

# Healthy Connecticut 2020



2 State Health Improvement Plan

# **Copyright Information** All material appearing in this report is in the public domain and may be reproduced or copied without permission. Citation as to this source, however, is appreciated. **Suggested Citation** Connecticut Department of Public Health. 2014. Healthy Connecticut 2020. 2: State Health Improvement Plan. Hartford, CT: Connecticut Department of Public Health.

# **HEALTHY CONNECTICUT 2020**

# 2: State Health Improvement Plan

# **Connecticut Department of Public Health**

410 Capitol Avenue Hartford, Connecticut 06106

March, 2014



# CONNECTICUT DEPARTMENT OF PUBLIC HEALTH

Jewel Mullen, MD, MPH, MPA Commissioner

Lisa A. Davis, MBA, BS, RN Deputy Commissioner

Katharine Kranz Lewis, PhD, MSN, MPH, RN
Deputy Commissioner

# **ACKNOWLEDGEMENTS**

The Healthy Connecticut 2020 State Health Improvement Plan was developed by members of the Connecticut Health Improvement Planning Coalition, comprising experts, stakeholders, and residents from throughout the state, and led by the Connecticut Department of Public Health.

The Coalition's Focus Area Work Groups formulated goals, objectives, and strategies for their respective Focus Areas, and are acknowledged on the first page of each Focus Area section of this Plan.

Many DPH staff provided subject matter expertise, staffing for the Focus Area Work Groups, and baseline data for this plan. Their names are listed in Appendix D to recognize their invaluable contribution to the Plan and the *Healthy Connecticut 2020* state health planning initiative.

We gratefully acknowledge many contributions of our consultant,

# Health Resources in Action Boston, MA

for facilitating the formation of the Coalition, coordinating the activities of the Coalition's Advisory Council and Work Groups, and for developing and compiling this Plan, in cooperation with DPH.

This plan was supported by funds made available from the Centers for Disease Control and Prevention, Office for State, Tribal, Local and Territorial Support, under grant number 5U58CD001324. The content of this document does not necessarily represent the official position or endorsement by the Centers for Disease Control and Prevention.

# LETTER FROM THE COMMISSIONER

Dear Colleagues:

I am pleased to present the 2014 Connecticut State Health Improvement Plan, a roadmap for improving the state's health and ensuring that all people in Connecticut have the opportunity to attain their highest potential for health.

The plan is based on findings from the Connecticut State Health
Assessment. Together these efforts comprise *Healthy Connecticut*2020, a state health planning initiative developed by more than 100 partners and organizations in the Connecticut Health Improvement Planning Coalition.

The plan identifies seven focus areas and 136 objectives related to the issues that most affect the state's health and well-being. The broad framework incorporates concepts from national initiatives such *Healthy People 2020* and the *National Prevention Strategy*. In particular, it focuses on prevention and shared responsibility of all sectors and partners for improving health. The plan also illustrates the need to ensure public health and health services are accessible in every community, and for new strategic partnerships to address the social and physical environments in our homes, workplaces, schools, and recreational areas affecting our health.

The plan is data driven with baselines and targets to help us monitor progress. Implementation of evidence-based strategies related to policy, advocacy, communication, partnership development and education will provide opportunities for aligning efforts and sharing approaches that shape a healthier Connecticut by 2020. These strategies are the core of public health and our prevention focus.

Thank you and congratulations to the DPH staff and our many partners who contributed to this important process. I hope this plan serves as a useful resource for your personal and organizational strategy to improve health, and I invite you to join us in working toward a healthier Connecticut.

Sincerely,

Jewel Mullen, MD, MPH, MPA

Jowel Muller, 18

Commissioner

# **CONTENTS**

# **Connecticut State Health Improvement Plan**

BACKGROUND & INTRODUCTION	
Background	2
Overview	2
Vision, Values and Operating Principles	2
Focus on Health Equity	3
PROCESS	
Planning Model	6
Partner Engagement	6
Community Engagement	6
Identification of Focus Areas	7
Development of the Areas of Concentration	7
Phase 1 Implementation at a Glance	8
The Plan and Other Guiding Documents and Initiatives	9
Going from Plan to Action	9
How You Can Use This Plan	10
THE PLAN	11
Focus Area 1: Maternal, Infant, and Child Health	13
Reproductive and Sexual Health	
Preconception and Pregnancy Care	
Birth Outcomes	
Infant and Child Nutrition	
Child Health and Well-being Focus Area 2: Environmental Risk Factors and Health	
LeadLead	
Drinking Water Quality	
Outdoor Air Quality	
Healthy Homes	
Healthy Communities	35
Focus Area 3: Chronic Disease Prevention and Control	
Heart Disease and Stroke	
Cancer	
Diabetes and Chronic Kidney Disease	
Arthritis and Osteoporosis	
Oral Health	
Obesity	
Nutrition and Physical Activity	63
Tobacco	64
Focus Area 4: Infectious Disease Prevention and Control	
Vaccine-preventable Diseases	69

Sexually Transmitted Diseases	74
HIV	77
Tuberculosis	80
Hepatitis C	81
Vector-borne Diseases	83
Foodborne Illness and Infection	
Waterborne Illness and Infections	90
Healthcare Associated Infections	
Emergency Preparedness for Emerging Infectious Diseases	95
Focus Area 5: Injury and Violence Prevention	97
Unintentional Injury	
• Falls	
Poisoning     Motor Vehicle Crashes	
Intentional Injury	
Suicide and Self-inflicted Injury	
Homicide	
Community Violence	
Traumatic Brain Injury	
Child Maltreatment	
Sports Injuries	
Occupational Injuries	
Focus Area 6: Mental Health, Alcohol, and Substance Abuse	
Mental Health and Mental Disorders	
Alcohol Abuse	
Substance Abuse	
Autism Spectrum Disorders	
Exposure to Trauma	
Focus Area 7: Health Systems	
Access to Health Services	
Quality of Care and Patient Safety	
Health Literacy, Cultural Competency and Language Services	
Electronic Health Records	
Public Health Infrastructure Primary Care and Public Health Workforce	
Financing Systems	
Emergency Preparedness and Response	
APPENDICES	
Appendix A: Key Informants	
Appendix B: Partners and Contributing Organizations	147
Appendix C: Advisory Council	149
Appendix D: DPH Contributors	150
Appendix E: Criteria for Phasing of Objectives	151
Appendix F: Objectives by Implementation Phase	
Appendix G: Index of Acronyms	
REFERENCES AND NOTES	
NEFENEINCES AIND INDIES	164

# **BACKGROUND & INTRODUCTION**

Background
Overview
Vision, Values and Operating Principles
Focus on Health Disparities and Health Equity



# **Background**

In 1987, the Connecticut General Assembly mandated the Connecticut Department of Public Health as lead agency for public health planning in the state. In 1993, it added a mandate for DPH to develop a comprehensive, multi-year state health plan that comprises assessments of the health status of Connecticut's population and the availability of health facilities (*Connecticut General Statutes*, Chapter 368a, Section 19a-7.) The Legislature designated the Office of Health Care Access (now part of DPH) to establish the statewide health facilities plan as part of the state health plan (*CGS*, Chapter 368z, 19a-634(b)).

In recent years, the Connecticut
Department of Public Health has issued
numerous categorical health improvement and
strategic plans. In Connecticut, inter- and intraagency overlap of activities is common, with the
same diseases, health conditions, population
health issues, or services being addressed by
several agencies or several programs within a
single agency.

As a result, these efforts may be duplicative and lacking in alignment and coordination, issues that are compounded by fragmented administrative and organizational infrastructures; lack of resources; and different data sources for decision-making. Coordinated public health planning through stakeholder coalitions can mitigate many of these concerns and is the organizing principle behind *Healthy Connecticut 2020*.

Building on its development of the 1992 Healthy Connecticut 2000 Baseline Assessment Report, the Healthy Connecticut 2000 Final Report, and the Healthy Connecticut 2010 Final Report, DPH will lead efforts outlined in Healthy Connecticut 2020. The current Plan is designed to be an integrating framework for agencies, coalitions, organizations, groups, and individuals to use in leveraging resources, coordinating and aligning efforts, and sharing

data and best practices to improve the health of Connecticut residents in a focused and purposeful way.

# **Overview**

A State Health Improvement Plan is a roadmap for promoting and advancing population health. It is focused on improving health outcomes through prevention and risk reduction. It differs from a strategic plan in that its goals and objectives are largely measurable changes in health outcomes and risk behaviors and exposures.

A State Health Improvement Plan is created through a statewide, collaborative planning process that engages partners and organizations to develop, support, and implement the Plan. The Plan is intended to provide a vision for the health of the state and a framework for organizations to use in leveraging resources, engaging partners, and identifying their own priorities and strategies for collective action.

Healthy Connecticut 2020 will enable loosely-networked system partners to coordinate for more efficient, targeted and integrated health improvement efforts.

# **Vision, Values and Operating Principles**

The Advisory Council of the Connecticut Health Improvement Planning Coalition developed the following process vision, values and operating principles to support the planning process and the Plan:

# Vision

The Connecticut Department of Public Health, local health districts and departments, key health system partners, and other stakeholders integrate and focus their efforts to achieve measurable improvements in health outcomes.

# Values and Operating Principles

- Integrated approach (with State and local health departments and key health system partners)
- Collaboration (among State and local health departments and DPH programs)
- Balance between depth of focus and breadth of scope (to increase impact)
- Health equity
  - Evidence-based practices and strategies
- Build on and expand from existing initiatives
- Present data to stakeholders in a meaningful way (understandable, actionable, can drive next action)

Objectives marked with this icon represent health equity objectives and strategies for disadvantaged or vulnerable populations and those with significant health disparities.

Social determinants of health are the conditions in which people are born, grow, live, work, age, and die, including the health system. Recognizing the impact of social determinants on health outcomes of specific populations, the Plan requires the tracking of numbers and rates of illness, death, chronic conditions, risk behaviors, and other types of outcomes, in relation to demographic factors and the social environment, to the greatest extent possible.

The Connecticut State Health Improvement Plan also incorporates a "Healthy Communities" approach; that is, a focus on how a community—its homes, streets, parks, walking paths, and grocery stores—is designed to promote everyone's health and well-being.

# **Focus on Health Equity**

Health equity is defined as the attainment of the highest level of health for all people.1 Health equity is a central tenet of this Plan, because members of the Connecticut Health Improvement Planning Coalition and Advisory Council believe that good health is a right for every resident, regardless of age, sex, race or ethnicity, gender identity, sexual orientation, disability status, socioeconomic status, or geographic location-- factors that contribute to an individual's ability to achieve good health.2 A health disparity is a difference in health status, risk factors, and/or health outcomes among subgroups of the population. Health disparities often stem from social, economic, or environmental disadvantages.

During the development of this Plan, there was a specific focus on disadvantaged and vulnerable populations, in an effort to work toward achieving health equity and eliminating health disparities.



# **PROCESS**

Planning Model

Partner Engagement

**Community Engagement** 

**Identification of Focus Areas** 

**Development of Areas of Concentration** 

Relationship between the Plan and Other Guiding Documents and Initiatives

Going from Plan to Action

How to Use This Plan



# **Planning Model**

Similar to the process for the State Health Assessment (described in *Healthy Connecticut 2020, Part 1*) development of this Plan utilized a participatory, community-driven approach guided by the Mobilization for Action through Planning and Partnerships (MAPP) process.<sup>3, 4</sup>

The MAPP model outlines a series of assessments that form the basis for collaborative planning. This Plan used a modified MAPP process as follows: The community health status assessment was the primary focus of the State Health Assessment. Community themes and strengths were gathered during Work Group planning sessions, as Work Group members identified potential resources and partners that could be leveraged and engaged for particular priorities of the Plan. The result of these conversations is included in each of the goal areas of this document.

Local public health agencies participated in both the Work Group sessions and on the Advisory Council, and provided important perspectives on systems capacity from various regions of the state. In March, 2014, Coalition members identified additional community assets as well as relevant environmental factors (forces of change) that could affect the Plan's implementation.

As this is a "living" document, DPH expects that information gathering and sharing will be an ongoing process that will be facilitated by DPH during Plan implementation.

# **Partner Engagement**

Accountable and effective public health practice depends upon comprehensive and strategic health improvement planning that engages a wide range of partners. Development of the Plan was led by the Connecticut Department of Public Health in collaboration with many partners from across the state (see Appendix B: Partners and Organizations). The Connecticut Health Improvement Planning Coalition, a large advisory body of

representatives from diverse local, regional, and statewide entities whose policies and activities can affect and influence health, was responsible for reviewing the State Health Assessment data, participating in Work Groups, making recommendations for the Plan, serving as community ambassadors for planning initiatives, and fostering connections with key networks and groups for action. Focus Area Work Groups, led by Co-Chairs from the member organizations of the Coalition, assisted in the identification of Work Group members, and led Work Groups in the development of goals, objectives, implementation strategies, potential partner lists, and Phase 1 recommendations for each of the seven Focus Areas of the Plan. In addition, Work Group members sought input from DPH subject matter experts throughout the process, and acted as ambassadors and educators as the Plan was being developed.

The Advisory Council, made up of 25 Connecticut leaders from various sectors, was responsible for guiding DPH in the development of the Plan and played a key role in reviewing Work Group products and making recommendations.

Health Resources in Action (HRiA), a nonprofit public health organization based out of Boston, MA, provided technical assistance, strategic guidance and facilitation.

# **Community Engagement**

Community engagement at multiple levels is critical throughout all components of a health improvement planning process, from conducting the state health assessment, to developing and implementing the state health improvement plan. Involving a broad range of stakeholders and developing multi-sector partnerships led to the creation of this actionable and sustainable Plan. In addition to being involved on the Coalition and serving in Focus Area Work Groups, community members were invited to provide input and feedback as the Plan was drafted. County forums were held in each of Connecticut's eight counties--Tolland,

Windham, Hartford, Litchfield, Fairfield, New Haven, New London, and Middlesex-- during the months of September and October, 2013 to discuss data and findings of the State Health Assessment. Additionally, two statewide forums were held, including a Spanish webinar and a forum for State agencies. Input from these sessions was used to refine the content of the Plan and to illustrate the needs in the identified focus areas with personal stories.

