Connecticut Tobacco and Health Trust Fund

Retrospective Report: Overview of Programming and Impact from 2000 - 2017

Prepared for:
Connecticut Tobacco and Health Trust Fund Board of Trustees

Prepared by:
UNC School of Medicine
Tobacco Prevention and Evaluation Program in Consultation with the Connecticut Office of Policy and Management and the Connecticut Department of Public Health

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Executive Summary

Since the establishment of the Connecticut Tobacco and Health Trust Fund (THTF) in 1999, its Board of Trustees (the Board) has disbursed funding to a variety of programs designed to reduce the prevalence and impact of tobacco use. The Board disbursed $29.2 million from 2003 to 2016 to support tobacco counter-marketing efforts, tobacco prevention initiatives, and tobacco use cessation programs including the QuitLine. Other efforts, such as evaluation, a lung cancer pilot, innovative programs, tobacco enforcement, and website development were funded to a lesser extent.

During the period of 2003 - 2016, the Board distributed $6.6 million to support tobacco counter-marketing efforts. Trust Funds were used to support adult and youth media campaigns. For example, from 2003-2004, funds were used to buy television ads, radio ads, bus panels, highway billboards, magazine ads, and a sign at the Hartford Civic Center. Several youth and young adult prevention campaigns were conducted between the period of 2009-2013.

Between the period of 2003-2016, the Board distributed $15.7 million to support cessation programs, including the Quitline. The Board disbursed funds for a variety of evidence-based approaches to tobacco cessation targeting populations disproportionately burdened by the negative health effects of tobacco use. During this time period, over 7,355 individuals received cessation services.

The QuitLine provided stop-smoking services free of charge to Connecticut residents through telephone cessation counseling and nicotine replacement therapy (NRT). During this

time period the QuitLine helped 67,228 Connecticut callers in their efforts to quit smoking and use of other tobacco products.

The Board disbursed $4.4 million to support tobacco prevention programs for youth from 2003-2016. Over 27,000 youth were served through these prevention programs.

The Board disbursed over $2.3 million from 2003 to 2016 to support other efforts including evaluations, administration and infrastructure, and website development.

Based on data from the Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS), the rate of cigarette smoking among Connecticut adults decreased by 34%; from 19.9% in 2000 to 13.2% in 2010[1]. In 2011, BRFSS implemented new weighing and survey methodologies so prior data cannot be compared to 2011 or later. However, using this new methodology for 2011-2017, the cigarette smoking rate among Connecticut adults decreased by an additional 26%, from 17.1% in 2011 to 12.7% in 2017. [1] The high school cigarette smoking rates declined 86.3%, from 25.6% in 2000 to 3.5% in 2017[2]. These trends mirror those observed nationally; according to the Centers for Disease Control and Prevention (CDC), the proportion of United States adults who smoked cigarettes declined from 20.9% in 2005 to 14% in 2017[3] and youth cigarette smoking rates declined from 15.8% in 2011 to 8.1% in 2018.[4] While it is not feasible to determine the exact impact of Connecticut's tobacco use prevention and control programming on the declines in cigarette smoking rates, independent evaluation data summarized in this report suggest that the mix of tobacco use prevention and control programs funded by the Board has likely contributed to reduced cigarette smoking rates.[5]

Despite the progress made over the past 17 years, tobacco use remains a serious issue in Connecticut, with more than 350,000 adults continuing to smoke cigarettes and 1,100 youth

becoming daily smokers each year.[6] As overall cigarette smoking declines, disparities persist in Connecticut and across the United States. In Connecticut there are higher cigarette smoking rates among, for example, Hispanic adults and residents with low socio-economic status.[1] Adult tobacco use rates are disproportionately higher among certain populations, including 25-34 year olds (25.6%) , persons with low-income (earning less than $25,000 - 25.9%) and persons with less than a high school education (28.1%).[7] The latest data (2009) from the CDC states that annual health care costs in Connecticut caused by cigarette smoking exceed $2 billion, including over $520 million in Medicaid costs.[6] An evaluation analysis conducted in 2015 indicates quitting smoking results in an estimated $8,595 savings in health care and lost productivity costs per Connecticut adult who quits (Appendix D: Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2014 Evaluation Period).

Tobacco use prevention and control efforts funded through the Board have utilized a variety of approaches to reduce the prevalence and impact of tobacco use. Evaluation data suggest that these efforts have generally been well implemented, and have likely helped to reduce overall tobacco use in Connecticut. One recent point in time analysis indicated that Connecticut's cessation-focused tobacco use prevention and control programs resulted in savings of up to $7.58 for every $1 invested (Appendix D: Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2014 Evaluation Period).

This report summarizes findings from various independent evaluations of programs funded by the Board since its inception through the end of 2017, in consultation with the Connecticut Department of Public Health and the Connecticut Office of Policy and Management. This report presents relevant tobacco use data and trends between 2000 and 2017, provides broad conclusions about the success of Board programming and offers

recommendations to strengthen programming. Findings shared in this report are from the Evaluation Reports prepared by independent evaluation teams over the course of trust fund programming, a full list of reports is located in Appendices C through F. Programs and evaluations often used different approaches and strategies, so the aggregate impact of these programs over time cannot be estimated reliably.

Board Programming Successes:

- **State and Community-based programs designed to engage youth in tobacco prevention and control have reached a large number of youth across the state.**
    - Some programs showed increases in knowledge about the risks of tobacco use. Programs reached a large number of communities across the state from 2009-2013 serving more than 3,000 youth.
    - Current programs are engaging youth in both educational and policy focused efforts (such as teaching other students about the harms of tobacco use and promoting smoke free policy implementation in their local communities), and indicating high quality implementation of the Centers for Disease Control (CDC) and Prevention Best Practice recommendations.[8] The Board's on-going programs have reached 3,400 youth through implementation of various community focused activities.
- **The Quitline and community-based cessation programs have consistently shown success with helping tobacco users in Connecticut reduce or quit their tobacco use.**
    - For example, at least 450 tobacco users in Connecticut quit as a direct result of funded cessation programs during the 2015 evaluation period, potentially saving Connecticut more than $10.5 million during that time period alone.
    - Quit rates for the Quitline have consistently been estimated to be substantially higher than rates for quitting without assistance, and most community cessation programs have achieved quit rates comparable with Quitline rates, as documented in evaluation reports. For example, between 2009 -2017, the 30 day quit rate at the time of program drop out or program completion for the

Community-Based Cessation Intervention Programs ranged between 5.2% to 16.5% (intent to treat assumes that all clients with missing survey data continue to use tobacco). The responder rate (responder rates do not account for the tobacco use status of non-respondents to the follow-up survey) ranged between 6.9% to 47%. The true quit rate lies somewhere between these two measures.

NOTE: U.S. Department of Health and Human Services, Public Health Services; "Treating Tobacco Use and Dependence, Clinical Practice Guideline", 2008 Update. Estimated abstinence rates for minimal or no counseling or self-help-8.5%, Quitline counseling-12.7%; for medication alone-21.7%, for medication and counseling- 27.8%

- **Cessation focused media campaigns targeted to adults have contributed to increased Quitline call volume.**
    - Quitline data show increases in Quitline reach and/or monthly call volume during most periods during which state-sponsored media has run. The Quitline reach increased between 2010 and 2012 from 0.87% to 1.67% and to 2.02% in 2012.
    - Cost analysis data and qualitative focus group data suggest that television and online ad placements are the most cost-effective advertising strategies and may be more effective in reaching target populations.
- **Adoption of the Centers for Disease Control and Prevention Best Practices for Comprehensive Tobacco Control Programs as a guiding framework for programming may increase program impact.**

<u>Lessons Learned from funded programs:</u>

- Cessation programs including the Quitline have consistently reached populations with disparities in tobacco use and related disease; by design, several cessation programs have focused services on clients with behavioral health disorders. Life stressors faced by these populations have been identified in evaluations as barriers to longer term

program engagement, and contribute to challenges with consistent data collection, especially with regards to assessing accurate program quit rates.

- While using existing national media campaigns to increase Quitline use has shown some impact, with increases in call volume correlating with periods in which these campaigns aired, focus group data suggest that Connecticut specific ads using a positive tone and featuring information about how the Quitline works may be more effective. Evaluation data suggest that the current cessation focused media campaign using this approach has been associated with Quitline call volume increases.
- State and community-based prevention programs focusing on youth audiences have worked well to secure "buy in" from key school and community partners, which was noted as being critical to implementation success.

Recommendations:

The following recommendations are offered to help prioritize programming decisions.

- Use the CDC Best Practices guidelines as a framework for increased coordination across program areas when possible. Increase consistency with regards to the types and foci of programs to support the type of coordinated approach recommended by the CDC.
- Integrate policy and systems level strategies into programs, including those that primarily focus on direct service provision and those that engage youth as partners in tobacco prevention and control. Ensure that programs have the capacity to incorporate a greater focus on policy and systems change in these areas to further align Connecticut programs with CDC Best Practices.
- Serve disparate populations with evidence-based interventions, bearing in mind that clients from high risk populations face multiple barriers to quitting and thus these programs may demonstrate lower overall quit rates and higher costs per participant.

- Ensure that any media campaign achieves the reach, frequency, and duration needed to be effective. In the absence of sufficient funding, media campaigns should focus on strategic message placement.
- Program and policy initiatives need to immediately address emerging products, especially e-cigarettes, in order to ensure that rates of overall tobacco use among Connecticut youth do not increase.

Introduction

Tobacco use remains the leading cause of preventable mortality in the United States, causing roughly 480,000 deaths per year.[9] Tobacco use also results in significant disability and illness[5] and increased economic costs in the United States, including $170 billion in medical care costs and $156 billion in lost productivity.[10] In Connecticut alone, 4,900 adults die each year from smoking and 56,000 youth will die prematurely from smoking in the future.[6]

The Connecticut Tobacco and Health Trust Fund Board of Trustees (the Board) has disbursed money from the Tobacco and Health Trust Fund (Trust Fund) to reduce tobacco use in Connecticut through the development and implementation of tobacco use prevention, education, and cessation programs. Reductions in smoking among Connecticut adults and youth in the past decade have been achieved through a mix of federal, state, and community level policies and programs, including those funded by the Board. The continuation of evidence-based tobacco control programs in Connecticut is necessary to further reduce tobacco use and improve the overall health of Connecticut residents.

The Board disbursed $29.2 million from 2003 to 2016 to support tobacco counter-marketing efforts, tobacco prevention initiatives and tobacco use cessation programs including the QuitLine. Other efforts, such as evaluation, a lung cancer pilot, innovative programs, tobacco enforcement, and website development have been funded to a lesser extent.

During the period of 2003 - 2016, the Board distributed $6.6 million to support tobacco counter-marketing efforts. Trust Funds were used to support adult and youth media campaigns. For example, from 2003-2004, funds were used to buy television ads, which ran 409 times over a two -month period, two radio ads, which ran 1,546 times over a two- month

period, thirteen bus panels, two interstate billboards, a full-page ad in Hartford magazine, and a sign for one month at the Hartford Civic Center. Several youth and young adult prevention campaigns were conducted between the period of 2009-2013.

