce store, su r me one else		
Comments	None					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>←○○</b>	● → better	

<sup>1.</sup> Centers for Disease Control and Prevention. Tobacco use and usual source of cigarettes among high school students—United States. *Morbidity and Mortality Weekly Report*. 1996;45(20);413–8.

## **Proportion of Young People Reporting That They Purchased Cigarettes from a Vending Machine**

	☐ I did not buy a pack of cigarettes ☐ A grocery store ☐ A drugstore								
	<ul><li>☐ A gas station</li><li>☐ A vending machine</li><li>☐ I bought them over the Internet</li></ul>								
	From YTS and YRBSS								
	During the past 30 days, how did you usually get your own cigarettes?								
	☐ I did not smoke cigarettes during ☐ I borrowed (or bummed) them from								
	the past 30 days someone else								
			☐ I bought them in a store such as a ☐ A person 18 years or older gave them to me						
	convenience store, supermarket,  \[ \sum \text{ A person to years of older gave them to me on the convenience store, supermarket, \[ \sum \text{ I took them from a store or family member } \]								
			rket, 🗆 🗎 1			amily member			
	discount store,	or gas station	rket, 🗆 1 n 🗆 1	got them so	ome other way	•			
	discount store,  ☐ I bought them	or gas station	rket,	I got them so I gave some	ome other way one else money t	•			
	discount store,	or gas station	rket,	got them so	ome other way one else money t	•			
Comments	discount store,  ☐ I bought them	or gas station	rket,	I got them so I gave some	ome other way one else money t	•			
Comments Rating	discount store, ☐ I bought them machine	or gas station	rket,	I got them so I gave some	ome other way one else money t	•			
	discount store,  I bought them machine  None  Overall quality	or gas station from a vendi	rket,	I got them so I gave some them for me	ome other way one else money t	o buy  Accepted			
	discount store,  I bought them machine  None  Overall quality	or gas station from a vendi	rket,	got them so gave some them for me	Face validity	o buy  Accepted			
	discount store,  I bought them machine  None  Overall quality	or gas station from a vendi	rket,	got them so gave some them for me	ome other way one else money t	o buy  Accepted			

<sup>1.</sup> Centers for Disease Control and Prevention. *State Tobacco Activities Tracking and Evaluation (STATE) system.* Atlanta, GA: Centers for Disease Control and Prevention. Online database. Available from: http://www.cdc.gov/tobacco/statesystem. Accessed February 2005.

## Proportion of Young People Who Believe That It Is Easy to Obtain Tobacco Products

Goal area 1	Preventing initiat	on of tobacco	o use among yo	ung people			
Outcome 11	Decreased access	to tobacco pr	oducts				
What to measure	The degree to who	ch young pe	ople believe tha	t it is easy or	r difficult to obta	in	
Why this indicator is useful	the perception am people perceive the	Changing the social norms regarding tobacco use by young people requires changing the perception among young people that tobacco products are easily obtained. If young people perceive that obtaining tobacco products is difficult, they are less likely to try to obtain such products. <sup>1</sup>					
Example data source(s)	California Youth Tobacco Survey (CA YTS), 1999 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm						
Population group(s)	Young people age	d less than 1	8 years				
Example survey question(s)	From CA YTS  Do you think it w  ☐ Easy ☐ Hard	ould be easy □ Don't k	or hard for you now/Not sure	to get cigare □ Refused	ettes if you want	ed some?	
Comments	This indicator wa				nerefore, no ratir	ng information	
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
				<b>←</b> ○○(	● → better		
	Denotes no data	a.					

 $<sup>^{\</sup>mbox{\scriptsize NR}}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

<sup>1.</sup> Gilpin EA, Lee L, Pierce JP. Does adolescent perception of difficulty in getting cigarettes deter experimentation? *Preventive Medicine*. 2004;38(4):485–91.

#### **Increased Price of Tobacco Products**

Studies show an inverse relationship between cigarette price and smoking prevalence by young people and adults. Increasing state or local excise taxes on cigarettes is an effective method of increasing the real price of cigarettes. However, maintaining higher real prices requires further tax increases to offset the effects of inflation and industry practices designed to control retail product prices. Recent efforts to offset industry pricing practices have focused on supporting minimum retail pricing laws. Econometric studies show price elasticity for tobacco use among adolescents of –0.76, which means that a 10% increase in price would result in a 7.6% decrease in tobacco use. In addition, to directly motivate people to quit or not start tobacco use, price increases can indirectly reduce tobacco use if a portion of the excise tax revenue is dedicated to the state's tobacco control program.

Although young people usually start using tobacco by first experimenting with cigarettes, some begin by experimenting with other tobacco products such as spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll-your-own). All tobacco products are taxed. To prevent tobacco users from shifting to cheaper tobacco products, increasing taxes on all tobacco products is important.<sup>5</sup> Tax increases on tobacco products increase the real price of tobacco products and thus reduce young people's demand for such products.

Listed below is the indicator associated with this outcome:

▶ **1.12.1** Amount of tobacco product excise tax

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Feighery EC, Ribisl KM, Clark PI, Haladjian HH. How tobacco companies ensure prime placement of their advertising and products in stores: interviews with retailers about tobacco company incentive programmes. *Tobacco Control*. 2003;12:184–8.
- 3. Bloom PN. Role of slotting fees and trade promotions in shaping how tobacco is marketed in retail stores. *Tobacco Control.* 2001;10(4):340–4.
- 4. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 5. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 2000.

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Gratias EJ, Krowchuk DP, Lawless MR, Durant RH. Middle school students' sources of acquiring cigarettes and requests for proof of age. *Journal of Adolescent Health*. 1999;25(4):276–83.

Ringel J, Pacula RL, Wasserman J. *Youth access to cigarettes: results from the 1999 National Youth Tobacco Survey.* Legacy First Look Report 10. Washington, DC: American Legacy Foundation; 2000.

U.S. Centers for Disease Control and Prevention. Responses to cigarette prices by race/ethnicity, income, and age groups—United States, 1976–1993. *Morbidity and Mortality Weekly Report*. 1998;47(29):605–9.

#### **Increased Price of Tobacco Products**

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality	evaluation evi	United the state of the state o	Face	praction	Accepted
1.12.1	Amount of tobacco product excise tax		\$	•	•	•	

Amount of Toba	cco Product Ex	cise Tax						
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people				
Outcome 12	Increased price of	tobacco prod	lucts					
What to measure	(1) The state excis				ercentage of the	total price		
Why this indicator is useful	Increasing tax on especially among Increasing cigaret of cigarettes, although	the most pric te excise taxe ough maintai	ce-sensitive pop s is an effective	ulations (e.g method of i	g., young people) ncreasing the rea	). <sup>1,2</sup> al price		
Example data source(s)	CDC State Tobacco Activities Tracking and Evaluation (STATE) system Data available at: http://www.cdc.gov/tobacco/STATEsystem. Select "economics" and "cigarette sales."							
	<ul> <li>Campaign For Tobacco-Free Kids (CTFK)</li> <li>Information available at: http://tobaccofreekids.org/research/factsheets</li> </ul>							
	▶ State departments of revenue							
Population group(s)	Not applicable. To excise taxes on to			d by tracking	g and monitoring	g state		
Example survey question(s)	Not applicable							
Comments	States can also ind scanner data (obta on product price, collection can be	ained from pr brand, and p	roduct bar code	s), which pro	ovide informatio	n		
	To gather more complete data on tobacco price, evaluators can also collect data on other tobacco products such as spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll-your-own).							
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$						
				<b>←</b> ○○	● → better			

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

#### **Reduced Initiation of Tobacco Use by Young People**

Tobacco use begins primarily during adolescence, decades earlier than when the death and disability associated with tobacco use are likely to occur. Few people begin to use tobacco as adults; almost 90% of adult smokers began by age 18 years. The earlier young people begin using tobacco products, the more likely they are to use them as adults and the longer they are likely to be users. Both the duration and amount of tobacco use are related to eventual chronic health problems, with duration posing the stronger risk. The processes of nicotine addiction further ensure that many of today's adolescent smokers will use tobacco regularly when they are adults.

Listed below are the indicators associated with this outcome:

- ▶ 1.13.1 Average age at which young people first smoked a whole cigarette
- ▶ 1.13.2 Proportion of young people who report never having tried a cigarette

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Jackson C, Dickinson D. Cigarette consumption during childhood and persistence of smoking through adolescence. *Archives of Pediatrics & Adolescent Medicine*. 2004;158:1050–6.
- 3. Doll R, Peto R. Cigarette smoking and lung cancer: dose and time relationships among regular smokers and lifelong non-smokers. *Journal of Epidemiology and Community Health*. 1978;32(4):303–13.
- 4. Flanders DW, Lally CA, Ahu BP, Henley J, Thun MJ. Lung cancer mortality in relation to age, duration of smoking, and daily cigarette consumption: results from Cancer Prevention Study II. *Cancer Research*. 2003;63:6556–62.

#### Outcome 13

## **Reduced Initiation of Tobacco Use by Young People**

## Indicator Rating ←○○●●→ better

Number	Indicator	Overall quality	Strein elles	math of moe	Face	practice	accepted
1.13.1	Average age at which young people first smoked a whole cigarette		\$\$	•			•
1.13.2	Proportion of young people who report never having tried a cigarette		\$\$	•	•	•	•

<b>Average Age at</b>	Which Young Po	eople First	Smoked a	Whole Cig	garette			
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people				
Outcome 13	Reduced initiation	n of tobacco ı	ise by young pe	eople				
What to measure	The average age a	at which your	ng smokers first	smoked a w	vhole cigarette			
Why this indicator is useful	The age at which that person's long tobacco, the more	g-term smoki	ng habits. The y	ounger peop	ple are when the			
Example data	➤ Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004							
source(s)	CDC Youth R	isk Behavior S	Surveillance Sys	stem (YRBSS	5), 2003			
Population group(s)	Young people age	Young people aged less than 18 years						
Example survey question(s)	From YTS and YRBSS  How old were yo  I have never sr  8 years or your  9 or 10 years  11 or 12 years  13 or 14 years  15 or 16 years  17 years or old	u when you s noked cigare nger		e cigarette fo	r the first time?			
Comments	To gather more co the use of other to and loose tobacco	obacco produ	cts such as spit					
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
				<b>←</b> ○○	◆ better			

<sup>1.</sup> U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

<b>Proportion of Yo</b>	oung People Wh	o Report N	lever Havinç	g Tried a (	Cigarette			
Goal area 1	Preventing initiat	Preventing initiation of tobacco use among young people						
Outcome 13	Reduced initiation	Reduced initiation of tobacco use by young people						
What to measure	Proportion of you	Proportion of young people who have never tried a cigarette, not even one or two puffs						
Why this indicator is useful		Reducing the number of minors who experiment with tobacco will decrease the number who become established smokers. <sup>1</sup>						
Example data source(s)		<ul> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>CDC Youth Risk Behavior Surveillance System (YRBSS), 2003</li> </ul>						
Population group(s)	Young people age	ed less than 18	3 years					
Example survey question(s)	From YTS and YRBSS Have you ever tri □ Yes □ No	Have you ever tried cigarette smoking, even one or two puffs?						
Comments	To gather more co	obacco produ	cts such as spit					
Rating	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$		•	•			
				<b>←</b> ○○(	● → better			

<sup>1.</sup> U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

#### **Reduced Tobacco-use Prevalence Among Young People**

Smoking by young people is associated with serious health problems, such as reduced lung capacity and physical fitness. Smoking by young people also increases the likelihood that they will continue to smoke through adulthood, increasing their risk of tobacco-related diseases such as lung and other cancers, heart disease, and emphysema. And emphysema.

Because the number of years of cigarette smoking produces a greater risk of disease than the number of cigarettes smoked per day, it is critically important to work on both preventing young people from starting to smoke and increasing the number and percentage of young smokers who quit.<sup>4,5</sup>

Listed below are the indicators associated with this outcome:

- ▶ 1.14.1 Prevalence of tobacco use among young people
- ▶ 1.14.2 Proportion of established young smokers

#### References

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Jackson C, Dickinson D. Cigarette consumption during childhood and persistence of smoking through adolescence. *Archives of Pediatrics & Adolescent Medicine*. 2004;158(11):1050–6.
- 3. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 4. Doll R, Peto R. Cigarette smoking and lung cancer: dose and time relationships among regular smokers and lifelong non-smokers. *Journal of Epidemiology and Community Health*. 1978;32(4):303–13.
- 5. Flanders DW, Lally CA, Ahu BP, Henley J, Thun MJ. Lung cancer mortality in relation to age, duration of smoking, and daily cigarette consumption: results from Cancer Prevention Study II. *Cancer Research*. 2003;63(19):6556–62.

#### For Further Reading

Centers for Disease Control and Prevention. *Targeting tobacco use: the nation's leading cause of death, 2004* [At a Glance]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2004. Available from: http://www.cdc.gov/nccdphp/aag/aag\_osh.htm. Accessed March 2005.

Centers for Disease Control and Prevention. Projected smoking-related deaths among youth—United States. *Morbidity and Mortality Weekly Report*. 1996;45(44):971–4.

U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.

#### Outcome 14

## **Reduced Tobacco-use Prevalence Among Young People**

## Indicator Rating ←○○● ◆→ better

Number	Indicator	Overall quality	evaluation evi-	union of mence	Face V.	practic	Accepted .
1.14.1	Prevalence of tobacco use among young people		\$\$	•			
1.14.2	Proportion of established young smokers		\$\$	•		•	•

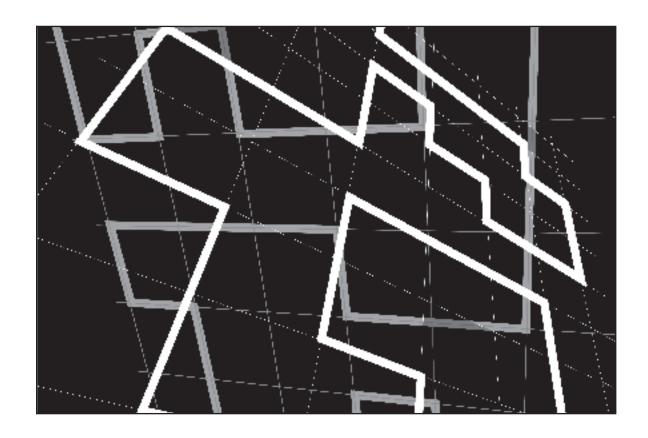
Prevalence of To	obacco Use Amo	ong Young	People					
Goal area 1	Preventing initiat	ion of tobacco	o use among yo	ung people				
Outcome 14	Reduced tobacco-	Reduced tobacco-use prevalence among young people						
What to measure	Proportion of young people who have smoked on at least 1 day during the previous 30 days <sup>1</sup>							
Why this indicator is useful	Reducing tobacco	Reducing tobacco use among young people decreases their chances of smoking as adults. <sup>2</sup>						
Example data source(s)	<ul> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>CDC Youth Risk Behavior Surveillance System (YRBSS), 2003</li> </ul>							
Population group(s)	Young people age	ed less than 18	8 years					
Example survey question(s)	From YTS and YRBSS  During the past 30 days, on how many days did you smoke cigarettes?  □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days							
Comments	Evaluators may a and young people To gather more couse of other tobacoloose tobacco (rol	e who frequen omplete data eco products s	ntly smoke. on tobacco use,	evaluators o	an also ask ques	tions about the		
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$	•		•	•		
				<b>←</b> ○ ○	● → better			

- 1. Centers for Disease Control and Prevention. Cigarette use among high school students—United States, 1991–2003. *Morbidity and Mortality Weekly Report*. 2004;53(23):499–502.
- 2. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

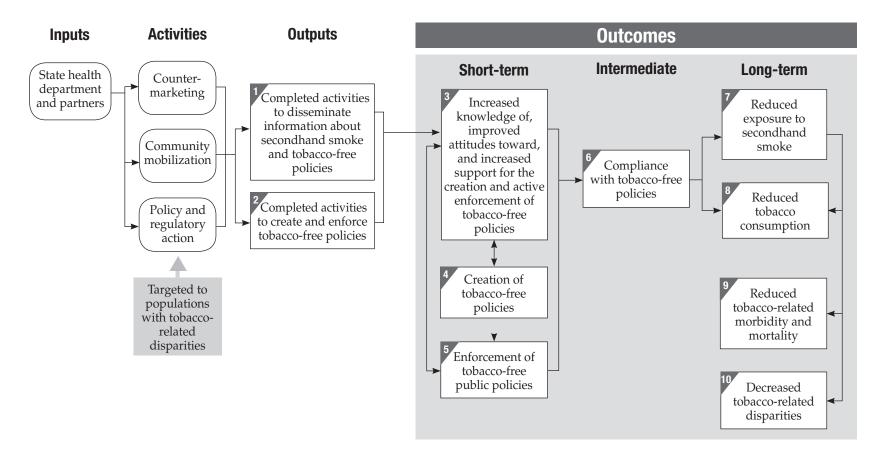
<b>Proportion of Es</b>	stablished Youn	g Smokers	3			
Goal area 1	Preventing initiat	tion of tobacco	o use among yo	ung people		
Outcome 14	Reduced tobacco	-use prevalen	ce among youn	g people		
What to measure	Proportion of you	ang people wl	ho smoked 100	cigarettes or	more during the	eir lifetimes¹
Why this indicator is useful	Young people whe to cigarettes and				k of becoming ac	ldicted
Example data source(s)	<ul><li>Youth Tobacco</li><li>CDC Youth R</li></ul>	•	S): CDC Recom Surveillance Sys	-		)04
Population group(s)	Young people age	ed less than 18	8 years			
Example survey question(s)	From YTS and YRBSS  During the past 3  0 days 1 or 2 days 3 to 5 days 6 to 9 days  During the past 3 (CHOOSE ONLY I did not smok during the past 3 Camel Marlboro  About how many None 1 or more puff 1 cigarette 2 to 5 cigarette 6 to 15 cigarette 16 to 25 cigare 16 to 99 cigare 100 or more cigare	30 days, on ho 30 days, what 4 ONE ANSW 4 ce cigarettes 5 to 30 days 6 usual brand 7 cigarettes ha 7 cigarettes ha 8 ses (about half 8 ttes (about 1 pttes (more tha	□ 10 to 19 day □ 20 to 29 day □ All 30 days  brand of cigare ER) □ Newport □ Virginia Sli □ GPC, Basic □ Some other  ve you smoked whole cigarette  f a pack total) brack total) in 1 pack, but le	ys ys ttes did you ms , or Doral brand in your enti	usually smoke? Tre life?	
Comments	To gather more couse of other tobacoloose tobacco (rol	cco products s				
Rating	Overall quality low → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$		4004	● → better	•
				<del>-</del> 00	■ Detter	

- 1. Centers for Disease Control and Prevention. Cigarette use among high school students—United States, 1991–2003. *Morbidity and Mortality Weekly Report*. 2004;53(23):499–502.
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# Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke



#### **Eliminating Nonsmokers' Exposure to Secondhand Smoke**



#### **Eliminating Nonsmokers' Exposure to Secondhand Smoke**

#### **Short-term Outcomes**

- Outcome 3: Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies
  - ▶ 2.3.1 Level of confirmed awareness of media messages on the dangers of secondhand smoke
  - ▶ 2.3.2 Level of receptivity to media messages about secondhand smoke
  - ▶ 2.3.3 Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke
  - ▶ **2.3.4** Proportion of the population willing to ask someone not to smoke in their presence
  - ▶ 2.3.5 Proportion of the population that thinks secondhand smoke is harmful
  - ▶ 2.3.6 Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women
  - ▶ 2.3.7 Level of support for creating tobacco-free policies in public places and workplaces
  - ▶ 2.3.8 Level of support for adopting tobacco-free policies in homes and vehicles
  - ▶ 2.3.9 Level of support for active enforcement of tobacco-free public policies
  - ▶ 2.3.10<sup>NR</sup> Level of support for creating tobacco-free policies in schools

#### ■ Outcome 4: Creation of tobacco-free policies

- ▶ 2.4.1 Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places
- ▶ 2.4.2 Proportion of workplaces with voluntary tobacco-free policies
- ▶ 2.4.3 Proportion of the population that works in environments with tobacco-free policies
- ▶ **2.4.4** Proportion of the population reporting voluntary tobacco-free home or vehicle policies
- ▶ **2.4.5** Proportion of schools or school districts reporting the implementation of 100% tobacco-free policies
- ▶ 2.4.6 Changes in state tobacco control laws that preempt stronger local tobacco control laws

#### ■ Outcome 5: Enforcement of tobacco-free public policies

- ▶ 2.5.1 Number of compliance checks conducted by enforcement agencies
- ▶ 2.5.2 Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies
- ▶ 2.5.3 Number of warnings, citations, and fines issued for infractions of tobacco-free public policies

#### **Intermediate Outcomes**

#### ■ Outcome 6: Compliance with tobacco-free policies

- ▶ 2.6.1 Perceived compliance with tobacco-free policies in workplaces
- ▶ 2.6.2 Perceived compliance with tobacco-free policies in indoor and outdoor public places
- ▶ **2.6.3** Proportion of public places observed to be in compliance with tobacco-free policies
- ▶ **2.6.4** Perceived compliance with voluntary tobacco-free home or vehicle policies
- ▶ 2.6.5 Perceived compliance with tobacco-free policies in schools

#### **Long-term Outcomes**

#### ■ Outcome 7: Reduced exposure to secondhand smoke

- ▶ 2.7.1 Proportion of the population reporting exposure to secondhand smoke in the workplace
- ▶ 2.7.2 Proportion of the population reporting exposure to secondhand smoke in public places
- ▶ 2.7.3 Proportion of the population reporting exposure to secondhand smoke at home or in vehicles
- ▶ 2.7.4 Proportion of students reporting exposure to secondhand smoke in schools
- ▶ 2.7.5 Proportion of nonsmokers reporting overall exposure to second-hand smoke

#### Outcome 8: Reduced tobacco consumption

- ▶ **2.8.1** Per capita consumption of tobacco products
- ▶ 2.8.2 Average number of cigarettes smoked per day by smokers
- ▶ **2.8.3** Smoking prevalence

# Increased Knowledge of, Improved Attitudes Toward, and Increased Support for the Creation and Active Enforcement of Tobacco-free Policies

The theory of change associated with eliminating nonsmokers' exposure to second-hand smoke starts with increasing people's knowledge of the dangers of exposure to secondhand smoke, changing their attitudes toward the acceptability of exposing nonsmokers to secondhand smoke, and increasing their support for passing and enforcing tobacco-free policies. Ideally, such changes should lead to increases in the number of environments with tobacco-free policies and increased compliance with those policies as people become more conscious of the importance of smoke-free air. In reality, passing tobacco-free policies is subject to many inhibiting and facilitating influences and factors. Moreover, adopting a policy does not ensure that the policy will be actively enforced or become self-enforcing.

Experience suggests that interventions intended to increase knowledge of and support for passing or enforcing tobacco-free policies can be effective. <sup>1,2</sup> In addition, experience and logic dictate that sufficient support for tobacco-free policies by either the public or decision makers will lead to the adoption of tobacco-free policies (including voluntary tobacco-free policies).<sup>3</sup>

Experience also shows that policy makers review data on public support for tobacco-free policies carefully before they decide whether to support such policies. <sup>4-7</sup> One study, for example, showed that support for a New York City law requiring that restaurants be tobacco free was associated with compliance with the law. <sup>3</sup> In addition, a study from California showed that exposure to a state media campaign promoting tobacco-free policies and laws was significantly associated with increases over time in reported smoking bans in homes. <sup>8</sup> Other studies show that increased knowledge of the adverse health effects of secondhand smoke is associated with increased efforts by individuals to minimize their exposure to secondhand smoke and with reductions in actual exposure to secondhand smoke. <sup>9,10</sup>

Listed below are the indicators associated with this outcome:

- ▶ 2.3.1 Level of confirmed awareness of media messages on the dangers of secondhand smoke
- ▶ 2.3.2 Level of receptivity to media messages about secondhand smoke
- ▶ 2.3.3 Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke
- ▶ 2.3.4 Proportion of the population willing to ask someone not to smoke in their presence
- ▶ 2.3.5 Proportion of the population that thinks secondhand smoke is harmful

- ▶ 2.3.6 Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women
- ▶ 2.3.7 Level of support for creating tobacco-free policies in public places and workplaces
- ▶ 2.3.8 Level of support for adopting tobacco-free policies in homes and vehicles
- ▶ 2.3.9 Level of support for active enforcement of tobacco-free public policies
- ▶ 2.3.10<sup>NR</sup> Level of support for creating tobacco-free policies in schools

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- 4. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000
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#### Outcome 3

# Increased Knowledge of, Improved Attitudes Toward, and Increased Support for the Creation and Active Enforcement of Tobacco-free Policies

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality low ← → high	evaluation evices	United States	Face vo.	practice	a replied
2.3.1	Level of confirmed awareness of media messages on the dangers of secondhand smoke		\$\$	•	•		
2.3.2	Level of receptivity to media messages about secondhand smoke	<u> </u>	\$\$ <sup>†</sup>	0	•	0	*
2.3.3	Attitudes of smokers and nonsmokers about the acceptability of exposing others to secondhand smoke	<u> </u>	\$\$\$ <sup>†</sup>		•		*
2.3.4	Proportion of the population willing to ask someone not to smoke in their presence		\$\$ <sup>†</sup>		•	•	*
2.3.5	Proportion of the population that thinks secondhand smoke is harmful	†	\$\$ <sup>†</sup>		•		•
2.3.6	Proportion of the population that thinks secondhand smoke is harmful to children and pregnant women		\$\$ <sup>†</sup>		•		•
2.3.7	Level of support for creating tobacco-free policies in public places and workplaces		\$\$ <sup>†</sup>		•	•	•
2.3.8	Level of support for adopting tobacco-free policies in homes and vehicles	<u> </u>	\$\$\$	Ø	•		
2.3.9	Level of support for active enforcement of tobacco-free public policies		\$\$\$ <sup>†</sup>	$\Diamond$			
2.3.10 <sup>NR</sup>	Level of support for creating tobacco-free policies in schools		$\otimes$	$\otimes$	Q	$\otimes$	$\otimes$

<sup>\*</sup> Denotes low reviewer response: that is, greater than 75% of the experts either did not rate the indicator, or gave the criterion an invalid rating (see Appendix B for an explanation).

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

 $<sup>^{\</sup>rm NR}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

# **Level of Confirmed Awareness of Media Messages** on the Dangers of Secondhand Smoke

•						
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke					
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies					
What to measure	Proportion of the target population that can accurately recall a media message about the dangers of exposure to secondhand smoke					
Why this indicator is useful	Evaluators should measure exposure to media messages to confirm awareness of these messages by asking respondents to provide specific information about the message. As people increase their knowledge about the health effects of secondhand smoke, the number of their actions to reduce exposure to secondhand smoke should also increase.					
Example data source(s)	Legacy Media Tracking Survey (LMTS), 2003 Information available at: http://tobacco.rti.org/data/lmts.cfm					
Population group(s)	Young people aged less than 18 years					
Example survey question(s)	From LMTS  Have you recently seen an anti-smoking or anti-tobacco ad on TV that shows?  □ Yes □ Maybe, not sure □ No □ Refused to answer  What happens in this advertisement? (DO NOT READ RESPONSE CATEGORIES)					
	What do you think the main message of this ad was? (DO NOT READ RESPONSE CATEGORIES)					
Comments	The example survey questions could be asked of adults.					
	Evaluators may want to categorize awareness of the medium (e.g., billboard, television, print) through which respondents learned of the anti-tobacco media message.					
	Programs may want to evaluate confirmed awareness of an advertisement by respondents' smoking status (current, former, or never) and addiction level (e.g., light, moderate, or heavy) because awareness levels may differ significantly among groups with different levels of addiction.					
	Evaluators should work closely with countermarketing campaign managers to (1) develop a separate series of questions for each main media message and (2) coordinate data collection with the timing of the media campaign.					

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>←○○</b> €	● → better	

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<b>Level of Recept</b>	ivity to Media Me	ssages A	bout Secon	dhand Sm	oke	
Goal area 2	Eliminating nonsm	okers' expos	sure to secondh	and smoke		
Outcome 3	Increased knowleds the creation and act					for
What to measure	The level of receptive generally defined as message. In tobaccorreceptivity is the exmade them think at	s the extent control eva tent to whic	to which people lluation, howev h people believ	e are willing er, the defini e that the me	to listen to a per tion is narrower essage was convi	suasive ; incing,
Why this indicator s useful	Message awareness attitudes toward tol and enforcing such reach and resonate ensure campaign ef	bacco-free p policies. Me with the inte	olicies, as well a edia campaigns ended audience	as for increas are effective	sing support for only if their mes	creating ssages
Example data source(s)	Legacy Media Track Information availab			/data/lmts.c	efm	
Population group(s)	Young people aged	less than 18	years			
Example survey question(s)	From LMTS  Tell me how much y This ad is convincir  ☐ Strongly agree ☐ Strongly disagree Would you say the ☐ Yes ☐ No ☐  Did you talk to you ☐ Yes ☐ No ☐	ng. Would yo ☐ Agree e ☐ Have ad gave you Don't know r friends abo	ou say you:  no opinion  good reasons r  out this ad?	Disagree Don't knov	V	
Comments	The example questi Evaluators may wa				hrough which re	espondents
	learned of the medi Evaluators should v (1) develop a separa (2) coordinate data	work closely ate series of	with counterm questions for ea	arketing can ach main me	npaign manager dia message and	s to
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
	†	\$\$ <sup>†</sup>				*
				<b>←</b> ○○(	● → better	
	<ul> <li>C ○ ● → better</li> <li>* Denotes low reviewer response: that is, greater than 75% of the experts either did not rathe indicator, or gave the criterion an invalid rating (see Appendix B for an explanation)</li> <li>† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).</li> </ul>					

- 1. Sly DF, Heald GR, Ray S. The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control*. 2001;10(1):9–15.
- 2. McGuire WJ. Public communication as a strategy for inducing health-promoting behavioral change. *Preventive Medicine*. 1984;13(3):299–319.
- 3. Kotler P, Armstrong G. Principles of marketing, 9th ed. Upper Saddle River, NJ: Prentice-Hall; 2001.
- 4. Carter WB. Health behavior as a rational process: theory of reasoned action and multiattribute utility theory. In: Glanz K, Lewis FM, Rimer BK, editors. *Health behavior and health education: theory, research, and practice.* San Francisco, CA: Jossey-Bass; 1990. pp. 63–91.
- 5. Maibach E, Parrott RL, editors. *Designing health messages: approaches from communication theory and public health practice.* Thousand Oaks, CA: Sage; 1995.

