Changing Lives in Missouri

Tobacco Prevention and Cessation Initiative Final Report DECEMBER 2015









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Contents

Page i
Page ii
Page 1
Page 3
Page 4
Page 6
Page 11
Page 41

Preface

Friends and Partners,

Systemic change is crucial to improving lives. Many challenges we face today are the result of policies and practices of the past that have influenced behavior, embroiled systems, and created inequities in health outcomes. The use and consequences of tobacco use are a perfect example. Over the past 10 years, MFH, along with an amazing list of partners, have sought to change these systems and policies while ensuring access to basic preventative services. We are proud of the work that has been accomplished by our partners and remain optimistic of many changes to come.

There are too many accomplishments to highlight in this letter, but this report demonstrates the gains that have been made in tobacco control in Missouri and the work that is still to come. We have seen declines in adult and youth tobacco use, dramatic increases in smokefree policies, and consistent and dogmatic improvements in communities. These trends will continue in absence of the initiative with the continued leadership and determination of those who have taken the effort this far.



As we reflect on the past 10 years, we have grown as an organization just as our communities have along this journey. The value of taking a long-term approach to intractable problems, the value of collaboration and partnership, and the connection between programming, systems and policy will all be part of MFH into the future. We have also grown professionally, many at MFH involved in this effort have grown in their professional careers within philanthropy and within other fields. Our partners have seen similar growth with student leaders becoming key stakeholders in our communities and many program leaders becoming valued assets in the field of health promotion and improvement.

I would like to extend a special thank you to all the organizations and community members who participated in this process and to the Center for Public Health Systems Science at Washington University in St. Louis for pulling together this report. Without the candor and participation of all those involved over these many years, this report, describing the outcomes of all of your hard work, would not have been possible.

I hope you find this report as enlightening and encouraging as we do and will continue to seek solutions to the toll tobacco takes on our state. As MFH concludes TPCI, it will always hold a place dear to our hearts. We have grown as a state and as communities, realizing real permanent changes that will last for generations to come.

We look forward to continuing to work with all of you on efforts to decrease the burden of tobacco use and improve the lives of Missourians.

Matthew Kuhlenbeck

Program Director, Missouri Foundation for Health

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Executive Summary

Introduction

In 2004, Missouri Foundation for Health's (MFH) Board of Directors committed 40 million dollars over nine years to establish the Tobacco Prevention and Cessation Initiative (TPCI). The overarching goal of TPCI was to support comprehensive tobacco control programs focused on reducing the negative health effects and economic burden of tobacco use in Missouri. Over the course of the Initiative, MFH funded 123 grants with the first grant beginning in December 2004 and the last grant concluding in June 2014.

The Center for Public Health Systems Science (CPHSS) at the Brown School at Washington University in St. Louis served as the external evaluator for the Initiative. This report presents key findings from the evaluation using process and outcome data collected from 2005-2014. The report also provides conclusions and lessons learned from TPCI, along with a discussion about what is next for tobacco control in Missouri.

Why MFH Chose Tobacco Control

MFH identified tobacco use for its first targeted funding portfolio because of its negative impact on the health of Missouri residents and the state's historically challenging tobacco control environment. For instance in 2004, Missouri struggled with a low cigarette excise tax (only 17 cents), an adult smoking prevalence well above the national average, limited success in passing local smokefree policies, and zero dollars allocated to the state tobacco prevention program.

Evolution of TPCI

The TPCI funding structure evolved over the course of the Initiative. From 2004 to 2006, TPCI utilized a two-tiered funding and implementation approach consisting of regional and community grants. During this time, grants were awarded to implement smokefree workplace programs, promote school-based prevention programs, and to provide education about the importance of increasing the tax on tobacco products.

Starting in 2007, MFH shifted away from funding regional grantees to focus more on communitybased prevention and cessation efforts, as well as community-wide policy advocacy. During this phase, grantees were awarded to implement community-based cessation programs, promote youth engagement programs, support local tobacco control policy change, and eliminate tobacco-related disparities.

In 2010, the overall funding structure remained the same but was updated to include new cessation and youth advocacy efforts. Policy change programming was also expanded to allow for regional and statewide policy advocacy approaches.

Findings

TPCI resulted in multiple findings over the course of the Initiative. The findings were categorized into four areas: MFH's tobacco control leadership and infrastructure, evaluation findings, capacity building, and impact of TPCI.

MFH's Tobacco Control Leadership and Infrastructure

MFH made significant contributions to building the leadership and infrastructure in Missouri to address tobacco control. The key areas of this effort were: long-term commitment, leadership, local capacity building, strategic grantmaking, surveillance, and cessation services.

Long-term Commitment

MFH's long-term funding commitment sent a message to communities, grantees, policymakers, and other stakeholders about the importance of tobacco control. Unfortunately, as the Initiative came to an end, it became apparent that there is a need for continued support as the state tobacco control program is currently funded at only 0.1% of the CDC-recommended level.

Leadership

MFH's leadership was invaluable in moving Missouri's tobacco control efforts forward. They supported the revitalization of the Tobacco Free Missouri statewide coalition, created an advisory team for TPCI, and were founding members of several national tobacco control alliances. Although MFH initially struggled with determining their place among other state tobacco control advocates, they became more confident in the leadership role as TPCI evolved.

Local Capacity Building

TPCI provided funding, training, and technical assistance that enabled grantees to more effectively implement tobacco control activities. Funding helped grantees support staff, build networks, and set aside time for their programs. Trainings provided relevant skills, helpful resources, and networking opportunities. Evaluation training and technical assistance provided knowledge and skills needed to assess their programs and make improvements.

Strategic Grantmaking

MFH implemented a strategic funding approach that was responsive to grantee needs, best practices, and evaluation results. Consistent with CDC recommendations, MFH also shifted their grantmaking efforts to focus more on policy and systems changes, rather than entirely on direct programming. While MFH tried to be responsive, changes were not always seamless and a few grantees noted that gaps between funding cycles made it difficult to maintain momentum.

Surveillance

MFH helped improve the tobacco surveillance infrastructure in Missouri. Without funding and leadership from MFH, the 2007 and 2011 Missouri County Level Study (CLS) would not exist. The CLS played a critical role in assessing population-level health and behavior changes and identifying public health priorities for Missouri.

Cessation Services

MFH provided critical resources needed to enhance Missouri's infrastructure to offer cessation services statewide. MFH also provided support for an expanded version of both the EX Campaign and the Missouri Tobacco Quitline.

Evaluation Findings

MFH funded 123 TPCI grants over the course of the Initiative. TPCI grantees spent 25.7 million dollars implementing tobacco control programs in 79 counties and the City of St. Louis. Key evaluation findings from grantee efforts are summarized in the following topic areas: education about increasing the tobacco tax, tobacco policy changes, youth education and advocacy, tobacco use cessation, tobacco-related disparities, and sustainability of TPCI grantee programs.

Education about Increasing the Tobacco Tax

In 2005, MFH awarded a grant to the American Lung Association to develop and implement an education campaign known as Show Me Health: Clearing the Air About Tobacco. The aim of Show Me Health was to educate the public about the impact of tobacco use on Missouri

residents and the benefits of increasing the tobacco tax. Campaign staff and volunteers reached community members throughout the state by presenting to community groups, distributing materials at local events, and gaining earned media coverage. Despite reaching a large number of people, there was little evidence to indicate the campaign was effective at saturating the grassroots level enough to persuade voters to support a policy to increase the tobacco tax.

Tobacco Policy Change

Recognizing the broad impact of policy changes, TPCI awarded grants to specifically focus on tobacco policy change efforts and encouraged all grantees to incorporate policy and advocacy activities into their grants. Grantees used many methods to promote policy change, from letter writing to testifying before city councils. By June 2014, TPCI grantees were involved in the passage of 197 tobacco control policies covering over two million Missourians. Grantees reported that in addition to passing policies, raising awareness in their communities was a major success. Grantees also noted that opposition to smokefree ordinances was a common challenge.

Youth Education and Advocacy

Since the beginning of TPCI, 49 grants have focused on addressing youth tobacco use initiation and involving youth in advocacy efforts. Youth have contributed to grant efforts in many ways, including advocating for smokefree ordinances and educating peers about the dangers of tobacco use and secondhand smoke. Between 2011 and 2014, youth were involved in 70 of the 99 policy changes passed with assistance from TPCI grantees. Grantees noted that existing relationships with schools played an important role in recruiting new program sites and that competing priorities with other school activities was a main challenge.

Tobacco Use Cessation

TPCI provided support for multiple cessation services. Grantees offered in-person cessation programming and pursued tobacco treatment systems changes. MFH also provided additional funds for an expansion of the Missouri Tobacco Quitline. Over 5,000 individuals attended at least one TPCI-funded cessation class and the program quit rate for participants was markedly higher than the quit rate for smokers with no treatment. Grantees also were successful in passing eight tobacco treatment systems changes that covered approximately 7,500 Missouri residents. Despite these successes, grantees noted challenges related to cessation class attendance and conducting participant follow-up.

Tobacco-Related Disparities

MFH allocated funding to address tobacco use among populations disproportionately affected by tobacco. The innovative funding structure consisted of three phases: assessment, planning, and implementation. Grantees stated the three-phase structure provided flexibility to assess community needs prior to implementing interventions. Grantees reported the impact on overall community engagement as a primary success. Challenges included the lag time between the funding phases and community perception that addressing tobacco was not a priority.

Tobacco-Related Disparities

MFH did not require formal sustainability plans from grantees. However, MFH provided trainings and often asked grantees about their sustainability efforts. By the end of TPCI, many grantees had identified strategies for continuing at least one program component while others were unable to continue any portion of their program.

Capacity Building

MFH invested in a comprehensive capacity building program for TPCI. TPCI's capacity building approach focused on helping grantees successfully implement their programs, meet Initiative evaluation requirements, and develop the skills needed to continue their tobacco control efforts beyond TPCI funding. End-of-grant interview respondents indicated the capacity building efforts positively impacted their skills and ability to implement their programs and meet evaluation requirements. Capacity efforts included policy and advocacy trainings, sustainability assessments and trainings, and evaluation training and technical assistance.

Impact of TPCI

The overall impact of MFH's investment in TPCI was explored by examining state-level tobacco surveillance indicators, conducting an economic evaluation of TPCI, and analyzing how TPCI efforts compared with county tobacco-related outcomes. Highlights are presented below.

State-level Surveillance Indicators

Analysis of surveillance indicators showed a significant decrease in smoking prevalence among adults and high school youth since the beginning of TPCI. Over the same time period, smokeless tobacco use prevalence did not change significantly among adults and increased among youth. Surveillance also showed a dramatic increase in the number of local smokefree policies in Missouri from the time TPCI began.

TPCI Economic Evaluation

An economic evaluation assessed the benefits of several TPCI strategies. Results of the evaluation showed a net positive benefit across the overall initiative with smokefree policy changes showing the greatest benefits, particularly for community-wide policies. The economic evaluation also assessed the benefits that would have been gained if the 2006 tobacco tax ballot initiative had passed. If the initiative had been successful, the positive benefits for the overall initiative between January 2005 and June 2014 would have increased more than six-fold.

Strength of Community Health Programming Index (SCHPI)

CPHSS created the Strength of Community Health Programming Index (SCHPI) tool to assess the strength of TPCI programming at the county level and to link these efforts to each county's observed tobacco-related outcomes. Although the tool was useful in illustrating the breadth, depth, and quality of programming occurring in TPCI-funded counties, it did not show a significant relationship between county index scores and county level tobacco outcomes.

What's Next for Tobacco Control

Despite TPCI's many successes in addressing tobacco use and secondhand smoke exposure, tobacco-related issues continue to pose a threat to Missourians. Missouri has failed to implement traditional tobacco control strategies, including increasing the state cigarette excise tax and passing a statewide smokefree policy. Continued efforts to implement these proven strategies are needed. In addition, the tobacco landscape continues to evolve and present new challenges. New and innovative policies to address the tobacco industry's increasingly strong presence in the retail environment, the rising popularity of e-cigarettes, and youth initiation should also be considered.

Conclusions

Missouri has made marked progress in addressing tobacco use and secondhand smoke exposure since the inception of TPCI. Although many tobacco control partners contributed to these

successes, TPCI's influential role and positive impact on Missouri's tobacco control environment is undeniable. Major conclusions drawn from the Initiative are described below.

- MFH provided important leadership, infrastructure, and capacity building for tobacco control professionals in Missouri through TPCI.
- Community-wide policy changes advocated by TPCI grantees reached numerous Missourians and had an impact on smoking rates and corresponding healthcare costs
- Although grantees did not initially prioritize sustainability planning, by the end of TPCI most grantees had identified ways to continue at least some aspects of their programs.

TPCI has been one of the most important public health initiatives during the last decade in Missouri. While significant strides have been made, future investment by the state and other tobacco control partners is now essential to continue the Initiative's momentum and sustain the infrastructure and expertise built by TPCI. Tobacco use remains the number one preventable cause of death for Missourians. A renewed commitment by Missouri's tobacco control leadership is critically needed. Without it, an opportunity to build on TPCI's many successes will be lost.

Lessons Learned

Advocating for policy and systems changes is key

While all grantees contributed to the overall success of TPCI, efforts focusing on community-level policy and systems changes reached a large number of people and provide a significant impact. Future funding portfolios should advocate for community-wide policies, but recognize the time required for policy change varies widely. Factors such as a community's level of readiness for and investment in policy change will affect implementation. Flexible funding that allows grantees to work within the parameters of their community and set realistic timelines is critical.

Capacity building is important and takes time

Evaluation and programmatic capacity varied widely across TPCI grantees. Many grantees struggled with quickly implementing their programs upon receipt of their grant awards and others found it difficult to assess how their program activities connected with results. These struggles resulted in implementation delays and challenges in communicating program successes. Development of timelines that allow for early capacity-building and formative work is essential. Time and funding must also be allocated to build grantees' evaluation capacity.

A clearly defined and flexible portfolio structure is essential

Based on TPCI grantee experiences, future portfolio structures should clearly define evaluation requirements, provide opportunities for relationship building activities, and allow grantees some degree of flexibility in adapting programs to their target population. Many TPCI grantees did not realize the time or skill level needed to meet the evaluation requirements and struggled to collect needed data. With regards to relationship building, grantees attributed many of their successes to strong partnerships. TPCI grantees also reported appreciation for the ability to modify their programs to better meet the unique needs of their target populations.

Planning for sustainability from the beginning is critical

MFH made grantees aware from the beginning that TPCI funding would be ending. However, many grantees did not initially prioritize sustainability planning and did little to ensure buy-in or assistance from their implementation sites. Future funders need to require and support grantees in developing more comprehensive plans for sustainability from the beginning of their grant. At the initiative level, funders need to clearly communicate how funding will be phased out and provide ample and repeated reminders and support to stakeholders and grantees.

Introduction

In 2004, Missouri Foundation for Health's (MFH) Board of Directors established the Foundation's first long-term targeted funding portfolio. They committed 40 million dollars over nine years to support comprehensive tobacco control in Missouri. This effort became known as the Tobacco Prevention and Cessation Initiative (TPCI). The overarching goal of TPCI was to implement comprehensive tobacco control programs proven to significantly reduce tobacco use, which in turn reduces morbidity, mortality, and health care costs. MFH awarded the first TPCI grant in December 2004, and the last TPCI grant ended in June 2014.

About This Report

The Center for Public Health Systems Science (CPHSS) at the Brown School at Washington University in St. Louis served as the external evaluator for the Initiative. This report presents key findings from the evaluation using data from 2005-2014, along with conclusions and lessons learned from TPCI and information about what is next for tobacco control beyond youth-focused programming, cessation services, and smokefree ordinances. The findings are organized into four primary sections:

- 1. MFH's Tobacco Control Leadership and Infrastructure, which describes the leadership and infrastructure building role MFH provided in Missouri for tobacco control during TPCI;
- 2. **Evaluation Findings**, which provides a summary of the inputs, outputs, and outcomes achieved by TPCI grantees;
- Grantee Capacity Building, which provides a summary of the capacity building activities provided through TPCI and the effectiveness of them; and
- 4. Impact of TPCI, which describes how tobacco indicators changed over the course of TPCI funding.

The evaluation findings and lessons learned will provide insights into the successes and challenges of funding in tobacco control, as well as in a long-term, multi-strategy foundation portfolio.

The report includes interactive elements that allow readers to navigate throughout the document and to external resources.

- Using the navigation bar on the left of each page will move the reader directly to each section of the report.
- Clicking on bold blue text will link to another section of the report or an external website.

Additionally, quotes from TPCI stakeholders are included throughout and were chosen to be representative examples of findings and to provide the reader with additional detail. The quotes are offset in italics, with a large quotation mark indicating the beginning of a quote.

Evaluation Approach

In 2005, MFH contracted with the Center for Public Health Systems Science (formerly the Center for Tobacco Policy Research) to conduct the external evaluation of the Initiative. The evaluation of TPCI utilized two evaluation types: process and outcome. CPHSS conducted a process evaluation because TPCI utilized a multi-strategy funding approach spanning ten years. It was essential to understand what was and what was not working along the way instead of at the conclusion of the Initiative. This allowed MFH to make program improvements along the way. The outcome evaluation provided information about the short-term, intermediate, and longterm outcomes of TPCI.

In addition to the external evaluation, MFH also conducted evaluation activities, including regular program process monitoring and trend analysis. Individual grantees also conducted their own internal program evaluation. This report focuses on the TPCI external evaluation.

Evaluation Design

CPHSS utilized a participatory, logic model driven evaluation approach to planning and implementing the TPCI evaluation. CPHSS staff worked with TPCI's primary stakeholders (MFH staff and grantees) to develop logic models for the overall Initiative and for each TPCI funding strategy, along with a set of evaluation questions. See Appendix A for the logic models and evaluation questions. In response to changes in the TPCI structure and strategies, CPHSS and MFH reassessed the evaluation in 2010. As a result, the logic models and evaluation questions were revised. See **Appendix B** for the revised logic models and evaluation questions.

Data Sources and Methods

CPHSS employed a mixed methods design to answer the evaluation questions. The primary quantitative data sources included the Tobacco Initiative Evaluation System (TIES), which was an online data collection system where grantees entered information specific to their grant activities, outputs, and outcomes. Note that TIES was substantially updated in 2011 to collect additional information needed for the revised evaluation plan, as well as to make upgrades to the user interface. CPHSS also utilized surveillance data sets, such as the Behavioral Risk Factor Surveillance System and the Missouri County Level Study. The qualitative data sources included key informant interviews (e.g., grantees, MFH staff, external stakeholders), content analysis of Missouri print media, and content analysis of TPCI grant reports submitted to MFH. See **Appendix C** for additional details on the data sources utilized by the evaluation team.

Evaluation Capacity Building

The TPCI evaluation included an evaluation capacity building component. The goal of the capacity building activities was to provide consistent and regular support and training to TPCI grantees to increase their ability to conduct and sustain evaluation efforts during the Initiative and beyond. The capacity building activities consisted of a regular needs assessment, one-onone coaching, workshops, multi-day institutes, an online forum for grantees to share resources, newsletters, tip sheets, and an evaluation resource library. These activities helped build the capacity of grantees to conduct their own internal evaluation and to provide quality data to CPHSS for the external evaluation. For additional details on the evaluation capacity building activities see the **Grantee Capacity Building** section of this report.

Dissemination

Dissemination was a core priority of the evaluation. CPHSS utilized a multi-modal approach to share evaluation methods, findings, and recommendations on a regular basis. It included dissemination via meetings, email updates, newsletters, reports, national conference presentations, and peer-reviewed journal articles. To see copies of the dissemination materials, please visit the CPHSS TPCI evaluation products web page: http://cphss.wustl.edu/Projects/ Pages/TPCIEvaluationProducts.aspx.

Why MFH Chose Tobacco Control

In 2004, there were many challenges facing the health of Missouri's citizens, particularly the underserved, uninsured, and underinsured populations. MFH selected tobacco control for its first targeted funding portfolio, due to the combination of its impact on health and the challenging environment in Missouri for addressing tobacco use and exposure.

Health Impacts of Tobacco Use and Exposure

Tobacco use is the single most preventable cause of death in the United States. The health impact of tobacco is far-reaching, affecting both smokers and those exposed to secondhand smoke. Smokers are more likely than nonsmokers to develop heart disease, stroke, and lung cancer. In addition, smoking also affects pregnancy, bone health, dental health, cataracts, type 2 diabetes, and rheumatoid arthritis. Secondhand smoke exposure causes heart disease, lung cancer, sudden infant death syndrome, acute respiratory infections, ear problems, and more frequent and server asthma attacks in children.1

Missouri's Tobacco Control Environment in 2004

Historically, Missouri has had a difficult tobacco control environment. In 2004, Missouri spent zero dollars on a state tobacco prevention program, meeting zero percent of the minimum amount recommended by the Centers for Disease Control and Prevention (CDC).2 It had a low tobacco excise tax that was last raised in 1993 from 13 to 17 cents.3 There were only two local smokefree policies in place protecting Missouri's citizens from secondhand smoke. The Missouri adult smoking prevalence rate was greater than the national average (24.1% compared to 20.9%) and was the 13th highest in the country.5



Evolution of TPCI

The funding structure of TPCI evolved throughout its ten years in response to the evaluation. From 2004 to 2006, the Initiative utilized a two-tiered funding and implementation approach consisting of regional and community grants. The regional grants provided funding for broadbased organizations and collaboratives with established programs that could be coordinated and conducted at the community level. Regional grantees provided technical assistance to community grantees to help increase the reach of their programs throughout the state. The community grants provided funding for community-based organizations to deliver the programs developed by the regional grantees. During this time, regional and community grantees were required to focus on one of three strategies:

- Educate Missourians about the importance of increasing the tax on tobacco products;
- Implement smokefree workplace programs; and
- Promote school-based prevention programs.

Appendix D describes the specific programs that grantees implemented as part of the workplace and schoolbased programs.

Starting in 2007, MFH shifted away from funding regional grantees to focus more on community-based prevention and cessation efforts, as well as community-wide policy advocacy activities and programming that sought to address tobacco-related disparities. The shift in funding occurred mostly as a result of the regional grantees not being able to successfully implement the structure to support community-level grant efforts, as intended by MFH. During this time,



grantees focused on at least one of four strategies:

- 1. Implement community-based cessation programs (includes the previous strategy known as implementation of smokefree workplace programs);
- 2. Promote youth engagement and empowerment programs (includes the previous strategy known as promoting school-based prevention programs);
- 3. Support local tobacco control policy change; and
- 4. Eliminate tobacco-related disparities.

