
Center for Public Health Systems Science
Stephanie Andersen
Laura Brossart
Sarah Moreland-Russell

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Program Infrastructure in Tobacco Prevention and Control
Acknowledgements

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Primary contributors:
Stephanie Andersen, Laura Brossart, Sarah Moreland-Russell, Anne Shea, Paige Riegel, Heidi Walsh, Laura Edison, Laura Bach, Caitlin Ashby, Rachel Barth, Isaiah Zoschke, Erin Foster

Input was provided by:
Brian Armour, Monica Eischen, Karen Girard, Roy Hart, Sally Herndon, Rene Lavinghouze, Brian King, Chris Kissler, Judy Martin, Danny McGoldrick, Jane Moore, Tiffany Netters, Meg Riordan, Karla Sneegas, Deidre Sully, Michael Tynan, Renee Wright

Input for the case studies was provided by:
Karen Girard, Oregon State Tobacco Prevention and Education Program
Chris Tholkes, Minnesota Office of Statewide Health Improvement Initiatives
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Purpose

The Centers for Disease Control and Prevention’s (CDC) Office on Smoking and Health and the Center for Public Health Systems Science at Washington University in St. Louis are developing a set of user guides funded by the Centers for Disease Control and Prevention (contract 200-2015-87568) for the *Best Practices for Comprehensive Tobacco Control Programs—2014* (Best Practices 2014).1

The purpose of the user guides is to help tobacco control staff and partners implement evidence-based best practices by translating research into practical guidance. The guides focus on strategies (e.g., programs and interventions) that have shown strong or promising evidence of effectiveness. Recommendations in this guide are suggestions for programs working to achieve strong infrastructure. Programs can follow these recommendations according to their needs, goals, and capacity.

Content

This user guide focuses on the critical role of program infrastructure in achieving and sustaining tobacco prevention and control goals. According to *Best Practices 2014*, “program infrastructure is the foundation that supports program capacity, implementation, and sustainability.”2 In 2011, CDC developed the Component Model of Infrastructure (CMI), an evidence-based model that defines infrastructure in practical and actionable terms.1,2 The CMI includes five core components of program infrastructure: Responsive Plans and Planning, Multilevel Leadership, Networked Partnerships, Managed Resources, and Engaged Data. As programs are increasingly challenged to secure funding and support, building a strong infrastructure becomes even more important to sustain programs and achieve goals.2,3 This guide gives program staff and partners information on how to begin developing strong program infrastructure.

Links to More Information

Each instance of italicized, bolded *blue text* in the guide indicates a link to an additional resource or a page within the guide itself with more information. Website addresses for all of the blue resources noted throughout the guide are also included in the Resources section.

Organization

- **Making the Case**: A brief overview of why it is important for tobacco control programs to develop a strong program infrastructure
- **Brief History**: How program infrastructure has become recognized as a critical foundation for tobacco prevention and control efforts
- **How to**: Strategies to develop and strengthen program infrastructure
- **Providing Support**: How tobacco control programs can support efforts to develop program infrastructure
- **Case Studies**: Real-world examples of how program infrastructure supports the work of tobacco control programs
- **Case for Investment**: Information that can be used to inform efforts to develop program infrastructure
- **Resources**: Publications, toolkits, and websites to help in infrastructure planning efforts

*Best Practices for Comprehensive Tobacco Control Programs—2014*

The Infrastructure, Administration, and Management section in *Best Practices 2014* offers recommendations and guidance on managing an effective tobacco prevention and control program. The section describes why it is important for programs to invest in strong tobacco control infrastructure, explains the Component Model of Infrastructure, gives examples of how states have put the components into practice, and includes budget recommendations for developing and maintaining infrastructure.
Making the Case for Program Infrastructure

Program infrastructure is the foundation that supports tobacco control program capacity, implementation, and sustainability. Investing in a stable foundation is critical for building a strong program, which is vital to achieve public health goals. As funding and overall support fluctuate, having a strong infrastructure becomes increasingly important to sustain program support and achieve program goals. Learn more about the core components of a strong program infrastructure on page 4.

How the Core Components of Infrastructure Support Program Goals

- **Responsive Plans and Planning**
  Tobacco control program plans help staff and partners develop effective strategies and make wise investments of resources. Plans that are revised when new information becomes available or changes in the program’s environment occur help programs adapt existing activities and launch new strategies.

- **Multilevel Leadership**
  Leadership at multiple levels can extend a program’s reach and leverage resources for tobacco control efforts. Leaders within the program contribute expertise and make day-to-day decisions about the program. Leaders of other chronic disease programs and partner organizations can help programs work toward common goals.

- **Networked Partnerships**
  Partnerships bring crucial skills and resources to tobacco control efforts, extending the reach and successes of programs. Partnerships help build motivation, achieve goals, reduce risk, and win allies.

- **Managed Resources**
  Obtaining, diversifying, and managing resources helps programs implement effective tobacco control strategies, even as overall support fluctuates. Developing skilled staff and partners helps avoid knowledge gaps and adapt to changing program environments.

- **Engaged Data**
  Collecting and analyzing data helps staff and partners understand how programs work, improve program quality, and make decisions about future activities. Data can also help demonstrate effectiveness and communicate the importance of comprehensive tobacco control programs to the public.
BRIEF HISTORY

Brief History

Traditionally, the term infrastructure describes the structures that support a society (e.g., roads, bridges, and railroads) and help distribute goods and services. The term can also describe the many components that support an organization’s growth and achievement of goals. Infrastructure is the basic underlying framework of policies, financial and human resources, organizational structures, and communications channels that help programs develop and grow.

The importance of program infrastructure can be easily overlooked. Emphasis is often placed on outputs or goals instead of building a strong foundation to reach those goals. Budget constraints have led programs to be required to show results and cost-effective spending. Because many programs must track day-to-day activities, assess program results, and plan for sustainability, developing a strong infrastructure is now more important than ever.

The National Cancer Institute and American Cancer Society’s American Stop Smoking Intervention Study for Cancer Prevention (ASSIST) was the first major federal investment in state tobacco control infrastructure. Running from 1991-1999, ASSIST combined evidence-based policy strategies and capacity building. To build capacity, state tobacco control programs established coalitions, offered training and technical assistance, and shared resources among coalition members. ASSIST showed that states that developed stronger program infrastructure to support the implementation of evidence-based strategies had lower cigarette consumption.

The importance of infrastructure for public health programs has also been recognized by organizations like the Institute of Medicine and the U.S. Department of Health and Human Services. According to Healthy People 2020, “Infrastructure is the foundation for planning, delivering, and evaluating public health.”

Even the tobacco industry has recognized the importance of infrastructure in preventing tobacco use initiation and promoting cessation. An internal tobacco industry document dating from the early 1990s described the creation of an anti-smoking infrastructure in California as the biggest threat to industry interests in the state. In response to growing recognition of the importance of strong program infrastructure, the CDC began encouraging states to develop assessment plans and improve infrastructure by focusing on building workforce skills, information and data systems, and organizational capacity.

In 2011, the CDC Office on Smoking and Health developed the Component Model of Infrastructure (CMI) using evaluation data from 18 state tobacco control programs. Collected over three phases, the evaluation explored program infrastructure, capacity, progress toward outcomes, and sustainability. Development of the model also incorporated a literature review of diverse public health program infrastructure articles (e.g., asthma, diabetes, oral health, physical activity, HIV/AIDS, and mental health) and theories such as organizational development, sociology, and economics. The model was refined with input from over 400 public health practitioners. The CMI includes five core components that make up program infrastructure: Responsive Plans and Planning, Multilevel Leadership, Networked Partnerships, Managed Resources, and Engaged Data. In 2014, the CMI was included in the recommendations for comprehensive tobacco control programs in Best Practices 2014.
What is Program Infrastructure in Tobacco Prevention and Control?

Program infrastructure is the foundation of all tobacco control programs. Developing a strong infrastructure can help achieve public health goals, support program capacity and implementation, and sustain programs. In the Component Model of Infrastructure (CMI), program infrastructure has five components:

- Responsive Plans and Planning
- Multilevel Leadership
- Networked Partnerships
- Managed Resources
- Engaged Data

Figure 1 below illustrates these five core components and how they relate to program outcomes and sustainability.

Core Components

Responsive Plans and Planning

Responsive Plans and Planning is the process of creating plans that guide the program's actions and goals. Programs often develop multiple plans, including a strategic plan, annual work plan, communications plan, evaluation plan, and sustainability plan. These plans are responsive because they are revised as new scientific evidence becomes available or shifts occur in the tobacco prevention and control landscape (e.g., emerging products). Responsive Plans can help develop effective strategies, inform hiring decisions, and make wise investments of resources.
**How to**

Multilevel Leadership

*Multilevel Leadership* is the development of leadership at all levels that affect a program. Leaders may come from within the program (e.g., program staff) and outside the program (e.g., from other departments, the community, and partner organizations). These leaders create a vision for the program, inspire staff, and drive program success.

Networked Partnerships

*Networked Partnerships* are diverse, strategic relationships made up of partners from different levels, organizations, and content areas. For instance, tobacco control program staff often partner with local, state, and regional programs; other chronic disease programs; state and national organizations; and federal partners, including CDC, to work toward program goals. *Networked Partnerships* work best when they are connected to each other and to the program. These partnerships help programs build motivation, reduce risk, and win allies. By including community representatives and populations most affected by tobacco use, partnerships will have the diverse perspectives that are critical to achieve health equity.

Managed Resources

*Managed Resources* are the funding and staff resources that are critical to carry out a program. Securing multiple funding sources and staff with diverse skills helps programs implement effective strategies even as budgets and staff levels change. Managing these resources effectively includes continuously training staff, providing technical assistance to partners, and ensuring funding stability, so that losing one funding source or staff person does not stop the program from making progress toward goals.

Engaged Data

*Engaged Data* is data that is used by staff, partners, decision makers, and local programs to promote action, such as planning and improving tobacco control efforts. Programs can use surveillance and evaluation data to guide program direction, understand how a program works, and make decisions about future activities. Sharing data with partners and decision makers can build support for programs by demonstrating their effectiveness and return on investment.