Between the period of 2003-2016, the Board distributed $15.7 million to support cessation programs including the Quitline. The Board disbursed funds for a variety of evidence-based approaches to tobacco cessation targeting populations disproportionately burdened by the negative health effects of tobacco use. During this time period, 7,355 individuals received cessation services.

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The Board disbursed $4.4 million to support tobacco prevention programs for youth from 2003-2016. Over 27,000 youth were served through these prevention programs.

The Board disbursed over $2.3 million from 2003 to 2016 to support other efforts including evaluations, administration and infrastructure, and website development.

Purpose and Development of the Report

This report is intended to summarize the accomplishments and, when feasible, the impact of tobacco prevention and cessation programs funded by the Board. The report also provides an overview of cigarette smoking and tobacco use trends among youth and adults in Connecticut and offers recommendations for programming based on established best practices for comprehensive tobacco control programs as well as new recommendations related to electronic cigarettes and other emerging tobacco products.

The information presented in this report is based on review of the Fiscal Year 2017 Board report, program evaluation reports produced by three different independent, external evaluators as well as select reports generated by internal agency evaluations, and publicly available national and state level surveillance data. Evaluation reports were reviewed, main findings were extracted from each report, and the most relevant findings for each funding area were presented. Throughout the report, unless otherwise noted, results and findings are drawn from evaluation reports included in the appendices. Given the differences in approaches and evaluation strategies across program areas and years, in most cases the aggregate impact of the programs over time cannot be reliably estimated.

Historical Perspective

The Trust Fund was established in 1999 under Connecticut General Statute Section 4-28f, in order to "create a continuing significant source of funds to (1) support and encourage development of programs to reduce tobacco abuse through prevention, education, and cessation programs, (2) support and encourage development of programs to reduce substance abuse, and (3) develop and implement programs to address the unmet physical and mental

health needs in the state." The Trust Fund was designed as a separate fund that accepts transfers from the Tobacco Settlement Fund, which is also a separate non-lapsing fund that is managed by the State Treasurer. The Trust Fund may also receive grants, donations, and other gifts so that it may fulfill its responsibilities. In 2000, the Board of Trustees was created to recommend how and to whom the funds should be disbursed. The Board consists of seventeen appointed members: four members appointed by the Governor, two appointments by each of the six legislative leaders, and one representative of the Office of Policy and Management.

Tobacco prevention and control programming has been funded at varying amounts between 2003 and the time of this report. Legislative decisions about whether and how much funding to allocate to the Trust Fund have driven these changes in program funding. Funding details are provided in Appendix A.

Board Programming and Results

In the past the Board used the CDC Best Practices for Comprehensive Tobacco Control Programs to inform funding decisions and programming design. The Best Practices guidelines recommend concurrent programming across five areas: a) state and community interventions; b) mass-reach health communication interventions; c) cessation interventions; d) surveillance and evaluation; and e) infrastructure, administration, and management. Appendix B provides additional details on CDC Best Practice Guidelines. This report is organized using Best Practice guidelines, highlighting evaluation findings for programming under each Best Practice category. An overview of the Board's disbursements by program category and year is provided in Appendix A. Programming decisions have also been informed by state level surveillance data (e.g., Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS) and Connecticut Youth

Tobacco Survey (YTS)). Additionally, the Board has worked to address disparities in tobacco use and related health outcomes through targeted programming and by requiring community based programs to target services to various disparate groups.

Program Area 1: State and Community Interventions

The CDC Best Practice Guidelines recommend close coordination between statewide tobacco control efforts (e.g., educating policy makers, strategic planning with other state level partners) and community-based efforts focusing on preventing youth initiation, promoting quitting, eliminating secondhand smoke exposure, and eliminating tobacco-related disparities. Board funded programs in this area have focused primarily on preventing youth initiation, largely through tobacco prevention education efforts targeted to school-aged youth and based in both school and community settings. The most recently funded State and Community programs have expanded focus to more active youth engagement work, including a focus on influencing local and state policies and reducing youth access to tobacco, bringing these efforts into closer alignment with the types of activities recommended by the CDC.

Between 2009 and 2013, Trust Fund dollars were awarded to 13 programs based in schools and community organizations, all primarily focused on providing tobacco prevention education to youth; brief program descriptions and evaluation findings are highlighted in Appendix C. Programs used different prevention curriculums, targeted different age ranges, and used different educational and outreach approaches. As these programs used different approaches and evaluation strategies, it is difficult to provide summative conclusions about their overall reach and impact. However, evaluation data suggest that these programs had a

number of successes both in how they were implemented and in their potential for positive impact, as highlighted in Figure 1.

Figure 1. Highlights of State and Community Intervention Program Successes

- Programs reached a high number of communities across the state from 2009 – 2013, serving more than 3,000 youth. Most programs used evidence-based curriculums and engaged in community outreach events to promote tobacco-free living and tobacco cessation.
- Among the programs using pre/post surveys, data indicate that participating youth increased knowledge about the risks of tobacco use. Survey and interview data suggest that program participants – both youth program participants and adult program staff – were satisfied with the programs.
- Key factors for successful implementation appear to include tailoring of program approaches and activities, and achieving buy in from key partners (e.g., schools, school staff).

A new set of State and Community Intervention programs were implemented in 2017 and are still running at the time of this report. As of 2015, all programs use evidence-based curriculums. The programs, based in four non-profit education and community agencies, are designed to actively engage youth and young adults in activities designed to prevent youth tobacco use initiation via education and outreach to other youth, reduce youth access to tobacco products, and promote policies that support tobacco-free living. One program based in a university also promotes cessation. Evaluation data show that in their first year of operation, these programs have had a number of successes (Figure 2).

Figure 2. Highlights of Ongoing State and Community Program Successes 2017-Present

- Youth/young adult leaders implemented community surveys to inform development of a coherent policy promotion agenda for the second program year
- Programs have engaged nearly 400 youth and young adults as active participants
- Youth/young adult leaders have planned and implemented 16 presentations and 90 school or community-based events promoting tobacco-free living, reaching more than 3,000 Connecticut youth and community members

Program Area 2: Mass-Reach Health Communication Interventions

Mass Reach Health Communication Interventions, such as broad-based television and social media campaigns, are the second tier of the CDC Best Practices.[7] Strong evidence suggests that these interventions can effectively decrease tobacco use prevalence, increase cessation and use of cessation services, and decrease initiation of tobacco use among young people.[7]

The Board has funded a number of mass-reach health communication efforts, including various media and counter-marketing projects, which have targeted adults with cessation-focused messages and youth with prevention-focused messages. Appendix D provides a summary of the media campaigns and main evaluation findings.

Adult Media Campaigns

Between 2010 and 2017, four distinct periods of adult cessation media campaigns were conducted, all designed to encourage tobacco use cessation and drive users to connect with the Quitline. Two of these campaigns used ads from The American Legacy Foundation

(now TRUTH INITIATIVE), *Become an Ex* campaign, targeting Connecticut adult tobacco users ages 25 and older. The third utilized ads from the CDC *Tips from Former Smokers* campaign, specifically targeting adults with disparate tobacco use rates and/or disparate rates of tobacco-related disease (e.g., young adults, people with low socioeconomic status, and African Americans) (see Appendix D). The fourth campaign, titled *Commit to Quit*, utilized ads developed specifically for Connecticut that targeted adult smokers with lower socioeconomic status and multiple life stressors that make it difficult to think about quitting. These ads were aligned with results from focus groups conducted with lower income adults in 2014 that suggested that ads using a more positive tone and including specific information about how the Quitline works may be more effective with this audience.

Quitline call volume and overall reach provide strong measures of media campaign impact. The first two periods of adult cessation media campaigns showed increasing success over time, with substantial increases in Quitline reach each year between 2010 and 2012 while media campaigns aired. The third campaign, using *Tips from Former Smokers* ads, was not as impactful on overall Quitline call volume, though monthly call volume did increase during the months ads were aired. The first two iterations of the *Commit to Quit* campaign were associated with increases in enrollment of 40% - 50% compared to the time periods immediately preceding the campaigns. Figure 3 outlines the impact of cessation media campaign activities on the Quitline.

Figure 3. Highlights of Cessation Media Campaign Impact on CT Quitline Volume

- Promotional reach of the Quitline increased substantially between fiscal year (FY) 2010 and FY 2012 during two periods of adult cessation media campaigns, increasing from 0.87% in FY 2010 to 1.67% in FY 2011 and to 2.02% in FY 2012. The promotional reach in FY 2011 and FY 2012 compare favorably to a 2011 North American Quitline Consortium (NAQC) study that reported the average national promotional reach rate was 1.22% of tobacco users who registered for Quitline services during a campaign.[10] Treatment reach (the number of tobacco users who received services) also showed increases during the cessation media campaigns between FY 2010 and FY 2012, from 0.74% in FY 2010 to 1.34% in FY 2011 and to 1.62% in FY 2012.

- Monthly call volume was higher during months when additional *Tips from Former Smokers* ads placed with Board funding aired, though overall Quitline call volume in FY 2014 was lower compared to previous years.

- Quitline enrollments increased by 43.5% and 51% during the first two iterations of Commit to Quit, compared to the same time period immediately preceding each campaign. Web enrollments increased significantly as well, reflecting an effective focus of the campaign on driving smokers to the Commit to Quit website.

Youth Media Campaigns

The Board's first funded youth prevention focused campaign, titled "*It's a Waste,*" was conducted between 2010 and 2011, using a contest format to solicit self-produced anti-tobacco video messages from youth and young adults. After airing television ads promoting the contest, the winning ads developed by youth were aired on television and online for more than one year. Over time, campaign intensity increased (i.e., higher gross rating points), resulting in significant improvements in campaign outcomes among the target population (Figure 4). The evaluator of this campaign conducted longitudinal surveys with Connecticut young adults across three waves of data collection.

Figure 4. Highlights of a Longitudinal Young Adult Media Survey

- *It's a Waste* campaign slogan awareness among the sample increased from 33% at Wave 1, to 40% at Wave 2, and 51% at Wave 3. Awareness of any campaign ads more than doubled between Wave 2 and Wave 3, increasing from 14.5% to 34%.

- Exposure to the *It's a Waste* campaign over time significantly strengthened anti-tobacco attitudes among Connecticut young adults.

In December, 2016 the Board funded and launched a campaign called *"Blacklist"*. *Blacklist*, developed by RESCUE, a behavior change agency, is designed to target Connecticut youth who identify with the "alternative" peer crowd. Relying on digital and social media, *Blacklist* targets these youth with tobacco prevention messages focused on the ways tobacco use does not fit in with the values of their "scene." Evaluation of the first three iterations of this campaign during 2017 suggest that *Blacklist* has been well implemented and potentially reached 817,736 people in Connecticut, but that relatively few of those have engaged in a deeper exploration of the campaign (13,301 visited the website) or helped spread the campaign message with their own social networks (356 shared on social media). An important limitation here is that these metrics do not distinguish between reach and engagement of the target audience (alternative youth) and everyone else that may see their messaging.

