Agenda

Tobacco and Health Trust Fund Board Meeting

Friday, July 16 at 10:00 a.m.

Room 410, State Capitol
Hartford, Connecticut

I. Welcome and Introduction of New Board Member

II. Appointment Expirations

III. Approval of January 2010 Minutes

IV. Update on Status of Fund

V. Recommended Board Action for FY11 and FY12

VI. Update on Status and Findings from Previous Disbursements
Barbara Walsh, Department of Public Health

VII. Update on Sustinet Tobacco Task Force
Andy Salner

VIII. Potential Dates for Next Meetings
August 20, September 17, October 15, November 19, December 17

STATE OF CONNECTICUT
OFFICE OF POLICY AND MANAGEMENT

July 12, 2009

Honorable M. Jodi Rell
Governor
State of Connecticut
State Capitol
Hartford, CT 06106

Dear Governor Rell,

Pursuant to the provisions of Connecticut General Statutes §4-28f, you have four appointments to the Tobacco and Health Trust Fund Board of Trustees. The terms of two of your appointees ended: Nancy Bafundo, on June 30, 2009 and Kenneth Ferrucci on June 30, 2010.

The Tobacco and Health Trust Fund Board of Trustees was established in 2000 to administer the Tobacco and Health Trust Fund. The board, consisting of 17 members, has three major responsibilities: (1) To recommend authorization of trust fund disbursements to the legislature; (2) To report to the legislature on the disbursement and other expenditures from the trust fund and evaluate the performance of each program receiving funds annually; and (3) To report to the legislature annually on the board's activities and accomplishments.

Please advise me of your re-appointments or your new appointments to the Tobacco and Health Trust Fund Board of Trustees for a term of three years. Ms. Bafundo and Mr. Ferrucci may continue to serve on the board until a new appointment is made. Thank you.

Sincerely,

Anne Foley

Anne Foley
Senior Policy Advisor

Cc: Honorable Susan Bysiewicz, Secretary of State
Kenneth Ferrucci
Nancy Bafundo

STATE OF CONNECTICUT
OFFICE OF POLICY AND MANAGEMENT

July 12, 2010

Honorable Martin M. Looney
Majority Leader
State Senate
Legislative Office Building
Hartford, CT 06106

Dear Senator Looney:

Pursuant to the provisions of Connecticut General Statutes §4-28f, you have two appointments to the Tobacco and Health Trust Fund Board of Trustees. The terms of two of your appointees ended: Ellen Dornelas, on June 30, 2009 and Robert Zavoski on June 30, 2010.

The Tobacco and Health Trust Fund Board of Trustees was established in 2000 to administer the Tobacco and Health Trust Fund. The board, consisting of 17 members, has three major responsibilities: (1) To recommend authorization of trust fund disbursements to the legislature; (2) To report to the legislature on the disbursement and other expenditures from the trust fund and evaluate the performance of each program receiving funds annually; and (3) To report to the legislature annually on the board's activities and accomplishments.

Please advise me of your re-appointments or your new appointments to the Tobacco and Health Trust Fund Board of Trustees for a term of three years. Ms. Dornelas and Mr. Zavoski may continue to serve on the board until a new appointment is made. Thank you.

Sincerely,

Anne Foley

Anne Foley
Senior Policy Advisor

Cc: Honorable Susan Bysiewicz, Secretary of State
Ellen Dornelas
Robert Zavoski

STATE OF CONNECTICUT
OFFICE OF POLICY AND MANAGEMENT

July 12, 2010

Honorable Denise Merrill
Majority Leader
House of Representatives
Legislative Office Building
Hartford, CT 06106

Dear Representative Merrill:

Pursuant to the provisions of Connecticut General Statutes §4-28f, you have two appointments to the Tobacco and Health Trust Fund Board of Trustees. The term of one of your appointees, Cindy Adams, ended on June 30, 2010.

The Tobacco and Health Trust Fund Board of Trustees was established in 2000 to administer the Tobacco and Health Trust Fund. The board, consisting of 17 members, has three major responsibilities: (1) To recommend authorization of trust fund disbursements to the legislature; (2) To report to the legislature on the disbursement and other expenditures from the trust fund and evaluate the performance of each program receiving funds annually; and (3) To report to the legislature annually on the board's activities and accomplishments.

Please advise me of your re-appointments or your new appointments to the Tobacco and Health Trust Fund Board of Trustees for a term of three years. Ms. Adams may continue to serve on the board until a new appointment is made. Thank you.

Sincerely,

Anne Foley

Anne Foley
Senior Policy Advisor

Cc: Honorable Susan Bysiewicz, Secretary of State
Cindy Adams

DRAFT
Meeting Summary

Tobacco and Health Trust Fund Board
Friday, January 29, 2010
10:00 a.m. – 12:00 noon

Room 410
State Capitol
Hartford, Connecticut

Members Present: Anne Foley (Chair), Diane Becker, Ellen Dornelas, Geralyn Laut, Andy Salner, and Dianne Harnad.

Members Absent: Cindy Adams, Nancy Bafundo, Pat Checko, Larry Deutsch, Ken Ferrucci, Douglas Fishman, Norma Gyle, Nikki Palmieri, Steve Papadakos, Cheryl Resha and Robert Zavoski.

Others present: Pam Trotman (OPM), Barbara Walsh (DPH), Dawn Mays Hardy (American Lung Association), and Joann Everson (Consultant–Drug Free Communities).

Item	**Discussion/Action**
Welcome and Introductions	The meeting was convened at 10:10 a.m.
Update on the Sustinet Tobacco Workgroup	Andy Salner, co-chair of the Sustinet Tobacco Task Force, reported on the establishment of this task force (Section 17 of P.A. 09-148) to examine evidence-based strategies for preventing and reducing tobacco use by children and adults, and then to develop a comprehensive plan to reduce tobacco use by children and adults. A preliminary report is due in July 2010. Board members asked to be added to the task force's distribution list to receive updates and other information from the task force.

Status of FY 2010 Disbursement	The Chair reviewed action by the Appropriations and Public Health committees on the board's recommended trust fund disbursement for FY10. The committees met on January 4 and approved the board's disbursement recommendations with the following amendments: (1) Community Based Cessations programs may include Emergency Department programs that help people quit smoking; and (2) Innovative Programs must be (a) focused primarily on elementary school aged programs that prevent tobacco use and (b) evaluated so that the finding can be reported back to the board and to the legislative committees of cognizance. Barbara Walsh (DPH) updated the board on the status of fiscal year 2010 funding disbursements. Highlights included: • An amendment to the QuitLine contract is in process to add $1,650,000 for additional callers to be served over this year and next. • An amendment to the Counter-Marketing contract is in process to expand and extend the current campaign including a statewide media campaign delivering high-impact messages through media including television, radio, print, and web-based advertising for $1,650,000. Board members expressed concerns regarding racial undertones related to the logo advertisement in the current media campaign. DPH will relay the board's concerns to the contractor. • A Request for Proposals (RFP) is being developed for anticipated release on March 1 with new contracts to begin on August 1 for: (1) Up to $75,000 for Emergency Department programs that help people quit smoking and (2) the remainder of the $750,000 for community based cessation programs in geographic areas other than those already funded. • An amendment to the existing contract for Cessation for Individuals with Serious Mental Illness is in process to add $800,000 to expand the program to 11 additional Local Mental Health Authorities across the state. Anticipated contract start date is

	September 2010. • For School-Based Prevention, carry forward funding in the amount of $121,525 will be added to the 2010 contract under Strategy 1 for a total of $321,525 to allow 12 Coordinated School Health Leadership Projects to apply for funds to address tobacco prevention and cessation efforts. A second RFP for approximately $300,000 will be distributed to secure after-school activities that provide interventions aimed at tobacco youth and cessation. Anticipated contract start date is September 2010. • The current Memorandum of Agreement (MOA) for Lung Cancer and Genetic Research will be amended to add $250,000 for a genetic research component. • An amendment to the Evaluation contract is in process to add $300,000 to evaluate all additional programs except innovative programs. • An RFP will be developed to distribute $477,745 for new and innovative programs that are focused primarily on school aged education programs that prevent tobacco use. Contractors will be required to set aside 10% for program evaluation. Anticipated RFP release date is April 1 for contracts to begin September 1. Board members will review and comment on the draft RFP and will serve as evaluators to select vendors. Board members were asked to inform Barbara Walsh as soon as possible if they would like to serve on any additional RFP committees.

Update on Tobacco Stimulus Funds	Barbara Walsh updated the group on DPH's application for $600,000 in federal funding for QuitLine and media campaigns.
2010 Meetings	The Chair reminded members that the next Board meeting will be held on Friday, July 16 from 10 a.m. to noon in the State Capitol Room 410. The meeting was adjourned at 12:00 noon.

Recent Legislation Impacting the Tobacco and Health Trust Fund

July 2010

Transfers to General Fund:

$10 million in both FY 10 and FY 11 per Public Act 09-3 JSS Section 74
$5 million in FY10 per Public Act 10-3 Section 4a

Transfers for Various Programs:

$1,991,982 in FY 10 for Asthma Awareness Program, Regional EMS Councils, Easy Breathing, and CHIN[1]
$1,841,982 in FY 11 for Regional EMS Councils, Easy Breathing Program and CHIN[2]

Disbursement Authority

Public Act 09-3 JSS Section 75. (*Effective from passage*) Notwithstanding the provisions of subdivision (1) of subsection (d) of section 4-28f of the general statutes, for the fiscal year ending June 30, 2011, the board of trustees of the Tobacco and Health Trust Fund may recommend authorization of disbursement of funds for the purposes permitted under said subdivision up to the unobligated balance projected to exist in said fund as of June 30, 2011.

[1] Per PA 09-3 JSS Sections 30, 62, 63, and 67
[2] Per PA 09-3 JSS Sections 62, 63, and 67

	ACTUAL FY2000	ACTUAL FY2001	ACTUAL FY2002	ACTUAL FY2003	ACTUAL FY2004	ACTUAL FY2005	ACTUAL FY2006	ACTUAL FY2007	ACTUAL FY2008	ACTUAL FY2009	Estimated FY2010	Estimated FY2011	Estimated FY2012
Tobacco and Health Trust Fund (35007)													
Carried Forward from Previous Year	--	20.2	41.1	53.1	1.1	0.6	0.0	18.1	21.3	29.4	11.7	0.4	0.6
Transfer from Tobacco Settlement Fund	20.0	19.5	17.4	0.0	12.0	0.0	18.6	12.0	13.2	24.3	12.0	12.0	12.0
Interest	0.2	1.4	1.8	0.2	0.0	0.0	0.1	0.8	0.9	0.4	0.1	0.0	0.0
Funds Available	20.2	41.1	60.3	53.3	13.1	0.6	18.7	31.0	35.3	54.1	23.8	12.5	12.6
Use of interest and principal	--	--	(0.8)	(0.6)	0.0	0	0	0.0	(0.9)	(6.9)	(6.4)	0.0	(6.0)
Transfer to General Fund	--	--	0.0	(48.2)	(12.0)	0.0	0.0	0.0	0.0	(25.3)	(15.0)	(10.0)	
Capital Gain/Loss			(1.5)	(0.8)									
Transfer of Principal for Various Programs	--	0.0	(4.9)	(2.6)	(0.5)	(0.6)	(0.6)	(9.7)	(5.1)	(10.3)	(2.0)	(1.8)	
Funds Used	--	0.0	(7.2)	(52.2)	(12.5)	(0.6)	(0.6)	(9.7)	(6.0)	(42.4)	(23.4)	(11.8)	(6.0)
Balance on June 30	20.2	41.1	53.1	1.1	0.6	0.0	18.1	21.3	29.4	11.7	0.4	0.6	6.6

TOBACCO AND HEALTH TRUST FUND SUMMARY OF FY 2008 FUNDING
Revised as of June 25, 2010

Community Health Centers Awarded
Contract period from November 1, 2008- June 30, 2010

Awardee	Contract Amount	Service Area
Fair Haven Community Health Clinic	$117,968	New Haven
Community Health Center, Inc	$117,968	Middletown, New Britain, Danbury, Enfield, New London, Meriden
StayWell Health Care, Inc.	$110,162	Greater Waterbury
Hill Health Corporation	$117,967	Greater New Haven
Generation Family Health Center, Inc.	$117,967	Greater Willimantic
Optimus Health Care	$117,967	Stratford, Bridgeport, Stamford

Services to be provided:

1. Health care providers will assess all patients for tobacco use and implement the DHHS clinical practice guidelines into all clinical services. Female patients using tobacco products will be referred to tobacco use cessation counseling.

2. Individual or individual and group face-to-face tobacco use cessation counseling sessions will be provided for pregnant women and women of childbearing age (13-44 years old) that are culturally and linguistically appropriate, including all education materials. Services will include one initial individual tobacco use cessation counseling session, an average of 20-30 minutes in length. In addition to the one initial counseling session, individual programs will consist of no less than three additional sessions. Group programs will consist of no less than eight sessions.

3. When medically appropriate and approved, pharmacotherapy (which includes nicotine replacement therapies as well as prescription medications) will be provided at no cost to the participant.

4. Follow up care for tobacco use to prevent relapse will be provide in the form of a relapse group and/or additional individual counseling.

5. Collection of data and input into an ACCESS database supplied by DPH. Data will be collected at intake, upon completion of cessation program services and at 3 and 9 months post -program follow-up to ascertain patient status regarding tobacco use. Data elements to be collected include, demographics, tobacco use status, quit status, number of quit attempts, birth weight, gestational age, and other adverse maternal or neonatal outcomes.

Status Update:

All contractors are finalizing reports and data; the contract period will end on June 30, 2010. The Department has received reports and data up to the period ending March 31, 2010, where 1455 females had participated in the cessation programs thus far. (See additional data below) Final reports and data for the contractors are due September, 2010.

Community Health Center Cessation Program Services
(Data for period ending 3/31/10)

Pregnancy

Pregnant	Number	Percentage
Yes	109	7.5%
No	1300	89.3%
Unreported	46	3.2%
TOTAL	**1455**	**100%**

Age

Age	Number	Percentage
14-15	14	1.0%
16-24	239	16.4%
25-30	293	20.1%
31-35	256	17.6%
36-40	292	20.1%
41-44	251	17.3%
Unreported	110	7.6%
TOTAL	**1455**	**100%**

Income

Income	Number	Percentage
Less than $10,000	725	49.8%
$10,000-$14,999	63	4.3%
$15,000-$19,999	108	7.4%
$20,000-$24,999	23	1.6%
$25,000-$34,999	63	4.3%
$35,000-$49,999	22	1.5%
$50,000-$74,999	14	1.0%
$75,000 or more	10	0.7%
Refused/Don't Know	312	21.4%
Unreported	115	7.9%
TOTAL	**1455**	**100%**

Insurance Status

Insurance	Number	Percentage
HUSKY/Medicaid	685	47.1%
HUSKY/Medicaid, Medicare	1	0.1%
I have no insurance	131	9.0%
Medicare	62	4.3%
Other insurance	64	4.4%
Private Insurance	96	6.6%
SAGA	299	20.5%
Unreported	117	8.0%
TOTAL	**1455**	**100%**

Smoking Results Upon Graduation

Results	Number	Percentage
Positive Result, Reduced Smoking	139	31.2%
Positive Result, Stopped Smoking	165	37.0%
Total Positive Results	***304***	***68.2%***
Negative Result, Increased Smoking	22	4.9%
Negative Result, Picked Up Smoking	5	1.1%
Total Negative Results	***27***	***6.1%***
No Change, Still Smoking, Same Amount	102	22.9%
No Change, Still Smoking, Unable to Determine Increased or Decreased Smoking	7	1.6%
No Change, Still Not Smoking	6	1.3%
Total Results for No Change	***115***	***25.8%***
TOTAL	**446**	**100%**

Evaluation of Community Health Center Tobacco Use Cessation Programs
Contract period from November 1, 2008- July 31, 2010

Awardee	Contract Amount
The Consultation Center	$100,000

Services to be provided:

1. Evaluate the systems operations, services and activities of the six-awarded Community Health Centers for effectiveness in promoting and achieving tobacco use cessation and the efficacy of integrating cessation services into agency operations. Areas to be evaluated include overall system changes, patient and health care provider satisfaction, program referral processes, effectiveness of training, quit rates, marketing and outreach activities and overall program effectiveness.

2. The contractor will examine progress towards reducing tobacco use in the patient population and the ability to reach targeted populations. The contractor will also identify strengths and weaknesses for use in future planning and implementation and identify areas in need of additional services and or programmatic changes.

3. The contractor will provide technical assistance on site regarding collection of data to establish proper protocols to assure accurate and quality data collection by community health center staff.

A Grantee Meeting was held on October 1, 2008. A representative from each of the CHCs and the Consultation Center was in attendance. Grant expectations were discussed and each CHC was given an opportunity to review the data collection forms and provide comment and input into the database and form development.

The ACCESS database and collection forms were developed using the input from the grantees and have been sent to each CHC and the Consultation Center.

Status Update:

This contract period started November 1, 2008 and runs through July 31, 2010. This contractor has developed additional tools for evaluation, and has met with each CHC contractor site to discuss evaluation procedures and protocols. The contractor has conducted focus groups of program participants and providers at each CHC site as well. The Department will receive the final evaluation report on the project September 1, 2010.

TOBACCO AND HEALTH TRUST FUND SUMMARY OF FY 2009 FUNDING
Revised as of June 25, 2010

Program	Amount	Funding Description	*Status*	*Contract Period*
CT QuitLine	$2 million	Tobacco cessation telephone service including information, counseling and pharmacotherapy.	Amendment added $700,000 in funding to current contract to expand services & extend contract with Free and Clear, Inc. to 7/31/2009. NRT made available to callers beginning 4/27/09. Award made to Free & Clear, Inc. on RFP 2009-0919 for new five-year quitline contract, to include $1,300,000 for expanded services. Contract has been executed.	7/31/2009-6/30/2014
Counter Marketing	$2 million	Mass media campaigns designed to discourage tobacco use.	Award approved for Cronin & Company, LLC. for $2,000,000. Media plan has been developed. Focus groups were held to develop youth prevention campaign. "Tobacco-It's a waste" campaign launched in February 2010 with a website and contest to create 30 second TV commercials in English and Spanish. Four contest winners were chosen and the TV commercial began airing on Broadcast and Cable stations on June 1, 2010 and will continue to air through November 2010. A Media Literacy workshop was held to assist grassroots advocated in prevention activities. Grassroots prevention and cessation activities continue with staff present at events such as Riverfest, the New London Sailfest, the Latino Expo, and the Boom Box Parade. Additional grassroots activities targeting African Americans and Hispanics are occurring in their communities. In addition, numerous radio interviews and newspaper articles in Spanish (including print and online) have occurred discussing the prevention and cessation campaign.	07/01/2009-06/30/2011

Community-Based Cessation	$412,456	Strategies to help people quit smoking including counseling and pharmacotherapy.	Proposals received on RFP, with funding awarded to six contractors. The seventh contractor backed out of their contract, and those unspent monies have been rolled into the new RFP for cessation services. Programs are up and running. Reports and data have been received for the first two quarters of their contracts. Data as of 3/31/10: • 184 people have participated in the programs thus far. • AIDS Project New Haven, Inc. $70,290 • Fair Haven Community Health Center, Inc. $66,712 • Generations Family Health Center, Inc. $43,700 • Hartford Gay and Lesbian Health Collective $94,230 • Hospital of Saint Raphael $51,248 • Ledge Light Health District $43,826	09/01/2009-12/31/2011
Cessation for Individuals with Serious Mental Illness	$1.2 million	Strategies to help people with serious mental illness quit smoking including counseling and pharmacotherapy.	Award to CommuniCare, Inc. The contract has been executed and programs are up and running at four sites. Reports and data have been received for the first two quarters of the contract. For the period ending 3/31/10: • 88 people have participated in the program thus far	09/1/2009-12/31/2011
School-Based Prevention	$500,000	10-20 school districts will implement tobacco use prevention and cessation programs.	RFP # 2009-0928, re-issue of 2009-0924 was released on June 18, 2009. Due to low response rate to the RFP only 4 awards were able to be made for a total amount of $378,475. The remaining funding will be added to the 2010 RFP for youth prevention programs. The following contracts have been fully executed:	5/1/2010-12/31/2011

			• Colchester Public Schools $23,172 • Education Connection (serving Torrington, Winchester, Waterbury School Districts and The Gilbert School, Winsted) $190,228 The following two Contracts are awaiting final signatures for execution. • Groton Public Schools $126,500 • Woodstock Academy $38,575	
Lung Cancer Research Tissue Biorepository	$250,000	Statewide Tumor Tissue Biorepository Feasibility Study and Lung Tissue Biorepository Demonstration Project	RFP # 2009-0923 Awarded to UCONN Health Center Memorandum of Agreement has been executed	08/01/2009-07/31/2010
Evaluation	$500,000	Monitor program accountability including progress in achieving outcome objectives.	RFP # 2009-0919 Awarded to Professional Data Analysts, Inc. of Minneapolis, Minnesota. Contract fully executed. Contractor has developed additional tools to assist with the evaluation of projects to include a website chat board to assist cessation contractors with data collection, Q & A and other evaluation protocols. PDA has preformed site visits to CT to meet with Department Staff, cessation contractors and Cronin and Co. A telephone conference was also conducted with Free & Clear, Inc.	09/01/2009-12/31/2011
Total:	$6,825,000			