# **Identification of Focus Areas**

Healthy Connecticut 2020 addresses the following seven distinct health Focus Areas:

Focus Area 1: Maternal, Infant, and Child

Health

Focus Area 2: Environmental Risk Factors

and Health

Focus Area 3: Chronic Disease Prevention

and Control

Focus Area 4: Infectious Disease

**Prevention and Control** 

Focus Area 5: Injury and Violence

**Prevention** 

Focus Area 6: Mental Health, Alcohol,

and Substance Abuse

Focus Area 7: Health Systems

These seven Focus Areas were identified through close examination of data, alignment with topics in *Healthy People 2020*, and dialogue with critical partners in health. On January 31, 2013, a summary of the State Health Assessment preliminary findings was presented to 95 members of the Coalition at its first meeting. Following the presentation, participants were asked to break into one of six Focus Area groups, based on their particular areas of expertise. In these facilitated discussions, participants were invited to ask questions, provide insight, and define the main focus areas for the Plan. Environmental Health was added as a seventh Focus Area based on recommendations from the Coalition.

# **Development of the Areas of Concentration**

# **Planning Coalition**

During the smaller breakout sessions, attendees participated in a facilitated discussion and ranking process to ensure that the most important areas of concentration were included under each Focus Area.

Participants were encouraged to consider issues that were of statewide importance, and to use a health equity lens and a health outcomes focus. Once this process was complete, participants were invited to become members of Focus Area Work Groups that would meet during the months of April through August, 2013 to draft goals, objectives, and strategies for the respective Focus Areas.

# **Advisory Council**

The Advisory Council, which was made up of leaders from across the state and from all sectors, was responsible for guiding DPH in the development of the Plan, and played a key role in reviewing Work Group output and making recommendations. The Advisory Council met four times during the months of May through August, 2013 and was responsible for guiding the planning process, advising on key stakeholders, framing the State Health Assessment and State Health Improvement Plan, and providing recommendations for Phase 1 and Phase 2 implementation.

# **Focus Area Work Groups**

Focus Area Co-Chairs were identified from the Coalition, and in close collaboration with DPH staff and contracted facilitators, they convened a series of 4-6 meetings for each Focus Area; each meeting lasted 3-5 hours. Work Groups were made up of 12-24 individuals from around the state with considerable expertise in one or more areas of concentration. All meetings were facilitated by a consultant, in collaboration with Work Group Co-Chairs and DPH staff.

All Work Group Co-Chairs participated in an hour-long orientation session provided by DPH and its consultants, to review process and role expectations; define terms; and provide specific guidance on the context and focus for planning (e.g., using a social determinants framework, adopting a health equity and healthy communities approach, and identifying and building upon statewide assets).

Each Work Group was also charged with developing objectives for the general population, and objectives for reducing disparities for specific populations that are disproportionately affected. The final set of measurable objectives in each Focus Area and its related areas of concentration was developed by reviewing indicators used in the National Prevention Strategy, County Health Rankings, Healthy People 2020, and by the CDC and Connecticut DPH.

Work Groups selected indicators that were relevant to the specific areas of concentration and goals; that represented long-term metrics; and for which surveillance systems existed. Objective targets were determined by reviewing historical data for each indicator. The Work Groups projected an improvement of 5-10% by 2020, based on intervention strategies and resources; and informed by *Healthy People 2020*. Once the objectives were developed, each Work Group identified evidence-based strategies informed by authoritative sources.

# **Implementation Phases**

Objectives and their related strategies were categorized into two implementation phases using a ranking process and a set of ranking criteria (see Appendix E: Criteria for Phasing of Objectives). Phase 1 objectives (and their related strategies) are those which are the starting point for implementation in the first 3 years of the Plan. These are the objectives and strategies upon which efforts, resources, and opportunities for partnership and leverage will be focused. These objectives will be reevaluated at the end of the first 3 years for potential inclusion in Phase 2 implementation.

Objectives for Phase 1 Implementation are noted throughout the plan by the following

icon: Ph1

Phase 2 objectives and strategies are those that are sequenced for implementation in subsequent years of the Plan. Organizations may already be implementing or may choose to implement Phase 2 objectives and strategies in the first 3 years of the Plan.

A core team from DPH, the consultants, and Work Group members reviewed the draft output from the planning sessions and edited material for clarity, consistency, evidence base, and alignment with data available in the State Health Assessment. This feedback was incorporated into the version of the Plan contained in this report.

# Phase 1 Implementation at a Glance

The following are the objective topics scheduled for Phase 1 implementation listed by Focus Area. (Refer to *Appendix F* for detailed summary of Phase 1 and Phase 2 objectives):

# Maternal, Infant and Child Health

- Unplanned pregnancies
- Prenatal care
- Birth outcomes
- Breastfeeding
- Oral health for children
- Developmental screening

# **Environmental Risk Factors and Health**

- Childhood lead poisoning
- Drinking Water Quality
- Air quality

# **Chronic Disease Prevention and Control**

- Heart disease and high blood pressure
- Diabetes
- Asthma
- Oral health for children
- Obesity
- Smoking

#### **Infectious Disease**

- Vaccinations for children, pregnant women, and childcare providers
- Vaccinate adults against seasonal flu
- Vaccinate adolescents for HPV
- Chlamydia and gonorrhea
- HIV/AIDS
- Hepatitis C
- Healthcare associated infections
- Emerging infectious disease

# **Injury and Violence Prevention**

- Falls
- Unintentional poisonings
- Motor vehicle crashes
- Seatbelt use
- Motorcycle deaths
- Suicide
- Firearms
- Sexual violence
- Child maltreatment

# Mental Health, Alcohol, and Substance Abuse

- Mental health emergency room visits
- Excessive drinking by youth and adults
- Non-medical use of pain relievers
- Illicit drug use
- Screening for autism
- Screening for trauma

# **Health Systems**

- Health insurance coverage
- Community-based health services
- Patient-centered medical homes
- Transportation to access health services
- Quality and patient safety standards for health systems
- Adoption of national Culturally and Linguistically Appropriate Services (CLAS) standards by health and social service agencies
- Professional health workforce shortages and diversity
- Funding to align with prevention and population health priorities

# The Plan and Other Guiding Documents and Initiatives

The Healthy Connecticut 2020 State Health Improvement Plan is closely aligned with the National Prevention Strategy, Healthy People 2020 objectives, the Centers for Disease Prevention and Control, and with other existing State of Connecticut and DPH Plans.

The Plan was designed to complement and build upon other guiding documents, plans, initiatives, and coalitions already in place to improve the health of Connecticut residents.

Rather than conflicting with or duplicating the recommendations and actions of existing frameworks and coalitions, the participants in the Plan development process identified potential partners and existing networks and resources (statewide assets as defined in the Mobilizing for Action Planning and Partnerships model) wherever possible. Those engaged in this process recognize that identifying partners, resources, and initiatives and compiling them in a common database is an ongoing effort that is critical for successful implementation and sustainability. DPH has assumed the role of convening partners and organizing available data to support collective action.

# **Going from Plan to Action**

Healthy Connecticut 2020 is designed to be a broad framework for state health improvement, and should be modified and adjusted as conditions, resources, and external environmental factors change. It is developed and written in a way that engages multiple perspectives, so that all community groups and sectors – private and nonprofit organizations, government agencies, academic institutions, community- and faith-based organizations, and consumers – can unite to improve the health and quality of life for all people who live, work, study, and play in the State of Connecticut.

The Plan reflects a commitment of partners and stakeholders to collaborate in addressing shared issues in a systematic and accountable

way. The next phase of the Plan will be to solidify a framework for implementation. This phase will include the implementation of clear communication strategies, a strong evaluation component, ongoing partnership, Work Group and Coalition development strategies, and cross sector project management and leadership.

# **How You Can Use This Plan**

# Community/nonprofit/faith based organizations:

Understand and promote priority health issues among the community members and stakeholders you serve

Talk with community members about the importance of wellness and connect them with resources

Align activities and outreach efforts with health improvement needs and recommendations in this Plan

Advocate for changes that improve health by interacting with policy makers and legislative officials

# Government (local, State)

Understand and promote priority health issues in the community

Identify barriers to health in the community and state and make plans for action

Invest in programs, services, systems, and policy changes that will support the health needs of the community and state

# **Individuals and families**

Understand and promote priority health issues among family members and friends

Create opportunities to educate others and take action at schools, churches, workplaces, etc., to support the objectives in this Plan

### **Businesses/employers**

Understand priority health issues in this Plan and how they apply to your workforce

Change your work environment and enhance your benefits plans to support healthier employees

Educate your management team and employees about the link between employee health and work productivity

# **Healthcare systems**

Plan for Non-Profit Hospital Community Benefits initiatives

Incorporate recommendations into organizational strategic planning

Lead your organization and the health care industry in responding to the health needs of the community and state

# **Health Care Professionals**

Identify important health issues and barriers that exist for your clients and use recommended practices to make changes

Share the information in this Plan with your colleagues

Lead your peers in advocating for actions that will improve the health of the community

# **Health Insurers**

Educate employers and other health insurance purchasers about the benefits of preventive health care and responding specifically to the health needs of the state

# **Education Institutions**

Understand and promote priority health issues in this Plan and incorporate them as educational lessons in health, science, social studies, and other subjects, or when designing research studies or service projects within the community and state

Create opportunities to take action at schools to support the objectives in this plan that affect students, faculty, staff, and parents.

# THE PLAN

- 1: Maternal, Infant, and Child Health
- 2: Environmental Risk Factors and Health
- 3: Chronic Disease Prevention and Control
- 4: Infectious Disease Prevention and Control
- 5: Injury and Violence Prevention
- 6: Mental Health, Alcohol, and Substance Abuse
- 7: Health Systems



1

# Maternal, Infant, and Child Health

- Reproductive and Sexual Health
- Preconception and Pregnancy Care
- Birth Outcomes
- Infant and Child Nutrition
- Child Health and Well-being



# WORK GROUP ON MATERNAL, INFANT, AND CHILD HEALTH

**Co-Chairs** 

Ann Gionet

Connecticut Department of Public Health

Erin Jones

March of Dimes

**Members** 

Maggie Adair

Connecticut Early Childhood Alliance

Linda Arpino

Linda Arpino & Associates, Inc. & Life Focus Nutrition Centers

Stephen Balcanoff

Connecticut Children's Medical Center

Mary Bawza

Planned Parenthood of Southern New England, Inc.

Patricia Beirne Greenwich Hospital

Rosa Biaggi

Connecticut Department of Public Health

Elizabeth Conklin

March of Dimes

Pat Cronin

Connecticut Department of Social Services

Bernadette D'Almeida

Community Health Network of Connecticut, Inc.

Patricia A. DeWitt Yale New Haven Hospital Samantha Dynowski
Early Childhood Alliance

Cynthia Fortner March of Dimes

Nadine Fraser

Connecticut Hospital Association

Amy Gagliardi

Community Health Center, Inc.

Janice Gruendel

Connecticut Department of Children and Families

Stephanie Knutson

Connecticut State Department of Education

Sarah Levy, Intern

University of Connecticut, Master of

Public Health Program

Mary Kate Lowndes

Connecticut Commission on Children

Leticia Marulanda Hispanic Health Council

**Judith Meyers** 

Children's Fund of Connecticut & Child Health

and Development Institute

Jennifer Morin

Connecticut Department of Public Health

Shital Shah, Intern Goodwin College

# **GOAL**

Optimize the health and well-being of women, infants, children and families, with a focus on disparate populations.

### WHY THIS GOAL IS IMPORTANT

The health and well-being of mothers, infants, and children are important indicators of community and state health, and are critical for our nation's future health, well-being, and prosperity. While infant mortality rates have declined in the US and Connecticut, racial and ethnic disparities in infant mortality, and low birthweight and preterm birth (risk factors for infant mortality) persist.<sup>5</sup>

# **Reproductive and Sexual Health**

# **Rationale**

Unplanned pregnancy has a public health impact. Births resulting from unintended or closely spaced pregnancies are associated with adverse maternal and child health outcomes, such as delayed prenatal care, premature birth, and negative physical and mental health effects for children.<sup>6</sup> Reproductive and sexual health education and support services enable young and adult men and women to make informed and healthier choices about family planning.

# **OBJECTIVE MICH-1**



Reduce by 10% the rate of unplanned pregnancies.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	34.5%	31%	Connecticut Department of Public Health,
	(2010-2011)		Connecticut Pregnancy Risk Assessment and
			Tracking System (PRATS) Survey

# **Strategies**

#### **Communications**

 Support parents and guardians in their efforts to talk with adolescents about sexuality by providing culturally sensitive, developmentally appropriate information and materials.

#### **Education and Training**

• Educate women of childbearing age on increased risks of birth defects and multiple births among women over age 35.

# Partnership and Collaboration

Support reproductive and sexual health services.

# Surveillance

Support and monitor school district compliance with mandatory Health Education curriculum.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Children and Families; Commission on Children; community health centers and clinics; school based health centers; primary care providers; health professional associations; community service providers for family and youth; faith-based organizations; schools of public health, allied health, nursing, and medicine; and others.

# **Preconception and Pregnancy Care**

# **Rationale**

Poor preconception health and inadequate access to prenatal care increase the risk of adverse birth outcomes and negatively affect overall health and well-being later in life. In Connecticut, inadequate prenatal care disproportionately affects black and Hispanic women. Only about one-third of black women and Hispanic women discuss preconception health with their health care providers, compared to more than half of white women. Preconception and prenatal health care enhances birth outcomes by providing an opportunity to discuss healthy behaviors such as diet, healthy weight, and abstaining from alcohol and tobacco, before and during pregnancy.