Program Area 3: Cessation Interventions

The CDC Best Practice Guidelines recommend that state tobacco control programs address tobacco cessation both through population level efforts to change policies and systems in ways that "normalize quitting and that institutionalize tobacco use screening and intervention within medical care" and by funding cessation interventions that directly

provide tobacco cessation services (i.e., counseling and cessation pharmacotherapy). Direct cessation interventions have been the focus of Board funding for cessation programs, through support for community-based cessation programs and the Quitline. This report includes only cessation interventions prepared by independent evaluation teams over the course of trust fund programming; a full list of these evaluation appears in Appendix E.

The Board has funded a number of community cessation programs, which provide evidence-based tobacco use treatment in a variety of health and behavioral health settings. Staff trained in tobacco use treatment provide cessation and relapse prevention counseling to clients in both one-on-one and group settings; when medically appropriate, programs also provide clients with cessation pharmacotherapy (i.e., nicotine replacement therapy (NRT), bupropion, and varenicline). Evaluation data indicate that these programs have served approximately 5,100 Connecticut residents in communities across the state between 2009 and early 2018.

Community-based cessation programs have varied in setting, scope, target population, and success. Appendix F provides an overview of evaluation reports and main findings used to inform this report. Because each program is unique in terms of the clients served, support within the host agency, staffing, and other factors, programs cannot be directly compared with one another. However, several common evaluation findings across programs and years provide important indicators of program success and offer direction for future programming (Figure 5).

Figure 5: Highlights of Findings Across Community-based Cessation Intervention Programs, 2009 - 2017

- Programs consistently reached tobacco users from disparate populations who face multiple barriers to quitting, especially those who have low socioeconomic status and/or co-occurring mental health or substance abuse conditions.
- Success in meeting enrollment goals varied widely by program, likely reflecting differences in support provided by the host agency, extent to which programs were adequately staffed, and extent to which programs were able to draw clients from their agency base.
- In evaluation reports that included data from staff interviews, provision of nicotine replacement therapies/medications was consistently reported as a key facilitator for success; difficulty keeping clients engaged relating to competing client life stressors was consistently reported as a barrier.

Evaluation data indicate that quit rates varied widely across program sites over the years. As quit rate data was calculated and presented differently across evaluators and as there were high rates of missing data across all evaluation reports, the quit rates reported in Figure 6 should be interpreted carefully, and should not be directly applied to aggregate program enrollment numbers. With those caveats, it appears that community based cessation programs funded by the Board have successfully helped many clients quit their tobacco use, with some programs achieving very high quit rates. Quit rates across programs are likely heavily influenced by factors specific to each program (e.g., programs serving primarily clients with co-occurring mental health/substance abuse disorders consistently have lower quit rates than agencies serving more general populations), which should also be considered when assessing the success of these programs.

Quit rates presented here are taken from those reported at the time of program completion or dropout; collection of quit data was attempted at 4 and 7 months follow-up,

but response rates were typically too low to produce reliable estimates. Two types of quit rates are reported. Intent-to-treat rates (ITT) assume that all clients with missing data continue to use tobacco and are an underestimate of the actual quit rate. Responder rates do not account for the tobacco use status of clients with missing data and are an overestimate of the actual quit rate. The true quit rate lies somewhere between these two measures.

Figure 6: Community-based Cessation Intervention Program Quit Rates, 2009 – 2017

- Reported 30-day quit rates at the time of program completion or dropout ranged:
  - ITT rate low of 5.2% to high of 16.5%
  - Responder rate low of 6.9% to high of 47%

Cost efficiency estimates offer a useful metric for assessing program success as it relates to use of Board resources. As with quit rate estimates, evaluation methodology varied across years, and cost efficiency estimates are influenced by multiple program specific factors, including population served, service model, and relative use of NRT. As such, direct comparisons between programs cannot be made, and estimating aggregate cost efficiency estimates is not feasible. Figure 7 presents select findings from evaluation reports indicating that while cost efficiency per program varied a great deal, these programs have likely been a good investment overall. Appendix E provides additional details on both quit rates and cost estimates.

Figure 7. Community-Based Cessation Intervention Programs Cost Efficiency Estimates, 2012 - 2018

- Cost per client enrollment from 2012 – 2018 ranged from a low of $106 to a high of $1,593.
- Community-based cessation programs implemented between November, 2013 and June, 2015 were estimated to result in a return on investment of up to $3.64 for every $1 invested in the programs.

The Quitline, a population-based cessation intervention that provides telephone and online cessation counseling free of charge to Connecticut residents, has received significant funding from the Board, which has enabled provision of NRT to callers when medically appropriate. Appendix F provides a summary of evaluation reports and main findings.

Evaluation focus, methodology, and reporting style vary widely across the reports available for review. As such, it is not feasible to aggregate results or apply findings from any one year (i.e., quit rates, cost efficiency) to any other year. However, a review of the evaluation reports highlights several important findings suggesting that while Quitline call volume has fallen over the last several years, the Quitline continues to be an effective service for its users, achieving strong quit rates and delivering a relatively cost efficient service (Figure 8 include key findings from QuitLine Evaluations).

Figure 8. Sample Key Findings from Quitline Evaluations

- Evaluation results from 2011 – 2017 demonstrate that the Quitline has consistently reached callers from groups with disparities in smoking and smoking related disease (e.g., lower socioeconomic status, and people with mental health conditions).
- Reported 30-day quit rates, measured at 7 months after Quitline registration, have remained fairly consistent across years and evaluation studies:
  - Responder quit rates have ranged from 19.5% (2005-2006) to 30.5% (2015-2016).
  - ITT quit rates have ranged from 8.7% (2010-2011) – 11.4% (2015-2016)
- Cost efficiency estimates from FY14 estimate a service cost of $202 per caller receiving treatment (i.e., completing a coaching call).

A cost effectiveness report prepared for the Board indicated that during the 2015 evaluation period, the community cessation programs and the Quitline resulted in a return on investment of up to $7.58 per every $1 invested in the programs, potentially saving the state over $10.5 million in averted smoking caused health costs and productivity losses. While these estimates cannot be directly applied to all cessation programming funded by the Board, they do suggest that these efforts have the potential to result in significant savings for the state.

Program Area 4: Surveillance and Evaluation

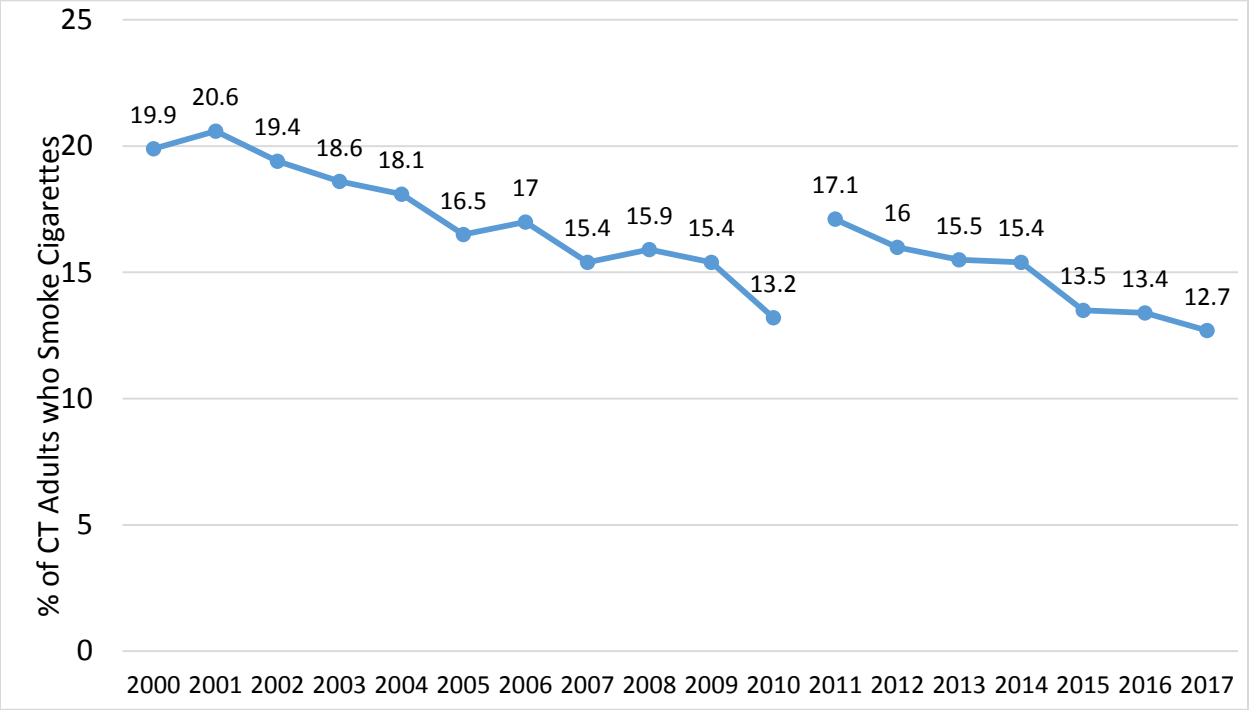
Surveillance and evaluation activities provide tobacco control programs with data to inform program design, support program accountability, and assess program effectiveness. To date, Board funding has supported ongoing independent program evaluation, allotting close to the CDC Best Practice Guideline recommended amount of 10% of overall budget by contracts with three different evaluation organizations: The Consultation Center, Professional Data Analysts, and the University of North Carolina at Chapel Hill. Evaluation methodologies and reporting styles have differed significantly between contracted

evaluators. Evaluation reports and key findings are outlined in Appendices C – G. Some variation is likely due to differences in evaluation approaches and philosophies, while other variation reflects evaluation responsiveness to unique programming models across years. These variations in both evaluation and program structure, as previously discussed, prohibit direct comparisons between programs areas and between individual programs within the same area across years.

Surveillance activities allow states to consistently monitor attitudes, behaviors, and outcomes over time. While the Board has not directly funded surveillance activities in Connecticut, data from state surveys (e.g., Behavioral Risk Factor Surveillance Survey, Youth Tobacco Survey) have been used to inform program funding and design decisions. Though not a Board funded activity, key surveillance data are highlighted here as they provide important context for assessing the overall impact of Board programming.