Supportive Components

A program's infrastructure is also affected by outside supports and influences. *Strategic Understanding* is the term used to describe the ideas, guidelines, and thinking that support the development of program infrastructure. For example, decision makers and the public may not feel that program infrastructure is a public health issue. Educating these groups about the importance of infrastructure for effective programs helps make the case for crucial infrastructure resources.

Operations includes all of the day-to-day work structures used to carry out the program, such as clearly defined staff roles and systems to communicate with staff and partners. It also includes the structure of the agency that houses the program. A strong operations structure can help programs coordinate activities and manage resources.

Contextual Influences are the broad cultural, political, economic, and social priorities of the environment in which the program works. For example, the way a community views tobacco use and its level of support for tobacco control efforts are important influences on a program's success. While these factors are often unpredictable and difficult to measure, it is important for staff to think about and prepare for how these influences may affect their programs.

Capacity

*Capacity* is the program's ability to implement tobacco control strategies. Developing program infrastructure builds capacity to take advantage of opportunities and defend against threats to achieving program goals. For example, it is important for programs to be able to act quickly when funding opportunities appear.

Continued Support

*Continued Support* is used to describe the resources that sustain a fully-functioning program infrastructure. It can take many forms and may include financial support, technical support, or support from decision makers, the media, or the public. Continued support is critical to sustain program infrastructure so the program can continue to achieve its goals.
Developing Program Infrastructure

To build a strong foundation for tobacco control programs, it is important to develop all five infrastructure components. Developing the components is not a step-by-step process. Building infrastructure in one area supports and reinforces the development of other areas. Programs that focus on developing all of the components are better prepared to take advantage of opportunities and defend against threats to achieving their goals.1 Table 1 below describes ways programs can strengthen each of the core components of program infrastructure, which are described in more detail throughout this guide.

### Table 1. Example Program Activities for Each Core Infrastructure Component

<table>
<thead>
<tr>
<th>Core Component</th>
<th>Program Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Responsive Plans and Planning</strong></td>
<td>• Gather and analyze data before planning.</td>
</tr>
<tr>
<td>Create plans that guide the program's actions and goals.</td>
<td>• Develop multiple plans (e.g., strategic plan, communications plan, evaluation plan, and sustainability plan).</td>
</tr>
<tr>
<td></td>
<td>• Communicate plans to stakeholders and the public.</td>
</tr>
<tr>
<td></td>
<td>• Review plans regularly and revise them if needed.</td>
</tr>
<tr>
<td><strong>Multilevel Leadership</strong></td>
<td>• Identify ways leaders can contribute.</td>
</tr>
<tr>
<td>Develop leadership at all levels that affect the program.</td>
<td>• Develop new leaders.</td>
</tr>
<tr>
<td></td>
<td>• Adjust leaders’ responsibilities as the environment changes.</td>
</tr>
<tr>
<td><strong>Networked Partnerships</strong></td>
<td>• Develop purposeful partnerships.</td>
</tr>
<tr>
<td>Work with partners from different levels, organizations, and content areas.</td>
<td>• Partner with diverse stakeholders.</td>
</tr>
<tr>
<td></td>
<td>• Engage partners to achieve goals.</td>
</tr>
<tr>
<td></td>
<td>• Evaluate partnerships.</td>
</tr>
<tr>
<td><strong>Managed Resources</strong></td>
<td>• Ensure funding stability.</td>
</tr>
<tr>
<td>Strengthen funding and staff resources.</td>
<td>• Direct funds to strategies with the greatest impact.</td>
</tr>
<tr>
<td></td>
<td>• Share positions and resources.</td>
</tr>
<tr>
<td></td>
<td>• Communicate program successes.</td>
</tr>
<tr>
<td></td>
<td>• Develop staff competencies.</td>
</tr>
<tr>
<td></td>
<td>• Train staff and partners.</td>
</tr>
<tr>
<td><strong>Engaged Data</strong></td>
<td>• Engage stakeholders in using data.</td>
</tr>
<tr>
<td>Use data to plan and improve program efforts.</td>
<td>• Understand the program and choose questions before collecting data.</td>
</tr>
<tr>
<td></td>
<td>• Gather credible data.</td>
</tr>
<tr>
<td></td>
<td>• Develop conclusions.</td>
</tr>
<tr>
<td></td>
<td>• Share results and ensure use.</td>
</tr>
</tbody>
</table>
Developing Responsive Plans takes time and resources, but can help program staff select effective strategies, make good hiring decisions, and make wise investments of resources. Programs with less planning experience may want to consider an outside consultant to help make the process a success.

The Importance of Responsive Plans and Planning in Program Infrastructure

Responsive Plans are important tools for developing a strong program infrastructure. When programs plan ahead for how they will support existing activities and keep experienced staff if funding changes, they make the most of their financial and staff resources (or Managed Resources). Developing Responsive Plans can also help programs identify the resources that are critical for gathering Engaged Data, such as staff and funding for data collection.

The planning process puts the components of infrastructure into action. Planners use Engaged Data to decide whether past strategies have been successful or whether the program should pursue new ideas. Involving Networked Partnerships in planning creates buy-in, enthusiasm, and momentum for tobacco control efforts. Partners also gain a better understanding of their roles and responsibilities to carry out the program. Planners can include organizations that have a stake in program results and those most affected by tobacco use, such as the LGBT community or members of certain racial and ethnic groups. Asking these partners to define their goals for the program strengthens Responsive Planning and increases their support for the program.

It is also important to include Multilevel Leaders in planning. The knowledge, creativity, and talents of leaders inside and outside the program strengthens Responsive Plans. Leadership support can also encourage staff to take planning seriously and make sure that the program will have enough resources to carry out the plan. Once plans are developed, leaders guide how plans are carried out, share progress with partners, and make sure the program is working toward its goals.

Developing Responsive Plans and Planning

Understanding the Different Plans

When programs begin planning, they often focus on creating a strategic plan. Though the strategic plan is an important long-term tool that can help staff decide the direction of their program, it is not the only plan important to program infrastructure. Other program plans often draw goals from the strategic plan, but also include important goals of their own. Programs often develop multiple plans, including:

- Strategic Plan
- Annual Work Plan
- Communications Plan
- Evaluation Plan
- Sustainability Plan

Plans do not have to be developed separately. Developing the plans is a continuous, integrated process.
Strategic Plan

The strategic plan sets goals and objectives that support the program’s mission and respond to its environment (e.g., available funding and community demographics). In tobacco control programs, the strategic plan is often called the comprehensive state tobacco control plan. It describes the problem of tobacco use in the state, strategies for addressing the problem, the program’s goals and objectives, baseline data and benchmarks for progress, and key partners who will carry out the plan. The strongest plans combine state and community partners’ programs, goals, and strategies into a single plan and include goals and strategies to reduce tobacco-related disparities.

Although the strategic plan lays out a long-term vision for the program, it typically covers a specific period of time, usually 3 to 5 years. It is a dynamic document that is revised as the program’s priorities, resources, or environment change. During the planning process, partners and leaders decide which activities can be carried out with the program’s current resources and which activities could be accomplished if more resources become available. Learn more about the elements of a strategic plan on page 9.

Annual Work Plan

The annual work plan lists objectives, priority populations, activities, start and end dates, and the people responsible for carrying out each activity. It is used by staff to carry out the strategies that the program will use to achieve objectives. An annual work plan is important because organizational and community priorities will likely change over the period covered by the strategic plan.

The annual is aligned with the long-term goals, objectives, strategies, and timeline that have been developed as part of the strategic plan and describes the strategies that will be used each year to move the program toward its long-term goals. Some program goals will be new. To meet these goals, the annual work plan will likely include strategies for obtaining new resources. For more information, see CDC’s Work Plan Template.

Communications Plan

The communications plan guides how health communications strategies (e.g., paid and earned media strategies) will be carried out to help achieve program goals. This plan complements the comprehensive state tobacco control plan and can help staff choose effective strategies, set priorities, assign responsibilities, create a timeline, and assess progress toward communications goals. The communications plan is most useful if it answers these important questions:

- Why do you want to communicate?
- Who do you want to communicate with?
- What do you want to communicate?
- How do you want to communicate it?
- What channels will you use for communication?

The communications plan describes the messages, products, and intended audiences for the program’s communications campaigns. It also details how the program will leverage national campaigns and new evidence, build local communications capacity, and use health communications strategies to reduce tobacco-related disparities. The communications plan also likely includes detailed annual work plans. The purposes, audiences, messages, and channels for communications may change over time, so it is best if the communications plan is revised regularly.

Evaluation Plan

The evaluation plan is “a written document that describes how you will monitor and evaluate your program, as well as how you intend to use evaluation results for program improvement and decision making.” The plan describes what, how, and when data will be collected. It is an important tool to create a shared understanding among partners and decision makers of how the evaluation will be used to improve the program and achieve outcomes. For instance, evaluation results can help develop future objectives and strategies that may be included in the strategic plan. The evaluation plan covers all parts of the program and typically spans multiple years. When writing the evaluation plan, it is critical to include those who have an interest in the program’s outcomes, such as community partners, grantees,
A CLOSER LOOK: Elements of a Strategic Plan

Strategic plans are used by all kinds of organizations, within and outside of tobacco control. The format of the strategic plan can vary, but typically includes several common elements. Planners can include the following sections:

- **Letter of Introduction**
  The strategic plan can begin with a public letter from the director or leader of the program.22

- **Executive Summary**
  This one- to two-page summary describes the planning process and the strategies that the program will use to reach its goals.31 It also describes how the plan will be implemented, communicated, and evaluated.31

- **Mission, Vision, and Guiding Values**
  This section describes the program's purpose, the principles and beliefs that guide its work, and its vision for the future.22

- **Data Sources**
  This section lists sources for internal data (i.e., data about the program and how it works) and external data (i.e., data about people served by the program).31 Planners analyze this data to develop the rest of the strategic plan.31

- **SWOT Analysis**
  This section includes a summary of the findings from a SWOT (i.e., Strengths, Weaknesses, Opportunities, Threats) analysis.36 Information from the SWOT analysis helps planners brainstorm questions about the program and develop objectives. Learn more about SWOT analysis on page 11.