# **OBJECTIVE MICH-2**

Increase by 10% the proportion of women delivering a live birth who discuss preconception health with a health care worker prior to pregnancy.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	44.7%	49.2%	Connecticut Department of Public Health,
	(2010-2011)		Connecticut Pregnancy Risk Assessment and
			Tracking System (PRATS) Survey

# **Strategies**

# **Communications**

• Develop or adapt a media campaign about the importance of preconception health (radio, television, community brokers, and schools).

# **Education and Training**

• Develop a plan to educate providers on the importance of preconception health, through a partnership between the Department of Public Health and the Department of Social Services.

# Planning and Development

• Explore the impact of Neonatal Abstinence Syndrome, and identify mechanisms for addressing the issue.

# Surveillance

• Support and monitor school district compliance with mandatory Health Education curriculum.

# **OBJECTIVE MICH-3**



Increase by 10% the proportion of pregnant women who receive prenatal care during the first trimester of pregnancy.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	87% (2011)	95.7%	Connecticut Department of Public Health, Vital Statistics (Registration
			Reports, Table 4 )

# **Strategies**

Advocacy and Policy

- Partner with Department of Social Services to encourage obstetricians and gynecologists to participate in Medicaid pay-for-performance.
- Advocate for the expansion of the Healthy Start Program statewide.
- Expand the Text-4-Baby initiative among hospitals, community health centers, private providers, women, and the Department of Social Services.

# **OBJECTIVE MICH-4**



Increase by 10% the proportion of pregnant women who receive adequate prenatal care (defined by Kotelchuck Index).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	77.8%	85.6%	Connecticut Department of Public
	(2011)		Health, Vital Statistics (Registration
			Reports, Table 4 )

# **Strategies**

Advocacy and Policy

- Partner with Department of Social Services to encourage obstetricians and gynecologists to participate in Medicaid pay-for-performance.
- Advocate for the expansion of the Healthy Start Program statewide.
- Expand the Text-4-Baby initiative among hospitals, community health centers, private providers, women and DSS.

# **Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Children and Families; Commission on Children; State Legislature; faith-based organizations; community health centers; other health care facilities and providers; local boards of education; health professional associations; organizations and coalitions that support women, preconception and pregnancy care; community service providers that address women and families; schools of public health, allied health, nursing, and medicine; and others.

# **Birth Outcomes**

# **Rationale**

Preterm births (less than 37 weeks), low birthweight births (less than 2,500 grams (5 lbs 8 oz)), and very low birthweight births (less than 1,500 grams (3 lbs 5 oz)) are important predictors of infant survival and well-being. Risk for infant illness and death increases with lower birthweight, which, in turn, is associated with gestational age (the number of weeks between conception and birth). There are conspicuous disparities in birth outcomes among Connecticut residents, particularly for singleton, non-Hispanic black and singleton, Hispanic infants. Enhancing access to screening, preconception, prenatal, and postpartum (after delivery) care improves the potential for healthy infant and child well-being for all population groups.

# **OBJECTIVE MICH-5**

Reduce by 10% the proportion of low birthweight and very low birthweight among singleton births.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	6.5% VLBW	5.9%	Connecticut Department of Public
	(2010)		Health, Vital Statistics, Registration
			Reports, Table 3
	8.0% LBW	7.2%	
	(2010)		

# Strategies\*

Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during, and after pregnancy.

### Partnership and Collaboration

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

### Surveillance

• Develop data systems to understand and inform efforts.

# **OBJECTIVE MICH-6**

Reduce by 10% the proportion of live singleton births delivered at less than 37 weeks gestation.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	8%	7.2%	Connecticut Department of Public Health, Vital
	(2011)		Statistics, Registration Reports, Table 3.

# Strategies\*

Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.

Improve access to healthcare for women before, during and after pregnancy.

# Partnership and Collaboration

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

# Surveillance

Develop data systems to understand and inform efforts.

# **OBJECTIVE MICH-7**



Reduce by 10% the infant mortality rate (infant deaths per 1,000 live births).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	5.3 per 1,000	4.8 per 1,000	Connecticut Department of
	(2008-2010)		Public Health, Vital Statistics,
			Registration Reports, Table 2A

# Strategies\*

# Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.

# Partnership and Collaboration

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

#### Surveillance

Develop data systems to understand and inform efforts.

# **OBJECTIVE MICH-8**





Reduce by 10% the disparity between infant mortality rates for non-Hispanic blacks and non-Hispanic whites.

Target Population(s)	Baseline	2020 Target	Data Source
Non-Hispanic black women and infants	2.9 times higher among non-Hispanic black infants than non- Hispanic white infants	2.6 times higher among non-Hispanic black infants than non-Hispanic white infants	Connecticut Vital Statistics Registration Report Table 12

# Strategies\*

# Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.

### Partnership and Collaboration

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

#### Surveillance

Develop data systems to understand and inform efforts.

# **OBJECTIVE MICH-9 (DEVELOPMENTAL)**

Reduce the proportion of non-medically indicated inductions/Cesarean sections prior to 39 weeks gestation.

# Strategies\*

### Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.
- Partner with obstetricians, gynecologists, and hospitals to adapt hard-stop policy on elective Cesarean births.

# **Education and Training**

• Educate pregnant women on the risk of elective Cesarean births.

### Partnership and Collaboration

- Address the quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

# Surveillance

Develop data systems to understand and inform efforts.

# **Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Children and Families; Commission on Children; health care providers; health care facilities; health insurers; professional associations for nursing, dieticians, and pharmacists; organizations and coalitions that support women and infants; community service providers that address at-risk populations; schools of public health, allied health, nursing, and medicine; and others.

<sup>\*</sup>Note: Strategies under the Birth Outcomes concentration area align with the State Plan to Improve Birth Outcomes to be released in 2014.

# **Infant and Child Nutrition**

# **Rationale**

Breastfeeding is associated with improved maternal and infant health, including nutritional, immunologic, developmental, and psychological benefits. <sup>10</sup> Infants who are breastfed have lower risk of childhood infections, respiratory conditions, sudden infant death syndrome, childhood obesity, type 2 diabetes, and childhood asthma. <sup>11</sup>

Compared to white non-Hispanic infants, Hispanic and black non-Hispanic infants are less likely to have ever been breastfed; the same is true for infants born to women of lower socioeconomic status.<sup>12</sup> These data indicate a need to enhance outreach to these populations in Connecticut.

# **OBJECTIVE MICH-10**



Increase by 10% the proportion of infants who are breastfed.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	88.5%	97.4%	Connecticut Department of Public
	Ever breastfed		Health, Connecticut Pregnancy
	(2010-2011)		Risk Assessment and Tracking
	37.1%	40.8%	System (PRATS) Survey
	Breastfed exclusively		
	through 3 months		
	(2010-2011)		
	12.3%	13.5%	
	Breastfed exclusively		
	through 6 months		
	(2010-2011)		

# **Strategies**

# Advocacy and Policy

 Ensure access to lactation support, including breast pumps, consistent with the Women's Health Provisions of the Affordable Care Act.

#### **Communications**

• Increase employee and employer awareness and understanding of their 'rights and responsibilities' under State and Federal breastfeeding laws.

# **Education and Training**

 Provide targeted technical assistance and support to breastfeeding friendly work places (schools), hospitals, and medical offices to ensure compliance with State and Federal workplace lactation accommodation laws.

# Planning & Development

• Engage and plan with established community support networks to promote health equity in breastfeeding initiation, exclusivity and duration.

# 1

# **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Labor; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Children and Families; State Legislature; professional associations for businesses; community health centers; primary care providers; health professional associations for lactation consultants and nutrition; faith-based organizations; community service providers for family, youth, and child development; food industry; federal and state nutrition programs; other organizations and coalitions that focus on breastfeeding and nutrition for women, infants, and children; schools of public health, allied health, nursing, and medicine; and others.

# **Child Health and Well-being**

# **Rationale**

Preventive health and dental care for children provide a foundation for good health well into adulthood. Although most Connecticut children saw a health care provider for preventive medical care in 2011, far fewer of those enrolled in the Medicaid Program, who are lower income children, received such care.

This disparity continues for those receiving any dental care, preventative dental care, or dental treatment. The result is a higher incidence of childhood dental caries (decay) for infants of lower socioeconomic status.

"My concern is that there is not enough awareness in the community about how we can work together so that people are aware of children with special needs and how to interact with them so that there are not circumstances or situations where they may not be able to communicate and/or are misunderstood." (Hartford)

Ensuring access to well-child visits and preventive dental care will provide early intervention in treating disease and will improve health outcomes and reduce costs, especially for those at greatest risk.

# OBJECTIVE MICH-11



Increase by 10% the percentage of children up to 19 years of age at greatest risk for poor health outcomes that receive well-child visits (e.g., enrolled in HUSKY A).

Target Population(s)	Baseline	2020 Target	Data Source
Low income and uninsured children	62.8% (2011)	69.1%	Well-child care utilization rate for children who were continuously enrolled in HUSKY A for the calendar year, Connecticut Voices for Children (August 2013).

# **Strategies**

#### **Communications**

Develop and implement an education campaign for parents around patient-centered medical home (e.g., Text-4-Child and Text-for-Teen).

# Partnership and Collaboration

- Explore opportunities to identify cultural barriers to using primary care physicians.
- Support school-based health centers, community health centers, and other community-based organizations to offer comprehensive reproductive health services. (Connecticut Adolescent Health Strategic Plan).
- Partner with AccessHealth CT to encourage youths under 21 years of age to obtain primary care.

# OBJECTIVE MICH-12 Ph1





Increase by 10% the percentage of children under 3 years of age at greatest risk for oral disease (i.e., in HUSKY A) who receive any dental care.

Target Population(s)	Baseline	2020 Target	Data Source
Low income children < age 3	41.6%	45.8%	Connecticut Voices for Children. 2013. Dental
	(2011)		Services for Children and Parents in the HUSKY
			Program: Utilization Continues to Increase Since
			Program Improvements in 2008, Table 1.

# **Strategies**

Advocacy and Policy

- Advocate for more funding for *Home by One*.
- Support enrollment and utilization of HUSKY.
- Ensure maintenance of appropriate pool of providers accepting HUSKY.

#### **Communications**

- Provide public education on importance of annual preventive dental services.
- Conduct public education and awareness campaigns that include cultural and linguistic issues.

### **Education and Training**

Educate providers; include cultural and linguistic issues.

[See also strategies under Objectives CD-20, CD-21, and CD-22.]

# OBJECTIVE MICH-13 Ph1



Increase by 10% the percentage of parents who complete standardized developmental screening tools consistent with American Academy of Pediatrics (AAP) guidelines.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	26.6%	29.3%	National Survey of Children's Health
	(2011)		

# **Strategies**

Advocacy and Policy

Advocate for primary care providers to incorporate parental education on developmental milestones.

### **Communications**

Communicate benefits of standardized developmental screening tools to parents and providers in primary care settings.

#### **Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Developmental Services; Connecticut Office of Early Childhood; Connecticut Department of Children and Families; Commission on Children; community health centers; school based health centers; primary care and dental providers; health professional associations for pediatricians and other primary care providers; faith-based organizations; community service providers for family, youth and child development; local boards of education and special education; schools of public health, allied health, nursing and medicine; and others.

# 2

# **Environmental Risk Factors and Health**

- Lead
- Drinking Water Quality
- Outdoor Air Quality
- Healthy Homes
- Healthy Communities



# WORK GROUP ON ENVIRONMENTAL RISK FACTORS AND HEALTH

**Co-Chairs** 

Patrick McCormack
Uncas Health District

Paul Schur

Adjunct Professor, University of Connecticut,

Master of Public Health Program

**Members** 

Suzanne Blancaflor

Connecticut Department of Public Health

Andrea Boissevain

Stratford Health Department

Judith R. Dicine

Connecticut Division of Criminal Justice, Office of the Chief State's Attorney

Nadine Fraser

Connecticut Hospital Association

**Robert Girard** 

Connecticut Department of Energy and

**Environmental Protection** 

Anne Hulick

Clean Water Action

Martha Kelly

Connecticut Coalition for Environmental Justice

**Sharon Lewis** 

Connecticut Coalition for Environmental Justice

Marco Palmeri

Connecticut Environmental Health Association

**Edith Pestana** 

Connecticut Department of Energy and

**Environmental Protection** 

Kate Powell

South Central Connecticut Regional Water Authority

Thomas St. Louis

Connecticut Department of Public Health

Carolyn Wysocki

Ecological Health Organization, Inc. and

Connecticut Association of Local Boards of Health

### **GOAL**

Enhance public health by decreasing environmental risk factors.

### WHY THIS GOAL IS IMPORTANT

Poor health outcomes resulting from exposure to lead, asbestos, radon, and air pollution have declined in the past decade in the US and Connecticut. These environmental hazards remain important risks, however because of their causal relationship with cancer, cardiovascular disease, respiratory disease, and cognitive and developmental problems, among other health concerns. The prevention, identification, and treatment of environmental risks, the enforcement of healthy housing standards, and the inclusion of health concerns into land planning and use result in both direct improvements in health and substantial cost savings.

# Lead

### Rationale

Lead exposure affects nearly every system in the body. Exposure of children to high levels of lead is associated with adverse health effects, including anemia, kidney damage, colic, muscle weakness, brain damage, and death. <sup>13</sup> Even low levels of lead exposure can have harmful cognitive, developmental, and behavioral effects in children. 14 Lead exposure often is not recognized, because it frequently occurs with no obvious symptoms.

Although elevated blood lead levels among children in Connecticut have declined over the past few decades, disparities persist.<sup>15</sup> Greater proportions of children who are non-Hispanic black, low-income, or who live in homes built before 1960 have elevated blood lead levels. Educating parents, enhancing screening, and reducing exposure to lead contamination are strategies that reduce the health risks of lead poisoning for Connecticut's most vulnerable children.