In 2010, some components of the grantmaking structure were modified based on lessons learned; however, the overall structure remained the same. Specifically, the community grant program was updated to focus on:

- 1. Cessation Services: community-based organizations could apply for funding to utilize one of the following approaches:
 - Increasing access to cessation services in local communities,
 - Promotion of existing cessation services in communities, or
 - Changing systems to encourage or support individuals to make healthy behavior choices related to tobacco use
- 2. Youth Prevention Project Smokebusters: community-based organizations could apply for funding to implement Project Smokebusters, a program focused on creating youth advocates to support policy changes in their schools and communities.

Additionally, the Support for Tobacco Policy Change program was expanded to allow for regional and statewide policy advocacy approaches. See Table 1 for a summary of TPCI's funding strategies and long-term outcomes.

Table 1. Description of the funding strategies implemented under TPCI

Funding strategy	Timeframe	Long-term outcomes
Educate about the importance of increasing the tax on tobacco products	2004-2006	 Increase awareness among the public and policymakers about evidence that increasing the price of tobacco products reduces initiation and use among youth and adults Create support among the public and policymakers that funding comprehensive tobacco control programs with tobacco tax proceeds will further reduce use
Implement smoke-free workplace programs	2004-2006	Ensure that fewer adults who work indoors are exposed to tobacco smoke in their work areas Create smoke-free work environments
Implement community-based cessation programs	2007-2014	 Increase affordability and accessibility of cessation services Promote quitting by adult tobacco users
Promote school-based prevention programs	2004-2006	Prevent tobacco use initiation among young people
Promote youth engagement and empowerment programs	2007-2014	Create tobacco – free school environments
Support local tobacco control policy change	2007-2014	 Create smoke-free environments and communities Increase community advocacy capacity
Eliminate tobacco-related disparities	2007-2014	 Create tailored, culturally appropriate programs to address disparities Create smoke-free work environments Increase affordability and accessibility of cessation services Promote quitting by adult tobacco users

MFH's Tobacco Control Leadership and Infrastructure

Over the ten years of TPCI, MFH has made several contributions to building the leadership and infrastructure in Missouri to address tobacco control. While these were important successes and needed resources, they did not happen effortlessly. MFH experienced several challenges along the way.

Long-term Commitment

When MFH created TPCI, they committed to a long-term funding approach. They dedicated 40 million dollars over nine years to addressing tobacco control. This commitment demonstrated to communities, grantees, policymakers, and other stakeholders the importance of tobacco control. It showed an understanding that this health issue takes time to make progress. This symbolized a commitment that had not been seen in the state. At the time MFH made the commitment, Missouri spent zero dollars towards a state tobacco control program and did not begin spending any money towards the effort until fiscal year 2007 (Figure 1).

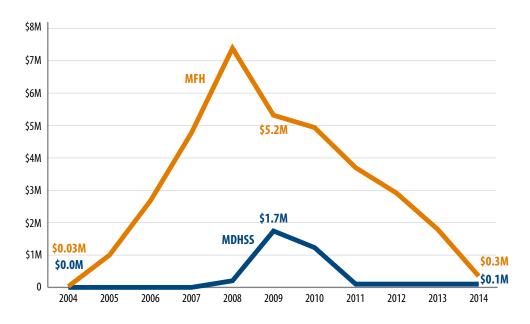


Figure 1. Funding for tobacco control in Missouri, 2004-2014

I also think that it [the long-term commitment] showed to others around the state...to decision makers like legislature and maybe other foundations or organizations. . . it showed that MFH and the TPCI initiative considered the problem of smoking, tobacco use, and exposure to secondhand smoke in the state of Missouri as serious, as a real public health issue, not just something that, We're going to try for a little while. Looking at something and saying, 'We're making a long-term commitment' says this is a serious issue. It's not the issue of the day. It's not soup de jour."

I think just knowing that [TPCI] was available and it wasn't going to be a flash in the pan and gone tomorrow kind of thing gave some stability and some credibility to the process and to tobacco control. So I think it's probably one of the strongest reasons we're as far along as we are because they made that commitment and they stood behind it. And I think it couldn't have been accomplished without that kind of strong commitment and lengthy commitment."

Leadership

MFH provided leadership, support, and knowledge that was invaluable in helping move Missouri's tobacco control efforts forward. They became recognized within Missouri as experts in tobacco control. A signature piece of this was MFH's convening of tobacco control experts and partners across the state. They supported the revitalization of the statewide coalition known as Tobacco Free Missouri (TFM). MFH also created an advisory team for TPCI with representatives from the Centers for Disease Control and Prevention (CDC), Campaign for Tobacco Free Kids (TFK), Massachusetts Tobacco Control Program, and Robert Wood Johnson Foundation (RWJF) Tobacco Policy Change Program. In addition, MFH was noticed on a national level as a leader in tobacco control. They were one of the founding members of the National Alliance for Tobacco Cessation (the Alliance), which was developed and managed by the American Legacy Foundation (Legacy). The goal of the Alliance was for states and organizations to work together to implement a nationwide campaign that teaches smokers how to quit and connect them with services and educational resources. MFH was also a founding member of the Funders Alliance for State-based Tobacco Control. CDC formed the group with the goal of developing strong relationships between state programs and foundations. Most members are state-based funders formed from either the Master Settlement Agreement (MSA) payments or tobacco taxes, and they focus on reducing tobacco use in their states. The group works with CDC, RWJF, TFK, and other national partners to share information and resources.

Matt Kuhlenbeck has some incredible expertise, and I think is one of the absolute smartest people on this issue I've ever been around. I went to the National Conference on Tobacco and Health, and there were jillions of really smart people, but I'd still trust Matt's judgment on things better than almost anyone else. So I think the staff expertise has been incredible."

Again, it wasn't state legislature, the state assembly that said, 'Let's pony up a little extra money so this can happen.' It wasn't... quite honestly the leadership at the Health Department that went to the state legislature and said, 'We need to make this happen.' It was the Missouri Foundation for Health that said, 'We see opportunity here. We can see the benefits to the health of Missourians and therefore we're going to invest in this.' And I think that's true leadership."

Local Capacity Building

In the beginning, communities did not have the capacity to take advantage of the opportunities made available through TPCI. As a result, MFH invested in building the capacity of local tobacco control professionals. This investment strengthened the expertise and infrastructure across the state, enabling local communities to more effectively implement tobacco control activities. The Initiative provided necessary funding, training, and technical assistance. Funding provided grantees the ability to support staff, build networks (e.g., build partnerships, strengthen existing partnerships), carry out activities they normally would not have been able to do, have adequate time and resources for their programs (e.g., providing nicotine replacement therapy, advertising their program in the community), and lent legitimacy to their efforts. The trainings provided grantees with a solid foundation for their programs through skill-building and helpful resources. They were also able to network, share information, and learn from each other during these trainings. Grantees also received evaluation training and technical assistance. The technical assistance provided grantees with the knowledge and skills needed to assess what was happening with their programs in order to demonstrate effectiveness and make improvements along the way. See the **Grantee Capacity Building** section for more details.

Without the funding we wouldn't have been able to do any of this."

What the funding has allowed us to do is expand and actually help people quit smoking...We're focused on outcomes like getting policies changed and more people to quit smoking. But we're coming to realize too that just building leaders, building people who are informed and aware and willing to do things in all these communities is real important for any future work we do too. So the fact that [MFH was] willing to [fund capacity building] is tremendous."

The funding helped us develop a lot of good partnerships in the community."

The trainings made us realize that we are not the only people working in this area and that we can look to other grantees and use their ideas."

Strategic Grantmaking

MFH adapted TPCI funding strategies and direction in response to evaluation findings, grantee needs, and best practices. MFH's funding flexibility and responsiveness allowed grantees to make changes when needed. More importantly, and consistent with CDC recommendations, MFH shifted their grantmaking efforts to focus more on policy and systems changes, rather than entirely on direct programming. The shift to policy-focused grants matched known best practices and set the stage for greater impact. While MFH recognized the need for utilizing known best practices in addressing tobacco, they continued to realize the need for innovation. For example, MFH created the disparities funding strategy, which allowed creativity to address tobacco use in populations disproportionately affected by tobacco use.

Surveillance

MFH helped improve the tobacco surveillance infrastructure in Missouri. MFH's support for the Missouri County Level Study (CLS) was farsighted and unique. Without funding and leadership from MFH, the CLS would not exist. The datasets (2007 and 2011) played a critical role in assessing population-level health and behavior changes and identifying public health priorities for Missouri. Prior to the CLS, surveillance data were only available at the state level. Additionally, MFH supported development of the 2007 CLS report series. Missouri now has the ability to assess important tobacco control and other health indicators at the county level – many, if not most, states do not have this capability. These types of data were not previously available, and the reports proved very helpful to tobacco control advocates and stakeholders across Missouri.

Cessation Services

Through TPCI, MFH provided vital resources needed to enhance the existing infrastructure in Missouri to offer cessation services on a statewide level. MFH provided funding to offer an expanded version of both the EX Campaign (EX) and the Missouri Tobacco Quitline.

EX Campaign

In April 2008, Legacy launched a national campaign known as EX. The campaign included national television and radio advertising, online advertising, and state specific radio and promotional events. It also included a website, which provided users with resources to develop a quit plan and interact with other smokers trying to quit. Through MFH's participation in the Alliance, MFH was able to apply for a service contract to amplify the EX Campaign in Missouri. The amplification targeted Southern Missouri and included radio, print materials, and earned media. The materials included the Missouri Quitline number and MFH's name.



Quitline Expansion

In December 2007, MFH provided the Missouri Department of Health and Senior Services (MDHSS) with a \$3 million grant to expand the reach of the state's Tobacco Quitline. With MFH funding, MDHSS was able to provide a four-call counseling regimen and nicotine replacement therapy at no cost to uninsured and underinsured callers seeking assistance during December 2007 through November 2010.

Both of these strategies are effective for addressing tobacco use. EX has been shown to change one's thinking about quitting and increase quit attempts, among those who had confirmed awareness of the campaign. Proactive telephone counseling has been documented through several meta-analytic reviews to be effective interventions for smoking cessation. Specifically in 2004, a study found a 56% increase in quit rates among proactive telephone counseling users compared with those using self-help. In addition, the U.S. Public Health Clinical Practice Guideline and the Guide to Community Prevention Services both recommend proactive telephone counseling as a method to help smokers quit.⁷

Challenges

As demonstrated above, MFH made vital contributions to building the leadership and infrastructure in Missouri to address tobacco control. However, these milestones did not happen without challenges. The challenges experienced by MFH in building the tobacco control leadership and infrastructure in Missouri include:

Long-term Commitment

MFH committed to nine years of addressing tobacco control in Missouri. However, as the Initiative came to an end, it was clear Missouri still needed support in addressing tobacco. In 2012, Missouri citizens failed to pass a tobacco tax increase, which would have provided funds to address tobacco in Missouri. In fiscal year 2014, the state of Missouri only spent 0.1% of the CDC recommended amount towards a state tobacco control program (\$0.1 million).

Leadership

During the early years of TPCI, MFH assumed a relatively passive leadership role in Missouri regarding tobacco control. At the beginning, they were somewhat cautious about their role in the work being done at the state level. For example, they were hesitant to take the lead during meetings. However, as the Initiative evolved and developed over time, they became savvier in how to navigate these complex relationships.

Strategic Grantmaking

Prior to TPCI, MFH grants were awarded using an applicant defined proposal process. TPCI was the first time the Foundation attempted to solicit proposals using a defined funding strategy. This resulted in a learning curve for both the Foundation and the Initiative. While MFH tried to be responsive to the lessons learned both internally and from the evaluation, changes to the funding structure were not always seamless. For example, when MFH created the Eliminating Tobacco Related Disparities Strategy, it was determined that the grantees would apply for and be awarded grants using a three phase cycle. However, the grant cycles were not awarded in continuous succession, resulting in gaps between them. Grantees stated that, while the three phase grant structure facilitated their project, the gaps in funding made it difficult to maintain capacity and momentum they had achieved in the previous cycle.

Evaluation Findings

Evaluation Findings: Overview

MFH awarded the first TPCI grant in December 2004, and the last TPCI grant ended in June 2014. MFH funded 123 grants over the approximately ten years, reaching a peak in 2011 with 64 active grants (Figure 2).

Figure 2. Number of active TPCI grantees, 2004-2014

The 123 TPCI grantees received 26.7 million dollars in funding over the course of the Initiative, and they spent 25.7 million dollars. Spending peaked in 2008 and then steadily declined through 2014 (Figure 3).

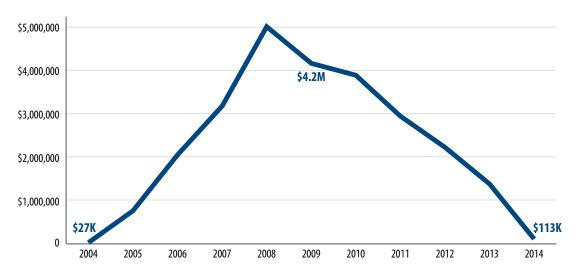


Figure 3. Amount of funding spent by TPCI grantees, 2004-2014

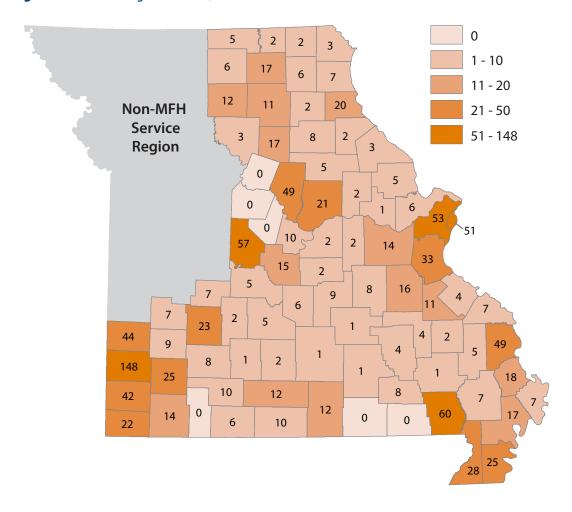
Over the course of the Initiative, grantees reported that the financial resources provided by MFH were more than adequate. With the resources provided by MFH, grantees were able to focus on developing, implementing, and strengthening their programs, rather than worrying about funding. Additionally, the funding allowed grantees to hire dedicated staff for their efforts and expand their programs and services.

We have been able to focus on the program itself instead of trying to figure out where we're going to get funds."

The funding has given us the chance to outreach and branch out where we otherwise wouldn't have been able to."

Between 2005 and 2014, MFH covered 92.9% of their service region (79 out of 84 counties and the City of St. Louis) with at least one active TPCI grantee site (Figure 4).1

Figure 4. Active TPCI grantee sites, 2005-2014



¹ The site data only includes grantees who entered grant information into TIES.

The remainder of this section presents the evaluation findings, organized by topic area:

- education about increasing the tobacco tax;
- tobacco policy changes;
- youth education and advocacy;
- tobacco use cessation;
- tobacco-related disparities; and
- sustainability of TPCI grantee programs.

Evaluation Findings: Education about Increasing the Tobacco Tax

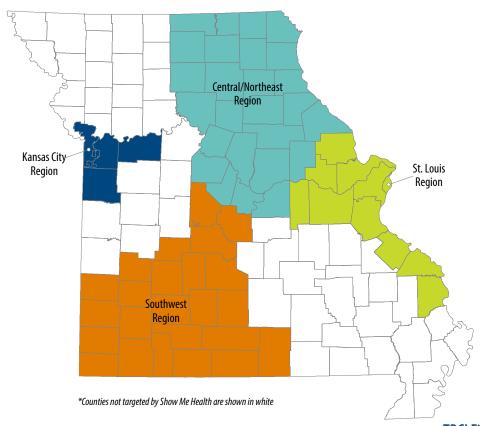
To address the first strategy of TPCI, American Lung Association of Missouri (ALA), along with the Missouri Partnership on Smoking or Health, developed an education campaign, Show Me Health: Clearing the Air About Tobacco. The purpose of Show Me Health (SMH) was to educate the public on the relevance of tobacco use and its impact on Missouri residents. Although the education campaign was not lobbying for a specific tobacco tax amendment, the primary short-term outcome of the campaign was to:

Increase knowledge of, improve attitudes towards, and build support to increase Missouri's tobacco tax.

With additional funding from the Healthcare Foundation of Greater Kansas City, ALA organized the state into four target regions (Figure 5):

- 1) Central and Northeast, including Kirksville, Columbia, and Jefferson City
- 2) Southwest, including Springfield, Joplin, and the Lake of the Ozarks
- 3) Kansas City metro area, including Lafayette and Cass counties
- 4) St. Louis metro area, including several surrounding counties and Cape Girardeau

Figure 5. SMH regional coverage map



Over half of the first year of SMH was devoted to hiring staff and developing the project plan. Long-term plans for field work and an earned media campaign were finalized in August 2005 and SMH held its first outreach activity in September 2005. Two months later, a petition drive to put a tobacco tax increase on the ballot was announced by two groups, the Committee for a Healthy Future and the Alliance for Health and Justice. Both proposals sought to increase Missouri's tobacco tax by 80 cents per pack; however, there was disagreement on the allocation of the revenue. In January 2006, the two groups reached a compromise and the collection of signatures was pursued through the Committee for a Healthy Future. In September 2006, the proposal was approved for the ballot, and on November 6, 2006, Missouri voters rejected the tax amendment:

- 51.4% against
- 48.6% in support

After the election, SMH's education efforts, and Strategy 1, came to an end. See Figure 6 for a timeline of SMH.

Field plan & earned media campaign finalized **Print materials** (Aug 05) Silenced Voices KC & STI Several committees website launched director SMH staff hired **Project Silenced Voices** are developed (May 06) hired (Aug 05) (Jan 06) SMH website Surpassed 5 million (Mar 05) 3 SMH staff & (0ct 06)SMH name& logo ALA through earned media launched PR firm hired launched Silenced Voices (Jul 06) identity developed (Jun 05) grant (Mar 06) January December November Competing Initiative Attorne Tobacco tax General on ballot petitions increase fails resolved (Sep 06) (48.6%/51.4%) (Jun 05) Competing tax (Jan 06) Tax initiative petitions signatures nounced Other major initiatives SMH Activities (above) (Nov 05) up for vote: (Aug 06) Stem Cell Research **Environmental Influences (below)** Raising the Minimum Wage

Figure 6. Show Me Health Timeline

The evaluation of SMH was framed using the logic model structure presented in Appendix A (i.e., inputs, activities, outputs, outcomes). The rest of this section will follow each component of the logic model and describe the most pertinent evaluation findings regarding SMH.

Inputs

Funding

Overall, stakeholders felt the funding level was sufficient for the activities that had been proposed for the grant. Funding for additional staff may have been helpful for covering the state, but otherwise stakeholders felt it was adequate.

They [funding resources] were adequate enough to do what we proposed to do in the grant. You can always use more resources though. Probably, you know if we'd had a couple more staff members we might have done a better job of covering more areas of the state."

Staff

Regional Managers (RMs), who served as a local point of contact for each region, were considered a critical piece of SMH. They maintained communication among the volunteers and ensured SMH's messages were disseminated to the public.

I was glad that it was someone who. . . it was their full-time job to do the communications. Because as just a volunteer, there's no way we could have kept up with the amount of e-mail and stuff that was sent out. I mean, communication was very good."

Coverage of the Regions

Because RMs were such a critical piece of SMH, additional staff would have been beneficial. SMH staff often reported challenges with reaching the rural areas due to large distances between communities and the need for a different approach for the more urban areas of the state. The large size of the Southwest and Central/Northeast regions made it difficult for the RMs assigned to those regions to reach their entire area (see page 13 for map).

It was very difficult for Southwest and Central regional managers to reach their entire area; it was very large and very diverse population; and definitely different than Kansas City and St. Louis. But I think they both did a great job there in being able to connect with urban and rural individuals."

In addition, the diversity of populations in each region also posed some challenges. For example, rural and urban areas require very different approaches. In rural areas taking the time to build relationships and earn people's trust was very important. While in urban areas, the status and reputation of spokespersons was important for gaining attention. The rural areas were where the vote for the tobacco tax increase was lost in 2002. Thus, targeting those areas was integral to achieving any future tax increases.

Partners

The primary collaborators in SMH were many of the traditional partners regularly seen in tobacco control efforts including regional coalitions, advocacy groups, and county health departments. SMH's effort to bring in existing tobacco control partners in the beginning was seen as a strength. These individuals, who were already involved in tobacco control efforts in the state, formed the base of SMH with the intention that they would help identify additional partners and disseminate SMH messages.

They [Regional Managers] did an excellent job of accessing groups that were already in place who could then take the information they have and disseminate it even further. So that's a wonderful positive in all of this."

Though the use of existing tobacco control partners was considered a strength, stakeholders felt reach to new and influential partners (e.g., hospitals, health care plans, local health departments in rural areas, and faith-based communities in certain regions) was limited. Consequently, they felt SMH missed out on important resources some of these partners could have provided. While there were a number of factors involved in whether an individual or organization became a partner of SMH, more time for building relationships in the beginning would have helped.

Materials

Due to SMH spending much of the first year hiring and planning, many resources necessary for implementation were delayed. Materials (e.g., fact sheets, brochures, business cards) for the education campaign were not completed until December 2005, almost a full year after the grant from MFH was awarded. This is not surprising given that an official name for the education campaign was not announced until September 2005, and the development of materials and talking points did not begin until October.

There were struggles with getting the materials printed, getting those all developed, and out into the community. . . I think it was eight months if not longer before actual materials are in the hands of people who have agreed to help us."

A portion of this delay was attributed to a slow response time from the public relations firm. They were responsible for producing the SMH logo, website, brochures, a template for fact sheets, and other materials. The products they produced were considered good, but the delay in these materials made it challenging for RMs to do their jobs, and was frustrating for volunteers who were ready to begin educating the public.

Planning

Due to inadequate planning prior to the grant proposal to MFH:

- The majority of the first year was used for planning
- Four major changes to SMH's structure and identity were made:
 - 1) Began targeting health care workers and health-related organizations who were not already partners to further develop their base
 - 2) Changed name from Missouri Partnership on Smoking or Health to Show Me Health: Clearing the Air About Tobacco
 - 3) Shifted from developing advocacy committees to using existing health-related groups
 - 4) Dropped fairs and festivals as a mode of communication
- Roles and relationships for stakeholders at all levels (i.e., grantor, grantee, and partners) were unclear from the beginning

Activities

Campaign Development

There were several challenges with the development of the education campaign and its messages. When the SMH Director and other staff were hired, there was nothing developed beyond what was written in the grant proposal. The person who wrote the grant was no longer with the organization. Unfortunately, prior to their leave, the structure, components, and activities for the education campaign were vaguely described or not addressed at all.

There was really nothing there except for the grant's application prior to the project being started.... There was literally nothing going on except for the fact that there was an expected reliance on the Missouri Partnership on Smoking or Health and its existing entities, which to be honest, was very little to nothing, except for paper."