Based on data from the Connecticut Behavioral Risk Factor Surveillance Survey (BRFSS), the rate of cigarette smoking among Connecticut adults decreased by 34%; from 19.9% in 2000 to 13.2% in 2010[1]. In 2011, BRFSS implemented new weighing and survey methodologies so prior data cannot be compared to 2011 or later. However, using this new methodology for 2011-2017, the cigarette smoking rate among Connecticut adults decreased by an additional 26%, from 17.1% in 2011 to 12.7% in 2017. [1] (Figure 9). Based on 2017 data, the majority of Connecticut tobacco users smoke combustible tobacco (i.e., cigarettes, cigars, or hookah), while 3.2% of all Connecticut adults currently use e-cigarettes).[1]

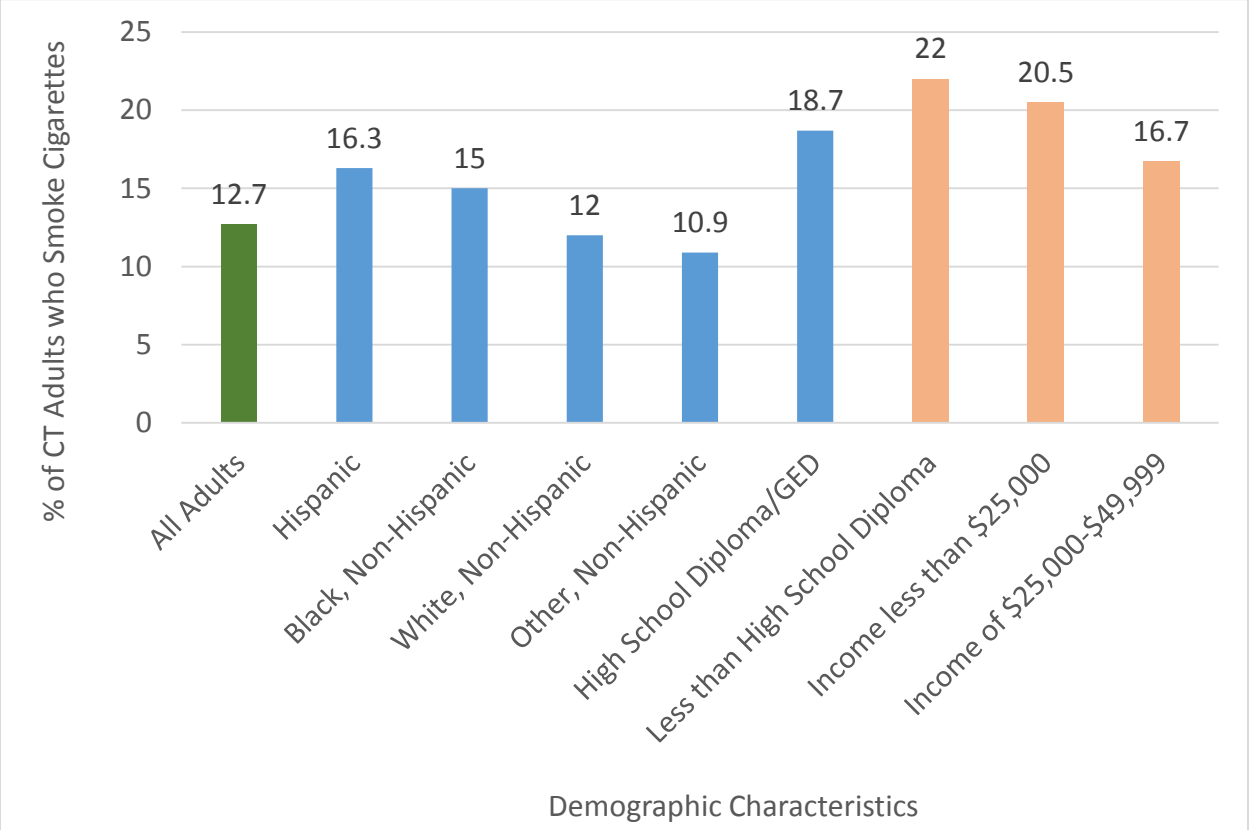
Figure 9. Current Cigarette Smoking Rate Among Connecticut Adults, 2000-2017



Data from the 2017 Behavioral Risk Factor Surveillance System (BRFSS). Changes in BRFSS methodology in 2011 make the data incomparable before and after 2011[1]

While the overall cigarette smoking rate has declined significantly in Connecticut, disparities in who smokes have persisted. The highest rates of cigarette smoking are found among Hispanic adults (16.3%) (significantly higher than non-Hispanic whites (12.0%), black adults (15.0%), among people with a high school degree (18.7%), and those with less than a high school degree 22.0%. Among adults with a household income of less than $25,000, the rate was 20.5% (Figure 10). Nationally, data show disparately high rates of cigarette smoking among people with behavioral health conditions and among the LGBT community; [11] while Connecticut specific smoking data are not available for those populations, it is reasonable to expect that similar patterns exist within Connecticut.

Figure 10. Cigarette Smoking Rates in Connecticut by Selected Demographic Characteristics, 2017

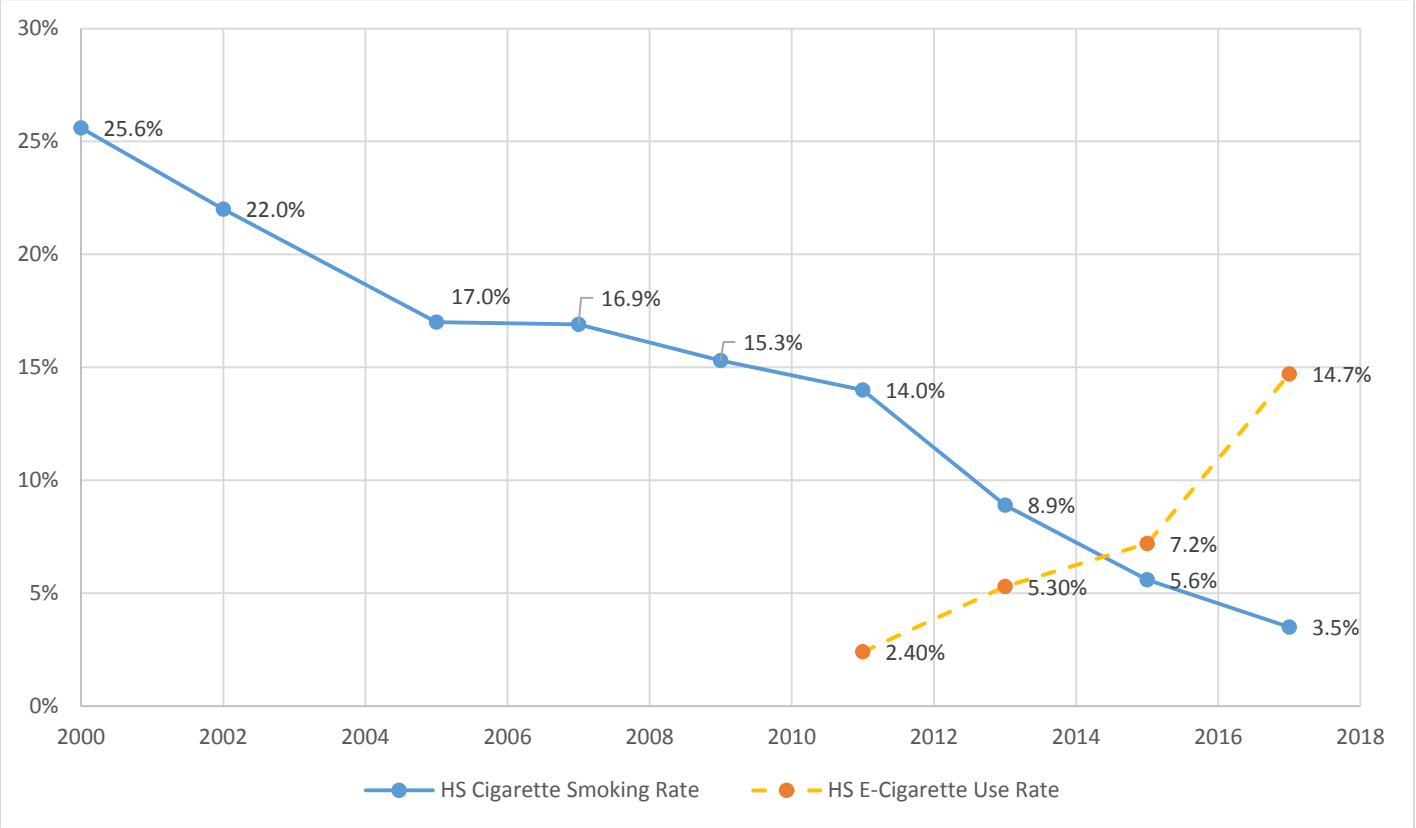


Data from the 2016 Behavioral Risk Factor Surveillance System (BRFSS)[1]

Youth cigarette smoking has similarly declined since 2000. Data from the Connecticut Youth Tobacco Survey (CT YTS) show a significant decrease of current cigarette smoking among high school students, from 25.6% in 2000 to only 3.5% in 2017 (Figure 11), lower than national estimates that show 7.6% of high school students currently smoke cigarettes.[4] While these numbers are encouraging, it is also important to note the dramatic rise in use of other tobacco products among Connecticut youth. In 2017, 17.9% reported current tobacco use of some kind (e.g., cigarette, cigar, e-cigarettes), and nearly 15% reported current use of e-cigarettes .[4] The 2017 Connecticut YTS data show that current use of any tobacco product and current e-

cigarette use are significantly higher among non-Hispanic white students compared to non-Hispanic black and Hispanic students; other demographic comparisons were not reported.

Figure 11. Cigarette Smoking Rate Among Connecticut High School Students, 2000-2017



Data from the Connecticut Youth Tobacco Survey (YTS)

Program Area 5: Infrastructure, Administration, and Management

The final CDC Best Practice program area addresses the resources needed to support tobacco control program capacity, implementation, and sustainability. Top among these resources are a skilled staff with sufficient capacity (i.e., of sufficient size and expertise) to develop and sustain a functioning program infrastructure including five core components: networked partnerships, multilevel leadership, engaged data, managed resources, and responsive planning. The Board provided funding in trust fund years 2015 and 2016 for administration and management; other years the Tobacco Control Program team at the Connecticut Department of Public Health led and managed a number of the Board Programs with other funding mechanisms.

Program Area 6: Other Board Programming

The Board has funded three other projects during its tenure that fall outside the CDC Best Practice categories: 1) website maintenance, 2) lung cancer research and biorepository infrastructure, and 3) retrospective report. The website maintenance was discontinued because the same or similar information could be disseminated on a CT Department of Public Health website for no cost to the Trust Fund. The University of Connecticut Health Center (UCHC) was contracted to conduct lung cancer research and a Connecticut biorepository needs assessment. The results of the study were unfavorable to developing the biorepository. The evaluation indicated that the justification for the pilot project was weak, and that the costs were considerable given the potential return. The results of the lung cancer research included the establishment of the research project, protocol, and testing. This retrospective report was funded to support improved understanding of the

successes and limitations of the programs funded by the Board and to inform future Board funding decisions.

Conclusion and Recommendations

Significant progress has been made in both adult and youth cigarette smoking rates in Connecticut over the past 15 years. The comprehensive tobacco use prevention and control programs funded by the Board have likely contributed to this success. Overall, programs have reached a large number of residents across the state. Cessation-focused programming has been especially successful in reaching Connecticut tobacco users from populations that experience disparities in tobacco use and related disease.