- **Goals and Objectives**
  This section includes program goals, objectives, and key outcome indicators to measure progress.37,38 Some programs display this information in a logic model.39 Learn more about logic models in the CDC workbook, *Developing an Effective Evaluation Plan*.35

- **Program Strategies**
  This section describes the approaches that the program will take to achieve its goals.31 It also gives a rationale and timeline for carrying out each strategy.31

- **Plan for Review**
  This section includes a schedule to review the plan at least annually and use the results to revise the program's activities and goals.27

- **Appendices**
  This section includes any supporting documents from the planning process, including a list of all the people who helped create the plan, dates and times of planning meetings, and the full SWOT analysis.22
Integrating Tobacco Control and Chronic Disease Strategic Plans

Strategic plans can integrate chronic disease prevention and tobacco control goals in areas where they overlap. Tobacco use combined with other risk factors such as an inactive lifestyle, poor diet, heart disease, high blood pressure, or diabetes poses a greater risk and poorer prognosis for many chronic diseases than the sum of each individual risk. Coordinating chronic disease and tobacco control efforts can reduce tobacco-related disease, reach more people by pairing tobacco control with other public health activities, and reduce the combined effect of tobacco use and chronic disease risk factors.

Chronic disease staff can help develop tobacco control plans to make sure objectives align and identify ways to strategically collaborate on program and policy development. Jointly developed plans show that program cooperation is necessary and normal. They can incorporate both tobacco control and chronic disease priorities, pool funding for common objectives, and coordinate critical resources. It is also important for programs and chronic disease partners to periodically assess integration progress.

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HOW TO

can secure more resources and achieve greater results. It is important for partners to know how much time they will be expected to commit to planning. Partners may be involved in every planning discussion or only weigh in on topics that fit their interests.

A committee or workgroup can help oversee the planning process and make decisions. The committee may be a small or large group (e.g., 5 to 12 members), depending on the size of the program. It is helpful to appoint a chairperson who is committed to and understands the organization. Staff with less planning experience may want to choose an outside consultant to lead the planning process. A skilled chairperson has strong communication and organizational skills, the ability to lead a committee, and no actual or perceived conflicts of interest. Many organizations have limited time for planning. The committee can draft a clear timeline and task list to make sure planning is completed.

ASSESS: Gather and Analyze Data

During this step, the planning committee collects and analyzes data to develop the objectives and goals of the plan. Data may come from internal or external sources. For example, staff may gather internal data about the program (e.g., existing program infrastructure) and external data about the population served by the program (e.g., tobacco use data).

The committee reviews and summarizes this information in a report shared with everyone involved in the planning process. The planning committee may also complete a SWOT analysis (see Figure 2 on the right) to assess the program’s strengths and weaknesses. By gathering this information in advance and involving diverse stakeholders in the process, planners are better equipped to set realistic goals and objectives. The planning committee often decides at this stage that past strategies were not effective and that by redirecting efforts, the program’s activities could be much more successful.

CREATE: Develop the Plan

In this step, the planning committee writes the plan. Many programs hold a stakeholders meeting to kick off the planning process and start developing the plan in as much detail as possible. This inclusive meeting is especially important to create a plan that will effectively address health equity and include more than just what the program can manage itself. Using data and analysis from the last step, stakeholders outline new goals, objectives, key outcome indicators, and strategies. Goals are the broad, long-term changes that the plan helps the program achieve. Objectives are realistic, measurable steps taken to achieve goals. To develop objectives, the committee can apply the SMART (Specific, Measurable, Achievable, Relevant, Time Bound) approach. Strong, clear objectives fulfill all SMART components (see an example of a SMART objective on page 12). The committee also selects indicators to measure progress toward goals. CDC’s Office on Smoking and Health has several workbooks to help programs select goals and key outcome indicators, including:

- Preventing Initiation of Tobacco Use: Outcome Indicators for Comprehensive Tobacco Control Programs—2014
- Promoting Quitting Among Adults and Young People: Outcome Indicators for Comprehensive Tobacco Control Programs—2015

**Figure 2. Elements of SWOT Analysis**

<table>
<thead>
<tr>
<th></th>
<th>Helpful</th>
<th>Harmful</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>S</strong></td>
<td>Strengths</td>
<td>What does the program do well?</td>
</tr>
<tr>
<td><strong>W</strong></td>
<td>Weaknesses</td>
<td>In what ways is the program lacking?</td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>O</strong></td>
<td>Opportunities</td>
<td>What outside factors help achieve program goals?</td>
</tr>
<tr>
<td><strong>T</strong></td>
<td>Threats</td>
<td>What outside factors block achievement of program goals?</td>
</tr>
</tbody>
</table>

Source: Adapted from Centers for Disease Control and Prevention and the Minnesota Department of Health
Example of a SMART Objective

**Specific:**
“Decrease the number of pharmacies in the tri-state area selling tobacco products...”

**Measurable and Achievable:**
“by 10%, from 80% to 70%...”

**Relevant:**
“to decrease both retailer density and youth exposure to tobacco advertising...”

**Timebound:**
“by June 1, 2016.”

Strategies are the approaches used by the program to achieve its goals and objectives. Effective strategies take advantage of program strengths. For example, a strategy to decrease the number of pharmacies that sell tobacco products could draw on existing Networked Partnerships with community groups or city officials.

Program activities put the strategies into action. Developing a written timeline helps the program keep staff accountable and activities on track. Effective timelines are clear, current, and include dates for activities and data collection.

**SHARE: Communicate the Plan**

In this step, the plan is shared with partners and stakeholders. It is important that information shared about the plan is useful and easy to understand. Staff can tailor communications by taking into account the priorities of different stakeholders and the information that will be most useful to each group. Details about the plan can be shared in reports, executive summaries, or fact sheets. It is best to share plans as soon as possible after they are created.

Sharing the plan holds the program and partners accountable for completing the plan’s strategies and activities. This step can be revisited whenever new or updated results of the program are available. Sharing progress shows stakeholders that the time and resources used to develop the plan were worthwhile.

**IMPLEMENT: Put the Plan into Action**

In this step, the plan’s strategies are put into action. The annual work plan guides implementation and is shared with everyone involved. The planning chairperson can also make sure that staff and partners have the resources to complete their activities. If gaps in knowledge or skills exist, professional development or training may be helpful. At meetings, time can also be set aside for program staff to report on the status of tasks and celebrate achievements.

**REVIEW: Revise the Plan**

Plans sometimes cover a long timeframe and may need to be revised based on changes to the program’s environment. Staff can monitor the implementation of each plan and revise them regularly (e.g., every six months). Programs can use evaluation results to identify outcomes that are not being achieved and activities that are ineffective.
Multilevel Leadership

Multilevel Leadership is the development of leadership for efforts at all levels that affect a tobacco control program. Tobacco control efforts benefit from leaders within the program, such as program staff, and outside the program, such as members of the community or staff from partner organizations. Figure 3 below shows examples of leadership at multiple levels of a tobacco control program. Depending on the tobacco control strategy the program is pursuing, the program may want to include leaders from other organizations outside of tobacco control, such as health systems personnel or staff from other government agencies like the department of revenue, the state mental health agency, or state law enforcement.

To achieve tobacco control goals, it is important that programs actively engage leaders at every level. Multilevel leaders create a vision for the program, inspire staff, and drive program success. They create a work environment that is empowering, efficient, and task-oriented. Successful leaders are open to innovation and risk taking and see developing new leaders as important to sustain the program.

The program manager is often considered a key leader. However, developing leadership among other program staff can deepen their commitment to program goals and ensure that transitions are smooth when staff changes occur.

It is also important to develop leaders from outside the program. Leaders may work for other programs with related goals (e.g., chronic disease prevention and public health).

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Figure 3. Multilevel Leaders Who Contribute to Tobacco Control Efforts

Source: Adapted from Avolio & Bass

Leaders outside of the tobacco control program

Leaders within the tobacco control program

Program Leadership
Tobacco Control Program Manager

Individual Leadership
Tobacco Control Program Staff

Organizational Leadership
Chronic Disease Program
State Health Department

Public Health Leadership
Partner Organizations
Centers for Disease Control and Prevention

Community Leadership
Elected Officials
Schools & Colleges
Public Housing Authorities
Businesses
Teachers
Parents
Non-profit Organizations
Community Organizations
Youth & Young Adults

Source: Adapted from Avolio & Bass

programs), hold higher positions of authority in the health department or organization where the program is located, or work in partner organizations. They may also be members of the community served by the program, decision makers, or other stakeholders. Involving partners as leaders gives them a stake in the program’s success while giving the program a broader perspective. External leaders also inspire motivation and build momentum, which in turn helps internal program leaders.

The Importance of Multilevel Leadership in Program Infrastructure

Multilevel leaders guide the development and maintenance of the core components of infrastructure. Leaders use Engaged Data to guide Responsive Planning and Managed Resources, helping the program plan for funding and staff needs and respond to changes like staff turnover. Involving staff in creating Responsive Plans and using Engaged Data creates ownership and develops staff as leaders.

Developing leaders outside the program also strengthens program infrastructure. External leaders contribute to Networked Partnerships and Managed Resources by building a broad base of support for the program and adding new ideas, skills, and resources to help achieve program goals. Leaders from outside the program also strengthen Responsive Planning. Involving diverse leaders in planning can bring in new perspectives and help planners recognize changes in the program’s environment.

Developing Multilevel Leadership

How a program approaches leadership is often deeply rooted in the organization’s culture. Although changes to how a program structures leadership take time and dedication, staff can begin developing Multilevel Leadership by focusing on:

- Responsibilities of effective leaders
- Leadership roles important for an effective tobacco control movement
- Strategies for developing new leaders
- Responsive leadership in stable and unstable environments

Responsibilities of Effective Leaders

Leaders make important contributions to program success. Effective leaders develop the program’s vision and create a road map to get there. They are also skilled communicators who maintain open and effective communication with other leaders, team members, and communities to inspire others, establish the program’s credibility, and build relationships.

Effective leaders are also responsible for strengthening the program’s infrastructure. For example, leaders can secure resources and funding by sharing the program’s vision with external partners and community members. Sharing goals and achievements can also increase program visibility, accountability, and sustainability. It is unlikely that one leader can fulfill all of the leadership responsibilities important for a successful program. Developing leaders with diverse skills and perspectives means that responsibilities can be shared among several leaders, making the program more relevant and effective.