The campaign and messages were primarily developed by the SMH Director with input from a small group of partners (i.e., ALA, AHA, ACS, MDHSS, and TFK) as well as SMH's public relations firm. No formative work was conducted to determine the most effective messages and methods for communication. Consequently, there were significant challenges regarding the structure and other components of SMH. For example, messages for SMH's education campaign were not tested prior to their communication to the public. They were written at a very high reading level for the general public (i.e., 10-12 grade) and contained a large amount of statistics (Table 2 on page 18). Stakeholders felt this turned people off when they heard them and RMs and volunteers often adjusted or simplified the messages when they gave presentations.

Campaign Implementation over Time

From the time the grant was awarded in January 2005, SMH had a total of 22 months to educate the public about tobacco use in Missouri before they would vote on a tobacco tax increase (see page 14 for timeline). There were a number of delays in the implementation of SMH. The original intention for SMH was to be out educating the public for a period of time prior to the announcement of the petition to increase Missouri's tobacco tax. Over half of the first year was devoted to hiring staff and developing the grassroots and media campaign plans. Three of the regional manager positions (Southwest, Central, and St. Louis) were filled by June 2005. Unfortunately, the St. Louis RM left after only a few weeks. A replacement for St. Louis, as well as the final RM position for Kansas City, was filled in August 2005, leaving approximately 14 months for the implementation of the education campaign in those two regions. SMH aimed to change attitudes in the state regarding tobacco, with a goal of building support for efforts to reduce tobacco use (e.g., funding comprehensive prevention programs, increasing the tobacco tax). Fourteen months left staff with a limited amount of time to build relationships, recruit volunteers, and disseminate the messages.

In nine or ten months you just can't do what you could do in three or four years. And Show Me Health is about an attitude change in the state; [changing] people's view [that] tobacco is a non-issue. It's not a non-issue; it affects so many things regarding healthcare in our state, and people don't view it that way. . . working to change an attitude is so much harder than working to change the behavior."

Table 2. SMH messages and their estimated grade level score

Message	Abbreviation	Grade Level Score*
Every day 26 Missourians die due to tobacco use.	Cigarette Price Increase	10.2
23.7% of Missouri high school students smoke whereas the U.S. high school smoking rate is 21.7%.	26 Missourians	10.5
Missouri's adult smoking rate of 24.1% ranks 13th highest among all states.	Missouri's Ranking	10.7
Missouri ranks 49th with its 17 cent cigarette tax and 50th in tobacco prevention spending.	High School Smoking Rate	10.9
Every 10% increase in cigarette prices results in a 7% reduction in cigarette use by youth and 4% by adults.	Costs of Smoking	11.0
In 2002, smoking cost Missouri \$4.3 billion in lost productivity and direct medical costs or \$760 for every man, woman, and child.	Adult Smoking Rate	12.0
For the past six years, Missouri has spent \$0 in state funds for a comprehensive tobacco use prevention and cessation program, ranking us last in the country, although it has received over \$1 billion in Master Settlement payments.	MSA	12.0

^{*}Flesch-Kincaid Grade Level Score—Rates text on a US school grade level.

Additionally, stakeholders felt recruitment and education activities slowed down after the initial launch due to a lack of materials. Stakeholders felt implementation did not pick back up again until January/February 2006 when materials were available. Also, due to a lack of adequate planning, many strategies and activities were tried and then determined ineffective. Though the end results of these trials and errors were considered effective, this also contributed to delays in the implementation of SMH.

We could have spent more time with working on the development of materials; the development of key messages; how we were going to do the outreach work; and coming up with a second plan in the event that that didn't work-that would have been helpful. But we went out and we engaged the community, and some of them were ready to work. At times...you build momentum, and then because we did not have things ready, we had to go back and build momentum again, and that was a struggle."

Communication

Overall, stakeholders felt the communication structure (e.g., weekly conference calls, email updates) was sufficient. However, there was a breakdown in communication on many levels regarding expectations for SMH, as well as its relationship with the tobacco tax political campaign. As discussed in the Inputs section, this made it difficult for SMH staff and their volunteers.

Expectations were not clear beginning, middle, or end for either party [grantor and grantee]. That was because it was a complex issue. It is not because of the fault of anyone in particular. It was just the first time they've done it, the first time we've done it. Trying to walk a line that is as wide as the Mississippi is gray...It was difficult."

External Environment

In addition to these challenges, the implementation of SMH was also affected by events in the external environment. SMH adjusted to some of these events. However, at times SMH was slow to react, failed to have contingency plans in place, and did not rally support among volunteers enough when the going got tough.

Outputs

Message Delivery

SMH staff and volunteers disseminated messages through several methods, including: presentations to community groups, distribution of materials at local events, earned media coverage, and towards the end, some paid advertising.

Presentations were the most effective method for communicating the messages for SMH. The audience knew what to expect when going into a presentation. They were a captive audience and having people listen to and read the information catered to more learning styles. Any opportunity they had to speak in front of a group was considered beneficial for SMH.

Project Silenced Voices, a one-day event in high schools across the state, was also considered very successful. Stakeholders reported a high level of community participation in the event, and it garnered a good amount of media attention.

Silenced Voices was incredible because we had all of these youth placing importance on tobacco education. Their local papers did write-ups and we had three TV stations in my area that went out to schools. So I liked those big events too because we got publicity and media coverage, kids learned about tobacco, the parents knew they were involved in it."

Attending health fairs, using company newsletters and briefs, and having volunteers write letters to the editor were also mentioned by stakeholders, primarily as a tool for recruiting additional partners and volunteers. It was noted that these methods worked particularly well in rural areas where there were a limited number of opportunities for networking and contacts.

The SMH website also proved to be less successful than originally anticipated. Though some volunteers accessed the site for information or materials, the number of hits was lower than expected. The website had information on everything they did, but it was not very dynamic, making it difficult to draw people in.

Response to Primary Messages

The SMH Director, with agreement from other stakeholders, identified seven statements as the primary messages for SMH. Some messages resonated with the public more often than others, though no message clearly stood out as effective. Stakeholders felt one to two, more concise messages would have been more effective.

Messages that were mentioned most often by stakeholders as having resonated with the public were:

- Cigarette Price Increase
- 26 Missourians
- Missouri's Ranking

The other four messages received mostly negative feedback from stakeholders. Stakeholders felt the High School Smoking Rate message did not resonate because the difference between Missouri's high school smoking rate and the national average was small. The Costs of Smoking message contained a lot of information to comprehend. The Adult Smoking Rate message did not provide a compelling enough reason to support tobacco control efforts and vote for a tax increase. The MSA message seemed to backfire and was used a lot by the opposition.

Results from the Community Tobacco Survey reiterated many of the responses from stakeholders (Table 3). No SMH message clearly stood out. Nearly everyone surveyed found the messages easy to understand, and with the exception of the Cigarette Price Increase message, a majority of the people also believed the messages were accurate. It is interesting to note, the 26 Missourians and Cigarette Price Increase messages, which were mentioned by stakeholders as two of the messages that resonated most of the time, were two of the messages that had a lower percentage of survey participants who recalled hearing them. The most people (21.9%) remembered hearing the MSA message. This was the message that many stakeholders felt had backfired for them, and was most often used by the opposition to the tobacco tax.

Table 3. Frequency of SMH message recognition, recall, and understanding

Message	n*	Remembered Hearing	Believed Accurate	Found Understandable
Cigarette Price Increase	822	11.6%	50.4 %	88.0%
26 Missourians	848	11.8%	71.2%	94.9%
Missouri's Ranking	864	17.1%	62.0%	87.1%
High School Smoking Rate	829	12.8%	70.4%	93.0%
Costs of Smoking	868	13.3%	64.6%	88.8%
Adult Smoking Rate	854	11.1%	70.5%	90.6%
MSA	903	21.9%	61.0%	84.5%

Source: Community Tobacco Survey

Reach of Show Me Health Efforts

SMH targeted communities throughout the state for the development of local advocacy committees, specifically: Bolivar, Columbia, Joplin, Kansas City, Lake of the Ozarks, Lebanon, Springfield, and St. Louis. The purpose of these committees was to serve as a mediator between the public and SMH staff and assist in disseminating SMH's messages. However, SMH moved away from the development of advocacy committees as defined in the grant proposal after struggling to create new committees in some of the more rural areas. Instead, they had SMH as an agenda item for meetings held by several existing groups (e.g., health coalitions) and continued to work with individual volunteers throughout the state in their effort to reach the general public.

Despite some successes with communication methods, stakeholders felt overall the SMH messages did not completely reach the grassroots level. Visibility of the campaign and its messages was considered limited. Stakeholders were not sure how well the information moved beyond those already involved in health or tobacco-related issues to the general public.

^{*} Survey participants were asked questions regarding a random sample of three of the messages.

The messages seem more focused on organizations or individuals who are involved either in healthcare or involved in tobacco related issues. . . But average six-pack, blue collar Missouri, just a normal person who has no background or interest in this topic area, I don't see the majority of these [messages] resonating with them."

Contacts with community and business leaders remained low and steady over the course of SMH's implementation (Figure 7). Contacts with the public (i.e., presentations, distribution of materials, etc.) significantly increased around February 2006, about the time materials were available, and then dropped until around October 2006. This was one month before the election. It was reported that SMH made 37,507 direct contacts with the general public. Based on the US Census 2006 estimates, this represents about 0.6% of the Missouri adult population.

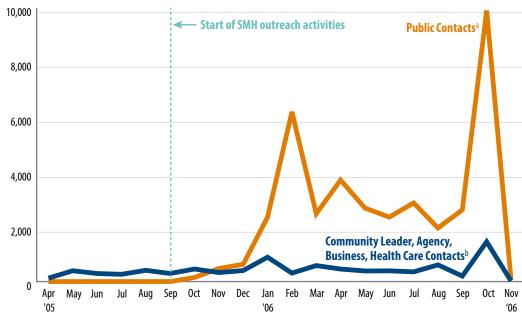


Figure 7. Number of SMH contacts over time

In addition to contacts, SMH also monitored their reach with earned media hits where their messages were communicated. Earned media hits over time showed a very similar pattern to contacts in that it did not steadily increase over time, but instead showed an inconsistent level of hits leading up to a large spike in October 2006. On average, SMH estimated they had potentially reached 730,667 Missourians with their earned media in any given month. This average was slightly skewed by the number reached in October 2006; approximately 5,000,000. Removing media hits from the last two months of SMH decreased the average to 403,567 Missourians per month.

a Public Contacts – counted when a new contact was made via phone call, meeting, presentation, or information was taken by general public.

b Organizational Contacts – counted when a new contact was made via phone call, meeting, presentation, etc. with a community leader, business, agency, or health care provider.

Regional Differences in Reach

Patterns in contacts and earned media hits across regions followed a very similar pattern to those seen when looking at SMH's overall reach. There were inconsistent levels of activity across the regions, with the largest increase in activity (e.g., media hits) seen in October 2006. The Kansas City region reported the highest number of earned media hits with 136 over a 15 month period. Kansas City also reported the most public contacts (16,960), followed closely by the Southwest region (13,523). The number of contacts with business, agency, and community leaders also showed Kansas City in the lead, followed by the Central/Northeast region (Table 4).

Table 4. Total contacts and earned media hits by region

Region	Public Contacts ^a	Organizational Contacts ^b	Earned Media Hits ^c
Kansas City	16,960	2,348	136
Southwest	13,523	1,162	45
Central/Northeast	5,100	1,595	79
St. Louis	1,924	1,248	27
Total	37,507	6,353	287

a Public Contacts – counted when a new contact was made via phone call, meeting, presentation, or information was taken by general public

Outcomes

Awareness of Show Me Health

On average, 30% of Community Tobacco Survey (CTS) participants reported awareness of an education campaign in the state that was addressing the effects of tobacco on health. Of those who reported awareness of an education campaign, on average, 5% identified SMH as the name of the campaign. There was little change in awareness across the three CTS administrations. In regard to specific coverage of SMH in newspaper articles, out of 1,263 newspaper clippings, SMH was mentioned by name in 13 (1%).

The small percentage of adults and articles specifically mentioning SMH was anticipated. The education effort was more focused on getting out their messages as opposed to their name. Identification of SMH's name by survey participants and newspaper articles was just one measure for assessing the reach of SMH's efforts. When coverage of SMH's primary messages in the media was assessed, 379 articles (30%) included at least one of the SMH messages, either verbatim or paraphrased. In addition, the percentage of CTS participants who recalled hearing individual SMH messages ranged from 11-22%. These numbers indicate there was potentially moderate awareness of the SMH messages, despite the low coverage or recognition of SMH's name.

b Organizational Contacts – counted when a new contact was made via phone call, meeting, presentation, etc. with a community leader, business, agency, or health care provider.

c Earned Media Hits – counted when newspaper articles, radio interviews, etc. involving SMH staff and/or volunteers were published or aired.

Voting Likelihood

Approximately 55% of CTS respondents reported they were more likely to vote for a tobacco tax increase after hearing SMH's primary messages (Table 5). The High School Smoking Rate message was the most likely to sway voters toward increasing the tobacco tax (57.9%). It is interesting to note here, as discussed in the Outputs section, stakeholders felt that more messages should have focused on prevention and youth. However, this message was rarely mentioned as one that they used or felt resonated with the public. It was also one of the messages with a lower percentage of survey participants who recalled hearing it (12.8%) and was found in only 78 (6.2%) of the newspaper articles.

Table 5. Percentage of respondents more likely to vote for a tax increase after hearing SMH message

Message	n*	More Likely to Vote for Tobacco Tax Increase
Cigarette Price Increase	822	56.1%
26 Missourians	848	53.0%
Missouri's Ranking	864	54.7%
High School Smoking Rate	829	57.9 %
Costs of Smoking	868	56.8%
Adult Smoking Rate	854	52.5%
MSA	903	45.8%

Source: Community Tobacco Survey

The MSA message was the least likely to sway voters. This followed stakeholders' opinion that this message did not work as well as they had anticipated. It was also the message survey participants were most likely to recall (21.9%) and was included in anti-tobacco control articles 22.9% of the time, while other messages were used a maximum of 6% of the time.

Testing of the messages prior to implementation may have helped SMH identify these issues early on, allowed them to avoid a trial-and-error approach during implementation, and focus on the most persuasive messages.

Summary: Education about Increasing the Tobacco Tax

There is no question that SMH staff and volunteers reached a number of community members throughout the state with direct contact through presentations and other events as well as indirect contact through methods such as distribution of materials and earned media. However, there is little evidence indicating SMH's effectiveness of saturating the grassroots level with the magnitude needed to persuade voters to support policy changes to reduce tobacco use (i.e., increasing the tobacco tax).

^{*} Survey participants were asked questions regarding a random sample of three of the messages.

Evaluation Findings: Tobacco Policy Changes

Recognizing that tobacco policy changes can have a broad impact on key health indicators, MFH increasingly emphasized support for policy changes in TPCI's activities. MFH supported tobaccorelated policy changes through two main approaches: funding grants specifically focused on tobacco-related policy change efforts and encouraging all grantees to incorporate policy and advocacy activities into their grants.

Activities and Outputs

Grantees used a variety of methods to promote policy changes, such as letter writing and testifying before city councils. See Table 6 for a detailed list of activities conducted by grantees and the number of impressions made on target audiences.

Table 6. Policy change activities, 2007-2014

Activity	Impressions**
Attended coalition meetings*	2,895
Attended community event to educate about/advocate for smokefree policy*	10,722
Collected endorsements supporting a tobacco policy from individuals*	5,201
Communicated with local-level decision makers regarding policy change*	631
Communicated with state-level decision makers regarding policy change*	102
Distributed advocacy materials*	5,316
Gave presentation promoting adoption of a smokefree policy	17,871
Involved youth in advocacy activities*	1,146
Organized community event to educate about/advocate for smokefree policy*	38,265
Performed other advocacy activities	74,406
Activity	Events
Community events attended to educate about/advocate for smokefree policy*	110
Coalition meetings held*	258
Community events organized to educate about/advocate for smokefree policy*	46

^{*} Metric data collected from 2011-2014

Grantees who implemented policy change activities referenced work with coalitions, capacity building activities, and community education as some of their major activities to promote community-wide policy change. Youth were also involved in many advocacy activities. For example, youth supported policy change by speaking with local businesses and decision-makers. For more information on how youth were involved in a number of these policy change activities, see the Youth Education and Advocacy section on page 29.

Over the course of TPCI, grantee programs evolved to include or expand policy advocacy efforts.

And when we talk about advocacy, we did none, no advocacy. We didn't do it as an agency and certainly we didn't have our children doing it. But now we've gone to Jefferson City and we've joined others in trying to establish non-smoking policies and we've also implemented an opportunity for our kids to participate in establishing policies and reaching out to other kids through media, advocating non-smoking."

^{**}Impression figures reflect the total number of times an individual participated in or was reached by an activity, and they include duplicate counts in some cases. For example, if the same individual attended two community events, he or she would be counted twice.

Grantees not funded specifically for policy change found ways to incorporate tobacco-related policy efforts into their main goals. For example, some grantees built on the cessation classes they conducted at worksites to encourage employers to adopt a smokefree policy.

I've talked to some of the worksites [that offered] cessation classes about changing their smoking policy as far as smoking allowed on the premises or on campus; that has been successful. We've had several of those that have changed their policy to no smoking on the premises."

In general, grantees had limited involvement in state-level policy change activities. Grantees' state-level activities were centered on writing letters to policymakers, community education, and responding to Tobacco Free Missouri action items.

Outcomes

By June 2014, over two million Missourians were covered by the 197 tobacco control policies that TPCI grantees helped pass (Figure 8).

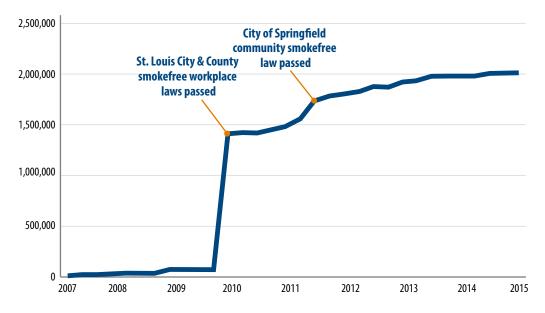


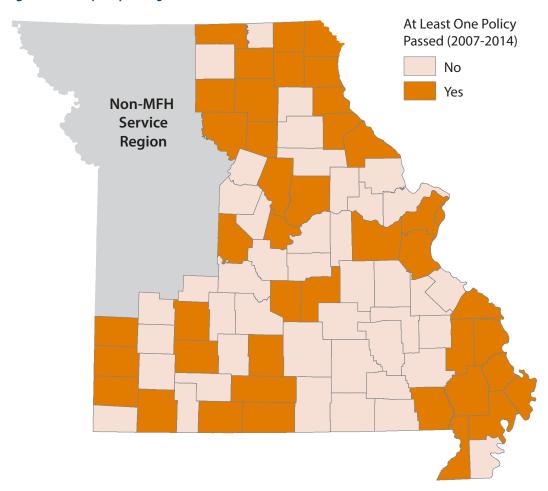
Figure 8. Cumulative number of people covered by policy changes enacted, 2007-2014

These policies were implemented in several different types of locations (Table 7 page 26) and in areas throughout MFH's service region (Figure 9 page 26). The vast majority of policy changes occurred at individual schools and worksites, rather than at the community level.

Table 7. Policy changes by type, 2007-2014

Туре	Total
Community: Community-wide smokefree policy changes. May or may not be comprehensive.	17
School: Smokefree or tobacco-free policy changes at schools. Some policies also prohibit sponsorships from tobacco companies or identify cessation services for staff and/or students.	29
Worksite: Smokefree or tobacco-free policy changes at individual worksites. Some policies also include provisions for cessation-related assistance from the employer (e.g., allowing employees time to attend cessation classes).	151

Figure 9. TPCI policy changes in Missouri, 2007-2014



To achieve policy successes, grantees cited the importance of forming strong and diverse leadership committees, using existing connections, partnership and coalition building, and building community support and buy-in for policy change.

And of course our coalition is very key to all of the policy that we've done, because they've really helped us change the social norms, and we've just kind of sort of piggy-backed on other organizations' events through [the coalition] and we're able to promote the new tobacco policies."

In addition to these policies, grantees spent time educating community members about the need to implement smokefree policies. Many grantees said their primary success was raising awareness in the community regarding the need for policy change, even if they had not yet achieved a policy change.

Really that increased awareness that this is going on in our community and this is why it's important, this is why we need to do it. They haven't done it, but they know it."

While grantees achieved success in working toward tobacco control policies, they also encountered a variety of barriers. Tobacco control was often viewed as a low priority in the community, and it was very difficult to get and keep individuals engaged in policy change efforts.

Getting people committed was another struggle for us. We really wanted a grassroots effort, but it's just people are busy and it's really hard to get individuals involved."

Grantees also encountered opposition from community members and policymakers on smokefree issues.

And then of course there's just the basic opposition, the folks who just absolutely don't want to see smokefree workplaces happen, because they think that's an infringement on their rights to smoke."

TPCI's Influence on Policy Change

Grantees stated that TPCI funding played a key role in advancing their policy change efforts. In some cases, funding enabled grantees to use media outreach to build awareness and support among community members. For several grantees, funding provided momentum and a structure around which they could organize their efforts. Being well organized and resourced gave further legitimacy to their policy change efforts.

We would have been a completely voluntary organization, and I think it would have taken forever for things to have moved forward if we did not have the funding."

"[Before the TPCI grant,] it was a group of. . . loosely connected groups, like the typical tobacco control group, the voluntaries, the health departments, and the other health groups...[The TPCI grant has been] forcing them to make a structure of having a steering committee and paid staff and things like that, [to] start having monthly meetings, having agendas."

Affiliation with MFH was also cited as an important aspect of funding, as MFH lent legitimacy to grantees' policy change education efforts, increased their effectiveness, and allowed them to build support.

Summary: Tobacco Policy Changes

TPCI grantees' involvement in advocating for policy changes increased and expanded over the course of the Initiative. They used a variety of methods and approaches to promote policy change and succeeded in assisting with passing 197 policies over the course of TPCI. The policy changes were primarily smokefree workplace policies, but also included school and cessation-related policies as well. Out of the 197 tobacco-related policies passed, 17 were community-wide smokefree policies. MFH funding helped legitimize efforts and build momentum. Community education and awareness and the passage of policies were seen as major program successes, while continued opposition to smokefree ordinances was a persistent barrier.



Evaluation Findings: Youth Education and Advocacy

The prevention of youth tobacco use initiation and the involvement of youth in advocacy efforts have been long standing components of TPCI. Since the start of the funding program, 49 grants have helped nonprofits educate youth, involve them in policy change, and prevent initiation of tobacco use. Youth-oriented programs have supported these goals through school-based and other initiatives.