The following recommendations are offered to help prioritize future programming decisions:

1. Use the CDC Best Practices guidelines as a framework for increased coordination across program areas when possible. Increase consistency with regards to the types and foci of programs to support the type of coordinated approach recommended by the CDC.
2. Integrate policy and systems level strategies into programs, including those that primarily focus on direct service provision and those that engage youth as partners in tobacco prevention and control. Ensure that programs have the capacity to incorporate a greater focus on policy and systems change to further align Connecticut programs with CDC Best Practices.
3. Serve disparate populations with evidence-based interventions, bearing in mind that clients from high risk populations face multiple barriers to quitting and thus these programs may demonstrate lower overall quit rates.

4. Ensure that any media campaign achieves the reach, frequency, and duration needed to be effective. In the absence of sufficient funding, media campaigns should focus on strategic message placement.
5. Program and policy initiatives need to immediately address emerging products, such as e-cigarettes, in order to ensure that rates of overall tobacco use among Connecticut youth do not continue to increase.

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Appendices

APPENDIX A. TOTAL DISBURSEMENT BY FISCAL YEAR, FUNDING CATEGORY AND BY CALENDAR YEAR

Fiscal Year	State & Community Intervention (Formerly "Prevention")	Mass Reach Health Communications (Formerly "Media & Counter-marketing")	Cessation Interventions (Includes Quitline)	Surveillance and Evaluation	Infrastructure, Administration, and Management	Other	Totals
2003	-	$350,000	$400,000	-		$50,000	$800,000
2004	-	-	$587,100	-		-	$587,100
2005	-	-	-	-		-	-
2006	-	-	-	-		-	-
2007	-	$100,000	-	-		-	$100,000
2008	-	-	$700,000	$100,000		-	$800,000
2009	$500,000	$2,000,000	$3,612,456	$500,000		$250,000	$6,862,456
2010	$1,227,745	$1,650,000	$3,200,000	$300,000		-	$6,377,745
2011	-	-	-	-		-	-
2012/2013	-	$2,000,000	$3,529,000	$486,000		-	$6,015,000
2014	$860,733	-	$2,139,267	-		-	$3,000,000
2015	$1,400,000	$385,650	$1,200,000	$351,183	$175,000		$3,511,833
2016	$475,334	$130,717	$404,034	$118,834	$59,416		$1,188,335
2017	-	-	-	-		-	-
2018	-	-	-	-		-	-
TOTALS	**$4,463,812**	**$6,616,367**	**$15,771,857**	**$1,856,017**	**$234,416**	**$300,000**	**$29,242,469**

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
2003	Mass Reach Health Communications (Media/Counter-Marketing)	$350,000	Cashman & Katz	Produced Radio, TV, Internet, ads totaling 16,169,260 impressions. 409 television spots were purchased.
	Quitline	-		
	Cessation Interventions	$400,000	American Lung Association, Hill Health Center, ERASE, Ledge Light Health District, Middlesex Hospital, RYASAP, Hospital of St. Raphael	Total of 1,190 participants were served at an average cost of $586 per participant. Local cessation programs that included provision of Nicotine Replacement Therapies and in-person counseling.
	State & Community Interventions	-		
	Other	$50,000	Training Solutions Interactive	Maintain and upgrade the Tobacco Free Connecticut Website.
	Evaluation	-		
Subtotal		**$ 800,000**		
2004	Mass Reach Health Communications (Media/Counter-Marketing)	-		
	Quitline	$287,100	CT Infoline/Hartford Hospital	Three 45-minute counselor lead sessions and caller led sessions as necessary. 12 month follow up session. Approximately 3,000 callers.
	Cessation Interventions	$300,000	American Lung Association, Hill Health Center, ERASE, Ledge Light Health District, Middlesex Hospital, RYASAP, Hospital of St. Raphael	Free or reduced cost Pharmacotherapy. Cessation education and relapse prevention sessions. Train cessation program providers.
	State & Community Interventions	-		
	Other	-		
	Evaluation	-		
Subtotal		**$ 587,100**		
2007	Mass Reach Health Communications	$100,000	Media Associates	Created subcommittee targeting 18-24 non-college through social networks.

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
	(Media/Counter-Marketing)			One ad for cessation, one ad for prevention.
	Quitline	-		
	Cessation Intervention Programs	-		
	State & Community Interventions	-		
	Other	-		
	Evaluation	-		
Subtotal		**$ 100,000**		
2008	Mass Reach Health Communications (Media/Counter-Marketing)	-		
	Quitline	-		
	Cessation Intervention Programs	$700,000	Fair Haven Community Health Center, Stay Well Heath Care, Hill Health Corporation, Generation Family Health Care see above comment, Optimus Health Care, Community Health Center	Cessation programs and nicotine replacement therapy targeting parents of young children, pregnant women, and women of child bearing age (13-44) at federal qualified health centers. Approximately 1,607 enrolled.
	State & Community Interventions	-		
	Other	-		
	Evaluation	$100,000	The Consultation Center	Evaluation of the funded tobacco use cessation programs.
Subtotal		**$800,000**		
2009	Mass Reach Health Communications (Media/Counter-Marketing)	$2,000,000	Cronin and Company	Campaigns focused on cessation among adults and prevention among youth. Used website, social media, and media tools. Youth video contest was used to develop ads in English and Spanish.
	Quitline	$2,000,000	Free & Clear	Large increase in funds to enhance NRT services. Extension of NRT services for uninsured or recipients of Medicare or Medicaid.

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
	Cessation Intervention Programs	$1,612,456	AIDS Project New Haven, Community Health Center Inc., Fair Haven CHC, Generations Family HC, Hartford Gay and Lesbian Health Collective, Hospital of St. Raphael, Ledge Light Health District, CommuniCare Inc.	Program services provided to underserved populations having high rates of tobacco use. In addition to community-based cessation programs the funds were focused on providing for people with serious mental illness and substance use disorders. Excluded clients served by DMHAS facilities. Approximately 1,314 participants served.
	State & Community Interventions	$500,000	UConn Health Center, Colchester Public Schools, Norwich Public Schools, Woodstock Academy, Education Connection	Four school districts implemented prevention programs, including review of tobacco free policies and tobacco free signage at community events. $250,000 for lung cancer research and the development of a statewide biorepository to collect and store samples of tumor tissue.
	Other	$250,000	UConn Health Center	Performed a needs assessment and feasibility study to consider developing a database; tissue and serum repository in CT.
	Evaluation	$500,000	Professional Data Analysts, Inc.	Evaluation mechanisms monitored program progress, determined effectiveness, and determined if desired results were obtained, find areas of improvement, and inform policy direction.
Subtotal		**$ 6,862,456**		
2010	Mass Reach Health Communications (Media/Counter-Marketing)	$1,650,000	Cronin and Company	Developed efforts to target age groups 12-17, 18-24, and 25+. Included target of lower socio-economic groups and other marginalized groups. Continued to use various mediums. Ran "Tobacco: It's a Waste" contest and selected ads aimed at 13-24 year olds.

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
				Ran 30-second commercials in English and Spanish.
	Quitline	$1,650,000	Free & Clear	Provision of cessation counseling and NRT through telephone-based tobacco use cessation services.
	Cessation Intervention Programs	$1,550,000	AIDS Project New Haven, Community Health Center, Fair Haven CHC, Generations Family HC, Hartford Gay and Lesbian Health Collective, Hospital of St. Raphael, Ledge Light Health District, CommuniCare Inc.	Approximately 1,986 participants served. Contracted cessation programming for the general community and individuals with serious mental illness and/or substance use disorders.
	State & Community Interventions	$1,227,745	CREC, CT Technical High School System, Norwich Public Schools, Bridges, Goodwill Industries, Living in Safe Alternatives, Inc. Business Industry Foundation of Middlesex County, UConn Health Center, American Lung Association, ERASE, Education Connection	$200,000 to support 12 school districts to create leadership and infrastructure to sustain effective tobacco programs addressing students' health. $300,000 for the development of afterschool prevention and cessation programs. UConn Health Center received $250,000 to implement a virtual biorepository demonstration project and the development of a biorepository of specimens for smoking cessation studies. $477,745 to support innovative programs such as: (1) a pilot prevention program for 5-14 year olds in summer camps and youth programs outside of school; (2) tobacco use prevention programming for K-8th grade via curriculum enhancement development, after-school clubs and outreach campaigns/activities; and (3) training high school aged youth to develop leadership skills, presentation skills and knowledge of the dangers of tobacco use – and then these youth became trainers and spokespersons against tobacco use.

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
	Other	-		
	Evaluation	$300,000	Professional Data Analysts, Inc.	Evaluation mechanisms to monitor program progress, determine effectiveness, and determine if desired results are obtained, find areas of improvement, and inform policy direction.
Subtotal		**$ 6,377,745**		
2012/2013	Mass Reach Health Communications (Media/Counter-Marketing)	$2,000,000	PITA COMMUNICATIONS	English and Spanish campaigns Utilized the CDC "Tips From Former Smokers" campaign through television, radio, transportation ads, social media, etc.
	Quitline	$1,600,000	Alere Wellbeing, Inc. (formerly Free and Clear)	Expanded reach of services for all Connecticut residents to telephone-based tobacco use cessation coaching and nicotine replacement therapies.
	Cessation Intervention Programs	$1,929,000	Department of Corrections (DOC), CommuniCare, Meriden HHS, Community Mental Health Affiliates, Fair Haven, Hartford Hospital, Ledge Light Health District, Mid-Western Connecticut Council on Alcoholism, Uncas Health District, Wheeler Clinic	The cessation programs were designed to provide evidence-based tobacco cessation assistance to those who want to quit tobacco use. Programs included Community Cessation Programs and the Department of Correction Smoking Cessation Program. Work with community health centers that have access to the underserved and uninsured. Approximately 1,100 participants served. Supported DOC's Smoking Cessation Programs for inmates under the department's jurisdiction. Community Cessation program curriculums included problem-solving skills, support systems, behavioral changes, stress management, and discussion of medication options.
	State & Community Interventions	-		
	Other	-		

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
	Evaluation	$486,000	University of North Carolina at Chapel Hill (UNC)	Design and implement evaluations to determine the effectiveness of programs. Evaluate prevention and cessation efforts, Quitline services, and counter-marketing campaigns.
Subtotal		**$6,015,000**		
2014	Mass Reach Health Communications (Media/Counter-Marketing)	-		
	Quitline	$1,611,984	Alere Wellbeing, Inc.	Maintain the services provided by the Quitline.
	Cessation Intervention Programs	$527,283	Department of Corrections	Implement Process Improvement plans to tailor services to best fit the needs of their target populations within four correctional facilities York Correctional Institution (YCI), New Haven Correctional Center (NHCC), Hartford Correctional Center (HCC), and Manson Youth Institution (MYI) ; develop its community integration relationships at YCI and MYI; develop cessation process for individuals with long-sentence re-entering the community; and provide smoking cessation education program and support system.
	State & Community Interventions	$860,733	ERASE, CT Alliance of Boys and Girls Clubs, Teen Kids News	Statewide Tobacco Education Program aimed towards ages 5-9 in summer camps, youth development programs, and classrooms. Boys & Girls implemented "Be Smart, Don't Start" program for youth. Teen Kids News produced 12 science based anti-smoking reports targeted towards youth.
	Other	-		
	Evaluation	-		
Subtotal		**$3,000,000**		