# OBJECTIVE ENV-1



Reduce to less than 3% the prevalence rate of children less than 6 years of age with confirmed blood lead levels at or above the CDC reference value (5 µg/dL).

Target Population(s)	Baseline	2020 Target	Data Source
Children less than 6 years of age who were screened for lead poisoning	3.1% (2,261/73,785 children) (2012)	<3%	Connecticut Department of Public Health, Lead Surveillance System

# **Strategies**

# Advocacy and Policy

- Introduce policy that requires medical care providers to give anticipatory guidance to parents for children whose blood lead levels are at or above 5 μg/dL.
- Leverage existing Lead Poisoning Prevention and Control funding allocated to communities for increasing targeted lead poisoning prevention efforts that have been proven effective.

### **Education and Training**

Provide educational materials about reducing exposure to lead hazards to high risk families with children less than 6 years of age.

#### Partnership and Collaboration

- Utilize existing coalitions and collaborations to develop programs to target all children less than 6 years of age and highest risk populations in urban areas.
- Partner with health care professionals to increase their ability to identify, prevent, and reduce environmental health threats, including lead, via technical assistance visits to providers, outreach to hospitals, and course(s) on environmental risk factors for children at the university level, school nurses.
- Partner with health care professionals to establish and enhance case management activities to align with 2012 CDC recommendations for childhood lead poisoning prevention and control.
- Partner with health care professionals to improve provider compliance with mandated lead testing requirements; increasing mandatory lead testing for all children at least 1 time per year until they reach 3 years of age.

# 2

# Planning & Development

- Identify high risk areas (pre 1978 housing with low socio-economic status families) in communities, and develop a plan to reduce exposure to lead-base painted surfaces.
- Explore options for infrastructure/capacity to address lead poisoning, to address abatement or remediation issues effectively in a timely manner.

#### Surveillance

• Develop a program to conduct inspections on units in pre-1978 rental housing; exploring collaborations with HUD inspectors with Healthy Homes inspections.

# **Potential Partners**

Connecticut Department of Public Health; State of Connecticut Division of Criminal Justice; Connecticut Department of Energy and Environmental Protection; Connecticut Department of Economic and Community Development; Connecticut Department of Social Services; State Department of Education; Connecticut Department of Administrative Services; Connecticut Department of Children and Families; Connecticut Department of Housing; Office of the Attorney General; local courts; U.S. Environmental Protection Agency; local public health agencies; local housing authorities and departments; housing and urban development agencies; professional associations for public health, housing; occupational health and safety, and the environment; continuing education providers; health insurers; organizations and coalitions focused on environmental health, housing, and real estate; primary care providers and community health centers; other professional associations; community service providers serving children and at-risk populations; regional lead treatment centers; licensed lead abatement and renovation contractors; childcare providers; neighborhood revitalization zones; and others.

## **Drinking Water Quality**

#### Rationale

Safe drinking water is fundamental to good health and comes from a variety of sources including public water systems, private wells, or bottled water. Most water sources in Connecticut meet acceptable health and recreational standards; however, it is important to continuously monitor Connecticut's water supply for exposure to contaminants and ground water pollution, disease causing bacteria, and disruptions to water systems due to major weather events such as storms and floods. Exposure to contaminants can lead to harmful health effects such as cancer, birth defects, and damage to organs, the nervous system, and immune system.<sup>16</sup>

#### **OBJECTIVE ENV-2 (DEVELOPMENTAL)**

Reduce the risk of consumption of unsafe drinking water from ground water sources serving private wells.

#### **Strategies**

#### Communications

• Develop a statewide campaign to educate residents about source water protection.

#### Research and Surveillance

- Convene a task force to reevaluate the capabilities of the MAVEN database to collect private well data upon the pilot's completion, or identify an alternative.
- Establish a surveillance system to collect, maintain and monitor water quality in private wells statewide.

# **OBJECTIVE ENV-3 (DEVELOPMENTAL)**



Reduce the risk of waterborne disease outbreaks due to consumption of contaminated drinking water for all ground-water-based, small community public water systems following an emergency situation.

#### **Strategies**

#### **Education and Training**

• Provide free emergency plan training and asset management plan training with technical assistance to all small community public water systems, to increase direct financial, managerial and technical assistance to assure system viability and sustainability.

#### Planning and Development

- Offer subsidized Drinking Water State Revolving Fund (DWSRF) loans each year for system infrastructure
  projects to bring systems into compliance, to increase direct financial, managerial and technical assistance
  to assure system viability and sustainability.
- Offer subsidized Drinking Water State Revolving Fund (DWSRF) loans each year for system generators, to increase direct financial, managerial and technical assistance to assure system viability and sustainability.

#### Surveillance

 Utilize existing enforcement measures to increase compliance of small community public water systems, to increase direct financial, managerial and technical assistance to assure system viability and sustainability.

#### **Potential Partners**

Connecticut Department of Public Health, State of Connecticut Division of Criminal Justice, Connecticut Department of Energy and Environmental Protection, Connecticut Department of Economic and Community Development, Connecticut Department of Consumer Protection, State Department of Education, Connecticut Department of Administrative Services, Connecticut Department of Housing, Office of the Attorney General, local courts, regional water authorities, federal environmental and geological agencies, local public health agencies, public health professional associations, local water quality agencies, other professional associations concerned with water quality and safety, organizations and coalitions focused on public health and the environment, philanthropic and research organizations that address the environment, and others.

## **Outdoor Air Quality**

#### Rationale

Poor outdoor air quality is one of the greatest environmental threats to human health. Air pollution is associated with premature death, cancer, lung diseases, and cardiovascular disease.17

Air quality has continued to improve in Connecticut, but there are still many occasions each year when pollutant levels, measured according to the US Environmental Protection Agency's Air quality index, endanger the public's health. 18,19 Improvements in meeting federal clean air standards would

"I would like to see DPH do more to address root causes of environmental health problems, i.e., the concentrated pollution of air and water in our urban communities. (New London)"

save approximately \$193 million in hospital expenditures over a 3-year period.<sup>20</sup>

# OBJECTIVE ENV-4 Ph1



Reduce by 10% the average number of days/year the Air Quality Index (AQI) exceeds 50.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	149 days/year	134 days/year	Connecticut Department of Energy
	8 year average		and Environmental Protection
	(2005-2012)		

### **Strategies**

#### Advocacy and Policy

- Seek to limit the amount of air pollution transported into the state of Connecticut from upwind sources, through legal actions under the Clean Air Act and voluntary actions with other states.
- Work with employers to promote telecommuting, electronic meetings, and other alternatives, to reduce the number of cars on the road on forecasted poor air quality days.
- Advocate for municipalities to increase their use of electric vehicles for their fleets.
- Develop and propose policy (or regulation) on banning outdoor wood burning (i.e., fireplaces, fire pits) and indoor wood burning stoves on forecasted poor air quality days. Exceptions would be for sole sources of heat in heating season.
- Implement regulations that would require outdated wood stoves that do not comply with US EPA standards to be replaced when houses change ownership.
- Provide incentives for and reward behaviors of people, organizations, companies that improve the air quality.

#### **Communications**

- Publicize the benefits of public transportation in general and as an alternative transportation, to reduce the number of cars on the road on forecasted poor air quality days.
- Increase awareness of the 3-minute vehicle idling law, through driver training curriculum, driver's license testing, and when renewing licenses and registrations.

#### Partnership and Collaboration

Enhance existing partnerships with State agencies, universities and private businesses to assess the feasibility of initiating statewide use of "green" technologies (e.g., "green" buildings, renewable energy, energy efficiency, and "green" chemistry) that can help reduce use of energy, water, and other resources and decrease pollution.

#### Planning & Development

- Work with public transportation entities to develop efficient, direct bus routes. Continue to retrofit buses
  to reduce emissions by installing control devices such as diesel particulate filters, diesel oxidation
  catalysts, and closed crankcase ventilation systems on diesel-powered engines, to reduce exhaust
  emissions.
- Promote cleaner vehicle use by installing more electric vehicle charging stations.
- Identify wood burning units of greatest concern and develop a phase-out plan.

#### Research

• Evaluate the public transportation system to identify opportunities to reduce emissions on buses.

#### Surveillance

Enforce the 3-minute vehicle idling law (pursue ticketing authority).

# **OBJECTIVE ENV-5 (DEVELOPMENTAL)**





Increase public awareness of the presence and risks of poor air quality days.

#### **Strategies**

#### **Communications**

- Provide public information and data to encourage sound decision making about outdoor activity on poor air quality days.
- Develop a comprehensive, standardized alert process to alert the public, and specifically reach at-risk populations, in the event of poor air quality.

#### **Education and Training**

 Develop and implement a plan for education and outreach about poor air quality days for at-risk populations.

#### Partnership and Collaboration

• Encourage schools to develop a list of at-risk children and design specific alternative indoor recess activities for those children on "bad air" days.

#### Research, Surveillance

• Establish baseline measurement of at-risk populations' level of awareness of forecasted poor air quality days.

(See also strategies under objectives CD-14, CD-15 and CD-16.)

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Administrative Services (Division of Construction Services); State Department of Education; Connecticut Department of Energy and Environmental Protection; Connecticut Department of Transportation; Connecticut Department of Motor Vehicles; Connecticut Division of Criminal Justice; Office of the Attorney General; U.S. Environmental Protection Agency; local courts; local public health agencies; housing and urban development agencies; professional associations for public health, health care, business, and housing; schools and municipalities; organizations and coalitions focused on health and the environment; health care providers; community service organizations serving children and underserved populations; childcare providers and after school programs; media; and others.

## **Healthy Homes**

#### **Rationale**

Housing conditions are critical to health. Substandard housing is linked to lead poisoning, allergens and respiratory diseases such as asthma, and puts residents at risk for injuries. Other issues of concern include exposure to asbestos and radon which increases the risks of lung diseases such as lung cancer. An increase in the number of Healthy Homes inspections, and enforcement of minimum housing code standards, can minimize the health risks caused by substandard housing and exposure to environmental hazards in the home.

## **OBJECTIVE ENV-6 (DEVELOPMENTAL)**

Increase the enforcement of minimum housing code standards through the collaboration of code enforcement agencies.

#### **Strategies**

Advocacy and Policy

• Establish incentives for those property owners who comply with new code, such as tax breaks and restricting federal, state and local housing rehabilitation funding to those who comply with the new code.

#### **Communications**

• Develop media or other awareness campaigns to inform property owners of the new code.

#### Planning and Development

- Establish/reconvene a task force to revive the discussion and move forward on proposing a minimum statewide housing and property code.
- Establish a statewide minimum housing code for the State of Connecticut.

#### Research, Surveillance

Establish baseline measurement of "sub-standard housing".

#### **OBJECTIVE ENV-7**

Increase by 10% the number of Healthy Homes inspections.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	45 Initial inspections (2012)	49.5	Connecticut Department of Public Health, Environmental Health Section

#### **Strategies**

Advocacy and Policy

- Advocate for the adoption and use of a statewide standardized Healthy Homes assessment tool to be utilized by all home visit service providers across the state of Connecticut.
- Advocate for funding to support Healthy Homes projects.

Communications, Education & Training

- Develop an education/awareness campaign on Healthy Homes for code enforcement officials, utilizing a variety of approaches/methods.
- Develop an education/awareness campaign on Healthy Homes for Connecticut residents, utilizing a variety of approaches/methods.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Administrative Services (Division of Construction Services); Connecticut Department of Economic and Community Development; Connecticut Department of Housing; State Department of Education; Connecticut Department of Energy and Environmental Protection; Connecticut Division of Criminal Justice; Connecticut Department of Consumer Protection; Office of the Attorney General; State Legislature; environmental advocacy organizations; local public health agencies; U.S. Environmental Protection Agency; housing and urban development agencies; other professional associations for public health, health care, housing and architecture; business including banking, energy providers, and realtors; organizations and coalitions focused on health and the environment; health care providers; community service organizations serving children and underserved populations; continuing education providers; lead treatment and prevention centers; academic research institutions focused on health and the environment; and others.

## **Healthy Communities**

#### Rationale

Land use decisions in metropolitan regions, cities, and towns strongly affect the health of those who live there.

Safe, accessible roads, sidewalks, recreational areas and parks, bicycle paths and lanes, lighting, and planned development, all can promote healthy living and reduce risk factors for many diseases and conditions. "Health in All Policies" is a strategy that takes into account the health implications of decisions and policies made in sectors that are not traditionally associated with health. Encouraging those who make land-use decisions to incorporate a "health-in-all-policies" approach can ensure that future community development and infrastructure improvements make it easier for all Connecticut residents to adopt healthy, active, lifestyles.

"When residents are thinking about where to exercise or trying to bike to work there are serious challenges, because our roads are winding and dangerous. We need to find a way to have more sidewalks on the many state roads to help everyone become healthier. (Torrington)"

**OBJECTIVE ENV-8 (DEVELOPMENTAL)** 

Increase the number of local planning agencies and others making land-use decisions that incorporate a "health-in-all-policies" approach.

#### **Strategies**

Planning & Development

- Create a Healthy Community Model guidance document to assist in land use decision making.
- Convene a work group/task force of key individuals and groups to research existing programs in the US and develop a Healthy Community Model blueprint for Connecticut.
- Establish a list of evidence-based tools that could be used to shape the connection between planning and health.
- Develop a guidance document specific for Connecticut on the value of adopting a Healthy Community Model in planning and zoning decision making.
- Explore the best ways to get towns to adopt the use of a Healthy Community Model in their decision making.

#### Surveillance

• Establish a baseline of local planning agencies and others making land-use decisions that incorporate a "health-in-all-policies" approach.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Administrative Services (Division of Construction Services); Connecticut Department of Economic and Community Development; Connecticut Department of Energy and Environmental Protection; Connecticut Division of Criminal Justice; State Department of Education; Connecticut Department of Transportation; Office of Policy and Management; Office of the Attorney General; State Legislature; environmental advocacy organizations; local public health agencies; regional and local planning agencies; housing and urban development agencies; other professional associations for public health, planning, housing, and conservation; business and industry; organizations and coalitions focused on health, historic preservation, and the environment; and others.