Activities and Outputs

TPCI programs have worked in 69 counties at 362 sites engaging youth and students in tobacco control efforts. Grantees trained youth to educate peers about the dangers of tobacco use and secondhand smoke exposure. Grantees also involved youth in local tobacco control advocacy activities, such as passing a school-based smokefree policy or advocating for a city ordinance to make workplaces smokefree. To this end, youth collected signatures and gave presentations before school boards. Youth also crafted public service announcements, attended community health fairs, and met with state and local representatives. Table 8 shows estimates of the number of youth reached by education and advocacy activities. These numbers are not mutually exclusive; an individual may have been at a classroom activity and been involved in advocacy activities.

Table 8. Youth education and advocacy activities, 2007-2013

Activity	Impressions**
Youth reached by classroom presentations	137,474
Youth involved in advocacy activities*	1,146
Youth trained	10,116

^{*} Metric data collected from 2011-2014.

Grantees identified relationships as the main factor behind successful program site recruitment. Personal connections were key to recruitment of new school sites. Grantees often contacted someone they knew in a school first and would branch out from there. It was also helpful to promote sites already participating in their programs; other schools would hear about the program and come to the grantees requesting to be a program site, particularly because grantees were able to provide the program at no cost to the schools.

Knowing one another, that's what did it. We didn't really have any problem at all [recruiting sites]. They came to us."

I think it is a huge selling point to the schools that they don't have to do it themselves. They don't have to dedicate the resources. I think that makes it much easier to get in to work with the schools."

^{**}Impression figures reflect the total number of times an individual participated in or was reached by an activity, and they include duplicate counts in some cases. For example, if the same individual attended two community events, he or she would be counted twice.

Even with successful strategies to employ, grantees often had difficulty recruiting new school sites. The biggest challenge was the amount of activities schools were already required to do under state and federal mandates. Schools often do not have the capacity or interest in taking on another program.

It's kind of tough to get [our program] on the agenda at some schools...they already have so much on their agenda and things that they have to cover that it's sometimes tough for them to get buy-in on another activity."

Outcomes

TPCI's youth-oriented programs empowered young people to educate others about tobacco control. Whether speaking to an elementary school student or state legislator, youth realized that they could make a difference and that they had something to share. Grantees stressed that having students teach other students or educate adults was more effective than having an adult give a similar presentation.

The impact that a peer education program makes on students, rather than just an adult going in to give information, is huge. Continue peer education programs that gear towards tobacco prevention, I think it's extremely important."

Additionally, grantees felt that youth developed a sense of confidence and passion to address tobacco in their communities.

It's just given these students a lot of confidence to speak to the public, to speak to the younger students, the elementary, community. They're passionate about this. They've learned a lot and it's given them the confidence, the knowledge where they can speak to others."

Youth were involved in 70 of the 99 policy changes enacted between 2011 and 2014 with TPCI grantee assistance. For a complete summary of these policy changes, see the **Tobacco Policy** Changes section on page 24. Training youth promoted leadership development and allowed students to be actively involved in advocacy and prevention programming. Additionally, grantees noted that youth involvement has the potential for long-term impact.

Youth are important... Youth have continued to be great policy partners and I've seen youth go from freshman in college, to graduate students, to community members that continue to make an impact."

Summary: Youth Education and Advocacy

Grantees reported that students involved in their school programs became more aware of the impact of tobacco in their communities and learned the skills to become teachers, advocates, and leaders. The scope of their impact ranged from educating younger kids about the dangers of tobacco use to influencing policy change activities. Over the course of TPCI, youth involvement in advocating for policy changes expanded. Existing relationships within schools were important for program site recruitment, while competing priorities with other school activities was a challenge for engaging schools in the program.



Evaluation Findings: Tobacco Use Cessation

Tobacco use treatment has been a major component of TPCI. Grantee efforts focused on offering and promoting in-person cessation programming and, starting in 2010, pursuing tobacco treatment systems changes. Between January 2008 and May 2010, TPCI cessation activities also included MFH providing supplemental funding for the Missouri Tobacco Quitline.

Activities and Outputs

Between 2007 and 2013, 55 grantees worked to promote tobacco cessation at 628 sites through a range of methods, which included implementation of in-person cessation programs, provision of free or reduced nicotine replacement therapy (NRT), and education about quitting tobacco. Grantees facilitated cessation classes in a variety of settings such as hospitals, businesses, clinics, and churches. They worked to change attitudes about smoking and promoted cessation through education and cessation-related materials. Table 9 shows estimates of the number of people reached by or involved in grantee program activities. These numbers are not mutually exclusive, meaning some individuals may be counted multiple times if they participated in more than one activity. For example, an individual who attended a cessation class and received nicotine replacement therapy would be counted in both categories.

Table 9. Cessation activities, 2007-2013

Activity	Impressions**
Conducted carbon monoxide tests*	4,025
Conducted cessation classes	23,786
Distributed cessation materials*	22,277
Performed other cessation activity*	7,684
Provided free nicotine replacement therapy	6,401
Provided subsidized nicotine replacement therapy*	303
Referred employees to outside cessation services	11,326

^{*} Metric data collected from 2011-2014.

As part of TPCI's cessation services, MFH provided supplemental funding to Missouri's Tobacco Quitline from January 2008 to May 2010. During this time, MFH funding represented more than 77% of the total Quitline budget, and 23,042 tobacco users called to request cessation interventions. Of these callers, 17,732 registered for multiple calls. During 2008 and the beginning of 2009, a broad range of individuals received one month of NRT at no cost. However, the program was scaled back to ensure provision of NRT for priority groups throughout the remainder of the grant. These priority groups included individuals who were on Medicaid, uninsured, or pregnant. Throughout the grant, individuals were eligible for NRT, provided they registered for multiple calls. During the MFH grant to enhance the Missouri Quitline, 15,318 tobacco users who registered for multiple calls received NRT.

In 2010, MFH also began funding grants to specifically pursue tobacco treatment systems changes. Systems strategies aim to ensure systematic assessment and treatment of tobacco use. Through institutionalizing assessment and treatment, systems changes have the potential to affect a large number of people. Between the years of 2011 and 2013, nine grantees pursued systems changes.

^{**}Impression figures reflect the total number of times an individual participated in or was reached by an activity, and they include duplicate counts in some cases. For example, if the same individual attended two community events, he or she would be counted twice.

Grantees cited the importance of flexibility of their program activities. From the time of day cessation classes were held to recruitment methods, being able to adapt was critical to program success.

If you're working with worksites, be willing to go to those worksites for shifts that get off at 6 o'clock in the morning or get off at 7:30 at night. You have to be able to be flexible in order to better serve the group that you intend to serve."

Grantees also faced numerous challenges in their cessation efforts. First, it was difficult to locate and recruit smokers who really wanted to quit.

Getting buy-in, getting people to invest the time and effort it takes to break the habit, because it just doesn't seem that bad to them."

Second, grantees struggled to maintain class attendance; over the weeks, participants often dropped out. Third, sustaining contact with participants after the end of cessation programming was difficult, making it a challenge to collect accurate follow-up data.

Yeah, just in a week's time the number has been disconnected, the mailbox is full, please call back at another time. So that's been our greatest challenge is making the contact with people. And we're. . . we try to text, we try e-mail. . . we would try all different kinds of technology."

In response to these and other challenges, grantees identified a variety of strategies to promote program attendance. One strategy was to tie incentives to attendance. Another method was to establish new partnerships for on-site cessation programming, so participants did not have to travel or leave work for classes.



Outcomes

Between 2008 and 2013, 5,337 individuals attended at least one TPCI-funded cessation class. Of these, 85.2% completed an entire cessation program. The cumulative, conservative quit rate at the 6-month follow-up was 28.5% for 2007-2013. This quit rate is markedly higher than the quit rate for smokers with no treatment, for which estimates vary widely: 4%-12% of smokers are estimated to quit successfully without any medication or treatment.^{8,9} Table 10 shows a summary of various cessation outcomes for TPCI program participants.

Table 10. In-person cessation services, 2007-2013

Attendance	Total*
Number of individuals who attended at least one cessation class	5,337
Number of individuals who completed entire cessation program	4,548
Percentage of individuals who completed an entire cessation program	85.2%
Cessation	Total
Quit Rate	28.5%
Estimated number of individuals who quit after using in-person cessation services	1,934

^{*}Attendance metrics include years 2008-2013

In addition to those who quit smoking due to in-person cessation services, an estimated 1,582 Missouri smokers quit as a result of MFH's grant to expand the Missouri Tobacco Quitline, between January 2008 and May 2010.

Grantees were also successful in passing eight systems changes from 2011-2013. These changes affected approximately 7,500 Missouri residents. See Table 11 for information regarding successful systems changes.

Table 11. Description of cessation systems changes passed, 2011-2013

Grantee	Year	Description
Ozark Center	2011	 Dedicate staff to provide tobacco dependence treatment Provide education, resources, and feedback to promote health care provider intervention
Phoenix Programs	2011	Provide education, resources, and feedback to promote health care provider intervention
SEMO Health Network	2011	Implement hospital/clinic policy that supports and provides inpatient tobacco dependence services, supports and provides inpatient tobacco dependence services
Douglas County Health Department	2012	Implement hospital/clinic-wide tobacco user identification system
Jordan Valley Community Health Center	2012	Provide education, resources, and feedback to promote health care provider intervention
Columbia-Boone	2013	Provide education, resources, and feedback to promote health care provider intervention
Columbia-Boone	2013	Dedicate staff to provide tobacco dependence treatment

Grantees tended to be very proud of their programs' quit rates and saw them as key indicators of their programs' benefit to the community.

Our success rates. Right now we are running at three months around 49 [or] 50% success rate and then that's still in the 40% range at six months."

In addition, grantees considered one of their most important outcomes to be influencing the individuals and families who were involved with their cessation programs.

This individual sent an email and said, 'this is the longest I've gone in six years without smoking, and this program really changed my life."

Grantees also thought that their TPCI program increased awareness of smoking cessation and tobacco control issues in their community.

"As far as the community as a whole, I think we've had a reasonable amount of success as far as just making everybody in these communities aware that this program is out here, that if they want classes, if they want to stop smoking, if they want relatives or whatever to stop smoking, that they can contact us."

"I think it promoted smoking cessation and awareness that this is a problem in our area."

Summary: Tobacco Use Cessation

Grantees worked to reduce tobacco use through cessation classes, free or subsidized nicotine replacement therapy, and systems changes. The TPCI cessation program quit rate was higher than that for individuals who receive no assistance with quitting. Grantees found continued class attendance and follow-up to be difficult, but cited successful cessation rates and the resulting increased awareness of tobacco issues and impact on individuals and families as major successes.

Evaluation Findings: Tobacco-related Disparities

Efforts to address tobacco-related disparities have long been hindered by a lack of dedicated evidence-based programs. To deal with this problem, MFH allotted funding to address tobacco use among populations disproportionately affected by tobacco. Disparity funding used an innovative, three-phase structure of assessment, planning, and implementation. Grants were funded separately for each phase and each distinct phase built on the previous one. The assessment phase helped grantees assess the tobacco environment in their target populations; the planning phase allowed grantees to plan for and tailor activities to their populations; and the implementation phase provided grantees with the opportunity to pilot tailored interventions. MFH funded six grants for the assessment phase, three continued to the planning phase, and two of those were funded to continue with the implementation phase (Table 12).

Table 12. Grants funded for disparities phases, 2007-2014

Population	Assessment	Planning	Implementation
LGBT Missourians	X	X	X
Mental health and substance abuse patients	X	X	X
Pregnant and parenting women	X	X	
Bosnian immigrants	X		
African-American youth	X		
Smoking parents	X		

Activities and Outputs

Beginning in December 2007, MFH funded six grantees to better understand tobacco use in their target populations. Assessment grantee activities concentrated on conducting surveys, interviews, and focus groups. The primary product for this phase was a report that summarized assessment findings. Secondary products ranged from presentations and papers to brochures, news releases, and a Freedom From Smoking manual translated into Bosnian.

In early 2011, grantees were invited to apply for the planning phase based on the results of their assessments. Planning grantees focused on analyzing qualitative data, developing toolkits, and conducting expert interviews, among other activities. The main product from this phase was a work plan for implementing a tailored intervention. Other products noted by grantees included branding products and materials designed for outreach and education.

At the end of 2011, after successfully completing both the assessment and planning phases, two grantees were selected to begin the implementation phase. One grantee piloted a tailored intervention to reduce tobacco use exposure in the LGBT community. The other grantee focused on implementing tobacco-free policies in state-funded mental health facilities and supporting tobacco cessation among mental health facility clients and staff. Some of the activities associated with the implementation phase included: launching a LGBT resource website, offering evidence-based smoking cessation treatment, distributing NRT, and incorporating tobacco interventions into mental health treatment planning.

Outcomes

The evaluation focus for the disparities grants centered on the effectiveness of the three-phase funding structure and the extent to which it led to intended outcomes. According to grantees,

the structure was logical and orderly. Going through the phases enabled grantees to more effectively serve their target populations.

I think the structure is great in the sense that it's a logical structure and ideally that's what you want."

I think information needed to be gathered, something had to be planned before implementing, so it probably seemed like really the best way to go about serving that population."

The structure allowed grantees to explore which strategies may be effective in working with their specific populations.

[What we really wanted to do was] document that there was in fact health disparities that existed, and then use that as justification and then to start looking at ways of learning more about that population and what might be effective strategies for reducing that disparity."

Several grantees appreciated the grant structure, as it ensured grantees funding to assess community needs before implementing an intervention.

I think it helped us to...learn more about it going into working with this population, not having the information we needed, and so I think it helped us to look more into the needs, barriers, challenges of this disparate population and learn more about how best to serve them. So I think it just sort of highlighted the disparity and need to work with this group."

Overall, grantees appreciated the grant structure's support of well-grounded and effective programs. However, a number of grantees found the time between the funding phases to be disruptive to their projects' flow.

I think those lag times between [the phases] made it much more challenging, as well as the uncertainty of knowing whether or not the funding was going to be there."

Successes

Grantees referenced major successes such as the impact of their projects on overall community engagement; connections with other stakeholders on their projects; and the long-term impact these relationships can have.

To have reached all of [these people] with the cooperation of the large number of organizations that it took to do was very nice because now we've developed a little bit stronger ties with all those organizations and can go and do other things and say, hey, we're here. Can you help us? And the door opens a little less squeakily."

I can make a little bit of an impact, but when I see impact of nine other people that are in fairly influential positions, the ripple effect is enormous."

Additionally, one external stakeholder specifically identified the LGBT disparities grant as having a large impact.

I know that [MFH] had an impact on the LGBT population. There's no question that there was a major initiative that grew and became its own entity and has been very successful at raising awareness and increasing engagement with LGBT populations in the work on tobacco control efforts all the way across from initiation to cessation to policy change and social norm change."

Challenges

Grantees struggled to overcome unsupportive attitudes about tobacco control in their communities. In some cases, tobacco control programming was not seen as a priority issue by their target populations.

So I guess that's one of my biggest disappointments that people are still stuck sometimes in that old way of thinking."

The perception, I guess, is the biggest challenge, the continued perception among department staff, and certainly among the providers, that tobacco isn't an issue."

Summary: Tobacco-Related Disparities

Disparity grants used an innovative grant structure to assess tobacco use and tobacco control programming options with populations disproportionately impacted by tobacco use. Grantees used a variety of techniques to learn about the realities of tobacco use in their respective communities, and the grant structure allowed them to be flexible to accommodate the results of their assessments. While grantees found the grant structure to be helpful, they sometimes found the lag time between phases disruptive to their project flow. Grantees were proud of the community engagement they were able to achieve, and worked to combat community perceptions of tobacco as a non-issue.

Evaluation Findings: Sustainability of TPCI Grantee Programs

Although grantees were not required to develop formal sustainability plans, MFH encouraged grantees to think about sustainability from the beginning of TPCI. MFH provided multiple sustainability trainings to grantees. See Grantee Capacity Building section for more details. In addition, while not a formal part of the evaluation, the Initiative evaluation asked grantees about their plans for sustaining their program efforts.

Early on in the Initiative, the majority of grantees lacked comprehensive plans for sustaining their efforts beyond their TPCI grant, and they were at the beginning stages of planning for sustainability. In 2007, searching for additional funding sources or applying for continuation of funding from MFH was cited as the most common sustainability activity. Some grantees reported networking to find funding from sources other than MFH, including businesses and hospitals.

Our guess is that many of the businesses that we talk to will continue to at least help supplement the program."

Other early sustainability activities grantees cited included building their evaluations to demonstrate the success of their programs, as well as building the capacity of program sites and other partners to carry out the programs without their support.

The first step has been to build capacity and implement those programs. The next step then is to go back to the school districts and others and say, 'Did you see value in this program now that you have been implementing it?' Then how do we work together to sustain that."

By the end of TPCI, while the majority of grantees did not have a formal sustainability plan in place, many had identified strategies for continuing at least some parts of their efforts. Some aspects of TPCI programs became integrated within the general operations of the organization, for example cessation assistance and trainings at schools.

We can sustain the health department cessation services. . . . We have enough funding to provide some patches for people and certainly the nurses are trained and they will be able to do the motivational interviewing."

Trainings at schools will continue to keep students updated on what is going on with tobacco world."

Additionally, the capacity building and networking activities supported by TPCI contributed to grantees' ability to sustain their efforts, even if minimally. Several grantees noted that the resources from their grant will continue to be used. And many stated that they plan to maintain their collaborations established through involvement with TPCI.

I think the resources that we've been able to purchase through the grant have been helpful, some of the books and educational resources will probably continue to be used because I think they provide a value to the providers, and so I think to that degree it will continue."

We have some strong community partners that have come out of these TPCI grants and we have a continued relationship with these partners and they are developing protocol and having somebody over that for both education and cessation within their site. So I really feel like 80 percent of our sites that we're working with will be sustainable on that."

However, some grantees stated at the end of their grants that they would not be able to continue their efforts without TPCI funding.

Without the funding we will not be able to sustain anything. Budget cuts are coming right and left. And to be honest, these grants help keep us going."

We're just kind of in perpetual writing mode right now. Because we don't have the capacity to continue the program without funding right now."

Summary: Sustainability of TPCI Grantee Programs

While many grantees lacked a formal sustainability plan for their programs, many had thought about sustainability and identified ways to sustain at least one component of their program. Sustainability strategies varied across grantees and evolved over the course of TPCI from relying on additional grants to integrating program components into general operations of the organization.

Grantee Capacity Building

When TPCI began, tobacco control had not historically been a priority in Missouri, leaving few organizations with the skills to be effective. MFH therefore recognized the importance of a robust capacity building program for TPCI to help grantees effectively implement and execute their programs and evaluation activities. The expectation of TPCI's capacity building component was to build the necessary skills needed by grantees to implement their programs and evaluation requirements and to provide skills needed to conduct tobacco control efforts beyond TPCI funding. The capacity building component included activities to target policy and advocacy, sustainability, and evaluation capacity.

Policy and Advocacy Trainings

Smokefree Policy Trainings and Technical Assistance (2007-2013)

Through the Americans for Nonsmokers' Rights Foundation (ANRF), TPCI offered both trainings and technical assistance centered on smokefree education and policy work. The training sessions covered topics such as an overview of the science behind secondhand smoke, benefits of smokefree laws, ins and outs of grassroots organizing, developing and running efficient coalitions, smokefree messaging, working with key stakeholders, implementation and enforcement of smokefree laws, and tobacco industry promotional tactics. The trainings were open to all stakeholders and coalitions in Missouri, not just TPCI grantees. ANRF also provided direct consultation and technical assistance to communities in MFH's service region. Grantees identified the ANRF trainings as very valuable to their work.

The ANR [Americans for Nonsmokers' Rights Foundation] trainings were all very, very valuable."

Advocacy Trainings

The Alliance for Justice (AFJ) offered advocacy trainings to TPCI grantees and others in the MFH service region. These trainings provided participants with the knowledge and skills needed to become confident and effective advocates, in particular information about the difference between advocacy and lobbying. Grantees also identified the AFJ trainings as valuable to their work.

The Alliance for Justice Training was definitely valuable because I probably would have crossed a few lines without knowing that I was."

Sustainability Assessments and Trainings (2008–2013)

MFH offered multiple sustainability services: general training sessions, program sustainability assessments, and an intensive sustainability program. The general training sessions were open to all TPCI grantees and were a single session offered through a larger training (e.g., summer training institutes, workshops). They focused on assisting grantees in laying out strategies the

coalitions and organizations could use to assist them becoming sustainable for the long term. The training sessions addressed the core of sustainability – strategy, planning, leadership, and fundraising. The sessions empowered grantees to use their evaluation data to support their program sustainability efforts.

The evaluation team conducted sustainability assessments with TPCI grantees in fall 2011 and fall 2012, using the Center for Public Health System Science's Program Sustainability Assessment **Tool**. Each grantee that participated received their own sustainability profile report, which could be used to guide sustainability planning for their program. The evaluation team also created aggregate sustainability reports for MFH, combining responses from across similar grant programs (e.g., grantees implementing cessation programming, grantees housed in local public health agencies). Results from these assessments provided MFH with information to prioritize and target technical assistance to grantees and support them in developing their capacity for sustainability.

In December 2011, all TPCI grantees were invited to apply for a more intensive sustainability program with the Nonprofit Services Center. Only four grantees chose to participate. The program focused on assisting grantees in developing and implementing their sustainability efforts. The program consisted of five components: grantee orientation; participant assessments; a two day sustainability clinic; group instruction and peer networking, which included six one day sessions; and sustainability coaching.

Evaluation Training and Technical Assistance

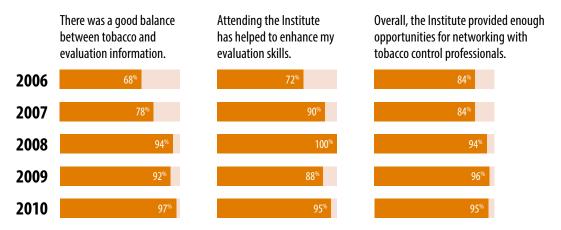
Summer Training Institutes (2006-2010)

CPHSS led three-day training institutes each summer from 2006 through 2010. These institutes focused on evaluation skill-building and tobacco control science, while also providing opportunities for networking among grantees. The institutes utilized multiple presentation formats: courses, plenaries, and roundtable discussions. Some of the session topics offered through the institutes included:

- Developing effective questionnaire items
- Evidence-based tobacco control: What it is and why it matters
- Fundamentals of evaluation: A first course
- Pass it on: Tips & tricks from teaching tobacco cessation clinics
- Moving beyond a plan: How to manage evaluations effectively

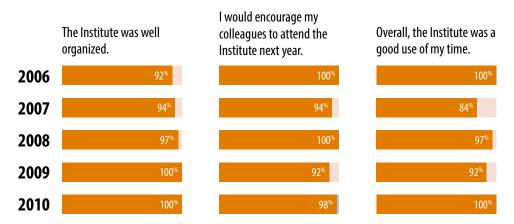
Feedback from the institute evaluations and the social network analysis indicate the Summer Training Institutes (STI) were effective at meeting their objectives: building evaluation skills, providing information about tobacco control science, and providing networking opportunities. All five institutes received high marks for the balance between tobacco and evaluation information, helping to enhance participants' evaluation skills, and providing enough opportunities for networking with tobacco control professionals (Figure 10).