Responsibilities of Leaders

Effective leaders contribute to program infrastructure by:

- Guiding Responsive Planning
- Creating an effective communications system internally, across chronic disease programs, and with partners
- Recruiting, developing, and managing staff and other resources efficiently
- Inspiring staff commitment to program goals through personal commitment to these goals
- Making sure staff have the skills to implement the program

Using Engaged Data to educate the public and decision makers on the importance of comprehensive tobacco control programs.
Leadership Roles

Successful tobacco control efforts bring leaders with different leadership styles and skill sets to the table. Leadership style is the way in which a leader achieves his goals, for example how he sets out to complete a task, mobilize support, or deal with a problem. Many types of leaders are important for tobacco control efforts:

- **Visionaries**: Leaders who aim high, take risks, and challenge what is possible
- **Strategists**: Leaders who determine what is realistically achievable, anticipate obstacles, and develop a plan to achieve goals
- **Statespersons**: Leaders who bring credibility to and raise awareness of the importance of tobacco control efforts
- **Experts**: Leaders who make sure strategies are based on credible scientific evidence
- **Strategic communicators**: Leaders who translate complex information to build support among the program’s stakeholders and the public
- **Movement builders**: Leaders who focus on building external support, resolving organizational conflict, and encouraging people to share their opinions
- **Outside sparkplugs**: Leaders outside the program who start movements and keep them energized
- **Inside advocates**: Leaders who are skilled negotiators and understand the policy process

No single leader can fulfill all of these roles. Programs benefit from leaders that can fill each of these leadership roles at different times. Recognizing these skills in current leaders and recruiting multilevel leaders to fill gaps can make sure the program is prepared for multiple leadership needs.
Strategies for Developing New Leaders

It is important that leaders devote some of their time to developing new leaders. Preparing new leaders and preserving knowledge during leadership transitions is a proactive way to support program infrastructure and sustainability. Planning for leadership changes ensures that the program will continue to make progress toward its goals without interruption when leaders leave their positions. Advance preparation for how changes in leadership will occur is particularly important if a leader leaves unexpectedly.

Though there can be risks in inviting inexperienced staff to take on more responsibility, for instance encouraging an inexperienced person to lead a meeting or event, developing new leaders is a long-term investment in the program. Some people may not view themselves as leaders, and it may be helpful to point out the other informal leadership roles they already hold (e.g., coaching or motivating others to complete tasks). Delegating smaller tasks to future leaders can help boost the confidence of those who are “leaders in training.”

Cultivating external leaders is also important to develop leadership for tobacco control efforts. They inspire staff and bring new ideas, expertise, and resources. To develop external leaders, program staff can focus on finding and nurturing champions. These champions may be existing partners who are ready to take on a larger role or new connections with similar interests. Educating community members and decision makers about the impact of comprehensive tobacco control programs can encourage new champions to get involved.

Responsive Leadership in Stable and Unstable Environments

Some programs work in stable, predictable environments. Predictable environments are orderly, structured, and have secure funding and administrative support. Other program leaders may be challenged by uncertain political, administrative, and economic times. As the stability of the environment changes, the responsibilities of leaders will change.

In stable environments, leaders guide the work of program staff, communicate expectations, and motivate the team to reach its goals. Leaders can also keep partnerships strong and communicate program successes to stakeholders. In a stable environment, stagnation within a program can easily go unnoticed. It is helpful if leaders watch for signs the program has stopped gaining momentum and progressing toward goals.

Programs often work in unstable environments with uncertain, changing conditions. To meet these challenges, a leader’s first responsibility is to use Engaged Data to identify instability and adapt the program as needed. Leaders can support the program by encouraging team creativity and being flexible enough to adapt to changes. It is important that they reassess resources often and reach out to partners to create new ways that the program and partners can support each other. In unstable environments, it is important for leaders at all levels to communicate with each other often. Multilevel Leadership gathers information from multiple sources so that programs can be aware of changes to the environment as soon as they occur.
Networked Partnerships

Networked Partnerships are diverse, strategic relationships made up of partners from different levels, organizations, and content areas. For instance, tobacco control program staff often partner with local, state, regional, and national organizations; programs in other states; and chronic disease programs to work toward program goals. Partners may work toward a common goal or mission, but each partner may fulfill different roles. Networked Partnerships work best when they are connected to each other and to the program.

Networked Partnerships help build motivation, achieve goals, reduce risk, and win allies. Partnerships strengthen programs by:

- Educating the public about the importance of tobacco prevention and control
- Increasing awareness of changes in the community
- Reducing duplication of efforts and resources
- Increasing access to community information and decision making
- Developing cultural competency
- Increasing accountability
- Offering new financial support

The Importance of Networked Partnerships in Program Infrastructure

Networked Partnerships contribute to program infrastructure by providing critical resources to plan, implement, sustain, and expand programs. For example, partners may have skills beyond those of program staff. They may be able to offer training and technical assistance to staff and other partners. They can also contribute to Managed Resources by providing financial support and sharing knowledge with the program.

Networked partners add to Multilevel Leadership and contribute to and carry out Responsive Plans. Partners also help use Engaged Data to achieve program goals. Partners work with program staff to decide what data to collect, review data, and put recommendations into action.

Creating Networked Partnerships

To incorporate Networked Partnerships into their programs, staff can focus on four main goals:

- Developing purposeful, strategic partnerships with key partners, rather than a large number of partners
- Partnering with diverse groups, including partners who do not usually work in tobacco control
- Working with partners to achieve goals
- Evaluating partnerships for strengths, outcomes, and areas for improvement

Developing Partnerships: Quality over Quantity

Having the right partnerships helps achieve tobacco control goals; having the wrong partnerships can divert time and energy and set back a program’s goals. Before developing Networked Partnerships, it is important to decide what kinds of partnerships will result in a more effective program. High quality partnerships include:

- Open and frequent communication
- Sensitivity to each partner’s priorities, goals, and culture
- Mutual trust and respect
- Shared stake in the process and outcome
Building relationships with commitment and trust takes time. Inadequate funding, limited organizational capacity, unequal sharing of responsibilities, and conflicting interests can challenge partnerships. Conflicts caused by miscommunication, differing missions, and disagreements over ownership or funding arrangements can also damage partnerships. *Networked Partnerships* can work to avoid challenges by developing clear expectations and responsibilities.

### Partnering with Diverse Stakeholders

*Networked Partnerships* include non-traditional partners who do not typically work on tobacco control issues. Joining forces with people from different backgrounds adds credibility and new perspectives to tobacco control efforts. These partners could include community organizations, youth organizations, local businesses, members of the media, housing authorities, neighborhood associations, or organizations working on other issues that share common goals (e.g., chronic disease prevention). It is also important to include representatives from populations most affected by tobacco use and the organizations that serve them. Reaching out beyond the “usual suspects” to include non-traditional partners in tobacco control efforts adds these benefits:

- New skills and knowledge to help programs achieve their goals
- A greater understanding of the community and the problem
- Valuable connections for those already working in tobacco control
- Wider promotion of tobacco control efforts

In a small state, partners may be called upon often by many parts of the public health system. Programs must understand partner time constraints and choose their partners strategically. Giving partners as much notice as possible can help them make room in their schedule for program activities.

Many examples of unique partnerships exist in public health. For example, New York City developed a broad coalition for its efforts to reduce access to cheap tobacco and reduce youth access to tobacco products at the point of sale. The coalition included organizations traditionally involved in tobacco control and new partners. For example, other city departments were part of the coalition, such as the Department of Finance, which enforces cigarette tax laws. The partnership was based on the idea that illegal cheap tobacco “wasn’t just a finance issue but…a health issue.” The city also partnered with local businesses, connecting with retailers through other partners whose membership included business owners. This resulted in a partnership with a tobacco retailer in the Bronx who testified in support of point-of-sale policies at a public hearing.

In some cases, *Networked Partnerships* are formed between organizations with different rules, interests, or levels of power. For example, over 1,000 voluntary, non-traditional partners joined forces to reduce access to cheap tobacco and reduce youth access to tobacco products at the point of sale. The coalition included organizations traditionally involved in tobacco control and new partners. For example, other city departments were part of the coalition, such as the Department of Finance, which enforces cigarette tax laws. The partnership was based on the idea that illegal cheap tobacco “wasn’t just a finance issue but…a health issue.” The city also partnered with local businesses, connecting with retailers through other partners whose membership included business owners. This resulted in a partnership with a tobacco retailer in the Bronx who testified in support of point-of-sale policies at a public hearing.

### Dealing with Conflict

Working with diverse partners can present special challenges for *Networked Partnerships*. Following these recommendations helps prevent conflicts from limiting a partnership's ability to achieve tobacco control goals:

- Balance representation of stakeholders to encourage respect for different opinions.
- Set ground rules for meeting behavior, attendance, and decision making.
- Look for shared interests when people will not change stated positions.
- Keep differences of opinion from becoming personal attacks.
- Agree on and use objective criteria to make decisions.
- When serious conflicts occur, focus on areas where some agreement exists instead of on tough sticking points.
professional, and community organizations partnered with Canada’s 10 provincial health departments to develop a national strategy to prevent cardiovascular disease.69 The collaboration formed a coalition called Health Canada, which coordinated the country’s resources to act together on problems too complex for one organization to tackle alone.71 Although the coalition was formed to prevent cardiovascular disease, it increased capacity for general health promotion and disease prevention.69

With the direction and support of the state office, local programs can be a fundamental part of program infrastructure and vital partners in achieving goals. Local programs have diverse relationships and resources that can be useful to state programs, including connections with community leaders who give insight into the community.72 In turn, states can help local programs by providing access to data, expert guidance, partnership development, funding, and technical assistance and training on best practices.1

Working with Partners to Achieve Goals

The purpose of a Networked Partnership is to achieve a common goal. The particular goal can vary as much as the partners themselves. Some partnerships work to carry out evidence-based strategies like smoke-free workplaces, while others focus on building program capacity through training and technical assistance.

To help achieve program goals, diverse partners and community members can take on responsibilities that draw on their strengths and match project needs.73 For example, those with strong ties to the community can serve as local experts and give insight into community priorities during planning.74,75 Partners may also be able to donate needed skills free of charge, such as communications expertise or grant writing.75 Others may be able to bring attention to an issue by lending their name or organizing public events to support the program’s efforts.75

Recognizing how partners’ contributions support tobacco control efforts and documenting progress toward goals can help keep partners engaged.66 Routinely checking in with partners is important to address concerns and expand the ways they contribute to the program. See an example of Networked Partnerships from New York City on page 20.