## Attitudes of Smokers and Nonsmokers About the Acceptability of Exposing Others to Secondhand Smoke

Goal area 2	Eliminating nonsi	nokers' expo	sure to secondh	and smoke						
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies									
What to measure	The attitudes of si smoke	The attitudes of smokers and nonsmokers concerning exposing others to secondhand smoke								
Why this indicator is useful	indicators of social hand smoke regul smokers (i.e., they to secondhand sm	Attitudes about the acceptability of exposing others to secondhand smoke are leading indicators of social norms with regard to smoking. Even in places without formal secondhand smoke regulations, changes in attitudes can increase (1) self-regulating behavior by smokers (i.e., they refrain from smoking in places where nonsmokers would be exposed to secondhand smoke) and (2) personal advocacy behavior by nonsmokers (i.e., they ask smokers not to smoke around them). <sup>1,2</sup>								
Example data source(s)	National Social Cl Information availa				cialclimate					
Population group(s)	Adults aged 18 ye	ars or older								
Example survey question(s)	Smoking should not be allowed in any public place. Do you:  ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree									
	From National Social Climate Survey of Tobacco Control									
	It is acceptable for parents to smoke in front of children. Do you:									
	☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree									
Comments	The authors created data source.	ed the first ex	ample question	. It is not in	any commonly ι	ısed				
	The example surv	ey questions	could be asked	of young pe	eople.					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
	†	\$\$\$ <sup>†</sup>				•*				
				<b>→</b> ∩ <b>○</b> (	● → better					
	* Danatas lazur war	iouar rocean	en that is greate		f the experts eith	or did not rate				

<sup>\*</sup> Denotes low reviewer response: that is, greater than 75% of the experts either did not rate the indicator, or gave the criterion an invalid rating (see Appendix B for an explanation).

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<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

### Indicator 2.3.4

## **Proportion of the Population Willing to Ask** Someone Not to Smoke in Their Presence Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke Outcome 3 Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies What to measure Proportion of the population who report that they have asked or would ask someone not to smoke in their presence (including in homes, vehicles, and public places) Why this indicator Compliance with tobacco-free policies and changes in smokers' behavior in places without policies require that nonsmokers be willing to ask smokers to refrain from is useful smoking in their presence. 1.2 Experience in California suggests that nonsmokers' willingness to ask someone not to smoke increases over time and that smokers' responses are usually positive.3 Example data ▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental source(s) Section D: Environmental Tobacco Smoke, 2003 California Adult Tobacco Survey (CATS), 1999 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation\_Resources.htm Population group(s) Adults aged 18 years or older **Example survey** From ATS question(s) If someone were smoking near you in the nonsmoking area of a restaurant, would you ask them to stop? ☐ Yes ☐ No ☐ Maybe ☐ Don't know/Not sure ☐ Refused In the past 12 months, have you ever asked a stranger not to smoke around you so you wouldn't have to avoid their tobacco smoke? $\square$ Yes $\square$ No $\square$ Don't know/Not sure $\square$ Refused From CATS In the past 12 months, have you ever asked someone not to smoke? ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused *If the answer is "yes," ask the following:* On that same occasion, what was the primary reason you asked that person not to smoke? ☐ Smoke was annoying to you ☐ Concerned about long-term health effects of secondhand smoke ☐ Smoking was illegal ☐ Concerned about the smoker's health ☐ Concerned about your own health (respondent's health) ☐ Other (specify) ☐ Don't know/Not sure ☐ Refused to answer **Comments** The example survey questions could be asked of young people.

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$ <sup>†</sup>			<b>●</b> <sup>†</sup>	*
				4-006	hetter	

- \* Denotes low reviewer response: that is, greater than 75% of the experts either did not rate the indicator, or gave the criterion an invalid rating (see Appendix B for an explanation).
- † Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

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- 2. Repace J. *An air quality survey of respirable particles and particulate carcinogens in Delaware hospitality venues before and after a smoking ban.* Bowie, MD: Repace Associates; 2003. Available from: http://www.tobaccoscam.ucsf.edu/pdf/RepaceDelaware.pdf. Accessed December 2004.
- 3. Independent Evaluation Consortium. Final report. *Independent evaluation of the California Tobacco Control Prevention and Education Program: waves* 1, 2, and 3 (1996–2000). Rockville, MD: The Gallup Organization; 2002. Available from: http://www.dhs.ca.gov/tobacco/documents/WavesComplete.pdf. Accessed December 2004.

## Indicator 2.3.5

### Proportion of the Population That Thinks Secondhand Smoke Is Harmful Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke Outcome 3 Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies What to measure Proportion of the population that believes exposure to secondhand smoke is harmful to one's health Why this indicator Several studies found that increased knowledge of the adverse health effects of secondis useful hand smoke was associated with (1) an increased number of actions to reduce exposure to secondhand smoke, (2) reduced exposure to secondhand smoke, and (3) increased intention to quit and higher quit rates among smokers. 1-3 Changes in attitudes and behaviors concerning secondhand smoke are often preceded by an understanding of its ill effects. **Example data** ▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003 source(s) Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004 Population group(s) Adults aged 18 years or older Young people aged less than 18 years **Example survey** From ATS question(s) Do you think that breathing smoke from other people's cigarettes is: ☐ Very harmful to one's health ☐ Not very harmful to one's health ☐ Somewhat harmful to one's health ☐ Not harmful at all to one's health Would you say that breathing smoke from other people's cigarettes causes: ☐ Lung cancer in adults ☐ Respiratory problems in children ☐ Heart disease in adults ☐ Sudden infant death syndrome ☐ Colon cancer in adults From YTS Do you think the smoke from other people's cigarettes is harmful to you? ☐ Definitely yes ☐ Probably not ☐ Definitely not **Comments** The example questions could be asked of decision makers or opinion leaders. Rating Strenath of Utility **Face validity Overall quality** Resources Accepted needed evaluation practice evidence \$\$<sup>†</sup> **←**○ ○ • • better Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Kurtz ME, Kurtz JE, Johnson SM, Beverly EE. Exposure to environmental tobacco smoke: perceptions of African American children and adolescents. *Preventive Medicine*. 1996;25(3):286–92.
- 2. Li C, Unger JB, Schuster D, Rohrbach LA, Howard-Pitney B, Norman G. Youths' exposure to environmental tobacco smoke (ETS): associations with health beliefs and social pressure. *Addictive Behaviors*. 2003;28(1):39–53.
- 3. Glantz SA, Jamieson P. Attitudes toward secondhand smoke, smoking, and quitting among young people. *Pediatrics*. 2000;106(6):E82.

## Proportion of the Population That Thinks Secondhand Smoke Is Harmful to Children and Pregnant Women

		•						
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke							
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies							
What to measure	Proportion of the population that believes exposure to secondhand smoke is harmful to children and pregnant women							
Why this indicator is useful	Exposure to secondhand smoke is especially harmful to children and pregnant women. <sup>1</sup> Increased public awareness of this danger reduces exposure of children and pregnant women to secondhand smoke. <sup>2</sup>							
Example data source(s)	Adult Tobacco Su	rvey (ATS): (	CDC Recommen	nded Questi	ons: Core, 2003			
Population group(s)	Adults aged 18 ye	ars or older						
Example survey question(s)	From ATS  Would you say that breathing smoke from other people's cigarettes causes:  □ Lung cancer in adults □ Respiratory problems in children  □ Heart disease in adults □ Sudden infant death syndrome  □ Colon cancer in adults  Do you agree or disagree with the following statement: Smoke from other people's cigarettes is harmful to children?  □ Strongly agree □ Somewhat agree □ Neither agree nor disagree  □ Somewhat disagree □ Strongly disagree □ Don't know/Not sure  □ Refused to answer							
Comments	The example surv	ey questions	could be asked	of pregnant	women and you	ıng people.		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$ <sup>†</sup>						
	† Denotes low agre				● → better			

## References

indicator were within one point of each other (see Appendix B for an explanation).

<sup>1.</sup> U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.

<sup>2.</sup> McMillen RC, Winickoff JP, Klein JD, Weitzman M. U.S. adult attitudes and practices regarding smoking restrictions and child exposure to environmental tobacco smoke: changes in the social climate from 2000–2001. *Pediatrics*. 2003;11(1 Pt 1): E55–60.

## Indicator 2.3.7

Level of Support	t for Creating Toba	cco-free	e Policies	in Public P	Places and \	Workplaces			
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke								
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies								
What to measure	Proportion of adults who support the creation of policies that restrict smoking in places and workplaces								
Why this indicator is useful	Tobacco-free policies are unlikely to be adopted without support among business owners, policy makers, and the general public. <sup>1-4</sup>								
Example data	► Adult Tobacco Sur	vey (ATS)	: CDC Reco	ommended Qu	estions: Core,	2003			
source(s)	<ul><li>Adult Tobacco Sur Section D: Environ</li></ul>				estions: Suppl	emental			
	Behavioral Risk Fa Module, 2000	ctor Surve	eillance Syst	em (BRFSS): T	Tobacco Use Pro	evention			
Population group(s)	Adults aged 18 years	or older							
Example survey question(s)	From ATS: Core  In indoor work areas, areas, or not at all?  Allowed in all area.  Don't know/Not su  From ATS: Supplemental S  In	s	allowed in so efused  th each of the ers, indoor sp ome areas, c llowed in so efused orkplace smo	ome areas   following: pub orting events) d or not allowed ome areas   bking policy, a	Not allowed a lic buildings, ba lo you think sn at all? Not allowed a	t all  rs noking t all lace			
	From BRFSS In the following locati areas, or not allowed a	it all?		O					
	i	Allowed n all areas	Some areas	Not allowed at all	Don't know Not sure	Refused to answer			
	<ul><li>Restaurants</li><li>Schools</li><li>Day Care Centers</li><li>Indoor Work Areas</li></ul>								

### **Comments**

Evaluators may want to analyze the level of support for creating tobacco-free policies according to (1) the smoking status of the responder and (2) the place where the smoking restrictions would or do apply.

These example questions could be asked of decision makers, employers, opinion leaders, or young people.

### Rating



<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. Thomson GW, Wilson N. Public attitudes about tobacco smoke in workplaces: the importance of workers' rights in survey questions [letter]. *Tobacco Control*. 2004;13(2):206–7.
- 4. Ĥoward KA, Rogers T, Howard-Pitney B, Flora JA, Norman GJ, Ribisl KM. Opinion leaders' support for tobacco control policies and participation in tobacco control activities. *American Journal of Public Health*. 2000;90(8):1283–7.

## Indicator 2.3.8

<b>Level of Suppor</b>	t for Adopting 1	Tobacco-fi	ree Policies	in Homes	and Vehicle	es			
Goal area 2	Eliminating nons	smokers' expo	osure to second	lhand smoke					
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies								
What to measure	Proportion of ad- products in home			ee policies th	at restrict the us	se of tobacco			
Why this indicator is useful	of homes and vel	Tobacco-free policies in private homes and vehicles are voluntary. To increase the number of homes and vehicles with these policies, it is necessary to increase the number of adults who support such policies.							
Example data source(s)	University of Cal and Practices, 19 Information avai • http://ssdc.ucs • http://www.dh	96 lable at: d.edu/tobacc	20		•				
Population group(s)	Adults aged 18 y	ears or older							
Example survey question(s)	From CTS  I am going to rea please indicate w to you for your h  To protect a ho  To protect fam  To discourage  To encourage  To avoid unple  Because it ann	whether it is voousehold. The busehold mentily from harm young peoplesmokers to que asant odor of the busehold.	ery important, ne reasons are: mber who is sen nful health effe le from starting uit	somewhat in nsitive to sme ects of enviro	nportant, or not oke	important			
Comments	Evaluators may vinside vehicles.	want to modi	fy the example	question to a	address tobacco	-free policies			
	Evaluators may whomes and vehic					free policies in			
	The example que	stion could b	e asked of you	ng people.					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	†	\$\$\$	$\Diamond$						
				<b>←○○</b> €	● → better				
	† Denotes low agree indicator were w Denotes no data	ithin one poin			75% of the valid r 3 for an explanatio				

Goal area 2	Eliminating nons	mokers' expo	sure to secondh	and smoke					
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies								
What to measure	example of active	Proportion of adults who support active enforcement of tobacco-free policies. An example of active enforcement is issuing citations for establishments found not to be in compliance with tobacco-free laws.							
Why this indicator is useful	Tobacco-free laws likely to be active public support th	ly enforced w							
Example data source(s)	Information avail	California Independent Evaluation: Adult Survey, 1997 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm							
Population group(s)	Adults aged 18 ye	ears or older							
Example survey question(s)	From California Indep Smoking bans in enforced. Do you  Strongly agree	restaurants, ca	afeterias, and in	•		strictly			
Comments	This example que	estion could be	e asked of decis	ion makers	or opinion leade	rs.			
	More information	about how to	o collect data on	this indicat	tor is in reference	e 5 below.			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$ <sup>†</sup>	$\bigotimes$						
				<b>←○○</b>	● → better				
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).								

- 1. Howard KA, Rogers T, Howard-Pitney B, Flora JA, Norman GJ, Ribisl KM. Opinion leaders' support for tobacco control policies and participation in tobacco control activities. American Journal of Public Health. 2000;90(8):1283-7.
- 2. U.S. Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. U.S. Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 4. Thomson GW, Wilson N. Public attitudes about tobacco smoke in workplaces: the importance of workers' rights in survey questions [letter]. *Tobacco Control.* 2004;13(2):206–7.

  5. California Independent Evaluation, Opinion Leader Survey [online]. 1997. Available from: http://www.dhs.ca.gov/ps/
- cdic/ccb/TCS/html/Evaluation\_Resources.htm#os. Accessed December 2004.

## Indicator 2.3.10<sup>NR</sup>

<b>Level of Suppor</b>	t for Creating Tobacco-free Policies in Schools
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke
Outcome 3	Increased knowledge of, improved attitudes toward, and increased support for the creation and active enforcement of tobacco-free policies
What to measure	Proportion of adults who support creating tobacco-free policies in schools
Why this indicator is useful	Young people's attitudes concerning the acceptability of smoking in general, and smoking around nonsmokers in particular, are influenced by what they see their peers and educators doing at school. Strong anti-tobacco school policies require the support of parents, teachers, principals, policy makers, and the general public.¹ High levels of compliance with tobacco-free school policies reduce students' exposure to secondhand smoke and reinforce anti-tobacco social norms.²
Example data source(s)	► Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section F: Policy Issues, 2003
	<ul> <li>University of California at San Diego, California Tobacco Survey (CTS): Adult Attitudes and Practices Instrument, 1996</li> <li>Information available at: http://ssdc.ucsd.edu/tobacco</li> </ul>
	Behavioral Risk Factor Surveillance System (BRFSS): Tobacco Use Prevention Module, 2000
Population group(s)	Adults aged 18 years or older
Example survey question(s)	From ATS  How strongly do you agree or disagree with the following statement: Tobacco use by adults should not be allowed on school grounds or at any school events.  □ Strongly agree □ Agree □ Disagree □ Strongly disagree □ Don't know/Not sure □ Refused  From CTS  Do you think schools should prohibit students from wearing clothing or bringing gear with tobacco brand logos to school? □ Yes □ No
	From BRFSS
	Do you think that smoking should be allowed in all areas of schools, restaurants, day care, and indoor work areas, some areas, or not allowed at all?  ☐ All areas ☐ Some areas ☐ Not allowed ☐ Refused to answer
Comments	The example questions could also be asked of decision makers.
	Evaluators may want to analyze the level of support for creating tobacco-free policies in schools based on the smoking status of the respondent.

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		$\bigotimes$	$\bigotimes$	$\Diamond$	$\bigotimes$	$\bigotimes$
				<b>←○○</b>	● → better	
	Denotes no data	a.				

 $<sup>^{\</sup>rm NR}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

- 1. Task Force on Community Preventive Services Meeting, February 25, 2004. Meeting minutes available at: http://www.thecommunityguide.org.
- Gilpin EA, White MM, White VM, Distefan JM, Trinidad DR, Lee L, Major J, Kealey S, Pierce JP. *Tobacco control successes in California: a focus on young people, results from the California Tobacco Surveys* 1990–2002. La Jolla, CA: University of California, San Diego; 2003. pp. 348–9. Available from: http://repositories.cdlib.org/tc/surveys/CTC1990–2002/. Accessed December 2004.

## Creation of Tobacco-free Policies

Creating tobacco-free policies in workplaces, other public places, and homes and vehicles not only protects nonsmokers from involuntary exposure to the toxins in tobacco smoke, but also may have the added benefit of reducing tobacco consumption by smokers and increasing the number of smokers who quit.<sup>1-3</sup> Smoking bans and restrictions are effective in reducing secondhand smoke exposure.<sup>1,2</sup>

Smoking bans may be implemented by governments (through legislation or regulation), oversight groups (e.g., the Joint Commission on Accreditation of Healthcare Organizations), individual employers or businesses, or private citizens (e.g., smoking bans in homes and vehicles). By approaching these groups or individuals and encouraging them to develop their own tobacco-free policies, tobacco control programs can protect the public from secondhand smoke. Where state law preempts stronger local laws, tobacco control programs retain the option of mobilizing the private sector to introduce voluntary smoking bans in workplaces and public places. In considering which channel to pursue, programs should take into account (1) the legal authority vested in various entities (e.g., counties, cities, local boards of health), (2) the level of support among relevant decision makers and their constituents, and (3) the feasibility of persuading these entities to implement tobacco-free policies. It is also worth remembering that despite the recent passage of a number of comprehensive state clean-indoor-air laws, comprehensive and strong laws can also be enacted at the local level, where such laws are easier to adopt and enforce.4

Experience shows that the education that occurs when a community debates whether it wants a local tobacco-free law—a debate that typically generates extensive media coverage—can greatly facilitate enforcement of the law, sometimes making it largely self-enforcing. Continued education of business proprietors, employers, and the public during the implementation process is also important in this regard. Preemptive laws prevent communities from engaging in the process of public education, mobilization, and debate that occurs when a local ordinance is under consideration, a process that can increase awareness and change social norms. Such laws also pose a barrier to local enforcement because communities and local enforcement agencies may be less likely to enforce state laws that they were not directly involved in adopting than to enforce local ordinances.

Regardless of which route is used to implement them, smoking bans are effective, cost-effective, feasible, and broadly supported by the public.<sup>1,2,6</sup> The dangers of secondhand smoke are well researched and well known, and the growth and spread of this knowledge has been accompanied by a radical reduction in the level of acceptability of smoking in public places and workplaces.<sup>7,8</sup>

Listed below are the indicators associated with this outcome:

- ▶ 2.4.1 Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places
- ▶ 2.4.2 Proportion of workplaces with voluntary tobacco-free policies
- ▶ 2.4.3 Proportion of the population that works in environments with tobacco-free policies
- ▶ **2.4.4** Proportion of the population reporting voluntary tobacco-free home or vehicle policies
- ▶ **2.4.5** Proportion of schools or school districts reporting the implementation of 100% tobacco-free school policies
- ▶ 2.4.6 Changes in state tobacco control laws that preempt stronger local tobacco control laws

- 1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 12. *Population-based smoking cessation: proceedings of a conference on What Works to Influence Cessation in the General Population*. Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4892.
- 4. National Cancer Institute. Smoking and Tobacco Control Monograph No. 11. *State and local legislative action to reduce tobacco use.* Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4804.
- 5. Centers for Disease Control and Prevention. Preemptive state tobacco-control laws—United States, 1982–1998. *Morbidity and Mortality Weekly Report*. 1999;47 (51 & 52):1112–4.
- 6. Gilpin EA, Lee L, and Pierce JP. Changes in population attitudes about where smoking should not be allowed: California versus the rest of the USA. *Tobacco Control.* 2004:13(1):38–44.
- 7. Brownson RC, Eriksen MP, Davis RM, Warner KE. Environmental tobacco smoke: health effects and policies to reduce exposure. *Annual Review of Public Health*. 1997;18:163–85.
- 8. Brownson RC, Hopkins DP, Wakefield MA. Effects of smoking restrictions in the workplace. *Annual Review of Public Health*. 2002;23:333–48.

### For Further Reading

Gilpin EA, Pierce JP. The California Tobacco Control Program and potential harm reduction through reduced cigarette consumption in continuing smokers. *Nicotine and Tobacco Research*. 2002;4(Suppl 2):S157–66.

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## **Creation of Tobacco-free Policies**

## Indicator Rating ←○○● ●→ better

Number	Indicator	Overall quality    Overall quality   Resource   Report   Resource   Report   Resource   Report   Resource   Report   Rep
2.4.1	Proportion of jurisdictions with public policies for tobacco-free workplaces and other indoor and outdoor public places	\$\$\$ \ \cdot \cd
2.4.2	Proportion of workplaces with voluntary tobacco-free policies	ss • • •
2.4.3	Proportion of the population that works in environments with tobacco-free policies	ss <sup>†</sup> • • •
2.4.4	Proportion of the population reporting voluntary tobacco-free home or vehicle policies	ss <sup>†</sup> • • •
2.4.5	Proportion of schools or school districts reporting the implementation of 100% tobacco-free school policies	ss • • •
2.4.6	Changes in state tobacco control laws that preempt stronger local tobacco control laws	\$ \\ \times \equiv \equ

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

## Indicator 2.4.1

# Proportion of Jurisdictions with Public Policies for Tobacco-free Workplaces and Other Indoor and Outdoor Public Places

Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke								
Outcome 4	Creation of tobacco-free policies								
What to measure		Proportion of local jurisdictions that have public policies requiring tobacco-free work-places, including restaurants, bars, and other indoor and outdoor public places							
Why this indicator is useful	to secondhand sm	Evidence shows that workplace smoking restrictions reduce nonsmokers' exposure to secondhand smoke. 1.2 Policies that restrict smoking in workplaces are also linked to reduced tobacco use by smokers and possibly lower smoking prevalence. 2.3							
Example data source(s)	Americans for	<ul> <li>Policy tracking system</li> <li>Americans for Nonsmokers' Rights (ANR)         Information available at: http://www.no-smoke.org     </li> </ul>							
Population group(s)	Not applicable. The local tobacco laws				g and monitoring	g pertinent			
Example survey question(s)	Not applicable								
Comments	Evaluators may a population affects	lso choose to ed by the rele	gather data on vant laws or ord	the size and dinances.	demographics o	f the			
Rating	Overall quality Resources Strength of Utility Face validity Accepted practice evidence								
		\$\$\$							
	← ○ ○ ● ◆ → better								

- 1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 12. *Population-based smoking cessation: proceedings of a conference on What Works to Influence Cessation in the General Population*. Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4892.

<b>Proportion of W</b>	orkplaces with Voluntary Tobacco-free Policies
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke
Outcome 4	Creation of tobacco-free policies
What to measure	Proportion of workplaces (including restaurants and bars) with voluntary tobacco-free policies
Why this indicator is useful	Individual employers may opt to institute tobacco-free policies on their premises. These policies reduce nonsmokers' exposure to secondhand smoke. <sup>1,2</sup>
Example data source(s)	<ul> <li>Worksite Survey</li> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Current Population Survey: Tobacco Use Supplement (CPS TUS), 2003</li> <li>Arizona Workplace Survey Information available at: http://www.tepp.org/evaluation</li> </ul>
Population group(s)	Employers
Example survey question(s)	From ATS  Which of the following best describes your place of work's official smoking policy for work areas?  Not allowed in any work areas Allowed in some work areas Refused  Which of these best describes your place of work's smoking policy for indoor public or common areas such as lobbies, restrooms, and lunch rooms? Not allowed in any public areas Allowed in some public areas Refused  From CPS TUS  Does your place of work have an official policy that restricts smoking in any way? Refused  From Arizona Workplace Survey  According to the policy, are employees allowed to smoke in the following areas? Private offices Open work and production areas Reception areas Break areas and lounges Cafeterias Hallways and stairwells
	<ul> <li>☐ Hallways and stairwells</li> <li>☐ Restrooms</li> <li>☐ Other areas inside the building</li> <li>☐ Company vehicles</li> <li>☐ Immediately outside entrances</li> <li>☐ The rest of the grounds outside</li> </ul>

Comments	Few surveys have free policies.	e been conduc	eted to assess the	e percentage	e of workplaces v	with tobacco-
	More information	about how to	o collect data or	this indicat	or is in reference	e 3 below.
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>~</b> 000	● → better	

- 1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. Eisenberg M, Ranger-Moore J, Taylor KA, Hall RA, Brown J, Lee H. Workplace tobacco policy: progress on a winding road. *Journal of Community Health*. 2001;26(1):23–37.

### Proportion of the Population That Works in Environments with Tobacco-free Policies Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke Outcome 4 Creation of tobacco-free policies Proportion of adults employed outside the home whose place of work has a What to measure tobacco-free policy Why this indicator Measuring this indicator shows the degree of protection provided to nonsmoking workers by policies that restrict smoking in the workplace.<sup>1-4</sup> Examples of such is useful polices include a ban on using tobacco on the grounds, a ban on smoking indoors, or permitting smoking only in designated areas. Example data ▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003 source(s) Current Population Survey: Tobacco Use Supplement (CPS TUS), 2003 Population group(s) Adults aged 18 years or older **Example survey** From ATS question(s) Which of the following best describes your place of work's official smoking policy for work areas? ☐ Not allowed in any work areas ☐ Allowed in some work areas ☐ Allowed in all work areas ☐ No official policy ☐ Don't know/Not sure ☐ Refused Which of these best describes your place of work's smoking policy for indoor public or common areas such as lobbies, restrooms, and lunch rooms? $\square$ Not allowed in any public areas $\square$ Allowed in some public areas ☐ Allowed in all public areas ☐ No official policy ☐ Don't know/Not sure ☐ Refused From CPS TUS Does your place of work have an official policy that restricts smoking in any way? ☐ Yes ☐ No **Comments** Evaluators may also want to categorize the data collected by occupation of the respondents. Rating Overall quality Resources Strength of Utility **Face validity** Accepted needed evaluation practice evidence \$\$<sup>†</sup> ←○○●●→ better Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

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- 2. Gerlach KK, Shopland DR, Hartman AM, Gibson JT, Pechacek TF. Workplace smoking policies in the United States: results from a national survey of more than 100,000 workers. *Tobacco Control.* 1997;6(3):199–206.
- 3. Wortley PM, Caraballo RS, Pederson LL, Pechacek T. Exposure to secondhand smoke in the workplace: serum cotinine by occupation. *Journal of Occupational and Environmental Medicine*. 2002;44(6):503–9.
- Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. Journal of Occupational and Environmental Medicine. 2004;46(4):347–56.

## Indicator 2.4.4

# Proportion of the Population Reporting Voluntary Tobacco-free Home or Vehicle Policies

Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke									
Outcome 4	Creation of tobac	Creation of tobacco-free policies								
What to measure		Proportion of adults who report some form of voluntary tobacco-free policy in their homes or vehicles								
Why this indicator is useful	Evidence shows to substantially less is especially true (1) smoking not a the home, or (3) s	secondhand s in households llowed anywl	smoke than chil s with at least o here in the hom	ldren not pro ne smoker. <sup>1,2</sup> ne, (2) smokir	otected by such p Examples of sun ng restricted to s	policies. <sup>1,2</sup> This ch policies are				
Example data source(s)	Adult Tobacco Su	rvey (ATS): (	CDC Recommen	nded Questio	ons: Core, 2003					
Population group(s)	Adults aged 18 ye	Adults aged 18 years or older								
Example survey question(s)	From ATS  Which statement Do not include de □ Smoking is no □ Smoking is alle □ Smoking is alle □ Don't know/N □ Refused	ecks, garages, t allowed any owed in some owed anywhe	or porches. where inside the places or at so	ne home me times	nside your home	?				
Comments	Evaluators could inside vehicles. The example que	,	1 1		tobacco-free pol	icies				
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$ <sup>†</sup>								
		—————————————————————————————————————								

- 1. Biener L, Cullen D, Di ZX, Hammond SK. Household smoking restrictions and adolescents' exposure to environmental tobacco smoke. *Preventive Medicine*. 1997;26(3):358–63.
- 2. Wakefield M, Banham D, Martin J, Ruffin R, McCaul K, Badcock N. Restrictions on smoking at home and urinary cotinine levels among children with asthma. *American Journal of Preventive Medicine*. 2000;19(3):188–92.

# Proportion of Schools or School Districts Reporting the Implementation of 100% Tobacco-free School Policies

Goal area 2	Eliminating nonsmokers' exposure t	o secondhand	smoke					
Outcome 4	Creation of tobacco-free policies							
What to measure	Proportion of schools or school distranyone from using tobacco at all timfunctions, and in school vehicles							
Why this indicator is useful	Young people spend much of their ti of smoking in general and smoking a the actions of their peers and educat	around nonsm	okers in particular a					
Example data source(s)	CDC School Health Profiles: School	CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002						
Population group(s)	School principals							
Example survey question(s)	From Profiles  Has this school adopted a policy pro  ☐ Yes ☐ No  Does the tobacco-free policy specific products for each for the following g	ally prohibit us		ypes of tobacco				
	<ul> <li>Type of tobacco product</li> <li>Cigarettes</li> <li>Smokeless tobacco</li> <li>Cigars</li> <li>Pipes</li> </ul> Does the school's tobacco-free policy	Students Yes No	Faculty/Staff  Yes No  □ □ □ □ □ □ □ □ □ □	Visitors Yes No  □ □ □ □ □ □ □ □ □ □				
	following times for each for the follo  Time  During school hours  During non-school hours	specifically proving groups?  Students  Yes No	Faculty/Staff Yes No	Visitors Yes No				
	Does the school's tobacco preventior of the following locations for each of			co use in each				
	<ul> <li>In school buildings</li> <li>On school grounds</li> <li>In school buses or other vehicles used to transport students</li> <li>At off-campus, school-</li> </ul>	Students Yes No	Faculty/Staff Yes No  □ □ □ □	Visitors Yes No				
	sponsored events							

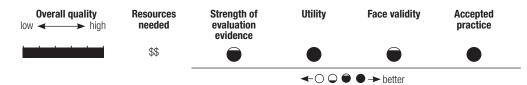
#### Comments

To measure this indicator fully, evaluators should use all four example questions, not just one or two.

Evaluators may also want to collect information on school districts in order to measure the proportion of students in the district who are covered by anti-tobacco policies.