TOBACCO AND HEALTH TRUST FUND SUMMARY OF FY 2010 FUNDING
Revised as of June 25, 2010

Program	Amount	Funding Description	*Status*	*Contract Period*
CT QuitLine	$1,650,000	Tobacco cessation telephone service including information, counseling and pharmacotherapy.	Amendment added funding to current contract to continue services and NRT as well as extend contract with Free and Clear, Inc. to 6/30/2014	7/31/2009-6/30/2014
Counter Marketing	$1,650,000	Mass media campaigns designed to discourage tobacco use.	Cronin & Company, LLC. contract has been amended to expand campaign efforts and extend the contract to 06/30/2012 Amendment will allow "Tobacco, It's a Waste" contest to be conducted again in the spring of 2011. Contest participants will be asked to develop radio ads as well as TV ads. Additional grassroots activities will be developed and materials purchased.	07/01/2009 - 06/30/2012
Community-Based Cessation	$750,000	Strategies to help people quit smoking including counseling and pharmacotherapy. Component 1- Local community cessation programs Component 2- Brief intervention counseling and referral in Emergency Departments	RFP language completed. RFP waiting for final approval to be released. Switch to a fee-for-service basis in cessation program contracts due to issues with lack of services at some CHC sites. Release date targeted for July 2010.	TBD 2 year period proposed
Cessation for Individuals with Serious Mental Illness	$800,000	Strategies to help people with serious mental illness quit smoking including counseling and pharmacotherapy.	CommuniCare, Inc. amendment language in process. Amendment will expand services to additional sites and areas of the State. Amendment execution targeted for July 2010.	09/1/2009-12/31/2012

School-Based Prevention	$500,000	Programs targeted to youth in Grades K-12. Component 1is for prevention programs conducted in after school programs Component 2 if for funding to support implementation of CSHLP in the selected school districts	RFP language being finalized. Release date targeted for July 2010	TBD 2 year period proposed
Lung Cancer Research Tissue Biorepository	$250,000	Statewide Tumor Tissue Biorepository Feasibility Study and Lung Tissue Biorepository Demonstration Project	Amendment in process with UCONN Health Center for expanded activities.	08/01/2009 - 06/30/2012
Evaluation	$300,000	Monitor program accountability including progress in achieving outcome objectives.	Professional Data Analysts, Inc. amendment language in process. Amendment will expand contract to evaluate additional services and programs. Targeted execution date July 2010	09/01/2009 - 12/31/2012
Innovative Programs	$477,745	Strategies for tobacco use prevention targeted to youth ages 5- 14 that do not fit into the above categories.	RFP language being finalized. Release date targeted for July 2010	TBD 2 year period proposed
Total:	$6,377,745			

REPORT OF THE TOBACCO AND SMOKING CESSATION TASK FORCE TO THE SUSTINET BOARD

July 1, 2010

I. Summary

The Tobacco and Smoking Cessation Task Force is pleased to present this report to the Sustinet Board and to the Joint Standing Committee of the Legislature. This report describes the work of the Task Force over the past eight months and represents the thoughtful contributions of representatives from health care, public health, retail organizations and provider groups.

The Task Force found that although Connecticut has experienced a reduction in smoking rates over the past decade, the effects of tobacco use significantly contribute to the growing total health care costs. In reviewing the available research and the initiatives of other states in this area, the Task Force firmly believes that the rate of tobacco use should and can continue to decline.

To achieve this continued decline, the Task Force has developed a series of recommendations that address the needs of individuals attempting to quit smoking; preventing young people from becoming smokers; opportunities to increase resources dedicated to this problem; and enhanced measurement strategies to improve understanding of tobacco users and how to help them. Key recommendations include expanding access to nicotine replacement items and supportive quit counseling; supporting smoking bans in homes, in and around schools, and other child-friendly areas; update and support the state's Tobacco Use Prevention and Control Plan; determine whether changes in pricing should be pursued; and allow sales of nicotine replacement gum and patches as over the counter medications.

II. Purpose and Mission of this Task Force

A. Charge to the Task Force

The Sustinet Legislation created the Tobacco and Smoking Cessation Task Force to examine evidence-based strategies for preventing and reducing tobacco use by children and adults, and then develop a comprehensive plan that will effectuate a reduction in tobacco use by children and adults.

B. Members of the Task Force

Andrew Salner
Director
Helen & Harry Gray Cancer Center
Hartford Hospital
Task Force Co-Chair

Jeannette DeJesus
President and CEO
Hispanic Health Council
Task Force Co-Chair

Kevin Lembo
Healthcare Advocate
Office of the Healthcare Advocate
Board of Directors Liaison

Nancy Wyman
Comptroller
Office of the Comptroller
State of Connecticut
Board of Directors Liaison

David Gregorio
Professor
Associate Chair for Education
Director, Graduate Program in Public Health
Community Medicine & Health Care
University of Connecticut Health Center

Barbara Koren
Retail Marketing Manager
Mercury Fuel

Frank Scifo
Director of Primary Care Development
St Vincent's Medical Center

David Scribner
Representative
House of Representatives
State of Connecticut House Republican Office Legislative

Task Force Members wish to thank the Workgroup members who have supported the Task Force's work and who were instrumental in the writing and editing of this Final Report.

Patricia Checko, MATCH Coalition
Robin Cox, Connecticut Department of Mental Health and Addiction Services
Joni Czajkowski, American Heart Association
David Gregorio, UConn School of Medicine
Bryte Johnson, American Cancer Society
Richard Kehoe, Office of the Connecticut Attorneys General
Barbara Koren, Mercury Fuel
Dawn Mays-Hardy, American Lung Association
Kevin O'Flaherty, Campaign for Tobacco free Kids
Barbara Walsh, Connecticut DPH

C. Methodology

The Tobacco Task Force created two workgroups which subsequently merged to focus on data collection and on program elements of tobacco cessation. The Task Force met monthly to discuss the subcommittees' findings and to hear in-depth presentations about key issues.

III. The Task Force's Approach

The Sustinet Tobacco Task Force Co-chairs convened a working group of tobacco experts to review current data and programmatic issues related to tobacco prevention and control and develop recommendation to the Task Force. This report became the basis of the Task Force report to the Sustinet Board of Directors and to the legislature regarding the status of tobacco use as well as prevention and control efforts in the state and recommendations to reduce the burden of tobacco use on the health and healthcare costs of Connecticut residents. The Workgroups were merged into a single group and met from April through June to prepare the recommendations in Section IV.

"Tobacco kills more people each year than losses from WWI, Korea and Vietnam combined, approximately equal to WWII losses."

The Workgroup relied heavily on reports and guidelines from the Centers for Disease Prevention and Control, data and reports from the Campaign for Tobacco Free Kids, Connecticut Tobacco and Health Trust Fund, and other states' tobacco prevention and control experiences.

The CDC published a document on *Best Practices for Comprehensive Tobacco Control Programs* in August of 1999, shortly after states reached a settlement agreement with the tobacco industry; an updated edition was released in October, 2007.[1] This comprehensive approach includes not only clinical interventions, but also economic, policy, and social strategies aimed at reducing the health and economic consequences of tobacco use. The CDC recommends that state and community interventions, effective health communications, smoking cessation, surveillance and evaluation as well as administration and management should be included in tobacco control programs if they are to be effective.

The *Clinical Practice Guidelines* describe the best treatment for reducing tobacco use and dependence. Originally developed and published in 1996 by

the U.S. Department of Health and Human Services (USDHHS), these *Clinical Practice Guidelines* have been updated three times. The most recent edition, published in 2008, is based upon treatment recommendations from over 8,700 research articles published between 1975 and 2007. These recommendations, addressing both clinical and systems-based interventions, were developed using the best available evidence (also known as evidence-based), and offer guidance to clinicians, as well as administrators of healthcare delivery and insurers. These guidelines view tobacco dependence as a chronic and recurring disease often requiring repeated interventions and multiple quit attempts.[2]

The workgroup supports the findings and recommendations of the recently released Connecticut Public Health Policy Institute Report of April 28, 2010 titled: *Examining Tobacco Use, Consequences and Policies in Connecticut.*[3] The workgroup also recognizes the Massachusetts Department of Public Health and its Massachusetts Tobacco Control Program (MTCP) as a leader in the area of tobacco prevention and control. The workgroup views the MTCP as a model program for its planning approach to comprehensive tobacco control and its many success stories. The MTCP Logic Model is included as an appendix to this document[4]. Finally, the workgroup also reviewed and evaluated the proposed 2020 Healthy People objectives for tobacco use to determine concurrence with the national health objectives.[5]

Recommendations are grouped in four major areas: the burden of tobacco use; Cessation; Prevention; and Policy/Environment Issues. Each section lists the recommendations along with background information and cost/benefit information. Costs or savings related to implementation are provided as available. Also please note that the order of the recommendations does not reflect prioritization or ranking of importance.

A paradox concerning our efforts is that CT is a tobacco producing state.

A. The Burden of Tobacco Use in Connecticut

The Surgeon General reports that tobacco use is the leading preventable cause of disease in the United States. Every year, cigarette smoking is responsible for 1 in 5 of all US deaths (or 443,000); 37% cancer, 32% heart disease and stroke and 21% due to respiratory disease. Smoking accounts for at least 30% of all cancer deaths and 87% of lung cancer deaths.

Chronic diseases are exacerbated by insufficient policies and systems; certain environments in which we live, learn, and work; and limited access to healthcare. The most effective way to improve the health of Connecticut

residents and reduce the burden of chronic diseases is through comprehensive statewide health promotion.

Many deaths resulting from chronic diseases are premature and preventable. In Connecticut, tobacco use continues to be a leading cause of preventable death. Between 2000 and 2004, over 4,800 adults ages 35 and older died each year as a result of tobacco use, a smoking-attributable mortality rate of 238.3/100,000.[6] In addition, another 440 adult nonsmokers die each year from exposure to secondhand smoke.

Annual health care costs in Connecticut attributed to cigarette use are estimated at $2 billion (in 2008 dollars), and the portion of that covered by the State's Medicaid Program is $507 million[3]. In addition, another $1.03 billion of tobacco-related "cost" is attributed to productivity losses of persons affected by tobacco-related diseases/treatments. These amounts do not include the health consequences or economic costs of exposure to secondhand smoke, smoking-related fires, or use of other forms of tobacco.

In 2009, 15.4% of Connecticut's adult population (ages 18+) — over 400,000 individuals — were current cigarette smokers[7]. The prevalence for adult men was 16.2% and for adult women it was 14.7%. The age group with the highest smoking prevalence was among 18 to 24 year-olds (24%). Smoking rates vary by socio-economic status (SES), education, age, race, and presence of psychiatric illness. Overall, smoking rates are higher in individuals with lower income and education levels, in younger adults compared to older adults, military veterans, and in individuals with psychiatric and substance use diagnoses. Nationally, the prevalence of smoking is comparable in Caucasians and African-American groups, but is lower in Hispanics. However in Connecticut smoking rates are higher among Hispanics as compared to Blacks or Whites. For adults who reported an annual income of less than $25,000, the cigarette-smoking rate was 30%, compared to about 12% for those earning $50,000 or more per year.[7]

Health disparity is a hallmark of the tobacco epidemic. While the last ten years have seen dramatic changes in smoking rates for whites, college graduates and persons with incomes over $50,000 per year, these same trends are not true for groups at high risk of being smokers. This is particularly true among Medicaid recipients, persons with no insurance, racial/ethnic groups, persons suffering from mental health and substance abuse, and low socio-economic status. Expanding and developing cessation programs that target these populations and aggressive media

countermarketing activities are needed to reduce tobacco use and smoking-related medical costs.

In 2009, 3.3% of middle school students (3.3% of boys and 3.2% of girls) and 15.3% of high school students (16% of boys and 14.4% of girls) in the state smoked cigarettes.[8] Between 9th and 12th grade smoking prevalence increases from13.9% to 30.1% of all high school students. Data also indicated that 17.3% of middle and 23.5% of high school students who never smoked were susceptible to starting smoking within the next year. This suggests that there is a need for more age-specific programs to prevent smoking initiation.

> "**Each day in the United States** -
>
> - *The tobacco industry spends nearly $36 million to market and promote its products*
> - *Almost 4,000 adolescents start smoking*
> - *Approximately 1,200 current and former smokers die prematurely from tobacco-related diseases*
> - *The nation spends more than $260 million in direct medical costs related to smoking*
> - *The nation experiences nearly $270 million in lost productivity to premature deaths from tobacco-related disease[1]."*

Data collected from the 2009 Connecticut School Health Survey showed that high school students who smoke are significantly more likely than non-smokers to report poorer mental health. Those with poorer mental health have a higher rate of smoking compared to their peers who report better mental health. Of the high school students who report feeling sad or hopeless in the past 12 months, 27% were smokers, compared to only 13% of the group that did not report those feelings. Among high school students who actually attempted suicide in the past year, 40.9% were smokers, compared to 15.4% of those who did not attempt suicide. These differences are statistically significant.

These findings suggest that students who smoke and students who have depressive disorders could possibly benefit from effective counseling coupled with comprehensive smoking cessation programs. Students who smoke are also more likely to participate in other high risk behaviors than those who do not smoke.[8]

Gathering data and determining effective and evidence-based interventions to decrease smoking prevalence among these populations is crucial.

IV. RECOMMENDATIONS

A. CESSATION: Provide comprehensive tobacco use cessation (TUC) services for all Connecticut Residents

Recommendation #1: Provide Medicaid coverage for tobacco use cessation (TUC) services.

- Effective October 2010, TUC benefits for pregnant women are required under the Federal health care reform.
- Comprehensive TUC benefits should be provided to all Medicaid recipients.
- Connecticut should seek out and secure matching federal funds to help fund this benefit.
- The Department of Social Services should actively promote the benefit with eligible clients.
- Remove the barrier of physician as "gatekeeper" for TUC service
- Expand access to nicotine reduction products (NRTs) to non-prescription retailers licensed to sell other OTC medications. Medicaid offers a formulary for OTCs, such as Claritin, and t should permit vendors to sell and be reimbursed for NRTs.
- Aggressively pursue funding through the $100 million in federal grants (available beginning Jan 2011) for Tobacco Use Cessation Programs targeting Medicaid participants. Develop a plan specifically for Connecticut or in a New England regional approach to secure the needed funds.

Background: Prevalence of smoking among Connecticut adults (≥ 18 years old) is estimated at 15.9%. Medicaid recipients smoke at roughly twice (36%) that level. Medicaid clients (i.e., persons with Low SES, substance addicted persons, the mentally ill and pregnant women) are all at high risk for tobacco addiction. Two variables, in particular, are strongly associated with tobacco use: low education and low income. Smoking prevalence among persons with incomes below $35,000 is 24.4%, whereas prevalence among persons with incomes greater than $35,000 is only 16.5%; the prevalence of smoking

among persons with less than high school educations is 29.3%, compared to a prevalence of 11.4% among persons with college degrees.

Pregnant women are an important target population to prevent tobacco use before a subsequent pregnancy, improve birth outcomes, and reduce the effects of secondhand smoke on children. According to the American College of Obstetricians and Gynecologists, smoking is the most modifiable risk factor for poor birth outcomes. Successful treatment of tobacco dependence can achieve a 20% reduction in low birth weight babies, a 17% decrease in preterm births, and an average increase in birth weight of 28 grams. According to the American College of Obstetricians and Gynecologists, a woman is more likely to quit smoking during pregnancy than at any other time in her life.[10] Pregnancy is a good time to intervene with smokers.

In Connecticut, pregnant women on Medicaid (HUSKY A and fee-for-service) were more likely to smoke than all other pregnant mothers giving birth in 2005. Among Medicaid mothers, 15.5% of HUSKYA mothers and 6.5% of fee-for-service mothers smoked, compared to 2.7% of all other mothers who smoked.[11]

A Healthy People 2020 goal is to ensure that evidence-based treatments for smokers are available through state Medicaid programs. The USDHHS 2008 Clinical Prevention Guidelines recommend that evidenced based medication and behavioral smoking cessation treatments should be offered as covered services in public as well as private health insurance plans. That means that smoking cessation coverage should be comprehensive including behavioral counseling and both legend (i.e., drugs requiring a prescription) and over the counter (OTC) drugs.

Connecticut had been at the forefront of tobacco policy when, in the 2002 session, the legislature authorized the coverage of smoking cessation programs for Medicaid recipients. However, the program was never funded, despite a DSS fiscal study prepared at their request in 2006 and a Medicaid reimbursement waiver that would return 62 cents on every dollar spent. Today, Connecticut is one of only four states (Connecticut, Alabama, Georgia and Missouri) still not providing any coverage for tobacco use cessation services for their Medicaid recipients.

In order to expand access to nicotine reduction products (NRTs) Tobacco Task Force recommends granting permission to sell non prescription NRTs. It is also suggested that OTC NRTs be made available in smaller pack sizes vs. the two week supply currently available. The current restrictions on selling non prescription NRTs and the pack size are based on FDA requirements that allow

for sale only in pharmacies. Broader access to NRTs in local shopping settings will encourage use among smokers in settings where tobacco sales occur.

Economic Burden: Total health care costs associated with smoking are nearly $2 billion in 2008 dollars. Nearly 35% of Medicaid-insured adults under the age of 65 smokes (compared to just 18.3% of privately-insured adults). The associated health care costs for Medicaid recipients who smoke is more than $507 million in 2008 dollars, costs primarily borne by Connecticut taxpayers.[3]

Program Costs: The following cost estimates assume all individuals will utilize both counseling and NRT or pharmaceutical components. The actual costs may be much less, based on the components the smoker elects to utilize. This cost estimate was developed by the MATCH Coalition as part of the initiative to obtain funding for this benefit during the 2010 legislative session.

Our estimate of tobacco use by Medicaid recipients and benefit of comprehensive cessation interventions assumes that Medicaid recipients ages 19-64 years would be targeted. Currently there are 377,968 Medicaid recipients in this category; we estimate that 173,534 are cigarette smokers. Smoking rates are presumed to be 36%, although estimates ranging from 36-40% have been cited in the literature. Assuming cessation programs are adequately marketed, utilization by 25% of targeted smokers could be anticipated (MassHealth experienced 40% utilization). We further assume all eligible participants would receive an average of 3 counseling session at $150 per session (note: Mass Health experienced much lower utilization of counseling services), and 50% of eligible persons opt to use NRTs and 50% opt for pharmaceuticals. Quit rates are based on use of both counseling and drug therapy (Rates are lower when only counseling is used). The annual estimated reduction in tobacco use by proportion of participants utilizing the benefit is presented in Table 1 below:

Table 1

Estimated Cost for Comprehensive Smoking Cessation for Medicaid Recipients in Connecticut*

	Presumed Utilization Rates	
	25%	**40%**
Clients 19-64 yrs old	173,534	173,534
Percent smokers	36%	36%
Total Smokers	62,472	62,472
Utilization Rate	25%	40%
Program Participants	15,618	24,989
All Receive Counseling	$2,342,709	$3,748,334
90% use NRT	14,056	22,490
50% use NRT & 50% use pharmaceutical	7,028	11,245
NRT cost for 12 wks =$125	$878,516	$1,405,625
25% use Bupropion	3,514	5,623
Bupropion cost for 12 wks =$264	$927,713	$1,484,340
25% use Varenicline	3,514	5,623
Varenicline cost for 12 wks= $475	$1,669,150	$2,670,925
TOTAL COST	**$5,818,088**	**$9,309,225**
# Smokers Quitting = 27.6%	**4,311 fewer smokers per year**	**6,897 fewer smokers per year**

*Based on DSS Medicaid Eligible Recipients for February, 2010, by Age

Health and Cost Benefits: Connecticut lawmakers should look to Massachusetts for a model program that is quickly becoming the standard for the nation. Most evaluation reports deal with long-term savings and health

effects from smoking cessation. In 2006, the Massachusetts legislature enacted a law providing a smoking cessation benefit for all MassHealth (Medicaid) enrollees. The "barrier-free" benefit includes: behavioral counseling, all FDA-approved medication and nicotine replacement, and very low co-pays. In the first 2.5 years of implementation 75,000 MassHealth members used the benefit to try to quit smoking (i.e., 40% of all smokers on MassHealth) and the smoking rate fell 10% a year, from 38.2% to 28.3% (a 26% reduction). Their recent report documented a 38% drop in heart attacks among the cessation benefit users, 17% fewer emergency department visits for asthma symptoms and 17% fewer claims for adverse maternal outcomes.[12] Under the Health Reform Act, all states will be required to provide smoking cessation benefits for pregnant women, effective October 2010. Beginning in January 2011, there will be $100 million in federal grants for TUC programs targeting the Medicaid population.