# Chronic Disease Prevention and Control

- Heart Disease and Stroke
- Cancer
- Diabetes and Chronic Kidney Disease
- Asthma and Chronic Respiratory Disease
- Arthritis and Osteoporosis
- Oral Health
- Obesity
- Nutrition and Physical Activity
- Tobacco



#### WORK GROUP ON CHRONIC DISEASE PREVENTION AND CONTROL

**Co-Chairs** 

Kristin duBay Horton Bridgeport Health Department

Steve Updegrove *Pediatrician* 

**Members** 

Diane Aye

Connecticut Department of Public Health

Annemarie Beaulieu

Connecticut Children's Medical Center

Mary Boudreau

Connecticut Oral Health Initiative

Patricia Checko Public Health Consultant

Michelle M. Cloutier

Connecticut Children's Medical Center

Dawn Crayco
End Hunger CT!

Mehul Dalal

Connecticut Department of Public Health

Teresa Dotson

Connecticut Academy of Nutrition & Dietetics

Anne Elwell Qualidigm Nadine Fraser

Campacticut II

Connecticut Hospital Association

Roberta Friedman

Rudd Center for Food Policy & Obesity

Kristen Noelle Hatcher Connecticut Legal Services

**Donna Heins** 

Connecticut State Department of Education

Lucinda H. Hogarty

Connecticut Cancer Partnership

Constance Kapral

Connecticut Association for Health, Physical

Education, Recreation, and Dance

Peter Kennedy University of Hartford

Marty Milkovic

Connecticut Dental Health Partnership

Lyn Salsgiver

Bridgeport Hospital/Yale New Haven Health System

Catherine Wagner

Connecticut State Medical Society

**Delores Williams-Edwards** 

Sickle Cell Disease Association of America, Southern

Connecticut Chapter

Lynn Garner

Donaghue Foundation

Nancy Yedlin

**Donaghue Foundation** 

#### **GOAL**

Reduce the prevalence and burden of chronic disease through sustainable, evidence-based efforts at risk reduction and early intervention.

#### WHY THIS GOAL IS IMPORTANT

The prevalence of chronic conditions and their risk factors in the United States have been rising steadily, whereas many other diseases and conditions are declining. The CDC has designated reductions in smoking and obesity and improvements in nutrition and physical activity, as "Winnable Battles" in efforts to improve the health of Americans and reduce the prevalence and severity of chronic diseases.<sup>22</sup>

In Connecticut, chronic diseases account for 6 out of 10 of the leading causes of death. Costs associated with treatment of and loss of productivity due to cancer, diabetes, heart disease, hypertension, stroke, and lung conditions totaled \$16.2 billion in 2003.<sup>23</sup> If the number of people with these chronic conditions continues to grow, the economic impact in Connecticut could reach \$44.5 billion in 2023.<sup>24</sup> Addressing modifiable risk factors for chronic disease, such as smoking, nutrition, physical activity, obesity, and the early detection of disease, could save thousands of lives and reduce the future economic impact of chronic disease in Connecticut by \$11.9 billion in 2023.<sup>25</sup>

#### **Heart Disease and Stroke**

#### Rationale

Although deaths from heart disease have declined, it is still the leading cause of death in and the third-leading cause of premature death in the US and Connecticut. 26 Stroke is the third leading cause of death for Connecticut residents of all ages. Many risk factors, including smoking, high cholesterol, and high blood pressure, increase the likelihood of getting heart disease and/or stroke. The proportion of people with high blood pressure, a key risk factor for stroke and heart disease, has increased among adults in Connecticut during the past decade, as has the prevalence of high cholesterol. There are racial and ethnic disparities in premature death from cardiovascular disease, and non-Hispanic blacks are more likely than other groups to have high blood pressure. Focusing on detecting and managing high blood pressure and high cholesterol among adults may help to reduce illness and deaths from heart disease and stroke

# OBJECTIVE CD-1 Ph1 =





Reduce by 10% the age-adjusted death rate for heart disease.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	164.7 per 100,000 (2006-2010)	148.2 per 100,000	Connecticut Department of Public Health, Vital Statistics, Death Registry data (special analysis)
Black non-Hispanic	178.0 per 100,000 (2006-2010)	160.2 per 100,000	

# OBJECTIVE CD-2 Ph1





Decrease by 40% the age-adjusted premature death rate for heart disease.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	889.0 per 100,000 (2007-2009)	540.0 per 100,000	Connecticut Department of Public Health, Vital Statistics, Death Registry data

#### **Strategies**

Advocacy and Policy

- Ensure consumer access to and insurance coverage for preventive services, and enhance reimbursement and incentive models.
- Adopt and implement policies to support insurance coverage for chronic disease self-management programs.
- Explore insurance incentives to promote employee wellness programs (e.g., State Health Enhancement Program insurance plan as a model).
- Explore insurance incentives for non-smokers.
- Align efforts with the national Million Hearts® initiative to address ABCS (aspirin for high risk, blood pressure control, cholesterol control, and smoking cessation).

#### **Communications**

- Conduct public awareness campaigns and work with providers and community health workers to promote eating a heart healthy diet (low saturated fat, low salt).
- Conduct public awareness campaigns and work with providers and community health workers to promote getting at least 150 minutes of exercise per week of moderate-intensity aerobic physical activity, and muscle strengthening activities a minimum of 2 days a week.
- Conduct public awareness campaigns and work with providers and community health workers to promote the importance of avoiding tobacco smoke and smoking cessation for current smokers (see C-25, CD-26).
- Conduct public awareness campaigns and work with providers and community health workers to promote the importance of maintaining a healthy weight (see CD-23, CD-24).
- Use media and health communications to build public awareness of heart disease and stroke prevention.
- Disseminate information on the benefits of regular screenings (blood pressure, cholesterol, diabetes) through community network of providers, community groups, healthcare systems, pharmacies, faithbased organizations, workplaces, etc. (e.g., "Know Your Numbers" campaign).
- Educate existing and at-risk patients with high blood pressure on the use of self-measured blood pressure monitoring tied with clinical support.
- Engage community pharmacists on counseling providers and patients on medication/self-management for adults with high blood pressure.

#### **Education and Training**

- Ensure that healthcare providers have the tools to promote healthy lifestyle behaviors (healthy eating, active living, avoiding the use of tobacco products, limiting exposure to secondhand smoke, etc.) and to make referrals to community resources.
- Train and develop teams of community health workers to ensure consistent follow up and connections between patients and providers, and to enhance referrals and treatments.

#### Partnership and Collaboration

 Foster collaboration among community-based organizations, the education and faith-based sectors, independent living centers, businesses, and clinicians to identify underserved groups and implement programs to improve access to preventive services.

#### Planning & Development

- Expand use of health information technology to remind and provide feedback to patients; and develop incentives for clinicians and health care systems.
- Develop a sustainable infrastructure for widely accessible, readily available self-management interventions that link community and clinical settings and make use of lifestyle intervention professionals such as registered dietitians, exercise physiologists, and social workers.
- Establish clinical-community linkages that connect patients to self-management education and community resources.
- Develop and implement community-led, place-based interventions targeted to address the social determinants of health in high-priority, at-risk communities.

# OBJECTIVE CD-3

Reduce by 10% the age-adjusted death rate for stroke.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	32.5 per 100,000 (2006-2010)	29.3 per 100,000	Connecticut Department of Public Health, Vital Statistics, Death Registry (special analysis
Black non-Hispanic	42.9 per 100,000 (2006-2010)	38.6 per 100,000	

#### **Strategies**

#### Advocacy and Policy

- Ensure consumer access to and insurance coverage for preventive services, and enhance reimbursement and incentive models.
- Adopt and implement policies to support insurance coverage for chronic disease self-management programs.
- Explore insurance incentives to promote employee wellness programs (e.g., State Health Enhancement Program (HEP) insurance plan as a model).
- Explore insurance incentives for non-smokers.

#### **Communications**

- Conduct public awareness campaigns and work with providers and community health workers to promote eating a heart healthy diet (low saturated fat, low salt).
- Conduct public awareness campaigns, and work with providers and community health workers to promote getting at least 150 minutes of exercise per week of moderate-intensity aerobic physical activity, and of muscle strengthening activities a minimum of two days a week.
- Conduct public awareness campaigns and work with providers and community health workers to promote the importance of avoiding tobacco smoke and smoking cessation for current smokers (see CD-25, CD-26).
- Conduct public awareness campaigns and work with providers and community health workers to promote the importance of maintaining a healthy weight (see CD-23, CD-24).
- Use media and health communications to build public awareness of heart disease and stroke prevention.
- Disseminate information on the benefits of regular screenings (blood pressure, cholesterol, diabetes) through a community network of providers, community groups, healthcare systems, pharmacies, faithbased organizations, workplaces, etc. (e.g., "Know Your Numbers" campaign).
- Educate current and at-risk patients with high blood pressure on the use of self-measured blood pressure monitoring tied with clinical support.
- Engage community pharmacists on counseling providers and patients on medication/self-management for adults with high blood pressure.

### **Education and Training**

- Ensure that healthcare providers have the tools to promote healthy lifestyle behaviors (healthy eating, active living, avoiding the use of tobacco products, limiting exposure to secondhand smoke, etc.) and to make referrals to community resources.
- Train and develop teams of community health workers to ensure consistent follow-up and connections between patients and providers, and to enhance referrals and treatments.

#### Partnership and Collaboration

 Foster collaboration among community-based organizations, the education and faith-based sectors, independent living centers, businesses and clinicians to identify underserved groups and implement programs to improve access to preventive services.

#### Planning & Development

- Expand use of health information technology to remind and provide feedback to patients; and provide incentives to clinicians and health care systems.
- Develop a sustainable infrastructure for widely accessible, readily available self-management
  interventions that link community and clinical settings and make use of lifestyle intervention professionals
  such as registered dietitians, exercise physiologists, and social workers.
- Establish clinical-community linkages that connect patients to self-management education and community resources.
- Develop and implement community-led, place-based interventions targeted to address the social determinants of health in high-priority vulnerable communities.

# OBJECTIVE CD-4 Ph1

Reduce by 3% the proportion of adults 18 years of age and older who have been told they have high blood pressure.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	29.8%	28.9%	Connecticut Behavioral Risk Factor
	(2011)		Surveillance System

### **Strategies**

Advocacy and Policy

- Explore insurance incentives to promote employee wellness programs (e.g., State Health Enhancement Program (HEP) insurance plan as a model).
- Explore insurance incentives for non-smokers.

Communications, Education & Training

- Communicate and educate on burden of high blood pressure to multiple audiences and through multiple modes (e.g., patients, parents, health care providers, schools, workplaces, community groups, etc.).
- Develop, promote, and/or leverage community outreach and education messages that address common lifestyle factors that can prevent high blood pressure.

Partnership and Collaboration

- Work with community network of providers, community groups, healthcare systems, pharmacies, faith-based organizations, workplaces, etc. (e.g., "Know Your Numbers" campaign) to disseminate information on the benefits of regular screenings (blood pressure, cholesterol).
- Work with community network of providers, community groups, healthcare systems, pharmacies, faith-based organizations, workplaces, etc. to disseminate information on lifestyle changes that can prevent high blood pressure or lower blood pressure (maintain healthy weight, regular exercise, eat a healthy diet, reduce sodium in diet, limit alcohol, avoid tobacco products, cut back on caffeine, reduce stress).

#### **OBJECTIVE CD-5**

Reduce by 10% the prevalence of adults 18 years of age and older who have had their cholesterol checked and have ever been told they have high cholesterol.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18 years of	36.2%	32.6%	Connecticut Behavioral Risk Factor
age and older	(2011)		Surveillance System

## **Strategies**

Advocacy and Policy

- Explore insurance incentives to promote employee wellness programs (e.g., State Health Enhancement Program (HEP) insurance plan as a model).
- Explore insurance incentives for non-smokers.

#### **Communications**

- Communicate and educate about the impact of high cholesterol to multiple audiences and through multiple modes (e.g., patients, parents, health care providers, schools, workplaces, community groups, etc.).
- Develop, promote, and/or leverage community outreach and education messages that address common lifestyle factors that prevent high cholesterol.

#### Partnership and Collaboration

- Work with community network of providers, community groups, healthcare systems, pharmacies, faith-based organizations, workplaces, etc. to disseminate information on the benefits of regular screenings (blood pressure, cholesterol) (e.g., "Know Your Numbers" campaign).
- Train and develop teams of community health workers to ensure consistent follow up and connections between patients and providers, and to enhance referrals and treatments.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Agriculture; Connecticut Department of Social Services; State Department on Aging; Connecticut Department of Energy and Environmental Protection; Office of the Healthcare Advocate; local public health agencies; health care providers including community health centers, hospitals, nurses and physicians; health professional associations; health insurers; pharmaceutical companies; other businesses and business associations; American Heart Association; other organizations and coalitions focused on heart disease and stroke; community service providers that serve seniors and other at-risk populations; philanthropic and research organizations that address heart disease and stroke; schools of public health, nursing, and medicine; faith-based organizations; and others.

Chronic Disease Cancer

#### Cancer

#### Rationale

Half of all men and one-third of all women will be diagnosed with cancer at some time in their lives. Cancer is the second leading cause of death in Connecticut overall and the leading cause of death for Connecticut men. In 2010, lung cancer was the leading cause of cancer deaths for male and female Connecticut residents. The second and third leading causes of death were prostate and colorectal cancer for males and breast and colorectal cancer for females. White non-Hispanics are the most likely to be diagnosed with cancer, whereas non-Hispanic blacks are the most likely to die from cancer. Other disparities occur for individual cancers, suggesting a need for increased attention to the modifiable behavioral risk factors for many cancers (smoking, physical inactivity, poor nutrition, obesity, and ultraviolet light exposure), and for improving access to screening and treatment for disparate populations. More than half of all cancers are preventable, and cancer screening is an effective strategy to detect cancer in the early stages and enhance survival.