Figure 10. Percent of Summer Training Institute participants who agreed with objective statements



In addition to meeting the objectives of the Summer Training Institutes, the participants had extremely high feedback for the overall structure of the institutes. Ninety-two percent or more of respondents agreed that the institute was well organized and would encourage colleagues to attend the institute next year. Moreover, respondents agreed that overall the institute was a good use of their time. While there was some variability in their feedback, the agreement rate was between 84% and 100% over the five years (Figure 11).

Figure 11. Percent of Summer Training Institute participants who agreed with objective statements

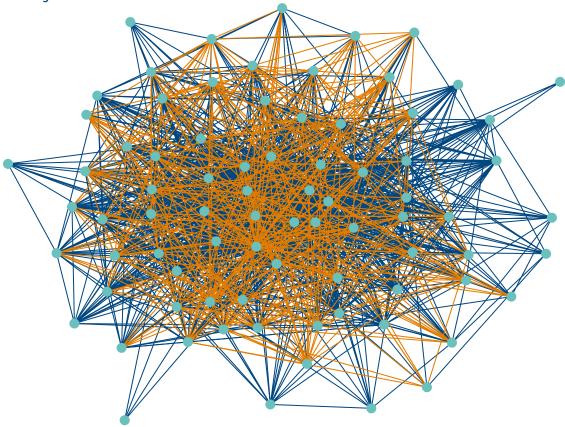


TPCI grantees consistently said that networking is one of the major benefits of the Summer Training Institutes. In 2009, CPHSS used an approach called social network analysis to assess how many professional connections were actually made at the Institute. TPCI grantees and staff from MFH and CPHSS were asked who they knew prior to the 2009 STI, who they met at the STI, and who they knew one year after the STI.

In the figures on page 42, each circle represents a person, and each line between the circles indicates that the people knew each other. About 33% of all possible pairs knew each other prior to the 2009 Summer Training Institute (Figure 12). By the end of the Institute, 370 new connections were made, increasing the number of all possible pairs who knew each other to 45% (Figure 13). A year later, 46% knew each other. The greatest jump in the number of pairs who knew each other resulted from attending STI.

Figure 12. TPCI partner connections before 2009 Summer Training Institute

Figure 13. TPCI partner connections before (blue) and immediately after (orange) 2009 Summer Training Institute



Qualitative feedback on the Summer Training Institute evaluations also showed that, overall, participants found the institutes' speakers, content, networking opportunities, and organization to be high quality. Participants also stated that they could apply what they learned immediately.

High quality speakers, great networking, immediate application of content learned, well organized; info on the web was clear/helpful."

Practical application of much of the material; great to talk and share with the other attendees."

Well organized, valuable and useful info and networking opportunities. I look forward to coming and really learning and taking back the info and using it right away."

Winter/Spring Workshops (2008-2013)

The workshop series were one day trainings hosted by MFH and CPHSS. The workshops occurred in 2008, 2009, 2011, and 2013. Initially, the workshops focused on evaluation topics. Based on grantee feedback and needs, later workshops broadened their focus to include other topics (e.g., tobacco control, sustainability). The workshops included sessions such as:

- Using data from the Missouri County Level Study
- Working with policy makers
- Grant writing

Feedback from the workshop evaluations indicate the workshops provided useful information to the attendees. Over 93% of workshop attendees indicated they were likely to use the information they learned during the workshops (Figure 14). Attendees also felt the workshops offered

Figure 14. Percent of Winter/Spring Workshop participants who agreed with objective statements



enough opportunities for networking. Overall, workshop attendees said they would encourage their colleagues to attend future workshops. Two out of three workshops received 100% agreement with the statement. The question was not included on the 2013 evaluation, as it was determined there would not be future workshops.

Across all workshops, participants found the applied nature of the sessions helpful. Participants also appreciated the opportunities to network with others in their field.

Very practical information. Having the computers to practice was also helpful and reinforced what we were learning."

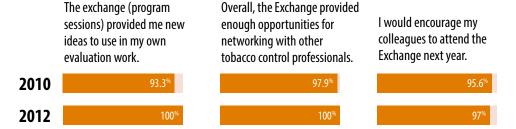
[I liked the] the opportunity to network with others [the most], was motivating to see others doing the same things/sharing successes and lessons learned."

Evaluation Exchanges (2010 and 2012)

CPHSS and MFH hosted evaluation exchanges two times over the course of TPCI. The exchanges were conference-style, one day gatherings. TPCI grantees submitted abstracts to CPHSS to present their work at the exchange. Everyone who submitted an abstract was invited to present, but CPHSS reviewed the abstracts and presentations and provided feedback as a technical assistance exercise. At the exchanges, grantees presented information about their program evaluation methods and results, success stories, and challenges. In addition to grantee presentations, the exchanges included sessions on Initiative-level evaluation results, statespecific tobacco control updates, and facilitated networking.

Overall, the evaluation exchanges were successful. Exchange attendees agreed they were provided with new ideas to use in their own evaluation work, felt the exchange provided enough opportunities for networking with other tobacco control professionals, and agreed they would encourage their colleagues to attend the Exchange next year. While grantees provided very high marks for these in 2010, agreement with these statements increased during the 2012 exchange (Figure 15).

Figure 15. Percent of Evaluation Exchange participants who agreed with objective statements



Evaluation Exchange participants enjoyed hearing from others and networking with their colleagues.

Hearing what others are doing challenges me to do better work and improve our program."

Needs Assessment (2006-2012)

CPHSS conducted an evaluation needs assessment with current TPCI grantees in 2006, 2008, 2010, and 2012. These needs assessments were used to better understand grantees' evaluation capacity, to identify technical assistance needs and format preferences, and to help guide development of workshops and trainings (e.g., Summer Training Institutes). The first assessment consisted of both interviews and a survey. Information gathered from the interviews was used to develop a web-based needs assessment survey. The following needs assessments utilized the web-based survey and no additional interviews were conducted.

TIES Training and Technical Assistance

CPHSS developed a training program for TIES, the online data collection system for TPCI. When TIES was first launched, TPCI grantees were required to participate in a training about how to enter data into TIES, data collection for specific metrics, and understanding operationalization of metrics. These trainings were hosted in-person. After the initial introduction of TIES, CPHSS hosted a webinar training for grantees' new data entry staff. In addition, a data entry manual was provided to all grantees to reinforce the training. CPHSS also conducted trainings with all grantees and developed a new manual when the new TIES system launched in 2011.

In addition to providing initial training on TIES, CPHSS provided substantial ongoing technical assistance about the data collection processes and system. CPHSS conducted monthly and quarterly quality checks on data submitted through TIES. These data quality checks were used to ensure the collection of quality data for the external evaluation. The quality checks often resulted in the identification of grantees needing technical assistance with TIES. Grantees also frequently contacted CPHSS directly seeking assistance with TIES.

The training from CPHSS really focused on the quality of data and entering the data into the TIES system correctly. These trainings really helped us with our evaluation outcomes and the quality of those evaluation outcomes."

Evaluation Technical Assistance (2005-2014)

In addition to providing assistance with how to use TPCI's online data collection system (TIES) and how to report the metrics being collected through TIES, CPHSS provided technical assistance around general evaluation topics. CPHSS both proactively sought out technical assistance opportunities and reactively responded to requests initiated by the grantees. To proactively engage grantees in TA opportunities, CPHSS conducted check-in calls and emailed grantees to offer technical assistance with evaluation (e.g., evaluation planning, survey development, data analysis, report development). They developed evaluation-focused tip sheets that provided advice on evaluation topics related to the grantees' work (e.g., presenting quantitative data

effectively). To empower grantees to reach out with evaluation TA request, CPHSS developed a TA services information sheet which was emailed to grantees and presented on the evaluation TA services available through CPHSS at in-person trainings (e.g., grantee orientation).

These proactive and reactive TA requests often resulted in additional follow-up. The follow-up meetings occurred either one-on-one (e.g., site visits, emails, phone calls) or in groups if multiple grantees had the same need (webinars, onsite training). The TA services provided included activities such as reviewing surveys, providing recommendations on data collection methods, assisting with data analysis, providing data from secondary sources, assisting with evaluation planning, and providing recommendations on reporting results.

I really got a lot out of working early on with staff that helped us develop an initial survey for the program. That was... a very educational process for me because we were able to get the feedback from somebody who really does this a lot. And so we could make sure that we were hitting kind of the important points of what we wanted to look at in a way that the language was clear and that it wasn't too much of a burdensome survey to fill out. And I think we got some good information from that as well. So that was very helpful."

TPCI Hub Google Site (2011-2014)

During qualitative interviews and evaluation needs assessments, TPCI grantees repeatedly expressed interested in having a secure avenue for sharing information about their project's materials, helpful resources, and ideas with one another. While previous TPCI-related message boards and communal sites had low utilization, CPHSS explored a different site format to meet the grantees' request. As a result, CPHSS developed the TPCI Hub Google Site, which launched in May 2011. The purpose of the site was to serve as a centralized location for TPCI grantees to share resources and ideas. Grantees had full ownership of populating the content of the site. They could upload the documents and resources they wanted to share with other members. CPHSS staff also uploaded resources to the site. Organizations had continued access after their TPCI grant ended to the site and the knowledge base created there.

To help ensure a successful launch, CPHSS developed and implemented a manual and training for using the site. Unfortunately, use of the site dropped drastically after a brief initial period of activity by a small number of grantees. While grantees expressed the desire to have a resource like the TPCI Hub Google Site, they did not utilize it.

We didn't really use the hub site. I don't know why we never really bonded with that site."

I really liked the idea of the TPCI hub. I didn't ever see too many people on there and sharing things. I always tried to share, but maybe not everybody wants to share."

Newsletter (2006-2014)

CPHSS developed a newsletter to share timely information related to evaluation and tobacco control. The Evaluation Matters newsletter was disseminated quarterly and included information such as grantee project updates, TPCI evaluation findings, tobacco control information, evaluation resources, MFH updates, CPHSS updates, and a calendar of important dates.

The newsletters I always read when I got them because they always had good information on them."

Evaluation Resource Library

The evaluation resource library included items such as journal articles, books, manuals, "howto" guides, websites, and presentations. When a grantee requested technical assistance with an evaluation related issue, the evaluation team shared relevant items from the resource library with them.

Missouri Evaluation Connection (2007-2009)

The Missouri Evaluation Connection (MEC) was a group of public health (specifically tobacco control) and evaluation experts in Missouri, formed as part of the TPCI evaluation capacity building activities. Launched in 2007, the mission of MEC was to increase information sharing and partnerships among public health professionals and program evaluators to promote evidence-based, sustainable public health programs and policies in Missouri. MEC was developed to provide a venue to: disseminate TPCI evaluation findings; share evaluation experiences and expertise among members; and build a sustainable support network for evaluation in Missouri after the MFH Initiative ends.

From 2007 through 2009, MEC hosted a web portal, a reception at the annual Summer Training Institute, and the quarterly newsletter and annual workshops described above. The web portal provided updates on TPCI evaluation results, a member message board, interactive trainings (e.g., podcasts and web chats), a network partners map, access to evaluation tools and resources, and information about upcoming public health activities throughout the state.

In early 2009, MEC stakeholders met to plan for an expansion of the group beyond TPCI, including an expansion of the membership, workshops, Summer Training Institutes, and evaluation technical assistance. The goal was to sustain MEC beyond TPCI and become a longterm resource for Missouri public health professionals. Unfortunately, the expansion of MEC did not move beyond the planning phase, and MEC was discontinued. Several components continued after it ended through the TPCI evaluation capacity building activities (e.g., newsletter, spring/winter workshops).

Successes and Challenges

MFH invested in a multi-faceted approach to build the capacity of TPCI grantees. Respondents to the end-of-grant interviews conducted with grantees from June 2012 through the end of TPCI indicated the capacity building efforts impacted their skills and ability to implement their programs and meet evaluation requirements. They stated the advocacy and policy trainings offered through TPCI were helpful. They informed them about specific and pertinent policy and advocacy techniques of programming.

The trainings were extremely useful because it helped us in technique, helped us with evaluation techniques, and then with other things we need to know how to do to talk with people, how to present policy options, how to speak with policy makers and that kind of thing."

Grantees also said that the workshops and trainings helped to build their evaluation skills and allowed them to learn about new programmatic tools, which could then be brought back to their own community. Not only did their evaluation skills increase, so did their confidence levels regarding evaluation. Grantees attributed their improvements to survey development, technical assistance, and learning evaluation techniques. Respondents also noted changes in their organizations' evaluation skills. They indicated that their organizations' competency for evaluation strengthened since first receiving TPCI funding. Grantees attributed their improvement in efficiency and confidence to activities including data collection, data tracking, and future grant writing.

I would say that I have probably gotten more skilled at generating reports from our specific data. And not so much even the data we enter into TIES, but we have our own Survey Monkey follow-up surveys that we do for our cessation clients and that funnels into what we enter into TIES essentially. But that would be the biggest way. I've also probably gained a comfort level with creating survey questions and reading data. And I think that was a way I felt like I wasn't as skilled before and I think that I've grown in that area of creating data, interpreting it on my own with just kind of the numbers."

I think they've increased considerably. Again, we practiced more the use of focus groups and surveys, not just with smoking cessation, but as a result of some of the training we were able to expand it to other areas of our work."

Not only did the capacity building component stress skill development, it placed a significant emphasis on networking. Most capacity components included networking time through facilitated networking sessions and open networking time (e.g., networking lunches). The respondents stated the trainings from MFH and CPHSS allowed them to collaborate and hear about other grantees ideas, successes, and challenges within their projects. These networking opportunities made a difference by allowing them to exchange information and frameworks with other organizations. The networking lead to collaborations and built strong connections and support systems between grantees. Moreover, the networking opportunities helped grantees accomplish their goals through resource sharing and making intentional collaborations and networks.

I think that hearing from other programs and how they worked and what was more successful for them and follow-up calls and success rates, that kind of stuff, it helped us kind of fine tune what our program was going to look like here on out."

[Networking] made a big difference because I remember when I went last year we were kind of just getting started, and I was able to talk to people... from all over Missouri and get an idea as to how to better recruit, how to be able to retain the people that we have in the class. Because when I started out, ... there were a few of the classes that the participation kind of dropped off, so I was trying to figure out what I could do to get these people to keep coming throughout the entire eight-week sessions, and after talking to some of the people that I met at those various workshops, they were able to give me good insight into the things they were doing. A lot of them had been out there and established a lot longer than I was, so that information was invaluable for me."

Well by networking and increasing those partnerships we were able to disseminate more marketing materials . . . to those organizations. . . and together we could help each other with our goals. So by increasing those partnerships and networking opportunities, we were able to increase our participation in our program."

Grantees received a tremendous amount of technical assistance and training opportunities through the capacity building component of TPCI. Overall, respondents to the end-of-grant interviews stated they felt the support they received from both MFH and CPHSS was adequate in meeting their needs. However, a few respondents stated there were gaps in the support they received from MFH, including site visits and feedback on reports.

And I always felt like both the funder and [CPHSS] were very responsive. So if you ran into snags \dots they wanted you to succeed. I felt like they were really supportive groups. And that's not always the case with funders and that's just a really nice thing to know that you can be like, oh, we're running into ... like my first site visit I was able to say, we're just running into difficulty with our response rate on our surveys. And so I was able to talk through that with the funder and I think that's important to be able to brainstorm through some of the roadblocks that come along."

Adequate isn't even the right word for [the support]. I can pick the phone up at any time and call you guys or call MFH and talk to several people. And if they weren't available, they would call me back. The idea that people were so accessible is fantastic. That doesn't always happen with grant situations. Sometimes people are not as available, but I felt like I could call someone if I had a question, whether it was a financial, or programmatic, or administrative, or ... about anything ... data entry. [The TIES Coordinator] and I got to know each other very well. And so that's good."

Impact of TPCI

Missouri has made great progress around tobacco use and secondhand smoke exposure since the inception of TPCI. MFH contributed to these successes through their investment in funding grantees to address tobacco control and building Missouri's leadership, infrastructure, and capacity for addressing tobacco control. Many other partners have contributed to these efforts as well, such as the Missouri Department of Health and Senior Services (MDHSS), Tobacco Free Missouri, Healthcare Foundation of Greater Kansas City, American Cancer Society, American Lung Association, American Heart Association, Americans for Nonsmokers' Rights, Campaign for Tobacco Free Kids, and countless local coalitions and volunteers. However, TPCI arguably stood out as the largest tobacco control program in Missouri during its time. As discussed in the Leadership and Infrastructure section, MFH committed to an extensive, long-term funding approach with TPCI. During 2004-2014, MFH spent more money on TPCI than the State of Missouri spent on their tobacco control program (see Figure 1 on page 6).

This section of the report presents the impact of TPCI through three methods:

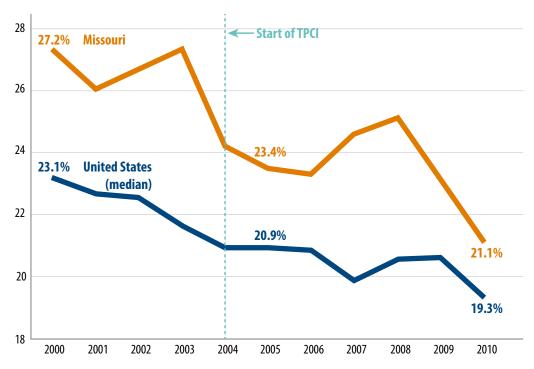
- an examination of state-level tobacco surveillance indicators over time;
- an economic evaluation of TPCI; and
- a county-level assessment of the depth, breadth, and quality of TPCI efforts compared to tobacco-related outcomes, through the use of a tool known as the Strength of **Community Health Programming Index (SCHPI).**

State-level Tobacco Surveillance Indicators

Adult Cigarette Smoking Prevalence

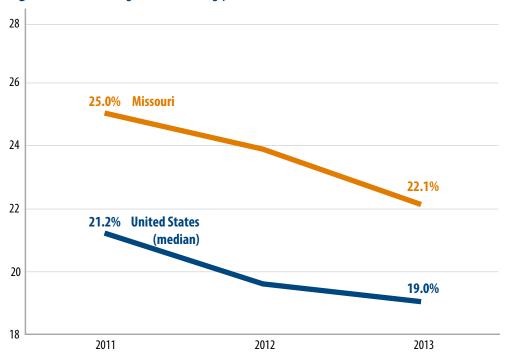
The adult cigarette smoking prevalence has significantly declined in Missouri since the inception of TPCI. Figures 16a and 16b present the percentage of adults who were current smokers in Missouri and the United States (median percentage of all states) for two time periods: a) 2000 through 2010 and b) 2011-2013. Starting in 2011, the Behavioral Risk Factor Surveillance System utilized new sampling and weighting methodology. Therefore, data collected prior to 2011 should not be compared to data collected during 2011 and later. During both time periods, Missouri's smoking prevalence decreased significantly and at a faster rate than the overall national decline. In 2010, Missouri had 124,121 fewer adult cigarette smokers, compared to when TPCI funding began in 2004.

Figure 16a. Adult cigarette smoking prevalence, 2000-2010



Data source: CDC Behavioral Risk Factor Surveillance System¹⁰

Figure 16b. Adult cigarette smoking prevalence, 2011-2013



Data source: CDC Behavioral Risk Factor Surveillance System¹⁰

High School Youth Cigarette Smoking Prevalence

The percentage of high school youth who are current cigarette smokers (i.e., smoked on at least 1 day during the 30 days before the survey) significantly decreased in Missouri from 2003, the year before TPCI began, to 2013 (Figure 17). In 2013, the high school youth smoking prevalence in Missouri was lower than that of the overall United States.

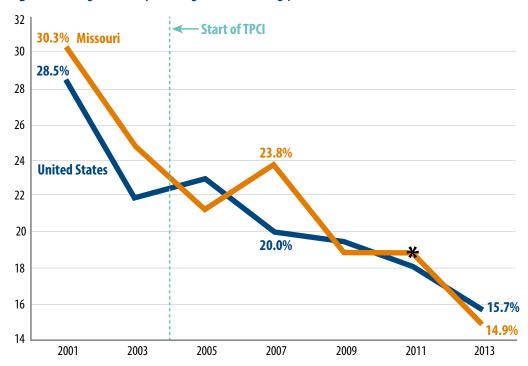


Figure 17. High School youth cigarette smoking prevalence, 2001-2013

*Missouri did not participate in the YRBS in 2011. Missouri data presented for 2011 are from 2009.

Data source: CDC High School Youth Risk Behavior Surveillance System¹¹

Cigarette Consumption

The amount of cigarette consumption in Missouri also steadily decreased from 2004, when TPCI began, through 2014 (Figure 18). However, cigarette consumption decreased from 2004 to 2014 more across the United States than in Missouri (26.1 pack sales per capita compared to 22.4, respectively). Cigarette consumption is the tax paid per capita sales in number of packs, which is based on the total number of packages taxed. It is measured as total tax paid sales divided by the states' total population using Census Bureau population numbers. The population figures used for the states are Census Bureau estimates as of July 1 of the respective fiscal years.

Adult Smokeless Tobacco Use Prevalence

Smokeless tobacco use among adult Missourians did not significantly change from 2003, the year before TPCI began, to 2010-2011 (Figure 19). In 2003, 2.6% of adults currently used smokeless tobacco products, and in 2010-2011, 2.5% of adults currently used smokeless tobacco products. The median percentage across all states in the United States decreased by the same small amount as in Missouri, but the smokeless tobacco use prevalence was lower across the US during each survey administration from 2001-2002 through 2010-2011.