The American Legacy Foundation estimated that within five years, Connecticut would see annual savings of $91 million (2005 dollars) with a 50 percent decrease in smoking rates, and $18 million (2005 dollars) annually in Medicaid savings with a ten percent reduction in smoking.[13]

Recommendation #2: Require all public and private health insurers to provide comprehensive tobacco usage cessation interventions, including counseling and all FDA-approved nicotine replacement therapies and pharmaceuticals.

- Recognize tobacco dependence is a chronic disease for which periodic relapses may be anticipated that require long term use of NRTs and multiple opportunities for quit attempts.
- Recognize relative benefit of multi-modality interventions (e.g., counseling combined with medication) for tobacco use cessation. Best results are achieved with both counseling and medication– (USDHHS Treating Tobacco Use and Dependence: Clinical Practice Guideline, 2008.
- Define and adequately fund through public sources and reimbursement mechanisms, a broad network of clinical and community-based TUC programs and services.
- Make the business case for providing TUC coverage and make workplace programs more affordable and accessible.

Background: About 16% of Connecticut adults (age ≥ 18) smoke, as well as 17% of adolescents (grades 9 through 12). USDHHS Clinical Practice

Guidelines, *Treating Tobacco Use and Dependence: 2008* recommends that evidenced based medication and behavioral smoking cessation treatments should be offered as covered services in public as well as private health insurance plans. That means that smoking cessation coverage should be comprehensive including behavioral counseling and both legend and over the counter (OTC) drugs.

Costs and Benefits There are several business case studies that demonstrate significant cost savings to businesses that went smoke-free and provided smoking cessation benefits to their employees. Total excess cost of a smoking employee to a private employer is $4,279 per year.[14] The Insurance Committee of the Connecticut General Assembly might consider a cost-benefit analysis of the effect of mandatory insurance coverage for comprehensive smoking cessation.

The following recommendations represent three different strategies to provide and integrate cessation services into diverse settings and opportunities.

Recommendation #3: Integrate tobacco use cessation (TUC) interventions into medical encounters.

- Recognize the utility of the 5A's strategy and incorporate the 5A's into all health provider settings: Ask about tobacco use; Advise to quit; Assess willingness to make a quit attempt; Assist the patient in quitting through counseling and medication; and Arrange follow-up.
- All medical questionnaires filled out by patients should include questions on tobacco use, frequency and if the patient would like information on cessation programs.
- Initiate a collaborative service network for referral of patients to aid health care providers in guiding their patients to available programs
- Age, gender, and racial ethnic models for delivering cessation services should be developed, taking into account evidence based treatments. High risk groups should be targeted to decrease disparities through better awareness and access.

- Provide opportunities and support for individuals in traditional and non-traditional health care settings to obtain training in evidence-based TUC protocols.
- Develop and provide training for TUC for traditional and non-traditional providers and develop and fund opportunities and training programs to do so. (Refer to Massachusetts certification program).
- Use the Connecticut Information line 211 to help citizens make connections to local cessation programs.

Background Coordinated tobacco use interventions, delivered in a timely and effective manner, can rapidly reduce the risk of suffering from smoking-related disease. At least 70% of smokers see a physician each year. In addition, 70% of smokers report wanting to quit. Smokers state that a physician's advice to quit is an important motivator for attempting that quit attempt. A brief, three minute assessment and referral process during a routine exam can increase the rate of quitting attempts. Clinicians trained in TUC interventions significantly increase the likelihood of patients' quit attempts.

When appropriate charting (e.g. regular charting of smoking status, use of electronic reminder systems) is used, rates of patients making quit attempts may increase five-fold compared to no intervention.[3] In addition, treatments delivered by multiple types of clinicians are more effective than those delivered by a single type. Even clinician-delivered brief interventions can increase the likelihood of future quit attempts among those not currently looking to quit.

The goal of these strategies is to change clinical culture and practice patterns to ensure that every patient who uses tobacco is identified, advised to quit and offered scientifically sound treatments. In addition, treatments delivered by multiple types of clinicians are more effective than those delivered by a single type. In addition, pediatricians and primary health care providers should also screen patients for exposure to second and third-hand smoke.

The sooner a patient quits smoking, the more savings: tobacco dependence treatments cost savings **per life-year** saved is $3,539. Although health care costs may rise during the year the patient is quitting, they decline progressively from that point on. A reimbursement mechanism needs to be established for these types of preventative interventions.

Recommendation #4: Implement and sustain a statewide, telephone Quitline for smoking cessation that provides both counseling and NRT.

Create and sustain funding for the Statewide Tobacco Quit Line at levels that allow it to reach the maximum audience while providing both counseling and NRT services.

Background: There is ample evidence that smoking cessation interventions are effective in reducing the number of individuals who quit smoking. Interventions can be categorized in terms of the type, venue, intensity, duration and cost. They may be behavioral, pharmacological or both. In general, greater intensity of treatment (duration and number of contacts and more modalities of intervention) improves cessation outcomes. Abstinence rates at a minimum of six month follow-up are related to the intensity of the intervention in a dose-response fashion. These range from:

- 5-10% for smokers quitting or their own or with self-help materials
- 10-20% for brief, moderate intensity interventions (counseling only)
- 20- 30+% for maximally intensive individual or combined pharmacological and behavioral interventions

Costs and Benefits: Telephone Quitlines have proven to be an effective smoking cessation intervention. Recognizing their value in helping individuals to stop smoking and acknowledging recommendations for a more robust, countrywide Quitline, DHHS established a national Quitline network in 2004. The network increased funding to states with existing Quitlines, offered grants for the creation of Quitlines in states that did not yet provide the service, and made available smoking cessation counselors in states without Quitlines. The Quitline is a highly useful intervention because advertising the availability of the Quitline helps to stimulate demand and accessing it provides a low-cost service for facilitating cessation. Studies have shown that Quitlines that combine behavioral counseling and medications have significantly higher abstinence rates than medication or counseling alone (28.1%).

Based on the 2006 Connecticut Adult tobacco survey there are 455,850 adults who currently smoke cigarettes in Connecticut. The Department of Public Health has supported a Quitline model in Connecticut for several years using grant funds provided through the Centers for Disease Control to states without their own Quitlines. The Quitline provides free services to callers. These CDC funds are limited and the Quitline contract had provided for telephone

counseling only. (Yr 1, $166,667, Yr 2 $285,000). During those two years there were approximately 1,200 registered callers per year.[10]

In FY 08, Quitline was funded through the Connecticut Cancer Partnership's Comprehensive Cancer Plan's 2006 tobacco allocation and CDC funds for a total of $1.7 million. The new Quitline contract provided for NRT (nicotine patch or gum) and enhanced counseling for persons who registered for the program. Insured enrollees received a two-week starter of NRT. Those without private insurance or on Medicaid received up to eight weeks of NRT. Counseling was provided to all enrollees. The Quitline received over 10,000 calls and enrolled more than 6,000 residents for service in three weeks in July 2007 alone. NRT available through the Quitline was depleted by the end of July, sending nicotine patches to 3,787 callers and nicotine gum to 858 callers. Subsequently, the Quitline provided only enhanced counseling services.[10]

The current cost per Connecticut Quitline user is $497 for uninsured and Medicaid participants and $284 per insured participants. Among the 8,405 registrants who provided insurance information, 46.5% had private insurance, 16.1% had Medicaid coverage, 11.7% had Medicare coverage and 19.3% were uninsured. Although almost half of registrants reported having commercial insurance, most insurance plans do not cover smoking cessation services. From June 2008 through March 2009, the percentage of Medicaid recipients utilizing the Connecticut Quitline increased to 30%.[10]

Women who use tobacco were more likely to utilize the Quitline than men, 62% vs. 38%. One in four Quitline users were 31-50 years old, one-third was 51-60 years old and 14% were 60 or older. Only 12% were 18-30 years old. Eighty percent identified themselves as white, 11% as African-American and 1.5% as other race. By ethnicity 8% identified themselves as Hispanic. Over half of Quitline users (54%) reported an educational level of high school or less.[10]

In a user evaluation conducted among participants who utilized the Quitline between January and June 2007 (prior to the availability of enhanced counseling and NRT), the contractor reported 7- day quit rates of 34%, and 30-day quit rates of 26%. The contractor noted that in a study performed for another state, medication increased quit rates from 33% to 44%.

Using current costs for Quitline services, the Tobacco and Health Trust Fund Board determined that $2 million could reach 11,672 callers and provide a multiple call program to all with a two week starter kit to insured and 8 weeks delivered in 2, 4 week shipments to Uninsured and Medicaid participants. This is a penetration rate of just less than 2% (1.74%) of the adult smoking

population in Connecticut. Increasing this amount to $5 million would increase the penetration rate to about 5% of smokers.[10]

Recommendation #5: Increase the number and types of TUC services available in diverse settings and develop and provide educational opportunities for training traditional and non-traditional TUC service providers.

- Provide adequate training, resources and feedback to ensure that tobacco use cessation providers consistently deliver effective treatments. Offer model training programs on tobacco dependence treatments, and provide continuing education credits and/or other incentives for participation by health care providers. Provide opportunities and support for individuals in traditional and non-traditional health care settings to obtain training in evidence-based protocols. Ensure health care providers have necessary tools to manage a referral system.

- Provide these services in diverse settings, including traditional clinical settings (hospitals, community health centers, school-based health centers, mental health and substance abuse setting) and non-clinical setting, such as local health departments/districts, and social service organizations, as well as the statewide telephone Quitline and website assisted programs.

- Increase the number and type of providers who provide comprehensive cessation services; include pediatricians, psychiatrists, mental health and other health care workers, pharmacists, social workers, health educators and prevention specialists. Initiate a collaborative service network for referral of patients to aid health care providers in guiding their patients to available programs.

- Develop and provide training for both traditional and non-traditional providers (e.g., faith based organizations, Boys/Girls Clubs, Local Health Departments, Continuing education services, etc.) with a standardized, model curriculum and fund opportunities to ensure training attendance.

- Research potential for an online training system for health care providers to break down barriers to training participation.

- Develop age, gender, and racial ethnic models for delivering cessation services that take into account evidence based treatments. Target high risk groups to decrease disparities through better awareness and access.

- Use the Connecticut Information line 211 to help citizens make connections to local cessation programs.

Background: Evidence-based tobacco use cessation methods have been proven to be effective in a variety of populations. Currently TUC cessation services in Connecticut are sparse and under advertised. While programs exist at some Community Health Centers, local health departments/ districts, and hospitals, many are supported by specific grants from the Tobacco and Health Trust Fund, Federal Block Grants or other funding that is not sustainable. Many of these programs will cease when these special funds are gone. There needs to be a mechanism in place, including insurance reimbursement, low cost services and government or privately supported funding, to develop and sustain tobacco use cessation opportunities in diverse settings in the community where people go to seek medical care and social services.

As noted above, even brief encounters with medical providers can increase the rate of quitting. State Quitlines also provide evidence-based cessation services that have been proven effective and need to be sustained.

The Massachusetts Tobacco Control Program has several model programs to reach smokers as well as training programs for providers and tobacco cessation certification. [4] In FY 2009, MTCP continued to provide funding and technical support to 19 community health centers (CHCs) across the state to improve their effectiveness in motivating and assisting patients to quit smoking. The initiative is based on research demonstrating that even brief advice from physicians and nurses can influence patients to make a quit attempt.

MTCP offers confidential information and telephone-based counseling services to help smokers quit through the Massachusetts Smokers' Helpline, which is free to Massachusetts residents. In FY 2009, the Helpline reported receiving 22,000 calls, including those who were referred through QuitWorks and those responding to free nicotine patch promotions. QuitWorks was developed by MTCP in 2002 in collaboration with all major health care insurers in Massachusetts. The QuitWorks fax referral service allows health care providers to connect their patients to free phone counseling services. In FY 2009, health care professionals made nearly 3,500 referrals to the Helpline through QuitWorks. More than one hundred hospitals, community health centers, and DPH programs have adopted the QuitWorks program. Training in smoking cessation counseling is available for providers and others. The University of Massachusetts Medical School provides technical assistance and

training to healthcare providers on smoking cessation and systems change through a contract with MTCP.

The National Tobacco Cessation Collaborative (NTCC) aims to improve the nation's health by increasing successful cessation among tobacco users in all U.S. populations through collaborative efforts and programs. Their website provides information on numerous on-line and in-person training opportunities for smoking cessation training, as well as certification programs for tobacco treatment specialists.[15] NTCC is supported by the nation's leading funders of tobacco control research and advocacy: the American Cancer Society, American Legacy Foundation, Centers for Disease Control and Prevention, National Cancer Institute, National Institute on Drug Abuse and Robert Wood Johnson Foundation.

The Connecticut Certification Board, a state body that currently certifies Alcohol and Drug counselors is having discussions related to creating a Tobacco Treatment Specialist certification.[16]

Cost/Benefit Analysis: The effectiveness of TUC is well documented. Increasing the places where TUC is available and the number of persons who can provide it will vastly increase the potential for smokers to quit. Combining this training with systems changes increases the rate of attempts for tobacco use cessation. Any reduction in smoking has a lifetime of savings, and tobacco dependence treatment can prevent the development of even more costly chronic diseases.

Recommendation #6: Make the business case for smoking cessation benefits for employees.

Background: Cigarette smoking is highly prevalent in the United States, and the adverse effects of cigarette smoking have a heavy impact on employers. Employers assume the costs of health care, disability, and lost work time for employees who smoke. Due to the cost-burden of smoking on employers, providing smoking cessation benefit coverage for employees can be extremely valuable.

For businesses, making an investment in tobacco cessation benefits not only improves employee health but also reduces the significant direct and indirect costs associated with tobacco use. In fact, paying for tobacco use treatment is regarded as the single most cost-effective health insurance benefit for adults and it is also considered the benefit with the most positive impact on health.[17]

Literature has demonstrated that smoking among employees can have a significant cost impact on employers with respect to lost productivity and increased health care costs.

- The CDC estimates that the average smoker costs an employer $3400 per year in smoking-attributed lost productivity and direct medical costs. However, reports show that only 4% of employers provide a comprehensive program.
- A 2007 study by Halpern and colleagues analyzed the impact of smoking cessation benefits on workplace costs and employee quit rates.[18]
- Smoking cessation benefit coverage yielded a greater number of successful quit attempts and a decreased rate of smoking-related diseases. Cost savings (reduced health care and workplace costs) over 4 years exceeded the cost of the smoking cessation benefit

Blue Cross and Blue Shield of Minnesota and Kaiser Permanente Northwest have each developed models for calculating the Return On Investment of tobacco cessation services.

Cost-Benefit Analysis: Scotts Miracle-Gro Company is a model for smoke-free workplaces tied to smoking cessation benefits. It is the world's largest marketer of branded consumer products for lawn and garden care, with a workforce of 6,000 employees and $2.9 billion in annual sales. The company's CEO cited the rising cost of healthcare coverage and the desire to have a healthy workforce as reasons for a tobacco-free workplace policy. The employer was willing to provide all cessation assistance necessary to provide assistance necessary for the employee to break their nicotine addiction[14]

B. PREVENTION: Reduce the health and economic burden of tobacco use by:

- Preventing young people from starting to smoke
- Helping current smokers to quit
- Protecting children and adults from secondhand smoke
- Identifying and eliminating tobacco-related disparities
- Shaping social norms related to tobacco use.

PREVENTION OF SMOKING INITIATION

Recommendation #7: Require age-appropriate life skill education in grades K-12 in Connecticut that address anti-tobacco education, drug and alcohol use prevention, nutrition, stress management and exercise.

- Incorporate life skill education within existing science, mathematics, social studies and language curriculum.
- Emphasize high-risk youth behavior and cultural factors that lead to addictive or unhealthy behavior.
- Initiate a health and wellness curriculum for K-12 students in Connecticut that would incorporate risk factor and behavioral training that is consistent with Sustinet priorities.
- Add no tobacco use to substance-free pledges by student athletes.

PREVENTION OF SECONDHAND SMOKE EXPOSURE: Eliminate the exposure to Secondhand Smoke where people work, live and play

Recommendation #8: Pass legislation that prohibits smoking in all workplaces including restaurants, bars and in public places and eliminate availability of smoking rooms in workplaces. Eliminate small business exemption and smoking room option.

Background: Breathing in secondhand smoke (SHS) is similar to the mainstream smoke inhaled by the smoker in that it is a complex mixture containing many chemicals (including formaldehyde, cyanide, carbon monoxide, ammonia, and nicotine). Many of these are known carcinogens. Exposure to secondhand smoke increases the risk of developing heart disease 25-30% and contributes to between 22,700 and 69,600 premature deaths from heart disease in non-smokers each year. According to the U.S. Surgeon General, eliminating indoor smoking is the only way to fully protect non-smokers from SHS. Connecticut enacted landmark legislation that prohibited smoking in workplaces and public places in 2003 and added bars in 2004. Although the Connecticut law is 100% smoke free in restaurants and bars, the smoking prohibition does not apply to workplaces with fewer than five employees.[3]

The U.S. Small Business Administration (SBA) maintains data for firms by workforce size. In Connecticut, there are approximately 35,000 firms with 1 to 4 employees, or slightly more than 74,000 employees subjected to smoke in the workplace up to 8 hrs. or more every day. 3 Every employee in

Connecticut deserves the right to a smoke-free workplace. As of January 10, 2010, there are 21 states (including Washington, D.C. and Puerto Rico) that have state laws that prohibit smoking in all workplaces, including restaurants and bars, as well as public places.

Connecticut participated in an optional module to the 2008 Behavioral Risk Factor Surveillance System (BRFSS) survey on health conditions and health risk behaviors that accessed SHS exposure at work and in the home as well as home smoking rules. Among Connecticut non-smoking participants, 6.4% reported that they were exposed to SHS inside their indoor workplace. Results of indoor workplace exposure varied widely among states, ranging from 3.2% in Arizona, a state with a 100% smoke free workplace law to 10.6% in West Virginia, a state with no smoke free workplace law. The legislature needs to make Connecticut a 100% smoke free workplace state to protect all our workers from the health effects of SHS.

Health and Cost Benefits: Smoke-free policies have also been found to prompt some smokers to quit smoking. And a number of studies have documented the positive health effects of smoke-free laws. Nine studies have reported that smoke-free laws were associated with rapid, sizeable reductions in hospitalizations for acute myocardial infarct (AMI) or heart attacks. The Pueblo Heart Study examined the impact of a smoke-free ordinance in Pueblo, Colorado. During the 18 months following the implementation of the ordinance, they documented a 27% decrease in the rate of AMI hospitalizations (Phase 1). Over the next 18 months the rate of AMI hospitalizations continued to decrease, with a demonstrated decline of 19% from the post-implementation study and a 41% decline from the pre-implementation period. These findings suggest that smoke-free policies can produce sustained reductions in AMI hospitalizations and that these policies are important in preventing morbidity and mortality associated with heart disease.[3]

Recommendation #9: Ban the sale of E-Cigarettes and other non traditional nicotine delivery devises that are not sanctioned as NRT. Develop a system to review other new products prior to their introduction and acceptance for sale in Connecticut.

- Ban Hookah Bars/Parlors in Connecticut.
- Open Indoor Clean Air Act for review.

Background: Regulation of other nicotine-based products: The tobacco industry is constantly creating and marketing new tobacco-based products.

These include e-cigarettes, Orbs (tobacco containing drops similar to Tic-Tacs), tobacco strips, etc. There is no mechanism in the current Clean Indoor Air Act to regulate or ban these products. There is a need to amend the Connecticut Clean Indoor Air Act to review new products prior to their introduction for sale and ban all non-traditional nicotine delivery systems that are not FDA-approved as nicotine replacement therapies. We cannot rely on the FDA to do so.

Ban Hookah Parlors/Bars in Connecticut: Hookah or water pipe smoking has been practiced for at least 400 years. Hookah is known by a number of names, including narghile, argileh, shisha, hubble-bubble, and goza. Over recent years there has been a resurgence of use, most notably among youth. Small cafes and clubs that rent the use of hookahs and sell special hookah tobacco are making their mark on the young, hip, urban scene and college students. Hookah tobacco is available in a variety of flavors, such as apple mint and cappuccino. Smoking is usually practiced in groups, with the same mouthpiece. Water pipes generally consist of four main parts: the bowl where the tobacco is heated; the base filled with water or other liquids; the pipe that connects the bowl to the base; and the hose and mouthpiece through which smoke is blown.

Even after it has passed through water, the smoke produced by hookah contains high levels of toxic compounds, including carbon monoxide, heavy metals and cancer-causing chemicals. Due to the mode of smoking, hookah smokers may absorb higher concentrations of the toxins found in cigarette smoke. A typical 1-hour smoking session involves inhaling 100-200 times the volume of smoke inhaled with a single cigarette. Hookah smokers are at risk of the same kinds of diseases caused by cigarette smoking, including oral cancer, esophageal and gastric carcinoma, lung cancer, reduced pulmonary function, and decreased fertility. Sharing a hookah may increase the risk of transmission of certain infectious diseases, including tuberculosis, viruses such as herpes or hepatitis, and other illnesses.