This indicator can be used to measure progress toward achieving Recommendation 1 of CDC's "Guidelines for School Health Programs to Prevent Tobacco Use and Addiction." <sup>1</sup>

Rating



- 1. Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. *Morbidity and Mortality Weekly Report Recommendations and Reports*. 1994;43(RR-2):1–18.
- 2. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.

# **Changes in State Tobacco Control Laws That Preempt Stronger Local Tobacco Control Laws**

Goal area 2	Eliminating nons	mokers' expo	sure to secondh	nand smoke								
Outcome 4	Creation of tobac	Creation of tobacco-free policies										
What to measure	Any change in le that are more stri											
Why this indicator is useful	tobacco control o tobacco control o aggressively pusl tobacco in variou As of December 3 for smoke-free in and Delaware, ha of tobacco contro process of public is under consider These laws also p	Preemptive legislation is the tobacco industry's chief strategy for eradicating local tobacco control ordinances.¹ Because of the striking increase in the number of local tobacco control ordinances from the mid-1980s to the mid-1990s, the tobacco industry aggressively pushed for states to pass legislation that preempted local regulation of tobacco in various areas, including smoke-free indoor air, minors' access, and marketing.² As of December 31, 2004, a total of 19 states had at least one type of preemptive provision for smoke-free indoor air legislation.² As of December 31, 2004, only two states, Maine and Delaware, had successfully repealed preemption laws in their entirety in any area of tobacco control policy. Preemptive laws prevent communities from engaging in the process of public education, mobilization, and debate that occurs when a local ordinance is under consideration, a process that can increase awareness and change social norms. These laws also pose a barrier to local enforcement because communities may be less likely to enforce state laws that they were not directly involved in adopting.²										
Example data source(s)	CDC State Tobaco Data available at:											
Population group(s)	Not applicable. T control laws.	his indicator	is best measure	d by tracking	g and monitoring	g state tobacco						
Example survey question(s)	Not applicable											
Comments	None											
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice						
		\$	$\bigcirc$									
				<b>←○○</b>	● → better							
	🛇 Denotes no dat	a.										

- 1. National Cancer Institute. Smoking and Tobacco Control Monograph No. 11. *State and local legislative action to reduce tobacco use.* Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4804.
- 2. Centers for Disease Control and Prevention. Preemptive state smoke-free indoor air laws—United States, 1999–2004. *Morbidity and Mortality Weekly Report*. 2005;54(10):250–3.

## Outcome 5

## **Enforcement of Tobacco-free Public Policies**

Experience shows that tobacco-free policies make a difference only when voluntary compliance is adequate or the policies are actively enforced. If the entities that are regulated (e.g., businesses, public agencies) do not experience any pressure to follow newly legislated policies, the policies will contribute little to reducing exposure to secondhand smoke. Although little research has been done on the effects of enforcing tobacco-free policies, research concerning other policies shows that policy enforcement is effective in improving compliance. With the recent trend toward passing comprehensive smoke-free laws that cover bars, the need for active enforcement of those laws is likely to become greater.

Listed below are the indicators associated with this outcome:

- ▶ 2.5.1 Number of compliance checks conducted by enforcement agencies
- ▶ 2.5.2 Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies
- ▶ 2.5.3 Number of warnings, citations, and fines issued for infractions of tobacco-free public policies

### References

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 1994.
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## Outcome 5

## **Enforcement of Tobacco-free Public Policies**

## **Indicator Rating ←**○ ○ **● →** better

Number	Indicator	Overall quality	evaluation evi-	Utility of nee	Face Vo	Bractice	acepted
2.5.1	Number of compliance checks conducted by enforcement agencies		\$\$\$	Ø	•		•
2.5.2	Number of enforcement agency responses to complaints regarding noncompliance with tobacco-free public policies	†	\$\$\$	X			
2.5.3	Number of warnings, citations, and fines issued for infractions of tobacco-free public policies		\$\$\$	Ø		•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).  $\oslash$  Denotes no data.

## Indicator 2.5.1

<b>Number of Com</b>	pliance Checks	Conducte	d by Enfor	ce	men	ıt A	ger	ncie	S		
Goal area 2	Eliminating nonsi	Eliminating nonsmokers' exposure to secondhand smoke									
Outcome 5	Enforcement of to	Enforcement of tobacco-free public policies									
What to measure	department inspe	The number of checks conducted by enforcement agencies (e.g., police, health department inspectors, and building inspectors) to assess the level of compliance with laws, regulations, and ordinances related to tobacco-free policies									
Why this indicator is useful	compliance check	an effective means of enforcing tobacco-free public policies is to conduct regular compliance checks. Such checks convey the message that policy makers and the public are about tobacco-free policies and are serious about enforcing them. <sup>1,2</sup>									
Example data source(s)	<ul><li>California Ind Environmenta Information a</li></ul>	<ul> <li>Enforcement Agency Survey</li> <li>California Independent Evaluation: Policy Enforcement Survey: Exposure to Environmental Tobacco Smoke, 2000</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm</li> </ul>									
Population group(s)	Agency representatives responsible for enforcement										
Example survey question(s)	From California Indepo In the last year, ho of enforcement ac	ow often has	your agency					the f	follov	ving	types  Don't know
	<ul> <li>Responded to i</li> <li>Responded to c</li> <li>Issued warning</li> <li>Issued citations</li> <li>Issued fines</li> <li>Conducted con</li> <li>Educated busin</li> <li>Educated other</li> </ul>	complaints s inpliance chec ness owners a	ks bout the law	-7, w 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 = ne 3 3 3 3 3 3 3 3	ver a 4 4 4 4 4 4 4 4	nd 7 = 5 5 5 5 5 5 5 5	6 6 6 6 6 6 6 6	7 7 7 7 7 7 7 7	Not applicable
Comments	Survey responder	nts may not h	ave access to	all 1	reque	ested	info	orma	tion.		
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence		Uti	ility		Face	validit	ty	Accepted practice
		\$\$\$									
	Denotes no data	a.			<b>←</b>	-O C	) 🔵 (	<b>●</b> → b	etter		

- 1. Kiser D, Boschert T. Eliminating smoking in bars, restaurants, and gaming clubs in California: BREATH, the California Smoke-Free Bar Program. *Journal of Public Health Policy*. 2001;22(1):81–7.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's Smoke-Free Workplace Law among bars and restaurants in Los Angeles County. *Tobacco Control*. 2003;12(3):269–73.

## Indicator 2.5.2

#### **Number of Enforcement Agency Responses to Complaints** Regarding Noncompliance with Tobacco-free Public Policies Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke **Outcome 5** Enforcement of tobacco-free public policies What to measure The number of checks (prompted by outside complaints) by enforcement agencies (e.g., police, health department inspectors, and building inspectors) to assess the level of compliance with tobacco-free public policies Why this indicator Recording complaints of noncompliance with tobacco-free public policies is one way of identifying noncompliance with such policies. Such checks convey the message that is useful policy makers and the public care about tobacco-free policies and are serious about enforcing them.<sup>1,2</sup> Following up on these complaints is an easy way of targeting noncompliance. The number of complaints received by enforcement agencies also provides a sense of the public's attitude toward tobacco-free policies. **Example data** Enforcement Agency Survey source(s) California Independent Evaluation: Policy Enforcement Survey: Exposure to Environmental Tobacco Smoke, 2000 Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation Resources.htm Population group(s) Agency representatives responsible for enforcement From California Independent Evaluation **Example survey** question(s) In the last year, how often has your agency conducted any of the following types of enforcement activities related to clean indoor air laws? Don't know 1-7, where 1 = never and 7 = very often Not applicable • Responded to inquiries 6 Responded to complaints 2 2 2 2 2 777777 6 3 5 5 5 5 5 Issued warnings 1 6 1 Issued citations 4 6 1 3 6 Issued fines 3 Conducted compliance checks 1 6 Educated business owners about the law Educated others about the law **Comments** Survey respondents may not have access to all the requested information.

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
	†	\$\$\$	$\bigotimes$			
				<b>←○○</b> (	● → better	

Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

 <sup>○</sup> Denotes no data.

<sup>1.</sup> Kiser D, Boschert T. Eliminating smoking in bars, restaurants, and gaming clubs in California: BREATH, the California Smoke-Free Bar Program. *Journal of Public Health Policy*. 2001;22(1):81–7.

<sup>2.</sup> Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's Smoke-Free Workplace Law among bars and restaurants in Los Angeles County. Tobacco Control. 2003;12(3):269-73.

# **Number of Warnings, Citations, and Fines Issued for Infractions of Tobacco-free Public Policies**

Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke								
Outcome 5	Enforcement of tobacco-free public policies								
What to measure	The number of the of tobacco-free pu		itations, and fir	nes issued to	retailers for infr	actions			
Why this indicator is useful	repercussions. <sup>1,2</sup> Is	Compliance with tobacco-free public policies improves when noncompliance has repercussions. <sup>1,2</sup> Issuing warnings or citations sets an example and shows that noncompliance with tobacco-free policies has adverse consequences.							
Example data source(s)	<ul><li>California Ind Environmenta Information as</li></ul>	<ul> <li>Enforcement Agency Survey</li> <li>California Independent Evaluation: Policy Enforcement Survey: Exposure to Environmental Tobacco Smoke, 2000</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm</li> </ul>							
Population group(s)	Agency represent	Agency representatives responsible for enforcement							
Example survey question(s)	From California Indepo In the last six mor air laws were  Issued in your Prosecuted in	nths, please e	stimate how ma	•		clean indoo			
Comments	The example surv Evaluators may a fines) have on cor Data must be inte indicate either hig	rey question or lso want to as npliance with rpreted in co	does not measur ssess the effects n tobacco-free p ntext. For exam	re warnings that differer ublic policie ple, a low n	given for noncont penalties (e.g., s.	graduated			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$							
				<b>←</b> ○○	● → better				
	Denotes no data								

- 1. Centers for Disease Control and Prevention. *Best practices for comprehensive tobacco control programs*. Atlanta, GA: Centers for Disease Control and Prevention; 1999.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

### Outcome 6

## **Compliance with Tobacco-free Policies**

The evidence is clear that exposure to secondhand smoke is harmful and that increasing the number of tobacco-free environments can save lives.¹ Compliance with voluntary tobacco-free policies in homes and vehicles is an important marker of social normative changes that have an effect on the health of children and on tobacco use among young people.² Although the need for compliance with tobacco-free policies is apparent, little research has been done specifically on whether increased compliance leads to decreased exposure to secondhand smoke (perhaps because the connection has face validity). Perceived compliance can be measured as that reported by members of a community responding to questionnaires and interviews. Actual compliance can be measured by observation. Observational measures capture a point in time, while population-based surveys capture the perceptions of individuals regarding compliance over a prior period.

Listed below are the indicators associated with this outcome:

- ▶ 2.6.1 Perceived compliance with tobacco-free policies in workplaces
- ▶ 2.6.2 Perceived compliance with tobacco-free policies in indoor and outdoor public places
- ▶ **2.6.3** Proportion of public places observed to be in compliance with tobaccofree policies
- ▶ 2.6.4 Perceived compliance with voluntary tobacco-free home or vehicle policies
- ▶ 2.6.5 Perceived compliance with tobacco-free policies in schools

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- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. Wakefield M, Chaloupka F, Kaufman N, Orleans C, Barker D, Ruel E. Effect of restrictions at home, at school, and in public places on teenage smoking: cross sectional study. *British Medical Journal*. 2000;321(7257):333–7. Erratum in: *British Medical Journal*. 2000;321(7261):623.

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## Outcome 6

## **Compliance with Tobacco-free Policies**

## Indicator Rating ←○○●●→ better

Number	Indicator	Overall quality	stress evices	Uthing of the state of the stat	Face VE	practice	mepted
2.6.1	Perceived compliance with tobacco-free policies in workplaces	<del></del> 1	\$\$ <sup>†</sup>	$\Diamond$			
2.6.2	Perceived compliance with tobacco-free policies in indoor and outdoor public places		\$\$\$ <sup>†</sup>	$\Diamond$	•	•	
2.6.3	Proportion of public places observed to be in compliance with tobacco-free policies		\$\$\$\$†	Ø	•	•	•
2.6.4	Perceived compliance with voluntary tobacco-free home or vehicle policies		\$\$ <sup>†</sup>		•		
2.6.5	Perceived compliance with tobacco-free policies in schools		\$\$	0	•	•	

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

## Indicator 2.6.1

Goal area 2	Eliminating nonsi	Eliminating nonsmokers' exposure to secondhand smoke								
Outcome 6	Compliance with	Compliance with tobacco-free policies								
What to measure	Proportion of adu their workplace's			me reporting	g employee comp	oliance with				
Why this indicator is useful	with these policie	Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies. <sup>1,2</sup> If tobacco-free policies are not followed, they are unlikely to protect nonsmokers from the harmful effects of secondhand smoke or change social norms. <sup>1</sup>								
Example data source(s)	Adult Tobacco Su	rvey (ATS): (	CDC Recommen	nded Questi	ons: Core, 2003					
Population group(s)	Adults aged 18 ye	Adults aged 18 years or older								
Example survey question(s)	From ATS  As far as you kno smoked in your w  ☐ Yes ☐ No ☐	vork area?	•		date], has anyon	e				
Comments	Evaluators may a company's size or			pany's demo	ographic data (e.ş	g., on the				
	Evaluators should perceived compliant			tobacco-free	policies before e	evaluating				
	The example ques	stions could a	lso be asked of	employers.						
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$ <sup>†</sup>	$\bigotimes$							
				<b>←○○</b> (	● → better					
	† Denotes low agrindicator were w	ithin one poin			75% of the valid range of the valid range of the value of					

- Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
   Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's smoke-free workplace law
- among bars and restaurants in Los Angeles County. Tobacco Control. 2003;12(3):269-73.

## Indicator 2.6.2

#### **Perceived Compliance with Tobacco-free Policies** in Indoor and Outdoor Public Places Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke **Outcome 6** Compliance with tobacco-free policies What to measure Proportion of adults and young people who report compliance with tobacco-free policies in public places (e.g., bars, restaurants, and sporting arenas) Why this indicator Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies.<sup>1,2</sup> If tobacco-free policies are not followed, they are not likely to prois useful tect nonsmokers from the harmful effects of secondhand smoke or change social norms. <sup>1</sup> **Example data** No commonly used data sources were found source(s) Population group(s) ▶ Adults aged 18 years or older Young people aged less than 18 years **Example survey** In your community, how many people break the policy that bans smoking in: question(s) A few Some All Don't Not Refused applicable know of to them Not sure answer Bars Restaurants Indoor public places Outdoor public places **Comments** The authors created this example question. It is not in any commonly used data source. Evaluators should determine the scope of tobacco-free policies before evaluating perceived compliance with them. Rating **Overall quality** Resources Strength of Utility **Face validity** Accepted → high needed evaluation practice evidence \$\$\$<sup>†</sup>

←○○● ● → better

# Denotes no data.

- 1. Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's smoke-free workplace law among bars and restaurants in Los Angeles County. *Tobacco Control*. 2003;12(3):269–73.

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke							
Outcome 6	Compliance with	tobacco-free p	policies					
What to measure	Proportion of indoor or outdoor places (e.g., bars, restaurants, and sporting arenas) in a community in which employees and patrons comply with tobacco-free policies							
Why this indicator is useful	Observing whether people (employees and patrons) comply with tobacco-free policies is a systematic way to measure compliance at a given place and time. If tobacco-free policies are not followed, they are not likely to protect nonsmokers from the harmful effects of secondhand smoke or change social norms.							
Example data source(s)	<ul> <li>Direct observation of employees' and patrons' behavior</li> <li>California's BREATH (Smoke-Free Bars, Workplaces, and Communities Program) Information available at: http://www.breath-ala.org</li> </ul>							
Population group(s)	Not applicable. This indicator is best measured by observation.							
Example survey question(s)	Not applicable. This indicator is best measured by observation.							
Comments		In addition to observing smoking-related behavior in public places, evaluators can measure the environmental tobacco smoke in these places by monitoring indoor air quality. <sup>3-5</sup>						
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$\$\$ <sup>†</sup>	$\bigotimes$					
	—————————————————————————————————————							

- 1. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's Smoke-Free Workplace Law among bars and restaurants in Los Angeles County. *Tobacco Control*. 2003;12(3):269–73.
- 2. Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
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- 4. Repace J. An air quality survey of respirable particles and particulate carcinogens in Delaware hospitality venues before and after a smoking ban. Bowie, MD: Repace Associates; 2003. Available from: http://www.tobaccoscam.ucsf.edu/pdf/RepaceDelaware.pdf. Accessed December 2004.
- 5. Kiser D, Boschert T. Eliminating smoking in bars, restaurants, and gaming clubs in California: BREATH, the California Smoke-Free Bar Program. *Journal of Public Health Policy*. 2001;22(1):81–7.

# Indicator 2.6.4

Perceived Comp	oliance with Vol	untary Tob	acco-free H	lome or V	ehicle Polici	es			
Goal area 2	Eliminating nons	Eliminating nonsmokers' exposure to secondhand smoke							
Outcome 6	Compliance with	Compliance with tobacco-free policies							
What to measure	Proportion of adu in their homes or		g people who re	eport compli	ance with tobacc	co-free policies			
Why this indicator is useful	these policies. 1,2 S in vehicles can be with home and ve	Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies. <sup>1,2</sup> Self-reported data on people's exposure to secondhand smoke at home or in vehicles can be used to measure compliance with tobacco-free policies. <sup>3,4</sup> Compliance with home and vehicle tobacco-free policies is especially important for protecting the health of children and for supporting anti-tobacco social norms. <sup>5,6</sup>							
Example data source(s)	Adult Tobacco Su	Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003							
Population group(s)	Adults aged 18 ye	ears or older							
Example survey question(s)	From ATS  For respondents who During the past 7 cigarettes, cigars,  □ days (0-7)	days (that is, or pipes any	since [fill in da where inside yo	te]), how ma our home?	ny days did any	one smoke			
Comments	Evaluators may want to modify the example question to address tobacco-free policies inside vehicles.								
	Evaluators should determine the scope of the tobacco-free policies before evaluating perceived compliance with them.								
	The example surv	ey question o	could be asked	of young peo	pple.				
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$ <sup>†</sup>							
				<b>←</b> ○○(	● → better				
					75% of the valid r 3 for an explanation				

- 1. Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's smoke-free workplace law among bars and restaurants in Los Angeles County. *Tobacco Control.* 2003;12(3):269–73.
- 3. Biener L, Cullen D, Di ZX, Hammond SK. Household smoking restrictions and adolescents' exposure to environmental tobacco smoke. *Preventive Medicine*. 1997;26(3):358–63.
- 4. Wakefield M, Banham D, Martin J, Ruffin R, McCaul K, Badcock N. Restrictions on smoking at home and urinary cotinine levels among children with asthma. *American Journal of Preventive Medicine*. 2000;19(3):188–92.
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<b>Perceived Comp</b>	pliance with Tobacco-free Policies in Schools
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke
Outcome 6	Compliance with tobacco-free policies
What to measure	Proportion of students who report that the school population is complying with the school's tobacco-free policies
Why this indicator is useful	Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies. <sup>1,2</sup> Compliance with tobacco-free school policies reduces students' exposure to secondhand smoke and reinforces anti-tobacco social norms. <sup>3</sup>
Example data	► Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004
source(s)	▶ CDC Youth Risk Behavior Surveillance System (YRBSS), 2003
	<ul> <li>California Independent Evaluation: Youth Survey, 2000</li> <li>Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/ Evaluation_Resources.htm</li> </ul>
Population group(s)	Young people aged less than 18 years
Example survey question(s)	From YTS and YRBSS  During the past 30 days, on how many days did you smoke cigarettes on school property?  □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days  During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip on school property? □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days
	From California Independent Evaluation
	Is there a rule at your school that no one is allowed to smoke cigarettes in the school building or on the school yard?  ☐ Yes ☐ No ☐ I don't know/I'm not sure
	Have you seen any students break that rule?  ☐ Yes ☐ No ☐ My school does not have a no-smoking rule ☐ I don't know/I'm not sure
	How many students who are smokers break that rule? □ None □ A few □ Some □ Most □ All of them □ My school does not have a no-smoking rule □ I don't know/I'm not sure
	Have you seen adults break that rule?  ☐ Yes ☐ No ☐ My school does not have a no-smoking rule ☐ I don't know/I'm not sure
	Is there a rule at your school that no one is allowed to use chewing tobacco or snuff in the school building or on the school yard?  ☐ Yes ☐ No ☐ I don't know/I'm not sure

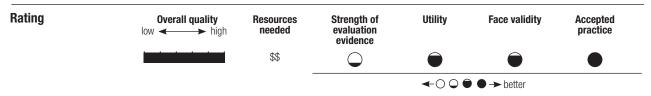
#### **Comments**

If students report on the YTS or YRBSS instruments (1) the existence of a tobacco-free school policy and (2) having personally used tobacco products more than 1 day on school property, they are considered noncompliant.

Evaluators may also want to categorize data by grade level and type of school (e.g., elementary, middle, high school, private, parochial, public).

Evaluators should determine the scope of the tobacco-free policies before evaluating perceived compliance with them.

The example survey questions could be asked of teachers and principals.



- 1. Shopland DR, Anderson CM, Burns DM, Gerlach KK. Disparities in smoke-free workplace policies among food service workers. *Journal of Occupational and Environmental Medicine*. 2004;46(4):347–56.
- 2. Weber MD, Bagwell DA, Fielding JE, Glantz SA. Long-term compliance with California's smoke-free workplace law among bars and restaurants in Los Angeles County. *Tobacco Control*. 2003;12(3):269–73.
- 3. Gilpin EA, White MM, White VM, Distefan JM, Trinidad DR, Lee L, Major J, Kealey S, Pierce JP. *Tobacco control successes in California: a focus on young people, results from the California Tobacco Surveys* 1990–2002. La Jolla, CA: University of California, San Diego; 2003. pp. 348–9. Available from: http://repositories.cdlib.org/tc/surveys/CTC1990-2002. Accessed December 2004.

# **Reduced Exposure to Secondhand Smoke**

There is substantial evidence regarding the harm caused by exposure to secondhand smoke. Secondhand smoke can lead to lung cancer and heart disease in adults and to many serious health problems (e.g., lower respiratory infections, asthma, sudden infant death syndrome, ear infections) in children.<sup>1-3</sup> Evidence also indicates that tobacco smoke is especially harmful to pregnant women and to fetal development.<sup>1,2</sup> Reducing nonsmokers' exposure to secondhand smoke can prevent disease and save lives.<sup>1-4</sup> Median exposure levels and the percentage of nonsmokers in the United States who are exposed to secondhand smoke have decreased significantly.<sup>5</sup>

Listed below are the indicators associated with this outcome:

- ▶ 2.7.1 Proportion of the population reporting exposure to secondhand smoke in the workplace
- ▶ 2.7.2 Proportion of the population reporting exposure to secondhand smoke in public places
- ▶ 2.7.3 Proportion of the population reporting exposure to secondhand smoke at home or in vehicles
- ▶ 2.7.4 Proportion of students reporting exposure to secondhand smoke in schools
- ▶ 2.7.5 Proportion of nonsmokers reporting overall exposure to secondhand smoke

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Rockville, MD: Office of the Surgeon General; Washington, DC: Government Printing Office; 2001.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency. Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 4. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 5. Changes in secondhand smoke exposure among nonsmokers from different racial/ethnic groups: United States, 1988–1994 and 1999–2000. Data from 1988–1994 NHANES III survey and 1999–2000 NHANES survey. Poster Presentation. 132nd Annual American Public Health Association Meeting, Washington, DC, November 6–10, 2004.

## For Further Reading

Mannino DM, Caraballo R, Benowitz N, Repace J. Predictors of cotinine levels in U.S. children: data from the Third National Health and Nutrition Examination Survey. *Chest.* 2001;120(3):718–24.

Pizacani BA, Martin DP, Stark MJ, Koepsell TD, Thompson B, Diehr P. Household smoking bans: which households have them and do they work? *Preventive Medicine*. 2003;36(1):99–107.

Poulsen L. Exposure to teachers smoking and adolescent smoking behaviour: analysis of cross sectional data from Denmark. *Tobacco Control.* 2002;11(3):246–51.

Wakefield M, Banham D, Martin J, Ruffin R, McCaul K, Badcock N. Restrictions of smoking at home and urinary cotinine levels among children with asthma. *American Journal of Preventive Medicine*. 2000;19(3):188–92.

# **Reduced Exposure to Secondhand Smoke**

# **Indicator Rating ←**○ ○ • • better

Number	Indicator	Overall quality	evaluation evi-	Utility of the ce	Face VE	practice	ocephed .
2.7.1	Proportion of the population reporting exposure to secondhand smoke in the workplace		\$\$ <sup>†</sup>		•	•	
2.7.2	Proportion of the population reporting exposure to secondhand smoke in public places	†	\$\$\$	•	•	•	•
2.7.3	Proportion of the population reporting exposure to secondhand smoke at home or in vehicles		\$\$ <sup>†</sup>	•	•	•	
2.7.4	Proportion of students reporting exposure to secondhand smoke in schools		\$\$\$	Ø	•	•	•
2.7.5	Proportion of nonsmokers reporting overall exposure to secondhand smoke		\$\$	•	•	•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation). © Denotes no data.

# Indicator 2.7.1

# Proportion of the Population Reporting Exposure to Secondhand Smoke in the Workplace

		φφ .		4006	• better			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
Comments	None							
Example survey question(s)	From CATS  During the past tv  ☐ Yes ☐ No ☐				in which you w	ork?		
Population group(s)	Adults aged 18 ye	ars or older						
Example data source(s)	California Adult T Information availa Evaluation_Resou	able at: http:/		ov/ps/cdic/	/ccb/TCS/html/			
Why this indicator is useful	Exposure to secondhand smoke is a major cause of death and disease. <sup>1-4</sup> For nonsmokers who are not exposed to secondhand smoke in their homes, the workplace is typically their greatest source of exposure. Studies show that after only 3 months of decreased workplace exposure to secondhand smoke, nonsmokers' lung function improves and their respiratory symptoms are reduced. <sup>5</sup>							
What to measure	Proportion of adults who are employed outside the home and who report exposure to secondhand smoke in the workplace							
Outcome 7	Reduced exposure	Reduced exposure to secondhand smoke						
Goal area 2	Eliminating nonsr	Eliminating nonsmokers' exposure to secondhand smoke						

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 4. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency.* Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 5. Eisner MD, Smith AK, Blanc PD. Bartenders' respiratory health after establishment of smoke-free bars and taverns. *Journal of the American Medical Association*. 1998;280(22);1909–14.

# Proportion of the Population Reporting Exposure to Secondhand Smoke in Public Places

Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke								
Outcome 7	Reduced exposur	Reduced exposure to secondhand smoke							
What to measure	Proportion of the population reporting exposure to secondhand smoke in public places, including bars, restaurants, sporting arenas, and concert venues								
Why this indicator is useful	studies show that disease in adults a respiratory tract i to secondhand sm	Exposure to secondhand smoke is a major cause of death and disease. <sup>1-4</sup> Many studies show that exposure to secondhand smoke leads to lung cancer and heart disease in adults and to multiple health problems, such as severe asthma, lower respiratory tract infections, and ear infections in children. <sup>1-4</sup> The public is exposed to secondhand smoke in many public places. Measuring exposure in public settings is necessary for assessing overall exposure levels. <sup>5</sup>							
Example data source(s)	California Adult Information avail Evaluation_Resou	able at: http:/			/ccb/TCS/html/				
Population group(s)	Adults aged 18 ye	ears or older							
Example survey question(s)		From CATS  During the past 7 days, when you were some place other than work or home, how many days were you exposed to other people's tobacco smoke?							
Comments	The example surv	vey question c	ould be asked o	of young peo	ople.				
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$	_	_	_				
		φφφ							

#### References

1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.

indicator were within one point of each other (see Appendix B for an explanation).

- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 4. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency.* Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 5. Centers for Disease Control and Prevention. *Taking action against secondhand smoke*. Atlanta, GA: Centers for Disease Control and Prevention; 2004. Available from: http://www.cdc.gov/tobacco/ETS\_Toolkit. Accessed March 2005.

# Indicator 2.7.3

### **Proportion of the Population Reporting Exposure** to Secondhand Smoke at Home or in Vehicles Goal area 2 Eliminating nonsmokers' exposure to secondhand smoke **Outcome 7** Reduced exposure to secondhand smoke What to measure Proportion of the population reporting exposure to secondhand smoke at home or in vehicles Why this indicator Exposure to secondhand smoke at home or in vehicles is a serious health hazard.<sup>1-4</sup> Many studies show that exposure to secondhand smoke leads to lung cancer and is useful heart disease in adults and to multiple health problems, such as severe asthma, lower respiratory tract infections, and ear infections in children.<sup>1-4</sup> Example data ▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003 source(s) ➤ Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004 Population group(s) Adults aged 18 years or older Young people aged less than 18 years **Example survey** From ATS question(s) During the past 7 days (that is, since [fill in date]), how many days did anyone smoke cigarettes, cigars, or pipes anywhere inside your home? $\square$ Less than 1 day per week $\square$ Rarely $\square$ None $\square$ \_\_\_days (1–7) ☐ Don't know/Not sure ☐ Refused In the past 7 days (that is, since [fill in date]), have you been in a car with someone who was smoking? ☐ Yes ☐ No From YTS During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes? $\square$ 0 days $\square$ 1 or 2 days $\square$ 3 or 4 days $\square$ 5 or 6 days $\square$ 7 days During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes? $\square$ 0 days $\square$ 1 or 2 days $\square$ 3 or 4 days $\square$ 5 or 6 days $\square$ 7 days **Comments** The ATS and YTS example survey questions can only be used to gather data on exposure to smoke during the previous 7 days and not to quantify exposure level. Rating Overall quality Resources Strength of Utility **Face validity** Accepted needed evaluation practice evidence \$\$<sup>†</sup>

**←**○○ • • better

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 4. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency.* Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.