Figure 18. Cigarette consumption (pack sales per capita), 2000-2014

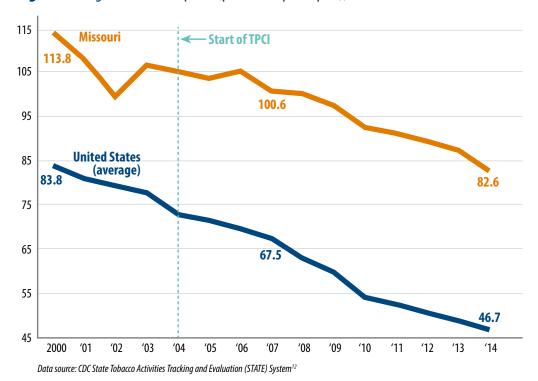
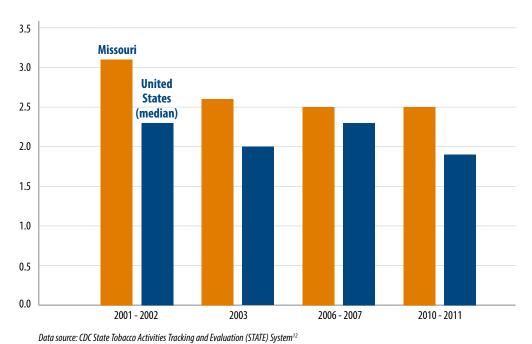


Figure 19. Adult smokeless tobacco use prevalence, 2001-2002 to 2010-2011



High School Youth Smokeless Tobacco Use Prevalence

The high school youth smokeless tobacco use prevalence has increased in Missouri since TPCI began (Figure 20). In 2003, 5.7% of high school youth currently used smokeless tobacco products, compared to 2013, when 10.4% of high school youth currently used smokeless tobacco products. Smokeless tobacco use prevalence among high school youth also increased across the United States overall, but the rate of increase was higher in Missouri compared to the US (4.7% increase versus 2.1% increase, respectively).

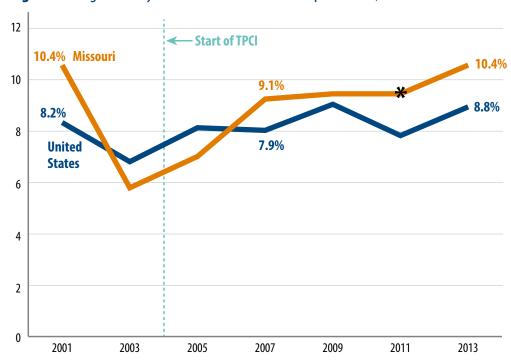


Figure 20. High school youth smokeless tobacco use prevalence, 2001-2013

*Missouri did not participate in the YRBS in 2011. Missouri data presented for 2011 are from 2009.

Data source: CDC High School Youth Risk Behavior Surveillance System¹¹

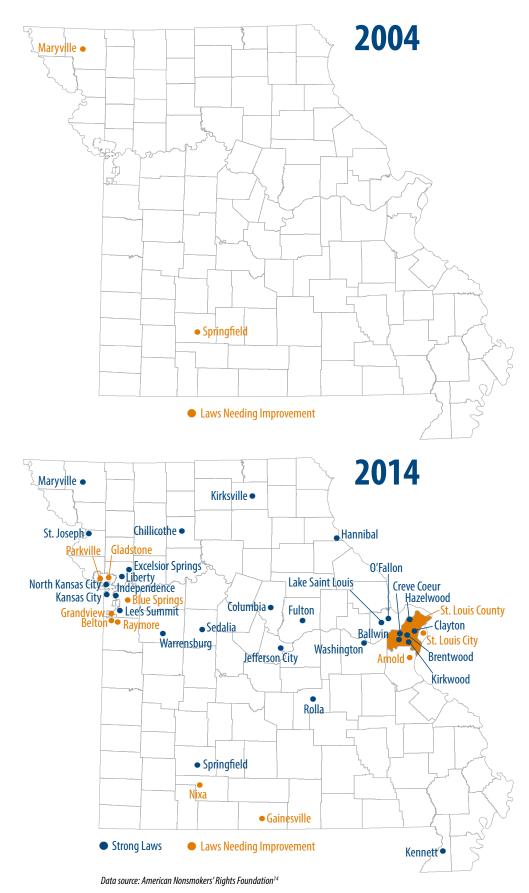
Smokefree Policies

The number of local smokefree policies has dramatically increased in Missouri from two policies in 2004 to 41 policies as of 2014, 28 (68.3%) of which are strong policies (Figure 21). Because of these policies, 42.2% of the Missouri population is protected by any type of smokefree policy.¹³

Summary: State-level Tobacco Surveillance Indicators

Cigarette smoking prevalence among adults and high school youth has decreased significantly since the inception of TPCI. Cigarette consumption in Missouri has also steadily decreased. Smokeless tobacco use prevalence, however, has remained stagnant among adults and actually increased among high school youth. The number of local smokefree policies in Missouri has dramatically increased since TPCI began.

Figure 21. Progression of Missouri smokefree policies from 2004 to 2014



TPCI Economic Evaluation

One of the long-term evaluation guestions for TPCI was "What is TPCI's return on investment (ROI)?"Therefore, CPHSS conducted an economic evaluation of TPCI as part of the overall Initiative evaluation. The first economic evaluation was conducted in 2009, and it has been updated and expanded yearly since then. For this evaluation, both cost-effectiveness and cost-benefit analysis approaches were used. We utilized primary data collected for the TPCI evaluation and existing estimates from the literature to estimate the benefits of several of the TPCI strategies. For details about the methodology, assumptions, and limitations of the analyses, refer to the full report: http://cphss.wustl.edu/Products/ProductsDocuments/TPCI_2012_ EconomicEvaluationReport.pdf.

Over the course of nine years, TPCI has funded several strategies ranging from providing direct services to individuals to advancing policy change at the local and state level. Table 13 outlines the strategies funded by the initiative and the timeframe for their inclusion in the economic evaluation; programs were implemented in numerous counties across the state.

Table 13. Initiative strategy descriptions and timeframe for inclusion in economic evaluation

Strategy	Description	Timeframe
Tobacco Tax	Education campaign focused on increasing support for a tobacco tax increase	Jan 2005-Dec 2006*
Community Grants	Funding for grants dedicated to increasing access to cessation services, advocating for smokefree environments, educating students, and promoting youth advocating for policy change	Jan 2007-Jan 2014
Tobacco Policy Change	Funding to support short-term activities conducted to advance policy change at the local level	Dec 2007-Jun 2014
Quitline Enhancement	Support for expansion of Missouri Quitline services	Dec 2007-Nov 2010
Tobacco-related Disparities	Multi-phase program to assess tobacco-related disparities and plan for	Not Assessed
EX Campaign	Funding to support the Legacy Foundation's Become an Ex campaign in	Not Assessed

^{*}A tobacco tax increase was also attempted in 2012. However, TPCI did not participate in advocating for that tax increase.

Table 14 presents the costs and benefits for each of the strategies from January 2005 through June 2014. The cost-to-benefit is expressed in two ways: cost of each quality-adjusted life year (QALY) gained and the amount of lifetime medical care savings per dollar spent. The table provides these measures for each individual strategy and the initiative as a whole.

In Table 14, the tobacco tax strategy shows no benefits were gained from the educational campaign, because the 2006 tobacco tax increase initiative did not pass. Despite the 2006 tobacco tax increase not passing, the total combined benefits for the four TPCI strategies during the time period resulted in real savings: 16,983 QALYs gained and lifetime medical care savings of \$108 million. The total combined cost for the four TPCI strategies during the time period assessed was \$23,091,140; therefore, TPCI resulted in a positive return on investment.

Table 14. Total costs and benefits for TPCI strategies, January 2005 - June 2014

Strategy	Costs	Total QALYs gained	Total lifetime medical care savings	Cost per QALY gained	Medical care savings per dollar spent
Tobacco Tax	\$654,000	0	\$0	\$0	\$0
Community Grants	\$17,626,432	9,883	\$62,022,013	\$1,783.56	\$3.52
Tobacco Policy Change	\$1,810,708	4,601	\$31,015,578	\$393.51	\$17.13
Quitline Enhancement	\$3,000,000	2,499	\$15,142,349	\$1,200.33	\$5.05
All Strategies Combined	\$23,091,140	16,983	\$108,179,940	\$1,359.63	\$4.68

The activities and potential outcomes for the various TPCI strategies are more complicated than they might first appear. Thus, they warrant closer examination and additional interpretation of the results. The Community Grants strategy in particular consisted of multiple interventions. For example, adults quitting due to smoking cessation classes does not simply account for the positive outcomes, but also the community smokefree policy changes that have occurred. Additionally, for youth-focused interventions, not only the number of youth who will not initiate smoking account for the benefits, but also the policies youth have advocated for and helped to pass in their schools, individual businesses, and communities.

Table 15 on page 58 presents details regarding the benefits of these individual interventions. The tobacco tax education intervention was excluded because the ballot measure to increase the tobacco tax failed, and therefore produced no benefits. Across all interventions, we estimate that 10,316 adults in Missouri quit smoking due to TPCI-supported efforts. For the youth education programs, we estimate that 201 school-aged children who would have initiated smoking were prevented from doing so.

Smokefree policy changes show the greatest benefits, particularly for community-wide policies. We estimate that 6,173 adults in Missouri quit smoking due to community-wide policy changes, and an additional 489 adults quit smoking due to individual worksite policy changes.

The TPCI Economic Evaluation also assessed the benefits that would have been gained if the 2006 tobacco tax increase had passed (i.e., a hypothetical scenario). A tobacco tax increase would have resulted in very large benefits for the people of Missouri: 100,298 QALYs and almost \$586 million in lifetime medical care savings. Had the tobacco tax ballot measure passed, the positive benefits-to-cost results would have been magnified more than six-fold; for every \$1 spent on TPCI, there would have been medical care savings of \$30.06, instead of \$4.68, with the tax ballot measure failing. Figure 22 compares the medical care savings per dollar spent for each strategy, including the benefits if the tobacco tax increase had passed.

Figure 22. Medical care savings per dollar spent for each TPCI strategy, January 2005 - June 2014

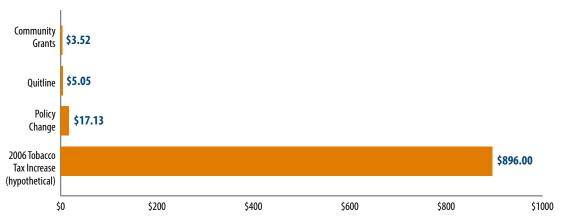


Table 15. Benefits from each intervention of the TPCI strategies, January 2007 - June 2014

Smokefree Policy Changes	
Community-wide Policy Changes	
Estimated number of adults who quit smoking	6,173
QALYs gained	9,753
Lifetime medical care savings to society	\$62,732,823
Worksite Policy Changes	
Estimated number of adults who quit smoking	489
QALYs gained	774
Lifetime medical care savings to society	\$4,946,230
Cessation Services	
In-person Group/Individual Services	
Estimated number of adults who quit smoking	2,072
QALYs gained	3,274
Lifetime medical care savings to society	\$21,207,143
Quitline Services	
Estimated number of adults who quit smoking	1,582
QALYs gained	2,499
Lifetime medical care savings to society	\$15,142,349
Youth Education	
Estimated number of youth who will not start smoking	201
QALYs gained	684
Lifetime medical care savings to society	\$4,151,395
Totals	
Estimated number of adults who quit smoking	10,316
Estimated number of youth who will not start smoking	201
QALYs gained	16,984
Lifetime medical care savings to society	\$108,179,940

Summary: TPCI Economic Evaluation

The results of the economic evaluation for TPCI during the specified time period show a net positive benefit across the overall initiative, as well as for the Community Grants, Tobacco Policy Change, and Quitline Enhancement strategies individually. The strategy designed to provide support for tobacco policy change efforts produced by far the largest positive net benefit. The separate economic evaluation for the strategy to raise support for the tobacco tax increase showed a net loss of the entire amount of MFH's investment in the educational campaign. Had the tobacco tax ballot initiative passed, the strategy would have resulted in large benefits both in regard to QALYs and lifetime medical savings for the people of Missouri. If the effort to increase Missouri's tobacco tax had been successful, the positive benefits for the overall initiative between January 2005 and June 2014 would have increased more than six-fold.

Strength of Community Health Programming Index (SCHPI)

An ongoing challenge with complex public health initiatives is the ability to link efforts to health outcomes. As part of the TPCI evaluation, CPHSS created the Strength of Community Health Programming Index (SCHPI). The Index serves as a tool to assess the strength of TPCI programming at the county level and to link these efforts to each county's observed tobaccorelated outcomes. The Index can also act as an important planning tool and inform community health planning, policy development, and evaluation.

SCHPI consists of three constructs: depth, breadth, and quality (Figure 23). The depth construct examines the reach of programming. The breadth construct assesses the variety of programming. The quality construct evaluates the quality of programming. Each construct is comprised of multiple indicators (Table 16). Taking all of these indicators into account, a county with many diverse and high quality programs will have a higher associated Index score and should experience better health outcomes compared with counties with fewer, less varied, and lower quality programs.

Figure 23. SCHPI Constructs



The development of SCHPI involved several steps. SCHPI indicator scoring was done retrospectively using data from the TPCI online data collection system, grantee interim reports, and grantee final reports. Given the retrospective nature of the data collection, indicator data was not available for all TPCI grantees/counties. Using the available data, indicators were range standardized, so they would be on a comparable scale of 0 to 1. Indicators were then averaged together to create the depth, breadth, and quality construct scores. Finally, depth, breadth, and quality construct scores were combined to create an overall county index score. Note that the quality construct serves as a multiplier to ensure, for example, that one county with numerous sites implementing a higher quality program would have a higher score than a county with a similar number of sites implementing a lower quality program. Additional information regarding scale development may be found on the CPHSS website.

Table 16. SCHPI Indicators and Descriptions

Indicator	Description
Depth Construct	
Number of people reached/ population	What proportion of the targeted county's population was reached through this program?
Amount of funding/population	How much funding was granted per member of the targeted populations?
Time spent within each county	How many months, on average, did grants spend within each county?
Level of implementation	At what level of the Social Ecological Model was the grant implemented (i.e., individual, interpersonal, community, institution, and/or society)
Breadth Construct	
Number of activity categories	How many different types of activities did the grant implement? (capacity building, education, advocacy, and/or cessation)
Number of setting types	How many setting types were targeted by the grant? (i.e., community, schools, and/or worksite)
Number of populations targeted	How many types of populations did the grant reach through program efforts? (i.e., youth, young adults, adults, and/or organizations)
Number of programs	How many types of programs were being conducted by the grant?
Quality Construct	
Level of evidence	What evidence base supports the program?
Evaluation	Did the grantee collect, analyze, and report process and outcome data regarding the program efforts?
Innovation	Is the program newly implemented, untested, or adapted from an existing program to advance research and provide added individual or community benefit?
Staff capacity	What is the capacity of the staff, including volunteers, to effectively manage and implement this program?
Objective achievement	Did the program achieve the objectives as outlined in their strategic plan or framework?
Collaborations/partnerships	To what extent did the grantee leverage collaborations/
Policy Involvement	Was there a concerted effort to initiate a policy/system change or become more involved in policy/advocacy change efforts?

Average county index scores for the years 2007-2013 are shown in Figure 24. To assess the relationship between county index scores and tobacco-related health outcomes, we obtained tobacco prevalence data from the Missouri County Level Study (CLS). The relationship between average index scores for 2007-2010 and the change in tobacco related outcomes (e.g., tobacco prevalence, quit attempts, secondhand smoke exposure at home) from the 2007 and 2011 CLS survey administrations were then examined. No statistically significant relationships were found for this time period; however, this could be for several reasons:

- Many Missouri counties had minimal change in tobacco related outcomes between the 2007 and 2011 CLS survey administrations. For example, only 16 of Missouri's 115 counties experienced a statistically significant increase or decrease in tobacco prevalence during this time period.
- There was a change in the sample and weighting methods for the 2011 CLS administration. The 2011 sample included 47,261 adults interviewed via randomly selected landline telephone numbers along with an additional 4,882 adults selected from cell phone-only users. The 2007 sample included landline telephone numbers only. Although 2007 data were reweighted using the new method, differences in the survey sample may still have had some impact on the data comparison.

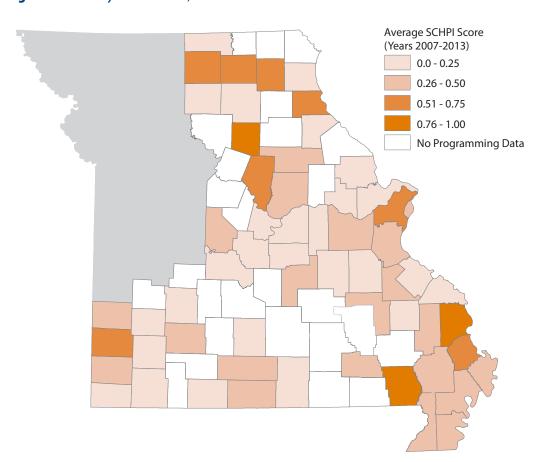


Figure 24. County Index Scores, 2007-2013

 Due to the retrospective nature of data collection for the SCHPI indicators, data were not available for all TPCI grants/counties. Missing grant data may have resulted in an under or over-estimation of some counties' programming activity.

Even though we did not find a relationship using CLS outcome data at this time, the Index still has great potential and utility for future evaluations. Other evaluators and funders can learn from the creation and validation of the Index and its application in TPCI.

Summary: Strength of Community Health Programming Index (SCHPI)

SCHPI represents one method used to evaluate the effects of TPCI's multi-site, multistrategy approach to health programming. The Index, comprised of three constructs (depth, breadth and quality), serves as a tool to monitor the intensity of TPCI programming at the county level and to link these efforts to each county's observed tobacco-related outcomes. Although a significant relationship was not found between county index scores and county level tobacco outcomes, the Index still has great potential for future use.

What's Next for Tobacco Control in Missouri

Despite the many successes of TPCI in addressing tobacco use and secondhand smoke exposure, these issues continue to present a threat to the health of Missourians. Missouri has failed to implement traditional tobacco control strategies known to be effective. Additionally, the tobacco landscape continues to evolve and present new challenges. To ameliorate the health effects of tobacco, Missouri needs to continue pursuing implementation of these traditional strategies along with considering innovative policies to address emerging challenges.

Traditional Strategies

Increasing cigarette excise taxes

It has been well documented that increases in cigarette prices reduce the use of cigarettes. One of the most effective strategies for increasing cigarette prices is through increasing their excise tax.¹⁵⁻¹⁷ Missouri has not increased its state cigarette excise tax since 1993, despite three unsuccessful attempts to increase it since 2006, making it the lowest rate in the country at \$0.17 per pack.¹⁸ As of July 2015, the average state cigarette tax was \$1.60 per pack.¹⁸

Establishing comprehensive smokefree policies

Smokefree laws are designed to safeguard employees and the public from the dangers of secondhand smoke. ¹⁹ In addition, they bolster individuals efforts to quit, prevent initiation, and change social norms around smoking. ¹⁹ Current best practices recommend states and localities pass complete bans on smoking in all non-residential indoor locations, including workplaces, restaurants, and bars. ¹⁵

Missouri has seen some success in passing smokefree policies at the local level. In 2014, Missouri had 41 local smokefree policies, of which 28 (68.3%) were considered strong policies. However, Missouri does not currently have a statewide smokefree policy in place.

Emerging Challenges and New Policy Strategies

Addressing tobacco industry presence at the point of sale

Point-of-sale (POS) advertising and promotions refer to a variety of marketing practices, including indoor and outdoor signs at retail stores, shelving displays, coupons, and other consumer price related discounts. ²⁰ POS advertising also includes promotional incentives to retailers by tobacco companies to have their products placed in specific store locations, therefore making them more likely to be seen by consumers.²⁰

The 1998 Master Settlement Agreement (MSA) restricted many of the main tobacco companies' marketing avenues (e.g., tobacco transit ads, billboards); however, it left the retail setting largely untouched. As a result, the tobacco industry has taken advantage of this gap. After the MSA, the tobacco industry's annual spending at the POS increased from \$4.7 billion in 1998 to \$8.7 billion in 2012.^{21,22} Over the same period, POS expenditures increased from 70% to 91% of the industry's total annual marketing dollars.^{21,22}

Given the industry's strong presence in the retail environment, there is an increased need for new policies to counter tobacco at the point of sale. Many states and communities are now implementing innovative POS strategies alongside traditional interventions. Some of the many POS policy options include: reducing tobacco outlet density, increasing the cost

of tobacco products by eliminating coupons and price discounting, and restricting point-ofsale advertising.²³

Regulating electronic cigarettes (e-cigarettes)

According to Health and Human Services, electronic cigarettes are battery operated products designed to turn nicotine and other chemicals into a vapor, which is then inhaled. ²⁴ Electronic cigarettes are designed to look like cigarettes, cigars, pips, or pens.²⁴ E-cigarettes have not been tested by the U.S. Food and Drug Administration (FDA), and it is unknown if they are safe, what chemicals they contain, how much nicotine is inhaled, and the health effects of long-term use.²⁴

While there are many unknowns associated with e-cigarettes, it is known that awareness and use of e-cigarettes is increasing. Awareness of e-cigarettes almost doubled among adults from 2010 to 2013 (40.9% to 79.7%).²⁵ The percentage of adults who have used an e-cigarette at least once more than doubled from 2010 to 2013 (3.3% to 8.5%) with current cigarette smokers seeing an increase from 9.8% in 2010 to 36.5% in 2013.²⁵ Current e-cigarette use (use in the past 30 days) also increased during this time frame from 1.0% to 2.6%.²⁵

From 2011 to 2014, use of e-cigarettes increased among middle and high school students as well. In 2014, 3.9% of middle school students reported they had used electronic cigarettes in the past 30 days. ²⁶ This is an an increase from 0.6% in 2011.²⁶ In addition, 13.4% of high school students reported they used electronic cigarettes in the past 30 days in 2014, up from 1.5% in 2011.²⁶

In addition, advertising of e-cigarettes has increased. From 2011-2012, e-cigarette makers nearly tripled their annual advertising expenditures which went from \$6.4 million to \$18.3 million.²⁵ E-cigarettes are also heavily marketed on television, which has been a banned advertising practice for conventional cigarettes since 1971.²⁵

In the absence of FDA regulation, many states and communities have begun to address e-cigarette use by restricting their sales to minors, requiring licensing for e-cigarette retailers, and banning e-cigarette self-service displays.²⁷ At the time of this publication, the White House's Office of Management and Budget is reviewing a plan to expand the definition of tobacco products to include e-cigarettes. If passed, the FDA would have authority to regulate e-cigarettes under the 2009 Tobacco Control Act. 28,29

Increasing the minimum legal sale age (MLSA)

Increasing the minimum legal sale age for tobacco products to 21 years of age is a fairly new approach to addressing tobacco initiation and use. Since it is a new approach, there is limited information about its impact. However, it is known that many smokers transition to regular, daily use between 18 and 21.30

Despite this being a new strategy, some have already adopted the approach. One state (Hawaii) and 90 localities in eight states have raised the tobacco sale age to 21.31 Columbia, Missouri is one of the 90 localities.³¹ There is also a bill being considered at the federal level that could result in a new national age limit.^{32,33} In addition, the Healthy KC organization in Missouri recently announced a new initiative aimed at getting area cities to raise the MLSA from 18 to 21. The initiative already has wide support from city businesses, health care organizations, and advocacy groups.^{34,35} Local tobacco control professionals in Missouri need to capitalize on the growing momentum from the MLSA increase in Columbia and the initiative from Healthy KC to increase the MLSA in their communities.