The language used in state laws regulating smoking in public places determine whether hookah would be covered or not. For example, Delaware law addresses "the burning of a lighted cigarette, cigar, pipe or any other matter or substance that contains tobacco." However, the language in some states could actually exempt hookah bars or cafes. This may be the case in Connecticut where a test case is currently before the Department of Public Health.

Recommendation #10: Encourage adoption of Healthy Home Concept of no smoking policies in homes.

Background: Second-hand smoke (SHS) has a negative impact on the health of children. Almost 60 percent of U.S. children aged 3-11 years are exposed to secondhand smoke. Children exposed to secondhand smoke are at a greatly increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma. Many children and non-smokers are exposed to SHS because they live with a smoker. In 2008, five percent of non-smokers in Connecticut were exposed to second-hand smoke in their homes.

The latest Surgeon General report found children are the only population group not to have seen significant progress in being protected from secondhand smoke.[19] Secondhand smoke is a carcinogen, for which there is no 'risk-free" level of exposure. Research now indicates exposure to third hand smoke, by definition the toxins, odors, and residues that remain on clothes, furniture and hair long after the cigarette has been extinguished, is extremely dangerous as well. A home is not a healthy home unless it is a smoke free home. While the government regulates several environmental health hazards that may be found in the home, including lead, mold and asbestos, smoking behavior remains unregulated (by the government) in housing. By eliminating smoking in multiunit housing, landlords are eliminating the number one causes of preventable death in the place people, especially children and elderly spend the majority of their time. Equally important, a 2010 report published by the Department of Housing and Urban Development (HUD), notes more than 7 million people live in public housing in the United States, with 4 in 10 units occupied with families with children.[20]

This recommendation focuses on developing voluntary approaches in partnership with owners and residents to reducing secondhand smoke in multi-housing units, condominiums, apartments, assisted living facilities, group homes, public housing and shelters. There is no 'one-sized fits all' approach to policy adoption. It is important that landlords adopt policies that meet the needs of their property and their tenants, whether that is to ban smoking in the indoor of the building, provide designated smoking areas, or ban tobacco use completely from the confines of their property.

While there may be opposition from the general public, policymakers and pushback because of the fear of violating first amendment rights of the smoker, it is important to understand smokefree policies are not designed to be punitive, or prohibit smoking, but are intended to encourage smokers to

smoke in locations outside for the safety of the property and the health of all occupants. In cases where smokefree polices have been adopted throughout the country, it has been shown that "pre-policy" anxiety far outweighs the reality of those concerns as the vast majority of residents want to live in a smokefree environment.

Health and cost benefits: There are several benefits to adoption of such voluntary policies.

- Reduction in the number of families and individuals involuntarily exposed to secondhand smoke
- Reduction in the number of smokers
- Reduction in the number of tobacco smoke-related complaints in multi-housing unit or complex
- Reduction in hospital stays for asthma, bronchitis, respiratory illness in complex
- Reduction in ED visits for asthma, bronchitis, respiratory illness in complex
- Savings to landlords in turnover costs associated with smoking indoors
- Reduction in fire risks associated with smoking materials

Smokefree housing policies are a long term, high complexity issue. However, there are considerable long-term savings in reduced health care and housing costs, improved health outcomes and quality of life. Nationwide, 65-85% of tenants report a desire to live in a smoke-free environment, and landlords can save an average of $3,000 on a turnover unit where smoking is prohibited. Policy adoption is a win-win situation for landlords and tenants; it is the way the message is conveyed that is the most intrinsic for a successful implementation of a smoke-free housing campaign.

On July 17, 2009, the U.S. Department of Housing and Urban Development (HUD) strongly encouraged Public Housing Authorities (PHAs) to implement non-smoking policies in some or all of their public housing units. Attachment A contains a list of the evidence-based policies implemented by the federal government and other states.

Recommendation #11: Require school districts to establish and maintain no tobacco use policies on school grounds and school events (including day-care, K-12 and college /university settings).

Background: There are no uniform policies for schools in Connecticut regarding tobacco use on school grounds and at school events. While all elementary schools have no smoking policies for students within the school, smoking on the grounds varies and may not be well enforced. Many of our colleges and universities allow smoking on the grounds and in dormitories. School and college/university properties are used for many after school and non-education events (e.g., after school care, sports events, etc.). Smoking should be banned at such events.

All Connecticut schools must be committed to providing a healthy environment for their students and staff. Therefore, a minimum standard set of no tobacco use policies need to be implemented that prohibits tobacco use on school grounds at all times and at all school sponsored events on or off school grounds. Schools may also create policies that are stronger than the minimum set.

The Department of Public Health in concert with the State Department of Education will need to draft standardized polices. School employees and school boards may oppose the policy because it involves no tobacco use at all times on school grounds, even after minors have left school for the day. Some expected outcomes of adopting a uniform no tobacco use policy on school grounds include:

A majority of schools across the state will be implementing the standard policies.

C. POLICY/ENVIRONMENT: Update, adopt, implement ,fund and sustain a Comprehensive Tobacco Prevention and Control Plan as recommended by the Centers for Disease Prevention and Control.

Recommendation #12: Update, adopt, implement, fund and sustain the *Connecticut Tobacco Use Prevention and Control Plan*.

- Document the return on investment for sustaining proper funding for tobacco prevention and cessation programs to educate the legislative and executive branch on this issue.
- Require appropriate funds received from MSA and Tax revenue from tobacco sales be applied to a sustainable comprehensive tobacco control

program (CDC currently recommends $43 million annually for such programs).

- Provide sustained funding for anti-tobacco media programming that incorporates evidence-based strategies and current technologies including social marketing.
- Partner with community-based organizations including the faith-based organizations to reach high risk populations.
- Provide sustained funding for anti-tobacco media programming that incorporates evidence-based strategies and current technologies including social marketing.
- Partner with community-based organizations including the faith-based organizations to reach high risk populations.

Background: In 1998 Connecticut was one of 46 states to settle lawsuits against the four major tobacco companies. Under this agreement states will receive annual payments in-perpetuity. In the first twenty-five years alone states will receive $246 billion from the Tobacco Master Settlement with Connecticut's portion $3.6 to $5 billion (approximately $175 million per year). At the time, public health advocates and the Attorneys General expected that a substantial portion of these funds would be used for tobacco prevention and treatment programs. Unfortunately, that has not been the case in most states.

The Centers for Disease Control and Prevention first published *Best Practices for Comprehensive Tobacco Control Programs* in August, 1999, shortly after the historic settlement with the American tobacco industry. An updated edition was released in October, 2007. This comprehensive approach that optimizes synergy through a mix of educational, clinical, economic, regulatory, and social strategies has become the principal standard for eliminating the health and economic burden of tobacco use. Evidence for the effectiveness of comprehensive programs has greatly increased with the growth in state capacity and a focus on proven interventions. CDC recommends five components of a comprehensive tobacco program: State and Community Interventions, Health Communication Interventions, Smoking Cessation, Surveillance and Evaluation and Administration and Management. In their 2007 Best Practices Guidelines, CDC provides state-by-states recommendations for how much funding should be spent for each component for successful outcomes. [1] To that end, an updated comprehensive Tobacco Use and Control Plan is necessary to direct and coordinate state efforts to

prevent initiation, increase cessation and advocate for effective policies and laws. This comprehensive plan should also combine educational, clinical, regulatory, economic, and social strategies.

A comprehensive statewide tobacco control program is a 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. This comprehensive approach combines educational, clinical, regulatory, economic, and social strategies. Research has documented the effectiveness of laws and policies in a comprehensive tobacco control effort to protect the public from secondhand smoke exposure, promote cessation, and prevent initiation, including increasing the unit price of tobacco products and implementing smoking bans through policies, regulations, and laws; providing insurance coverage of tobacco use treatment; and limiting minors' access to tobacco products. Additionally, research has shown greater effectiveness with multi-component intervention efforts that integrate the implementation of programmatic and policy interventions to influence social norms, systems, and networks.[1]

Community-based interventions focus on 1) prevention of initiation among youth and young adults, 2) promoting quitting among adults and youth, 3) eliminating exposure to secondhand smoke, and 4) identifying and eliminating tobacco-related disparities among population groups. Health communication interventions can be powerful tools for promoting and facilitating smoking cessation, preventing smoking initiation and shaping social norms related to tobacco. Traditional health communication and counter-marketing strategies use multifaceted efforts, including paid TV, radio, print, billboard, and web-based advertising, on-line networking, and media. Campaigns as early as 1999 demonstrated the effectiveness of anti-tobacco advertisements to affect smoking attitudes and beliefs.1

CDC compiled "best practices" to help states organize their tobacco control program efforts into an integrated and effective structure. The 2007 guide included state by state recommended funding levels for each program component. These recommended levels of annual investment factor in state-specific variables, such as the overall population; the prevalence of tobacco use; the proportion of the population that is uninsured, receiving publicly financed insurance, or living at or near the poverty level; infrastructure costs; the number of local health units; geographic size; the targeted reach for Quitline services; and the cost and complexity of conducting mass media to reach targeted audiences, such as youth, racial/ethnic minorities, tobacco users interested in quitting, or people of low socioeconomic status.[1]

In Connecticut, CDC recommends an annual spending rate of $12.54 per capita ($43.9 million) for Comprehensive Tobacco Programs. Table 2 lists total funding to date from the Tobacco and Health Fund Trust.

The legislature established the Tobacco and Health Trust Fund (THTF) in 1999 and created a Board of Trustees in 2000. It directed the transfer of $12 million annually from the Tobacco Master Settlement dollars into the THTF to create a continuing, significant source of funds to encourage the development of programs to reduce tobacco abuse, to reduce substance abuse and to meet the unmet physical and mental health needs of the state. Initially, the THTF Board was only authorized to recommend expenditure of the interest earned on the fund principal. In 2008, the legislature amended this authority to allow expenditure of half (up to $6 million) of the previous year's transfer from the Master Settlement to the THTF. Since its inception through FY2011, the THTF will have received $153 million and $114 will have been transferred out.[1] The legislature transferred $81.1 million back into the General Fund and another $38 million to other programs and services. In fact, the THTF Board of Trustees has only been allowed to spend $9.2 million from the fund on tobacco prevention and control programs. The majority of the Trust Board expenditures (74%) were authorized in FY09 and FY10 (Table 2). [3,10] The constant raids on the Trust Fund have left the fund with a balance of just $5.2 million after the FY10 allocations. The current budget calls for additional transfers from the fund and it is likely the fund will be extinguished by the end of the biennium. The THTF dollars spent on tobacco prevention and control represent nearly all of the funds supporting anti-tobacco activities in Connecticut, and collapse of the fund would be a serious blow to anti-tobacco goals. During the 2010 legislative session, the legislature swept the remaining $5 million from the THTF principal balance for mitigation of the FY2010 budget.[3, 10, 21]

Table 2: Tobacco and HealthTrust Fund Board Disbursements FY03 – FY09

Category	*FY03 -FY08*	*FY09*	*FY10*	*Total*
Counter Marketing	$450,000	$2,000,000	$1,650,000	$4,100,000
Website Development	$50,000			$50,000
Cessation Programs (Community-Based)	$1,500,000	$412,456	$750,000	$2,662,456
Cessation for Mentally Ill		$1,200,000	$800,000	$2,000,000
Quit-line	$287,100	$2,000,000	$1,650,000	$3,937,100
School-Based		$500,000	$500,000	$1,000,000
Lung Cancer Pilot		$250,000	$250,000	$500,000
Evaluation		$500,000	$300,000	$800,000
Innovative Programs			$477,745	$477,745
Total	**$2,287,100**	**$6,862,456**	**$6,377,745**	**$15,527,301**

States that have made larger investments in comprehensive tobacco control programs have seen cigarette sales drop more than twice as much as in the United States as a whole, and smoking prevalence among adults and youth has declined faster as spending for tobacco control programs increased. In Florida, between 1998 and 2002, a comprehensive prevention program anchored by an aggressive youth-oriented health communications campaign, reduced smoking rates among middle school students by 50% and among high school students by 35%. Other states, such as Maine, New York, and Washington, have seen 45% to 60% reductions in youth smoking rates with sustained comprehensive statewide programs.[16-18] Between 2000 and 2006, the New York State Tobacco Control Program reported that the prevalence of both adult and youth smoking declined faster in New York than in the United States as a whole[1] Adult smoking prevalence declined 16% and smoking among high school students declined by 40%, resulting in more than 600,000 fewer smokers in the state over the 7-year intervention period.

According to the American Cancer Society (ACS), even by the most conservative estimates, more than 40% of the reduction in male cancer deaths between 1991 and 2003 was due to the declines in smoking over the last half of the 20th century. Before cigarette smoking became common, lung cancer was a rare disease. Now lung cancer is the leading cancer cause of death for both men and women, killing an estimated 160,000 people in this country each year.20 ACS estimates that approximately 87% of these deaths are caused by smoking and exposure to secondhand smoke. Additionally,

more than 100,000 deaths from lung diseases, and more than 140,000 premature deaths from heart disease and stroke are caused each year by smoking and exposure to secondhand smoke. Research shows that the more states spend on sustained comprehensive tobacco control programs, the greater the reductions in smoking—and the longer states invest in such programs, the greater and faster the impact.[12] In California, home of the longest-running comprehensive program, smoking rates among adults declined from 22.7% in 1988 to 13.3% in 2006. As a result, compared with the rest of the country, heart disease deaths and lung cancer incidence in California have declined at accelerated rates. Among women in California, the rate of lung cancer deaths decreased while it continued to increase in other parts of the country. Overall, from 1987–1998, approximately 11,000 cases of lung cancer were avoided. Since 1998, lung cancer incidence in California has been declining four times faster than in the rest of the nation.[1]

Since FY2000, Connecticut has received about $1.3 billion from the tobacco settlement, but less than two percent of that money has been used for programs aimed at reducing smoking or targeted toward anti-tobacco advertising and other efforts. Instead, 86 percent of the Tobacco Settlement funds ($1.1 billion) have been used for unrestricted spending in the General Fund.[3,10,21] At $3.00 per pack, Connecticut state taxes on cigarettes are among the highest in the nation. For FY 2010, the Campaign for Tobacco Free Kids reported estimated cigarette tax revenues of $377.9 million and master settlement revenue of $141.3 million, with only $7.2 million spent on tobacco prevention and control.

From 2000 through 2009, the state received $1.3 billion in tobacco settlement money and $2.36 billion in cigarette tax revenues, for a total of $3.655 billion. However, they have spent only $18.3 million (6.75%) on tobacco prevention and control.[22] Prudent use of some of these revenues to fund a comprehensive tobacco prevention plan would result a many-fold return on investment in a very short time, and save countless lives and billions of dollars in the long term.

D. POLICY/ENVIRONMENT: ENFORCEMENT

Recommendation #13: Pass tax parity on all other tobacco products and insure any future tobacco tax increases include all tobacco and tobacco-related products.

Background: There is currently no parity between cigarette and loose tobacco products in Connecticut. Taxes on loose tobacco are considerably lower and have not changed in many years. Legislation introduced in the

2010 legislative session (SB 543) would have changed the tobacco products tax on non-cigarette smoking tobacco, including pipe and roll your own tobacco, from 27.5% of the wholesale price to 15 cents (150 mills) per 0.0325 ounces.

Benefits: This would make the non-cigarette tax equal to the tax rate on cigarettes. Approximately 460,000 ounces of roll-you-own and pipe tobacco are sold each year in Connecticut. In addition to reducing the smoking of loose tobacco, this increase would generate approximately $1.3 million per year in addition tobacco tax revenue.

Recommendation #14: Redirect revenues generated through enforcement of youth tobacco access laws under CGS§12-295a(c) and CGS §53-344. (b) for tobacco prevention services concerning merchant and community education and administrative hearings.

- Increase the number of Department of Revenue Services administrative hearing officers to ensure full enforcement of the current laws.
- Mandate merchant education for first time violators that sell tobacco to minors instead of the imposed fine.
- Make merchant education compulsory for second time violators that sell tobacco to minors in addition to the imposed fine and pay for the training.
- Suspend the licenses for tobacco dealers that fail to pay imposed fines under CGS §12-295a(c).
- Require mandatory merchant education before a suspended licenses is activated under CGS §12-295a(c).

Background: Currently, levies collected for criminal infractions and administrative fines go into the general fund. In July 1992, Congress enacted the Synar Amendment as part of the Alcohol and Drug Abuse and Mental Health Administration Reorganization Act (P.L.103-321). The Synar Amendment is aimed at decreasing access to tobacco products among individuals under the age of 18 by requiring states to enact and enforce laws prohibiting any manufacturer, retailer, or distributor from selling or distributing tobacco products to individuals under the age of 18. States are in compliance when the rate of sales to minors occurs at less than 20% of all outlets. The Synar Amendment further defined state requirements for conducting unannounced inspections of a random sample of tobacco vendors, to assess their compliance with the state's access laws and filing an annual

report. Each state must submit an annual report to the Secretary of Health and Human Services describing that year's enforcement activities, the extent to which the state reduced the availability of tobacco to minors, and a strategy including a time frame for achieving and maintaining a retailer violation rate (RVR) of no greater than 20 percent. A state that does not meet its targeted reduction is penalized 1 percent of its federal Substance Abuse Prevention and Treatment (SAPT) block grant funds for each percent it is over the 20 percent minimum threshold. Applying the above referenced recommendations will ensure that tobacco merchants who fail compliance inspections will receive training and education so the State of Connecticut can achieve and maintain a RVR in accordance with prescribed federal mandates.

Due to a lack of administrative hearing officers the Department of Revenue Services (DRS) issued 340 warning letters to first time violators under the CGS §12-295a in FY 2009, instead of imposing an administrative fine of $300. (The Connecticut Annual Synar Report, FFY 2010, Department of Mental Health and Addiction Services.) This represents a loss of $102,000 in possible revenue collections in 2009. In the last five years, following this current protocol, DRS has forfeited well over one half million dollars in possible revenue collections. The fines imposed do not represent the actual fines collected due to the lack of additional administrative action (i.e., license suspension/revocation) against the license holder who failed to pay the fine. The Department of Mental Health & Addiction Services' Summary Report on Underage Sale of Tobacco 2009 indicates that 160 infractions under CGS §53-344a were issued by police agencies through their Police Partnership Program. This represents additional potential revenue collection by Judicial Branch's Centralized Infractions Bureau of $40,000.

To redirect these revenues to support tobacco enforcement activities within DMHAS, Judicial Branch Centralized Infractions Bureau and the Department of Revenue Services would be required to deposit collected criminal and administrative fines into tobacco merchant and community education fund. The Department of Mental Health & Addiction Services in collaboration with the Department of Revenue Service and the Department of Public Health would augment existing merchant and community education services for individuals who are required to pay fines and those who opt for training. Tobacco retailers might oppose this recommendation because it will require them and/or their employees to take time from their stores to attend training. Failure by the license holder to pay a fine or penalty within a reasonable time period would be grounds for immediate suspension of a license to sell tobacco products.

Fully enforcing current laws would increase resources for merchant and community education. More merchants and retail clerks trained on how to prevent tobacco sales to minors would result in reducing youth access to tobacco. Trained merchants and reduced youth access would lower the RVR, which would not jeopardize block grant funding. Enhanced prevention enforcement activities would better position Connecticut for future funding under the Family Smoking Prevention and Tobacco Control Act. This law, passed in 2009, gave the Food and Drug Administration authority over tobacco products and advertising.

Recommendation #15: Provide voluntary cessation services for youth who are fined under the §53-344.(c) for possession of tobacco.

Background: Approximately 48,600 middle and high school students in Connecticut used some form of tobacco on at least 1 of the 30 days prior according to the Department of Health's 2007 School Health Survey. In October 2008 the youth tobacco possession law came into effect, and according to the Judicial Branch 246 youth were ticketed under this law in 2009. Minors are issued a $50.00 fine for a first time offense of possessing tobacco products and up to $100.00 for each subsequent offense within 18 months. The statute fails to address or provide a tobacco use cessation option. Currently, there are no requirements to provide cessation services to youth who are tobacco use dependent. Youth fined under this law should receive information about cessation services so they can easily access resources to quit using tobacco products. This preventative measure will reduce the number of youth that could develop tobacco dependency as adults by increasing cessation opportunities. Providing cessation services for youth with tobacco dependencies will ultimately reduce the health care costs associated with the treatment of tobacco related illnesses.

The data received from the Judicial Branch does not indicate previous violators or the final disposition/outcome of the cases. Assuming all tickets were issued to first time violators, potentially $12,300 went into Connecticut General Fund as a result of enforcement of this law during the 2009 calendar year.

Operationalizing this recommendation would require infractions information be shared with the Department of Public Health, who in coordination with the Department of Mental Health and Addiction Services and State Department of Education would develop a process for referring these youth violators to school or community tobacco cessation programs. Municipal Police agencies may oppose this recommendation as they may consider it a burden on current work demands. Expected outcomes include an increase in the number of: youth

who access cessation services; an increase in quit attempts by youth who participate in cessation programs will increase; and an increase in community resources available to youth in preventing tobacco addition will also increase.