In 2008, health care costs associated with cancer cost the US \$77.4 billion, and loss of productivity due to cancer cost \$124 billion.<sup>30</sup>

#### **OBJECTIVE CD-6**

Decrease by 2% the incidence of new cases of the 6 major cancers (breast, cervical, prostate, lung, colorectal, and melanoma).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	491.8 per 100,000 All Cancers (2008-2010)	482.0 per 100,000	Connecticut Tumor Registry
	137.0 per 100,000 Female Breast Cancer	134.3 per 100,000	
	5.8 per 100,000 Cervical Cancer	5.7 per 100,000	
	150.4 per 100,000 Prostate Cancer	147.4 per 100,000	
	64.7 per 100,000 Lung Cancer	63.4 per 100,000	
	42.9 per 100,000 Colorectal Cancer	42.0 per 100,000	
	23.0 per 100,000 Melanoma	22.5 per 100,000	

#### **Strategies**

Advocacy and Policy

- Advocate for legislation to create tax parity for all tobacco products in Connecticut.
- Utilize regular and voluntary measures to increase smoke-free environments.
- Advocate for Synar inspections, vendor education, and fines for underage sale of tobacco products. (Refers to the Synar Amendment, named after Congressman Mike Synar)
- Identify, disseminate, and recommend evidence-based policies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).

Chronic Disease Cancer

• Advocate for genetic risk assessment and BRCA mutation testing for breast and ovarian cancer susceptibility, and genetic testing for Lynch syndrome.

#### Communications, Education and Training

- Conduct creative media and education campaigns to reduce initiation of tobacco use and increase cessation attempts.
- Conduct outreach to females and 13-17 year old males on importance of 3-dose HPV vaccination, through peer-to-peer education, pediatrician-parent outreach, and education, and through school-based education and outreach.
- Conduct media and public awareness/education campaigns to communicate and promote behaviors that decrease exposure to harmful UV radiation and sunburn.

#### Partnership and Collaboration

- Partner with school districts to advocate for legislation to expand school-based health centers.
- Develop and implement interventions with primary and middle schools to prevent skin cancer by increasing sun-protective behaviors.

#### Planning and Development

- Provide quality, accessible, low-cost or no-cost tobacco cessation services for all smokers.
- Adopt coordinated school health model for all Connecticut schools.

#### Research

- Research and adopt evidence-based systems change strategies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).
- Research and adopt evidence-based environmental change strategies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).

#### **OBJECTIVE CD-7**

Reduce by 5% the proportion of late-stage diagnoses for 4 major cancers (breast, prostate, lung, and colorectal).

Target Population(s)	Baseline	2020 Target	Data Source	
Connecticut Overall	22.1% 21.0% All Cancers (2004-2009)		Connecticut Tumor Registry	
	5.0% Female Breast Cancer	4.8%		
	4.2% Prostate Cancer	4.0%		
	54.7% Lung Cancer	52.0%		
	18.4% Colorectal Cancer	17.5%		

#### **Strategies**

#### Advocacy and Policy

 Advocate for universal access to cancer-related screenings mandated by the Affordable Care Act, regardless of insurance status.

#### Communications, Education and Training

• Communicate the benefits and importance of cancer-specific screenings as appropriate (e.g., mammograms, colorectal screenings, etc.) through:

Use of written and/or telephone client reminders to participate in regular screenings, including an explanation of benefits;

Chronic Disease Cancer

1:1 education through providers on benefits of and recommendations for regular screenings; Identification and reduction of structural barriers for patients.

Develop culturally appropriate media and education campaigns to increase screening.

#### **OBJECTIVE CD-8**

Reduce by 5% the age-adjusted mortality rates for 6 major cancers (breast, cervical, prostate, lung, colorectal, and melanoma) through modification of major risk factors.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	164.2 per 100,000 All Cancers (2008-2010)	156.0 per 100,000	Connecticut Department of Public Health, Connecticut Resident Deaths, 3-year Mortality Tables.
	21.0 per 100,000 Breast Cancer	20.0 per 100,000	
	1.6 per 100,000 Cervical Cancer	1.5 per 100,000	
	43.6 per 100,000 Lung Cancer	41.4 per 100,000	
	13.5 per 100,000 Colorectal Cancer	12.8 per 100,000	
	2.5 per 100,000 Melanoma	2.4 per 100,000	

### **Strategies**

Advocacy and Policy

- Advocate for legislation to create tax parity for all tobacco products in Connecticut.
- Utilize regular and voluntary measures to increase smoke-free environments.
- Advocate for Synar inspections, vendor education, and fines for underage sale of tobacco products. (Refers to the Synar Amendment, named after Congressman Mike Synar).
- Identify, disseminate, and recommend evidence-based policies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).
- Advocate for genetic risk assessment and BRCA mutation testing for breast and ovarian cancer susceptibility and also genetic testing for Lynch syndrome.

#### Communications, Education and Training

- Conduct creative media and education campaigns to reduce initiation of tobacco use and increase cessation attempts.
- Conduct outreach to females and 13-17 year old males on importance of 3-dose HPV vaccination, through peer-to-peer education, pediatrician-parent outreach and education, and through school-based education and outreach (see ID-7).
- Conduct media and public awareness/education campaigns to communicate and promote behaviors that decrease exposure to harmful UV radiation and sunburn

Partnership and Collaboration, Planning and Development

- Provide quality, accessible, low-cost or no-cost tobacco cessation services for all smokers.
- Adopt coordinated school health model for all Connecticut schools.
- Partner with school districts to advocate for legislature to expand school-based health centers.
- Develop and implement interventions with primary and middle schools to prevent skin cancer by increasing sun-protective behaviors.

#### Planning & Development, Research

- Research and adopt evidence-based systems change strategies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).
- Research and adopt evidence-based environmental change strategies to reduce modifiable risk factors for the six major cancers (see: CD-23, CD-24, CD-25, CD-26).

# OBJECTIVE CD-9

Increase by 5% the proportion of adults who have ever had a sigmoidoscopy/colonoscopy.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 50+	75.7% (2010)	79.5%	Behavioral Risk Factor Surveillance System

### **Strategies**

- Offer colorectal cancer screening, diagnostic, case management, and treatment referral services to medically underserved men and women.
- Enhance population-based approaches to cancer screening through targeted outreach; patient navigation services; high quality screening services; and education and training to health professionals.
- Promote the awareness of evidence-based recommendations for hereditary cancers

#### **OBJECTIVE CD-10**

Increase by 5% the 5-year relative survival rates for the 6 major cancers (lung, breast, prostate, colorectal, melanoma, and cervical).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	68.4% All Invasive Cancers (Diagnosed 2005-2009; followed through 2010)	71.8%	Connecticut Tumor Registry
	92.0.0% Female Breast Cancer	96.6%	
	99.7% Prostate Cancer	100.0%	
	21.0% Lung Cancer	22.1%	
	68.1.1% Colorectal Cancer	71.5%	
	93.3% Melanoma	98.0%	
	69.6 Cervical Cancer	73.1%	



#### **Strategies**

Advocacy and Policy

- Advocate for universal access to cancer-related screenings mandated by the Affordable Care Act regardless of insurance status.
- Advocate for universal access to state of the art cancer treatment and clinical trials for all cancer patients regardless of insurance status.

#### Communications, Education and Training

- Communicate the benefits and importance of cancer specific screenings as appropriate (e.g., mammograms, colorectal screenings, etc.) through:
   Use of written and/or telephone client reminders to participate in regular screenings, including an
  - Use of written and/or telephone client reminders to participate in regular screenings, including an explanation of benefits
  - 1:1 education through providers on benefits of and recommendations for regular screenings Identification and reduction of structural barriers for patients
- Develop culturally appropriate media and education campaigns to increase screening.
- Educate and provide support to cancer survivors on the importance of healthy lifestyles.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Energy and Environmental Protection; State Department of Education; Connecticut Department of Agriculture; Connecticut Department of Mental Health and Addiction Services; Office of the Healthcare Advocate; local public health agencies; laboratories; health care providers including oncology nurses, oncologists, community health centers, hospitals, visiting nurse associations, palliative care and hospice providers, health professional associations; health insurers; pharmaceutical companies; business and business associations; American Cancer Society; other organizations and coalitions that focus on cancer prevention and control; patient advocates; cancer survivors, community service providers for families, youths, and seniors; philanthropic and research organizations that address cancer prevention and control; schools of public health, allied health, nursing, and medicine; faithbased organizations; food industry; farmer's markets organizations; food advocacy groups; and others.

## **Diabetes and Chronic Kidney Disease**

#### Rationale

Diabetes affects an estimated 23.6 million people in the United States and is the 7th leading cause of death.<sup>3</sup> There are significant human costs to the disease, including lowered life expectancy by up to 15 years; increased risk of heart disease; and risks of kidney failure, lower limb amputations, and adultonset blindness.<sup>3, 4</sup> In addition to these human costs, the estimated total financial cost of diabetes in the US in 2007 was \$174 billion, which includes the costs of medical care, disability, and premature death.<sup>31</sup>

The proportion of Connecticut adults ever told they had diabetes increased significantly in the last decade to nearly 10%. Disparities exist in diabetes prevalence by race, ethnicity, and income; in premature mortality by race and ethnicity; and in lower extremity amputations by race and ethnicity. In the absence of more effective intervention strategies, the proportion of adults diagnosed with diabetes in Connecticut is expected to continue to increase.

Diet is key to preventing and managing diabetes, yet children and adults in lower-income households are less likely than those of higher income households to consume a healthful diet.<sup>32</sup> Ensuring that all Connecticut residents eat and have access to healthy foods; engage in regular exercise; and receive the care of a primary care physician in a patient-centered medical home are important factors in prevention, early detection, and effective management of diabetes.

In Connecticut, costs associated with health care, lost productivity, and premature mortality due to diabetes totaled \$1.7 billion in 2002.<sup>33</sup>

# OBJECTIVE CD-11 Ph1

Reduce by 5% the estimated number of individuals with undiagnosed Type II diabetes.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	93,000 individuals	88,350 individuals	Connecticut Department of Public Health,
	(2011)		Diabetes Surveillance Reports (Estimates)

#### **Strategies**

Advocacy and Policy, Education and Training

- Advocate for the implementation of patient-centered medical home model in primary care practices.
- Promote case management combined with disease management approach among providers to encourage patients to be engaged in early screening and preventive health care.

#### **Communications**

 Implement a public information campaign to promote screenings (knowledge of signs and symptoms) and regular blood glucose monitoring, especially for adults with Type 2 diabetes, and adolescents and children with Type 1 diabetes.

#### Partnership and Collaboration

• Expand statewide screenings for diabetes with direct referrals to primary care physicians as appropriate.

# OBJECTIVE CD-12 Ph1

Reduce by 6% the proportion of adults 18 years of age and older with diagnosed diabetes.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18 years of	9.1%	8.6%	Connecticut Behavioral Risk Factor Surveillance
age and older	(2012)		System

### **Strategies**

Advocacy and Policy

- Advocate for universal access to affordable, culturally appropriate healthy foods (address food deserts in Connecticut via Farmers markets, WIC policing, Diabetic Foot Study Group) (see CD-23, CD-24).
- Advocate for policy change on State level to require itemized receipts to monitor WIC vendors.

Communications, Education and Training

Conduct public awareness campaigns and provider-patient outreach to increase awareness of prediabetes among people at high risk.

Planning & Development

- Utilize 2009 CDC strategies to prevent obesity in the US. (see CD-23, CD-24).
- Implement CDC guidelines around physical education programs and physical activity programs (Early Childhood Education through high school).
- Increase access, referrals, and reimbursements for Center for Disease Control recognized lifestyle change programs for the prevention of Type 2 diabetes (Diabetes Prevention Program).

# **OBJECTIVE CD-13**



Stabilize at 15% the prevalence of chronic kidney diseases among Medicare beneficiaries 65+ years of age.

Target Population(s)	Baseline	2020 Target	Data Source
Medicare beneficiaries	14.8%	15%	Centers for Medicaid and Medicare Services,
	(2011)		State-Level Chronic Conditions Reports

#### **Strategies**

Advocacy and Policy

Advocate for insurers to improve their comprehensive diabetes care (Healthcare Effectiveness Data and Information Set HEDIS measures).

**Communications** 

Utilize nontraditional methods to provide culturally appropriate supports for patient engagement (e.g., community brokers, faith-based organizations).

**Education and Training** 

Promote evidence-based chronic kidney disease guidelines through academic detailing.

Planning & Development

- Remove barriers to diabetes and hypertension treatment adherence for underserved populations.
- Professionalize and find methods to sustain needed community health outreach work.

### **OBJECTIVE CD-14**

Decrease by 10% the age-adjusted hospital discharge rate for "diabetes-related" hospitalizations.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	138.3 per 100,0000	124.5 per 100,0000	Connecticut Department of Public Health,
	(2011)		Hospitalization Reports, Table H-1

#### **Strategies**

Communications, Education and Training

- Encourage culturally sensitive self-management skill training among providers and caregivers.
- Promote participation in Americans with Disabilities Act (ADA)-recognized, American Association of Diabetes Educators (AADE)-accredited, and /or Standard-licensed Diabetes Self-Management Education Programs.
- Increase access, referrals, and reimbursement for Diabetes Self-Management Education (DSME) programs.
- Expand health coaching, individual assessment, and treatment planning on a personal level (faith based).
- Expand use of peer champions to re-educate family and community members.

#### Planning & Development

• Include chronic kidney disease in strategies from Connecticut Diabetes Prevention and Control Plan.