# Indicator 2.7.4

<b>Proportion of S</b>	tudents Reportir	ng Exposu	re to Second	dhand Sm	oke in Scho	ols			
Goal area 2	Eliminating nons	Eliminating nonsmokers' exposure to secondhand smoke							
Outcome 7	Reduced exposur	e to secondha	and smoke						
What to measure	at school-sponsor	Proportion of students reporting exposure to tobacco smoke while on school grounds, at school-sponsored functions, and in school vehicles (exposure can occur during or after regular school hours)							
Why this indicator is useful	spend many of th hand smoke. Con	Exposure to secondhand smoke is a major cause of death and disease. <sup>1-4</sup> Young people spend many of their waking hours in school, where they might be exposed to secondhand smoke. Compliance with tobacco-free school policies reduces students' exposure to secondhand smoke and reinforces anti-tobacco social norms. <sup>5</sup>							
Example data source(s)	No commonly use	No commonly used data sources were found							
Population group(s)	Students								
Example survey question(s)	When you are at some or cigars? ☐ Yes ☐ No	school, are yo	u exposed to sn	noke from ot	ther people's cig	arettes, pipes,			
Comments		The authors created this example question. It is not in any commonly used data source. Evaluators might also want to measure secondhand smoke exposure on college campuses.							
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$\$	$\bigcirc$						
				<b>←</b> ○○(	● → better				
	○ Denotes no data	a							

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency.* Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 4. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- Gilpin ÉA, White MM, White VM, Distefan JM, Trinidad DR, Lee L, Major J, Kealey S, Pierce JP. Tobacco control successes in California: a focus on young people, results from the California Tobacco Surveys 1990–2002. La Jolla, CA: University of California, San Diego; 2003. pp. 348–349. Available from: http://repositories.cdlib.org/tc/surveys/CTC1990-2002/. Accessed December 2004.

<b>Proportion of No</b>	onsmokers Reporting Overall Exposure to Secondhand Smoke						
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke						
Outcome 7	Reduced exposure to secondhand smoke						
What to measure	Nonsmokers' level of exposure to secondhand smoke. Such exposure can be caused by family members, co-workers, or strangers in public places.						
Why this indicator is useful	Exposure to secondhand smoke is a major cause of death and disease. <sup>1-4</sup> Trends in nonsmokers' overall level of exposure to secondhand smoke are an important gauge of the success of efforts to reduce this exposure. <sup>5-7</sup>						
Example data source(s)	<ul> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>California Independent Evaluation: Adult Survey, 2000         Information available at: http://www.dhs.ca.gov/ps/cdic/ccb/TCS/html/Evaluation_Resources.htm     </li> </ul>						
Population group(s)	▶ Adults aged 18 years or older						
	▶ Young people aged less than 18 years						
Example survey question(s)	From YTS  During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes?  □ 0 day □ 1 or 2 days □ 3 or 4 days □ 5 or 6 days □ 7 days						
	During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes?  □ 0 day □ 1 or 2 days □ 3 or 4 days □ 5 or 6 days □ 7 days						
	From California Independent Evaluation						
	During the past 7 days, when you were at home, how many days were you exposed to other family members' or visitors' tobacco smoke?  ☐ None ☐ 1 day ☐ 2 days ☐ 3 days ☐ 4 days ☐ 5 days ☐ 6 days ☐ 7 days ☐ Was not home in the past 7 days						
	Of those who were exposed on some days, ask the following:						
	On these days, about how many hours per day were you exposed to other people's smoke?  Write the actual number of hours per day						
	During the past 7 days, when you were at work, how many days were you exposed to other people's tobacco smoke?  ☐ None ☐ 1 day ☐ 2 days ☐ 3 days ☐ 4 days ☐ 5 days ☐ 6 days ☐ 7 days ☐ Was not at work in the past 7 days						
	Of those who were exposed on some days, ask the following:  On these days, about how many hours per day were you exposed to other people's smoke?  Write the actual number of hours per day						
	During the past 7 days, when you were some place other than work or home, how many days were you exposed to other people's tobacco smoke?  ☐ None ☐ 1 day ☐ 2 days ☐ 3 days ☐ 4 days ☐ 5 days ☐ 6 days ☐ 7 days						

Example survey question(s) (cont.)	Of those who were of these days, ab people's smoke? Write the actual n	out how man	y hours per day	0	xposed to other	
Comments	None					
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>←</b> ○○(	● → better	

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Environmental Protection Agency. *Respiratory health effects of passive smoking: lung cancer and other disorders.* Washington, DC: EPA Office of Research and Development; 1992. Publication No. EPA/600/6-90/006F.
- 3. National Cancer Institute. Smoking and Tobacco Control Monograph No. 10. *Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency.* Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.
- 4. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 5. U.S. Department of Health and Human Services. *Healthy people 2010.* 2nd ed. With *Understanding and improving health and objectives for improving health.* 2 vols. Washington, DC: Government Printing Office; 2000.
- 6. International Agency for Research on Cancer. Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 83. *Tobacco smoke and involuntary smoking: summary of data reported and evaluation*. Lyon, France: World Health Organization; 2002. Available from: http://monographs.iarc.fr/htdocs/indexes/vol83index.html. Accessed December 2004.
- 7. National Institutes of Health, National Toxicology Program. 10th report on carcinogens, 2000. Research Triangle Park, NC: National Institute of Environmental Health Sciences; 2002. Available from: http://ehp.niehs.nih.gov/roc/toc10.html. Accessed December 2004.

# **Reduced Tobacco Consumption**

Although the main goal of activities to eliminate exposure to secondhand smoke is protecting nonsmokers, another possible outcome is the reduced cigarette use that may result from cessation by smokers or the decreased number of cigarettes smoked per day by continuing smokers. Research shows that smokers in workplaces with tobacco-free policies may reduce the number of cigarettes they smoke or quit smoking altogether. <sup>1,2</sup> In addition, young people who live in households with tobacco-free policies are less likely to smoke than those who live in households in which people smoke.<sup>3</sup>

Listed below are the indicators associated with this outcome:

- ▶ **2.8.1** Per capita consumption of tobacco products
- ▶ 2.8.2 Average number of cigarettes smoked per day by smokers
- ▶ 2.8.3 Smoking prevalence

#### References

- 1. Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal*. 2002;325(7357):188.
- 2. Farrelly MC, Pechacek TF, Chaloupka FJ. The impact of tobacco control expenditures on aggregate cigarette sales: 1981–2000. *Journal of Health Economics*. 2003;22(5):843–59. Erratum in: *Journal of Health Economics*. 2004;23(2):419.
- 3. Farkas AJ, Gilpin EA, White MM, Pierce JP. Association between household and workplace smoking restrictions and adolescent smoking. *Journal of the American Medical Association*. 2000;284(6):717–22.

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National Cancer Institute. Smoking and Tobacco Control Monograph No. 11. *State and local legislative action to reduce tobacco use.* Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4804.

# Outcome 8

# **Reduced Tobacco Consumption**

# Indicator Rating ←○○ ● ◆ → better

Number	Indicator	Overall quality	evaluation evices	United the new	Face VL	practice	Accepted
2.8.1	Per capita consumption of tobacco products		\$		•		•
2.8.2	Average number of cigarettes smoked per day by smokers		\$\$ <sup>†</sup>	•	•		•
2.8.3	Smoking prevalence		\$\$ <sup>†</sup>	•	•	•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

# Indicator 2.8.1

<b>Per Capita Cons</b>	sumption of Tob	acco Prod	ucts						
Goal area 2	Eliminating nons	Eliminating nonsmokers' exposure to secondhand smoke							
Outcome 8	Reduced tobacco	Reduced tobacco consumption							
What to measure	The number of ci	The number of cigarette packs sold per adult aged 18 years or older in the state							
Why this indicator is useful		In addition to decreasing nonsmokers' exposure to secondhand smoke, smoke-free policies decrease the number of cigarettes smoked. <sup>1</sup>							
Example data source(s)	<ul> <li>CDC State Tobacco Activities Tracking and Evaluation (STATE) system         Data available at: http://www.cdc.gov/tobacco/STATEsystem     </li> <li>State departments of revenue</li> </ul>								
Population group(s)		Not applicable. This indicator is best measured by examining tax records to assess the state's sales of cigarettes.							
Example survey question(s)	Not applicable								
Comments	Evaluators need t			nption of cig	arettes, smokeles	ss tobacco,			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$							
				<b>←○○</b>	● → better				

<sup>1.</sup> Fichtenberg CM, Glantz SA. Effect of smoke-free workplaces on smoking behaviour: systematic review. *British Medical Journal*. 2002;325(7357):188.

# Indicator 2.8.2

Average Numbe	r of Cigarettes Smoked per Day by Smokers
Goal area 2	Eliminating nonsmokers' exposure to secondhand smoke
Outcome 8	Reduced tobacco consumption
What to measure	The average number of cigarettes smoked per day by adult and young smokers
Why this indicator is useful	Daily cigarette use by employees who smoke decreases when smoke-free policies are adopted in the workplace. <sup>1</sup> In addition, young people who live in households with tobacco-free policies are less likely to smoke than those who live in households in which people smoke. <sup>2</sup>
Example data source(s)	▶ CDC State Tobacco Activities Tracking and Evaluation (STATE) system Data available at: http://www.cdc.gov/tobacco/STATEsystem
	▶ Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004
	<ul><li>CDC Youth Risk Behavior Surveillance System (YRBSS), 2003</li></ul>
	▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003
Population group(s)	► Smokers 18 years of age or older
	▶ Smokers aged less than 18 years
Example survey question(s)	From YTS and YRBSS  During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day?  I did not smoke cigarettes during the past 30 days  Less than 1 cigarette per day  1 cigarette per day  2 to 5 cigarettes per day  11 to 20 cigarettes per day  More than 20 cigarettes per day  More than 20 cigarettes per day  From ATS  For everyday smokers  On the average, about how many cigarettes a day do you now smoke?  Number of cigarettes  For some-day smokers  On the average, on days when you smoked during the past 30 days, about how many cigarettes did now smoke?
	cigarettes did you smoke a day? Number of cigarettes

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$ <sup>†</sup>				
				<b>4</b> 000	● → hetter	

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

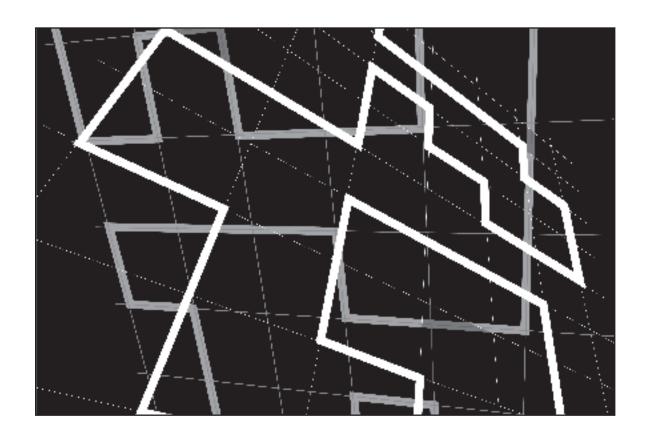
- 1. Farrelly MC, Evans WN, Sfekas AE. The impact of workplace smoking bans: results from a national survey. *Tobacco Control.* 1999;8(3):272–7.
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# Indicator 2.8.3

Smoking Preval	ence							
Goal area 2	Eliminating nonsmo	kers' expos	ure to secondha	and smoke				
Outcome 8	Reduced tobacco cor	sumption						
What to measure	Proportion of adults employed outside the home who have ever smoked at least 100 cigarettes in their lives and who smoke every day or some days <sup>1</sup>							
	Proportion of young 30 days <sup>2</sup>	people wh	o have smoked	on at least 1	day during the	previous		
Why this indicator is useful	Studies show that to employees who quit associated with signi likelihood of adolesc	smoking. <sup>3</sup> ificantly lov	In addition, smo wer rates of ado	oke-free wor	kplaces and hon	nes are		
Example data source(s)	▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003							
504100(5)	▶ Behavioral Risk I		•					
	► Youth Tobacco Su	, , ,				)4		
	CDC Youth Risk	Behavior S	urveillance Syst	em (YRBSS)	, 2003			
Population group(s)	▶ Adults aged 18 y	ears or olde	or					
3 ,	<ul><li>Young people les</li></ul>							
	Tourig people les		ears or age					
Example survey	From ATS and BRFSS							
question(s)	Have you smoked at least 100 cigarettes in your entire life?							
	☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused							
	Do you now smoke cigarettes every day, some days, or not at all? $\Box$ Every day $\Box$ Some days $\Box$ Not at all $\Box$ Refused							
	From YTS and YRBSS							
	During the past 30 d  ☐ 0 days  ☐ 1 or 2 days  ☐ 3 to 5 days  ☐ 6 to 9 days  ☐ 10 to 19 days  ☐ 20 to 29 days  ☐ All 30 days	ays, on hov	v many days di	d you smoke	e cigarettes?			
Comments	To gather more compabout the use of othe cigars, and loose (rol	er tobacco p	roducts such as					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$ <sup>†</sup>						
				<b>←</b> ∩ <b>○ (</b>	● → better			
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this							

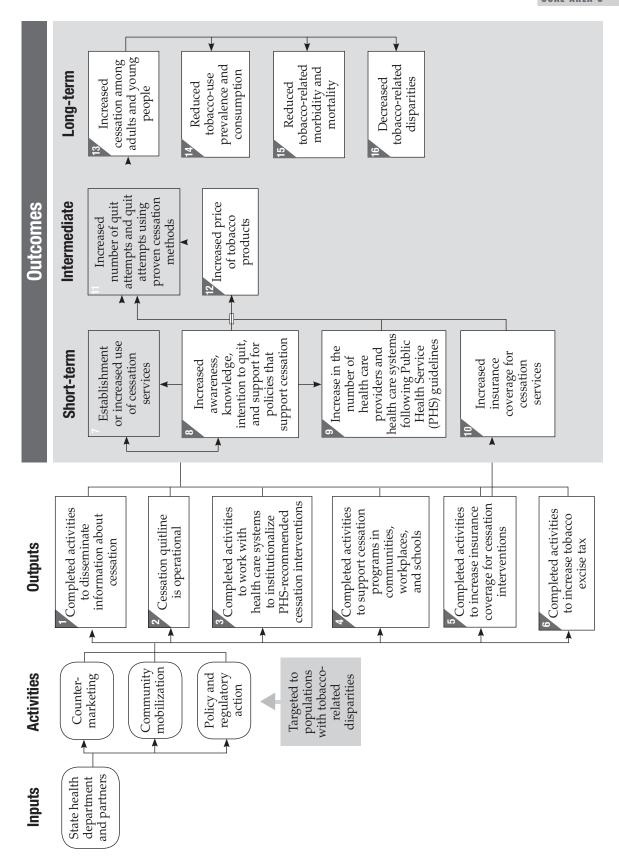
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# Goal Area 3: Promoting Quitting Among Adults and Young People



Goal Area 3

**Promoting Quitting Among Adults and Young People** 



# **Promoting Quitting Among Adults and Young People**

## **Short-term Outcomes**

- Outcome 7: Establishment or increased use of cessation services
  - ▶ 3.7.1 Number of callers to telephone quitlines
  - ▶ 3.7.2<sup>NR</sup> Number of calls to telephone quitlines from users who heard about the quitline through a media campaign
  - ▶ 3.7.3 Number of calls to telephone quitlines from users who heard about the quitline through a source other than a media campaign
  - ▶ 3.7.4 Proportion of smokers who have used group cessation programs
  - ▶ 3.7.5 Proportion of health care systems with telephone quitlines or contracts with state quitlines
  - ▶ 3.7.6 Proportion of worksites with a cessation program or a contract with a quitline
- Outcome 8: Increased awareness, knowledge, intention to quit, and support for policies that support cessation
  - ▶ 3.8.1 Level of confirmed awareness of media campaign messages on the dangers of smoking and the benefits of cessation
  - ▶ 3.8.2 Level of receptivity to anti-tobacco media messages on the dangers of smoking and the benefits of cessation
  - ▶ 3.8.3 Proportion of smokers who intend to quit
  - ▶ 3.8.4 Proportion of smokers who intend to quit smoking by using proven cessation methods
  - ▶ 3.8.5 Level of support for increasing excise tax on tobacco products
  - ▶ 3.8.6 Proportion of smokers who are aware of the cessation services available to them
  - ▶ 3.8.7 Proportion of smokers who are aware of their insurance coverage for cessation treatment
  - ▶ 3.8.8 Level of support for increasing insurance coverage for cessation treatment
  - ▶ **3.8.9**<sup>NR</sup> Proportion of employers who are aware of the benefits of providing coverage for cessation treatment

- Outcome 9: Increase in the number of health care providers and health care systems following Public Health Service (PHS) guidelines
  - ▶ 3.9.1 Proportion of health care providers and health care systems that have fully implemented the Public Health Service (PHS) guidelines
  - ▶ 3.9.2 Proportion of adults who have been asked by a health care professional about smoking
  - ▶ 3.9.3 Proportion of smokers who have been advised to quit smoking by a health care professional
  - ▶ 3.9.4 Proportion of smokers who have been assessed regarding their willingness to make a quit attempt by a health care professional
  - ▶ 3.9.5 Proportion of smokers who have been assisted in quitting smoking by a health care professional
  - ▶ 3.9.6 Proportion of smokers for whom a health care professional has arranged for follow-up contact regarding a quit attempt
  - ▶ 3.9.7 Proportion of pregnant women who report that a health care professional advised them to quit smoking during a prenatal visit
  - ▶ 3.9.8 Proportion of health care systems that have provider-reminder systems in place

# ■ Outcome 10: Increased insurance coverage for cessation services

▶ **3.10.1** Proportion of insurance purchasers and payers that reimburse for tobacco cessation services

#### **Intermediate Outcomes**

- Outcome 11: Increased number of quit attempts and quit attempts using proven cessation methods
  - ▶ 3.11.1 Proportion of adult smokers who have made a quit attempt
  - ▶ **3.11.2** Proportion of young smokers who have made a quit attempt
  - ▶ 3.11.3 Proportion of adult and young smokers who have made a quit attempt using proven cessation methods

## ■ Outcome 12: Increased price of tobacco products

▶ **3.12.1** Amount of tobacco product excise tax

# **Long-term Outcomes**

# ■ Outcome 13: Increased cessation among adults and young people

- ▶ **3.13.1** Proportion of smokers who have sustained abstinence from tobacco use
- ▶ 3.13.2<sup>NR</sup> Proportion of recent successful quit attempts

# ■ Outcome 14: Reduced tobacco-use prevalence and consumption

- ▶ **3.14.1** Smoking prevalence
- ▶ **3.14.2** Prevalence of tobacco use during pregnancy
- ▶ **3.14.3** Prevalence of postpartum tobacco use
- ▶ **3.14.4** Per capita consumption of tobacco products

# **Establishment or Increased Use of Cessation Services**

Tobacco is highly addictive.¹ Although it is possible to quit without help, evidence shows that the chance of success is much higher with the use of support services.² State-supported telephone quitlines overcome many of the barriers to smoking cessation classes because they are free and available at smokers' convenience.² They also bring services to smokers in areas that have few resources. Group cessation programs and workplace cessation programs also improve the likelihood of success. Integrated services—which link quitlines, provider services, workplace cessation initiatives, and approved pharmacotherapies—offer smokers several help options and lead to greater use of cessation services and more success.³

Listed below are the indicators associated with this outcome:

- ▶ 3.7.1 Number of callers to telephone quitlines
- ▶ 3.7.2<sup>NR</sup> Number of calls to telephone quitlines from users who heard about the quitline through a media campaign
- ▶ 3.7.3 Number of calls to telephone quitlines from users who heard about the quitline through a source other than a media campaign
- ▶ 3.7.4 Proportion of smokers who have used group cessation programs
- ▶ 3.7.5 Proportion of health care systems with telephone quitlines or contracts with state quitlines
- ▶ 3.7.6 Proportion of worksites with a cessation program or a contract with a quitline

- 1. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 3. Fiore MC, Bailey WC, Cohen SJ, Dorfman S, Goldstein M, Gritz E, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

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▶ Outcome 7

Warner KE. Effects of the antismoking campaign: an update. *American Journal of Public Health.* 1989;79(2):144–51.

Zhu S, Rosbrook B, Anderson CM, Gilpin E, Sadler GP. The demographics of help-seeking for smoking cessation in California and the role of the California Smoker's Helpline. *Tobacco Control*. 1995;4(1):9–15.

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# **Establishment or Increased Use of Cessation Services**

# Indicator Rating ←○○ ● ◆ better

Number	Indicator	Overall quality	evaluation evi-	University of the new teach	Face Ver	practice	- nepted
3.7.1	Number of callers to telephone quitlines		\$\$	•			
3.7.2 <sup>NR</sup>	Number of calls to telephone quitlines from users who heard about the quitline through a media campaign		Ø	Ø	$\boxtimes$	Ø	$  \otimes  $
3.7.3	Number of calls to telephone quitlines from users who heard about the quitline through a source other than a media campaign		\$\$				
3.7.4	Proportion of smokers who have used group cessation programs		\$\$	•	•	•	
3.7.5	Proportion of health care systems with telephone quit- lines or contracts with state quitlines	†	\$\$\$ <sup>†</sup>				
3.7.6	Proportion of worksites with a cessation program or a contract with a quitline		\$\$\$	Ø			

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data

 $<sup>^{\</sup>mbox{\scriptsize NR}}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

# Indicator 3.7.1

-								
Number of Calle	ers to Telephone	Quitlines						
Goal area 3	Promoting quitting among adults and young people							
Outcome 7	Establishment or increased use of cessation services							
What to measure	The number of cal	The number of calls to telephone-based tobacco use cessation services						
Why this indicator is useful	Evidence shows that telephone quitlines are an effective method of increasing tobacco cessation. <sup>1-5</sup> Quit rates among users of the California quitline were twice as high as among those who used self-help methods alone. <sup>3</sup> Quitlines can reach large numbers of smokers and services can be provided in multiple languages. <sup>6</sup>							
Example data source(s)	Quitline call moni	Quitline call monitoring						
Population group(s)	Quitline telephone callers							
Example survey question(s)	Not applicable. This indicator is best measured by tracking calls to telephone quitlines.							
Comments	Evaluators may also want to collect information about the proportion of smokers in the state who have received counseling from the quitline.							
	Multiple types of information (e.g., caller demographics and location, call variability by month and time of day, and client satisfaction with quitline services) can be tracked through quitline monitoring.							
	Additional information about quitline monitoring is available through the North American Quitline Consortium at: http://naquitline.org.							
	For more informat below.	ion on how to	o collect data or	this indicat	or, see reference	s 7 and 8		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
			←○ ○ ● ◆ better					

- 1. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 2. Stead LF, Lancaster T, Perera R. Telephone counselling for smoking cessation. *Cochrane Database of Systematic Reviews*. 2003;(1):CD002850.
- 3. Zhu SH, Anderson CM, Tedeschi GJ, Rosbrook B, Johnson CE, Byrd M, Gutierrez-Terrell E. Evidence of real-world effectiveness of a telephone quitline for smokers. *New England Journal of Medicine*. 2002;347(14):1087–93.
- 4. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

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- 5. National Cancer Institute. Population-based smoking cessation: proceedings of a conference on What Works to Influence Cessation in the General Population. *Smoking and Tobacco Control Monograph No.* 12. Bethesda, MD: National Cancer Institute; 2000. NIH Publication No. 00-4892.
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- 8. Miller CL, Wakefield M, Roberts L. Uptake and effectiveness of the Australian telephone quitline service in the context of a mass media campaign. *Tobacco Control.* 2003;12(Suppl 2):ii53–8.

# Number of Calls to Telephone Quitlines from Users Who Heard About the Quitline Through a Media Campaign

Goal area 3	Promoting quittir	ng among adu	ılts and young p	people			
Outcome 7	Establishment or	increased use	of cessation ser	rvices			
What to measure	The number of ca who heard about				ion services from	n people	
Why this indicator is useful	Media programs advertisements ca area. <sup>1,2</sup> Quitline m and local cessatio as appropriate. <sup>1,2</sup>	nn promote a ledia campaig	single télephon gns can be a cos	e number ar t-effective m	nd broadcast it ac ethod to promot	cross a wide to both state	
Example data source(s)	Quitline call mon	itoring					
Population group(s)	Quitline telephon	e callers					
Example survey question(s)	Not applicable. T	his indicator i	is best measured	d by tracking	g calls to telepho	ne quitlines.	
Comments	Evaluators may also want to collect information about the proportion of smokers in the state who received counseling from the quitline.						
	Multiple types of information (e.g., caller demographics and location, call variability by month and time of day, and client satisfaction with quitline services) can be tracked through quitline monitoring.						
	Additional inform American Quitlin				lable through th	e North	
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	
	<b>←</b> ○ ○ ● <b>→</b> better						
	🛇 Denotes no data.						

NR Denotes an indicator that is not rated (see Appendix B for an explanation).

- 1. Centers for Disease Control and Prevention. *Telephone quitlines: a resource for development, implementation, and evaluation.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. The World Bank. *Tobacco quitlines: at a glance*. Washington, DC: The World Bank; 2002. Available from: http://wbln0018. worldbank.org/HDNet/hddocs.nsf/vtlw/7de69862c4402da485256ea1004e73b2 or http://www.cdc.gov/tobacco/quit/CRC/TobaccoQuitlineataGlance.pdf. Accessed March 2005.

# Number of Calls to Telephone Quitlines from Users Who Heard About the Quitline Through a Source Other Than a Media Campaign

Goal area 3	Promoting quitting	ng among ad	ults and young	people				
Outcome 7	Establishment or increased use of cessation services							
What to measure	The number of calls to a telephone-based tobacco use cessation service from people who heard about the service through sources other than media campaigns, including workplaces, community programs, and health care providers							
Why this indicator is useful	Integrating multi services. <sup>1,2</sup> The us workplaces, mass	e of telephor	ne quitlines can	be increased	by promoting the	nem through		
Example data source(s)	Quitline call mon	itoring						
Population group(s)	Quitline telephor	e callers						
Example survey question(s)	Not applicable. This indicator is best measured by tracking calls to telephone quitlines.							
Comments	Evaluators may also want to collect information about the proportion of smokers in the state who received counseling from the quitline.							
	Multiple types of information (e.g., caller demographics and location, call variability by month and time of day, and client satisfaction with quitline services) can be tracked through quitline monitoring.							
	Additional information about quitline monitoring is available through the North American Quitline Consortium at: http://naquitline.org.							
	For more information below.	ition on how	to collect data o	on this indica	ator, see referenc	es 2 and 3		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
				<b>←</b> ○○	● → better			

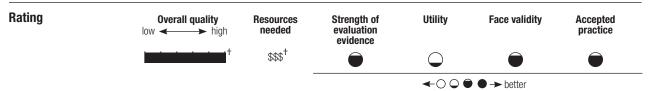
- 1. The Pacific Center on Health & Tobacco. *Linking a network: integrate quitlines with health care systems.* Portland, OR: The Pacific Center on Health & Tobacco; 2003. Available from: http://www.paccenter.org/pages/pub\_reports.htm. Accessed March 2005.
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<b>Proportion of Sr</b>	nokers Who Ha	ve Used Gi	oup Cessatior	n Prog	<b>jram</b> :	S					
Goal area 3	Promoting quitting	ıg among adı	ılts and young peo	ple							
Outcome 7	Establishment or	increased use	of cessation service	ces							
What to measure	Proportion of smo (e.g., stop-smokin		port using a group group counseling)	cessatio	on serv	vice or prograi	m				
Why this indicator is useful	cessation. <sup>1</sup> For exagroup programs v	Evidence shows that group cessation programs are effective in increasing tobacco use cessation.¹ For example, studies have shown that the quit rates of people who attended group programs were significantly higher than the quit rates of control subjects who did not attend group programs.²									
Example data source(s)	Adult Tobacco Su Cessation, 2003	rvey (ATS): (	CDC Recommende	d Ques	tions:	Supplementa	l Section C:				
Population group(s)	Smokers aged 18	years or olde	r								
Example survey question(s)	as classes or coun	seling?	smoking, did you u	-	other	assistance suc	ch				
	If respondent answer Did you use:	ers "yes," ask t	the following questio	n for ead Yes	ch optio No	on below:  Don't know	Refused				
	<ol> <li>A stop-smokin</li> <li>A telephone qu</li> <li>One-on-one co</li> <li>Self-help mater</li> <li>Acupuncture?</li> <li>Hypnosis?</li> <li>Did you use an</li> </ol>	uitline? unseling fron rial, books, or	n a doctor or nurse videos?	?		Not sure					
Comments	•	want to colle	could also be aske ct information on t n programs.	•	0		n the state				
Rating	Overall quality low  → high	Resources needed	Strength of evaluation evidence	Utility		Face validity	Accepted practice				
		\$\$									
				<b>←</b> ○ <b>○</b>		→ better					

- 1. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 2. Stead LF, Lancaster T. Group behavior therapy programmes for smoking cessation. *Cochrane Database of Systematic Reviews*. 2002;(3):CD001007.

# Proportion of Health Care Systems with Telephone Quitlines or Contracts with State Quitlines

Goal area 3	Promoting quitting among adults and young people								
Outcome 7	Establishment or increased use of cessation serv	vices							
What to measure	Proportion of health care systems (e.g., managed care organizations) that include telephone quitlines in their tobacco cessation services								
Why this indicator is useful	Not all states have statewide telephone quitlines, and in those that do, the quitlines are not always adequately funded to counsel all tobacco users in the state. <sup>1-4</sup> In these situations, health care systems can either contribute financially to the state quitline or develop a quitline for their own patients.								
Example data source(s)	Addressing Tobacco in Managed Care (ATMC), Survey of Health Plans, 1997–1998								
Population group(s)	Managed care or health care system administra	tors							
Example survey question(s)	From ATMC  Which of the following cessation interventions are available in your plan, and which are included in your plan's formulary? [Mark all that apply.]								
	U	navailable	Full coverage	Partial coverage	In formulary				
	<ol> <li>Nicotine replacement therapy         Over-the-counter         Prescription         Only with enrollment in cessation program</li> <li>Buproprion (e.g., Zyban®)</li> <li>Telephone counseling</li> <li>Face-to-face counseling</li> <li>Classes or group meeting</li> <li>Self-help materials</li> </ol>								
	Example questions								
	Does [your organization] operate a telephone quitline for smokers?  ☐ Yes ☐ No ☐ Don't know								
	Does [your organization] inform beneficiaries about the state's telephone quitline?  ☐ Yes ☐ No								
	Does [your organization] contribute to the financing of the state's telephone quitline? $\Box$ Yes $\Box$ No								
Comments	For the second set of example questions, the authors modified questions from the State Medicaid Tobacco Dependence Treatment Survey, 2003. Information available from the Center for Health and Public Policy Studies, School of Public Health, University of California Berkeley.								