Evaluating Partnerships

Formal reports of successful Networked Partnerships are uncommon.76 In many evaluations of public health programs, little attention is paid to the qualities of successful partnerships and the challenges that partners face.77 Evaluating partnerships for strengths, outcomes, and areas for improvement is just as important as evaluating tobacco control strategies. Sharing the purposes and benefits of evaluating partnerships with partners can help build buy-in and ensure the findings are used.35 Partnership evaluation can help programs by:73,78

- Identifying partnership strengths and areas for improvement
- Determining if partnership goals have been met
- Increasing public awareness of the partnership
- Helping the partnership be accountable to stakeholders
- Helping achieve tobacco control goals

Information about partnerships are often collected through short surveys. The partnership may also decide to gather more in-depth information through interviews with partners.73 The CDC’s National Heart Disease & Stroke Prevention Program resource, Fundamentals of Evaluating Partnerships, includes sample partnership evaluation questions and assessment tools.73

The California Healthy Cities and Communities program evaluates partnerships as part of its program to help communities carry out health initiatives.79 Evaluators assessed how well partnerships secured resources, expanded programs, and influenced organizational policies.79 The evaluators interviewed coalition and community leaders, held focus groups with coalition members, and reviewed documents.80 The results suggested that multi-sector partnerships can strengthen the infrastructure of communities to promote health.81
NYC Smoke-Free, (formerly the NYC Coalition for a Smoke-Free City), a program of Public Health Solutions, works to protect the health of New Yorkers through tobacco control policy and education. They have locations in four boroughs across New York City (the Bronx, Brooklyn, Manhattan, and Queens) and support their efforts through Networked Partnerships with over 130 community partners. NYC Smoke-Free focuses on community engagement among populations experiencing tobacco-related disparities to build support for initiatives to:

- Reduce access to tobacco products and limit tobacco industry marketing to youth
- Expand smoke-free environments through voluntary adoption of smoke-free housing and outdoor air policies
- Reduce pro-tobacco imagery in youth-rated movies and on the Internet

Developing strong Networked Partnerships has been critical to NYC Smoke-Free’s success in reducing tobacco use. To address the increasing demand for smoke-free housing, NYC Smoke-Free works with tenants, landlords, and property owners to create thousands of smoke-free housing units. NYC Smoke-Free shares resources, makes referrals to partner organizations, and offers technical assistance. They also meet regularly with community boards to educate and inform communities on the negative health effects of tobacco use and the benefits of smoke-free housing. As a result, community boards have passed resolutions encouraging smoke-free housing and smoking disclosure policies in multi-unit housing.

To encourage connections among partners, NYC Smoke-Free has hosted smoke-free housing summits where partners interact with each other and share information. Partners discussed strategies to increase smoke-free housing in their own communities, such as involving tenants, partnering with health initiatives, and encouraging smoke-free new construction. To keep partners connected throughout the year, NYC Smoke-Free hosts meetings for all partners and communicates updates through e-newsletters, blog posts, Twitter, and Facebook.

Innovative partnerships have also helped NYC Smoke-Free tackle its toughest challenges. Despite an overall drop in smoking prevalence in New York City, smoking has remained high among certain populations, including the Asian American and LGBT communities. To reduce these disparities, NYC Smoke-Free partnered with influential community organizations. For example, NYC Smoke-Free worked with the Chinese-American Planning Council to design a culturally relevant ad for Chinese language newspapers to help parents understand the dangers of secondhand smoke exposure at home.

NYC Smoke-Free’s strategic use of Networked Partnerships to share ideas and resources, implement programs, and increase public awareness of smoke-free strategies has helped New York City lower smoking prevalence, safeguard youth from tobacco industry marketing, and protect New Yorkers from the harmful effects of secondhand smoke exposure where they live, work, and play. For more information on NYC Smoke-Free, visit www.NYCSmokeFree.org.
Managed Resources

Managed Resources are the funding and staff resources used to implement a program. It is essential that programs have enough funding and skilled staff to oversee programs and conduct technical assistance and training. The process for managing these resources is often referred to as the program's operations strategy; it serves as a guide for how a program's resources will be used to achieve intended outcomes. This strategy is developed with the support of leadership and plans for the resources needed to not only meet funding requirements, but also achieve program goals and vision.

Securing multiple funding sources and staff with diverse skills can help programs use effective tobacco control strategies, even as budgets and staff levels change. Diversifying and managing funding is important so that the loss of a single funding source will not have a large impact on the program's work. Programs that focus on funding sources that fit best with their goals, instead of pursuing every funding opportunity, can build more stable revenue sources and engage new partners and funders.

Successful programs also view staff as their most important asset. Staff with diverse technical, programmatic, and administrative skills are crucial to achieve program goals. Their work is supported by local programs and grantees who are skilled in carrying out tobacco control strategies. Developing staff skills encourages staff ownership of the program.

The Importance of Managed Resources in Program Infrastructure

Developing strong Managed Resources supports the other components of infrastructure. Continuously training staff, partners, and local programs helps develop skilled Multilevel Leadership and Networked Partnerships. These leaders and partners increase the capacity of programs by contributing much-needed resources and knowledge.

Managed Resources are also an important part of the Responsive Planning process. Planners use information about staff skills and funding to develop plans. Responsive Plans in turn help staff decide how to use resources.

Adequate resources and skilled staff are also important to collect and analyze Engaged Data. Data can then be used to allocate resources and justify continued staff and financial support.

Strengthening Managed Resources

Strong Managed Resources begin with a firm understanding of the program's environment. It is important that program staff understand the state and regional funding climate and the health department's capacity to support tobacco control efforts. Knowing what funding and staffing strategies have been tried in the past can also help make wise Managed Resources decisions. This knowledge is most useful when it is shared among program staff, so that it is not lost if someone leaves. Using this information, staff can work to develop and strengthen Managed Resources by focusing on these important goals:

- Ensuring funding stability
- Directing resources to strategies with the greatest impact
- Sharing positions and resources
- Communicating program successes
- Developing staff competencies
- Training staff and partners

Ensuring Funding Stability

Creating an adequate and consistent financial base for the program is important for Managed Resources. Stable funding strongly influences a program's sustainability, or the ability the maintain the program and its achievements over time. Because the availability of state, federal, and foundation funding changes from year to year, it is important for program managers and supporters to be aware of funding threats and adapt to changes. Programs that have maintained stable funding during difficult times have shared the following characteristics:

- Experienced leadership
- Understanding of the internal processes to make budget decisions
- Strong ties across departments and levels of the organization
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- Coordinated efforts
- Strategic use of Engaged Data
- Effective messages
- Active communication about program successes
- Visible and influential champions

Careful planning and strong financial management can lessen the effect of funding losses. Working with leadership to develop a funding plan, diversify funding sources, and train staff in financial management skills like grant writing are important steps to sustain the program when one funding source. See below for information on Best Practices 2014 funding recommendations.

A CLOSER LOOK: Understanding Best Practices Funding Recommendations

Best Practices 2014 recommends that states make annual investments to fund and sustain comprehensive tobacco control programs. A reasonable target is between $7.41 and $10.53 for each member of the state's population, depending on the state's demographics, smoking prevalence, and existing health infrastructure. These levels of investment are lower than past recommendations because of new opportunities created by the Affordable Care Act and other factors, including new scientific evidence, state experiences, and the changing tobacco control landscape.

What Do States Fund?

The CDC recommends that states create, fund, and sustain tobacco control programs that include five main elements: state and community interventions, mass-reach health communication interventions, cessation interventions, surveillance and evaluation, and infrastructure, administration, and management. Best Practices 2014 includes state-by-state recommendations for funding each of these elements.

Who Do States Fund?

To support local infrastructure and implement programs, states often fund local health departments, boards of health, or health-related nonprofit organizations representing counties or metropolitan areas. Funds can also be awarded to tribal health departments or tribal-serving organizations and other community organizations that serve specific populations. Best Practices 2014 includes minimum and recommended funding levels which reflect the annual investment that each state can make to fully fund and sustain a comprehensive tobacco control program. The minimum funding level represents the lowest annual investment to implement a comprehensive tobacco control program. The recommended funding level represents the annual level of investment to ensure a fully funded and sustained comprehensive tobacco control program, with enough resources to effectively reduce tobacco use.
be useful strategies. Developing a timeline and deciding who will manage the funding plan encourages ownership of the plan by making it the responsibility of both program leadership and staff.

**Directing Resources to Strategies with the Greatest Impact**

To lessen the effect of funding cuts on program goals, staff can direct limited resources to strategies with the widest reach and strongest evidence of effectiveness. For example, tobacco control policies that focus on population-level changes have the potential to reach more people, shifting social norms about tobacco use and reducing initiation, tobacco use, and secondhand smoke exposure. A flexible operations strategy allows the program to redirect resources toward these strategies.

**Sharing Positions and Resources**

Creative funding and staff arrangements serve many uses in public health. Programs with common goals may want to share a specialized staff person, such as an epidemiologist or policy expert. Programs may also use these arrangements to sustain activities when funding levels change, though it is important not to wait to share resources until budgets are threatened. This could mean sharing Managed Resources across projects or departments, such as grant writing, communications materials, and administrative support. Redefining positions and sharing resources often makes the difference for programs that are able to sustain a high level of services after losing funding.

**Communicating Program Successes**

Communicating about the importance and successes of a program can be one effective strategy to strengthen Managed Resources. Gathering data about activities and strategically sharing the results are powerful ways to highlight the achievements of a program (see the Engaged Data section on page 26 for more details). One way to communicate accomplishments is by writing a success story. Success stories describe the program’s progress, achievements, and lessons learned and can take many formats. Learn more about developing success stories on page 30.

**Developing Staff Competencies**

Having the right people with the right skills is critical to effectively carry out tobacco control programs. Programs can focus on developing staff competencies (i.e., skills that people need to do a job well) to build staff capacity in key areas. Developing staff competencies helps avoid knowledge gaps and creates a workforce that is skilled enough to adapt to changing program environments. Competencies help managers set realistic expectations for staff, identify areas for improvement, and recognize successes. Reviewing competencies can also help during performance evaluations and hiring. Program managers can assess staff competencies to justify requests for more resources and develop program plans.