Conclusions

Missouri has made marked progress in addressing tobacco use and secondhand smoke exposure since the inception of TPCI. Over the course of the ten-year initiative, smoking prevalence among adults and high school youth has decreased significantly, cigarette consumption has steadily declined, and the number of local smokefree policies has increased from only two policies in 2004 to 41 policies in 2014. These policies protect over 42% of the Missouri population from secondhand smoke exposure.

Although many tobacco control partners contributed to these successes, TPCI's influential role and positive impact on Missouri's tobacco control environment is undeniable. Major conclusions drawn from the Initiative are described below.

MFH provided important leadership, infrastructure, and capacity building for tobacco control professionals in Missouri through TPCI.

MFH provided tobacco control leadership and infrastructure at a time when it was relatively absent in Missouri. With TPCI, MFH committed to a long-term funding approach, dedicating 40 million dollars over nine years to address tobacco use and secondhand smoke exposure. At the time of this commitment, Missouri allocated zero dollars to the state tobacco control program.

MFH's leadership was invaluable in advancing Missouri's tobacco control efforts. As part of TPCI, MFH brought together tobacco control experts and partners, supported the revitalization of the statewide coalition, and increased the visibility and emphasis placed on tobacco control in Missouri.

TPCI also provided extensive capacity building opportunities, enabling tobacco control professionals to more effectively implement their programs and to address tobacco control in their own communities. Initiative-supported trainings provided skill building, networking opportunities, and relevant resources. Many of TPCI's successes would not have been achieved without this additional support.

Community-wide policy changes advocated by TPCI grantees reached numerous Missourians and had an impact on smoking rates and corresponding healthcare costs.

Recognizing the broad impact of policy changes, TPCI awarded grants to specifically focus on tobacco policy change efforts and encouraged all grantees to incorporate policy and advocacy activities into their grants. By June 2014, TPCI grantees were involved in the passage of 197 tobacco control policies covering over two million Missourians.

Out of the 197 tobacco-related policies passed, 17 were community-wide smokefree policies. Results of TPCI's economic evaluation showed that these policy change efforts produced the greatest positive benefits by far. Due to community-wide policy changes, an estimated 6,173 Missouri adults quit smoking, 9,753 quality adjusted life years were gained, and over \$62 million in lifetime medical care costs to society were saved.

Although grantees did not initially prioritize sustainability planning, by the end of TPCI most grantees had identified ways to continue at least some aspects of their programs.

MFH reminded grantees from the beginning that TPCI would eventually end and encouraged them to think about sustainability. However, grantees were not initially required to develop formal sustainability plans and the majority lacked comprehensive plans for sustaining their efforts beyond their TPCI grant. When offered the opportunity for extensive sustainability

planning services, the vast majority of grantees declined to participate. By the end of TPCI, while the majority of grantees still did not have a formal sustainability plan in place, many had identified strategies for continuing at least some parts of their efforts. For example: integrating activities into the general operations of the organization, continuing to utilize resources procured with the grant, and maintaining collaborations established through their involvement with TPCI. However, some grantees did state that at the end of their grants they would not be able to continue their efforts without TPCI funding.

TPCI has been one of the most important public health initiatives during the last decade in Missouri. MFH's multi-year investment has improved the health of Missourians, strengthened the capacity of tobacco control organizations, and contributed to declines in tobacco use and secondhand smoke exposure. While significant strides have been made, future investment by the state and other tobacco control partners is now essential to continue the Initiative's momentum and sustain the infrastructure and expertise built by TPCI. Efforts to pursue a cigarette excise tax increase and a statewide comprehensive smokefree policy are still needed and new strategies to address emerging challenges (e.g., electronic cigarettes, point-of-sale marketing) must be developed.

Tobacco use remains the number one preventable cause of death for Missourians. A renewed commitment by Missouri's tobacco control leadership is critically needed. Without it, an opportunity to build on TPCI's many successes will be lost.



Lessons Learned

In addition to the many successes and contributions of TPCI to the tobacco control community in Missouri, several lessons learned from TPCI can be applied to future funding portfolios.

Advocating for policy and systems changes is key

Community-wide policy and systems changes provide a large impact and a large reach. Community policy changes and other systems-based efforts were able to reach a large number of people, and they had a large overall impact. While all TPCI grantees made important contributions to TPCI's success and contributions, examining the potential of policy and system-based initiatives may be beneficial in future funding portfolios.

Time required for policy change efforts varies widely. The time period required to enact successful policy change varies widely based on community-specific factors, including the community's level of readiness for and investment in policy change. Flexible grant making that allows grantees to work within the parameters of their own community and set its own timeline is important.

Advocating for broad policy change is crucial. TPCI grantees were extremely successful in helping to pass tobacco control policies. However, the majority of those policies occurred at individual schools and worksites not at the community level. While site level policy change can assist in building momentum within a community, they do not have a large overall impact. Policies geared towards increasing the price of tobacco or reducing exposure to secondhand smoke have some of the clearest and largest effects on reducing prevalence. Future funding portfolios should pursue advocating for community-wide policies.

Levels of readiness for change will affect implementation. Grantees often reported initially targeting organizations or communities that were ready for change and needed little to no convincing to implement the policy change. Targeting locations with a high level of readiness for change is the best approach for quickly accomplishing policy changes. However, achieving successful policy implementation in locations with lower levels of readiness may also be considered. Grantees will need to allow more time to move a location from low readiness to high readiness and provide the resources necessary to implement the change. In addition, many grantees may not have the capacity to evaluate an organization or community's level of readiness and will need resources to build their capacity to do this work. Funders will need to take these mediating factors into account when funding policy change grants.

Capacity building is important and takes time

Strengthening grantees' internal evaluation capacity is needed. Grantees' internal evaluation skills are critical to the Initiative level evaluation. Their skill level impacts their ability to discuss their programs successes and collect data needed for the Initiative level evaluation. Evaluation skills varied widely across TPCI grantees. Grantees found it easy to document anecdotal observations and clear cut results (e.g., policy change). However, grantees struggled to make the connection between program activities that build awareness (e.g., community events, media) and the resulting outcome. Time and funding must be built into the Initiative's evaluation component to build grantees' evaluation capacity through training and technical assistance.

Building capacity and creating change takes time. At the beginning of TPCI, MFH staff sought for grantees that could immediately begin implementation upon receipt of their grant awards. The capacity of grantees to do this was drastically overestimated. For the majority of grantees

several months were needed to get their programs up and running. This included administrative tasks, such as hiring staff, as well as developing materials and piloting interventions. For two to three year grants, this delay significantly cut into the time period available for implementation. This potentially diminished the level at which programs were able to achieve the objectives of their programs and TPCI as a whole. Development of realistic timelines for grantees is essential. These timelines should include time devoted to capacity-building and formative work.

A clearly defined and flexible portfolio structure is essential

Flexibility in program implementation is important to long-term success. TPCI grantees appreciated the ability to modify their plans to better meet the needs of their target populations when they encountered a reality different from what they expected. This flexibility allowed grantees to better address the needs of their communities, and it encouraged communityspecific approaches. Future funding portfolios should utilize a flexible grant making structure to allow grantees to account for unexpected implementation challenges.

Finding balance between focused and flexible approaches is important. In the beginning of TPCI, grantees were given freedom to identify and implement a program of their choice. As the structure of TPCI evolved, the Initiative moved away from allowing grantees to choose their own program to requiring them to select from a list of preapproved programs. MFH later recognized a need for balance between the two approaches, and incorporated a funding approach that utilized evidence based programs while still allowing innovative strategies to meet specific needs. Just as MFH realized, each of these approaches has its advantages; however, a balance must be achieved between the two.

Relationships matter to the success of the Initiative and its programs. Stakeholders consistently emphasized the importance of building and maintaining partnerships with other organizations and groups within their communities. Partners were important for contributing resources, providing technical assistance, and connecting programs to participants. Partnering organizations were essential for the implementation of many grantees' programs. Grantees often attributed the success of their recruitment and program implementation to the assistance of the individuals and groups with whom they collaborated. Partners that paid attention to relationships reaped the benefits. Beyond the grantee stakeholder relationship, the relationships between grantees and MFH staff/external evaluation team staff were critical. Building strong relationships between grantees and MFH staff/external evaluation team staff built trust and a willingness to listen to one another. This facilitated communication regarding success and challenges allowing MFH staff and the external evaluation team to identify training/technical assistance opportunities, discuss potential program implementation changes, and identify budget reallocations. Time needs to be allowed for these relationship building activities, formal opportunities need to be provided for networking, and a coordinated approach needs to be facilitated to ensure efficient use of dollars.

Clearly define evaluation expectations. Evaluation requirements and expectations need to be defined early in the grant making process similar to grant implementation requirements. Grantees often did not realize the time or level of skill that was needed to meet the Initiative's evaluation. As a result, some grantees struggled to collect the necessary data for the Initiative. Funders need to clearly define requirements and expectations of the Initiative's evaluation along with the skills and time need to complete the corresponding activities. These expectations should be set in the request for concept papers/proposals/applications and continue to be emphasized throughout the grant making process by holding grantees accountable for not meeting evaluation requirements.

Planning for sustainability from the beginning is critical

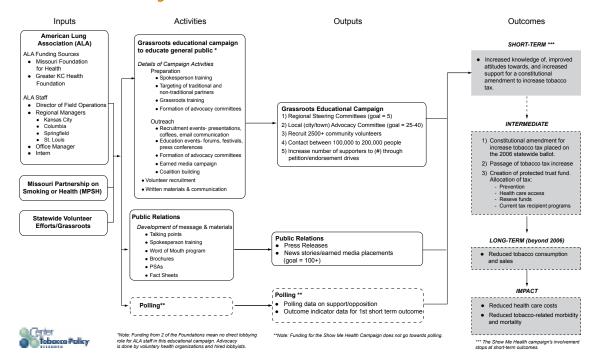
Planning for sustainability is critical for grantees. Although MFH made grantees aware from the beginning that TPCI would be ending, grantees did not initially prioritize sustainability planning. Early on in the Initiative, grantees primarily focused their sustainability strategy on renewing their grants with MFH or finding another grant opportunity. They did little to ensure buy-in from their implementation sites to assist with sustainability. Grantees often offered their services free of charge, which increased participation, but could have hurt the sustainability of their programs. While many sites had trained facilitators that could carry out the programs if grantees' resources diminished, it was unclear whether the support was there for many sites to do so. Funders need to work with their grantees to find a balance between the resources grantees provide and what sites or participants contribute. In addition, funders need to require and support grantees in developing more comprehensive plans for sustainability in the beginning of their grant. By the end of TPCI, while the majority of grantees did not have a formal sustainability plan in place, many had identified strategies for continuing at least some parts of their efforts. Grantees should be required to submit an initial sustainability plan with their grant, and the plan should be revised as assistance is provided by the funder. These plans should include items such as what elements of their program should be sustained after the grant ends, how they plan on sustaining them, and professional development needed by staff.

Develop an exit strategy for the Initiative. Funders need to develop an exit strategy for the Initiative early in the grant making process. Long-term, large scale Initiatives should not withdrawal funding with no warning to its stakeholders and grantees. This exit strategy should include a process for how funding will be phased out and expectations for the sustainability of the Initiative's outcomes and activities. This exit strategy should be shared with key stakeholders, and they should be reminded of it frequently.



Appendix A: Original Logic Models and Evaluation Questions

Show Me Health Logic Model



Show Me Health Evaluation Questions

11/3/05

Strategy 1- Initiative Evaluation Questions

	Questions	Tier 1 or Tier 2? Qualitative, Quantitative, Both?		New & Existing Data Sources	Timeframe*	
	1a. Were the resources available for Strategy 1 adequate?	1	Both	Description of resources (budget, staff) Progress Reports to MFH Interviews with grantees Did you have what you needed? Did you make decisions not to do activities based on funding?	Ongoing Nov/Dec '06	
Inputs	1b. Was the structure for Strategy 1 adequate?	2	Qual.	Interviews/Focus Groups with MFH, Regional, and community supporters What were the benefits of splitting the responsibilities (i.e., educational vs. political campaign)? What were the challenges of separating the two campaigns? Were they remedied?	1. Nov/Dec '06	
=	2a. Who were the collaborators for Strategy 1?	1	Both	Show Me Health (SMH) Monitoring system List of meeting participants Interviews/Focus Groups	Ongoing Nov/Dec '06	
	2b. How effective were existing collaborations? How effective were new collaborations?	2	Both	Interviews/Focus Groups SMH Monitoring system What parts of the state were most successful? What types of agencies were most successful?	Nov/Dec '06 Ongoing	

Show Me Health Evaluation Questions *cont.*

Questions		Tier 1 or Tier 2?	Qualitative, Quantitative, Both?	New & Existing Data Sources	Timeframe*
	1a. What was the development and implementation of the campaign over time? (timeline)	1/2	Both	SMH Monitoring system Weekly updates When did certain groups join? SMH Media Monitoring system When did certain groups join? SMH Media Monitoring system When did the media jump in? Was the timing appropriate? Was enough time provided to disseminate the message? Where and what were the gaps in activities? In the beginning, did they draw from a menu of activities? What did they select and why? During the campaign were there new opportunities for activities? What did they choose and why?	Ongoing Ongoing Nov/Dec '06
Activities	2a. What was the level of communication among stakeholders? (types and frequency)	1	Both	SMH Monitoring system a. Types of meetings and who was present b. Tracking of other forms of communication Interviews/Focus Groups a. Levels of communication for: MFH, ALA, Regional coordinators, community groups, general public	Ongoing Nov/Dec '06
	2b. Was there sufficient/effective communication among stakeholders?	2	Qual.	Interviews/Focus Groups	1. Nov/Dec '06
	3. Was the public education campaign prepared for and flexible enough to respond to environmental changes (e.g., political)?	2	Qual.	Interviews/Focus Groups	1. Nov/Dec '06

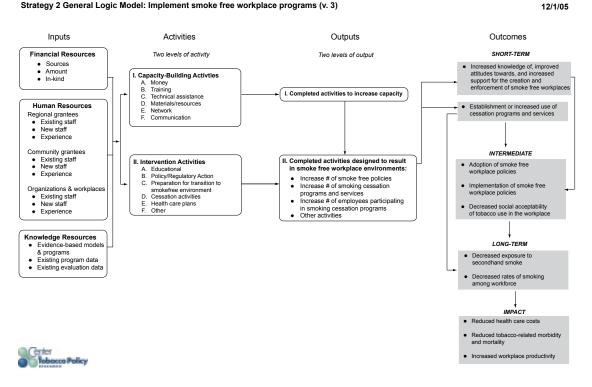
	Questions	Tier 1 or Tier 2?	Qualitative, Quantitative, Both?	New & Existing Data Sources	Timeframe*
Outputs	Grassroots Education Monitoring	1	Quan.	SMH Monitoring system Consumer Survey demographic coverage	Ongoing Three time points Dec 2005 Summer 2006 Oct 2006
	2. Public Relations Monitoring a. How many earned media placements? b. What types of media picked up the stories? c. # of direct earned media vs. regular media d. Public education earned media vs. political campaign earned media e. What was the geographic coverage of the public relations campaign? f. What was the demographic coverage of the public relations campaign?	1	Quan.	SMH Media Monitoring system Clippings from MFH, ACS, and AHA	Ongoing Ongoing
	3. What were responses of various groups to the public education message?	2	Both	Consumer Survey Interviews/Focus Groups Constituency	Three time points Dec 2005 Summer 2006 Oct 2006 Nov/Dec '06
	4. What were the properties of the public education message?	2	Qual.	Interviews/Focus Groups Were the messages appropriate for specific audiences? Content Analysis Were the messages appropriate? Was a consistent message developed?	Nov/Dec '06 Early 2007
	5. How did the media frame the public education campaign?	2	Qual.	Content Analysis	1. Early 2007

Show Me Health Evaluation Questions cont.

	Questions	Tier 1 or Tier 2?	Qualitative, Quantitative, Both?	New & Existing Data Sources	Timeframe*
Outcomes	What was the public's awareness of the educational campaign's message?	1	Quan.	Consumer survey	Three time points Dec 2005 Summer 2006 Oct 2006
	2. What effect did the educational campaign have on public attitudes?	1	Quan.	Consumer survey	Three time points Dec 2005 Summer 2006 Oct 2006
	3. Which part of the educational campaign's message was most effective?	2	Both	Consumer survey Interviews/Focus Groups	Three time points Dec 2005 Summer 2006 Oct 2006 Nov/Dec '06
	4. Did the educational campaign impact tobacco use? (long-term)	2	Quan.	State surveillance data	1. Long-term

Workplace Programs Logic Model

Strategy 2 General Logic Model: Implement smoke free workplace programs (v. 3)



Workplace Programs Evaluation Questions

Missouri Foundation for Health **Tobacco Prevention and Cessation Initiative Evaluation Questions** Strategy 2: Worksites

5/4/06

<u>Inputs</u>				
Questions	Data Sources			
a) What resources (financial, informational, and human) were utilized to implement worksite programs?	Regional Grantees Data collection system			
b) How adequate were the resources?	CTPR Key informant interviews			
What outside factors in the environment influenced the programs (e.g., Missouri Hospital Association mandating tobacco-free hospital campuses)?	Regional Grantees Program Materials CTPR Ongoing listserv/ newspaper tracking for specific policies Key informant interviews MFH Ongoing media tracking for tobacco-related topics			
What was the level of support for clean indoor air in Missouri?	MDHSS or Other Contractor County Level Survey			

TPCI Final Report | 74

Workplace Programs Evaluation Questions cont.

Activities/Outputs			
Questions	Data Sources		
What were the main goals, framework, and components of the worksite programs?	Regional Grantees Program Materials CTPR Key informant interviews		
2. What was the reach of the worksite programs? a. What types businesses were targeted during the Initiative? 1. When? 2. Where? 3. How many? 4. Duration of contact b. How many activities did programs conduct? 1. When? 2. Where? 3. With Who?	Regional Grantees Data collection system		
3. a) What collaborations occurred during the implementation of worksite programs?	Regional Grantees Data collection system CTPR Key informant interviews		
3. b) Who were the most important collaborators for specific activities and overall?	CTPR Key informant interviews		

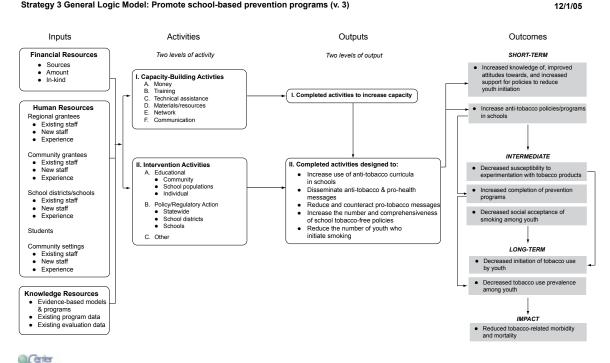
<u>Outcomes</u>					
Questions	Data Sources				
What policy changes occurred as a result of Strategy 2 programs? Employer and community level	Regional Grantees Data collection system MDHSS or other sources tracking policy changes in Missouri				
2. How did participants in worksite programs utilize cessation services?	Regional Grantees Data collection system				
What was the effect of policy changes? Community perceptions/viewpoints	CTPR Key informant interviews				
4. How did the number of adults reporting the implementation of smoke-free policies in their workplace change?	MDHSS or Other Contractor County Level Survey				
5. What was the change in quit attempts among Missouri adults?	MDHSS or Other Contractor County Level Survey				
6. How did knowledge, attitudes, and beliefs of Missourians change regarding smoke free policies during the implementation of Strategy 2?	MDHSS or Other Contractor County Level Survey				

Questions to Frame Analyses for Worksite Programs

- 1. a. How cost-effective was Strategy 2?
- 1. b. How cost-effective was Strategy 2 in comparison to Strategy 3?
- 2. What is the evidence of sustainability for programs funded through Strategy 2?
- 3. Were there gaps in coverage for Strategy 2 (e.g., gaps in regional coverage)?

School-based Programs Logic Model

Strategy 3 General Logic Model: Promote school-based prevention programs (v. 3)



School-based Programs Evaluation Questions

Missouri Foundation for Health **Tobacco Prevention and Cessation Initiative Evaluation Questions** Strategy 3: Schools

5/4/06

<u>Inputs</u>				
Questions	Data Sources			
a) What resources (financial, informational, and human) were utilized to implement school programs?	Regional Grantees Data collection system			
b) How adequate were the resources?	CTPR Key informant interviews			
What outside factors in the environment influenced the implementation of school programs (e.g., changes in MO Dept. of Ed requirements)?	Regional Grantees Program Materials CTPR Ongoing listserv/ newspaper tracking for specific policies Key informant interviews MFH Ongoing media tracking for tobacco-related topics			

TPCI Final Report | 76

School-based Programs Evaluation Questions cont.

Activities/Outputs				
Questions	Data Sources			
1. What was the reach of the school programs? a. # Schools/other settings participating b. # of trainings conducted c. # of teens/youth participating d. # of activities e. Where and when did the activities occur? f. Types of activities	Regional Grantees Data collection system			
a) What collaborations occurred during the implementation of school programs?	Regional Grantees Data collection system CTPR Key informant interviews			
2. b) Who were the most important collaborators for specific activities and overall?	CTPR Key informant interviews			
3. What were the main goals, framework, and components of the school programs?	Regional Grantees Program Materials CTPR Key informant interviews			

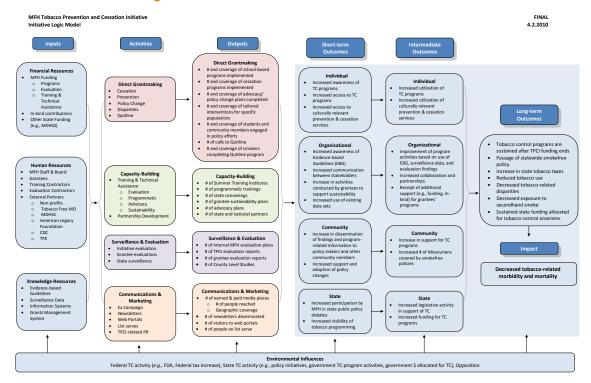
<u>Outcomes</u>					
Questions	Data Sources				
What effect did involvement in school programs have on students conducting advocacy efforts?	Regional Grantees Data collection system				
What policy changes occurred as a result of school programs? a. Schools, Workplaces, Community	Regional Grantees Data collection system				
What was the effect of participant involvement in grantee programs? a. For example, did the environment in the schools change regarding tobacco?	CTPR Key informant interviews				
4. How did prevalence rates change? a. Initiation b. Tobacco use	MDHSS or Other Contractor County Level Survey for 18-24 year olds Source for youth under 18 to be determined				
5. How did knowledge, attitudes, and beliefs of Missouri students change during the implementation of the school programs?	Source for youth under 18 to be determined				

Questions to Frame Analyses for School Programs

- a. How cost-effective was Strategy 3?
 b. How cost-effective was Strategy 3 in comparison to Strategies 2?
- 2. What is the evidence of sustainability for programs funded through Strategy 3?
- 3. Were there gaps in coverage for Strategy 3 (e.g., ages reached)?