<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Centers for Disease Control and Prevention. *Telephone quitlines: a resource for development, implementation, and evaluation.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. The Pacific Center on Health & Tobacco. *Linking a network: integrate quitlines with health care systems.* Portland, OR: The Pacific Center on Health & Tobacco; 2003. Available from: http://www.paccenter.org/pages/pub\_reports.htm. Accessed March 2005.
- 3. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 4. Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

Proportion of W	orksites with a	Cessation	Program or	a Contra	ct with a Qu	itline				
Goal area 3	Promoting quittir	ng among adı	ılts and young j	people						
Outcome 7	Establishment or	increased use	e of cessation se	rvices						
What to measure	Proportion of wor	rksites that su	ipport a tobacco	o cessation p	rogram for emp	loyees				
Why this indicator s useful	Like health care systems, employers can contribute financially to the state quitline in order to ensure access to these services for their employees. Employers can also set up their own cessation programs, although the results to date from numerous worksite-based cessation projects suggest either no impact or a small net effect.									
Example data source(s)	Health Plans, 200	Partnership for Prevention, Tobacco Survey: National Survey of Employer-sponsored Health Plans, 2002 Information available at: http://www.mercerhr.com								
Population group(s)	Employers									
Example survey question(s)	From Partnership for Which of the folloservice(s) are offe Check all that apply Individual cou Group counsel Telephone cou Self-help progrum Cessation treat Prescription mOver-the-coun Other (please son Don't know	owing tobacco red at the wo / nseling (face- ing (face-to-fanseling (inclu- cams (such as ment as part edications ter medicatio	o/smoking cessarksite/outside of rto-face) ace) iding referrals to brochures, vide of prenatal care	ation (tobacc of the health o quitlines) eos, Internet	ro/nicotine depe plan?					
Comments	None									
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$	$\square$							
				<b>←</b> ○○	● → better					
	Denotes no data	a.								

The Pacific Center on Health & Tobacco. Comprehensive statewide tobacco cessation. Portland, OR: The Pacific Center on Health & Tobacco; 2003. Available from: http://www.paccenter.org/pages/pub\_reports.htm. Accessed March 2005.
 U.S. Department of Health and Human Services. Reducing tobacco use: a report of the Surgeon General. Atlanta, GA:

Centers for Disease Control and Prevention; 2000.

## Increased Awareness, Knowledge, Intention to Quit, and Support for Policies That Support Cessation

Programs to encourage tobacco users to quit using tobacco start with activities to increase the number of smokers who intend to quit.<sup>1</sup> Increasing the number of smokers who intend to quit involves (1) providing tobacco users with the tools needed to quit successfully and (2) eliminating barriers to services that will help them to quit. Evidence shows that media campaigns increase tobacco cessation rates.<sup>1</sup> Evidence also shows that policies that encourage people to stop using tobacco (e.g., increasing the price of cigarettes or providing insurance coverage for cessation treatment) increase rates of successful cessation.<sup>1</sup>

Listed below are the indicators associated with this outcome:

- ▶ 3.8.1 Level of confirmed awareness of media campaign messages on the dangers of smoking and the benefits of cessation
- ▶ 3.8.2 Level of receptivity to anti-tobacco media messages on the dangers of smoking and the benefits of cessation
- ▶ 3.8.3 Proportion of smokers who intend to quit
- ▶ 3.8.4 Proportion of smokers who intend to quit smoking by using proven cessation methods
- ▶ 3.8.5 Level of support for increasing excise tax on tobacco products
- ▶ 3.8.6 Proportion of smokers who are aware of the cessation services available to them
- ▶ 3.8.7 Proportion of smokers who are aware of their insurance coverage for cessation treatment
- ▶ 3.8.8 Level of support for increasing insurance coverage for cessation treatment
- ▶ 3.8.9<sup>NR</sup> Proportion of employers who are aware of the benefits of providing coverage for cessation treatment

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## **Increased Awareness, Knowledge, Intention to Quit, and Support for Policies That Support Cessation**

### Indicator Rating ←○○● ◆→ better

Number	Indicator	Overall quality	Streng entires	uth of the state o	Face W	Practive	Landan Landa
3.8.1	Level of confirmed awareness of media campaign messages on the dangers of smoking and the benefits of cessation		\$\$ <sup>†</sup>	•			
3.8.2	Level of receptivity to anti-tobacco media messages on the dangers of smoking and the benefits of cessation		\$\$ <sup>†</sup>		•	•	
3.8.3	Proportion of smokers who intend to quit		\$\$ <sup>†</sup>	•	•		
3.8.4	Proportion of smokers who intend to quit smoking by using proven cessation methods		\$\$\$ <sup>†</sup>	0	•	0	
3.8.5	Level of support for increasing excise tax on tobacco products		\$\$ <sup>†</sup>	0	•	•	•
3.8.6	Proportion of smokers who are aware of the cessation services available to them		\$\$	•	•	•	
3.8.7	Proportion of smokers who are aware of their insurance coverage for cessation treatment		\$\$\$	Ø	•	•	
3.8.8	Level of support for increasing insurance coverage for cessation treatment		\$\$\$	Ø	•	•	•
3.8.9 <sup>NR</sup>	Proportion of employers who are aware of the benefits of providing coverage for cessation treatment		Ø	Ø	Ø	Ø	Q

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

Denotes no data.

NR Denotes an indicator that is not rated (see Appendix B for an explanation).

## **Level of Confirmed Awareness of Media Campaign Messages** on the Dangers of Smoking and the Benefits of Cessation

Goal area 3	Promoting quitting among adults and young people				
Outcome 8	Increased awareness, knowledge, intention to quit, and support for policies that support cessation				
What to measure	Proportion of the target population that can accurately recall a media message about the dangers of smoking and the benefits of cessation				
Why this indicator is useful	Evaluators should measure exposure to media messages to confirm awareness of these messages by asking respondents to provide specific information about the messages. <sup>1</sup> Evidence shows that mass media campaigns are effective in increasing tobacco-use cessation. <sup>1,2</sup>				
Example data source(s)	Legacy Media Tracking Survey (LMTS), 2003 Information available at: http://tobacco.rti.org/data/lmts.cfm				
Population group(s)	Young people less than 18 years of age				
Example survey question(s)	From LMTS  Have you recently seen an anti-smoking or anti-tobacco ad on TV that shows  □ Yes □ Maybe, not sure □ No □ Refused to answer				
	What happens in this ad? (DO NOT READ RESPONSE CATEGORIES.)				
	What do you think the main message of this ad was?				
Comments	The example questions could also be asked of adults.				
	Evaluators may want to categorize awareness of the medium (e.g., billboard, television, or print) through which respondents learned of the message.				
	Programs may want to evaluate confirmed awareness of an advertisement by respondents' smoking status (current, former, or never) and addiction level (e.g., light, moderate, or heavy) because awareness levels may differ significantly among groups with different levels of addiction.				
	Evaluators should work closely with countermarketing campaign managers to (1) develop a separate series of questions for each main media message and (2) coordinate data collection with the timing of the media campaign.				



<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Sly DF, Heald GR, Ray S. The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control.* 2001;10(1):9–15.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

## Level of Receptivity to Anti-tobacco Media Messages on the Dangers of Smoking and the Benefits of Cessation

Goal area 3	Promoting quitting	Promoting quitting among adults and young people								
Outcome 8	Increased awaren support cessation		ge, intention to	quit, and su	pport for policie	s that				
What to measure	Level of receptivity to media messages by the intended audience. Receptivity is generally defined as the extent to which people are willing to listen to a persuasive message. In tobacco control evaluation, however, the definition is narrower; receptivity is the extent to which people believe that the message was convincing, made them think about their behavior, and stimulated discussion with others. <sup>1</sup>									
Why this indicator is useful	and intentions of messages reach ar	Message awareness is necessary but not sufficient to change the knowledge, attitudes, and intentions of young people and adults. Media campaigns are effective only if their messages reach and resonate with the intended audience. A well-received message helps ensure campaign effectiveness. <sup>2-5</sup>								
Example data source(s)		Legacy Media Tracking Survey (LMTS), 2003 Information available at: http://tobacco.rti.org/data/lmts.cfm								
Population group(s)	Young people less	s than 18 years	s of age							
Example survey question(s)	From LMTS  Tell me how much you agree or disagree with the following statement: This ad is convincing. Would you say you:  ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree ☐ No opinion ☐ Don't know ☐ Refused  Would you say the ad gave you good reasons not to smoke? ☐ Yes ☐ No ☐ Don't know ☐ Refused									
	Did you talk to your friends about this ad?  ☐ Yes ☐ No ☐ Don't know ☐ Refused									
Comments	The example quest Evaluators may we campaigns that acother quitting strate Evaluators may we (e.g., television, p	vant to assess ddress (1) smo ategies. vant to assess	the public's lev bking during pr media message	rel of reception regnancy and	d (2) telephone q	uitlines and				
	Evaluators should work closely with countermarketing campaign managers to (1) develop a separate series of questions for each main media message and (2) coordinate data collection with the timing of the media campaign.									
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		<b>ው</b>								
					● → better					

- 1. Sly DF, Heald GR, Ray S. The Florida "truth" anti-tobacco media evaluation: design, first year results, and implications for planning future state media evaluations. *Tobacco Control*. 2001;10(1):9–15.
- 2. McGuire WJ. Public communication as a strategy for inducing health-promoting behavioral change. *Preventive Medicine*. 1984;13(3):299–319.
- 3. Kotler P, Armstrong G. Principles of marketing, 9th ed. Upper Saddle River, NJ: Prentice-Hall; 2001.
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- 5. Maibach E, Parrott RL, editors. *Designing health messages: approaches from communication theory and public health practice.* Thousand Oaks, CA: Sage; 1995.

Goal area 3	Promoting quitting among adults and young people									
Outcome 8	Increased awareness, knowledge, intention to quit, and support for policies that support cessation									
What to measure	Proportion of smo	okers who are	seriously consi	dering stopp	ping smoking					
Why this indicator is useful	Evidence shows the quit attempts. 1,2	Evidence shows that intention to quit using tobacco is a strong predictor of actual quit attempts. <sup>1,2</sup>								
Example data source(s)		<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> </ul>								
Population group(s)	•	<ul> <li>Smokers 18 years of age or older</li> <li>Smokers aged less than 18 years</li> </ul>								
Example survey question(s)	From ATS  Are you seriously considering stopping smoking within the next 6 months?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused									
	Are you planning to stop smoking within the next 30 days? $\square$ Yes $\square$ No $\square$ Don't know/Not sure $\square$ Refused									
	From YTS  Do you want to st  ☐ I do not smoke	op smoking o	rigarettes?							
Comments	None									
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$ <sup>†</sup>	•	•	•	•				
	←○ ○ ● ◆ better									

- 1. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 2. Hellman R, Cummings KM, Haughey BP, Zielezny MA, O'Shea RM. Predictors of attempting and succeeding at smoking cessation. *Health Education Research*. 1991;6(1):77–86.

#### **Proportion of Smokers Who Intend to Quit** Smoking by Using Proven Cessation Methods Goal area 3 Promoting quitting among adults and young people **Outcome 8** Increased awareness, knowledge, intention to quit, and support for policies that support cessation What to measure Proportion of smokers who report that they intend to quit smoking using proven cessation methods (FDA-approved pharmacotherapies, in-person individual counseling, counseling from telephone quitlines, or stop-smoking classes) Why this indicator Approximately 46% of smokers attempt to quit each year in the United States, but only about 5% of those attempting to quit are still abstinent 1 year later. The use of proven is useful cessation strategies—such as FDA-approved pharmacotherapies, counseling, and telephone quitlines—improves the chances of a successful quit attempt.<sup>1</sup> Example data No commonly used data sources were found source(s) Population group(s) Smokers 18 years of age or older Smokers aged less than 18 years Do you intend to quit smoking in the next 30 days? **Example survey** $\square$ Yes $\square$ No $\square$ Don't know/Not sure $\square$ Refused to answer question(s) *If yes to above, then ask:* Which of the following cessation methods do you intend to use? ☐ Call a quitline ☐ Use a prescription pill, such as Zyban, ☐ See a physician Buproprion, or Wellbutrin ☐ Join a cessation program ☐ Quit with a friend, relative, or acquaintance ☐ Use a nicotine patch, gum, nasal ☐ Other methods spray, inhaler, lozenge, or tablet ☐ Quit on your own **Comments** The authors created these example questions. They are not in any commonly used data source. Evaluators may want to assess smokers' intention to quit by respondents' tobacco use (current, former, or never) and addiction level (e.g., light, moderate, or heavy) because awareness levels may differ significantly among groups with different levels of addiction. Addiction levels are often inversely related to strength of intention to quit. Rating Overall quality Resources Strength of Utility **Face validity** Accepted evaluation → high needed practice low <del><</del> evidence \$\$\$ → better

### Reference

Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this

indicator were within one point of each other (see Appendix B for an explanation).

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

#### **Level of Support for Increasing Excise Tax on Tobacco Products** Goal area 3 Promoting quitting among adults and young people Outcome 8 Increased awareness, knowledge, intention to quit, and support for policies that support cessation What to measure Proportion of the population that supports an increase in excise tax on cigarettes and the amount of tax increase they support Why this indicator Public opinion is a major determinant of the feasibility of enacting an excise tax increase is useful on tobacco products. Tobacco policies are unlikely to be adopted without support among business owners, policy makers, and the general public.<sup>1-4</sup> Measuring policy makers' support for a tax increase will also assess their willingness to support legislation for a tax increase.5 **Example data** Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section F: Policy Issues, 2003 source(s) Population group(s) Adults aged 18 years or older Example survey From ATS question(s) How much additional tax on a pack of cigarettes would you be willing to support if some or all the money raised was used to support tobacco control programs? ☐ More than two dollars a pack ☐ Less than fifty cents a pack ☐ Two dollars a pack ☐ No tax increase ☐ One dollar a pack ☐ Don't know/Not sure ☐ Fifty to ninety-nine cents a pack ☐ Refused **Comments** The example question could be asked of decision makers or opinion leaders. Evaluators may want to analyze the level of support for increasing an excise tax on tobacco products according to the smoking status of the respondent. To gather more complete data on tobacco use, evaluators can also ask questions about the use of other tobacco products such as spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll-your-own). Rating Strength of Utility **Face validity Accepted Overall quality** Resources needed evaluation practice evidence \$\$<sup>†</sup> ←○○●●→ better Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this

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- U.S. Department of Health and Human Services. Women and smoking: a report of the Surgeon General. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. Thomson GW, Wilson N. Public attitudes about tobacco smoke in workplaces: the importance of workers' rights in survey questions. *Tobacco Control.* 2004;13(2):206–7.
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5. O'Connell P. Tobacco control in the land of the golden leaf: has political perception kept pace with reality? *North Carolina Medical Journal*. 2002;63(3):175–6.

Goal area 3	Promoting quittir	ig among adı	ılts and young <sub>l</sub>	people						
Outcome 8		Increased awareness, knowledge, intention to quit, and support for policies that support cessation								
What to measure	counseling (face-t programs (such a	Proportion of smokers who know about available cessation services, such as individual counseling (face-to-face), group counseling (face-to-face), telephone counseling, self-help programs (such as brochures, videos, and Internet support), on-site treatment, follow-up counseling, and FDA-approved pharmacotherapies <sup>1-3</sup>								
Why this indicator is useful	An increase in the do not learn abou	An increase in the availability of cessation services will not have an effect if tobacco user do not learn about these services. <sup>2-5</sup>								
Example data source(s)	Adult Tobacco Su Cessation, 2003	rvey (ATS): (	CDC Recommen	nded Questi	ons: Supplemen	tal Section C :				
Population group(s)	Smokers aged 18	years or olde	r							
Example survey question(s)	From ATS  Are you aware of telephone quitling   ☐ Yes ☐ No ☐	es, local healt	h clinic services	?	o you quit smoki	ing, such as				
Comments	The example surv	The example survey question could be modified to include a more expansive list of cessation services								
	The example survey question could be asked of young people.									
Rating	Overall quality low ← ► high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$								
				<b>←○○</b>	● → better					

- 1. McMenamin SB, Halpin HA, Ibrahim JK, Orleans CT. Physician and enrollee knowledge of Medicaid coverage for tobacco-dependence treatments. *American Journal of Preventive Medicine*. 2004;26(2):99–104.
- 2. Schauffler HH, Barker DC, Orleans CT. Medicaid coverage for tobacco-dependence treatments. *Health Affairs*. 2001;20(1):298–303.
- 3. Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.
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## **Proportion of Smokers Who Are Aware of Their Insurance Coverage for Cessation Treatment**

	•									
Goal area 3	Promoting quitting	ng among adı	ılts and young j	people						
Outcome 8	Increased awareness, knowledge, intention to quit, and support for policies that support cessation									
What to measure	Proportion of smocessation treatme group counseling brochures, videos and all types of F	nts. Such cov (face-to-face) , and Interne	erage could incl ), telephone cou t support), on-s	lude individ inseling, self ite treatmen	ual counseling ( help programs	face-to-face), (such as				
Why this indicator is useful	coverage. Increas	Insurance coverage lowers barriers to cessation services if tobacco users know about the coverage. Increased awareness of the cessation services that are covered by insurers may lead to greater use of these services. <sup>3</sup>								
Example data source(s)	American Smokii Information avail				/surveys.cfm					
Population group(s)	Smokers aged 18	years or olde	r							
Example survey question(s)	From ASHES  Does any of your cigarettes or to sto Yes   No	op using othe	r tobacco produ	ıcts?	eatment to quit s	moking				
Comments	Evaluators may v covered rather th					treatments				
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$	$\square$							
				<b>←</b> ○○	● → better					
	Denotes no dat	a.								

- 1. McMenamin SB, Halpin HA, Ibrahim JK, Orleans CT. Physician and enrollee knowledge of Medicaid coverage for tobacco-dependence treatments. *American Journal of Preventive Medicine*. 2004;26(2):99–104.
- 2. Schauffler HH, Barker DC, Orleans CT. Medicaid coverage for tobacco-dependence treatments. *Health Affairs*. 2001;20(1):298–303.
- 3. Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

<b>Level of Suppor</b>	t for Increasing	Insurance	e Coverage 1	or Cessa	tion Treatme	nt				
Goal area 3	Promoting quittir	ıg among adı	ults and young J	people						
Outcome 8		Increased awareness, knowledge, intention to quit, and support for policies that support cessation								
What to measure	care coverage to i	Proportion of decision makers or opinion leaders who support increasing health care coverage to include proven behavioral and pharmacologic treatments that help people stop smoking								
Why this indicator is useful	age of cessation s	Studies show that the number of managed care organizations offering even partial coverage of cessation services is still low. <sup>1</sup> Measuring decision maker support for increasing insurance coverage of cessation treatment may assist with efforts to improve coverage. <sup>2</sup>								
Example data source(s)	Decision Maker o	Decision Maker or Opinion Leader Survey								
Population group(s)	Decision makers									
Example survey question(s)	Proven therapies health insurance	olans. Do you	1			ру				
Comments	The authors creat			,	,	data source.				
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$	$\bigotimes$							
				<b>←○○</b>	● → better					
	Denotes no dat	a.								

- 1. McPhillips-Tangum C. Results from the first annual survey on addressing tobacco in managed care. *Tobacco Control.* 1998;7(Suppl):S11–3.
- 2. Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

## **Proportion of Employers Who Are Aware of the Benefits of Providing Coverage for Cessation Treatment**

Goal area 3	Promoting quittin	Promoting quitting among adults and young people									
Outcome 8	Increased awarene support cessation	ess, knowled	ge, intention to	quit, and su	pport for policie	s that					
What to measure	Proportion of emp that are aware of t productivity) of p treatments that he	the benefits (e roviding insu	e.g., improved e irance coverage	mployee he	alth and greater	employee					
Why this indicator is useful	If purchasers of gr coverage for tobac										
Example data source(s)	No commonly used data sources were found										
Population group(s)	Employers										
Example survey question(s)	Health plan cover improved employ ☐ Strongly agree	ree heath. Do	you	•		lead to					
	Health plan coverage that includes proven therapies for tobacco cessation lead to greater employee productivity. Do you  ☐ Strongly agree ☐ Agree ☐ Disagree ☐ Strongly disagree										
Comments	The authors created these example questions. They are not in any commonly used data source.										
	This indicator was is available. See A				nerefore no ratin	g information					
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice					
		$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$					
			- 1								

NR Denotes an indicator that is not rated (see Appendix B for an explanation).

<sup>1.</sup> Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

## Increase in the Number of Health Care Providers and Health Care Systems Following Public Health Service (PHS) Guidelines

The Clinical Practice Guideline: Treating Tobacco Use and Dependence was produced by a consortium of experts charged with "identifying effective, experimentally validated, tobacco-dependence treatment and practices." To ensure that the Guideline would be based on the best evidence available, the experts reviewed approximately 6,000 scientific publications on how health care providers and health care systems can reduce tobacco use. Given that many tobacco users visit a primary care clinician each year, it is important that clinicians be prepared to intervene with tobacco users who are willing to quit. The five major steps (the "5 A's") to intervention include asking the patient if he or she uses tobacco, advising him or her to quit, assessing the patient's willingness to make a quit attempt, assisting him or her in making a quit attempt, and arranging for follow-up contact to prevent relapse. Evidence shows that cessation counseling and FDA-approved pharmacotherapies contribute to increases in quit rates. In addition, evidence is strong that institutionalizing cessation counseling in health care settings leads to an increase in the number of patients who quit smoking.

Listed below are the indicators associated with this outcome:

- ▶ 3.9.1 Proportion of health care providers and health care systems that have fully implemented the Public Health Service (PHS) guidelines
- ▶ 3.9.2 Proportion of adults who have been asked by a health care professional about smoking
- ▶ 3.9.3 Proportion of smokers who have been advised to quit smoking by a health care professional
- ▶ 3.9.4 Proportion of smokers who have been assessed regarding their willingness to make a quit attempt by a health care professional
- ▶ 3.9.5 Proportion of smokers who have been assisted in quitting smoking by a health care professional
- ▶ 3.9.6 Proportion of smokers for whom a health care professional has arranged for follow-up contact regarding a quit attempt
- ▶ 3.9.7 Proportion of pregnant women who report that a health care professional advised them to quit smoking during a prenatal visit
- ▶ 3.9.8 Proportion of health care systems that have provider-reminder systems in place

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### Increase in the Number of Health Care Providers and Health Care Systems Following Public Health Service (PHS) Guidelines

### Indicator Rating ←○○●●→ better

Number	Indicator	Overall quality	Strein enuces	UHIN STATICE	Face Vo	Waches	nephed .
3.9.1	Proportion of health care providers and health care systems that have fully implemented the Public Health Service (PHS) guidelines		\$\$\$				•
3.9.2	Proportion of adults who have been asked by a health care professional about smoking		\$\$	•	•	•	•
3.9.3	Proportion of smokers who have been advised to quit smoking by a health care professional		\$\$	•	•	•	
3.9.4	Proportion of smokers who have been assessed regarding their willingness to make a quit attempt by a health care professional		\$\$\$	•			
3.9.5	Proportion of smokers who have been assisted in quitting smoking by a health care professional		\$\$	•	•	•	
3.9.6	Proportion of smokers for whom a health care professional has arranged for follow-up contact regarding a quit attempt	†	\$\$\$ <sup>†</sup>				
3.9.7	Proportion of pregnant women who report that a health care professional advised them to quit smoking during a prenatal visit		\$\$\$ <sup>†</sup>		•		•
3.9.8	Proportion of health care systems that have provider- reminder systems in place		\$\$\$	•	•	•	

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

## **Proportion of Health Care Providers and Health Care Systems That Have Fully Implemented the Public Health Service (PHS) Guidelines**

	· ,				
Goal area 3	Promoting quitting among adults and young people				
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines				
What to measure	Proportion of health care system administrators (or managed care providers) who have fully implemented PHS recommendations. For a list of the recommendations, see "Comments" below.				
Why this indicator is useful	Policies implemented by managed care administrators affect whether tobacco-dependence treatment services are offered to patients. Increases in the use of these proven services will result in increases in the number of successful quit attempts. <sup>1,2</sup>				
Example data source(s)	Addressing Tobacco in Managed Care (ATMC), 1997–1998 Information available at: http://www.aahp.org/atmc/mainindex.cfm				
Population group(s)	Managed care administrators				
Example survey question(s)	From ATMC  With regard to the AHCPR [Agency for Health Care Policy and Research] guidelines, has your plan implemented them:  □ Fully □ Partially □ The plan has not implemented the guidelines				
Comments	Note: The Agency for Health Care Policy and Research is now named the Agency for Healthcare Research and Quality (AHRQ). The AHRQ published the most recent Public Health Service (PHS) guidelines.				
	A more thorough way to measure this indicator would be to ask managed care administrators the example question for each of the PHS guideline recommendations for health care administrators, insurers, and purchasers. The PHS guideline recommendations are:				
	1. Implement a tobacco-use identification system in every clinic				
	2. Provide education, resources, and feedback to promote provider intervention				
	3. Dedicate staff to provide tobacco-dependence treatment and assess the delivery of this treatment in staff performance evaluations				
	A Dromate hamital religion that compart and provide impatient tobages dependence				
	4. Promote hospital policies that support and provide inpatient tobacco-dependence services				



- 1. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

## **Proportion of Adults Who Have Been Asked by a Health Care Professional About Smoking**

a mountin out o i	olooolollal Abo	at 0111011111	J						
Goal area 3	Promoting quitting	Promoting quitting among adults and young people							
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines								
What to measure	Proportion of adults who had been asked about their smoking status by a health care professional during the previous 12 months								
Why this indicator is useful	Evidence shows that when patients are asked about their tobacco use by a health care professional and when that response is documented, clinician interventions increase. <sup>1</sup>								
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section C: Cessation, 2003</li> </ul>								
Population group(s)	Adults aged 18 ye	ears or older							
Example survey question(s)	From ATS  During the past 1: ask if you smoke?  ☐ Yes ☐ No ☐  From ATS, Supplemen	☐ Don't know	•		health professio	onal			
	In the past 12 months, did a dentist ask if you smoked?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused								
Comments	The example ques	stion could als	so be asked of y	oung peopl	e.				
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		\$\$							
				<b>←</b> ○ ○	● → better				

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

## **Proportion of Smokers Who Have Been Advised** to Quit Smoking by a Health Care Professional

Goal area 3	Promoting quitting among adults and young people							
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines							
What to measure	Proportion of smo professional durin			to quit smol	king by a health	care		
Why this indicator is useful	Evidence shows t patients to stop u			health care p	professionals adv	vise their		
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section C: Cessation, 2003</li> </ul>							
Population group(s)	Smokers aged 18 years or older							
Example survey question(s)	From ATS  During the past 12 months, did any doctor, nurse, or other health professional advise you to not smoke?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused							
	From ATS: Supplemental Section C							
	In the past 12 months, did a dentist advise you to quit smoking?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused							
Comments	The example ques	stions could a	lso be asked of	young smok	kers.			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$						
		•		<b>←</b> ○○(	● → better			

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

## **Proportion of Smokers Who Have Been Assessed Regarding Their Willingness to Make a Quit Attempt by a Health Care Professional**

Goal area 3	Promoting quitting	ng among adu	lts and young j	people				
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines							
What to measure	Proportion of smokers who have been evaluated by a health care professional regarding their willingness to stop smoking							
Why this indicator is useful	Evidence suggests that once a tobacco-using patient is advised to quit, assessing that patient's willingness to quit can help to tailor the cessation counseling provided to the patient. <sup>1</sup>							
Example data source(s)	No commonly used data sources were found.							
Population group(s)	Smokers aged 18	years or older						
Example survey question(s)	During the past 1 ask you if you we □ Yes □ No □ In the past 12 mor □ Yes □ No □	ere willing to r Don't know nths, did a de	make a quit atte √Not sure □ ntist ask you if	empt? Refused to you were w	answer illing to make a			
Comments	The authors creat data source.	•	•	•		used		
	The example quest Evaluators might patient's willingn group cessation p	also wish to e	evaluate wheth stance in quitt	er the physical	cian inquired abo ling a quitline, jo			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$\$						
				<b>←</b> ○○	● ● → better			

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

## **Proportion of Smokers Who Have Been Assisted** in Quitting Smoking by a Health Care Professional

				<b>←○○●</b>	●→	hetter				
		\$\$								
Rating	Overall quality low  high	Resources needed	Strength of evaluation evidence	Utility	Fac	e validity	Accepted practice			
Comments	The example ques	stions could a	lso be asked of your	ng smoke	rs.					
	or other health pr of the following: seek counseling fo	ofessional ad suggest that y or stopping sr	t is since [FILL IN D vised you to quit sm you use a smoking c moking? v/Not sure □ Refu	oking cig essation	garett	es, did they d	lo any			
		p you quit sm	oking on your own							
	program, quit l 4. Provide you w	ine, or couns ith booklets, v	eling videos, or other							
	nasal spray, an 2. Suggest that yo	inhaler, or pi ou set a specif	atch, nicotine gum, lls such as Zyban® ic date to stop smok cing cessation class,	ing 🗆						
	•	•		•	No	Don't know Not sure	Refused			
Example survey question(s)	From ATS  In the past 12 months, when a doctor, nurse, or other health professional advised you to quit smoking, did they also do any of the following?									
Population group(s)	Smokers aged 18	years or older	r							
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>American Smoking and Health Survey (ASHES), 2003</li> <li>Information available at: http://tobacco.rti.org/data/New/surveys.cfm</li> </ul>									
Why this indicator is useful	Evidence is strong	that clinicia	n assistance in cessa	tion lead	s to in	nproved quit	rates. <sup>1</sup>			
What to measure	Proportion of smokers who have had a health care professional actively assist them in an attempt to quit smoking. Examples of assistance include prescribing FDA-approved cessation medications, providing educational material, providing counseling or a counseling referral, and establishing a firm quit date.									
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines									
Goal area 3	Promoting quittin	g among adu	ılts and young peop	le						

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

### Proportion of Smokers for Whom a Health Care Professional Has Arranged for Follow-up Contact Regarding a Quit Attempt

Goal area 3	Promoting quittie	ag among ad-	ilte and vounce	noonle					
<b>นบล</b> เ สเซล 3 	Promoting quitting among adults and young people								
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines								
What to measure	Proportion of smokers who have had a health care professional schedule follow-up contact to help them quit smoking								
Why this indicator is useful	Arranging for foll	Brief interventions may not be sufficient to help every patient quit successfully. Arranging for follow-up contact ensures continued cessation assistance and can increase the likelihood of a successful quit attempt. <sup>1</sup>							
Example data source(s)	No commonly use	No commonly used data sources were found.							
Population group(s)	Smokers aged	18 years or o	lder						
	Smokers aged	less than 18	years						
Example survey question(s)	In the past 12 mor				ssional advised	you to quit			
	Yes N  1. Call and ask you about your quit attempt within one week  2. Ask you about your quit attempt in person (during an office visit) within one week  3. Call and ask you about your quit attempt within one month								
	4. Ask you about								
	within one month 5. Arrange for a cessation counselor, program, or quitline to make								
	follow-up contact with you regarding your quit attempt								
Comments	The authors creat data source.	ed these exan	nple questions.	They are not	t in any common	ly used			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
	†	\$\$\$ <sup>†</sup>							
	<b>←○○● →</b> better								

<sup>1.</sup> Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

## **Proportion of Pregnant Women Who Report That a Health Care Professional Advised Them to Quit Smoking During a Prenatal Visit**

Goal area 3	Promoting quittir	Promoting quitting among adults and young people								
Outcome 9		Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines								
What to measure	Proportion of pregnant women who were advised by a health care professional during a prenatal visit of the ill effects of smoking									
Why this indicator is useful	Tobacco use by pregnant women and exposure to tobacco smoke are causal factors in both maternal and child morbidity and mortality. Evidence shows that advising pregnant women to quit, coupled with intensive counseling, increases abstinence rates. <sup>1</sup>									
Example data source(s)	CDC Pregnancy F	CDC Pregnancy Risk Assessment Monitoring System (PRAMS), Phase 4, 2000–2003								
Population group(s)	Pregnant women									
Example survey question(s)	From PRAMS  During any of you talk with you abo  □ No □ Yes									
Comments	Evaluators could the patient to quit					ssional advised				
Rating	Overall quality low ← ▶ high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice				
		\$\$\$ <sup>†</sup>								
				<b>←</b> ○○(	● → better					
	† Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).									