Current cessation programs need to build their capacity on how to provide cessation services to meet the needs of youth tobacco users. School resource officers, community social service providers, youth services agencies, along with prevention and health care professionals will need training on youth targeted cessation services. The Department of Public Health and the Department of Mental Health and Addiction Services will be instrumental in implementation of this type of targeted training. These services are expected to be of a long term, low complexity nature that will utilize preexisting agencies and best practices tobacco cessation programs for minors.

E. POLICY/ENVIRONMENT: RETAIL SALES

Recommendation #16: Urge the FDA to expand access to over the counter (OTC) nicotine reduction therapies (NRT) and support similar initiatives in other states.

Background: In order to expand access to nicotine reduction products (NRTs) a suggestion of the Tobacco Task Force is to allow non prescription NRTs to be sold by retailers licensed to sell other OTC medication. It is also suggested that OTC NRTs be made available in smaller pack sizes vs. the two week supply currently available.

In January 2008, Richard Daines, the New York State Commissioner of Health, submitted a citizen's petition to the Secretary of DHHS and the Food and Drug Administration requesting expansion of the availability of nicotine replacement therapy to consumers who use tobacco. In August 2008, the FDA responded that they had not reached a decision in regard to this issue. It is time to pursue a decision in this matter.

The current restrictions on selling non prescription NRTs and the pack size are based on FDA requirements.

Health Benefits

Broader access to NRTs in local shopping settings.

No Economic Burden is foreseen.

Any pack size change is the cost of the manufacturer of the product

Recommendation

The Task Force recommends that state officials, such as the AGs office, send letters urging the FDA to take up this topic and expand access to OTC NRTs.

Recommendation #17: Prevent youth access to tobacco products by restricting new cigarette licenses and reducing current cigarette license renewals

- Eliminate all vending machines by April 2011
- Eliminate renewals and new licenses to all Bars and Restaurants by October 2011
- Eliminate renewals and new licenses to all Drug Stores by January 2012
- Eliminate Mass Merchants and Supermarkets / Grocery Stores over 3000 square feet by July 2012
- Determine if there are any other locations that have licenses that are deemed inappropriate.

Background: Controlling youth access to tobacco products is an important aspect of reducing youth tobacco use. DMHAS is charged with the responsibility of monitoring licensed tobacco merchants to ensure they are enforcing limitations on youth access. There are currently 3 inspectors for over 4000 licensees. On average, a licensee will have a compliance check at least every 18 months with those that have failed previous compliance checks receiving them more frequently.

The 2009 SYNAR report indicated that less than 10% of Connecticut tobacco merchants failed compliance checks. These are great numbers that need to be maintained or improved to ensure continued federal block grant funding from SAMHSA for a range of prevention and treatment programs.

To ensure that annual inspections are conducted, the number of licensees should be reduced. Family oriented merchants and food establishments would be phased out over time. For example, the City of Boston no longer allows drug stores to hold tobacco merchant licenses.

As of March 4, 2010 there were 4,239 recorded licensed tobacco merchants. This information is updated on the 25th of each month by the keeper of the records which is the tobacco licensing agency in the Department of Revenue Services.

The licensees are not sorted by type of establishment on the web site. As of March 4, 2010, DMHAS had identified 90 vending machine locations and 4,149 over the counter locations. Licensed tobacco merchants in the state include:

- 180 chain supermarkets
- 80 independent supermarkets over 3000 sq ft
- 300 chain drug stores
- 25 independent drug stores
- 32 large "big box" retailers
- 90 vending machine locations, many of these are in bars, cafes, deli's pizzerias, golf courses, auto repair / cleaning sites
- 25 check cashing sites – possibly vending sites
- several low price variety stores

Table 3 indicates current license fee revenue and estimates of changes if renewal fees are increased and if the number of licenses is reduced:

Table 3: Estimated Effects of Changes Tobacco Merchant License Volume and Renewal Fees

	Jul-10	*Jul-12*	*Oct-11*	*Jul-12*
Policy Change	Current	Current fee, fewer licenses	Increased fee, fewer licenses	Increased fee, fewer licenses
Total Licenses	4,239	3,132	3,749	3,132
License Renewal Fee	$50	$50	$75	$100
Total Revenue	**$211,950**	**$156,600**	**$281,175**	**$313,200**
Change +/(-)		($55,350)	$69,225	$101,250

Economic Impact: Neutral to slight gain in revenue. As proposed there will be a slight revenue gain of $101,500 once fully implemented by July 2012. This does not call for any "grandfathering" under current law.

Recognizing the concerns from all retail sectors about lost income source and concerns over more regulations, the following recommendation is offered to address those issues to ensure that the retail sector remains competitive and vital in the state of Connecticut.

Recommendation #18: Support the Connecticut Fair Trade Law which helps counteract manufacturer trade discounting and encourage an increase to keep a viable and competitive retail economic sector to Connecticut's economy.

Background: Cigarette price increases reduce the demand for cigarettes and thereby reduce smoking prevalence, cigarette consumption and youth initiation of smoking. Fair Trade laws were established by states in the 1940's to protect tobacco retailers from predatory business practices. The laws require adding a minimum percentage markup to the manufacturer's list price at the wholesale level and again at the retail level.

Cigarettes rank as the largest category by share of sales in convenience stores, contributing on average 32.9% of inside dollars in 2008 as stated in the NACS SOI report. Cigarettes are the third contributor to gross margin dollars / profits for convenience stores. OTP (other tobacco products) contributed 11.9% to inside sales making it the sixth highest sales category.

Economic Burden: In Connecticut, both the wholesaler and retailers are struggling with profitability as the consumption of cigarettes continues to decline. The cost of doing business in Connecticut is considerable and the loss of revenue in this area is causing higher costs/retails on non tobacco products to make up for the losses. The Task Force supports an increase to both the wholesaler and retailer minimum markups (amounts to be determined).

Massachusetts, recognizing that the retailer was the front line in preventing youth access sales, opted to increase their minimum markup over 10 years ago to help the retailer make up for lost revenue.

Health Benefits: Further reduction in demand and a higher threshold to prevent young smokers from starting.

Cost: This increase would reduce the excise tax collection on cigarettes. There would be a slight increase in sales tax collected. All depends on the percentages established. Today, the state of Connecticut has an excise sales tax of $30.00 per carton. The retailer lags behind this making approximately $8-$9 per carton – this profit on reduced demand is not allowing retailers to cover increases in medical benefits, electricity, minimum wages. The wholesaler is in the same boat with limited resources and opportunities to improve themselves and their employee's situations.

Recommendation #19: Ensure a healthy retail environment with ample competition for Connecticut citizens by offering replacement products for lost tobacco revenue for retailers.

Regulations continue to prevent retailers from expanding / replacing tobacco revenue with other viable product lines. 0

Recommendation #20: Strive to optimize FDA funding for collaboration around enforcement of youth tobacco laws

Maine and Massachusetts have received FDA funding to develop preliminary enforcement mechanisms which will be used as models for other states' efforts.

June 22, 2010 marked the first anniversary of the U.S. Food and Drug Administration's (FDA) authority over tobacco under The Family Smoking Prevention Control Act, June 22 was also the date when the agency's tobacco regulations went into effect, including a ban on the words "light" and "mild" when referring to cigarettes.

During the past year, the FDA has:

- Established the Center for Tobacco Products
- Established the tobacco user fee program, which provides funding for FDA tobacco regulation support activities
- Begun to enforce the Act's prohibition on manufacturing, distributing or selling certain flavored cigarettes, such as spice-, fruit-, and candy-flavored cigarettes
- Implemented new statutory authorities, under which tobacco product manufactures have registered their establishments and listed their products with the FDA, provided detailed information about product ingredients and their own research into the health effects of their products
- Convened a Tobacco Products Scientific Advisory Committee, which began to study the impact of the use of menthol in cigarettes on the public health

The following provisions of the Act become effective on June 22, 2010:

FDA rules that limit the sale, distribution, and marketing of cigarettes and smokeless tobacco to protect the health of children and adolescents become legally enforceable

Provisions that prohibit the advertising or labeling of tobacco products with the descriptors "light," "mild," or "low" or similar descriptors without an FDA order

Requirements that new, larger health warning labels for smokeless tobacco products begin to rotate on labels, labeling, and advertising and begin to be displayed on smokeless tobacco packaging [23]

F. POLICY/ENFORCEMENT: Surveillance

Recommendation #21: Develop a surveillance mechanism that utilizes health information developed through statewide health information exchanges and Sustinet.

- Collect and analyze data related to smoking prevalence, cessation interventions and quit rates and other parameters necessary to evaluate the utilization, efficacy and cost-effectiveness of tobacco prevention and control strategies.
- Launch a comprehensive, time-sensitive Information Technology (IT) system linking patient, medical encounter, smoking prevalence and tobacco-related morbidity.
- Maintain ongoing surveillance of targeted groups to assess effectiveness of tobacco prevention and control strategies.
- Engage health prevention experts and public health epidemiologists in development of the variables for inclusion in the electronic record to maximize its value to provide not only appropriate individual patient care, but also to use as population based surveillance tools to measure prevalence of risk factors and behaviors that contribute to and mediate disease, utilization of prevention services, including tobacco use cessation, and evaluation of their costs (and savings) as well as their efficacy.

Background: Sustinet expects to participate in developing a system for electronic health records. This will be an extensive and expensive process, as anyone who has developed major data systems is aware. Dr. Robert Aseltine, a member of the IT Advisory Committee, is currently the principal investigator for the Connecticut Health Information Network (CHIN), which would enable research with data combined across Connecticut state agencies that was previously impossible. Researchers and public health officials share an understanding of the need for health data bases that go beyond the concept of merely the standard medical record.

As part of the Health Care Reform legislation, the federal government will also be requiring information on Preventative Services and client risk factors that contribute to and mediate chronic diseases. On June 18, 2010, Secretary Sibelius announced the Prevention and Public Health Fund created by the Affordable Care Act. Included in the latest round of $250 million is $122 million for Community and Clinical Prevention. These funds will support federal, state and community prevention initiatives; the integration of primary

care services into publically funded community-based behavioral health settings; obesity prevention and fitness; and tobacco cessation.

This new interest in prevention and wellness, along with secondary and tertiary care of the individual as "patient", requires a new way of organizing information on the clients we serve in the health care setting. It is interesting that although we refer to our system of care as "health care", it has traditionally focused only on "disease care". The cost of this downstream focus has forced those who pay for this care to move the focus upstream and begin to focus on those behavioral and environmental factors that can be modified to prevent or ameliorate the disease. This focus not only saves lives, but is also more cost effective. Whatever IT system is finally developed needs to be a merger of the two approaches to increase the health of the people; preventing disease and treating it when it does occur. Additionally, it must be developed to be useful for the individual client and for population based research and surveillance that can provide long-term trend analysis to measure outcomes and costs.

A comprehensive tobacco surveillance system will provide disease control specialists and legislators necessary information about the utilization and impact of tobacco on populations, as well as the capacity to monitor tobacco industry practices.[24] The World Health Organizations (WHO), in cooperation with the U.S. Centers for Disease Control and Prevention (CDC) other stakeholders have long advocated for implementation of a Global Tobacco Surveillance System (GTSS).

This comprehensive toolkit consists of four validated and effective population survey instruments to assess tobacco use and impact that can provide national and international comparative data to assess progress reaching specific tobacco control targets.

Youth Tobacco Survey (YTS): The YTS focuses on youth aged 13-15 and collects information in schools. The YTS is a 56 item questionnaire for gathering data on individual's awareness and knowledge about smoking and environmental tobacco smoking (ETS), prevalence of tobacco use, the impact of media and advertising on youth attitudes about tobacco, youth access to tobacco products, their exposure to tobacco control curriculum in schools and the awareness and experience of young smokers about cessation opportunities.

The School Personnel Survey (SPS) The SPS surveys teachers and administrators from the same schools that participate in the YTS regarding tobacco use, their knowledge and attitudes about tobacco, availability and

student access to resources focused on the prevention and control of tobacco use by students and the , existence and effectiveness of tobacco control policies in schools.

The Health Professions Student Survey (HPSS) The HPSS is intended for advanced (e.g., 3rd year) students enrolled in Dental, Medical, Nursing and Pharmacy programs about their use of tobacco, knowledge and attitudes about smoking and environmental tobacco smoke, training received on counseling patients to stop smoking and willingness of smokers to stop.

Adult Tobacco Survey (ATS) The ATS is a household survey of adults to monitor prevalence of cigarettes and smokeless tobacco products, exposure to environmental tobacco smoke, knowledge, attitudes and perceptions about tobacco, impact of media on knowledge and perceptions of tobacco, economics of smoking and efforts by smokers to stop.

Surveillance of tobacco industry efforts to undermine tobacco control efforts is equally important. Recognizing new marketing strategies and roll out of new devices for delivery for tobacco use are critical in developing effective counter marketing and regulatory strategies.

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15 National Tobacco Cessation Collaborative

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http://www.tobaccofreekids.org/research/factsheets/pdf/0178.pdf

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Referenced and Recommend Attachments

Connecticut School Health Survey 2007

CT Judicial Branch 2009 Court Statistical Data, Centralized Infractions Bureau

List of known cessation programs:
www.ct.gov/dph/lib/dph/hems/tobacco/pdf/tobacco_use_cessation_programs_in_connecticut_2010.pdf

Centers for Disease Control and Prevention

State Cigarette Minimum Price Laws – US 2009

MMWR weekly report April 9, 2010 / 59 (13); 389-392

NACS State of the Industry Report for 2008

APPENDICES

The following documents are available at the links below and are contained in a separate compressed file titled "Sustinet Tobacco Use Cessation Task Force Report Appendices."

Appendix 1:

The Connecticut Public Health Policy Institute. Cooney, J; Cohen, J; Checko, P; et.al. **Examining Tobacco Use, Consequences and Policies in Connecticut: Smoke and Mirrors?** University of Hartford: April 28, 2010 http://enhp.hartford.edu/ctphp/pdf/Tobacco_Issue_Brief_Final.pdf

Appendix 2:

Massachusetts Department of Public Health: Massachusetts Tobacco Control and Prevention Program. **Annual Report, Fiscal Year 2009**. http://www.mass.gov/Eeohhs2/docs/dph/tobacco_control/annual_report_2009.pdf

Appendix 3:

Tobacco and Health Trust Fund Board of Trustees: **Fiscal Year 2010 Report to the Appropriations and Public Health Committees and the Connecticut General Assembly**. December 2009.

http://www.ct.gov/opm/lib/opm/secretary/tobacco/tobacco_report_fy_2010.pdf

Appendix 4:

Tragakiss,T. **Connecticut's Tobacco Windfall: A Billion Dollars Up in Smoke.** July 2009. Yankee Institute for Public Policy, Inc. Available at *www.yankeeinstitute.org/wp-content/ TobaccoStudy.pdf*

Appendix 5:

Healthy People 2020 Proposed Objectives for Tobacco Use.
http://healthypeople.gov/HP2020/Objectives/TopicArea.aspx?id=47&TopicArea=Tobacco+Use

Attachment A

Smoke Free Housing Programs

United States (Nationally): Americans for Nonsmokers' Rights: In Your Home:
http://www.no-smoke.org/goingsmokefree.php?id=101

California: Smoke-Free Apartment House Registry:
http://www.smokefreeapartments.org

Colorado: My Smoke-Free Housing: http://www.mysmokefreehousing.com

Maine: Smoke-Free Housing: http://www.smokefreeforme.org

Michigan: MI Smoke-Free Apartment:
http://www.mismokefreeapartment.org

Minnesota: Live Smoke Free: http://www.mnsmokefreehousing.org

Minnesota: Minnesota Multi-Housing Association: http://www.mmha.org

Minnesota: Minnesota Chapter of the National Association for Housing and Redevelopment Officials: http://www.mnnahro.org

Ohio: Smoke-Free Housing: http://www.ohiosmokefreehousing.com

Oregon: Smoke-Free Housing Project:
http://www.smokefreeoregon.com/housing

Utah: The TRUTH: http://www.tobaccofreeutah.org/aptcondoguide.html

The Connecticut Public Health Policy Institute

Examining Tobacco Use, Consequences and Policies in Connecticut: Smoke and Mirrors?

April 28, 2010

Research paper written by:
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Research funded by:
Universal Health Care Foundation of Connecticut

UNIVERSAL HEALTH CARE FOUNDATION of CONNECTICUT

UNIVERSITY OF HARTFORD

Examining Tobacco Use, Consequences and Policies in Connecticut: Smoke and Mirrors?

In 1982, U.S. Surgeon General Dr. C. Everett Koop wrote, "Cigarette smoking is the chief single avoidable cause of death in our society and the most important public health issue of our time."[1] These words are still applicable today. This issue brief begins with an overview of tobacco use nationally and in Connecticut, health and economic consequences to individuals and society, the process of nicotine dependence, and effective treatments. Next, national and Connecticut policies and programs are described, followed by specific costs and potential savings of implementing proven programs in the state. The issue brief concludes with a summary and recommendations for policymakers and legislators working toward reducing tobacco use in Connecticut.

An Overview of Tobacco Use

Global: Globally, there are 1.3 billion tobacco users. Overall, 47 percent of men and 12 percent of women smoke some form of tobacco. While countries such as the United States (U.S.) have seen a reduction in the percentages of adults who smoke, in many developing countries there is actually an increase in the number of smokers. For example, smoking consumption rates are climbing 4.3 percent annually in African countries.[2]

Adult Smoking Rates - U.S. and Connecticut: In the United States, smoking rates are generally calculated based upon results of a national survey administered by the Centers for Disease Control and Prevention (CDC), known as the *Behavior Risk Factor Surveillance System* (BRFSS). BRFSS data have been collected every month via telephone survey since 1984.[3]

Nationally, in 2008, the percentage of adults aged 18 years and over who were current cigarette smokers was 20.5 percent.[4] This figure has declined from 24.7 percent in 1997 and from 42.4 percent in 1965,[5] the first year for which numbers are available. These sharp reductions in adult smoking rates since 1965 are likely due to improved treatments for smoking cessation, public health efforts targeting tobacco risks and tax increases. Since 2005, however, there has not been a large decrease in smoking rates nationally.[5] This plateau may be due to a leveling off of the number of people who start smoking and in smoking quit rates,[6] and rates of funding for tobacco and smoking cessation programs.

Smoking rates vary by socio-economic status, education, age, race, and presence of psychiatric illness. Specific smoking prevalence data for the U.S. and Connecticut are presented in *Table 1: Smoking Rates – U.S. and Connecticut*. Overall, smoking rates are higher in individuals with lower income and education levels, in younger adults compared to older adults, and in individuals with psychiatric and substance use diagnoses. Nationally, the prevalence of smoking is comparable in Caucasians and African-American groups, but is lower in Hispanics.[5] However in Connecticut smoking rates are higher among Hispanics as compared to Blacks or Whites (D. Sorosiak, personal communication, September 22, 2009).