Appendix B: Revised Logic Models and **Evaluation Questions**

Overall Initiative Logic Model

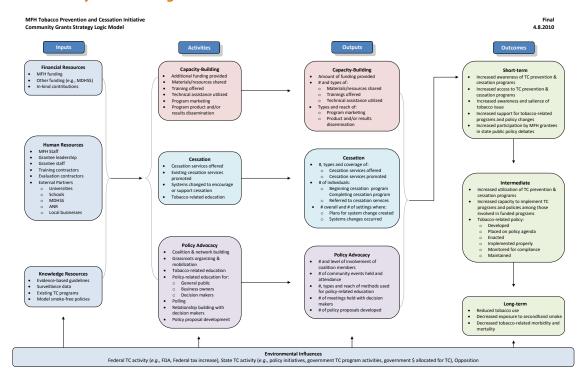


Overall Initiative Evaluation Questions

Overall Initiative Data Collection

Logic Model	Further Counties	Data Collection			
Component	Evaluation Question	Source(s)	Method(s)	Timeframe(s)	
Inputs	What resources were utilized to implement grantee efforts?	TPCI grantees MFH staff	TIES Applications & Reports	On-going Periodically	
	2. What was the reach of TPCI?	TPCI grantees MFH staff	TIES Applications & Reports	On-going Periodically	
Outputs	What was TPCI's role in state-level tobacco control policy activities?	TPCI granteesMFH staffMO TC stakeholders	TIES Interviews/FGs	On-going Periodically	
Intermediate	What was TPCI's role in tobacco control policy outcomes in Missouri communities?	TPCI grantees MFH staff	TIES Applications & Reports Interviews/FGs	On-going Periodically	
Outcomes	How has TPCI increased capacity for tobacco control programming in communities with TPCI funding?	MFH staff TPCI grantees External partners	Applications & Reports Interviews/FGs Trainings attendance Types of TA requests	Periodically	
Long-term Outcomes	6. What public health outcomes occurred as a result of TPCI? • How many Missourians quit smoking? • How many Missouri youth didn't start smoking? • How many Missourians have a reduced exposure to secondhand smoke?	TPCI grantees Missourians	TIES County-level Study	• On-going • 2011 & 2013	
	7. What is TPCI's return on investment (ROI)?	TPCI grantees MFH staff Missourians	TIES Applications & Reports County-level Study	On-going Periodically 2011 & 2013	

Community Grants Logic Model

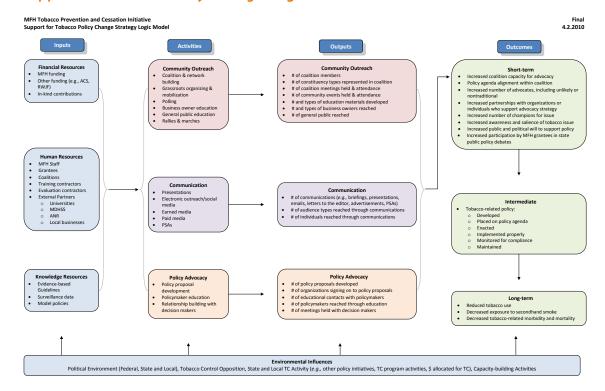


Community Grants Evaluation Questions

Community Grants Strategy Data Collection

Logic Model	Fundamental Operation	Data Collection			
Component	Evaluation Question	Source(s)	Method(s)	Timeframe(s)	
	What capacity-building strategies were most utilized?	TPCI grantees MFH staff	Trainings attendanceInterviews/FGsApplications & Reports	Periodically	
Activities	What was the process leading to policy change?	TPCI grantees MFH staff	TIES Interviews/FGs Applications & Reports	On-going Periodically	
	What was the role/contribution of youth in community policy changes?	TPCI grantees MFH staff	TIES Interviews/FGs Applications & Reports	On-going Periodically	
Outputs	What collaborations occurred during the implementation of the Community Grants Strategy?	TPCI grantees MFH staff	TIES Interviews/FGs Applications & Reports	On-going Periodically	
Short-term Outcomes	5. How did community norms (i.e. knowledge, attitudes and beliefs) change regarding tobacco and smoke-free policies?	Missourians	County-level Study	• 2011 & 2013	
Intermediate Outcomes	6. What policy changes occurred?	TPCI grantees	• TIES	On-going	

Support for Tobacco Policy Change Logic Model

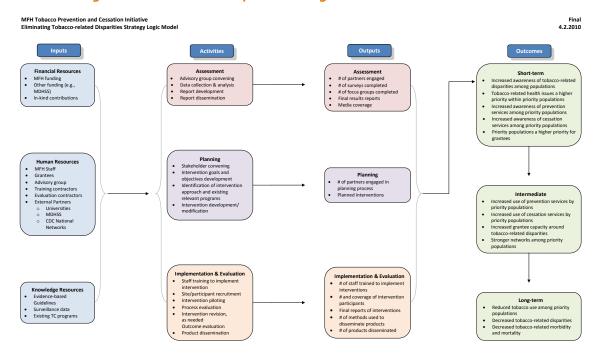


Support for Tobacco Policy Change Evaluation Questions

Eliminating Tobacco-related Disparities Strategy Data Collection

Logic Model Component	Evaluation Question	Data Collection		
		Source(s)	Method(s)	Timeframe(s)
Activities	1. How did each phase of the strategy contribute to the next (i.e., assessment to planning to implementation)?	TPCI grantees MFH staff	Interviews/FGs	Periodically
	What was the process used to develop the interventions?	TPCI grantees MFH staff	Interviews/FGs Applications & Reports	Periodically
Outputs	 How many grantees moved from assessment to planning? From planning to implementation? 	MFH staff	Grant applications and awards	Periodically
	How many tailored tobacco programs were piloted with disparate populations?	TPCI grantees MFH staff	Interviews/FGS Applications & Reports	Periodically
Short-term Outcomes	To what extent did the structure of the strategy achieve the intended outcomes?	MFH staff	Interviews/FGs	Periodically

Eliminating Tobacco-related Disparities Logic Model



Eliminating Tobacco-related Disparities Evaluation Questions

Support for Tobacco Policy Change Strategy Data Collection

Logic Model Component	Evaluation Question	Data Collection		
		Source(s)	Method(s)	Timeframe(s)
Inputs	What resources were used (e.g., ANR training and technical assistance, other leveraged monies)?	TPCI grantees MFH staff	Interviews/FGs Applications & Reports TIES	Periodically
Short-term Outcomes	2. How did the funding contribute to the capacity of the coalitions?	TPCI grantees MFH staff	Interviews/FGs Applications & Reports	Periodically
Intermediate Outcomes	3. What tobacco-related policies changed?	TPCI grantees MFH staff	Direct communication Applications & Reports TIES	On-going
	How has the coalitions' sustainability changed?	TPCI grantees MFH staff	Applications & Reports Interviews/FGs	Periodically

Appendix C: Data Sources

Once the TPCI evaluation questions were established, CPHSS identified the data sources necessary to answer these questions. CPHSS developed a mixed methods design (quantitative and qualitative) to evaluate TCPI. Below is a list of the primary data sources utilized by CPHSS along with a description of the data source.

Ouantitative Data Sources

Retrospective Grantee Data (Pre TIES Data)

Prior to the launch of TIES, the online data collection system of TPCI, data were collected retrospectively from grantees to cover the time period from January 1, 2006 through December 31, 2006. Grantees were sent a paper data collection tool which collected information about their grantee activities (e.g., sites were activities were conducted, type of activities conducted, policy changes enacted) during this timeframe.

Tobacco Initiative Evaluation System (TIES)

Beginning in 2007, community-based cessation program and youth engagement and empowerment program grantees were responsible for using TIES. Support for local tobacco control policy change grantees begin entering data into TIES during the final quarter of 2011. Eliminating tobacco-related disparities grantees did not enter data into the system. The type of data collected through TIES included program site characteristics, activities conducted, policies enacted, and people reached. Data from TIES were exported into SPSS and analyzed along with data collected retrospectively to examine the implementation of the strategies by program, across regions, and over time.

Training and Workshop Evaluations

CPHSS developed and administered evaluation forms at all CPHSS hosted trainings and workshops (i.e., summer training institutes, winter/spring workshops, and evaluation exchange). The type of data collected on the evaluation forms included usefulness, information learned, program satisfaction, etc.

Needs Assessment Surveys

Every two years from 2006-2012 CPHSS conducted a needs assessment survey with TPCI grantees. The needs assessment was used to review grantees' evaluation capacity, to identify technical assistance needs and preferences, and to help guide trainings.

Network Analysis Survey

During the 2009 Summer Training Institute, CPHSS conducted a network analysis of the program participants. The network analysis assessed how many professional connections were made at the Institute. Via an online surveys, TPCI partners (grantees, MFH staff and CPHSS staff) were asked who they knew before the 2009 Summer Training Institute, who they had met at the Summer Training Institute, and who they had met within a year after the Summer Training Institute.

Community Tobacco Survey

CPHSS developed the Community Tobacco Survey (CTS) to assess the reach and impact of the SMH educational campaign. The survey included questions about exposure to SMH and its messages, likelihood of voting for a tobacco tax, and participant demographics. The Center for Advanced Social Research at the University of Missouri School of Journalism administered the survey. Using random-digit dialing, the survey team selected a representative sample of residents aged 18 or older across Missouri to evaluate changes over time regarding Missourians' knowledge, behavior, and attitudes, the survey was administered at three different time points:

- December 2005-February 2006
- July September 2006
- October November 2006

A total of 3, 012 Missouri adults (approximately 1,000 participants/administration) were surveyed over the three administrations. On average, participants took 3-5 minutes to complete the survey. Following the final survey administration, responses from all three administrations were consolidated and analyses were conducted using SPSS 13.0. The analyses focused on answering questions about exposure to the education campaign. Both descriptive and inferential statistics were used to answer the questions.

EX Campaign Telephone Survey

CPHSS developed a survey to measure whether the proposed media campaign increased awareness of EX and the Quitline. Survey items were taken from a survey developed by the evaluation team for the national EX campaign at Legacy. Additional items were modified from media and social marketing literature. The survey included questions on use of media for health information, awareness of EX, awareness of the Missouri Quitline, readiness to quit, and caller demographics. The survey was administered at two time points, prior to the amplification and a few weeks after the amplification of the EX campaign, by a call center at a local university. The project sample frame included list assisted households containing an adult smoker, randomly generated for the target region. During the data collection periods, each sample was randomly dialed and interviewed during morning, evening, and weekend times. A total of 500 interviews for each time point were completed.

Oualitative Data Sources

Qualitative Interviews and Focus Groups

CPHSS conducted multiple sets of qualitative interviews over the course of TPCI's evaluation. A unique qualitative interview tool was developed for each set of interviews. The interviews were conducted with a sample of grantees from each funding strategy, MFH staff, and external stakeholders. Trained CPHSS staff members conducted the interviews either in person or over the phone. After each set of interviews were conducted, they were transcribed and analyzed for themes.

In addition, CPHSS conducted two focus groups for the Show Me Health evaluation: one with MFH staff and one with members and volunteers of the advocacy committee. Trained CPHSS staff conducted the focus groups in-person. The focus groups were then transcribed and analyzed. Once analysis of the focus groups was complete, themes were examined to identify primary themes.

Missouri Print Media

Content analysis of Missouri print media was conducted to better understand how the topic of tobacco was covered in newspapers throughout Missouri during the implementation of the smokefree workplace and school-based prevention programs. This was used as one indicator of the state environment regarding tobacco control during the Initiative from 2005-2007. TPCI program and grantee names were also coded as an indicator of how Initiative programs were covered in a media source. A clipping service contracted by MFH was utilized to identify tobaccorelated articles, editorials, and letters to the editor. To analyze the articles, CPHSS developed a 10-item codebook based on published accounts of similar projects. The codebook included codes for general information about the newspaper and story (e.g., region of publication, date of publication), the article type, and tobacco-related topics. Tobacco topics included youth prevention, adult cessation, smoke-free policy, tobacco taxes, and tobacco science.

Clippings were coded into a database by trained CPHSS staff. Data were then imported into SPSS to explore the topics covered, regional variations (MFH-defined regions), and other characteristics of the newspaper coverage. To account for the difference in the number of newspapers available in each region, ratios of the number of articles per available newspaper was calculated for each measure of interest (e.g., ratio of articles covering tobacco taxes).

Grantee Document Review

As part of their grant requirements, TPCI grantees submitted six month interim reports throughout the course of their grant and a final report at the end. These reports provide information about topics such as success and challenges implementing their programs, progress towards their program objectives, lessons learned implementing their program, etc. As part of the SCHPI index, CPHSS developed the Quality construct and a corresponding tool to measure it. A select group of TPCI grantee who met eligibility criteria to be scored were scored using the quality tool. In order to identify a grantee's quality score, CPHSS staff reviewed the grantee documents. CPHSS staff were trained on the tool. Grantee documents were scored by two CPHSS staff until an inter-rater reliability was established. Once inter-rater reliability was established, the trained staff person could score grantee documents on their own.

Show Me Health Monitoring System

Beginning in 2005, monitoring data from ALA project staff were submitted to CPHSS on a monthly basis. Submitted data included numbers of contacts, recruited volunteers, and inclusion of the education campaign's information in various media (e.g., radio, company newsletters). CPHSS also developed a meeting monitoring form for ALA staff to complete and submit on a regular basis. The form tracked information such as the location, purpose, attendees, and important decisions made for all project-related meetings conducted in the community. All monitoring data were organized by region (i.e., Central/Northeast, Kansas City, Southwest, and St. Louis). Data were entered into an Access database and queries were run to examine the implementation of SMH across regions as well as over time.

Show Me Health Material Review

CPHSS collected materials produced for SMH throughout the campaign. The materials collected included: fact sheets, brochures, newsletter inserts, and posters/flyers. A document review was conducted of all the SMH materials. This review provided CPHSS with important background information and supporting evidence for the qualitative results.

Appendix D: Programs implemented under workplace and school-based strategies

From 2004 to 2006 when TPCI was implementing the regional and community grants, the grantees choosing to address the strategies of smokefree workplaces and school-based prevention programs implemented six different programs. Below is a list of these programs along with a summary.

Strategy: Implement smokefree workplace programs

Campus-Community Alliances for Smoke-free Environments

College and community leaders worked together to change policies to increase smokefree workplaces and college campuses, and access to cessation resources.

Employer Tobacco Policy Project

Employers were surveyed to assess their interest in strengthening their workplace tobacco policies and were provided toolkits with more information.

Freedom from Smoking/Employer Assisted Smoking Elimination

Community members and employees learned strategies to help them guit smoking and remain smokefree.

Strategy: Implement school-based prevention program

Project Smokebusters

Teens learned about the effects of smoking, how to communicate this knowledge to other youth and the public, and how to advocate for policy change.

Teens Against Tobacco Use

Teens learned about the effects of tobacco use and developed skills to teach younger children about the dangers of tobacco use.

Youth Empowerment in Action

Youth participated in a program to empower them to make their own decisions through media literacy education and hands-on media production.

References

- Centers for Disease Control and Prevention. (2014). Smoking & Tobacco Use Health Effects of Cigarette Smoking. Retrieved April 14, 2015 from http://www.cdc.gov/tobacco/data_statistics/fact_ sheets/health_effects_cig_smoking/.
- 2. Campaign for Tobacco Free Kids. (2014). Broken Promises to Our Children. A State-by-State Look at the 1998 State Tobacco Settlement 16 Years Later. Retrieved http://www.tobaccofreekids.org/content/what_we_do/state_local_issues/settlement/FY2015/2014_12_11_brokenpromises_report.pdf.
- 3. Center for Tobacco Policy Research. (2008). Evaluation Findings: School and Workplace Strategies 2005-2007. http://cphss.wustl.edu/Products/ProductsDocuments/TPCI_Phase1_Report.pdf.
- 4. Tobacco Free Missouri. (2015). Missouri Smokefree Ordinances. Retrieved April 14, 2015 from http://www.tobaccofreemo.org/get-informed/missouri-smokefree-ordinances/.
- 5. Centers for Disease Control and Prevention. (2015). BRFSS Prevalence & Trends Data. Retrieved April 14, 2015 from http://www.cdc.gov/brfss/.
- 6. Vallone, D. M., Duke, J.C., Cullen, J., McCausland, K.L., Allen, J.A. (2011). Evaluation of EX: A National Mass Media Smoking Cessation Campaign. American Journal of Public Health, 101(2), 8.
- 7. Centers for Disease Control and Prevention. *Telephone Quitlines: A Resource for Development, Implementation, and Evaluation.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Final Edition, September 2004.
- 8. Hughes, J. (2004). Shape of the relapse curve and long-term abstinence rates among untreated smokers. Addiction, 99, 29-38.
- 9. Fiore, M., Jaen, C., & Baker, T. (2008). Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.
- 10. Centers for Disease Control and Prevention. (2015). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services Centers for Disease Control and Prevention.
- 11. Centers for Disease Control and Prevention. (2015). 1991-2013 High School Youth Risk Behavior Survey Data. Retrieved June 14, 2015, from http://nccd.cdc.gov/youthonline/.
- 12. Centers for Disease Control and Prevention. (2015). State Tobacco Activities Tracking and Evaluation (STATE) System. Retrieved June 14, 2015 from http://www.cdc.gov/tobacco/statesystem.
- 13. American Nonsmokers' Rights Foundation. (2015). Percent of U.S. State Populations Covered by 100% Smokefree Air Laws, from http://www.no-smoke.org/pdf/percentstatepops.pdf.
- 14. American Nonsmokers' Rights Foundation. (2015). Chronological Table of U.S. Population Protected by 100% Smokefree State or Local Laws, from http://www.no-smoke.org/pdf/EffectivePopulationList.pdf.
- Institute of Medicine. (2007). Report Brief: Ending the Tobacco Problem: A Blueprint for the Nation, 2007, from https://iom.nationalacademies.org/~/media/Files/Report%20Files/2007/Ending-the-Tobacco-Problem-A-Blueprint-for-the-Nation/Tobaccoreportbriefgeneral.pdf.
- 16. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: 50 Years of Progress. A Report of the Surgeon General.* Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Printed with corrections, January 2014, from http://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf
- 17. Center for Public Health Systems Science. *Pricing Policy: A Tobacco Control Guide.* St. Louis: Center for Public Health Systems Science, George Warren Brown School of Social Work at Washington University in St. Louis and the Tobacco Control Legal Consortium; 2014.

- 18. Campaign for Tobacco Free Kids. (2015). State Cigarette Excise Tax Rates & Rankings, from http://www. tobaccofreekids.org/research/factsheets/pdf/0097.pdf.
- 19. Center for Public Health Systems Science. Policy Strategies: A Tobacco Control Guide. St. Louis: Center for Public Health Systems Science, George Warren Brown School of Social Work at Washington University in St. Louis and the Tobacco Control Legal Consortium; 2014.
- 20. Campaign for Tobacco Free Kids. (2015). Tobacco Marketing that Reaches Kids: Point-of-Sale Advertising and Promotions, from https://www.tobaccofreekids.org/research/factsheets/pdf/0075.pdf.
- 21. Federal Trade Commission, Federal Trade Commission Cigarette Report for 2009 and 2010: Washington, DC 2012.
- 22. Federal Trade Commission, Federal Trade Commission Smokeless Report for 2009 and 2010: Washington, DC 2012.
- 23. Center for Public Health Systems Science. Point-of-Sale Strategies: A Tobacco Control Guide. St. Louis: Center for Public Health Systems Science, George Warren Brown School of Social Work at Washington University in St. Louis and the Tobacco Legal Consortium; 2014.
- 24. U.S. Department of Health and Human Services. Electronic Cigarettes. Retrieved October 26, 2015 from http://betobaccofree.hhs.gov/about-tobacco/Electronic-Cigarettes/.
- 25. Centers for Disease Control and Prevention. (2014). Smoking & Tobacco Use: Electronic Cigarettes. Retrieved October 26, 2015 from http://www.cdc.gov/tobacco/basic_information/e-cigarettes/adulttrends/index.htm.
- 26. Centers for Disease Control and Prevention Smoking & Tobacco Use. (2015). Smoking and Tobacco Use: Youth and Tobacco Use. Retrieved October 26, 2015 from: http://www.cdc.gov/tobacco/data_statistics/ fact_sheets/youth_data/tobacco_use/index.htm.
- 27. Center for Public Health Systems Science. Point-of-Sale Report to the Nation: The Tobacco Retail and Policy Landscape. St. Louis, MO: Center for Public Health Systems Science at the Brown School at Washington University in St. Louis and the National Cancer Institute, State and Community Tobacco Control Research Initiative, 2014.
- 28. Duhaime-Ross, A. (2015, October 23). E-cig regulations are almost here. The Verge. Retrieved from http://www.theverge.com/2015/10/23/9605256/e-cig-fda-regulations-us-almost-here.
- 29. Counter Tobacco. E-Cigarettes at the Point of Sale. Retrieved October 28, 2015 from http://www. countertobacco.org/e-cigarettes-point-sale.
- 30. Campaign for Tobacco Free Kids. (2015). Increasing the Minimum Legal Sale Age for Tobacco Products to 21 from https://www.tobaccofreekids.org/research/factsheets/pdf/0376.pdf.
- 31. Preventing Tobacco Addiction Foundation. (2015). Tobacco twenty-one State by State. Retrieved October 29, 2015 from http://tobacco21.org/state-by-state/.
- 32. Nelson, S. (2015, September 30). National Tobacco Age 21? 10 Senators Seek to Treat Cigarettes Like Alcohol. U.S. News and World Report. Retrieved from http://www.usnews.com/news/ articles/2015/09/30/national-tobacco-age-21-10-senators-unveil-bill-to-treat-cigarettes-like-alcohol.
- 33. Counter Tobacco. (2015). Tobacco to 21 Act: Federal Legislation Introduced to Raise the MLSA to 21. Retrieved October 28, 2015 from http://countertobacco.org/news/2015/09/30/tobacco-21-act-federallegislation-introduced-raise-mlsa-21.
- 34. The Editorial Board. (2015, October 22). Raising legal age to 21 is the best way for KC area cities to combat teen smoking. The Kansas City Star. Retrieved from http://www.kansascity.com/opinion/ editorials/article40874205.html.
- 35. Press, T.A. (2015). KC civic leaders call for raise in legal age for tobacco. The Kansas City Sta. Retrieved from http://www.kansascity.com/news/state/kansas/article41167182.html.