The Council on Linkages Between Academia and Public Health Practice developed competencies for public health programs to assess staff knowledge, skills, and training needs. The competencies are organized into eight important skill areas, called domains. Table 2 on page 25 describes entry-level staff competencies in each domain. Competencies for program managers and leadership are also available at the web page, Core Competencies Tools. There, program leaders can review all the competencies, along with self-assessment tools, sample job descriptions, and guidance on incorporating the competencies into staff training.

**Training Staff and Partners**

Hiring and keeping skilled staff is a priority for public health programs. State and local programs can face recruitment and retention problems that are made worse by hiring requirements, hiring freezes, and budget crises. Predetermined budgets can interfere with career ladders and competitive salary structures that recognize skills and motivate staff performance. These problems can lead to inadequate staffing levels and staff who are not prepared for their jobs, which can weaken all components of program infrastructure and keep programs from achieving goals.

Continuous training processes help programs overcome these challenges by ensuring that staff have the right skills for tobacco control efforts. Continuous training is a four-step process: orientation, onboarding, training,
Orientation helps new staff understand the basic structure and philosophy of the organization, see what their daily routine will be like, and learn about who the program serves. Onboarding can be a 6 to 12 month process of learning about tobacco control, understanding how the program works, and adapting to the program’s culture. Training helps staff build the skills and knowledge needed for their position and typically covers:

- The skills and information needed to do the job, such as knowledge of tobacco control strategies and funder reporting requirements.
- The processes and tools used by the program.
- New developments, policies, and regulations in tobacco control.
- Other skills that staff need to do their jobs, such as interpersonal skills or cultural sensitivity.

Professional development is an ongoing process for all staff that helps them build new skills above and beyond past training. Opportunities for staff might include participating in informal interest groups with other staff on specific topics, taking university courses, attending conferences or workshops, or completing topic-based institutes.

It is helpful to develop a systematic process to carry out each phase of training that includes checklists and tools that are followed with each staff person. This ensures that training will actually take place amid the many other responsibilities of busy program staff.

Staff join programs with different backgrounds and skills. Training can be tailored to the needs of each staff person by first assessing what skills the person already has and what he needs to develop. Assessment tools like the Public Health Foundation resource, Competency Assessments for Public Health Professionals, can help assess staff skills. CDC resources can also help meet training needs. The State and Community Resources section of the CDC Office and Smoking and Health’s website includes resources for program development, surveillance and evaluation, and Best Practices 2014 guidance. The CDC Learning Connection portal includes links to tobacco control resources and CDC TRAIN, an online learning system that offers courses on topics like strategic planning and financial management. Most CDC Train courses are available free of charge.

Programs can also use individual development plans to ensure that ongoing training builds on existing staff skills. The National Association and County & City Health Officials resource, Your Individual Development Plan, is one template that can be used to create staff development plans.

Skilled local grantees and partners help achieve program goals and sustain impacts. Program staff can offer training and technical assistance to partners by assessing the needs of local programs and building these skills first. Programs can offer foundational trainings and partner with expert consultants when more specialized technical assistance is needed. It is also important for grantees to set training goals and required competencies for their own staff.
### Table 2. Tobacco Control Domains and Competencies

<table>
<thead>
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<th>Domain</th>
<th>Competency</th>
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| **Communication**               | • Communicate clearly and respectfully with diverse groups.  
• Use multiple strategies to communicate with professionals and the public (e.g., reports, presentations, e-mail, and letters).  
• Develop effective messages to speak with funding organizations. |
| **Community Engagement**        | • Partner with community members and organizations to reduce tobacco use (e.g., share data and connect people to resources).  
• Inform the public about policies, programs, and resources that improve community health. |
| **Cultural Competency**         | • Include diverse perspectives in the development, implementation, and evaluation of policies and programs.  
• Describe the effects of policies and programs on different populations in a community. |
| **Data Analysis**               | • Use quantitative and qualitative data to assess the health of a community.  
• Apply ethical principles in collecting, analyzing, using, and sharing data.  
• Understand how community assessments use information about tobacco use. |
| **Financial Planning and Management** | • Help develop program budgets.  
• Gather information for funding proposals and service contracts.  
• Motivate colleagues to achieve program goals (e.g., work in teams, encourage others to share ideas). |
| **Leadership and Systems Thinking** | • Understand how tobacco control is part of a larger inter-related system of organizations that influence health at local, national, and global levels.  
• Recognize professional development needs (e.g., mentoring, training, peer advising) and take part in opportunities. |
| **Policy Development and Program Planning** | • Help develop and implement program goals, objectives, and strategic plans.  
• Gather information and data to develop strategies. |
| **Tobacco Control Evidence**    | • Learn about and apply scientific evidence.  
• Contribute to the evidence base (e.g., write articles).  
• Recognize limitations of evidence (e.g., validity, reliability, sample size, bias, generalizability). |

*Source: Adapted from The Council on Linkages Between Academia and Public Health Practice*[^99]
Engaged Data

Engaged Data is data that is used by staff, partners, decision makers, and local programs to act.1 Tobacco control programs may be required to collect and report data to funders, decision makers, or the public. These efforts take staff time and resources. Programs can get the best return on this investment by also using data to plan and improve their efforts. Programs can use surveillance data to monitor attitudes, behaviors, and health outcomes over time and guide program direction.1,3,10 Evaluation data about program activities and results can help understand how the program works, improve the program, and plan future activities.1 Sharing data with partners and decision makers can increase program visibility, transparency, and credibility.

The Importance of Engaged Data in Program Infrastructure

Engaged Data provides critical information about the program to support the other four infrastructure components. For example, programs use data during Responsive Planning to assess program strengths and weaknesses, track progress toward goals, and identify areas for improvement.8,11 It is very difficult for programs to respond to problems, gaps in service, or changes in the environment without timely, correct data.

Multilevel Leadership also uses data to drive program success. Leaders share data with the public and decision makers to make the case for continued program support of the program.11 Internally, leaders use data to make decisions about how to manage program resources. Leaders also inspire staff commitment and can use data to show staff that their work makes a difference.35

Engaged Data is also an important tool for creating Networked Partnerships. Involving partners in selecting and reviewing data makes sure their questions about the program are answered and increases their commitment to the program. Sharing data with the public can encourage people to get involved in tobacco control efforts in their community.20

Sound decisions about Managed Resources are grounded in data. Program staff review data to allocate resources to new strategies and decide if activities will be revised or eliminated.

Using Engaged Data

Program staff can use data to track progress toward goals, learn from mistakes, make changes, and create effective programs.11 Program staff with less experience collecting and analyzing data may also want to partner with an outside expert, such as a university or evaluation firm. Learn more about developing staff data skills on page 28.

Surveillance and evaluation are two reasons programs often collect data, but any data gathered by the program can become Engaged Data when it is used to promote action.2 Data can come from sources such as the Behavioral Risk Factor Surveillance System (BRFSS), local surveys, or internal program records. Data can also be carefully collected if none exists. More guidance on collecting data is available on the CDC Office on Smoking and Health’s web page, Surveillance and Evaluation.112

Six Steps of Engaged Data

Programs can follow these six steps to effectively use Engaged Data:8,35

- Step 1: Engage stakeholders.
- Step 2: Describe the program.
- Step 3: Choose questions to answer.
- Step 4: Gather credible data.
- Step 5: Develop conclusions.
- Step 6: Share results and ensure use.

Stakeholders can be involved in each step. They can help select key questions, test data collection tools, collect and analyze data, and decide on recommendations.35 Keeping stakeholders engaged increases their ownership of evaluation results.35

Although the process only has six steps, Engaged Data is an ongoing process that is continuously used by programs. When staff and stakeholders reach the last step, they can use the results to inform the next Engaged Data process. More guidance on completing the six steps of Engaged Data is also available in the CDC workbook, Developing an Effective Evaluation Plan.35 The workbook describes each step and includes worksheets for completing the steps to develop the program’s evaluation plan.
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Step 1: Engage Stakeholders

Involving stakeholders in using data increases the chances that recommendations will be accepted and put into action. Stakeholders who help review data are more likely to share results with others, support recommendations, and act on findings. Without stakeholder support, data might be criticized, resisted, or ignored.

Stakeholders involved in using data might include people served by the program (e.g., community members or taxpayers), people involved in program operations (e.g., program staff or partners), or people who make decisions about the program (e.g., funders and elected officials). The first list of stakeholders created by program staff may be long. Programs can focus on including stakeholders who:

- Are responsible for day-to-day program activities
- Are involved in Responsive Planning
- Can authorize changes to the program recommended by the Engaged Data process
- Will fund or authorize the continuation or expansion of the program
- Can increase the credibility of the results

Stakeholders are more likely to support recommendations if they are involved from the beginning. Incorporating input from diverse stakeholders early on also helps ensure that data answers stakeholders’ most important questions and that evaluation results are used. Program staff can also share the list of stakeholders and how they were involved to increase buy-in from people who did not participate. Knowing that someone they find credible was involved encourages others to use the results.

Step 2: Describe the Program

It is important that staff and stakeholders agree on how to achieve program goals before they use data to make decisions about the program. Knowing what the program does (and does not do) helps stakeholders develop realistic expectations for what questions can and cannot be answered by the data. When stakeholders know what to expect, they can plan for how they will use the results.

Working with stakeholders to develop the program description and the logic model creates a shared understanding of the program. The program description explains the need for the program, the program’s activities, its capacity to improve public health, and the program’s environment. The logic model is a diagram showing all parts of the program and how they relate to intended outcomes. Learn more about how to develop logic models in the CDC workbook, *Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide*. The logic model and program description may have already been developed for strategic planning. If the program already has these documents, staff can review them with stakeholders before collecting data.

Step 3: Choose Questions to Answer

Programs have limited resources to collect and analyze data. They should focus on the most important questions about the program, rather than trying to answer every question that stakeholders may ask. This focused approach leads to results that can be used to make decisions about the program. Program staff can ask, “What information will be used by the program and stakeholders (including funders) to improve the program and make decisions?”