Based on data collected between 2003-2007, overall rates of smoking are higher among military veterans (27 percent) compared to non-veterans (21 percent), and are particularly high among veterans between the ages of 20 and 34 (approximately 37 percent).[7]

Smoking rates also vary across states. The Connecticut Department of Public Health (DPH) and CDC define smokers as those who smoke every day or some days and have smoked at least 100 cigarettes during their lifetime. Using these definitions, Connecticut has the 3rd lowest smoking rate of all 50 states, behind Utah and California, with nearly 16 percent of adults smoking. Similar to national trends, Connecticut smoking rates are higher in groups with lower income and lower education.[6]

Table 1: Smoking Rates – U.S. and Connecticut [a]

	United States[6]	Connecticut [b]
Percent Overall (2008)	20.6	15.9
Percent by Sex (2008):		
Male	23.1	17.3
Female	18.3	14.7
Percent by Age (2008):		
18-24	21.4	20.6
25-44	23.7	20.8
45-64	22.6	14.5
65 and older	9.3	6.1
Percent by Income (2000):		
<$35,000	28.6 [8]	24.4 [8]
>35,000	18.0[8]	16.5[8]
Percent by Education (2008) :	Age 26 or older	Age 25 or older
Less than HS degree	28.9	29.3
HS degree or GED	26.4	22.3
Some post-HS	22.8	19.2
College degree	11.4	9.1
Percent by Race/Ethnicity (2008):		
White, non-Hispanic	22.0	15.3
Black, non-Hispanic	21.3	14.3
Hispanic	15.8	23.2 [c]
Asian	9.9	3.2 [d 9]
Native American/Alaskan	32.4	NSD [e 9]

National rates of smoking are roughly comparable across the adult life span, with rates beginning to taper in older adulthood. However data from DPH (D. Sorosiak, personal communication, September 22, 2009) reveal a recent spike in smoking in Connecticut adults age 25-34 (23.8 percent) compared to all other age groups. While more males than females smoke in

[a] Current smokers are defined as persons who reported smoking at least 100 cigarettes during their lifetime and who, at the time of interview, reported smoking every day or some days.
[b] Connecticut 2008 data received from the Connecticut Department of Public Health Epidemiologist (Dawn Sorosiak, personal communication, September 22, 2009).
[c] The Hispanic population in the state of Connecticut is younger than the national average. As smoking rates are greater in younger populations, this figure should be interpreted with some caution (Dawn Sorosiak, personal communication, November, 6, 2009).
[d] Includes Native Hawaiian and Pacific Islander (2006)
[e] NSD (Not Sufficient Data)

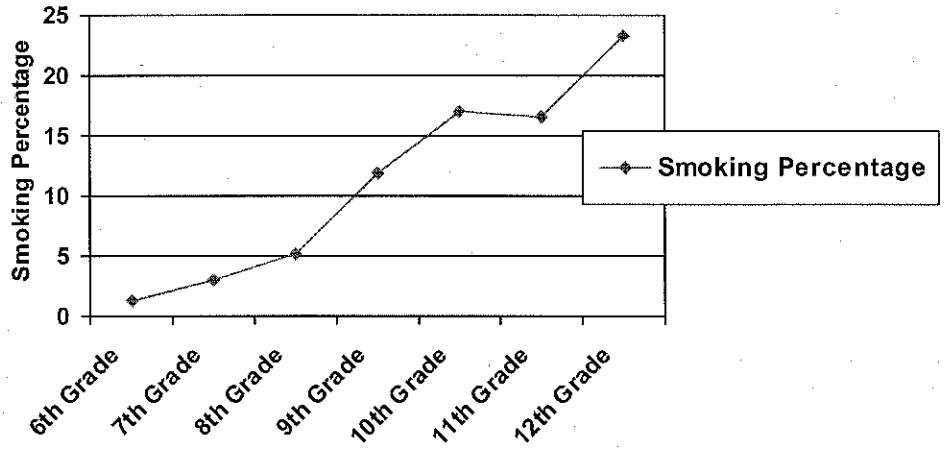
Connecticut, the difference is not great. DPH data also suggest that rates of smoking for adults 45-64 years are lower in Connecticut compared to national levels (*see Table 1: 2008 Smoking Rates – U.S. and Connecticut*).

Adolescent Smoking Rates – U.S. and Connecticut: In the U.S., approximately 6,000 people under age 18 try a cigarette every day, and every day more than 3,000 people under age 18 become daily smokers. In 1996, it was estimated that 5 million children alive at the time who were daily smokers would die from a smoking-related illness. [8]

Although rates of cigarette smoking continue to be high among adolescents, national rates among high school students decreased from 27.5 percent in 1991 when data were first available, to 20.0 percent in 2007. When smokeless tobacco and cigar-smoking are included, 25.7 percent of adolescents report current tobacco use, defined as having used tobacco on at least one day in the past 30. When asked about frequent smoking (defined as smoking 10 or more cigarettes on at least 20 of the past 30 days), 8.1 percent of adolescents self identified as frequent smokers. [10]

Similar to adults, adolescent rates of cigarette-smoking vary by age, gender, and ethnicity. Twelfth graders smoke at nearly twice the rate of 9th graders (26.5 percent vs. 14.3 percent), and males are more likely to smoke than females (21.3 percent vs. 18.7 percent). Rates of smoking are highest among white students (23.2 percent) followed by Hispanic (16.7 percent) and then black students (11.6 percent). Like adults, adolescents are also trying to quit smoking, with 49.7 percent of current cigarette smokers reporting that they had tried to quit smoking in the previous 12 months.[10]

Figure 1: Percentage of Adolescent Smokers in Connecticut

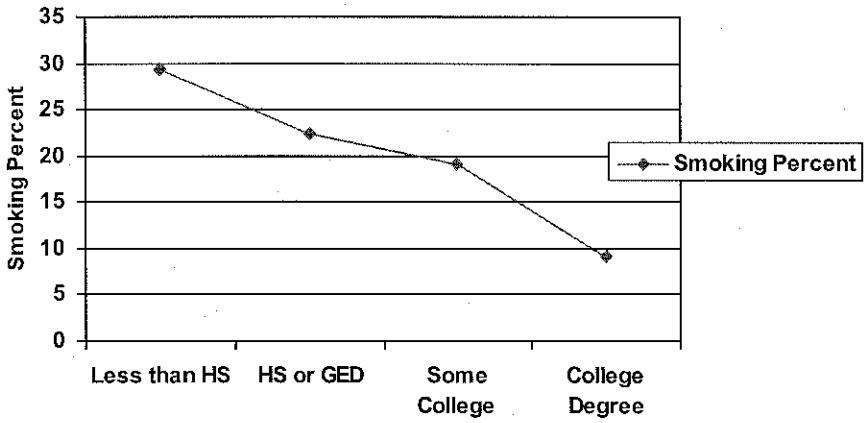


In Connecticut, cigarette smoking among high school students is slightly lower than the national average at 16.9 percent, although this difference is not statistically significant. When all forms of tobacco are included, 22.6 percent of Connecticut high school students report current use. Rates of cigarette smoking across ethnic groups are not statistically different, and rates are similar to those at the national level. Comparable to national trends, males in the state of Connecticut are more likely to smoke than females (18.6 percent vs. 15.2 percent).[11] Although rates of cigarette

smoking rise in high school, initiation can occur much earlier. Approximately 3.3 percent of middle school students in Connecticut smoke and 40 percent of current smokers initiated use before the age of 15.[12] *Figure 1: Percentage of adolescent smokers in Connecticut* provides a snapshot of increases in smoking prevalence with age.

Smoking prevalence by Type of Health Insurance Coverage: Prevalence of smoking is associated with type of health insurance coverage[13] which is also associated with level of income and education. *Figure 2: Smoking Rates by Education*, shows decreasing rates of smoking with increased education. Adults under the age of 65 with private insurance have the lowest rates of smoking (18.3 percent). Although the prevalence of tobacco use among adults in the U.S. has decreased by half since the 1960s, low-income populations, such as Medicaid enrollees, continue to smoke at substantially higher rates than the general population (36.6 percent compared to 22.6 percent for ages 18 – 65 years, respectively).[14] Smoking prevalence among Medicaid recipients ranges from 36 to 40 percent depending on the population surveyed[15 16 17] and this has not changed over the past ten years. In Connecticut there are currently about 169,500 adult Medicaid recipients[18] and we estimate, based upon previous surveys,[15 16 17] that approximately 61,000 (36 percent) of them smoke.

Figure 2: Smoking Rates by Education



In adults over the age of 65, 9.4 percent of those who are privately insured smoke compared to 10.4 percent of adults who are on Medicaid and Medicare.[15] The disparity in smoking rates has lessened as adults over the age of 65 are both more likely to have quit, or more likely to have died prematurely from smoking-related illnesses. One goal of *Healthy People 2010* is to ensure that evidence-based treatments for smokers are available through state Medicaid programs.[19] Furthermore, USDHHS Clinical Practice Guidelines, *Treating Tobacco Use and Dependence: 2008* recommends that evidenced based medication and behavioral smoking cessation treatments should be offered as covered services in public as well as private health insurance plans.[20]

Smoking Prevalence in Pregnant Women: Maternal smoking during pregnancy accounts for 30 percent of low birth weights, 10 percent of premature deliveries and five percent of all infant deaths in the U.S.[20] Estimated rates of smoking during pregnancy vary according to data collection method, but some data suggest that 16.4 percent of pregnant women smoked during

pregnancy in 2007 across the U.S.[21] In Connecticut, rates of smoking based on birth certificate data were 8.3 percent in 2005.[22] However in 2004, among the 11,007 births to mothers enrolled in Connecticut's HUSKY-A program, 16 percent smoked during pregnancy.[23]

Smoking Prevalence in Psychiatric Populations: Smoking rates are much higher among those with psychiatric disorders, and the greater the intensity, duration, and frequency of these disorders, the greater the rates of smoking. Results of a national survey conducted from 1992 to 2000 revealed that those with a psychiatric diagnosis (including mood, anxiety, psychosis, and substance use diagnoses) consume approximately 44 percent of all cigarettes smoked in the U.S. This same population is nearly twice as likely to smoke cigarettes (41 percent), compared to those without a psychiatric diagnosis (22.5 percent).[24]

Rates of smoking increase if the psychiatric disorder has been present within the past month and when multiple psychiatric diagnoses are present. Individuals with psychiatric disorders tend to be heavier smokers (smoking in excess of 25 cigarettes per day), with rates between 15 and 30 percent depending on the number of lifetime psychiatric diagnoses. In comparison, only 10 percent of persons with no history of a psychiatric diagnosis are defined as heavy smokers. These persons also tend to have lower quit-rates compared to persons with no history of a psychiatric diagnosis. In Connecticut, current smokers were twice as likely as non-smokers to have ever been diagnosed with an anxiety disorder (18.4 percent vs. 8.5 percent).[25]

Similarly, individuals with alcohol and drug dependence are more likely to smoke. While population studies have estimated that over 60 percent of substance abusers smoke cigarettes, studies of treated alcoholics suggest that 80-95 percent of alcoholic dependent individuals smoke cigarettes. Alcoholics tend to smoke heavily, have greater difficulty quitting, and have higher smoking related disease and mortality rates. More alcoholics die of cigarette related causes (51 percent), than of alcohol related causes (34 percent).[26]

Summary: While smoking rates nationally and in Connecticut have declined significantly since 1965, overall state and national smoking averages do not reflect large disparities which exist among some groups. Smoking rates are higher among those with less than high school education, those who earn less than $35,000 annually, veterans, those diagnosed with mental illness and those individuals with alcohol and drug dependence.

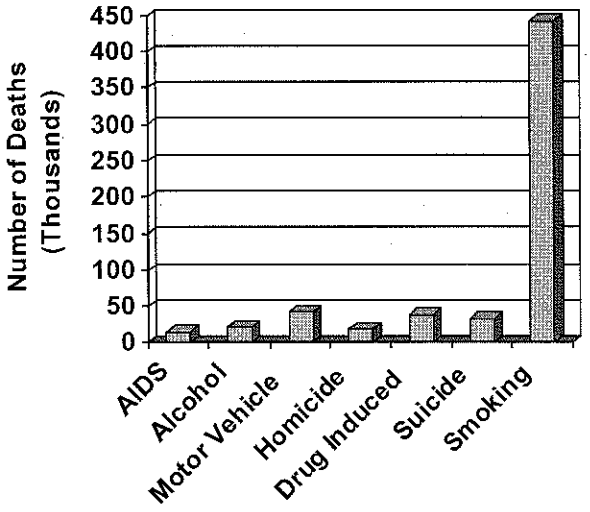
***

Health and Economic Consequences of Smoking

Health Consequences: Smoking is associated with enormous negative consequences on health and mortality. Globally, the World Health Organization (WHO) estimates that over 4 million people will die from cigarettes this year. To put this into perspective, this is comparable to twenty-seven 747 airliners filled with passengers crashing each and every day. Smoking and tobacco-related diseases claim a life every eight (8) seconds of every day. As grim as this figure is, smoking related death rates continue to rise. It is estimated that by 2030, annual worldwide smoking death rates will increase to over 10 million.[27]

In the U.S., cigarette smoking is responsible for 1 in 5 of all deaths, or 443,000 deaths each year.[28] Tobacco use is to blame for more deaths than human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides, and murders combined.[29] *Figure 3: Annual Deaths from Smoking Compared to Other Causes of Death* provides a snapshot of annual deaths, in thousands, from various causes as compared to smoking. In male smokers aged 35-70 years, the death rate may be up to three times greater than in non-smokers.[30] Every smoker loses an average of 14 years of life[28] and combined across all smokers, cigarette smoking results in 5.1 million years of potential life lost (YPLL)[f] in the U.S. annually.

Figure 3: Annual Deaths from Smoking Compared to Other Causes, 2006



Cigarettes contain an array of components that contribute to disease and death. When an individual smokes cigarettes s/he inhales more than 4,000 chemicals, including over 200 known toxins, 60 known carcinogens, and a number of agents known to cause birth defects. These toxins, which include such compounds as aluminum, ammonia, arsenic, carbon monoxide, carbon dioxide, DDT, formaldehyde, hydrogen cyanide, lead, mercury, nickel, nicotine and tar, are indigenous to the tobacco plant, or occur during processing, filtration or burning. Because smokers tend to smoke daily, and without interruption for many years (e.g. a one pack per day smoker consumes nearly 200,000 packs of cigarettes over 50 years), these chemicals accumulate to pose a severe hazard to health and bodily functions. Of these chemicals, nicotine, which is the addictive component of cigarettes, is less a direct cause of harm to health. However, as smokers become dependent on nicotine, they are then exposed to the other 4,000 toxic chemicals.[31]

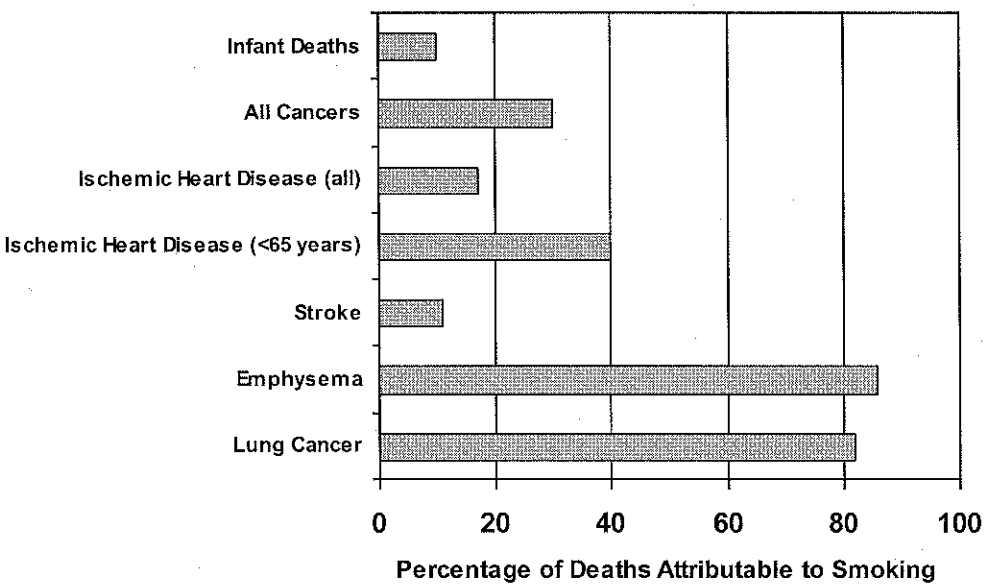
Smoking is associated with a number of diseases and conditions. Cancers of the bladder, kidney, pancreas, stomach, esophagus, larynx, lungs, throat, and mouth; chronic lung diseases; and

[f] YPLL provides an estimate of the length of time a person would live had they not died prematurely; it is used to quantify the costs (social and economic) associated with premature death.

cardiovascular diseases have all been linked to smoking. The three leading causes of smoking-related death between 2000 and 2004 were lung-cancer (128,922 deaths), ischemic heart disease (126,005 deaths), and chronic obstructive pulmonary disease (92,915 deaths). Smoking is also associated with poor surgical outcomes and recovery, hip fractures and low bone density, cataracts, peptic ulcer disease, metabolic syndrome, sexual dysfunction, fertility problems, pregnancy complications, low birth weight and sudden infant death syndrome.[32]

Data from the Surgeon General's Report[32] suggest that smoking-attributable mortality rates in Connecticut are similar to national rates. In 1999, smoking in Connecticut accounted for 80.5 percent of lung-cancer deaths, 16 percent of all heart disease, ten percent of all strokes, and approximately 75 percent of all COPD-related deaths. *Figure 4: Smoking-Related Deaths in the United States*[32] provides a summary of the percentage of deaths attributable to smoking by cause of death. So for example, 82 percent of all lung cancer deaths and 86 percent of all deaths from emphysema are associated with smoking.

Figure 4: Smoking Related Deaths: United States



The majority of smoking-related deaths result from disease; however, smoking-related fires contribute to approximately 4,000 deaths every year, in which elderly and young children are at particularly high risk.[33] Smoking is the number one cause of residential and nursing home fires leading to one or more older adult casualties, accounting for 25 percent of these types of fires.[34] Smoking-related fires result in an estimated $7 billion in annual damages. In the state of Connecticut since January 2009, careless smoking has been associated with at least two fatal residential fires, resulting in the deaths of 3 adults and a 17-year old male. However, these data likely underestimate the actual number of smoking-related fire fatalities.[35]

The health consequences of smoking are not limited to the smoker: the consequences of second-hand smoke are well documented. Concerns over the potential dangers of "passive-smoking" or second-hand smoke first appeared in the 1972 Surgeon General's Report.[31] The US Public Health

Service estimates that approximately 86 million non-smoking adults were exposed to second-hand smoke in 2000, including 22 million children ages 3-11 years. Most exposure occurs in homes and workplaces. In 2008, 7.8 percent of American non-smokers were exposed to second-hand smoke inside their homes while 8.6 percent were exposed to smoke at work. [36]

Rates of exposure are a little lower in Connecticut, which is likely a result of overall lower smoking rates in addition to the strong policies that ban smoking in public places. In 2008, five percent of non-smokers in Connecticut were exposed to second-hand smoke in their homes and 6.4 percent were exposed to second-hand smoke in the workplace.[37] Smokers in Connecticut are approximately four times more likely to believe that breathing in second-hand smoke is not harmful compared to non-smokers (12.9 percent vs. 3.6 percent).[25]

Second-hand smoke has been designated a known human carcinogen by the U.S. Environmental Protection Agency. Exposure to second-hand smoke at home or at work increases the risk of developing of lung cancer by 20 – 30 percent, and of heart disease by 25 – 30 percent in individuals who do not smoke cigarettes. Furthermore, second-hand smoke exposure increases a non-smoker's risk of emphysema, a chronic lung disease, by 55 percent, and doubles the risk of stroke, nearly to the level of risk experienced by a direct smoker. [38]

Second-hand smoke has a negative impact on the health of children. Almost 60 percent of U.S. children aged 3-11 years are exposed to secondhand smoke. As a result, they are at a greatly increased risk for sudden infant death syndrome (SIDS), acute respiratory infections, ear problems, and more severe asthma. There is no risk-free level of exposure and conventional air-cleaning systems cannot be relied on to control health risks, as they do not remove the smaller particles found in second-hand smoke.[36]

Economic Consequences: In addition to the impact that smoking has on individual health, the economic impact is also significant, and the economic cost of smoking far exceeds the revenue generated from the sale of cigarettes. As of 2008, the average national retail price of a pack of cigarettes was $5.15, including federal and state sales taxes. In contrast, the actual "cost" of each pack of cigarettes in the U.S. was $15.62 when lost productivity and direct medical costs are also factored in. As of 2004, cigarette smoking was estimated to be responsible for $193 billion in annual health-related economic losses in the U.S. ($96 billion in direct medical costs and approximately $97 billion in lost productivity).[28]

In Connecticut alone, health-care costs to treat cigarette-related diseases were estimated to be around $1.6 billion annually in 2004. Also in 2004, it was estimated that each pack of cigarettes sold in Connecticut was associated with $5.49 of lost productivity and $8.81 in health care costs, with Medicaid paying $2.32 of this amount.[38] Using more recent data, we estimate that health care costs associated with smoking in Connecticut in 2008 dollars was nearly $2 billion, even without considering the costs associated with years of productive life lost. This loss in years of productive life can result in lost wages, state and federal income tax revenues, and general sales tax revenues, as discussed below in the section on the business case for smoking cessation.

Summary: Smoking, both for the smoker and as a result of secondhand smoke, continues to pose significant health and economic costs in the U.S. and in Connecticut. Smoking-related illness, death, lost productivity and fire contribute substantially to health care and other costs. It is estimated that more than four million people will die of cigarette smoking this year around the world, and in the U.S. smoking is linked to one in five deaths. We estimate smoking related health care costs in Connecticut at nearly $2 billion annually.

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Why It Is Difficult to Quit Smoking Cigarettes

Among current U.S. adult smokers, 70 percent report that they want to quit completely, and millions have attempted to quit smoking.[8] In 2006, 80 percent of Connecticut adults, age 35-44, reported that they were seriously thinking about quitting smoking within the next 6 months and 60 percent of current smokers aged 25-54 years made a quit attempt in the previous 12 months.[25] However, despite motivation, successful quitting is difficult to accomplish. Most smokers will make six to nine attempts before achieving long-term cigarette abstinence. Perhaps even more concerning is the fact that only three to five percent of smokers who stop without benefit of treatment will remain abstinent for more than six months.[6 39 40]

Long-term abstinence of cigarettes is difficult because tobacco use is a chronic and recurring disorder due to the addictive properties of nicotine dependence. Nicotine is a highly addictive stimulant-like drug, and cigarettes are an ideal nicotine delivery system. In cigarette smoke, nicotine is delivered very rapidly (within 7-19 seconds), to brain centers associated with reward. The absorption of nicotine quickly produces a range of physical events such as increased heart rate, metabolism, blood pressure, and release of endorphins and adrenalin. These physical events are experienced positively as pleasure, arousal, enhanced concentration and task performance, reduced hunger, and improved mood.