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

Goal area 3								
uvai ai ca 3	Promoting quitting among adults and young people							
Outcome 9	Increase in the number of health care providers and health care systems following the Public Health Service (PHS) guidelines							
What to measure	Proportion of health care systems that include smoking status information (e.g., stickers) in their patients' records. This information is recorded in order to prompt health care professionals to discuss smoking cessation during patients' visits.							
Why this indicator is useful	Evidence shows that reminder systems for health care providers increase the rate of clinician intervention to assist patients in quitting, thereby increasing the number of patients who successfully quit. <sup>1,2</sup>							
Example data source(s)	Addressing Tobacco in Managed Care (ATMC), Survey of Health Plans, 19	97–1998						
Population group(s)	Managed care administrators							
Example survey question(s)	From ATMC  Mark all that apply  Has your plan implemented systems for any of the following?		No					
	<ol> <li>Documentation of patient smoking status in an administrative computer database</li> <li>Documentation of patient smoking status in the medical record</li> <li>Computerized clinic reminders to encourage providers to advise</li> </ol>							
	patients to quit  4. Provider training in effective smoking cessation interventions  5. Routine cessation advice/brief provider counseling of patients  6. Provider incentives that promote tobacco cessation assessment							
	<ul><li>and intervention</li><li>Patient incentives for use of/adherence to recommended cessation treatment</li></ul>							
	Are the providers in your plan required to carry out any of the following activities?							
	<ol> <li>Ask new patients about their smoking status</li> <li>Include smoking status as a vital sign (i.e., ask about and</li> </ol>							
	document smoking status at every visit) 3. Document smoking status in the patient's medical record 4. Strongly advise all patients who smoke to quit 5. Assess willingness of patient to make a quit attempt 6. Refer the patient who smokes to intensive treatment when							
	the physician considers it appropriate or the patient prefers it  7. Arrange for follow-up with patients who are trying to quit smoking  8. Ensure that support staff is trained to counsel patients about							
	smoking cessation  9. Have literature about smoking cessation and the health risks							
	of smoking readily available in waiting rooms and exam rooms 10. Encourage parents who smoke to provide a smoke-free							
	environment for their children at home and in day care  11. Other (please specify)							

Comments	None					
Rating	Overall quality low  → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$\$				
				<b>←</b> ○○(	● → better	

- 1. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

### **Increased Insurance Coverage for Cessation Services**

The Guide to Community Preventive Services recommends that insurance carriers cover proven cessation therapies and strongly recommends reducing patients' out-of-pocket costs for cessation therapies to increase quit rates.<sup>1</sup> A review of five studies showed that pre-paid or discounted prescription drug benefits increased the percentage of patients who received pharmacotherapy and increased smoking abstinence rates.<sup>1</sup> The Guide to Community Preventive Services and Treating Tobacco Use and Dependence: Clinical Practice Guideline also recommends that smoking cessation treatment (both pharmacotherapy and counseling) be included as a covered benefit by health plans because doing so increases the use of these services and improves overall abstinence rates.<sup>1,2</sup> Full coverage of tobacco-dependence treatment is an effective and relatively low-cost strategy for significantly increasing the use of proven interventions and increasing quit attempts and quit rates.<sup>3</sup> Reviewers of tobacco-dependence treatments found that full insurance coverage of treatment services produced the highest level of use of these services.<sup>4</sup> In addition, full coverage produced the highest use of nicotine replacement therapy, increased the number of quit attempts, and yielded the greatest decline in overall smoking prevalence.<sup>4</sup>

Listed below are the indicators associated with this outcome:

▶ 3.10.1 Proportion of insurance purchasers and payers that reimburse for tobacco cessation services

### References

Outcome 10

- 1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. Fiore MC, Bailey WC, Cohen SJ, Dorfman S, Goldstein M, Gritz E, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 3. Schauffler HH, McMenamin S, Olson K, Boyce-Smith G, Rideout JA, Kamil J. Variations in treatment benefits influence smoking cessation: results of a randomised controlled trial. *Tobacco Control*. 2001;10(2):175–80.
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### Outcome 10

## **Increased Insurance Coverage for Cessation Services**

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality low → high	Strong evices	Unit of the new	Face V.	practice	accepted
3.10.1	Proportion of insurance purchasers and payers that reimburse for tobacco cessation services	<del>         </del>	\$\$\$				

## **Proportion of Insurance Purchasers and Payers That Reimburse for Tobacco Cessation Services**

Goal area 3	Promoting quitting among adults and young people								
Outcome 10	Increased insurance coverage for cessation services								
What to measure	Proportion of purchasers and payers of health insurance (public and private) who reimburse for some level of tobacco cessation services. Examples of such services are (1) medications approved by the FDA and (2) individual, group, and telephone counseling.								
Why this indicator is useful	Reducing out-of-pocket costs for cessation treatment increases the use of both effective cessation therapies and cessation. In addition, reimbursement of expenses increases the number of quit attempts and decreases smoking relapse rates. <sup>2,3</sup>								
Example data source(s)	Addressing Tobacco in Managed Care (ATMC), Survey of Health Plans, 1997–1998								
Population group(s)	Managed care administrators								
Example survey question(s)	From ATMC  Coverage for smoking cessation intervention is:  Available to selected members as outlined in their coverage agreement  Available to selected members with specific co-morbidities Please list:  Available to all members  Not available  Other (please specify)  Is there an annual or lifetime limit on coverage for smoking cessation interventions?  Yes, annual  Yes, lifetime  No limit  Other (please specify)  Which of the following cessation interventions are available in your plan, and which are included in your plan's formulary? (Mark all that apply.)								
	<ol> <li>Nicotine replacement therapy         Over-the-counter         Prescription         Only with enrollment in cessation progra         Buproprion (e.g., Zyban®)         Telephone counseling         Face-to-face counseling         Classes or group meeting         Self-help materials</li> </ol>	Unavailable  m	Full coverage	Partial coverage	In Formulary				

#### Comments

Evaluators need to determine which employers and/or health insurance organizations provide coverage for that state's population in order to obtain meaningful data regarding reimbursement of tobacco cessation services.

Evaluators may also want to measure whether tobacco cessation treatment is fully or partially reimbursed by public and private health insurance purchasers or payers.

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$\$				
				<b>←</b> ∩ <b>○ (</b>	● → hetter	

- 1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 2. Centers for Disease Control and Prevention. *Coverage for tobacco use cessation treatments*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 3. Centers for Disease Control and Prevention. State Medicaid coverage for tobacco-dependence treatments—United States, 1994–2002. Morbidity and Mortality Weekly Report. 2004;53(3):54–7.

# Increased Number of Quit Attempts and Quit Attempts Using Proven Cessation Methods

Quitting smoking has immediate and long-term benefits, such as reducing smokers' risk of diseases caused by smoking and improving health in general. Attempting to quit is the first step in becoming tobacco-free. Although some smokers can quit without help, the probability of a quit attempt leading to sustained abstinence is increased by using behavioral and pharmaceutical interventions. Effective interventions include FDA-approved pharmacotherapies and various forms of counseling (individual or group, in person or by telephone).

Listed below are the indicators associated with this outcome:

- ▶ 3.11.1 Proportion of adult smokers who have made a quit attempt
- ▶ 3.11.2 Proportion of young smokers who have made a quit attempt
- ▶ 3.11.3 Proportion of adult and young smokers who have made a quit attempt using proven cessation methods

#### References

- 1. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

## For Further Reading

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## GOAL AREA 3

► Outcome 11

Hollis JF, Bills R, Whitlock E, Stevens VJ, Mullooly J, Lichtenstein E. Implementing tobacco interventions in the real world of managed care. *Tobacco Control.* 2000;9 (Suppl 1):i18–24.

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# **Increased Number of Quit Attempts and Quit Attempts Using Proven Cessation Methods**

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality	evaluation evalues	July of the stelling	Face VE	practice	accepted
3.11.1	Proportion of adult smokers who have made a quit attempt		\$\$ <sup>†</sup>		•		
3.11.2	Proportion of young smokers who have made a quit attempt	†	\$\$	0			
3.11.3	Proportion of adult and young smokers who have made a quit attempt using proven cessation methods		\$\$	•	•	•	•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

<b>Proportion of A</b>	dult Smokers W	ho Have M	ade a Quit <i>l</i>	Attempt				
Goal area 3	Promoting quittin	Promoting quitting among adults and young people						
Outcome 11	Increased number	Increased number of quit attempts and quit attempts using proven cessation methods						
What to measure		Proportion of adult smokers who have stopped smoking for at least 1 day during the previous 12 months in an attempt to quit smoking						
Why this indicator is useful	tobacco use entire	Attempting to quit is an essential step in the process of becoming tobacco-free. Stopping tobacco use entirely is often preceded by several quit attempts. Increasing the number of quit attempts may lead to increased smoking cessation rates and a lower prevalence of smoking.						
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Behavioral Risk Factor Surveillance System (BRFSS), 2002</li> <li>Current Population Survey: Tobacco Use Supplement (CPS TUS), 2003</li> </ul>							
Population group(s)	Smokers aged 18	Smokers aged 18 years or older						
Example survey question(s)	From ATS, BRFSS, and During the past 12 you were trying to □ Yes □ No □	2 months, hav o quit smokin	ıg?	C	one day or long	ger because		
Comments	Evaluators may al a given time perio		easure the num	ber of quit a	ittempts made b	y smokers over		
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$ <sup>†</sup>	•	•	•	•		
				<b>←○○</b>	● → better			

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

Outcome 11  What to measure  Pro the  Why this indicator is useful  Example data source(s)  Population group(s)  Example survey question(s)  How long	poportion of you previous 12 m rempting to que cessful cessation reasing the nures and a lower Youth Tobacco CDC Youth Ricokers less than the work many times ager because your properties.	r of quit attenting smokers whom the in an alit is an essention of tobaccomber of quit aprevalence of Survey (YTS isk Behavior States and 18 years of all during the particular states and the particular states and the particular states are small small states are small states are small states are small states a	who have stopp ttempt to quit s ial step in the p use is often pr attempts can le f smoking. <sup>1</sup> S): CDC Recom Surveillance Sy	ttempts using ped smoking frocess of become by several to increase namended Questem (YRBSS)	for at least 1 day oming tobacco-foreral quit attempted smoking cessors: Core, 20 20, 2003	free. pts. ation
What to measure  Why this indicator is useful  Example data source(s)  Population group(s)  Example survey question(s)  How long	pportion of your previous 12 m rempting to quecessful cessati reasing the nures and a lower Youth Tobacco CDC Youth Ricokers less than we many times ager because your previous provides the previous provides and the previous previous previous previous provides and the previous previ	ing smokers whonths in an a dit is an essent on of tobaccomber of quit a prevalence of Survey (YTS isk Behavior States of a during the particular states of a during the	who have stopp ttempt to quit s ial step in the p use is often pr attempts can le f smoking. <sup>1</sup> S): CDC Recom Surveillance Sy	ped smoking f smoking process of become eceded by sevand to increase amended Que stem (YRBSS)	for at least 1 day oming tobacco-foreral quit attempted smoking cessor estions: Core, 20	free. pts. ation
Why this indicator is useful  Example data source(s)  Population group(s)  Example survey question(s)  How long	tempting to quecessful cessatireasing the nurses and a lower  Youth Tobacco CDC Youth Richards the session of the nurses and a lower  Youth Tobacco CDC Youth Richards the session of the	it is an essent on of tobacco mber of quit a prevalence of Survey (YTS isk Behavior S n 18 years of a	ttempt to quit state in the process is often process. The state is often process. The process is often process is often process is often process. The process is often process is often proce	process of become several to increase several	oming tobacco-feeral quit attempted smoking cessors: Core, 2003	free. pts.¹ ation
is useful  Suc Incirate  Example data source(s)  Population group(s)  Example survey question(s)  How long	ccessful cessatireasing the nures and a lower  Youth Tobacco CDC Youth Ricokers less than  TYTS  w many times ager because your services and a lower	on of tobacco mber of quit a prevalence of Survey (YTS isk Behavior S a 18 years of a during the pa	use is often prattempts can leaf smoking.   6): CDC Recomburveillance Syage  ast 12 months h	eceded by sevand to increase namended Que stem (YRBSS)	veral quit attemped smoking cessors: Core, 2003	pts. <sup>1</sup> ation 004
Population group(s)  Example survey question(s)  Hotolony	CDC Youth Ricokers less than wrts w many times ger because yo	isk Behavior S n 18 years of a during the pa	Surveillance Synge  ast 12 months h	stem (YRBSS)	), 2003	
Example survey question(s) Hor	n YTS w many times ger because yc	during the pa	ast 12 months h		ped smoking fo	r one day or
question(s) Ho	w many times ger because yo				ped smoking fo	r one day or
1   2   3   6   1   Fron	I have not tried time 2 times 3 to 5 times 6 to 9 times 10 or more times mYTS and YRBSS ring the past 1	oked in the part to quit  es  2 months, dic		o quit smokin		
Comments No:	ne					
	Overall quality  high	Resources needed				
_	†	\$\$				
					● → better 75% of the valid r	

<sup>1.</sup> Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.

# **Proportion of Adult and Young Smokers Who Have Made a Quit Attempt Using Proven Cessation Methods**

Goal area 3	Promoting quitting among adults and young people						
Outcome 11	Increased number of quit attempts and quit attempts using proven cessation methods						
What to measure	The proportion of adult and young smokers who have stopped smoking for at least 1 day during the previous 12 months using proven cessation methods in an attempt to quit smoking entirely. Examples of proven cessation strategies are (1) FDA-approved pharmacotherapies, (2) in-person individual counseling, (3) counseling from telephone quitlines, and (4) stop-smoking classes.						
Why this indicator is useful	Evidence shows that among adult tobacco users, the use of effective such as counseling or FDA-approved pharmaceuticals can double to unassisted quit attempts. Less evidence is available concerning but preliminary studies suggest that cognitive-behavioral intervent approach.	quit rate young to	s compared obacco users,				
Example data	► Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003						
source(s)	➤ Youth Tobacco Survey (YTS): Supplemental Questions, 2004						
Population group(s)	▶ Smokers aged 18 years or older						
	► Smokers aged less than 18 years						
Example survey question(s)	From ATS  During the past 12 months, have you stopped smoking for one day because you were trying to quit smoking?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused						
	The last time you tried to quit smoking, did you use any other assis as classes or counseling?  ☐ Yes ☐ No	stance sı	ıch				
	If yes, ask						
	Did you use? (Check all that apply)  1. A stop-smoking clinic or class  2. A telephone quitline  3. One-on-one counseling from a doctor or nurse  4. Self-help material, books or videos  5. Acupuncture  6. Hypnosis  7. Other, specify	Yes	No				
	The last time you tried to quit smoking, did you use the nicotine patch, gum, or any other medication to help you quit?						
	Did you use?  1. Nicotine gum  2. A patch  3. A nasal spray  4. An inhaler  5. Buproprion, Zyban,® Wellbutrin®  5. Other, specify						

Example survey question(s) (cont.)	From YTS Supplement Have you ever pa □ I have never us	rticipated in	a program at sc □ Yes □ No	hool to help	you quit using t	obacco?
Comments	This example YTS Supplemental question could be expanded to include types of cessation methods, as well as the number of quit attempts in the year (see ATS questions).					
Rating	Overall quality low high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>←</b> ○○(	● → better	

- 1. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services; 2000.
- 2. Milton MH, Maule CO, Yee SL, Backinger C, Malarcher AM, Husten CG. Youth tobacco cessation: a guide for making informed decisions. Atlanta, GA: Centers for Disease Control and Prevention; 2004.

## **Increased Price of Tobacco Products**

Evidence is strong that raising the price of cigarettes encourages smokers to quit and reduces smoking prevalence and tobacco use. A comprehensive review of studies of the effect of tobacco price increases shows that a 10% increase in price yields a 4% decrease in tobacco consumption (approximately 2% of which is due to reduced consumption and the remaining 2% is due to quitting smoking). Certain populations—such as adolescents, young adults, and low-income smokers—are particularly price sensitive and are more likely to quit or cut back in response to cigarette price increases than other populations. Even the tobacco industry recognizes the effect of price increases, as revealed by an internal Philip Morris document stating, "A high cigarette price, more than any other cigarette attribute, has the most direct impact on the share of the quitting population. Price, not tar level, is the main driving force for quitting."

Listed below is the indicator associated with this outcome:

▶ **3.12.1** Amount of tobacco product excise tax

#### References

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- 2. Centers for Disease Control and Prevention. Responses to cigarette prices by race/ethnicity, income, and age groups—United States, 1976–1993. *Morbidity and Mortality Weekly Report*. 1998;47(29):605–9.
- 3. Schwab C. Cigarette attributes and quitting. Philip Morris Doc. 2045447810, March 4, 1993. Available from: http://www.pmdocs.com. Accessed December 2004.

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## **Increased Price of Tobacco Products**

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality low → high	Strength evices	Unit of the control o	Face	practice	and the desired
3.12.1	Amount of tobacco product excise tax		\$	•	•		

<b>Amount of Toba</b>	cco Product Ex	cise Tax					
Goal area 3	Promoting quittir	Promoting quitting among adults and young people					
Outcome 12	Increased price of	Increased price of tobacco products					
What to measure		(1) The state excise tax per pack of cigarettes and (2) the percentage of the total price of a pack of cigarettes that is attributable to tax					
Why this indicator is useful	Increasing the tax especially among ing cigarette excis although maintai inflation. <sup>1,2</sup>	the most prices tax is an eff	ce-sensitive pop fective method	oulations (e.go) of increasing	g., young people g the real price of	). <sup>1,2</sup> Increas- f cigarettes,	
Example data source(s)		e at: http://w	ww.cdc.gov/tol	l Evaluation pacco/STAT	(STATE) system Esystem	ı	
	<ul> <li>Campaign For Tobacco-Free Kids (CTFK)</li> <li>Information available at: http://tobaccofreekids.org/research/factsheets</li> </ul>						
	State departm	ents of reven	ue				
Population group(s)	Not applicable. T tax on tobacco pr		is best measure	d by trackin	g and monitorin	g state excise	
Example survey question(s)	Not applicable						
Comments	States can also ind "scanner data" (d on product price, be cost prohibitiv	lata obtained brand, and p	from product b	ar codes), w	hich provide inf	ormation	
	To gather more couse of other tobac loose tobacco (rol	cco products s					
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		\$					
				<b>←</b> ○○	● ◆ better		

- 1. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 2. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

## **Increased Cessation Among Adults and Young People**

Scientific evidence shows that stopping smoking yields major and immediate health benefits. Former smokers live longer than smokers and they have a decreased risk of lung cancer, other cancers, heart attack, stroke, and chronic lung disease. In addition, newborns of women who stop smoking before pregnancy or during the first 3 months of pregnancy have birth weights that are the same as those of nonsmokers. Quitting even later than 3 months in pregnancy confers some benefit. Regardless of the age at which they stop smoking, former smokers live longer and frequently healthier lives than smokers. The excess risk of death from smoking begins to decrease shortly after cessation and continues to decrease for at least 10–15 years.

Listed below are the indicators associated with this outcome:

- ▶ 3.13.1 Proportion of smokers who have sustained abstinence from tobacco use
- ▶ 3.13.2<sup>NR</sup> Proportion of recent successful quit attempts

### Reference

1. U.S. Department of Health and Human Services. *The health benefits of smoking cessation: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1990. CDC Publication No. 90-8416.

### For Further Reading

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▶ Outcome 13

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## **Increased Cessation Among Adults and Young People**

## Indicator Rating ←○○● ●→ better

Number	Indicator	Overall quality	Streng enter	University of the state of the	Face	practice	arcented .
3.13.1	Proportion of smokers who have sustained abstinence from tobacco use	<del></del>	\$\$	•	•	•	
3.13.2 <sup>NR</sup>	Proportion of recent successful quit attempts		Ø	Ø	Ø	Ø	$\Diamond$

 <sup>○</sup> Denotes no data.

NR Denotes an indicator that is not rated (see Appendix B for an explanation).

<b>Proportion of Sr</b>	nokers Who Have Sustained Abstinence from Tobacco Use					
Goal area 3	Promoting quitting among adults and young people					
Outcome 13	Increased cessation among adults and young people					
What to measure	Proportion of former smokers who have sustained abstinence from tobacco use for 6 months or longer <sup>1</sup>					
Why this indicator is useful	The longer the time since a person smoked, the more likely that person will continue not smoking. <sup>2</sup>					
Example data	▶ Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003					
source(s)	<ul> <li>Behavioral Risk Factor Surveillance System (BRFSS): Tobacco Use Prevention Module, 2002</li> </ul>					
	▶ Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004					
Population group(s)	Former smokers aged 18 years or older					
	Former smokers aged less than 18 years					
Example survey	From ATS and BRFSS					
question(s)	About how long has it been since you last smoked cigarettes regularly?  Within the past month (0 to 1 month ago)  Within the past 3 months (1 to 3 months ago)  Within the past 6 months (3 to 6 months ago)  Within the past year (6 to 12 months ago)  Within the past 5 years (1 to 5 years ago)  Within the past 15 years (5 to 15 years ago)  15 or more years ago  Don't know/Not sure  Refused					
	From YTS					
	When was the last time you smoked a cigarette, even one or two puffs    I have never smoked even one or two puffs   Earlier today   Not today but sometime during the past 7 days   Not during the past 7 days but sometime during the past 30 days   Not during the past 30 days but sometime during the past 6 months   Not during the past 6 months but sometime during the past year   1 to 4 years ago   5 or more years ago  When you last tried to quit, how long did you stay off cigarettes?   I have never smoked cigarettes   I have never tried to quit   Less then a day   1 to 7 days   More than 7 days but less than 30 days   30 days or more but less than 6 months   6 months or more but less than a year   1 year or more					

#### **Comments**

Evaluators could also ask the example questions of current smokers regarding their last quit attempt or longest quit attempt, since an increase in the duration of a quit attempt (even if the smoker begins smoking again) could indicate progress toward cessation.

This indicator can be used as a proxy for smokers who have "permanently quit."

Evaluators can determine a proxy for "former smokers" using YTS data by combining the variable of lifetime smoking (≥ 100 cigarettes) and current cigarette smoking (smoked zero cigarettes during the past 30 days).

Evaluators could also modify the example questions to measure sustained abstinence from all tobacco products.

Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice
		\$\$				
				<b>←</b> ○○(	● → better	

- 1. Schwartz JL. Review and evaluation of smoking cessation methods: the United States and Canada, 1978–1985. Bethesda, MD: National Cancer Institute; 1987.
- 2. Hughes JR, Keely JP, Niaura RS, Ossip-Klein DJ, Richmond RL, Swan GE. Measures of abstinence in clinical trials: issues and recommendations. *Nicotine and Tobacco Research*. 2003;5(1):13–25. Erratum in: *Nicotine and Tobacco Research*. 2003;5(4):603.

<b>Proportion of Re</b>	ecent Successful Quit Attempts					
Goal area 3	Promoting quitting among adults and young people					
Outcome 13	Increased cessation among adults and young people					
What to measure	Proportion of smokers who made a quit attempt in the previous 12 months and are still not smoking					
Why this indicator is useful	It is important to measure the proportion of recent successful quit attempts to document progress toward increased cessation. <sup>1</sup>					
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Behavioral Risk Factor Surveillance System (BRFSS), 2002</li> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> </ul>					
Population group(s)	<ul><li>Smokers aged 18 years or older</li><li>Smokers aged less than 18 years</li></ul>					
Example survey question(s)	From ATS and BRFSS  Have you smoked at least 100 cigarettes in your entire life?  Yes No Don't know/Not sure Refused  Do you now smoke cigarettes every day, some days, or not at all?					
	<ul> <li>□ Everyday</li> <li>□ Some days</li> <li>□ Not at all</li> <li>□ Refused</li> <li>□ During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?</li> <li>□ Yes</li> <li>□ No</li> <li>□ Don't know/Not sure</li> <li>□ Refused</li> </ul>					
	From YTS  During the past 30 days, on how many days did you smoke cigarettes?  0 days 1 or 2 days 3 to 5 days 6 to 9 days 10 to 19 days 20 to 29 days All 30 days  How many times during the past 12 months have you stopped smoking for one day or longer because you were trying to quit smoking? I have not smoked in the past 12 months I have not tried to quit 1 time 2 times 3 to 5 times 6 to 9 times 10 or more times					

Example survey	When you last trie	When you last tried to quit, how long did you stay off cigarettes?							
question(s) (cont.)	☐ I have never smoked cigarettes								
,	☐ I have never tri								
	☐ Less than a day	7							
	<ul><li>☐ 1 to 7 days</li><li>☐ More than 7 da</li></ul>	ivs hut less th	an 30 days						
	☐ 30 days or mor								
	☐ 6 months or mo								
	☐ 1 year or more								
Comments	Evaluators should ask all three example questions of respondents in the target population to obtain the information necessary to measure this indicator.								
	Evaluators may also want to report the percentage of <i>ever-smokers</i> that have quit. This percentage is calculated by dividing the number of <i>former smokers</i> by the number of <i>ever-smokers</i> .								
This indicator was not rated by the panel of experts, and this provided. See Appendix B for an explanation.					nerefore no ratin	g information			
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice			
		$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$	$\bigotimes$			
	→ ○ ○ ● → better								
	◯ Denotes no data	a.							

#### Reference

1. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.

 $<sup>^{\</sup>mbox{\scriptsize NR}}$  Denotes an indicator that is not rated (see Appendix B for an explanation).

## **Reduced Tobacco-use Prevalence and Consumption**

Evidence is strong that tobacco use, particularly cigarette smoking, is the leading cause of preventable illness and death in the United States. Cigarette smoking is responsible for more than 440,000 deaths each year, or one of every five deaths. In the United States, nearly one in four adults and about one in four teenagers smoke. It current trends continue, 25 million people (including 5 million of today's children) will die prematurely of a smoking-related disease. Paralleling this enormous health and personal toll is the economic burden of tobacco use: more than \$75 billion in medical expenditures and another \$80 billion in indirect costs resulting from lost productivity. Reducing the number of smokers is the best strategy for decreasing preventable disease and death.

Listed below are the indicators associated with this outcome:

- ▶ **3.14.1** Smoking prevalence
- ▶ **3.14.2** Prevalence of tobacco use during pregnancy
- ▶ **3.14.3** Prevalence of postpartum tobacco use
- ▶ 3.14.4 Per capita consumption of tobacco products

#### References

Outcome 14

- 1. Centers for Disease Control and Prevention. *Targeting tobacco use: the nation's leading cause of death, 2004* [At a Glance]. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion; 2004. Available from: http://www.cdc.gov/nccdphp/aag/aag\_osh.htm. Accessed March 2005.
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- 4. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 5. U.S. Department of Health and Human Services. *The health consequences of smoking: cardiovascular disease. A report of the Surgeon General.* Atlanta, GA: Centers for Disease Control; 1983. PHS Publication No. 84-50204.
- 6. U.S. Department of Health and Human Services. *The health consequences of smoking: cancer. A report of the Surgeon General.* Atlanta, GA: Centers for Disease Control; 1982. PHS Publication No. 82-50179.

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- U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- U.S. Department of Health and Human Services. *The health benefits of smoking cessation: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1990. CDC Publication No. 90-8416.

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## Outcome 14

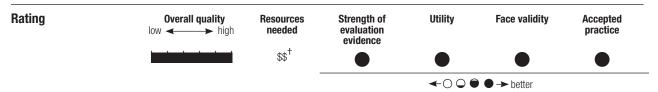
## **Reduced Tobacco-use Prevalence and Consumption**

## Indicator Rating ←○○ ● ● → better

Number	Indicator	Overall quality	Streng evices	Uthis defice	Facever	practice practice	acepted .
3.14.1	Smoking prevalence		\$\$ <sup>†</sup>		•	•	•
3.14.2	Prevalence of tobacco use during pregnancy		\$\$				
3.14.3	Prevalence of postpartum tobacco use		\$\$\$	•			
3.14.4	Per capita consumption of tobacco products		\$				•

<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

<b>Smoking Preval</b>	ence
Goal area 3	Promoting quitting among adults and young people
Outcome 14	Reduced tobacco-use prevalence and consumption
What to measure	Proportion of adults who have ever smoked at least 100 cigarettes in their lives and who smoke every day or some days <sup>1</sup>
	Proportion of young people who have smoked on at least 1 day during the previous $30~\mathrm{days^2}$
Why this indicator is useful	Tobacco use remains the leading preventable cause of death and disease in the United States, resulting in more than 440,000 deaths each year. <sup>3</sup> Although smoking prevalence continues to decline, nearly one in four adults and about one in four teenagers smoke. <sup>4</sup> Reducing the number of smokers is the best strategy for decreasing preventable disease and death. <sup>6-8</sup>
Example data source(s)	<ul> <li>Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003</li> <li>Behavioral Risk Factor Surveillance System (BRFSS), 2003</li> <li>Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004</li> <li>CDC Youth Risk Behavior Surveillance System (YRBSS), 2003</li> </ul>
Population group(s)	<ul> <li>Adult smokers aged 18 years or older</li> <li>Young smokers aged less than 18 years</li> </ul>
Example survey question(s)	From ATS and BRFSS  Have you smoked at least 100 cigarettes in your entire life?  ☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused  Do you now smoke cigarettes everyday, some days, or not at all?  ☐ Everyday ☐ Some days ☐ Not at all ☐ Refused
	From YTS and YRBSS  During the past 30 days, on how many days did you smoke cigarettes?  □ 0 days □ 1 or 2 days □ 3 to 5 days □ 6 to 9 days □ 10 to 19 days □ 20 to 29 days □ All 30 days
Comments	To gather more complete data on tobacco use, evaluators can also ask questions about the use of other tobacco products such as spit tobacco (smokeless), bidis, small cigars, and loose tobacco (roll-your-own).