#### **OBJECTIVE CD-15 (DEVELOPMENTAL)**

Reduce hospitalizations due to chronic kidney disease.

#### **Strategies**

**Education and Training** 

- Provide education, incentives and technology-based tools to providers, patients and families to facilitate self-reporting on hypertension data.
- Provide education and incentives to providers, patients and families to facilitate monitoring and management of high cholesterol data.

#### Surveillance

• Identify and implement data tracking methods to establish a baseline for hospitalizations; chronic kidney disease currently is identified based on clinical characteristics of the disease.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; State Department of Education; Connecticut Department of Energy and Environmental Protection; Office of the Healthcare Advocate; local public health agencies; health care providers including community health centers, hospitals, nurses and physicians; health professional associations; health insurers; pharmaceutical companies; other businesses and business associations; American Diabetes and Heart Associations; National Kidney Foundation; other organizations and coalitions focused on diabetes and kidney disorders; community service providers; other philanthropic and research organizations that address diabetes and kidney disorders; schools of public health, allied health, nursing, and medicine; and others.

## **Asthma and Chronic Respiratory Disease**

#### Rationale

Asthma is a chronic respiratory disease characterized by reversible obstruction of the passages that take air into the lungs. Blockage of these airways results from chronic inflammation related to overresponsiveness to various environmental "triggers" (tobacco smoke, pollen, mold, dust mites, air pollution, cockroach allergens, pet allergens, etc.). The effect is episodes of wheezing, shortness of breath, chest pain or tightness, and coughing. Although there is no cure for asthma, its symptoms can be reversed with treatment for most people. 34

"My son has asthma, also food allergies and diabetes. We have school nurses 1-2 days per week. If an incident occurs at school, staff has to call a parent or take the child to the ER. People are not sure how to take care of these kids. A nurse could offer this education but they are not in the building enough. We are told there is not enough money for more nurses in schools. We need to come up with creative solutions to get more coverage for our kids in schools." (New Haven)

The prevalence of asthma among

Connecticut adults and children increased significantly during the last decade. Childhood asthma appears to be increasing at a greater rate than adult asthma. Asthma prevalence is highest in Hispanic children and adults, and they also are the most likely to go to hospital emergency rooms for treatment of asthma episodes. Asthma health care costs in Connecticut totaled \$112 million in 2009.

# OBJECTIVE CD-16



Decrease by 5% the rate of Emergency Department visits among all Connecticut residents for which asthma was the primary diagnosis.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	652.7 per 100,000	620.1 per 100,000	Connecticut Department of Public
	(2011)		Health, Office of Health Care Access

#### **Strategies**

Advocacy and Policy

- Advocate for mandatory written asthma treatment plans for all children with asthma in schools and in licensed daycare centers.
- Advocate for legislation to prohibit smoking in cars with children.

Communications, Education and Training

- Promote the use of evidence-based asthma guidelines (e.g., Easy Breathing and other programs) by primary care clinicians and dentists and other dental and medical professionals.
- Conduct a public education campaign, in partnership with local television news stations, on the effects of poor air quality days on health. (See ENV-5)

Planning & Development

- Implement evidence-based, comprehensive asthma programs (patient self-management, environmental assessment, and remediation at home, at school, and in the workplace; e.g., Putting on Airs, Tools for Schools, Healthy Homes).
- Encourage pediatricians to discuss smoking cessation/prevention with parents.
- Implement evidence-based, comprehensive smoking prevention and cessation programs (e.g., counseling and Rx) in community and workplace settings, especially in urban areas.

#### **OBJECTIVE CD-17**

Decrease by 5% the rate of hospitalizations for asthma.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	124.9 per 100,000	118.7 per 100,000	Connecticut Department of Public Health,
	(2011)		Hospitalization Reports, Table H-1

#### **Strategies**

#### Advocacy and Policy

- Advocate for mandatory written asthma treatment plans for all children with asthma in schools and in licensed daycare centers.
- Advocate for legislation to prohibit smoking in cars with children.

#### Communications, Education and Training

- Promote the use of evidence-based asthma guidelines (e.g., Easy Breathing and other programs) by primary care clinicians and dentists and other dental and medical professionals.
- Conduct a public education campaign, in partnership with local television news stations, on the effects of poor air quality days on health. (See ENV-5)

#### Planning & Development

- Implement evidence-based, comprehensive asthma programs (patient self-management, environmental assessment, and remediation at home, at school, and in the workplace; e.g., Putting on Airs, Tools for Schools, Healthy Homes).
- Encourage pediatricians to discuss smoking cessation/prevention with parents.
- Implement evidence-based, comprehensive smoking prevention and cessation programs (e.g., counseling and Rx) in community and workplace settings, especially in urban areas.

#### **OBJECTIVE CD-18**

Reduce by 5% hospitalizations for chronic obstructive pulmonary disease (COPD).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	274.9 per 100,000	261.2 per 100,000	Connecticut Department of Public Health,
	(2011)		Hospitalization Reports, Table H-1

#### **Strategies**

#### **Communications**

• Enhance community awareness and understanding of the effects of poor air quality days on health. (See ENV-5)

#### Planning & Development

- Implement evidence-based, comprehensive asthma programs (patient self-management, environmental assessment, and remediation at home, at school, and in the workplace; e.g., Putting on Airs, Tools for Schools, Healthy Homes).
- Identify and utilize comprehensive (e.g., counseling and Rx), culturally appropriate smoking cessation/prevention programs in community and workplace settings, especially in urban areas.
- Establish mechanisms to reimburse smoking cessation programs in practice and community settings.

# OBJECTIVE CD-19

Reduce by 5% the age-adjusted death rate for chronic lower respiratory disease.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	28.7 per 100,000	27.3 per 100,000	Connecticut Department of Public Health
	(2010)		1-year state AAMR mortality tables

## **Strategies**

#### Communications

• Conduct outreach with public and providers to promote pneumovax vaccine utilization among at-risk populations, especially adults age 50+.

#### Planning and Development

- Work with medical/healthcare workers to enhance efforts toward achieving universal influenza vaccination.
- Implement evidence-based, comprehensive programs (patient self-management, environmental assessment, and remediation at home, at school, and in the workplace; e.g., Putting on Airs, Tools for Schools, Healthy Homes).

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Economic and Community Development; Connecticut Department of Energy and Environmental Protection; State Department of Education; Connecticut Department of Children and Families; State Legislature; local public health agencies; health care providers including pediatricians and thoracic specialists, community health centers, and hospitals; health professional associations; pharmacists and pharmaceutical companies; health insurers; American Lung Association and Thoracic Society; other organizations and coalitions focused on health and the environment; community service providers; philanthropic and research organizations that address asthma and respiratory diseases; schools of public health, allied health, nursing, and medicine; and others.

## **Arthritis and Osteoporosis**

#### **Rationale**

Arthritis, the most common cause of disability,<sup>35</sup> often co-occurs with other chronic conditions, such as heart disease, diabetes, and obesity.<sup>36</sup> Osteoporosis, or reduced bone strength, is associated with an increased risk of fractures and most commonly affects persons aged 50 or older, particularly women.<sup>37</sup> Arthritis and osteoporosis may affect overall quality of life; self-care activities such as bathing, grooming, feeding, and housework; and the ability to work at a job.<sup>38</sup>

The prevalence of arthritis and osteoporosis among Connecticut residents was stable during the last decade. Strategies that address chronic disease prevention, including diet and exercise, also address prevention of these conditions. The per *capita cost* of one chronic condition such as arthritis or osteoporosis among Medicare beneficiaries has increased steadily and was \$2,236 in 2011.

# OBJECTIVE CD-20

Reduce by 10% the proportion of Medicare beneficiaries with osteoporosis.

Target Population(s)	Baseline	2020 Target	Data Source
Medicare beneficiaries	7.4%	6.7%	Centers for Medicaid and Medicare Services, State-
	(2011)		Level Chronic Conditions Reports

#### **Strategies**

Advocacy and Policy

• Advocate for reimbursement for services.

#### Communications, Education and Training

- Disseminate information to practitioners, senior centers, and other key community sites to promote a healthy diet throughout the life span, with specific focus on calcium and vitamin D supplementation (see CD-23 and CD-24).
- Disseminate information to practitioners, senior centers, and other key community sites to promote physical activity (see CD-23 and CD-24).
- Publicize and strengthen fall prevention programs, especially among older adults.
- Disseminate information to practitioners, senior centers, and other key community sites to promote appropriate screening, and educate providers on importance of screening.
- Educate public and providers concerning evidence-based strategies for fall prevention.
- Educate on and promote preventive services for osteoporosis, such as weight bearing exercise and diet (see CD-23 and CD-24).

#### Planning & Development

- Implement fall prevention programs including hospital discharge, home safety assessments.
- Promote collaborative partnerships (see CD-19).
- Ensure access to diagnostic services (see CD-19).

#### **OBJECTIVE CD-21**

Reduce by 7% the proportion of Medicare Beneficiaries with Rheumatoid Arthritis/Osteoarthritis.

Target Population(s)	Baseline	2020 Target	Data Source
Medicare beneficiaries	27.0%	25.1%	Centers for Medicaid and Medicare Services,
	(2011)		State-Level Chronic Conditions Reports

#### **Strategies**

Communications, Education and Training

- Promote healthy weight (see CD-23 and CD-24).
- Promote physical activity (see CD-23 and CD-24).
- Promote utilization and reimbursement of early intervention using arthritis self-help course.

#### Partnership and Collaboration

• Expand collaborative partnerships through: identification of potential partners; building local coalitions; reactivation of state arthritis advisory working group.

#### Planning & Development

• Ensure access to preventive services/education/reimbursement.

#### Surveillance

Enhance data collection and surveillance (adapt and network Electronic Medical Records systems).

(See also strategies under objective CD-18.)

#### **Potential Partners**

Connecticut Department of Public Health, State Department on Aging, Connecticut Department of Social Services, State Legislature, local public health agencies, health care providers, health insurers, pharmaceutical companies, long term care facilities, National Arthritis Foundation, other organizations and coalitions that address arthritis and geriatrics, community service providers for women and seniors, academic institutions with geriatric centers, and others.

Chronic Disease
Oral Health

#### **Oral Health**

#### Rationale

Oral health is closely linked to physical health and well-being. Dental carries (tooth decay) is a preventable bacterial disease process that affects both children and adults.<sup>39</sup> Preterm births and chronic conditions, such as diabetes, heart disease, lung disease, and stroke, are associated with poor oral health.

Black non-Hispanic and Hispanic children have the highest percentages of tooth decay, and Hispanic and black non-Hispanic high school students are the least likely to see a dentist regularly. About 700,000 Connecticut adults do not see a dentist every year.

Addressing barriers to access to preventive dental care for underserved children, and educating all Connecticut residents about the relationship between oral health and physical health and well-being, are key strategies for preventing the onset of other chronic health conditions.

# **OBJECTIVE CD-22**



Reduce to 35% the proportion of children in third grade who have dental decay.

Target Population(s)	Baseline	2020 Target	Data Source
Children in grade 3	40.0%	35.0%	Connecticut Department of Public Health, Every
	(2010-2011)		Smile Counts: The Oral Health of Connecticut's
			Children Report, Key Finding #1

#### **Strategies**

#### Advocacy and Policy

- Enhance the concept and utilization of a dental home through enrollment and utilization of HUSKY insurance coverage and the maintenance of an appropriate pool of providers accepting HUSKY
- Maintain the fluoridation statute.
- Advocate for parity of oral health with physical and behavioral health (medical) in practice, policy, and reimbursement.

#### Communications, Education and Training

- Enhance the acceptance and use of sealants through school-based programs; education and public awareness campaigns (include cultural and linguistic issues); and education of providers (dental and pediatric; include cultural and linguistic issues
- Expand existence of and participation in dental homes through education and public awareness on the benefits of annual dental preventive maintenance, including cultural and linguistic issues; education of providers on principles, models, and best practices including cultural and linguistic issues (see MICH-12).
- Educate public and policymakers on the safety and benefits of water fluoridation.
- Encourage the adoption of a non-cariogenic diet through non sweetened beverage promotions; school-based programs; education and public awareness campaigns; education of providers (sugar meds; nutritional programs (e.g., WIC).

#### Planning and Development

- Expand availability of sealants to high-risk populations.
- Identify and address barriers to access to dental services (transportation and locations; hours of services; cultural and linguistic barriers; non-ambulatory populations/institutional home-bound; other financial).

(See also Objective MICH-12.)

# OBJECTIVE CD-23 Ph1





Reduce untreated dental decay to 15.0% in black non-Hispanic children and 12% in Hispanic children in the third-grade.

Target Population(s)	Baseline	2020 Target	Data Source
Black non-Hispanic	18.0%	15.0%	Connecticut Department of Public
children	(2010-2011)		Health, Every Smile Counts: The
Higgs and a shild ways	15.0%	12.0%	Oral Health of Connecticut's
Hispanic children	(2010-2011)		Children Report, Key Finding #4.

## **Strategies**

Advocacy and Policy

- Enhance the concept and utilization of a dental home through enrollment and utilization of HUSKY; maintenance of appropriate pool of providers accepting HUSKY.
- Advocate for parity of oral health with physical and behavioral health (medical) in practice, policy, and
- Advocate for parity of oral health with physical and behavioral health (medical) in practice, policy, and reimbursement.

Planning and Development

- Identify and address barriers to access to dental services (transportation and locations; hours of services; cultural and linguistic barriers; non-ambulatory populations/institutional home-bound; other financial). Communications, Education and Training
- Expand existence of and participation in dental homes through education and public awareness on the benefits of annual dental preventive maintenance (include cultural and linguistic issues); education of providers on principles, models, and best practices (include cultural and linguistic issues) (see MICH-12).