Although the acute effects of nicotine are experienced rapidly, nicotine is a short acting drug, losing half of its effect in approximately two hours. Smokers become physically dependent upon nicotine after several months of semi-regular exposure, and then develop a tolerance to nicotine, needing more and more nicotine to maintain the same effect. Furthermore, when acute nicotine effects wear away after several hours, smokers may experience uncomfortable withdrawal symptoms including agitation, restlessness, increased hunger (which will ultimately lead to weight gain), difficulty in concentrating, decreased task performance, and negative mood. Cigarette smoking rapidly relieves these withdrawal symptoms. Smokers then smoke to offset these negative withdrawal symptoms as well as to obtain the positive effects of acute nicotine use, and this cycle gets repeated many times throughout the day. Regular smoking at key daily events (e.g. upon awakening, with coffee, alcohol, while driving) associates these events with cigarette smoking and over time cue an individual to smoke.[41 42 43]

Summary: Cigarette smoking is both a physical addiction and a learned habit, and smoking cessation treatments are most effective if they take aim at both of these components. Evidence-based treatments that target both of these aspects are reviewed below.

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Benefits of and Successful Treatments for Smoking Cessation

Benefits of Smoking Cessation: In the U.S., 21 percent of adults have successfully quit smoking, with males more likely to be former smokers compared to females (24.8 percent vs. 17.3 percent).[13] A total of 28.2 percent of adults in Connecticut have successfully quit smoking; rates of quitting are similar in males and females.[12]

The benefits of smoking cessation are evident quickly after the smoker has their last cigarette. Within 20 minutes, heart-rate and blood-pressure return to normal; within 12 hours, carbon monoxide levels in the blood return to normal; within one year of quitting, risk of heart disease is half that of a smoker; within five to fifteen years, stroke risk is reduced to that of a non-smoker; within ten years, risk of developing lung cancer is half that of a person who continues smoking; and within fifteen years, risk of developing coronary heart disease is equivalent to that of a non-smoker.[44] An individual who quits by age 30 eliminates almost all excess risk associated with smoking, and those who quit by age 50 cut in half their risk of dying in the next 15 years.[45] Pregnant women who stop smoking by 16 weeks gestation are nearly as likely to have a normal birth weight baby as women who do not smoke.[22] These health benefits are in addition to the many personal benefits such as improved finances, improved taste and smell, increased social acceptance, and greater stamina and endurance.

While the benefits of smoking cessation are greatest in younger age groups, cessation at any age has a positive impact. Research suggests quitting at age 40 will increase life expectancy by nine years, quitting at age 50 increases life expectancy by six years, and quitting at age 60 increases life expectancy by three years.[30]

Smoking Cessation Treatments: The *Clinical Practice Guidelines* describing the best treatment for reducing tobacco use and dependence were originally developed and published in 1996 by the U.S. Department of Health and Human Services (USDHHS).[20] These *Clinical Practice Guidelines* have been updated three times. The most recent edition was published in 2008 and is based upon treatment recommendations from over 8,700 research articles published between 1975 and 2007. These recommendations, addressing both clinical and systems-based interventions, were developed using the best available evidence (also known as evidence-based), and offer guidance to clinicians, as well as administrators of healthcare delivery and insurers. These guidelines view tobacco dependence as a chronic and recurring disease often requiring repeated interventions and multiple quit attempts.

The recommendations in *Clinical Practice Guidelines* [20] suggest that smoking status should be assessed at every clinical visit, and all smokers should be advised to quit smoking and offered evidenced-based medication and behavioral counseling. In general, while more intensive and frequent interventions result in greater smoking quit rates even a 2-minute counseling intervention doubles quit-rates compared to no counseling. Counseling and medication are both effective for treating tobacco dependence, but the combination of both counseling and medication is more effective than either alone. Therefore it is recommended that all individuals, except where contraindicated, be encouraged to use both smoking cessation medications and behavioral counseling in a quit attempt.[20]

Effective tobacco treatments can be administered by a variety of clinicians in a variety of formats. Smoking cessation advice and brief counseling delivered by physicians and non-physicians (e.g. nurses, dentists, psychologists, etc.) are highly effective in improving smokers' abstinence rates. While interventions delivered by smoking cessation specialty programs are effective, treatment guidelines recommend that smoking cessation interventions should be offered in any and all health care clinics in which patients receive treatment, including primary care clinics, community health centers, dental offices, mental health and substance use treatment settings, and medical and psychiatric hospitals. Interventions should also not be limited to certain groups, but are transportable among a broad range of people. However, there are specific populations where safety issues or issues related to language and culture may need to be considered.[20]

The *Clinical Practice Guidelines* [20] recommend all smokers be assessed at each encounter and offered evidence-based drug and behavioral treatment. Within a framework termed the *5A Model* for treating tobacco use and dependence, it is recommended that each clinician helps smokers through the process of quitting by *Asking* about tobacco use at every visit, *Advising* the smoker to quit, *Assessing* willingness to quit, *Assisting* by offering evidence-based behavioral treatments and smoking cessation medication, and *Arranging* for follow-up. Clinicians who are trained to use this model double the likelihood of patients quitting compared to clinicians who have not been trained to use this model. When appropriate charting (e.g. regular charting of smoking status, use of electronic reminder systems) is used, rates of patients making quit attempts may increase five-fold compared to no intervention.[20]

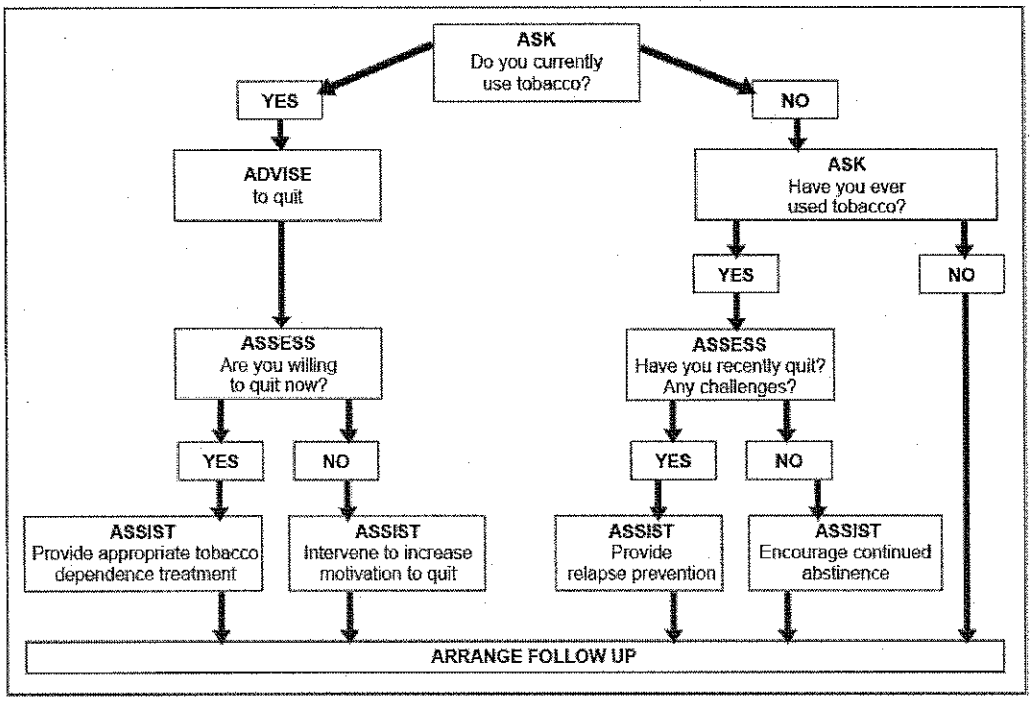
The process of the *5A Model* is shown below in *Figure 5: The 5A Model: Helping smokers through the process of quitting.*[46] Ongoing follow-up of all current and former smokers is a central component of the *5A Model*. Such follow-up serves to assist ex-smokers in maintaining abstinence, allows for tailoring of treatment, and helps individuals who relapsed to again engage in immediate quit attempts. Clinicians are encouraged to use motivational techniques to encourage patients who are either unwilling to quit or are ambivalent about quitting. These techniques, termed *The 5Rs* include demonstrating to the patient why quitting would be personally *Relevant* to them; helping them to identify the *Risks* of continuing to use and the *Rewards* of cessation; overcoming and identifying potential *Roadblocks*; and *Repeating* these steps each time the unmotivated patient returns for a visit.[46]

Counseling: Counseling varies by type, frequency, and technique. Proactive telephone counseling (e.g. clinician follow-up, quit-lines), group counseling, and individual counseling are effective and should be used in smoking cessation interventions. Although individual counseling appears to be the most effective, pro-active telephone counseling (e.g. quit-lines) can significantly improve abstinence rates compared to minimal interventions or self-help, which do not appear to be effective. Quit-line treatments in conjunction with medication can be more effective than medication alone, and given the potential for wide reach and easy access to quit-line treatments, this may have a large public health impact for smoking cessation.[20]

The more treatment formats (e.g., individual, group, quit-line) a patient utilizes, the greater the effectiveness in increasing abstinence rates. Minimal interventions lasting less than three minutes increase overall tobacco abstinence rates, and every tobacco user should be offered at least a

minimal intervention. However, abstinence rates increase with longer sessions, and it is recommended that sessions should last at least ten minutes. Abstinence rates also increase the more often the treatment is offered: at least four sessions appear to be effective, and eight or more sessions doubles quit rates compared to single session smoking treatments.[20]

Figure 5: The 5A Model: Helping smokers through the process of quitting [46]



Some interventions are not effective at reducing tobacco use according to the 2008 *Clinical Practice Guidelines*: acupuncture and hypnosis; tapering of cigarettes; and the use of herbal medications. Although support of friends and family can improve abstinence, interventions that attempt to enlist or increase these supports are not effective. Likewise, aversive smoking techniques, such as "rapid smoking," do not increase rates of smoking cessation.[20]

Medication: There are a number of medications effective in treating tobacco dependence and can double tobacco quit rates as compared to placebo treatments. Five of these medications are Nicotine Replacement Therapies (NRTs) which reduce the withdrawal symptoms associated with abrupt smoking cessation. These NRTs include nicotine patch, gum, lozenge, inhaler, and nasal spray. These are available over-the-counter and improve rates of abstinence by 1.5 to greater than two times depending on the type and duration of use. NRTs are considered much safer than cigarettes as they do not contain the hundreds of other chemicals known to be carcinogenic and toxic; nicotine by itself is not considered carcinogenic or toxic.[20]

There are currently two FDA approved first-line medications on the market that are not NRTs and are not available over-the-counter: Bupropion (Zyban) was initially prescribed as an antidepressant under the name Wellbutrin; and Varenicline (Chantix). On their own, Bupropion

increases abstinence rates by two-fold, while Varenicline is associated with three times greater abstinence rates. Certain combinations of medications increase effectiveness. The most effective combination is long term nicotine patch with an ad lib NRT (gum, lozenge, or spray), resulting in rates of abstinence that are 3.6 times greater than placebo. Nicotine patch in combination with nicotine inhaler or Bupropion results in abstinence rates greater than twice that of placebo.[20]

Second-line medications for smoking cessation that have demonstrated effectiveness are Nortiptyline (an antidepressant), and Clonidine (used to treat high blood pressure). These medications are considered second-line because they have not yet been FDA approved for smoking cessation and there are concerns about potential side effects. Decisions regarding use of these medications should be made under a physician's supervision on a case-by-case basis. Other medication interventions being studied but not yet approved include the nicotine vaccine (NicVAX), Naltrexone, Ramonibant, Selegeline, and Topirimate.[20]

Given that nicotine dependence is a chronic and recurring disorder, smokers may require a range of medication options to succeed in smoking cessation. Furthermore, specific groups of smokers may respond better to certain smoking cessation medications compared to others. The *Clinical Practice Guidelines* [20] offer guidance on selecting appropriate evidence-based medications for specific smokers needs. Therefore, smokers should have insurance coverage that allows them access to the range of evidence-based medications.

Special Populations: Interventions identified as effective in the *Clinical Practice Guidelines* are recommended for all individuals who use tobacco, except when medication is contraindicated or has not been shown to be effective. Groups in which medications are contraindicated for reasons related to safety or effectiveness include pregnant women, smokeless tobacco users, light smokers, and adolescents. There are a number of other special populations which may have less access overall to healthcare, and where tobacco interventions may need to be tailored because of differences in language, culture, or presence of other diseases. These may include smokers who are HIV-positive, hospitalized, lesbian/gay/bisexual/transgender, of low socioeconomic status and/or with limited formal education, older smokers, smokers with medical or psychiatric diagnoses, racial and ethnic minorities, and women. [20]

Women smokers represent the largest minority of smokers, and present with unique issues related to consequences and treatment, including consideration of reproductive and fetal-health. The use of NRTs is also currently contraindicated in pregnant women due to concerns about effects on the developing fetus. Women may also present with greater barriers to quitting due to greater likelihood of depression and greater weight control concerns. There is also some evidence that NRTs are less effective in women in the long-run[47] so that non-NRT medication such as varenicline or bupropion in conjunction with counseling may be beneficial. Interventions may also need to be tailored to specifically address mood or weight concerns.

Summary: Smoking cessation has immediate, measurable benefits. The most effective smoking cessation treatment encompasses both medication and counseling. Evidence-based smoking cessation treatments are widely available and their effectiveness is well documented.

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The Current Landscape: Policies, Programs, Interventions

Two events have had a major impact on policies, programs and interventions aimed at reducing tobacco use and its consequences. First was a societal shift in how smoking was perceived. Second was the unprecedented Master Tobacco Settlement in 1998 between the four major tobacco companies and the state's Attorneys General, which provides payments to the states in perpetuity.[48] The purpose of the Master Tobacco Settlement was to reimburse states for the costs incurred of treating smokers enrolled in Medicaid. The confluence of political will and resources has spurred many states to act aggressively to implement tobacco control programs that have been enormously successful.

States investing in tobacco control programs according to the CDC guidelines could achieve lower rates of adult [49] and youth smoking.[50] Even though this investment in public health is so successful, *The Campaign for Tobacco-Free Kids* reported that only North Dakota funded tobacco cessation programs at the level recommended by the CDC, and only nine states (Alaska, Delaware, Montana, Wyoming, Maine, Hawaii, Vermont, Arkansas and South Dakota) funded tobacco cessation programs at half the level recommended by the CDC in 2009. During this same period of time, states received $25.1 billion in tobacco settlement money and cigarette taxes in 2009. The CDC recommends that Connecticut spend $12.54 per person ($43 million) annually to fund comprehensive tobacco control programs: currently Connecticut spends less than 17 percent ($7.2 million) of that amount.[51]

National: The CDC published a document on *Best Practices for Comprehensive Tobacco Control Programs* in August of 1999, shortly after states reached a settlement agreement with the tobacco industry; an updated edition was released in October, 2007.[52] This comprehensive approach includes not only clinical interventions, but also economic, policy, and social strategies aimed at reducing the health and economic consequences of tobacco use. The CDC recommends that state and community interventions, effective health communications, smoking cessation, surveillance and evaluation as well as administration and management should be included in tobacco control programs if they are to be effective.

In the community it is important to focus on preventing smoking among youth and young adults, and supporting quitting among adults and youth. Effective programs require that tobacco-related disparities are identified and for all communities, eliminating exposure to secondhand smoke is critical. Health communication can be extremely effective at reducing smoking rates or preventing smoking initiation, and in changing social norms about tobacco use. In fact, health communication and 'counter-marketing' strategies that employ TV, radio, print, billboard, web-based advertising and on-line networking have been quite effective in changing attitudes and beliefs about smoking. [53]

The CDC also provides a number of guidelines for states, individuals, agencies and businesses to reduce tobacco use.[53] While state policies and programs are important, national efforts to reduce tobacco use may be necessary in the long run to achieving overall reductions smoking rates.[54]

Telephone quit-lines are one cost-effective way to disseminate population- and evidence-based smoking cessation programs to communities, particularly when they combine behavioral

counseling and NRT. In 2004, an expert panel recommended funding a national telephone quit-line as a means of reaching more smokers, achieving an additional 5 million quitters per year, and saving 3 million lives over the next two decades.[55] In response, DHHS established a national quit-line network in 2004 that increased funding to states for quit-lines and offered grants and counselors to states for creating quit-lines.[56]

States: As of January 10, 2010, 21 states had laws banning smoking in all workplaces, restaurants and bars, and public places.[57] These smoking bans, in addition to possibly reducing rates of smoking among adults,[54] appear to be associated with reduced hospitalizations for heart attack [58] and possibly a number of other health benefits as well.[59]

Of all the 50 states, 46 provide some type of coverage for smoking cessation as part of their Medicaid programs.[60] Most state Medicaid programs cover smoking cessation on a fee-for-service basis. However, many states place restrictions on services, including limiting duration of treatment, requiring prior authorization, and making behavioral treatment programs prerequisites for pharmacological treatments. New Jersey and New Mexico are currently the only states without restrictions on smoking cessation services for Medicaid beneficiaries.[15]

Since 2006, smoking cessation benefits have been provided to all Medicaid recipients in Massachusetts. The Massachusetts Tobacco Cessation and Prevention Program (MTCP) includes counseling, NRT and minimal co-pays. The Massachusetts Department of Public Health (MDPH) recently released a report on the successes of the MTCP: smoking rates among Medicaid (MassHealth) recipients have fallen by 26 percent since 2006 or ten percent per year; rates of heart attack among users of the MTCP program declined 38 percent; and fewer pregnancy complications and lower rates of asthma-related emergency room visits have been documented.[59]

Connecticut Policies: Connecticut, Missouri, Georgia and Tennessee are the only four states not providing any smoking cessation services recommended in the 2000 *Clinical Practice Guidelines* for Medicaid recipients.[60] This is despite the $180 million in Medicaid expenditures attributed to tobacco-related healthcare costs in this state [61] and despite 2005 legislation authorizing such coverage. Currently smoking cessation coverage is provided to state employees and lawmakers but not to Medicaid recipients.