<sup>†</sup> Denotes low agreement among reviewers: that is, fewer than 75% of the valid ratings for this indicator were within one point of each other (see Appendix B for an explanation).

- 1. Centers for Disease Control and Prevention. Prevalence of current cigarette smoking among adults and changes in prevalence of current and some-day smoking—United States, 1996–2001. *Morbidity and Mortality Weekly Report*. 2003;52(14):303–7.
- Centers for Disease Control and Prevention. Cigarette use among high school students—United States, 1991–2003. Morbidity and Mortality Weekly Report. 2004;53(23);499–502.
- Centers for Disease Control and Prevention. Targeting tobacco use: the nation's leading cause of death, 2004 [At a Glance].
   Atlanta, GA: Centers for Disease Control and Prevention; 2004. Available from: http://www.cdc.gov/nccdphp/aag/aag\_osh.htm. Accessed March 2005.
- 4. Centers for Disease Control and Prevention. State laws on tobacco control—United States, 1998. *Morbidity and Mortality Weekly Report CDC Surveillance Summaries*. 1999;48(SS-3):21–40.
- Centers for Disease Control and Prevention. Projected smoking-related deaths among youth—United States. Morbidity and Mortality Weekly Report. 1996;45(44):971–4.
- 6. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 7. U.S. Department of Health and Human Services. *The health consequences of smoking: cardiovascular disease. A report of the Surgeon General.* Atlanta, GA: Centers for Disease Control; 1983. PHS Publication No. 84-50204.
- 8. U.S. Department of Health and Human Services. *The health consequences of smoking: cancer. A report of the Surgeon General.* Atlanta, GA: Centers for Disease Control; 1982. PHS Publication No. 82-50179.

Prevalence of To	obacco Use Dur	ing Pregna	ancy				
Goal area 3	Promoting quittir	ıg among adı	ılts and young	people			
Outcome 14	Reduced tobacco-	Reduced tobacco-use prevalence and consumption					
What to measure	Proportion of pre	Proportion of pregnant women who smoked during pregnancy					
Why this indicator is useful	Smoking is associated with a variety of complications before, during, and after pregnancy, including ectopic pregnancy, premature membrane rupture, placental complications, preterm delivery, stillbirth, neonatal and perinatal mortality, increased rates of hospital care, and low birth weight. Reducing maternal smoking prevalence can lead to a reduced probability of these complications.						
Example data	▶ Birth certificat	e data					
source(s)	CDC Pregnan	cy Risk Asses	sment Monitor	ing System (	PRAMS), Phase	4, 2000–2003	
Population group(s)	Not applicable. This indicator is best measured by examining birth certification vital statistic records.					ificate data	
	Pregnant won	nen					
Example survey	Birth certificate data are available from states' vital statistics data.						
question(s)	From PRAMS						
	In the <i>last 3 month</i> did you smoke orcigarette ☐ Less than 1 cig ☐ I didn't smoke ☐ I don't smoke	n an average o	day?	any cigarette	es or packs of cig	arettes	
Comments	Using birth certifi pregnancy due to data regarding sn	underreport	ing.¹ Surveys su				
	To gather more co						
Rating							
	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		\$\$					
	—————————————————————————————————————						

<sup>1.</sup> U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.

Prevalence of P	ostpartum Toba	cco Use						
Goal area 3	Promoting quittin	g among adu	ılts and young p	people				
Outcome 14	Reduced tobacco-	Reduced tobacco-use prevalence and consumption						
What to measure	Proportion of women who use tobacco in the postpartum period (6 months after giving birth)							
Why this indicator is useful	Although smoking prevalence among women decreases significantly during pregnancy, most mothers resume smoking within a year of delivery. <sup>1,2</sup> In such cases, not only is the health of the mother affected, but also that of her child; exposure to secondhand smoke is a major cause of lower respiratory infections, asthma, and chronic middle inner ear infections among infants and children. <sup>2,3</sup>							
Example data source(s)	CDC Pregnancy Risk Assessment Monitoring System (PRAMS), Phase 4, 2000–2003							
Population group(s)	Pregnant women							
Example survey question(s)	Are you currently pregnant? □ Yes □ No □ Don't know/Not sure □ Refused to answer  Have you given birth in the past 6 months?							
	☐ Yes ☐ No ☐ Don't know/Not sure ☐ Refused to answer							
	From PRAMS  How many cigarettes or packs of cigarettes do you smoke on an average day now?  □cigarettes ORpacks □ Less than 1 cigarette a day □ I didn't smoke □ I don't smoke							
Comments	The authors create pregnancy status. Evaluators may wout pregnancy int partum period.	The question ant to differe	s are not found entiate between	in any comr women who	monly used data continued smol	source.		
Rating	Overall quality	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice		
		\$\$\$						
				<b>←</b> ○○	● → better			

- 1. U.S. Department of Health and Human Services. *The health benefits of smoking cessation*. Atlanta, GA: Centers for Disease Control; 1990. CDC Publication No. 90-8416.
- 2. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.
- 3. National Cancer Institute. Health effects of exposure to environmental tobacco smoke: the report of the California Environmental Protection Agency. *Smoking and Tobacco Control Monograph No. 10*. Bethesda, MD: National Cancer Institute; 1999. NIH Publication No. 99-4645.

<b>Per Capita Cons</b>	sumption of Tob	acco Prod	ucts				
Goal area 3	Promoting quittir	Promoting quitting among adults and young people					
Outcome 14	Reduced tobacco-	use prevalen	ce and consum	ption			
What to measure	The number of cig	garette packs	sold per adult a	aged 18 year	s or older in the	state	
Why this indicator is useful		Decreases in overall tobacco consumption indicate the success of a comprehensive tobacco control program. <sup>1,2</sup>					
Example data source(s)	<ul> <li>CDC State Tobacco Activities Tracking and Evaluation (STATE) system         Data available at: http://www.cdc.gov/tobacco/STATEsystem     </li> <li>State departments of revenue</li> </ul>						
Population group(s)	Not applicable. This indicator is best measured by examining tax records to assess the states' sales of cigarettes.						
Example survey question(s)	Not applicable						
Comments	Evaluators need t			nption of ciga	arettes, smokeles	ss tobacco,	
Rating	Overall quality low ← → high	Resources needed	Strength of evaluation evidence	Utility	Face validity	Accepted practice	
		\$					
				<b>←○○</b>	● → better		

- 1. Farrelly MC, Pechacek TF, Chaloupka FJ. The impact of tobacco control expenditures on aggregate cigarette sales: 1981–2000. *Journal of Health Economics*. 2003;22(5):843–59. Erratum in: *Journal of Health Economics*. 2004;23(2):419.
- 2. Orzechowski W, Walker RC. *The tax burden on tobacco: historical compilation.* Volume 38. Arlington, VA: Orzechowski and Walker; 2003.

## **Future Directions**

In this publication, we discuss key outcome indicators to evaluate comprehensive state tobacco control programs. Outcome indicators are important for program planning, monitoring, and evaluation. In addition, increasing demands for timelier program performance measures and the need to synthesize existing evidence for evaluation of tobacco control programs contributed to the need for this publication.

The Centers for Disease Control and Prevention's (CDC's) future plans include (1) developing process indicators for evaluating comprehensive tobacco control programs, (2) developing process and outcome indicators for evaluating activities that address tobacco-related disparities (National Tobacco Control Program [NTCP] goal area 4), and (3) conducting research and building scientific evidence for indicators and theories related to tobacco control.

#### **Process Indicators**

Process indicators are used to measure success in program planning and implementation. Indicators in this area help to answer questions about the planning, infrastructure, and implementation of a program's activities and the extent to which these activities are reaching the target population. Process indicators are also used to understand why outcomes were or were not achieved as planned. For example, program managers can learn whether implementation of a program component could be improved or whether a new strategy is needed to overcome an unexpected obstacle (e.g., political opposition).

In the NTCP logic models, the emphasis is on environmental, behavioral, and health outcomes; it is assumed that the capacity and infrastructure needed for goal-specific activities are, for the most part, in place. However, for fully informed program planning and evaluation, the program's capacity, infrastructure, and processes must also be assessed. To do so, well-defined indicators of these aspects of the program are needed. Although considerable work has been completed on defining indicators that can be used by program planners and evaluators for measuring program capacity, working with CDC partners to define these indicators in a meaningful and systematic way is necessary.

## Indicators for NTCP Goal Area 4: Eliminating Tobacco-related Disparities

Unlike activities to prevent initiation of tobacco use by young people, eliminate nonsmokers' exposure to secondhand smoke, and promote quitting among adults and young people, activities to identify and eliminate tobacco-related disparities lack a definitive evidence base for implementing a program and identifying target outcomes. Sufficient public health knowledge and experience exists, however, to provide a well-founded framework for approaching tasks associated with improving

the public health infrastructure and related capacities so that tobacco control programs can address tobacco-related disparities among specific populations.

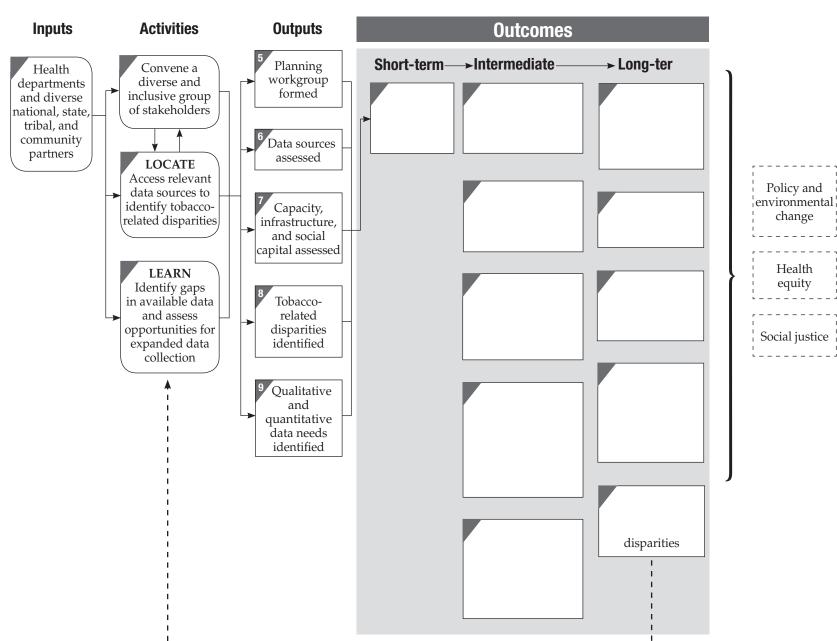
Building on successful capacity-building and infrastructure activities during the past 10 years, CDC began the Disparities Pilot Training Project, an initiative to improve the state and territorial public health capacity and infrastructure needed to address tobacco-related disparities. To assist health departments and their partners with planning and implementing strategic activities to identify and eliminate tobacco-related disparities, CDC prepared a draft logic model that is based on state practices, published scientific findings, and input from external partners (see draft logic model, page 271). Instead of focusing on traditional health outcomes, this logic model focuses on the minimum capacity needed by state and territorial health departments to pursue strategic activities that would identify and eliminate tobacco-related disparities.

In cooperation with its partners, CDC will continue the task of developing an approach to identifying, evaluating, and eliminating tobacco-related disparities. The draft logic model is a window to the work that is being done now and that needs to continue.

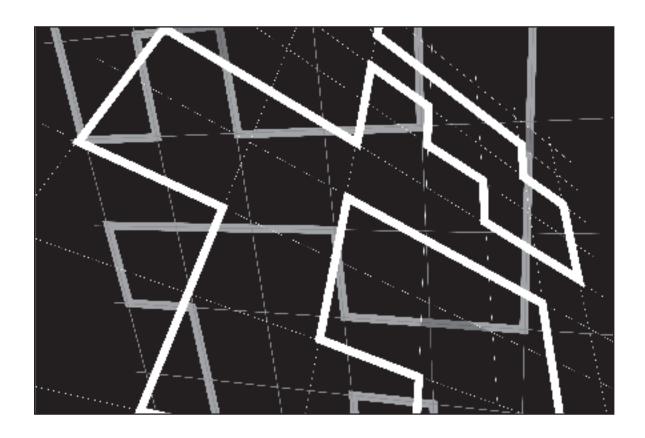
### **Research Opportunities**

We encourage researchers outside CDC who read this publication to identify research opportunities. For example, where the strength of the evidence for using certain indicators is low, expanding that evidence base would be beneficial. Researchers might also consider developing new evaluation designs that could (1) further refine theories related to tobacco control or (2) identify other outcome indicators, especially indicators for program components that need additional research or scientific evidence to support them. In addition, researchers might work on developing methods for measuring indicators for which no well-established methods are currently available.

## **Identifying and Eliminating Tobacco-Related Disparities**



# **Appendices and Glossary**



## **National Tobacco Control Program**

## An Overview

The Centers for Disease Control and Prevention (CDC) is the lead federal agency for comprehensive tobacco prevention and control. CDC develops, conducts, and supports strategic activities to protect the public's health from the harmful effects of tobacco use.

To carry out its mission, CDC:

- Expands the science base for effective tobacco control.
- Builds sustainable capacity and infrastructure for comprehensive tobacco control programs and policies.
- ► Communicates information about tobacco issues to policy makers, health professionals, and the public.
- ▶ Provides technical assistance on developing, implementing, and evaluating tobacco control policies, strategies, and initiatives.
- ▶ Builds strategic partnerships with national and international organizations.

Through its Office on Smoking and Health, CDC manages the National Tobacco Control Program (NTCP), which funds comprehensive tobacco control programs in state health departments and territories. NTCP-funded programs work to implement the strategies described in the following publications:

- ▶ Best Practices for Comprehensive Tobacco Control Programs¹
- ▶ Reducing Tobacco Use: A Report of the Surgeon General²
- ► The Guide to Community Preventive Services: Tobacco Use Prevention and Control³
- ► Treating Tobacco Use and Dependence: Clinical Practice Guideline<sup>4</sup>
- ► The Health Consequences of Smoking: A Report of the Surgeon General<sup>5</sup>
- ▶ Preventing Tobacco Use Among Young People: A Report of the Surgeon General<sup>6</sup>
- ▶ Women and Smoking: A Report of the Surgeon General<sup>7</sup>
- ► Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General<sup>8</sup>

CDC created NTCP to encourage coordinated, nationwide activities to reduce tobacco-related disease and death. NTCP provides funds and technical support to all 50 states, the District of Columbia, seven U.S. territories, and eight national networks of Indian tribes, Alaskan Natives, and other minority ethnic groups.

## **NTCP's Goals**

The overall goal of NTCP's comprehensive tobacco control programs is to reduce tobacco-related disease, disability, and death. This goal is subdivided into four goal areas:

- ▶ Preventing initiation of tobacco use among young people.
- ▶ Eliminating nonsmokers' exposure to secondhand smoke.
- ▶ Promoting quitting among adults and young people.
- ▶ Identifying and eliminating tobacco-related disparities.

## The Four Strategies of the NTCP

- ▶ Population-based community interventions.
- ▶ Countermarketing.
- ▶ Public policies and regulations to reduce tobacco use.
- ▶ Surveillance and evaluation.

For more information on the NTCP go to http://www.cdc.gov/tobacco.

- 1. Centers for Disease Control and Prevention. *Best practices for comprehensive tobacco control programs*. Atlanta, GA: Centers for Disease Control and Prevention; 1999.
- 2. U.S. Department of Health and Human Services. *Reducing tobacco use: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 2000.
- 3. Task Force on Community Preventive Services. The guide to community preventive services: tobacco use prevention and control. *American Journal of Preventive Medicine*. 2001;20(Suppl 2):1–88.
- 4. Fiore MC, Bailey WC, Cohen SJ, Dorfman SF, Goldstein MG, Gritz EG, Heyman RB, Jaén CR, Kottke TE, Lando HA, Mecklenburg RE, Mullen PD, Nett LM, Robinson L, Stitzer ML, Tommasello AC, Villejo L, Wewers ME. *Treating tobacco use and dependence: clinical practice guideline*. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service; 2000.
- 5. U.S. Department of Health and Human Services. *The health consequences of smoking: a report of the Surgeon General*. Atlanta, GA: Centers for Disease Control and Prevention; 2004.
- 6. U.S. Department of Health and Human Services. *Preventing tobacco use among young people: a report of the Surgeon General.* Atlanta, GA: Centers for Disease Control and Prevention; 1994.
- 7. U.S. Department of Health and Human Services. *Women and smoking: a report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001.

8. U.S. Department of Health and Human Services. Tobacco Use Among U.S. Racial/ Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: a report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health; 1998.

# **Selecting and Rating the Indicators**

The Centers for Disease Control and Prevention (CDC) began producing this publication by appraising the logic models for three of the four goal areas of the National Tobacco Control Program (NTCP):

- ▶ Preventing initiation of tobacco use among young people.
- ▶ Eliminating nonsmokers' exposure to secondhand smoke.
- ▶ Promoting quitting among adults and young people.

As a result of the appraisal, our previously published logic models were updated, and the new versions are published here.<sup>1</sup>

#### **Selecting the Indicators and Data Sources**

After an extensive review of published and fugitive literature, we selected candidate indicators for the outcome components of each NTCP goal area's logic model. Then we reviewed the scientific evidence for an association between the candidate indicators and the outcome components in the NTCP logic models. For example, we looked for evidence that an increase in levels of support for policies, and enforcement of policies, to decrease young people's access to tobacco (indicator 1.6.4) is associated with a reduction in the percentage of teenagers who experiment with tobacco (outcome 10 in goal area 1).

Next, we selected example data sources and survey questions for each indicator. One important criterion used to select example data sources was their easy availability to state tobacco control programs. Such data sources include the Behavioral Risk Factor Surveillance System; Adult Tobacco Survey: CDC-Recommended Questions; Youth Tobacco Survey: CDC-Recommended Questions; Current Population Survey: Tobacco Use Supplement; CDC Pregnancy Risk Assessment Monitoring System; and the CDC Youth Risk Behavior Surveillance System.

The selected survey questions come primarily from these survey or surveillance systems. However, if these sources had no appropriate questions to measure the indicator, we developed example questions or chose questions from national or state surveys and evaluation protocols (e.g., Legacy Media Tracking Survey) that are not widely used by state tobacco control programs, although they are available to them.

#### **Rating the Indicators**

We assembled a panel of experts (whose names are listed in Appendix C) to rate the final set of candidate indicators. The principal reason for having experts rate the indicators was to have them advise CDC on which indicators were key for evaluation of comprehensive state tobacco control programs. The experts also assessed the indicators on the basis of several criteria and advised us about which data sources are most

useful for tracking these indicators. In developing the rating process, we first did a pilot test. As a result of that test, we refined the indicator rating process, instructions to raters, and supportive materials (see page 284).

The panelists were asked to rate each of the 136 candidate indicators separately according to the following criteria:

- ▶ **Strength of the evaluation evidence.** The extent to which the literature supports use of the indicator for the evaluation of comprehensive, statewide tobacco control programs, as characterized by the logic models.
  - Reference citations on each indicator rating form were intended to provide guidance for reviewer ratings.
- ▶ Resources needed for data collection and analysis. The amount of funds, time, and effort needed to collect reliable and precise data on the indicator and to analyze primary or secondary data.
  - In making their judgments, reviewers were instructed to consider the availability of existing data (e.g., archival records or other secondary data) and the difficulties related to sampling and data collection methods. We reminded reviewers that many state health departments do not have extensive data collection systems for use in comprehensive evaluations of their tobacco control programs. However, all states have access to data on adults from the Behavioral Risk Factor Surveillance System, as well as periodic data on attitudes and policies through the Tobacco Use Supplements of the Current Population Survey. In addition, CDC synthesizes behavioral and policy data on the State Tobacco Activities Tracking and Evaluation (STATE) system. The resources needed for data collection and analysis are less when data are already available than when new data must be collected and analyzed.
- ▶ **Utility.** The extent to which the indicator would help to answer key evaluation questions for a state comprehensive tobacco control program.
  - Although many indicators are also appropriate and useful for evaluating local tobacco control programs, reviewers were asked to consider the utility of each indicator for evaluating state tobacco control programs.
- ▶ Face validity. The extent to which judgments about and measurements of the indicator would appear valid and relevant to policy makers and other decision makers who use the results of an evaluation to justify their continued support.
- ▶ **Uniqueness.** Whether the indicator contributes distinctive information for the evaluation of tobacco control efforts.
  - Reviewers who believed that an indicator was not unique were instructed to identify the redundant indicator.
- ▶ Conformity with accepted practice. The degree to which use of the indicator as a measure of a tobacco control program's progress is consistent with accepted, real-world tobacco control practice.
- ▶ Overall quality. A global rating that reflects the reviewer's opinion of the overall quality of the indicator.

▶ Summary rating. The reviewer's opinion of how essential a particular indicator is for the evaluation of comprehensive, statewide tobacco control programs.

After the rating process, 31 indicators were merged, 4 eliminated, and 7 added, leaving a total of 120 indicators for which we provide information in this publication.

In addition, we asked the expert raters to:

- ▶ Comment on the data sources and survey questions that CDC had selected for each proposed indicator.
- ▶ Suggest alternative data sources and questions.
- ▶ Suggest additional indicators that would be useful for evaluation of comprehensive state tobacco control programs.

Each expert used a separate rating form for each indicator (see end of this appendix for a reprint of the rating form and rater instructions).

The form has three sections:

- ▶ A summary of information on CDC's proposed indicator and logic model component to which it relates, suggested data sources and survey questions, and (when available) a reference to the scientific evidence supporting the use of the indicator.
- ▶ A rating scale for each criterion.
- Space for reviewer comments.

We also encouraged the experts to write notes on the rating forms and to provide additional information, references, or other documentation.

#### **Analysis and Synthesis of Data from the Expert Reviews**

After CDC received the completed rating forms from the experts, all data (including written comments) were entered into an electronic file. We adjusted for multiple responses, skipped items, and coding errors. If, for example, a rater circled more than one response for a criterion, we averaged the responses unless the rater had noted a preference for one response over another. Skipped items and "don't know" responses were combined into a "no answer" category. All data were analyzed using the Statistical Analysis System (SAS v.8.02).<sup>2</sup>

For each type of rating, numerical data were analyzed in various ways. Frequency distributions of numerical data were analyzed to help us understand the raters' perceptions about the indicators. Narrative comments included on the raters' rating sheets were also reviewed to help us understand why raters gave an indicator a particularly high or low rating. To limit the effect of outliers, we used the median scores for each indicator.

After reviewing the experts' ratings, we decided to combine indicators that were originally divided by population group (e.g., young people, adults). The experts'

numeric ratings for the 31 merged indicators are not provided in this publication but are noted with NR. In addition, after reviewing the rating data and comments carefully, we eliminated four indicators that were rated "not essential" by most panel members.

CDC also reviewed the expert panelists' "resources needed" scores (their estimate of the intensity of resources required to collect and analyze data on each indicator). CDC substituted scores for six indicators that were rated by the experts. For example, the experts rated the "resources needed" criterion for indicator 1.9.12 (amount of tobacco industry campaign contributions to local and state politicians) as 2.5 out of 4. We know, however, that data about this indicator are readily available from archival sources, so we lowered the score to 1 out of 4.

The indicator rating tables include seven indicators that were not rated by the experts. Most of those were suggested by the experts themselves, and CDC used its best judgment to select which expert-proposed indicators to include. These indicators are not rated (and noted by an NR), but some information about them is provided in the indicator profiles.

Two criteria used by expert panelists were not included in the final rating tables: "uniqueness" and the "summary rating." "Uniqueness" was only used to determine redundant indicators, and we found that the "summary rating" was highly correlated with "quality."

After extensive analysis and consideration, we also decided not to use the expert panelists' assessment for the "strength of evaluation evidence" criterion because, among other reasons, several panelists were concerned that their knowledge of the scientific literature on certain areas of tobacco control was limited. Instead, ratings for this criterion are based on the findings from an independent literature review conducted by the Battelle Centers for Public Health Research and Evaluation under contract to CDC. Battelle staff reviewed 847 articles to assess the evidence supporting the use of each indicator to measure a downstream outcome of a tobacco control program.

We evaluated and scored each relevant article or report on the following factors:

#### Type of Article

One designation per article as follows:

- ▶ **Research article.** Article with new data, generally from a single study.
- ▶ **Review article.** Article with summaries of multiple published studies and no original data.
- ▶ **Background article.** Article with information relevant to the indicator but no evidence of a relationship between the indicator and outcomes.

#### Score:

Research article = 0.5 Review article = 1.0 Background article = 0.0

#### Linkage

The extent of evidence provided in the article for a link between the indicator and the expected downstream outcomes in the NTCP goal area logic models.

#### Score:

Article shows *any* evidence of link between the indicator and an expected outcome = 1.0

Article shows only evidence against a link between the indicator and expected outcome = -1.0

#### Relevance

The degree to which the article specifically focuses on the indicator.

#### Score:

Article focuses directly on the indicator = 1.0Article does not focus directly on the indicator = 0.0

#### **Study Strength**

How well the study was designed and how well it showed a link between the indicator and outcomes in the NTCP goal area logic models.

#### Score:

Article shows *strong* links between the indicator and an expected outcome = 1.0 Article shows a *weak* link = 0.5\*

These data were used to calculate the Strength of Evaluation Evidence (SEE) criterion, as follows:

 $SEE = \sum (T^*L^*R^*S)$ 

where, for each article,

**T** = article type

**L** = linkage

 $\mathbf{R}$  = relevance

**S** = study strength

The product of T\*L\*R\*S for each article was summed across all articles for each indicator. The result was translated into the relative score in the indicator rating tables, symbolized as follows:

- ▶ No data (♦): Indicators for which no studies tested an association between the indicator and a downstream outcome in one of NTCP's goal area logic models.
- No support ( $\bigcirc$ ): Indicators for which most studies that tested an association between the indicator and outcomes in the logic models found that the association was not significant (SEE score = -0.5–0.0).

<sup>\*</sup>An article that showed a weak link was given a value of 0.5 rather than 0 (zero) because a weak link is stronger than no link.

- ▶ Minimal support (○): Indicators for which roughly an equal amount of research showed a significant association as showed no association between the indicator and downstream logic model outcomes. This category also includes indicators for which studies with weak designs supported an association between the indicator and an outcome (SEE score: 0.01–0.5).
- ▶ Moderate support ( ): Indicators for which more research showed a significant association between the indicator and a logic model outcome than research showing a non-significant association. This category also includes indicators for which studies supported an association between the indicator and a downstream outcome in the logic models, but the study designs were not strong (SEE score = 0.51–2.5).
- ▶ Strong support (♠): Indicators for which research showed a strong relationship between the indicator and a logic model outcome. Included in this category are all long-term indicators because the research supporting these indicators as predictive of beneficial health effects is well established (SEE score > 2.5).

We also footnoted indicators that had low reviewer response, low agreement among reviewers, or a modified "resources needed" criterion with the following symbols:

- An asterisk (\*) indicates low reviewer response: if less than 75% of experts rated the indicator or if more than 75% of experts gave a certain criterion an invalid rating (e.g., "don't know"), we considered the indicator to have low reviewer response. A low response suggests a high degree of uncertainty among raters. An example of such an indicator is 2.3.2: Level of receptivity to media messages about secondhand smoke.
- A dagger (†) indicates a low level of agreement among reviewers: if less than 75% of the valid ratings were within one point of each other, we considered the rating to have a low level of agreement. An example of an indicator with a low level of agreement is 1.6.3: Proportion of students who would ever wear or use something with a tobacco company name or picture. This low level of agreement represents a relatively high degree of variability in the raters' responses for the criterion.
- ▶ A diamond (◊) indicates that the "resources needed" rating for this indicator was modified by CDC after the experts provided their ratings for this criterion. An example of such an indicator is 1.9.1: Extent and type of retail tobacco advertising and promotions.

#### **Review of this Publication**

This publication was peer reviewed internally at CDC and externally by program managers of state tobacco control programs and by other experts in the field of tobacco control.

# **CDC/OSH Key Indicators Report: Instructions for Expert Panel Reviewers Purpose**

CDC's Office on Smoking and Health (OSH) is developing a report intended to assist state and territorial tobacco control program evaluation efforts under the National Tobacco Control Program (NTCP). State Program Managers, State Evaluators, OSH staff, and national partners will be the primary audiences for the report. The report will aim to accomplish the following functions:

- Serve as a companion to OSH's Best Practices for *Comprehensive Tobacco Control Programs* and *Introduction to Program Evaluation for Comprehensive Tobacco Control Programs*.
- ▶ Describe key outcome indicators for evaluation of statewide, comprehensive tobacco control programs, and suggest appropriate data sources and measures for these indicators.
- ▶ Encourage states to use consistent evaluation measures and comparable data sources.
- ▶ Help OSH determine evaluation criteria for the NTCP, assess Best Practices recommendations, and provide consistent surveillance and evaluation technical assistance to states.

#### Methods

Report development began with a critical appraisal of OSH logic models for three of the four NTCP goal areas: (1) preventing initiation of tobacco use among youth; (2) eliminating nonsmokers' exposure to secondhand smoke; and (3) promoting quitting among youth and adults. The logic models (figures 1, 2, and 3) graphically display the links among input, activity, output, and short, intermediate, and long-term outcome components.

The fourth NTCP goal area—identify and eliminate disparities among population groups—will be incorporated through guidance on population-specific data collection methods and measures.

Almost every identified outcome indicator may be tracked for various population groups, including groups with high tobacco use prevalence rates or excess tobaccorelated disease morbidity and mortality. In addition, OSH is currently developing a logic model specific to this disparities goal. The primary focus is currently on identifying appropriate program activities and process measures.