Questions to Ask Stakeholders

To assess their interests, programs can ask each stakeholder:

- Who do you represent and what about the program is important to you?
- What would you like the program to achieve?
- How much progress do you expect the program to have made at this time?
- What do you think are the critical questions at this time?
- How will you use the results?
- What resources (e.g., time, funds, or knowledge) could you contribute?
A CLOSER LOOK: Developing Engaged Data Skills

For inexperienced staff and partners, collecting and analyzing data may seem overwhelming. Tobacco control staff use specialized skills to turn data into action. Offering trainings on the following topics can help develop Engaged Data skills:\(^{114}\)

- Creating sound evaluation plans
- Developing and using data collection instruments
- Training data collection teams
- Using culturally competent methods
- Analyzing and interpreting data
- Reporting evaluation results

Programs can use the evaluation workbooks on the CDC’s Surveillance and Evaluation web page to develop Engaged Data skills. Webinars, newsletters, and a regional peer-to-peer network are also available. Technical assistance such as site visits, webinars, and “how-to” guides can also ensure that local program staff also have the skills to use data. Technical assistance is most effective when it is tailored to the needs and budgets of local programs and partners.

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Stakeholders may reach different or even conflicting conclusions when reviewing the data. Program staff can use the following questions to guide discussion and reach consensus:

- Why was the data gathered? Do the results answer all the questions?
- Are the results similar to expected results?
- Do the results address the priorities of the program and stakeholders?
- How do the results compare with those of similar programs?
- How does the social and political environment of the program affect the results?
- Do the results support tobacco control goals?

**Step 6: Share Results and Ensure Use**

Evaluation recommendations are most useful when they are shared with the people who make decisions about the program. Programs can plan for how results and lessons learned will be communicated with others. This information can be included in the communications plan developed as part of Responsive Planning.

To decide what information to share, staff can think about how stakeholders plan to use the results. For example, will stakeholders use the results to build support for the program or to make changes to program activities? Stakeholders may also prefer different levels of detail. Effective evaluation reports include:

- An executive summary
- A list of stakeholders and how they were engaged
- A description of the program
- A description of the focus of the evaluation and its limitations
- The criteria used to draw conclusions
- Recommendations for action
- For each recommendation, a description of the pros, cons, and resources
- Technical information in appendices

Decision makers may not have time to read full reports and may prefer web-based or visual formats. Local grantees may want the detail of a full report. Some stakeholders may also prefer more frequent updates than others. Interim reports can be especially useful when programs are new or work in rapidly changing environments. Learn more about developing evaluation reports in the CDC workbook, *Developing an Effective Evaluation Report*. Success stories can also be used along with evaluation reports to share data in a compelling and accessible way. Learn more about developing success stories on page 30.

Audiences access information in different ways. Online reports or presentations may not be appropriate for stakeholders with limited Internet access. Some stakeholders may have limited English-speaking abilities or lower literacy levels. Others may have little knowledge of tobacco control. It is best to avoid technical terms and jargon in all communications.
Even well-thought-out communications plans may not be enough to get programs, partners, and decision makers to act on recommendations. Programs can increase the likelihood that results are used by following up with stakeholders to help them carry out recommendations. Program staff can review results during internal staff meetings, hold regular meetings with stakeholders to brainstorm ways to put results into action, and track efforts of staff and stakeholders to make changes. These efforts take time and commitment, but are important to remind stakeholders what was learned, prevent misuse of results, and keep recommendations from being forgotten or ignored during complex or political decisions.

A CLOSER LOOK: Using the Success Story

An effective, flexible way to frame results is to use a “success story.” Success stories can help explain program data in a compelling, easily understandable format. An “upstream” success story follows a project in its early stages. A “midstream” success story follows a program that is up and running and shows progress. A “downstream” success story shows program impact. Highlighting a success story can educate decision makers, celebrate achievements, and show progress toward long-term goals. A success story can take several forms. The story’s purpose and the intended audience will help programs decide which format to use:

- An “elevator story,” an attention-grabbing short story that describes the program and can be easily recited
- A “paragraph spotlight,” a paragraph explaining the program that can be used in newspapers and other media
- A “one-pager,” a polished document with pictures and contact information that can be easily handed to decision makers or funders
- A “two-page success story,” a detailed story that presents a more complete picture of a program and can be used for best practice submissions or to highlight a specific program
- A “full brief,” a more formal combination of the above formats, as well as data visualizations that showcase program achievements
- A “published article,” an article that synthesizes the program’s work and experiences, used when the public recognizes the public health issue and supports the program’s efforts

Effective success stories are recent, relatable, realistic, jargon-free, tailored to the audience, and tied to other issues important to the community (e.g., child health or public safety). The workbook, Impact and Value: Telling Your Program’s Story, and the web page, Tips for Writing an Effective Success Story, can help programs create success stories. The website, NCCDPHP Success Stories, includes step-by-step instructions for developing content and designing success story layouts.
How Can Tobacco Control Programs Support Program Infrastructure?

Program staff can take the following actions to support the development of a strong program infrastructure:

**Responsive Plans and Planning**
- Encourage diverse staff, partners, community members, and grantees to take part in the planning process.
- Think about what data will be needed to develop plans and gather information before starting planning.
- Regularly assess implementation of plans and revise activities as needed.

**Multilevel Leadership**
- Identify organizations or people in the community that could become leaders and make sure they understand the value of tobacco prevention and cessation.
- Look for staff that can be developed into future leaders.

**Networked Partnerships**
- Continue to develop and strengthen internal partnerships with public health directors or other agency administrators.
- Create opportunities to connect people inside and outside the program (e.g., networking events and partner meetings) to strengthen the entire network of tobacco control champions.

**Managed Resources**
- Develop a plan to secure resources for the program, including identifying champions, alternative funding sources, and opportunities to share resources and staff with other programs.
- Establish competencies for staff to guide the development of staff skills and knowledge.
- Assess the technical assistance needs of local grantees and partners and offer trainings on these topics.

**Engaged Data**
- Tailor how results are shared, choosing information, format, and language that is relevant to the audience.
- Meet with stakeholders to discuss how results can be put into action and follow-up with technical assistance to make changes.
Oregon Case Study

Oregon maintains basic infrastructure during complete budget cut and uses Engaged Data to build support to restore funding

Oregon’s efforts result in sharp decreases in statewide tobacco use

In the late 1990s, Oregon’s tobacco control program was among the most successful in the country. In 1996, voters approved a 30¢ increase in the cigarette tax and set aside 10% of the revenue to fund tobacco prevention and education, leading to the creation of the Oregon State Tobacco Prevention and Education Program (TPEP). Two years later, TPEP’s efforts were paying off; smoking prevalence in Oregon had declined by 11%. The state started funding tobacco cessation coverage for Medicaid recipients in 1998, passed the first private employer smoke-free workplace law in 2001, and raised the cigarette tax by another 60¢ in 2002. Smokers in Oregon started to cut back on their use, and smoking prevalence decreased by 40% from 1996 to 2003.

Program infrastructure devastated by loss of funding

In response to a state budget crisis in March 2003, the Oregon state legislature completely defunded TPEP. Just as the program had become recognized as a model tobacco control program, it was shut down. Many programs, including the Quit Line, were dismantled. The state’s paid media campaign ended as billboards and other counteradvertising were removed. Defunding also nearly dissolved TPEP’s infrastructure that had sustained efforts across the state. Though a fraction of its funding was replaced in 2004, the damage to TPEP’s infrastructure had been done. TPEP’s Networked Partnerships and Managed Resources were most affected. TPEP was forced to end contracts with all 34 local health departments, representing 36 counties. Staff members who had been working for TPEP were forced to find new jobs. Partnerships developed over time and investments in staff training and technical assistance were lost.

TPEP uses Engaged Data and Multilevel Leadership to build support to reinstate funding

Following the 2003 funding cut, TPEP was forced to operate with less than 40% of its former budget, limited annual funding from the CDC, and basic program infrastructure. TPEP made the strategic decision to focus on continuing surveillance and evaluation. Using Engaged Data gathered from these efforts, Oregon was able to show the legislature and public that the loss of funds was having a profound effect on cigarette sales rates (see Figure 4 on page 33). Because TPEP’s efforts were scaled back, the decline in cigarette pack sales had slowed and eventually began to rise in 2005.

Multilevel Leadership helped gain the support necessary to reinstate TPEP’s funding. Staff from the Oregon Department of Human Services educated decision makers and the public on the need for comprehensive tobacco control programs. In 2007, they presented

“We learned you can weather even big swings in your budget if you have that basic framework to build on.”

– Karen Girard
CASE STUDIES

budget recommendations to the legislature, predicting that cigarette sales and tobacco use would continue to increase if TPEP kept operating without enough funding. By this time, Oregon's fiscal situation had improved, and former Governor Ted Kulongoski responded to the recommendations, pledging his support for TPEP and tobacco prevention. In 2007, the legislature and Governor supported fully restoring funding to 1990s levels, and Oregon again began making progress in reducing tobacco use and secondhand smoke exposure.

The legislature also passed the Indoor Clean Air Act in 2007. The law went into effect in 2009 and protects most Oregonians from secondhand smoke exposure at work and prohibits smoking within 10 feet of public buildings. Tobacco product sales started to decrease again, and as of 2015 adult cigarette smoking prevalence was below the national average.

Karen Girard, Health Promotion & Chronic Disease Prevention Section Manager, credited the program refunding to Engaged Data, saying, “Data gathering is an ongoing need to help plan and then evaluate. It is very important to have the evidence to back up the work that is being done.”

Managed Resources support program sustainability

TPEP is now well-integrated into Oregon’s Public Health Division. Staff and resources are shared across all chronic disease programs, so that if the money goes away again in the future, the infrastructure will not. Girard explained, “Unstable funding is devastating to a program. After some of the funding was reinstated, we spent the next two years rebuilding the infrastructure that had been torn down from not having funding for just a few months. We learned you can weather even big swings in your budget if you have that basic framework to build on.”
Minnesota Case Study

Minnesota focuses on strengthening tobacco control program infrastructure as funding fluctuates

Statewide Health Improvement Program (SHIP) sees fluctuating levels of support

Created in 2009, Minnesota’s SHIP works to reduce obesity and tobacco use by offering grants and technical assistance to local public health departments and tribes throughout the state. While Minnesota’s legislature first funded SHIP at $47 million, a state budget deficit in 2011 led to a 70% funding cut. As a result, some grantees lost all funding and many were forced to lay off their entire SHIP staff.