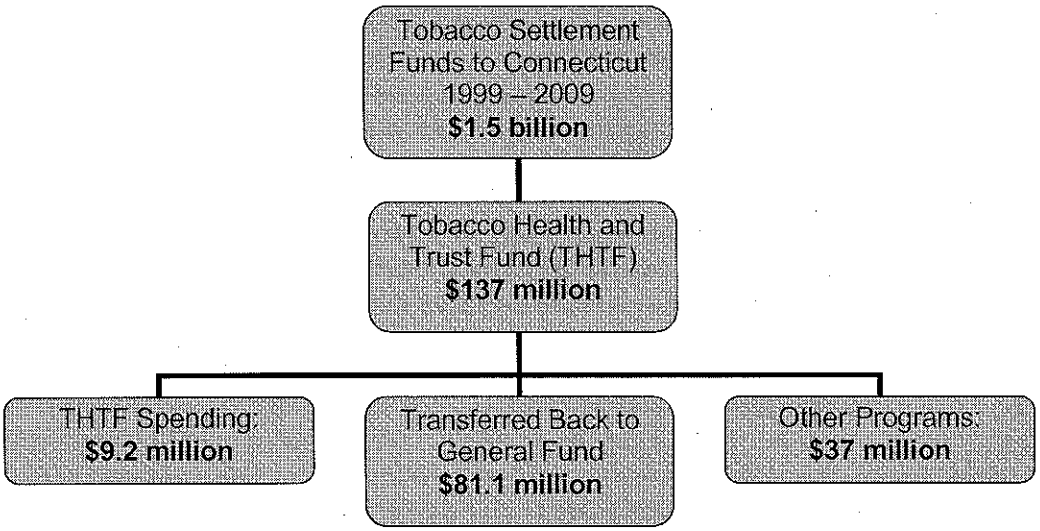
In 2003 smoking in workplaces and public spaces was banned in Connecticut, and by 2004 bars were added to this list. The smoking ban, however, does not apply to correctional facilities, designated smoking areas in psychiatric facilities, public housing projects, workplaces with fewer than five employees, private clubs and casinos.[62] The CDC 2008 *Behavioral Risk Factor Surveillance System* (BRFSS) survey reports that 6.4 percent of Connecticut respondents were exposed to second hand smoke at their indoor workplace. The results showed wide variation among states: indoor workplace exposure ranged from 3.2 percent in Arizona, where there is a 100 percent smoke-free workplace law in effect, to 10.6 percent in West Virginia, where no smoke-free workplace law currently exists.[63]

The Tobacco Settlement Funds and Programs in Connecticut: In 1998 Connecticut was one of 46 states to settle lawsuits against the four major tobacco companies. Under this agreement states

will receive annual payments in-perpetuity. In the first twenty-five years alone states will receive $246 billion from the settlement; Connecticut's portion is estimated at $3.6 to $5 billion (approximately $175 million per year). At the time the settlement was reached, public health advocates and the Attorneys General expected a substantial portion of these funds would be used for tobacco prevention and treatment programs. Since FY2000, Connecticut has received about $1.3 billion from the tobacco settlement, but less than two percent of that money has been used for programs aimed at reducing smoking or targeted toward anti-tobacco advertising and other efforts. Instead, 86 percent of the Tobacco Settlement funds ($1.1 billion) have been used for unrestricted spending in the General Fund.[64] [65]

In 1999 the Connecticut legislature established the Tobacco and Health Trust Fund (THTF) and created a Board of Trustees in 2000. The purpose of the THTF is "... to create a continuing, significant source of funds to encourage the development of programs to reduce tobacco abuse... reduce substance abuse... and meet the unmet physical and mental health needs of state residents."[66] The legislature also created a Biomedical Research Trust Fund in 2001 that may make grants to eligible institutions performing biomedical research in the areas of heart disease, cancer and other tobacco-related diseases. This fund receives $4 million from the tobacco settlement annually.[65]

Figure 6: Connecticut THTF Fund Disbursements, FY01 – FY09 [67]



Initially, the THTF Board was only authorized to recommend expenditure of the interest earned on the fund principal but by 2008 had amended the authority of the THTF Board to allocate half (up to $6 million) of the previous year's transfer from the Master Settlement to the THTF. [67] Since its inception through FY2011, the THTF will have received $153 million. A total of $114 million was transferred out: the legislature transferred $81.1 million back into the General Fund and another $38 million to other programs and services.[64]

The THTF Board of Trustees has been allowed to spend $9.2 million from the fund on tobacco prevention and control programs. *Figure 6: Settlement Transfers to THTF and Fund Disbursements, FY01 – FY10* shows how the tobacco settlement funds have been disbursed in Connecticut to date and *Table 2: Tobacco and HealthTrust Fund Board Disbursements FY03 – FY09* provides a summary of fund allocation since 2003. The THTF balance will be $5.2 million after FY10 allocations. The current budget calls for additional transfers out of the fund and it is likely the THTF will be extinguished by the end of the biennium. The THTF disbursements represent nearly all funds supporting anti-tobacco activities in Connecticut.[64]

Table 2: Tobacco and HealthTrust Fund Board Disbursements FY03 – FY09[64]

Category	FY03- FY08	FY09	FY10	Total
Counter Marketing	$450,000	$2,000,000	$1,650,000	$4,100,000
Website Development	$50,000			$50,000
Cessation Programs (Community-Based)	$1,500,000	$412,456	$750,000	$2,662,456
Cessation for Mentally Ill		$1,200,000	$800,000	$2,000,000
Quit-line	$287,100	$2,000,000	$1,650,000	$3,937,100
School-Based		$500,000	$500,000	$1,000,000
Lung Cancer Pilot		$250,000	$250,000	$500,000
Evaluation		$500,000	$300,000	$800,000
Innovative Programs			$477,745	$477,745
Total	$2,287,100	$6,862,456	$6,377,745	$15,527,301

Community-based smoking cessation programs have received grant support from the THTF since 2001. A grant awarded to the American Lung Association provided smoking cessation counseling and NRT to smokers with the greatest health risks in local health department settings. The MATCH (Mobilizing Against Tobacco for Connecticut's Health) Coalition received funding from the American Legacy Foundation to support a tobacco cessation, public education and outreach program with the Hispanic/Latino population of Connecticut. The program, facilitated by bi-lingual health educators, was effective in reducing smoking rates among Connecticut's Latino population.[68]

Since FY 2008, the THTF has viewed smoking cessation programs, particularly for low income and minority populations, a priority for funding. Community health centers (CHC), the primary medical home for many of the people they serve and where programs and counseling can be integrated into all patient services, are an ideal location for funding smoking cessation programs. In addition, most CHC patients are uninsured, underinsured, low-income and/or people of color, populations with some of the highest smoking rates and risks. Currently CHC are not reimbursed by the federal government for smoking cessation services.

Initially, pregnant women and women of childbearing age were targeted and by June 30, 2009, 625 women had been served (38 percent Latina; 19 percent African American). Fifty-nine percent earned less than $10,000 a year, 21 percent had no high school diploma and 59 percent had attempted to quit smoking at least twice. Of those who completed the program, 30 percent stopped smoking and an additional 30 percent reduced their smoking. Smoking cessation

funding for FY09 and FY10 will continue for persons with low incomes, reaching smokers in a number of settings: CHC, hospital clinics, local health departments and AIDS programs.[64] To the extent that quit rates are generalizable, these programs could result in 300 fewer smokers for every one thousand persons served.

Quit-lines in Connecticut: The Connecticut Department of Public Health has supported a quit-line model for several years using grant funds provided through the CDC. While the quit-line provides free services to callers, CDC funds were limited and the quit-line contract provided telephone counseling only, not the recommended counseling and NRT. During the first two years there were approximately 1,200 registered callers per year.

In FY 2008, a total of nearly $1.7 million was allocated to the quit-line which provided for the recommended NRT (nicotine patch or gum) and enhanced counseling. The program was available to insured and uninsured, with insured persons receiving a two-week starter of NRT and those without private insurance or on Medicaid receiving up to eight weeks of NRT. Counseling was available to all enrollees. The quit-line was overwhelmed in the first three weeks of operation: over 10,000 calls were received; more than 6,000 residents enrolled for service; and NRT supplies were exhausted by the end of July. There were 3,787 shipments of nicotine patches and 858 shipments of nicotine gum sent to quit-line users. Since August 2008, the Quit-line has continued to provide enhanced counseling services only.[69] In April 2009 the Quit-line received additional funding to reestablish enhanced counseling and NRT.

Through June 30, 2008, 10,114 individuals were registered with the quit-line. Among the 8,405 registrants who provided insurance information, 46.5 percent had private insurance, 16.1 percent had Medicaid coverage, 11.7 percent had Medicare coverage and 19.3 percent were uninsured. Although almost half of registrants reported having commercial insurance, most insurance plans do not provide coverage for smoking cessation services, and those that do may require higher premiums from enrollees or plans may cover prescription medications only. [70]

Women who use tobacco were more likely to utilize the quit-line than men (62 percent compared to 38 percent, respectively). By age, 1 in 4 quit-line users were 31-50 years old, one-third were 51-60 years old and 14% were 60 or older. Only 12 percent were 18-30 years old. Eighty percent identified themselves as white, 11 percent as African-American and 1.5 percent as other race. By ethnicity 8 percent identified themselves as Hispanic. Over half of quit-line users (54 percent) reported an educational level of high school or less. [64 71]

Summary: Various policies, programs and interventions have been effective in reducing smoking rates and the effects of secondhand smoke. Quit-lines, community interventions, smoking bans in public places and other measures can reduce the cost and other burdens that smoking places on health care, individuals, families, communities and the state. To date, Connecticut has invested in smoking cessation at only a fraction recommended by the CDC.

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The Business Case for Smoking Cessation Policies, Programs and Interventions

Tobacco cessation interventions are among the most cost-effective of all preventive interventions. Smoking cessation treatments are clinically effective and economically defensible. Compared to routinely reimbursed health care such as diuretics for high blood pressure, drugs for high cholesterol, screening and public safety measures, smoking cessation treatment is significantly less expensive per year of life saved. [72 73] *Table 3: Cost-effectiveness of Prevention* provides cost estimates per year of life saved with various prevention methods.

Considering health-care expenses for chronic smoking-related illnesses, including heart and pulmonary diseases and cancers, tobacco cessation is truly the gold standard. The *Clinical Practice Guidelines* suggest that providing complete tobacco dependence treatment benefits (both medication and counseling) through insurance doubles the likelihood that smokers will receive smoking cessation treatment and improves smoking quit rates by 60 percent.[20]

Table 3: Cost-Effectiveness of Prevention [72 73]

Preventive Procedure	Cost / year of life saved
Statin (45 – 75 year old male, no heart disease, cholesterol 250 – 300)	$105,000 - $270,000
Front airbags in automobiles	$96,000 - $213,000
Annual mammography (55 – 65 year old)	$32,000 - $120,000
Diuretic for high blood pressure	$22,000
Brief smoking cessation counseling + nicotine patch	$2,900
Intensive smoking cessation counseling + nicotine patch	$2,000

Cost Effectiveness of Smoking Cessation in Connecticut: To determine the cost effectiveness of smoking cessation, revenues from cigarette sales tax must be taken into account, in addition to the costs for programs and interventions to reduce smoking. In 2008, 166 million packs of cigarettes were sold in Connecticut, generating sales tax revenues of $332 million, up from $267 million generated in 2007. This increase in 2008 is primarily due to increased sales tax on cigarettes rather than an increase in the number of packs sold. In fact, the number of packs sold was actually down from the nearly 177 million packs sold in 2007 (personal communication, K. O'Flaherty, Campaign for Tobacco-Free Kids, 1/6/2010). *Figure 7: Cigarettes Sold, Tax Revenues and State Tax per Pack in Connecticut: 2000 – 2008* provides trend data on packs sold, tax revenues and taxes per pack.

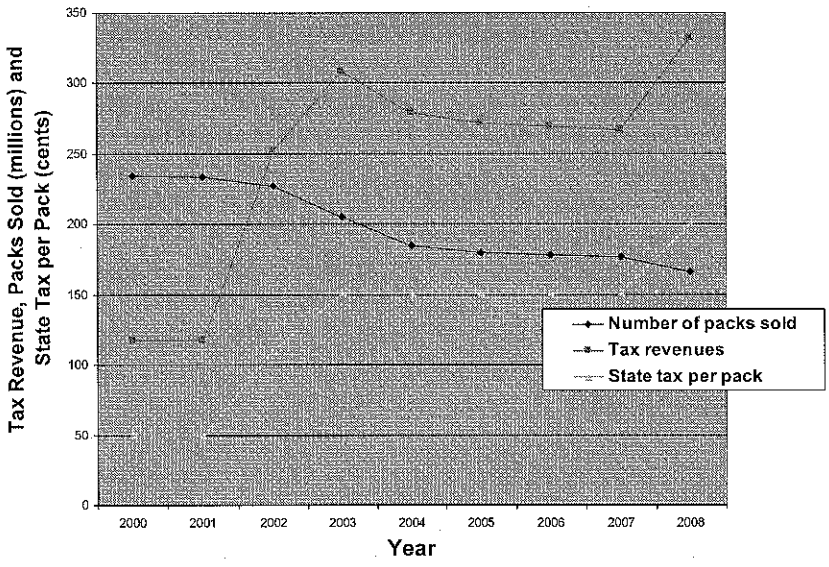
Reduction in cigarette smoking may lead to lower sales tax collected as a result of fewer packs sold. However, when tax revenue declines as a result of reduced cigarette sales, the costs to society and to the health care system will fall as well. For example, the CDC estimates that years of potential life lost (YPLL) for each worker is 0.035 years.[38] There are approximately 362,263 workers in the state who smoke.[g] Total lost general sales tax for these workers amounts to more than $69 million annually.

[g] These calculations were made using Bureau of Economic Analysis data: Regional Economic Accounts (available at http://www.bea.gov/regional/spi/default.cfm?selTable=SA04&selSeries=ancillary); State Annual Personal Income data (available at http://www.bea.gov/regional/spi/default.cfm?selTable=SA04&selSeries=ancillary); and

Further, any loss of sales tax income due to fewer packs sold is dwarfed by the savings to the health care system due to decreased smoking. Total health care costs associated with smoking are nearly $2 billion in 2008 dollars. Nearly 35 percent of Medicaid-insured adults under the age of 65 smoke (compared to just 18.3 percent of privately-insured adults).[15] The associated health care costs for Medicaid recipients who smoke is more than $507 million in 2008 dollars,[38] costs primarily borne by Connecticut taxpayers.

Quit-lines appear to be one cost-effective strategy for reducing smoking rates. A quit rate evaluation was conducted in Connecticut 13 months after registered quit-line participants were offered both counseling and NRT. Twenty-seven percent reported that they had quit.[74] Using current costs for quit-line services, $2 million could potentially reach 11,672 callers and provide a multiple call program to all participants, with a two-week starter kit to insured participants and 8 weeks of NRT delivered in two, four-week shipments to uninsured and Medicaid participants.[75] This represents a penetration rate of just less than 3 percent of the adult smoking population in Connecticut, at a cost of $497 per uninsured and Medicaid participant and $284 per person with insurance.[76]

Figure 7: Cigarettes Sold, Tax Revenues and State Tax per Pack Connecticut: 2000 – 2008



If the quit-line can reach 22,000 smokers in the next two years and 30 percent successfully quit, there would be 6,600 fewer adult smokers as a result of this program alone. Projections from the DSS 2006 report to the legislature estimate the cost of implementing smoking cessation programs for Medicaid clients (both counseling and NRT) at approximately $7.1 million per year. Since the state would be eligible for 50 percent federal matching funds, actual cost to the state would be half, or approximately $3.6 million. The American Legacy Foundation estimated

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State of Connecticut Department of Revenue Services data (available at http://www.dir.ct.gov/drs/Taxcalsched/TCS2008.htm)

that within five years, Connecticut would see annual Medicaid savings of $91 million (2005 dollars) with a 50 percent decrease in smoking rates, and $18 million (2005 dollars) annually in Medicaid savings with a ten percent reduction in smoking.[77]

Summary: A strong business case can be made for implementing proven, effective smoking cessation policies and programs. Current policies that increase tobacco taxes reduce the number of packs sold but do little to reduce disparities in smoking rates: those who are poor, less educated and receive Medicaid benefits smoke at higher rates than those who are more educated, with higher incomes and have private insurance. Implementing Medicaid coverage of smoking cessation would result in overall cost savings to the state.

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Conclusions and Policies for Consideration

Despite declines in rates of smoking over the past four decades,[5] smoking remains a significant public health concern. More than 20 percent of U.S. adults smoke [4] and in Connecticut nearly 16 percent of adults smoke.[6] Although rates of smoking in Connecticut are third lowest in the nation, this masks some significant differences between disparate groups. For example, it is estimated that between 36 – 40 percent of Medicaid recipients smoke.[15] [16] [17] Those with lower incomes [8] and less education (D. Sorosiak, personal communication, September 22, 2009) are also more likely to be smokers.

Smoking rates also vary by race and ethnicity, and are higher among some vulnerable populations. In Connecticut smoking rates are higher among Hispanics as compared to Blacks or Whites (D. Sorosiak, personal communication, September 22, 2009). Veterans,[7] those who have mental illness[25] and substance abuse[26] diagnoses are more likely to be smokers. Smoking is particularly concerning among pregnant women, children and adolescents: in Connecticut, approximately eight percent of pregnant women smoked in 2005 [22] and nearly 17 percent of adolescents report that they smoke.[11]

Nationally smoking claims 443,000 lives annually in the U.S.[28] mostly due to lung cancer, ischemic heart disease and chronic obstructive pulmonary disease (COPD). In Connecticut, smoking accounts for more than 80 percent of all lung-cancer deaths, 16 percent of all heart disease, ten percent of all strokes and about 75 percent of all COPD-related deaths.[32] Smoking is also associated with a number of other cancers,[32] increased health risks to non-smokers who are exposed to second-hand smoke,[31] [36] and nursing home and residential fire fatalities.[33]

In addition to the diseases and deaths associated with smoking, the economic consequences are also significant. In 2004, smoking was responsible for an estimated $193 billion in health care and lost productivity costs in the U.S.[28] In the same year, it was estimated that smoking-related health care costs in Connecticut were around $1.6 billion.[38] We estimate that, in 2008 dollars, smoking-related health care costs in Connecticut are about $2 billion annually. The associated health care costs for Medicaid recipients who smoke is more than $507 million in 2008 dollars,[38] costs primarily borne by Connecticut taxpayers.

Smoking is considered a chronic and recurring disorder due to the unique properties of nicotine, a highly addictive and stimulant-like drug.[41] Although smoking cessation programs can reduce rates of smoking significantly [59] and are among the most cost-effective of all prevention programs,[72 73] these programs have not been made widely available. For example, Connecticut, Missouri, Georgia and Tennessee are the only four states *not* providing smoking cessation services as recommended in the 2000 *Clinical Practice Guidelines* for Medicaid recipients;[60] in fact Connecticut spends only 14 percent of the amount recommended by the CDC to fund comprehensive smoking cessation programs.[51]

In 1998 Connecticut participated in the *Master Tobacco Settlement,* along with 45 other states, against the four major tobacco companies. It was anticipated that a significant portion of the funds from the settlement (totaling about $175 million annually for Connecticut alone) would be used to support smoking cessation programs. To date 86 percent of the funds have been used for unrestricted spending in the General Fund.[64 65] This is despite research showing that smoking cessation interventions that include both counseling and nicotine replacement therapy (e.g., patches, gum) are highly effective.[72 73]

In the past, legislators have attempted to pay for smoking-related health care costs and to reduce smoking rates by raising taxes (*see Figure 7: Cigarettes sold, tax revenues and state tax per pack Connecticut 2000 – 2008*). While this does have the intended effect of reducing the number of packs sold (personal communication, K. O'Flaherty, Campaign for Tobacco-Free Kids, 1/6/2010), it does nothing to reduce rates of smoking among Medicaid recipients [15 16 17] and other vulnerable populations who do not have access to effective smoking cessation treatment.

There are, however, a number of policy options available to legislators and others for reducing the economic and health consequences of tobacco use and would be effective in reaching the most vulnerable populations. Here we list some of those options.

1. Since smoking cessation programs can reduce rates of smoking significantly [59] and are among the most cost-effective of all prevention programs,[72 73] Medicaid and private insurance coverage that includes evidence-based smoking cessation treatments could save both lives and money. Massachusetts is a case in point: that state has reduced smoking rates among its Medicaid population by ten percent per year since offering comprehensive smoking cessation to Medicaid beneficiaries.[17]
2. Recent federal health care reform provides incentives for smoking cessation programs and initiatives, including enhanced funding through Medicaid.[78] However effective smoking cessation programs require a number of provisions:
    a. Both counseling and pharmacological interventions should be offered, since it is the combination of counseling and specific smoking cessation medication treatments that are most effective in reducing smoking rates.[20]
    b. Providers should have the full panel of FDA approved medications available, since treatment must be tailored to each smoker; there is not a single treatment that is effective for everyone.[20]
    c. Smoking cessation services should be integrated into sites where smokers receive their healthcare, and multiple types of providers should be trained to deliver smoking cessation services. For example, an effective model for treating tobacco disorders

across a range of treatment sites (such as community health centers, primary care clinics, dental offices, and mental health and substance abuse treatment facilities), may include brief counseling and medications provided by physicians and other prescribers (including dentists, pharmacists, APRN's and others), with non-prescribers (including psychologists, nurses, trained counselors, etc) providing more intensive evidence-based counseling and followup.[20]

d. Since smoking is so highly addictive and because smoking is considered a chronic and recurring disorder, insurance coverage for smoking cessation treatment must provide for unlimited episodes of treatment.[20]

3. One very cost-effective method of delivering evidence-based smoking cessation counseling and treatment is through a quit-line. Quit-lines can reach some of the most vulnerable of smokers: women, young adults, the uninsured, those with less than high-school education and Medicaid recipients.[64 70 71] However, in order for the quit-line to be effective it must be fully funded to provide both counseling and pharmacological treatments.[20]
4. It is important that smoking cessation programs target at-risk groups, those who are most likely to smoke or to begin smoking. In Connecticut Medicaid recipients,[15 16 17] Hispanic residents (personal communication, D. Sorosiak, September 22, 2009), those with less education,[6] lower income,[8] youth[6] and those with psychiatric[24] and substance abuse[26] disorders are more likely to smoke or to become smokers. For this reason, smoking cessation programs and treatments should specifically target these at-risk groups with culturally, age and otherwise appropriate interventions.[20]
5. Clinicians providing smoking cessation treatment and/or counseling should be trained appropriately to maximize the effectiveness of their efforts. The recommendations in *Clinical Practice Guidelines* are based upon treatment recommendations from over 8,700 research articles, and offer evidence-based guidance to clinicians and administrators of healthcare delivery and insurers.[20]
6. Finally, it makes good public health sense for lawmakers to consider building upon current legislation to make Connecticut a 100 percent smoke-free workplace state, in order to protect all workers from the health effects of second hand smoke. In 2003 a state-wide smoking ban in most public places went into effect. However, correctional facilities, designated smoking areas in psychiatric facilities, public housing projects, workplaces with fewer than five employees, private clubs and casinos are exempt from this ban.[62] This exemption is not without consequence: in 2008, 6.4 percent of Connecticut residents reported exposure to second-hand smoke in the workplace.[63]

Tobacco use, consequences and policies in Connecticut have done much to curb smoking rates in the state. But smoking remains a significant public health threat, particularly among some of Connecticut's most vulnerable populations. Evidence-based interventions are effective and will save money. Lawmakers should consider carefully the options available to them, including the consequences of doing nothing. The public's health depends upon it.

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