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
2015	Mass Reach Health Communications (Media/Counter-Marketing)	$385,650	Rescue Social Change Group, Subcontractor Cashman & Katz	Update Quitline branding, include social media campaigns. Implement youth prevention campaign to reach high-risk youth
	Quitline	-		
	Cessation Intervention Programs	$1,200,000	Hartford Behavioral Health (HBH), Midwestern Connecticut Council of Alcoholism (MCCA), City of Meriden Department of Health and Human Services (HHS), Department of Corrections	HBH provided services to people 14+, train 100 providers and other cessation services. MCCA had a tobacco program in place serving southern and western CT. City of Meriden served the greater Meriden area targeting those who are uninsured or underinsured, providing cessation activities, NRT, follow up and relapse prevention. DOC continues to work with target inmates.
	State & Community Interventions	$1,400,000	Southern Connecticut State University (SCSU), Education Connection, CT Alliance of Boys and Girls Clubs, Community Mental Health Affiliates(CMHA)	SCSU will train and engage their youth community as well as provide cessation services at their health center. Education Connection will develop leadership and infrastructure to build student/youth advocacy and help develop social media and marketing tobacco prevention campaigns. Boys & Girls Clubs will continue their anti-tobacco efforts. CMHA worked with several local prevention councils and Implemented 'Photovoice' projects to engage youth, and to create and spread anti-tobacco messages
	Infrastructure, Administration, and Management	$175,000	American Cancer Society, Hispanic Health Council	Funding provided to support administration of the above programs.
	Evaluation	$351,183	UNC Chapel Hill	Assist all of the contractors except DOC with program planning, measuring program outcomes, assistance with data collection, and create reports.
Subtotal		**$ 3,511,833**		

Year	Funding Category	Disbursement Amount	Contractors	Services Provided/Focus
2016	Mass Reach Health Communications (Media/Counter-Marketing)g	$130,717	RESCUE	Provide Mass Reach Health Communications services including technical assistance for all contracted programs, statewide focus days, and promotion of cessation services through targeted campaign elements.
	Quitline	-		
	Cessation Intervention Programs	$404,034	UConn School of Pharmacy, Uncas Health District, Department of Corrections	Outreach to community health care providers, direct cessation services and training of pharmacists; Environmental changes at halfway houses promoting continued cessation efforts.
	State & Community Interventions	$475,334	EdAdvance, RESCUE	State and Community Intervention Programs will work in various communities to share tobacco prevention education and discussion of policy changes that will help to reduce tobacco use initiation and exposure in their communities.
	Infrastructure, Administration, and Management	$59,416	Hispanic Health Council	Provide administrative support including report development.
	Evaluation	$118,834	UNC Chapel Hill	Design and implement evaluations to determine the effectiveness of funded programs. Evaluate interventions including Quitline services, and mass reach campaigns.
Subtotal		**$ 1,188,335**		
GRAND TOTAL		**$ 29,242,469**		

APPENDIX B. CDC BEST PRACTICES OVERVIEW

OVERVIEW OF BEST PRACTICES:

The U.S. Department of Health and Human Services, Centers for Disease Control and Prevention has developed an evidence-based guide to help states to implement comprehensive tobacco control programs that will reduce rates of tobacco use. This coordinated effort to establish smoke-free policies and social norms, to promote and assist tobacco users to quit, and to prevent initiation of tobacco use combines educational, clinical, regulatory, economic, and social strategies.

This guide, "Best Practices for Comprehensive Tobacco Control Programs-2014" is divided into five areas of practice: 1) State and Community Interventions, 2) Mass-Reach Health Communication Interventions, 3) Cessation Interventions, 4) Surveillance and Evaluation, and 5)Infrastructure Administration and Management.

State and Community Interventions:

These interventions target social norms in order to influence behavior change, using coordinated and combined societal and community resources. Interventions can focus on building community capacity, awareness, engagement, and mobilization; coordination of state efforts, policies, laws, and regulations; and influencing people in their daily environment. These interventions cover a wide range of areas.

Mass-Reach Health Communication Interventions:

These interventions include the various means by which public health information reaches large numbers of people to make meaningful changes in population-level awareness, knowledge, attitudes, and behaviors. These interventions promote and facilitate cessation, prevent tobacco use initiation and shape social norms related to tobacco use, but go beyond a traditional mass media placement. Interventions are strategic, culturally appropriate, and high-impact messages, shared through sustained and adequately funded campaigns.

Cessation Interventions:

These interventions provide treatment services, such as directly delivering cessation counseling and medications through population-based services such as a telephone Quitline; as well as population-level strategic efforts to reconfigure policies and systems in order to normalize quitting and support tobacco free lifestyles, and ensure ongoing tobacco use screening and intervention are part of ongoing medical care.

Surveillance and Evaluation:

These interventions include surveillance: continually monitoring attitudes and behaviors and health outcomes over time, and Evaluation: Monitoring and documenting short-term, intermediate, and long-term outcomes within populations. This is accomplished through systematic collection of information about the activities and results of programs to inform decisions about future programming and/or increase understanding. Evaluation also serves to document or measure the effectiveness of programs, including policy and media efforts.

Infrastructure, Administration, and Management:

The infrastructure in place in order to achieve the capacity to implement effective interventions: a comprehensive tobacco control program requires considerable funding to implement; therefore, infrastructure must be in place in order to achieve the capacity to implement effective interventions. Capacity is essential for program sustainability, efficacy, and efficiency, and enables programs to plan their strategic efforts, provide strong leadership, and foster collaboration among the state and local tobacco control communities.

Resource:

Centers for Disease Control and Prevention. Best Practices for Comprehensive Tobacco Control Program-2014. Atlanta: 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.

Document is located at
http://www.cdc.gov/tobacco/stateandcommunity/best_practices/index.htm

APPENDIX C. OVERVIEW OF STATE AND COMMUNITY-BASED PROGRAM EVALUATIONS

Report Details	Program Structure	Main Findings
Author: Professional Data Analysts (PDA) External Evaluation of the CT DPH School-Based Tobacco Prevention & Cessation Programs Report Date: September 30, 2011	4 grantees funded to implement school-based programs Major Activities: • Expansion/enforcement of tobacco-free school policies • Use of prevention curriculum or related activities • Involvement of families/communities in tobacco prevention events • Cessation classes for students and adults One grantee had just begun work at time of report and all grantees continued work after evaluation report; findings are primarily formative rather than summative	• Cessation programs served 126 students and adults • Efforts made to engage parents and communities in tobacco prevention activities; #s reached not reported • Surveys documented need for increased staff awareness of available tobacco prevention & cessation resources • Work completed towards improving tobacco-free schools policies and enforcement • Support from schools/districts was important for program success
Report prepared by independent entity hired by funded contractor STEP Evaluation Report date not specified	Statewide Tobacco Education Program designed to create and implement innovative anti-tobacco efforts for CT youth ages 5-14 Implemented by East of the River Action for Substance Abuse Elimination (ERASE) in all 13 Regional Action Councils (RACs) across CT Specially designed curriculum implemented summer 2011 through June 2013 in a variety of settings serving youth Pre/post questionnaires given to all participants	• 10 Regional Action Councils completed program • 1,079 youth served • Surveys showed increased knowledge about chemicals in cigarettes, dangers of secondhand smoke, awareness of cigarette marketing, and cost of smoking across age groups
Author: Education Connection KidsCAN Avoid Tobacco Final Evaluation Report Report Date: March 2013	KidsCAN Avoid Tobacco Program implemented by Education Connection This evaluation was prepared by an independent reviewer hired by the contractor funded to pilot Innovative Tobacco Use Prevention Programs	• Teacher survey indicated high satisfaction with professional development activities intended to help teachers integrate tobacco prevention in classroom activities • 554 students served

Report Details	Program Structure	Main Findings
	Elementary and middle school initiative designed to incorporate school-community approaches for tobacco prevention; evidence-based curriculum designed for program Activities support three goals: • Prevention initiation of tobacco use in youth • Promote access to cessation programs • Promote the elimination of exposure to secondhand smoke	• Evaluation data suggest high level of support and buy-in by students and staff
Author: Education Connection American Lung Association of the Northeast Teens Against Tobacco Use Program Evaluation Report 2013 Report Date: August 30, 2013	This evaluation was prepared by an independent reviewer hired by the contractor funded to pilot Innovative Tobacco Use Prevention Programs Two year "Teens Against Tobacco Use Program (TATU)" implemented by the American Lung Association of the Northeast Peer teaching model in which adults are trained to work with high school students, who then conduct tobacco prevention education to elementary students. Activities supported three goals: • Reduce, eliminate and prevent youth tobacco use • Improve access to and knowledge about tobacco-prevention activities and cessation programs • Promote the involvement of high school students in tobacco-use prevention careers and activities	• Multiple barriers encountered in first year related to engaging committed adult facilitators and getting school buy in • Modifications to approach contributed to a more successful second year, with high involvement and satisfaction • 140 students served
Author: PDA Tobacco Youth Prevention Programs: External Evaluation of Seven Projects in Connecticut Report Date: June 30, 2013	7 school and community based programs funded to implement tobacco prevention programming; 4 included tobacco cessation classes 2 grantees implemented programs within schools; 3 implemented programs in after-school settings; 2 implemented programs outside of the school setting, including one program for incarcerated male youth Variety of curriculums used across programs; activities and overall approach varied; ages served varied	• 1,565 Students reached by prevention activities • 57 Participants in cessation classes • Early program planning critical to successful program implementation • Allowing for grantee-specific outcomes supported more focused, targeted programming

Report Details	Program Structure	Main Findings
		• Overall low participation in cessation classes, due to multiple barriers including lack of interest • Establishing partnerships to support program activities was important to overall program implementation success • Evaluation report includes only sporadic mention of numbers of youth reached by program; as such, an overall reach estimate is not feasible to report here
Author: University of North Carolina at Chapel Hill (UNC)-Tobacco Prevention and Evaluation Program State & Community Intervention Programs 2017 Interim Report Report Date: August 20, 2018	4 school and community-based organizations contracted to implement interventions focused on preventing the initiation of tobacco use among youth and young adults, promoting tobacco-free lives and spaces, and contributing to the overall reduction of tobacco use in Connecticut. Programs engaged youth and young adults leaders to plan and implement educations and outreach events and engage in tobacco-free policy promotion activities	• In 2017, 382 youth and young adults recruited as leaders/participants • Youth/young adults implemented 16 presentations and 90 events, reaching more than 3,000 people • Youth/young adults engaged in preliminary work to inform policy promotion focus for 2018