Networked Partnerships help sustain program infrastructure after defunding

After losing funding, SHIP turned to its Networked Partnerships to make the case for reinstating funding. Health advocates brought together business leaders, decision makers, and community groups to town hall meetings across Minnesota to show support for SHIP. As Chris Tholkes, former manager of Minnesota’s Alcohol and Tobacco Prevention and Control Program (TPCP) explains, “The partnerships that we built through workplace wellness strategies and other strategies with non-traditional partners were unusual suspects. They grabbed people’s attention.”

TPCP also used a unique partnership-based funding structure to sustain program infrastructure and activities after SHIP funding was cut. Minnesota’s tobacco control efforts are funded by three main sources: Blue Cross and Blue Shield of Minnesota (a health insurance provider), ClearWay Minnesota (an independent nonprofit foundation), and the Minnesota Department of Health. Additional yearly CDC funding supports staffing. This diversified funding structure allowed TPCP to respond to a volatile funding environment and manage resources so that they could continue program activities. As a result, the program continued to achieve tobacco control successes, including a tobacco tax increase and progress on innovative point-of-sale policies.

Responsive Plans and Planning help SHIP regain position as a tobacco control leader

In 2012, Tholkes worked with CDC’s Office on Smoking and Health to revise the program’s strategic plan to better respond to changes in funding. During the planning process, the committee acknowledged that the program had lost its status as the state’s primary resource for evidence-based knowledge. To regain the program’s position as a tobacco control leader,
the committee presented at national and regional conferences, developed a communications plan, and emphasized evaluation objectives in the new plan’s goals. The new plan also focused on educating state officials on tobacco control initiatives and featured a “menu” of strategies for grantees, including increasing tobacco prices and expanding local point-of-sale work. The plan also included evaluation tools that could be used to assess each of the strategies. Tholkes sees the Minnesota program once again serving as a leader in tobacco control and as a resource for data and education on tobacco-related issues for Minnesota.

**TPCP adapts Managed Resources to respond to funding instability**

After experiencing drastic funding changes over the course of five years, Tholkes and colleagues realized the importance of being proactive instead of reactive to funding changes. In response, the program focused on strengthening Managed Resources to help sustain the program when funding fluctuates.

State tobacco funding in Minnesota does not cover administrative costs, including staffing. To protect staff from future budget cuts, the program (with the support of state leadership) revisited the statute that prohibits administrative expenses and began sharing staff with other divisions of the Health Department. Sharing staff allowed TPCP to hire part-time staff to support Engaged Data efforts. Staff used data to develop public health messages to support tobacco control strategies. These messages were an important factor in recent program wins, including increasing Minnesota’s tobacco tax by $1.60 in 2013.

**TPCP strengthens Networked Partnerships**

Because of its connection to many other community issues (e.g., chronic disease prevention, environmental concerns, and state revenue), Tholkes sees the program acting as a “hub” within the public health department that can guide the work of Networked Partnerships across many departments. In 2013, the Minnesota Health Department received a Quality Improvement Grant. According to Tholkes, “The group that convened identified tobacco as the topic that touches the most areas in the department, and they wanted that to be the focus of the quality improvement work.” The Minnesota TPCP used the grant opportunity to improve how tobacco control works and communicates information with other health department programs.

> “The group that convened identified tobacco as the topic that touches the most areas of the department...they wanted that to be the focus of the quality improvement work.”
>  
> – Chris Tholkes

**SHIP funding fluctuations encourage Responsive Planning for state tobacco control efforts**

In 2013, SHIP funding increased from $15 million to $35 million. Communities that were defunded reapplied for SHIP grants, and 38 communities and 10 tribal nations were awarded SHIP funding. The program also began awarding planning grants to ensure that grantees had time to rebuild capacity before implementation. These experiences have also led to Responsive Planning for other tobacco control initiatives in the state. ClearWay Minnesota runs the state quitline, but these services will end in 2023. “It seems far into the future, but we’re already thinking about who will take on the quitline and what that transition might look like.”
Why Invest in Program Infrastructure?

Fully-functioning program infrastructure is essential to develop and implement successful tobacco prevention and control programs. Program infrastructure is the foundation that supports the organizational capacity to carry out tobacco control strategies and achieve program goals. Investing in a strong program infrastructure also helps sustain programs during times of fluctuating support. This case for investment provides information that programs can use to educate decision makers and leadership on why program infrastructure should be funded and the important role it plays in a comprehensive tobacco control program.

History and Adoption

Since 2000, the CDC has encouraged states to improve public health infrastructure by assessing staff skills, information and data systems, and organizational capacity. Healthy People 2020 also included the development of public health infrastructure among its goals. The initiative described infrastructure as “key to all other topic areas in Healthy People 2020. It allows for and supports key goals of Healthy People, including the improvement of health, creation of environments that promote good health, and promotion of healthy development and behaviors.”

In 2009, building on past work, the CDC conducted a literature review on public health infrastructure and theories from other disciplines such as sociology, organizational development, and economics. In 2011, the CDC developed an infrastructure model based on data from 18 state tobacco control programs. Tobacco control programs and partners can use the model’s five core components (i.e., Responsive Plans and Planning, Multilevel Leadership, Networked Partnerships, Managed Resources, and Engaged Data) to measure success and increase the sustainability of programs. This “practical, actionable, and evaluable” model was added to the expanded Infrastructure, Administration, and Management category in Best Practices 2014.

Scientific Evidence

Several national public health organizations recommend infrastructure development as key to achieving public health goals. The 2002 Institute of Medicine report, The Future of the Public’s Health in the 21st Century; the 2007 National Cancer Institute monograph, Greater Than the Sum: Systems Thinking in Tobacco Control; and Healthy People 2020 all include infrastructure development as important objectives.

Evidence shows that greater investments in tobacco control programs lead to greater declines in tobacco use. In states that have made larger investments in comprehensive tobacco control programs, smoking prevalence and cigarette sales have decreased faster than national rates. Major cuts to program infrastructure have also had drastic effects. Decreases in staffing and funding have increased cigarette use, youth willingness to try smoking, and youth smoking prevalence. Developing and maintaining fully-functioning infrastructure supports program capacity to reach tobacco control goals.
Cost

Tobacco use and secondhand smoke exposure is the leading cause of preventable disease and death in the U.S.\textsuperscript{128} Cigarette smoking resulted in approximately $175.9 billion in direct health care costs in 2013 and approximately $150.7 billion in annual productivity losses.\textsuperscript{128} Comprehensive tobacco control programs reduce both the health and financial burdens of tobacco use.\textsuperscript{127} A solid infrastructure is the supporting foundation that gives states the capacity to effectively implement tobacco control programs.\textsuperscript{1}

Creating and maintaining a strong program infrastructure is a continuous process. Fully developing each component is important to carry out effective strategies. Developing all components takes resources and time. The cost of building a strong infrastructure depends on the infrastructure the program already has in place and the program's scope of work. \textit{Best Practices 2014} recommends that at least 5\% of a state's CDC-recommended budget go toward administration and management of infrastructure activities, even if actual program funding is below this level.\textsuperscript{1}

When programs have a complete infrastructure in place, they can take advantage of opportunities and defend against threats to achieving program goals.\textsuperscript{1} The core infrastructure components of Responsive Plans and Planning, Multilevel Leadership, Networked Partnerships, Managed Resources, and Engaged Data interact with each other to create a synergy that builds capacity to implement evidence-based strategies and achieve public health outcomes.\textsuperscript{2}

Sustainability

Sustainability is not just about funding; it is also about being able to maintain program activities and their benefits over time.\textsuperscript{30,41,42} Investing in tobacco control program infrastructure can have a lasting effect on tobacco use and secondhand smoke exposure.

Each of the five core infrastructure components help sustain the effects of tobacco control programs.\textsuperscript{2} Responsive Planning helps programs create a long-term plan for success that maps out how the program will maintain or increase funding and sustain its achievements. Developing strong Multilevel Leadership and Networked Partnerships secures resources and creates champions that are critical to achieve goals and keep programs going when funding is cut. Careful attention to Managed Resources can lessen the effect of funding losses and help ensure program sustainability. Programs can also use Engaged Data to justify continued support for programs and to improve their effectiveness. When programs are successful, it helps make the case for continued support of tobacco prevention and control strategies.\textsuperscript{134}
Articles and Books


Manuals, Reports, and Toolkits


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https://sustaintool.org

Centers for Disease Control and Prevention (CDC), CDC Learning Connection  
http://www.cdc.gov/learning

CDC, CDC TRAIN  
https://cdc.train.org

CDC, NCCDPHP Success Stories  
https://nccd.cdc.gov/nccdsuccessstories

CDC, Evaluate: SWOT Analysis Tool  

CDC, National State-Based Tobacco Control Programs, Work Plan Template  

CDC, Smoking and Tobacco Use Surveillance and Evaluation  

CDC, Tips for Writing an Effective Success Story  

GovLeaders.org, Tips for Change Agents  
http://govleaders.org/change_agents.htm

National Association of County & City Health Officials, MAPP Framework  

National Association of County & City Health Officials, Your Individual Development Plan  

Public Health Accreditation Board  
http://www.phaboard.org

Public Health Foundation, Core Competencies Tools  

Smoking Cessation Leadership Center, Performance Partnership Model  

**Community Tool Box**  
http://ctb.ku.edu

- Developing a Strategic Plan  
- Building Leadership Toolkit  
- Creating and Maintaining Partnerships Toolkit  
- Becoming an Effective Manager  
- Getting Grants and Financial Resources  
- Hiring and Training Key Staff  
  http://bit.ly/ctb_staff
- Evaluating the Initiative Toolkit  
- Strategies for Sustaining the Initiative  

**Tobacco Control Network**  
http://tobaccocontrolnetwork.org

**Case Studies**

**Oregon**

Oregon Public Health Division  
http://public.health.oregon.gov

Oregon Tobacco Prevention and Education Program  

**Minnesota**

Minnesota Department of Health  
http://www.health.state.mn.us

Minnesota SHIP: The Statewide Health Improvement Program  
http://www.health.state.mn.us/SHIP

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