The indicators are organized by CDC/OSH goal area and logic model component. Extensive review of published and fugitive literature identified candidate indicators for the outcome components of each logic model. Selection decisions were guided by a need to highlight key indicators for evaluation of statewide, comprehensive tobacco control programs. Linkages connecting antecedent and consequent indicators were reviewed for evidence of association; for example, what is the evidence that implementation of tobacco-free policies in schools is associated with "downstream" outcomes? Each goal indicator list (tables 1, 2, and 3) shows the proposed indicators and references to supportive evaluation research. However, the references provided are not intended to be a comprehensive bibliography.

Next, optimal data sources and measures were selected for each indicator. The primary criterion used to select measures was whether the data sources are readily available to state tobacco control programs. These include the Behavioral Risk Factor Surveillance System (BRFSS), CDC Adult and Youth Tobacco Surveys, and other similar surveys and surveillance data sources. Where necessary, measures were drawn from other national and state-specific surveys and evaluation protocols that are not widely used at present but are accessible to state tobacco control programs.

Finally, a pilot study was conducted to test the rating process. Refinements in the instructions, rating forms, and supportive materials were made in response to feedback from pilot study participants.

#### **Rating Process**

The principal purpose of this expert review process is to advise CDC/OSH on which of the proposed indicators are considered key for the evaluation of comprehensive state tobacco control programs, and what data sources and measures would be most useful for tracking these indicators. Reviewers are asked to do the following:

- ▶ Rate each indicator on a set of criteria.
- ▶ Comment on the data sources and measures that have been identified for each proposed indicator.
- ▶ Suggest alternative data sources and measures.
- ▶ Offer additional indicators that may be useful for state tobacco control program evaluation.

#### **Rating Form**

Each indicator is presented on a separate rating form in the same order as the indicators are listed in tables 1, 2, and 3. The rating forms have three sections:

- Summary information on the proposed indicator, including the goal area, logic model component, suggested data sources and measures, other relevant information, and a reference regarding the evidence supporting use of the indicator, where available.
- ▶ Eight rating criteria scales for reviewer response.
- Space for open-ended reviewer comments on the proposed indicator and data sources/measures.

In the summary information section on the rating forms, the data sources/measures suggested are intended only to help operationalize the indicators and do not represent a comprehensive list of all possible measures for the indicators. In several instances where existing data sources or measures have not been identified, they have been labeled generically (e.g., "State Adult Tobacco Survey") and the measure noted as "No question identified." This suggests that a measure could be added to a state-specific survey. For measures involving data collection at levels other than for an individual respondent, only the data source is identified (e.g., "Environmental scan of tobacco advertising and promotional practices in retail outlets" or "Local

level policy tracking system"). Finally, to conserve space, response options for the suggested measures have been abbreviated.

#### **Rating Criteria**

The following criteria are to be used to rate each indicator:

- 1. **Strength of the evaluation evidence**—extent to which you believe that the literature supports use of the indicator for the evaluation of comprehensive, statewide tobacco control programs, as characterized by the logic models. The reference citations included in tables 1, 2, and 3 and on each indicator rating form are intended to provide guidance in your ratings on this criterion, but your knowledge about other citations should also be used.
- 2. Data collection and analysis resource needs—your rating of the intensity of resource use (cost, time, and effort) required to collect reliable and precise measures, and to analyze appropriately primary or secondary data on the indicator. In making your judgments, please consider availability of existing data (e.g., archival records or other secondary data) and methodology and sampling frame issues. Please recognize that, with few exceptions (e.g., California, Massachusetts, Florida, Oregon, Texas, and a few others), most state health departments currently do not implement comprehensive, statewide evaluations of their tobacco control programs.

All states have access to basic prevalence data for adults from the BRFSS, periodic data on attitudes and policies through the Current Population Survey (CPS) tobacco use supplements, and School Health Education Profile (SHEP). CDC synthesizes the available state-level data on many behavioral and policy areas in the State Tobacco Activities Tracking and Evaluation System (STATE). Beyond these "common denominator" data sources, some states collect additional data through youth or adult surveys, policy tracking systems, media tracking systems, or other specific data collection methods. The intensity of resource use for data collection and analysis will obviously be less for those "common denominator" data sources than for other sources.

- 3. **Utility**—extent to which you believe that the indicator would help to answer key statewide comprehensive tobacco control program evaluation questions. Although these indicators may also be appropriate and useful for community-level evaluation, the utility criterion refers primarily to state efforts.
- 4. Face validity—your estimation of how valid the indicator would appear to be in the eyes of policy makers and decision makers who may be users of tobacco control program evaluation results.
- 5. **Uniqueness**—your opinion of whether the indicator contributes distinct information for the evaluation of tobacco control efforts. If you believe that the indicator is not unique, please note the redundant indicator in the space provided. [Note: Pilot study reviewers suggested that the best way to rate indicators on their uniqueness was to review all indicators in a given area once through, and then adjust ratings on this criterion as necessary.]
- 6. **Conformity with accepted practice**—your opinion of the degree to which use of the indicator is consistent with currently accepted, "real-world" tobacco control practice.

- 7. **Overall quality**—a summary rating that reflects your opinion of the overall quality of the indicator.
- 8. **Priority rating**—your opinion of how essential this indicator is for the evaluation of comprehensive, statewide tobacco control programs. [Note: Pilot study participants suggested that this criterion be reviewed again and adjusted once all indicators in an area have been rated.]

#### **Reviewer Comments**

In addition to providing comments and suggestions regarding the proposed indicator, data sources, and measures in the spaces provided, reviewers are encouraged to write notes anywhere on the rating forms or provide additional information, references, or other documentation, as necessary.

#### **Product**

Expert ratings of the indicators will be taken into account when determining the final list of key indicators. The report will also present information on each indicator, as in Box 1.

**Box 1: Indicator Summary (Sample)** 

**Proposed Indicator:** Proportion of youth who report never having tried a cigarette

Goal Area: Preventing Initiation of Tobacco Use Among Youth

Logic Model Component: Long-term—Reduced initiation among youth

**Definition:** Proportion of respondents under 18 years of age who report that they

have never tried even one puff of a cigarette.

**Purpose:** By employing periodic cross-sectional surveys of youth sampled from

school or communitywide frames, this indicator may be used to track the rate of initiation of cigarette smoking among youth in a given population. With sufficient sampling, initiation may be measured with good precision in various subpopulation groups to look at gender, age, geographic, and

ethnic/racial group disparities.

**Rationale:** Reduced initiation of tobacco use by youth will lower the youth smoking

prevalence rate in the population. And, if youth reach adulthood without

any tobacco use, chances are they will not initiate use as an adult.

**Demographic Group:** Youth, under the age of 18 years.

**Data Sources/Measures:** CDC Youth Tobacco Survey

Have you ever tried cigarette smoking, even one or two puffs?

Yes No

**Additional Data Needs:** Age, gender, race, ethnicity, city/county of residence.

**Limitations:** None

**Other Information:** This indicator may also encompass measurement of other forms of

tobacco use, such as smokeless tobacco.

#### References

- 1. MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. *Introduction to program evaluation for comprehensive tobacco control programs*. Atlanta, GA: Centers for Disease Control and Prevention; 2001.
- 2. SAS Institute, Inc. SAS Language reference: dictionary. Version 8. Cary, NC: SAS Institute Inc.; 1999.

### **CDC/OSH Tobacco Control Indicator Rating Form**

**Proposed Indicator:** Proportion of schools/districts with policies that regulate

display of tobacco industry promotional items (01.06.XX)

**Goal Area:** Preventing Initiation of Tobacco Use Among Youth (01)

**Logic Model Component:** Short-term—Changes in school curricula and policies (06)

Data Sources/Measures: CDC SHPPS, State School Policy and Environment (2000)

Has your [school/district] adopted a policy that prohibits students from wearing tobacco name-brand apparel or carrying merchandise with tobacco company names,

logos, or cartoon characters in it?

**Other Information:** Question modified for use with school and/or district

samples

Reference:

#### **Indicator Ratings**

a. Please circle the response number that reflects the extent to which evaluation evidence supports use of the indicator for the associated construct:

No	Minimal	Moderate	Strong	Don't
Support	Support	Support	Support	Know
1	2	3	4	0

b. Please circle the response number that reflects your estimate of the intensity of resource utilization required to collect and analyze indicator data adequately:

Low	Moderate	High	Very High	Don't
Intensity	Intensity	Intensity	Intensity	Know
1	2	3	4	0

c. Please circle the response number that reflects your rating of the utility of the indicator to answer important questions on program effectiveness and impact:

No	Low	Moderate	High	Don't
Utility	Utility	Utility	Utility	Know
1	2	3	4	0

d. Please circle the response number that reflects your estimation of how face valid the indicator would appear to be in the eyes of policy- and decision-makers:

Not at	A Little	Somewhat	Highly	Don't
All Valid	Valid	Valid	Valid	Know
1	2	3	4	0

e. Please circle the response number that reflects your opinion of whether the indicator contributes unique information for tobacco control evaluation efforts:

Unique	Not Unique	If "Not Unique" write the number(s) of the redundant indicator(s):	Don't Know
1	2		0

f. Please circle the response number that reflects your opinion of the degree to which use of the indicator is consistent with currently accepted, "real-world" tobacco control practice:

Not at all		Somewhat	Highly	Don't
Consistent		Consistent	Consistent	Know
1	2	3	4	0

g. Please circle the response number that reflects your view of the overall quality of the indicator:

Low				High	
1	2	3	4	5	

h. Please circle the response number that reflects your summary rating of how essential this indicator is for the evaluation of comprehensive state tobacco control programs:

Not Essential	Optional	Essential	
1	2	3	

#### **Reviewer Comments**

- a. Please provide any additional comments on your ratings of this indicator:
- b. If you feel there is a better indicator of this logic model construct, please specify here:

c. Please provide comments on the proposed data sources/measures for this indicator:
d. If you feel there are better data sources/measures, please specify here:

### **Expert Panel Members**

We thank the following panel of experts members (in alphabetical order) who rated the indicators. Without their generosity in sharing their expertise and donating their time, this publication would not have been possible.

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### **Data Source Indicator Table**

The following table cross-references example data sources and indicators in this publication. The example data sources do not represent all data sources available. When possible, Web addresses are provided. For additional information on tobaccorelated data sources and data collection methods, refer to *The Introduction to Program Evaluation for Comprehensive Tobacco Control Programs* or *Surveillance and Evaluation Data Resources for Comprehensive Tobacco Control Programs*.<sup>1,2</sup>

Data source	Indicator numbers	For more information
Addressing Tobacco in Managed Care (ATMC), Survey of Health Plans, 1997–1998	3.7.5; 3.9.1; 3.9.8; 3.10.1	▶ http://www.aahp.org/atmc/mainindex.cfm
Adult Tobacco Survey (ATS): CDC Recommended Questions: Core, 2003	2.3.5; 2.3.6; 2.3.7; 2.4.2; 2.4.3; 2.4.4; 2.6.1; 2.6.4; 2.7.3; 2.8.2; 2.8.3; 3.8.3; 3.9.2; 3.9.3; 3.9.5; 3.11.1; 3.11.3; 3.13.1; 3.13.2 <sup>NR</sup> ; 3.14.1	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section C: Cessation, 2003	3.7.4; 3.8.6; 3.9.2; 3.9.3	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section D: Environ- mental Tobacco Smoke, 2003	2.3.4; 2.3.7	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section F: Policy Issues, 2003	1.6.4; 1.6.5; 1.6.7 <sup>NR</sup> ; 2.3.10 <sup>NR</sup> ; 3.8.5	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
Adult Tobacco Survey (ATS): CDC Recommended Questions: Supplemental Section G: Parental Involvement, 2003	1.10.4	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
American Lung Association's State Legislated Actions on Tobacco Issues (SLATI)	1.8.1	<ul><li>http://slati.lungusa.org</li><li>See "Policy tracking"</li></ul>

Data source	Indicator numbers	For more information
American Smoking and Health Survey (ASHES), 2003	3.8.7; 3.9.5	▶ http://tobacco.rti.org/data/New/surveys.cfm
Americans for Nonsmokers' Rights (ANR)	1.8.1; 1.8.2; 1.8.3; 1.8.4; 2.4.1	<ul><li>http://www.no-smoke.org</li><li>See "Policy tracking"</li></ul>
Arizona Workplace Survey	2.4.2	<ul><li>http://www.tepp.org/evaluation</li><li>See "Worksite survey"</li></ul>
Behavioral Risk Factor Surveillance System (BRFSS), 2002	3.11.1; 3.13.2 <sup>NR</sup>	▶ http://www.cdc.gov/brfss
Behavioral Risk Factor Surveillance System (BRFSS), 2003	2.8.3; 3.14.1	http://www.cdc.gov/brfss
Behavioral Risk Factor Surveillance System (BRFSS): Tobacco Use Prevention Module, 2000	1.6.7 <sup>NR</sup> ; 2.3.7; 2.3.10 <sup>NR</sup>	▶ http://www.cdc.gov/brfss
Behavioral Risk Factor Surveillance System (BRFSS): Tobacco Use Prevention Module, 2002	3.13.1	▶ http://www.cdc.gov/brfss
Birth certificate data	3.14.2	► State vital statistics and records
California Adult Tobacco Survey CATS), 1999	2.3.4; 2.7.1; 2.7.2	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Independent Evaluation: Adult Survey, 1997	2.3.9	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Independent Evaluation: Adult Survey, 2000	2.7.5	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Independent Evaluation: Policy Enforcement Survey: Exposure to Environmental Tobacco Smoke, 2000	2.5.1; 2.5.2; 2.5.3	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Independent Evaluation: Policy Enforcement Survey: Youth Access to Tobacco, 2000	1.8.5; 1.8.6	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Independent Evaluation: Youth Survey, 2000	1.6.8 <sup>NR</sup> ; 1.7.9; 1.7.10; 2.6.5	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Tobacco Industry Monitoring Evaluation: Project SMART Money	1.9.5; 1.9.10	<ul> <li>http://www.ttac.org/enews/mailer09-30-03full.html</li> <li>See "Event sponsorship tracking system" and "Tobacco industry monitoring system"</li> </ul>

Data source	Indicator numbers	For more information
California Tobacco Use Prevention Education Evaluation: District Coordinator Survey, 2003	1.7.4	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Tobacco Use Prevention Education Evaluation: Teacher Survey, 2003	1.7.2; 1.7.4; 1.7.5	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California Youth Tobacco Survey (CA YTS), 1999	1.11.6 <sup>NR</sup>	http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm
California's BREATH (Smoke-Free Bars, Workplaces, and Communities Program)	2.6.3	▶ http://www.breath-ala.org
Campaign for Tobacco-Free Kids (CTFK)	1.12.1; 3.12.1	▶ http://www.tobaccofreekids.org
CDC Pregnancy Risk Assessment Monitoring System (PRAMS), Phase 4, 2000–2003	3.9.7; 3.14.2; 3.14.3	▶ http://www.cdc.gov/reproductivehealth
CDC School Health Profiles: Lead Health Education Teacher Question- naire (Profiles), 2002	1.7.2; 1.7.3; 1.7.4; 1.7.5	<ul> <li>Division of Adolescent and School Health, Centers for Disease Control and Prevention, (888) 231–6405 http://www.cdc.gov/HealthyYouth/index.htm</li> <li>State health departments</li> </ul>
CDC School Health Profiles: School Principal Questionnaire (Profiles), 2002	1.7.1; 1.7.6; 1.7.11; 1.9.7; 2.4.5	<ul> <li>Division of Adolescent and School Health, Centers for Disease Control and Prevention, (888) 231–6405</li> <li>http://www.cdc.gov/HealthyYouth/index.htm</li> <li>State health departments</li> </ul>
CDC State Tobacco Activities Tracking and Evaluation (STATE) system	1.8.7; 1.12.1; 2.4.6; 2.8.1; 2.8.2; 3.12.1; 3.14.4	▶ http://www.cdc.gov/tobacco/STATESystem
CDC Youth Risk Behavior Surveillance System (YRBSS), 2003	1.7.10; 1.11.2; 1.11.4; 1.11.5; 1.13.1; 1.13.2; 1.14.1; 1.14.2; 2.6.5; 2.8.2; 2.8.3; 3.11.2; 3.14.1	http://www.cdc.gov/nccdphp/dash/yrbs/ index.htm
Center for Responsive Politics (CRP)	1.9.11; 1.9.12	▶ http://www.opensecrets.org
Current Population Survey: Tobacco Use Supplement (CPS TUS), 2003	2.4.2; 2.4.3; 3.11.1	<ul> <li>http://www.riskfactor.cancer.gov/studies/ tus-cps</li> <li>http://www.census.gov/apsd/techdoc/cps/ cps-main.html</li> </ul>

Data source	Indicator numbers	For more information	
Decision Maker or Opinion Leader Survey	3.8.8	➤ State Decision Maker Tobacco Survey (California Independent Evaluation, Opinion Leader Survey), 1997 http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm	
Direct observation of employees' and patrons' behavior	2.6.3	<ul> <li>http://www.breath-ala.org</li> <li>See "California's BREATH (Smoke-Free Bars, Workplaces, and Communities Program)"</li> </ul>	
Enforcement Agency Survey	1.8.5; 1.8.6; 2.5.1; 2.5.2; 2.5.3	<ul> <li>California Independent Evaluation: Policy Enforcement Survey, Youth Access to Tobacco, 2000</li> </ul>	
Environmental scan of tobacco advertising and promotional practices in retail outlets	1.9.1; 1.9.3; 1.9.7	Operation Storefront: Youth Against Tobacco Advertising and Promotion Initiative http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm	
Event sponsorship tracking system	1.9.5	<ul> <li>Project SMART Money http://www.ttac.org/enews/ mailer09-30-03full.html#LinkF</li> <li>Rosenberg NJ, Siegel M. Use of corporate sponsorship as a tobacco marketing tool: a review of tobacco industry sponsorship in the USA, 1995–99. <i>Tob Control</i>. 2001; 10(3):239–46</li> </ul>	
Federal Election Commission (FEC)	1.9.12	<ul><li>http://www.fec.gov</li><li>See "Public records of political contributions"</li></ul>	
Legacy Media Tracking Survey (LMTS), 2003	1.6.1; 1.6.2; 2.3.1; 2.3.2; 3.8.1; 3.8.2	http://tobacco.rti.org/data/lmts.cfm	
Media Tracking Service	1.9.8; 1.9.9	<ul> <li>See "TNS Media Intelligence Competitive Media Reporting (CMR)"</li> <li>Stillman FA, Cronin KA, Evans WD, Ulasevich A. Can media advocacy influence newspaper coverage of tobacco: measuring the effectiveness of the American Stop Smoking Intervention Study's (ASSIST) media advocacy strategies. <i>Tob Control</i>. 2001;10(2):137–44.</li> </ul>	
National Social Climate Survey of Tobacco Control, 2001	2.3.3	http://www.ssrc.msstate.edu/socialclimate	
Operation Storefront: Youth Against Tobacco Advertising and Promotion Initiative	1.9.1; 1.9.3; 1.9.7	<ul> <li>http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm</li> <li>See "Environmental scan"</li> </ul>	

Data source	Indicator numbers	For more information		
Partnership for Prevention, Tobacco Survey: National Survey of Employer- sponsored Health Plans, 2002	3.7.6	▶ http://www.mercerhr.com		
Policy tracking system	1.8.1; 1.8.2; 1.8.3; 1.8.4; 1.9.2; 1.9.4; 1.9.6; 2.4.1	<ul> <li>Americans for Nonsmokers' Rights http://www.no-smoke.org</li> <li>State Legislated Actions on Tobacco Issues (SLATI) online database http://slati.lungusa.org</li> </ul>		
Public records of political contributions	1.9.11; 1.9.12	<ul> <li>Collected by the Office of State Secretary or equivalent at local level in each state</li> <li>See "Federal Election Commission (FEC)"</li> <li>Givel MS, Glantz SA. Tobacco lobby political influence on US state legislatures in the 1990s <i>Tob Control</i>. 2001; 10 (2):124–34.</li> </ul>		
Quitline call monitoring	3.7.1; 3.7.2 <sup>NR</sup> ; 3.7.3	Miller CL, Wakefield M, Roberts L. Uptake and effectiveness of the Australian telephone quitline service in the context of a mass medi campaign. <i>Tob Control</i> . 2003; 12 (Suppl 2): ii53–8.		
State departments of revenue	1.12.1; 2.8.1; 3.12.1; 3.14.4	<ul> <li>State tax sales data, tobacco product excise taxes</li> </ul>		
Substance Abuse and Mental Health Services Administration (SAMHSA) Compliance Checks	1.11.1	http://prevention.samhsa.gov/tobacco/guidance.asp		
TNS Media Intelligence Competitive Media Reporting (CMR)	1.9.8	<ul><li>http://www.tnsmi-cmr.com/products/ index.html</li><li>See "Media Tracking Service"</li></ul>		
Tobacco industry fiscal reports	1.9.11	http://www.altria.com/investors/ 02_01_annualreport.asp http://www.reynoldsamerican.com/ Investors/sharedocs_cover.asp		
Tobacco industry monitoring system	1.9.10	<ul> <li>See "California Tobacco Industry Monitoring Evaluation: Project SMART Money"</li> </ul>		
University of California at San Diego, California Tobacco Survey (CTS): Adult Attitudes and Practices, 1996	1.6.7 <sup>NR</sup> ; 2.3.8; 2.3.10 <sup>NR</sup>	<ul> <li>http://ssdc.ucsd.edu/tobacco</li> <li>http://www.dhs.ca.gov/ps/cdic/ccb/TCS/ html/Evaluation_Resources.htm</li> </ul>		
Worksite Survey	2.4.2	► See "Arizona Workplace Survey"		

Data source	Indicator numbers	For more information
Youth Tobacco Survey (YTS): CDC Recommended Questions: Core, 2004	1.6.3; 1.7.8; 1.7.9; 1.7.10; 1.10.1; 1.10.2; 1.10.3; 1.10.5; 1.11.2; 1.11.3; 1.11.4; 1.11.5; 1.13.1; 1.13.2; 1.14.1; 1.14.2; 2.3.5; 2.6.5; 2.7.3; 2.7.5; 2.8.2; 2.8.3; 3.8.3; 3.11.2; 3.13.1; 3.13.2 <sup>NR</sup> ; 3.14.1	<ul> <li>State health departments</li> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>
Youth Tobacco Survey (YTS): Supplemental Questions, 2004	3.11.3	<ul> <li>Office on Smoking and Health, Centers for Disease Control and Prevention, (770) 488–5703</li> </ul>

#### References

- 1. MacDonald G, Starr G, Schooley M, Yee SL, Klimowski K, Turner K. *Introduction to program evaluation for comprehensive tobacco control programs*. Atlanta, GA: Centers for Disease Control and Prevention; 2001.
- 2. Yee SL, Schooley M. *Surveillance and evaluation data resources for comprehensive tobacco control programs.* Atlanta, GA: Centers for Disease Control and Prevention; 2001.

# Glossary

#### **Activities**

The events or actions that are part of a tobacco control program.

#### **Attitudes**

Biases, inclinations, or tendencies that influence a person's response to situations, activities, other people, or program goals.

#### **Awareness**

The extent to which people in the target population know about an event, activity, or campaign.

#### Capacity

The resources (e.g., staff, data-collection systems, funds) needed to conduct a tobacco control program or to evaluate such a program.

#### **CDC**

Centers for Disease Control and Prevention.

#### **Cognitive-behavioral interventions**

Activities based on the premise that people can learn new behaviors to use in response to stimuli and that the thought processes that serve as intermediate steps between stimuli and behaviors can be altered, thereby influencing behavior. Basic applications of this theory for tobacco-use cessation are:

- ▶ Establishing self-awareness of tobacco use.
- Providing the motivation to quit.
- Preparing to quit.
- ▶ Providing strategies to maintain abstinence.

#### Consumption

The number of tax-paid cigarettes (pack of 20) purchased by consumers in a particular calendar year.

#### Data

Documented information or evidence.

#### **Data sources**

Surveys or surveillance systems used to gather data.

#### Evaluation

The process of determining whether programs—or certain aspects of programs—are appropriate, adequate, effective, or efficient and, if not, how to make them so.

#### Ever-smoker

A person who gives a positive answer to the question "Have you tried cigarette smoking, even one or two puffs?"

#### Example data source

Surveys or surveillance systems used to measure an indicator and the population on which the data are needed.

#### **Face validity**

The degree to which data on an indicator appear reliable to stakeholders and policy makers.

#### **FDA**

U.S. Food and Drug Administration.

#### Goal area

One of the four components of the overall goal of CDC's National Tobacco Control Program.

#### HHS

U.S. Department of Health and Human Services.

#### **Implementation**

Carrying out or putting into effect a plan or program.

#### Indicator

An observable and measurable characteristic or change that shows the progress a program is making toward achieving a specified outcome.

#### **Indicator profile**

The term used in this manual for a table with detailed information on one indicator listed in this publication (see page 29 for an example).

#### **Indicator rating table**

The term used in this publication for the list of the indicators associated with one outcome in one NTCP logic model. The experts' rating for each indicator is also included (see page 28 for an example).

#### Inputs

Resources used to plan and set up a tobacco control program.

#### Intervention

The method, device, or process used to prevent an undesirable outcome or create a desirable outcome.

#### Logic model

A graphic depiction of the presumed causal pathways that connect program inputs, activities, outputs, and outcomes.

#### Media messages

Anti-tobacco information provided to the public through various media (e.g., television, radio, billboards).

#### **Minors**

Persons younger than 18 years of age.

#### Morbidity

Disease or disease rate.

#### NCI

National Cancer Institute.

#### Never-smoker

A person who gives a negative answer to the question "Have you tried cigarette smoking, even one or two puffs?"

#### NIH

National Institutes of Health.

#### NTCP

National Tobacco Control Program.

#### **Observation**

A method of collecting data that does not involve any communication with the subjects being studied. The investigators merely watch for particular behaviors and record what they see.

#### **Opinion leader survey**

Collection of information (data) from leaders in the community.

#### **Outcome**

The results of an activity such as a countermarketing campaign or an effort to reduce nonsmokers' exposure to smoke. Outcomes can be short-term, intermediate, or long-term.

#### **Outcome components**

The term used in this publication for the short-term, intermediate, and long-term results described in the NTCP logic models for the first three goal areas. These are the results expected if tobacco control programs provide the needed inputs and engage in the recommended activities also described in the logic models.

#### **Outcome evaluation**

The systematic collection of information to assess the effect of a program or an activity within such a program to reduce the adverse health effects of tobacco use. Good evaluation allows evaluators to draw conclusions about the merit of a program and make recommendations about the program's direction.

#### **Outcome overview**

The term used in this publication for the summary of the scientific evidence in support of the assumption that achieving an outcome on an NTCP logic model affects all concurrent and later activities and outcomes (see page 25 for an example).

#### **Outputs**

The direct products of a program (e.g., the materials needed for a media campaign).

#### **Payers**

Health insurance organizations that reimburse providers for services when coverage is purchased by companies, government agencies, or other consortia. Also self-insured companies, government agencies, or other consortia that purchase health care benefits for a group of individuals and use an insurer as a fiscal intermediary to process claims and reimburse for services.

#### **Population group**

Individuals from which data about a given indicator can most commonly be collected.

#### **Preemption**

Federal or state legislation that prevents states or local jurisdictions from enacting tobacco control laws more stringent than or otherwise different from the federal or state law.

#### **Prevalence**

The amount of a factor of interest (e.g., tobacco use, awareness of a media campaign) present in a specified population at a specified time.

#### **Process evaluation**

Systematic collection of information to determine how well a program is set up and operating.

#### **Program evaluation**

Systematic collection of information about activities, characteristics, and outcomes of programs, used to make judgments about a program, improve its effectiveness, or inform decisions about future program activities.

#### **Purchaser**

Purchasers include companies, government agencies, or other consortia that purchase health care benefits for a group of individuals.

#### Rate

A measurement of how frequently an event occurs in a certain population at one point in time or during a particular period of time.

#### Reach

The number of people or households that receive a program's message or intervention.

#### Recent successful quit attempts

Proportion of former smokers who have quit in the previous 12 months.

#### Resources

Assets available or expected to be available for program operations. Resources include people, equipment, facilities, and other items used to plan, implement, and evaluate public health programs whether or not they are paid for directly with public funds.

#### Self service tobacco sales

Sales that allow customers to handle tobacco products before purchasing them.

#### Social source

A person or location from which tobacco products are obtained other than a tobacco product retailer.

#### Some-day smoker

A current smoker who gives a "smoked on some days" response.

#### Surveillance

The ongoing, systematic collection, analysis, and interpretation of data about a hazard, risk factor, exposure, or health event.

#### Survey

A quantitative method of collecting information on a target population at one point in time. Surveys can be conducted by interview (in person or by telephone) or by questionnaire.

#### Susceptibility

The intention to smoke or the absence of a strong intention not to smoke.

#### **Sustained abstinence**

Complete cessation of tobacco use for 6 months or longer.

#### Theory of change

Intellectual framework for understanding the process of behavior change.

#### Utility

The extent to which evaluation produces reports that are disseminated to relevant audiences, that inform program decisions, and that have a beneficial effect.

### **How to Use the Rating Tables** Outcome 7 **Increase in Anti-tobacco Policies Indicator Rating** and Programs in Schools · ○ • • better Number Indicator **Overall quality** 1.7.4 Proportion of schools or school districts that provide \$\$ program-specific training for teachers Indicator number 1.7.4 Outcome Goal area Indicator component within the goal area

**Overall quality:** The general worth of the indicator as it relates to evaluating tobacco control programs.

**Resources needed:** Dollar signs show the amount of resources (funds, time, and effort) needed to collect and analyze data on the indicator using the most commonly available data source: the more dollar signs (maximum four), the more resources needed. The dollar signs do not represent specific amounts because the actual cost of measuring and analyzing an indicator varies according to the existing capacity of a state health department or organization to evaluate its programs.

**Strength of evaluation evidence:** The degree to which scientific evidence supports that implementing interventions to affect change in a given indicator (e.g., proportion of schools or school districts that provide program-specific training for teachers) will lead to a measurable downstream outcome (e.g., reduced susceptibility to experimentation with tobacco products).

**Utility:** The extent to which the indicator is useful for answering evaluation questions for comprehensive state tobacco control programs.

**Face validity:** The degree to which data on the indicator would appear valid to tobacco program stakeholders, such as policy makers.

**Accepted practice:** The degree to which using the indicator to measure a tobacco control program's progress is consistent with accepted practice.