APPENDIX D: OVERVIEW OF MEDIA EVALUATION REPORTS

Evaluator	Report Title	Timeframe of Media Campaign & Target Audience	Main findings	Outcomes
Professional Data Analysts Report date: December 31, 2010 Report date: October 7, 2010	Adult Cessation Media Impact on Quitline Call Volume Sept 2009-Dec 2010 Adult Cessation Media Impact on Quitline Call Volume and Website Visits FY 2010-2011	Adult Cessation Campaign: March 2010 – June 2011 Used ads from Legacy *Become an EX* campaign on TV and online Targeted CT adult tobacco users ages 25+	• Substantial increases in QL promotional and treatment reach in FY 2010 and FY 2011 compared to FY 2009 • Broadcast TV media had a small but significant effect on call volume and web visits to BecomeAnEx.org among target audience • Paid search media had a greater impact than broadcast TV & online ads, significantly increasing QL call volume & web visits among target audience	• QL promotional reach: ○ FY 2010=0.87% ○ FY 2011=1.67% (higher than average reach of QLs nationwide, 1.11%) • QL treatment reach ○ FY 2010=0.74% ○ FY 2011=1.34% • Average GRPs per week of TV media over 32 weeks=53.6 (lower than CDC recommended intensity levels)
Professional Data Analysts Report date: October 14, 2011	Connecticut Youth Prevention Media Campaign Final Evaluation Report	Youth Prevention Campaign ("It's a Waste"): April 2010 – August 2011 Used a contest format to solicit self-produced anti-tobacco video messages from youth & young adults; ads promoting contest were run April-May 2010 and winning ads were run on TV and online May 2010-August 2011	• Substantial improvement in strength of media buy (i.e., GRPs) from Wave 2 to Wave 3 of campaign • Campaign showed significant improvement in ad and slogan awareness over time • Exposure to campaign over time significantly strengthened anti-tobacco attitudes	• Average GRPs of TV media: ○ Wave 1 (Mar-May 2010): 7 weeks, averaging 1,120 GRPs/quarter ○ Wave 2 (May-Nov 2010): 17 weeks, averaging 265 GRPs/quarter ○ Wave 3 (Nov 2010-June 2011): 30 weeks, averaging 629 GRPs/quarter

Evaluator	Report Title	Timeframe of Media Campaign & Target Audience	Main findings	Outcomes
		Targeted youth and young adults ages 13-24		• Campaign slogan awareness among CT young adults ages 18-24: ○ Wave 1: 33% ○ Wave 2: 40% ○ Wave 3: 51% • Any ad awareness among CT young adults ages 18-24: ○ Wave 1: N/A ○ Wave 2: 14.5% ○ Wave 3: 34%
Professional Data Analysts Report date: April 1, 2013	Adult Cessation Media Evaluation FY 2011-2012	Adult Cessation Campaign: September 2011 – December 2012 Used ads from Legacy *Become an EX* campaign on TV, online, and out-of-home venues Targeted CT adult tobacco users ages 25+	• Intensity and length of media buy was increased compared to previous year of the cessation campaign • Increases in QL promotional and treatment reach in FY 2012 compared to FY 2011 • Broadcast TV and radio media had a moderate effect on QL registrations, while Facebook ad clicks had a small effect	• FY 2012 QL promotional reach=2.02% (higher than average reach of QLs nationwide, 1.0%) & treatment reach=1.62% • Average GRPs per week of broadcast TV media over 44 weeks=73.3 (lower than CDC recommended intensity levels)
UNC Tobacco Prevention & Evaluation Program	Connecticut Tobacco Use Prevention and Control Program Cost Analysis	Cost analysis included data for the following programs and time periods:	• Collectively, these three program strategies successfully reached CT residents with evidence-	

Evaluator	Report Title	Timeframe of Media Campaign & Target Audience	Main findings	Outcomes
Report date: March 1, 2015	Evaluation: 2014 Evaluation Period	Community-based cessation program data between November, 2011 – March, 2014 Quitline data between July, 2013 – June, 2014 Media Campaign data between November, 2013 – December, 2014	based resources and cessation services in a cost-effective manner • Community-based cessation programs and the Quitline helped at least 400 CT tobacco users quit, saving CT more than $8.6 million	
UNC Tobacco Prevention & Evaluation Program Report date: November 19, 2015	CT Media Campaign Final Evaluation Report 2013-2014	Adult Cessation Campaign: November 2013 – December 2014 Used ads from CDC *Tips* campaign on TV, radio, online, and other venues Targeted adults with disparate tobacco use rates and/or disparate rates of tobacco-related disease (e.g., young adults, low socioeconomic status, African American)	• Did not have anticipated impact on overall CT QL call volume • Monthly call volume did increase in relation to campaign exposure • CT adult tobacco users had high recall of *Tips* ads used in CT campaign, though awareness of CT Quitline and its services was low	• Overall QL call volume 38% lower during FY 2014 compared to FY 2013 • FY 2014 promotional reach=0.92% and treatment reach=0.78% (lower than average reach of QLs nationwide, 1.22% and 1.08%, respectively) • Average GRPs of TV & radio per quarter over 3 quarters=4,866 (reaching CDC recommended intensity levels) • More than 253 million impressions (i.e., number of times a

Evaluator	Report Title	Timeframe of Media Campaign & Target Audience	Main findings	Outcomes

				given ad was viewed) for ages 18-64 across all campaign mediums
				
				• Broadcast TV & online reached highest number of potential viewers at lowest cost
				  ○ Online cost per thousand impressions: $3.01
				  ○ Broadcast TV cost per thousand impressions: $4.37

UNC Tobacco Prevention & Evaluation Program Report Date: September 11, 2018	Connecticut Mass Media Tobacco Prevention and Cessation Campaigns 2017 Annual Report	Quitline promotion/adult cessation "Commit to Quit" campaign: May 31 – August 31, 2017 and November 21, 2017 – February 13, 2018 Youth prevention "Blacklist" campaign: December 9, 2016 – January 5, 2017; April 3 – May 8, 2017; July 7 – August 7, 2017	• Commit to Quit campaign was successful, increasing Quitline call volume in months the campaign ran • Blacklist appeared to be well implemented and reached a relatively large audience, but engagement with the campaign was low	• Quitline call volume increased 43.5% and 51.2% during Commit to Quit campaign periods, compared to the weeks immediately preceding each campaign

APPENDIX E: OVERVIEW OF COMMUNITY BASED CESSATION PROGRAM EVALUATION REPORTS

Evaluator	Report Title	Timeframe/Organizations	Main Findings	Quit Rates	Cost Estimates
The Consultation Center Report date: November, 2010	Tobacco Cessation Evaluation Results	Community Health Center Cessation Programs funded in 2008	• Six community health centers provided tobacco cessation treatment services to pregnant women and women of childbearing age • 1,607 persons enrolled	15.1% of those served quit	Cost per patient averaged $3,751 without nicotine replacement therapies, and $4,155 with nicotine replacement therapies
Professional Data Analysts Report date: November 21, 2011	Connecticut Community & SMI/SUD Tobacco Cessation Grant Initiative: 2011 Annual Evaluation Report	Evaluation period September 2009 – June, 2011 6 community organizations (contracted September 2009 – December, 2011) 1 SMI/SUD program (CommuniCare, contracted beyond 2011)	• Six community programs, total unique clients = 1,244 • CommuniCare unique clients = 403 • Served clients from disparate populations • 4 agencies met or approached enrollment goal	At time of program completion or dropout: Responder Rate: 47%	Cost per enrollment estimates not provided
Professional Data Analysts Report date: March 31, 2013	Connecticut Community & SMI/SUD Tobacco Cessation Grant Programs: Final Evaluation Report	Programs running 2010 – 2012 SMI/SUD program (CommuniCare) serving people with severe mental illness and/or substance use disorders (2010-2013) 3 additional community based programs funded in 2011 (first year of funding in 2012; contracts ongoing at time of report)	• CommuniCare unique clients = 427 • Community-based agencies to date = 423 (includes re-enrollments) • Served clients from disparate populations • Quitting associated with attending greater number of counseling sessions and cessation pharmacotherapy use	A 4 month follow-up, by program site: ITT ranged from 7.4% - 34% Responder rate ranged from 9.2% to 40.2%	Cost estimates accounted for all direct programming, marketing, and medication costs, as well as 7% DPH administrative costs Cost per enrollment by program site ranged from $98 - $808; average of $366 per enrollment

Evaluator	Report Title	Timeframe/Organizations	Main Findings	Quit Rates	Cost Estimates
			• Many clients who did not quit reduced daily tobacco use		
Professional Data Analysts Report Date: March 26, 2013	Brief Tobacco Cessation Intervention Pilot Project: Windham Community Memorial Hospital Emergency Department	Process Evaluation Report	Key staff engaged in brief intervention design and implementation. • Important electronic medical record (EMR) elements were upgraded. • Staff and providers trained their peers and served as expert resources 100% of 11,742 tobacco users were provided with brief intervention	N/A to this process evaluation report	N/A to this process evaluation report
UNC Tobacco Prevention & Evaluation Program Report date: September 30, 2014	Connecticut Tobacco Use Prevention and Control Program Community Cessation Programs 2011 Funding Cycle	Programs contracted between January, 2012 – August 31, 2014 (periods varied by organization)	• Total unique clients = 705 • 2 of 4 grantees met or nearly met enrollment goals • Served clients from disparate populations • Quitting associated with attending greater number of counseling sessions and using cessation pharmacotherapy • Many clients who did not quit reduced daily tobacco use	At time of program completion or dropout*: ITT: 16.5% Responder Rate: 35% *Response rates too low at 4-month follow-up for accurate estimates	Cost estimates accounted for all program costs, including medication, but do not account for DPH staff time Cost per enrollment by program site ranged from $251 - $1,593 (likely an overestimate for agency that underreported enrollment data)
UNC Tobacco Prevention &	Connecticut Tobacco Use Prevention and Control Program CommuniCare	CommuniCare, a behavioral health agency, and sub-contracting	• Total unique clients = 576	At time of program	Cost estimates accounted for all program costs, including medication, but

Evaluator	Report Title	Timeframe/Organizations	Main Findings	Quit Rates	Cost Estimates
Evaluation Program Report date: September 30, 2014	Cessation Program 2011 Funding Cycle	behavioral health agencies Program time period November 1, 2011 – March 19, 2014	• Met nearly 40% of enrollment goal • Success in helping difficult to treat clients quit or reduce tobacco use • Success in promoting agency norm and policy changes to support client cessation	completion or dropout*: ITT: 13.5% Responder Rate: 17.8% *Response rates too low at 4-month follow-up for accurate estimates	do not account for DPH staff time Cost per enrollment = $1,256 (higher cost per enrollment reflects difficult to reach population and extended duration of NRT provided)
UNC Tobacco Prevention & Evaluation Program Report date: March 1, 2015	Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2014 Evaluation Period	Cost analysis included data for the following programs and time periods: Community-based cessation program data between November, 2011 – March, 2014 Quitline data between July, 2013 – June, 2014 Media Campaign data between November, 2013 – December, 2014	• Collectively, these three program strategies successfully reached CT residents with evidence-based resources and cessation services in a cost-effective manner • Community-based cessation programs and the Quitline helped at least 400 CT tobacco users quit, saving CT more than $8.6 million	N/A	N/A
UNC Tobacco Prevention & Evaluation Program	Connecticut Tobacco Use Prevention and Control Program Community Cessation Programs 2013-2015 Final Report	Eight programs contracted between November 1, 2013 – June 30, 2015 (periods varied by organization)	• Total unique clients = 1,149 • 6 of 8 grantees met or exceeded enrollment goals • Served clients from disparate populations	At time of program completion or dropout: ITT: 14.2%	Cost estimates accounted for all program costs, including medication, but do not account for DPH staff time

Evaluator	Report Title	Timeframe/Organizations	Main Findings	Quit Rates	Cost Estimates
Report date: October 14, 2015			• Quitting associated with attending greater number of counseling sessions and using cessation pharmacotherapy • Many clients who did not quit reduced daily tobacco use	Responder Rate: 24.6% At 4-month follow-up: ITT: 8.3% Responder Rate: 25.7%	Cost per enrollment by program site ranged from $106 - $1,129 (wide variations reflect differences in funding models by organization)
UNC Tobacco Prevention & Evaluation Program Report date: August 11, 2016	Connecticut Tobacco Use Prevention and Control Program CommuniCare Cessation Program 2013 Funding Cycle	CommuniCare, a behavioral health agency, and sub-contracting behavioral health agencies Evaluation period April 1, 2014 – March 31, 2016	• Total unique clients = 288 • Met 32% of enrollment goal • Served high risk population with multiple barriers to quitting	At time of program completion or dropout: ITT: 5.2% Responder Rate: 6.9%	Cost estimates accounted for all program costs, including medication, but do not account for DPH staff time Cost per enrollment = $785
UNC Tobacco Prevention & Evaluation Program Report date: December 8, 2016	Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2015 Evaluation Period	Cost analysis included data for the following programs and time periods: Community-based cessation program data between November, 2013 – June 2015 Quitline data between July, 2014 – June, 2015	• Collectively, these three program strategies successfully reached CT residents with evidence-based resources and cessation services in a cost-effective manner • Community-based cessation programs and the Quitline helped at least 450 CT tobacco users quit, saving CT more than $10.5 million	N/A	N/A
UNC Tobacco Prevention & Evaluation Program	Connecticut Tobacco Use Prevention and Control Program Community Cessation Programs 2015	Three programs contracted between December 1, 2015 – December 31, 2018	• Total unique clients = 511 • 2 of 3 grantees on track to meet enrollment goals	At time of program completion or dropout:	Not calculated for interim report

Evaluator	Report Title	Timeframe/Organizations	Main Findings	Quit Rates	Cost Estimates
Report date: June 30, 2017	Funding Cycle Interim Report	(periods vary by organization)	• Served clients from disparate populations • Quitting associated with attending greater number of counseling sessions • Many clients who did not quit reduced daily tobacco use	ITT: 14.1% Responder Rate: 29.6%	
UNC Tobacco Prevention & Evaluation Program Report Date: March 22, 2018	Connecticut Tobacco Use Prevention and Control Program Community Cessation Programs 2015 Funding Cycle Interim Report	Two programs contracted between December 1, 2015 – December 31, 2017	• Total unique clients = 612 • 1 agency exceeded enrollment goal; 1 met 90% of goal • Served clients from disparate populations • Quitting associated with attending greater number of counseling sessions • Many clients who did not quit reduced daily tobacco use • Agencies effectively advanced tobacco-free policy and systems changes in organizations and communities	At time of program completion or dropout: ITT: 17.6% Responder Rate: 26.2% At 4-month follow-up: ITT: 12.9% Responder Rate: 31.6%	Cost estimates accounted for all program costs, including medication, but do not account for DPH staff time Cost per enrollment by program site similar at $742 and $766

APPENDIX F: OVERVIEW OF QUITLINE EVALUATION REPORTS

Evaluator	Report Title	Timeframe	Main findings	Quit rates
Free & Clear, Inc. (QL vendor)	Connecticut Tobacco Quitline Evaluation Report Year 01 of New Contract	2005-2006	High satisfaction with Quitline services among survey respondents	• 30 day responder quit rate: 19.5% • 30 day intent-to-treat quit rate: 9.8% • Based on 7 month follow-up study conducted by Free & Clear
Free & Clear, Inc. (QL vendor)	Connecticut Tobacco Quitline 13-Month Follow-up Evaluation Report – Year 3	2007	High satisfaction with Quitline services among survey respondents	• 30 day responder quit rate: 28.8% • 30 day intent-to-treat quit rate: 7.6% • Based on 13 month follow-up study conducted by Free & Clear
Free & Clear, Inc. (QL vendor)	Connecticut Tobacco Quitline 13-Month Follow-up Evaluation Final Report – Year 4	2007 (focused on callers registering during NRT benefit period)	High satisfaction with Quitline services among survey respondents – no differences between pre-NRT and NRT benefit callers	• 30 day responder quit rate: 22.7% • 30 day intent-to-treat quit rate: 8.0% • Based on 13 month follow-up study conducted by Free & Clear
Free & Clear, Inc. (QL vendor)	Connecticut Tobacco Quitline 7-Month and 13-Month Evaluation Report Year 5	2008 – 2009 (13 month follow-up survey) 2009-2010 (7 month follow-up survey)	High satisfaction with Quitline services among survey respondents	• 30 day responder quit rate: 23.2% (13 month follow-up) • 30 day intent-to-treat quit rate: 7.3% (13 month follow-up) • 30 day responder quit rate: 28.4% (7 month follow-up) • 30 day intent-to-treat quit rate: 9.7% (7 month follow-up)

Evaluator	Report Title	Timeframe	Main findings	Quit rates
Free & Clear, Inc. (QL vendor)	Connecticut Quitline CDC-CPPW Stimulus Funding 7-Month Evaluation Report Fiscal Years 2010-2011	2010-2011	High satisfaction with Quitline services among survey respondents	• 30 day responder quit rate: 25.3% • 30 day intent-to-treat quit rate: 8.7% • Based on 7 month follow-up study conducted by Free & Clear
Professional Data Analysts	Adult Cessation Media Impact on Quitline Call Volume: September 2009 – December 2010	Sept. 2009 – Dec. 2010	• Total registration and reach increased from previous year • Inconclusive evidence regarding impact of state media	N/A for this report
Professional Data Analysts	Adult Cessation Media Impact on Quitline Call Volume and Website Visits: FY2010-FY 2011 Report Date: 10/7/2011 (misprinted as 10/7/2010 on cover)	FY 2010-2011		N/A for this report
Professional Data Analysts	Final Quitline Evaluation Report FY 2010 – FY 2011 Report Date: 11/18/2011	Fiscal Year 2011 (July 1, 2010 – June 30, 2011)	• Total registration increased from 4,552 in FY 2010 to 7,154 in FY 2011 • QL reaching low SES groups • Most callers do not complete full call program	30-day responder quit rate for past 30 days 28.0%; 95% confidence interval 24.1 – 32.2%
Professional Data Analysts	Connecticut Tobacco Quitline Evaluation: Economic Analysis	Fiscal Year 2012 (July 1, 2011 – June 30, 2012)	• Cost per registrant: $143 • Cost per treated tobacco user: $188	N/A for this report

Evaluator	Report Title	Timeframe	Main findings	Quit rates
	3/31/2013		• Cost per quit: $973 - $1,782	
Professional Data Analysts	Connecticut Tobacco Quitline Evaluation: Final Evaluation Report 3/31/2013	Fiscal Years 2010 - 2012	• Annual enrollment nearly doubled over three year period • QL reached populations with mental and/or chronic health conditions	• 30 day responder quit rate: 27.1% (FY 2012 data) • Based on 7 month follow-up study conducted by Quitline vendor
UNC Tobacco Prevention & Evaluation Program Report date: March 31, 2015	CT Quitline Annual Report	Fiscal Year 2014 (July 1, 2013 – June 30, 2014)	• Overall call volume decreased despite statewide media using TIPS • QL reached disparate populations (e.g., low income & education; mental health conditions)	• 30 day responder quit rate: 29.1% • 30 day intent-to-treat quit rate: 8.9% • Based on 7 month follow-up study conducted by UNC
UNC Tobacco Prevention & Evaluation Program Report date: March 1, 2015	Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2014 Evaluation Period	Cost analysis included data for the following programs and time periods: Community-based cessation program data between November, 2011 – March, 2014 Quitline data between July, 2013 – June, 2014 Media Campaign data between	• Collectively, these three program strategies successfully reached CT residents with evidence-based resources and cessation services in a cost-effective manner • Community-based cessation programs and the Quitline helped at least 400 CT tobacco users quit, saving CT more than $8.6 million	N/A

Evaluator	Report Title	Timeframe	Main findings	Quit rates
		November, 2013 – December, 2014		
UNC Tobacco Prevention & Evaluation Program Report date: November 19, 2015	CT Quitline Annual Report	Fiscal Year 2015 (July 1, 2014 – June 30, 2015)	• Call volume similar to previous year • National TIPS campaign important call driver • QL reached disparate populations (e.g., low income & education; mental health conditions)	• 30 day responder quit rate: 30.5% • 30 day intent-to-treat quit rate: 11.4% • Based on 7 month follow-up study conducted by UNC
UNC Tobacco Prevention & Evaluation Program Report date: December 8, 2016	Connecticut Tobacco Use Prevention and Control Program Cost Analysis Evaluation: 2015 Evaluation Period	Cost analysis included data for the following programs and time periods: Community-based cessation program data between November, 2013 – June 2015 Quitline data between July, 2014 – June, 2015	• Collectively, these three program strategies successfully reached CT residents with evidence-based resources and cessation services in a cost-effective manner • Community-based cessation programs and the Quitline helped at least 450 CT tobacco users quit, saving CT more than $10.5 million	N/A
UNC Tobacco Prevention & Evaluation Program Report date: October 14, 2016	CT Quitline Annual Report	Fiscal Year 2016 (July 1, 2015 – June 30, 2016)	• Call volume lower than previous two years • National TIPS campaign important call driver • QL reached disparate populations (e.g., low	• 30 day responder quit rate: 30.5% • 30 day intent-to-treat quit rate: 11.4% • Based on 7 month follow-up study conducted by UNC

Evaluator	Report Title	Timeframe	Main findings	Quit rates
			income & education; mental health conditions)	
UNC Tobacco Prevention & Evaluation Program Report date: November 16, 2017	CT Quitline Annual Report	Fiscal Year 2017 (July 1, 2016 – June 30, 2017)	• Call volume lower than previous three years • National TIPS campaign and state "Commit to Quit" campaigns important call driver • QL reached disparate populations (e.g., low income & education; mental health conditions)	• 30 day responder quit rate: 26.4% • 30 day intent-to-treat quit rate: 9.3% • Based on follow-up study conducted by UNC