# **OBJECTIVE CD-24**

Increase by 4% the proportion of adults who have visited a dentist or dental clinic in the last year.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18+ years	80.6%	84%	Connecticut Department of Public Health,
	(2010)		Connecticut Behavioral Risk Factor Surveillance
			System

#### **Strategies**

Communications, Education and Training

- Increase oral health literacy and promote the value of good oral health for all Connecticut residents.
- Ensure that the oral health needs of Connecticut residents are met by a competent workforce, including dental and non-dental providers.
- Ensure a strong and sustainable oral health workforce to anticipate and meet the oral health needs of Connecticut residents.
- Raise awareness and educate the public and decision makers regarding the science and efficacy of policies to improve the oral health of Connecticut residents and implement or enforce existing policies.

# OBJECTIVE CD-25

Reduce by 5% the proportion of adults over 65 who have had all their natural teeth extracted

Target Population(s)	Baseline	2020 Target	Data Source
Adults 65 years of	13.6%	12.9%	Connecticut Department of Public Health,
age and older	(2012)		Connecticut Behavioral Risk Factor Surveillance
			System

#### **Strategies**

Advocacy and Policy

- Enhance the concept and utilization of a dental home through enrollment and utilization of HUSKY;
   maintenance of appropriate pool of providers accepting HUSKY.
- Advocate for parity of oral health with physical and behavioral health (medical) in practice, policy, and reimbursement.

Communications, Education and Training

- Expand existence of and participation in dental homes through education and public awareness on the benefits of annual dental preventive maintenance (include cultural and linguistic issues); education of providers on principles, models, and best practices (include cultural and linguistic issues) (see MICH-12).
- Enhance education and public awareness to older adults and their families through care-giving associations, long term care staff, providers, etc.
- Promote periodontal health and the prevention and treatment of dental caries through: education and public awareness (especially high risk populations, including pregnant women); education of providers (medical) and policymakers to recognize/refer, to emphasize the need for good oral health and preventive services in diabetic care.
- Encourage the adoption of a non-cariogenic diet through: non sweetened beverage promotions; school-based programs; education and public awareness; education of providers; nutritional programs.

#### **Oral Health Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Developmental Services; State Department of Education; Office of Healthcare Reform and Innovation; State Department on Aging Long Term Care Ombudsman Program; University of Connecticut School of Dental Medicine; other schools of dental medicine and dental hygiene; local public health agencies; American Dental Association; health care facilities and providers; professional dentistry and dental hygiene associations; dental insurance providers; organizations and coalitions focused on oral health; community service providers serving children, older adults, and underserved populations; faith-based organizations; philanthropic and research organizations that address oral health; and others.

Chronic Disease Obesity

## Obesity

#### Rationale

The obesity epidemic in the United States has the potential to incur major healthcare costs because of the substantial risks associated with excess body fat; obesity is a risk factor for nearly every chronic disease. Many other health problems associated with overweight and obesity can lead to early illness and death.<sup>40</sup> The prevalence of adult overweight and obesity in

Connecticut increased significantly among both men and women during the past decade, and currently affects more than 1.5 million Connecticut adults.

Since the 1980s, the prevalence of obesity has tripled among adolescents.<sup>41</sup> Because of obesity, it is projected that today's youth will be the first generation to live less healthy and shorter lives than their parents.<sup>42</sup> Ensuring access to healthy food options, promoting and supporting an active lifestyle, and ensuring access to early screening and prevention are key strategies to address and reverse this trend, particularly for those from lower socioeconomic households.

"We do not have walkable communities in Hartford County. There are no sidewalks and no crosswalks in many towns. This would help with childhood obesity and asthma." (Hartford)

# OBJECTIVE CD-26 Ph1

Decrease by 5% the percent adults age 18 and older who are obese.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18 years of age	25.6%	24.3%	Connecticut Behavioral Risk Factor Surveillance
and older	(2012)		System

### **Strategies**

Advocacy and Policy

- Advocate for universal screening for overweight and obesity in multiple settings (office, school, other screening programs, health fairs).
- Advocate for appropriate reimbursement for nutritional counseling, medical follow-up, and weight loss programs.
- Advocate for businesses (food retailers) to post nutritional information re: food labeling and menu labeling; posting information re: healthy options; and encouraging food rating system.
- Increase healthy food options in vending machines by reducing the price of healthy choices and increasing the number of healthy choices compared to unhealthy choices.
- Increase availability of water (drinking fountains, water coolers, or bottled water in vending machines), and promote its consumption as a way to improve nutrition and overall health.

Communications, Education and Training

- Conduct and provide education and training about high blood pressure and high cholesterol (e.g., Know Your Number) and self-referral.
- Educate providers concerning cognitive behavioral therapy and other proven strategies to promote healthy behavioral change.
- Educate providers and pregnant women about the importance of breastfeeding for at least 6 months.

Chronic Disease
Obesity

• Communicate and educate on the benefits of healthy eating and active living through multiple modes and to multiple audiences and settings (e.g., grocery stores, health centers, community groups, food distribution, family based programs, etc.).

#### Partnership and Collaboration

- Work with communities, businesses, and local/state agencies to create and promote active living options (e.g., bike lanes, bike paths, pedestrian paths, etc.).
- Implement physical activity programs through municipal and county government that include walking challenges, free or reduced gym memberships, financial incentives for completing a Health Risk Assessment and for maintaining good health or improving health.

#### Planning & Development

- Develop and adapt Electronic Medical Records and disseminate decision support tools to providers.
- Work with communities, businesses, and local/state agencies to develop community gardens and farmers markets to increase access to healthy foods in neighborhoods.

(See also strategies under objectives CD-1, CD-2, CD-5, CD-7, C-10, CD-18 and CD-19.)

# OBJECTIVE CD-27

Reduce by 5% the prevalence of obesity in children 5-12 years of age and students in grades 9-12.

Target Population(s)	Baseline	2020 Target	Data Source
Students in grades 9-12	12.5%	11.9%	Connecticut School Health
	(2011)		Survey
Children 5-12 years of age	19.9%	18.9%	Connecticut Behavioral Risk
	(2008-2010)		Factor Surveillance System

#### **Strategies**

#### Advocacy and Policy

- Review and revise local/school wellness policy by local Boards of Education annually as part of the Healthy Food Certification process including food as reward and/or for celebrations.
- Increase healthy food options in vending machines by reducing the price of healthy choices and increasing the number of healthy choices compared to unhealthy choices.
- Increase availability of water (drinking fountains, water coolers, or bottled water in vending machines), and promote its consumption as a way to improve nutrition and overall health.
- Implement age-appropriate policies that support increased physical activity such as decreased screen time, physically active classrooms, lunch after recess, and walking/biking to school.
- Advocate for universal screening for overweight and obesity in schools.
- Advocate for appropriate reimbursement for nutritional counseling, medical follow-up, and weight loss programs.

#### Communications, Education and Training

- Provide training and technical assistance to teachers on the implementation of early childhood programs' nutrition standards.
- Provide age-appropriate health education with pre- and post-testing on topics such as heart disease and healthy living.
- Label menu items in cafeterias for nutrition content.
- Educate providers concerning cognitive behavioral therapy and other proven strategies to promote healthy behavioral change.

#### Planning & Development

Develop and adapt Electronic Medical Records and disseminate decision support tools to providers.

Chronic Disease Obesity

#### Surveillance

 Identify or develop surveillance system with age-appropriate data collection methodology on consumption of fruits and vegetables, decreasing consumption of sugar sweetened beverages and increasing physical activity.

(See also strategies under objectives CD-1, CD-2, CD-5, CD-7, C-10, CD-18 and CD-19.)

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Agriculture; Connecticut Department of Economic and Community Development; Connecticut Department of Energy and Environmental Protection; State Department of Education; Connecticut Department of Transportation; Connecticut Department of Children and Families; State Legislature; local public health agencies; health care providers including nurses and primary care physicians; health professional associations; food industry; other businesses and worksite wellness programs; educational providers; other organizations and coalitions focused on nutrition, dietetics, and physical activity; community service providers; philanthropic and research organizations that address obesity; schools of public health, allied health, and medicine; and others.

Chronic Disease Tobacco

## **Nutrition and Physical Activity**

#### **Rationale**

A healthy lifestyle includes healthy eating, regular physical activity, and balancing the number of calories consumed with the number of calories the body uses. Healthful eating means reducing the intake of saturated fats, salt and added sugars, and increasing the consumption of fruits, vegetables, and whole grains. Eating five or more daily servings of fruits and vegetables may reduce the risk of chronic disease<sup>43</sup> and prevent 30% of cancer deaths.<sup>44</sup>

## OBJECTIVE CD-28



Increase by 5% the proportion of adults who meet the recommended 150 minutes or more of aerobic physical activity per week.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18 years of age	52.6%	55.2%	Connecticut Behavioral Risk Factor
and older	(2011)		Surveillance System

#### **Strategies**

Partnership and Collaboration,

- Partner with schools and early child education centers to adopt and implement policies that create a healthy nutrition environment and promote daily physical activity.
- Work with local communities and existing coalitions to advance policies that promote healthy eating and active living.
- Work with local public health partners and schools to establish school and community gardens.
- Work with local public health partners including local transportation authorities to promote bicycle- and pedestrian-friendly communities

#### **Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Transportation; State Legislature; local public health agencies; local transportation authorities, schools, other organizations and coalitions focused on nutrition, dietetics, and physical activity; and community service providers

Chronic Disease Tobacco

#### **Tobacco**

#### Rationale

Tobacco smoke is a major risk factor for lung disease (including asthma, bronchitis, and chronic obstructive pulmonary disease), cardiovascular disease (heart disease, high blood pressure, and stroke), cancer, and chronic kidney disease. According to the Surgeon General, quitting smoking is the single most important step a smoker can take to improve the length and quality of his or her life. This is true even for someone who quits later in life.<sup>45</sup>

The prevalence of smoking decreased among adults across of all ages and levels of educational attainment during the past decade. During the same period, the percent of students in middle school and high school who smoked also decreased. Continuing this downward trend is important for reducing one of the greatest risk factors for premature death and disability in Connecticut.

# OBJECTIVE CD-29 Ph1

Reduce by 20% the prevalence of current cigarette smoking among adults 18 years of age and older.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18 years of age	16.0%	12.8%	Connecticut Behavioral Risk Factor
and older	(2012)		Surveillance System

#### **Strategies**

Advocacy and Policy

- Advocate for insurance coverage for smoking cessation and insurance incentives for nonsmokers.
- Advocate for higher taxes on all tobacco products.
- Advocate for greater Tobacco Trust Fund allocations for education, prevention, and cessation on tobacco use.
- Advocate for legislation to prohibit smoking in cars with children.

#### Communications, Education and Training

- Include smoking and tobacco use in the health education curriculum for all schools, K-12.
- Educate parents about the dangers of secondhand smoke (smoking in room, cars) to children.

#### Partnership and Collaboration,

- Encourage pediatricians to discuss smoking cessation/prevention with parents and teens.
- Enlist youth as consumers to develop, test, and evaluate smoking prevention/cessation strategies, campaigns, etc.

#### Planning & Development

- Increase smoke-free environments on campuses, school grounds, recreational areas and state parks, etc.
- Implement evidence-based, comprehensive smoking prevention and cessation programs (e.g., counseling and Rx) in community and workplace settings, especially in urban areas.

(See also strategies under objectives CD-1, CD-5, CD-7 and CD-19.)

## OBJECTIVE CD-30 Ph1

Reduce by 25% the prevalence of smoking among students in grades 6-8 and 9-12.

Target Population(s)	Baseline	2020 Target	Data Source
Students in grades 6-8	2.9%	2.2%	Connecticut School Health
	(2011)		Survey, Youth Tobacco
Students in grades 9-12	14.0%	10.5%	Component
	(2011)		

## **Strategies**

## Advocacy and Policy

- Advocate for insurance coverage for smoking cessation and insurance incentives for nonsmokers.
- Advocate for higher taxes on all tobacco products.
- Advocate for a greater Tobacco Trust Fund allocation for education, prevention, and cessation on tobacco
- Advocate for legislation to prohibit smoking in cars with children.

## **Education and Training**

Include smoking and tobacco use in the health education curriculum for all schools, K-12.

## Partnership and Collaboration

- Encourage pediatricians to discuss smoking cessation/prevention with parents and teens.
- Enlist youth as consumers to develop, test, and evaluate smoking prevention/cessation strategies, campaigns, etc.

## Planning & Development

- Increase smoke-free environments on campuses, school grounds, recreational areas and state parks.
- Implement evidence-based, comprehensive smoking prevention and cessation programs (e.g., counseling and Rx) in community and workplace settings, especially in urban areas.

## **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Veterans' Affairs; State Department of Education; Connecticut Department of Correction; State Legislature; local public health agencies; health care providers including nurses and primary care physicians, community health centers, and hospitals; health professional associations; health insurers; pharmaceutical companies; American Cancer Society; American Heart and Lung Associations; other organizations and coalitions focused on tobacco control; community service providers; philanthropic and research organizations that address tobacco control and tobacco related diseases; faith-based organizations; and others.

# Infectious Disease Prevention and Control

- Vaccine-preventable Diseases
- Sexually Transmitted Diseases
- HIV
- Tuberculosis
- Hepatitis C
- Vector-borne Diseases
- Foodborne Illness and Infections
- Waterborne Illness and Infections
- Healthcare Associated Infections
- Emergency Preparedness for Emerging Infectious Diseases



#### WORK GROUP ON INFECTIOUS DISEASE PREVENTION AND CONTROL

**Co-Chairs** 

Elaine O'Keefe

Yale University Center for Interdisciplinary

Research on AIDS

**Douglas Waite** 

Day Kimball Healthcare

**Members** 

Christian Andresen

Connecticut Department of Public Health

Patricia Checko

Public Health Consultant

Louise M. Dembry

Yale New Haven Hospital

John Fontana

Connecticut Department of Public Health, Dr. Katherine A. Kelley Public Health Laboratory Anne Fountain

Stamford Health Department

**Nadine Fraser** 

Connecticut Hospital Association

Shawn M. Lang

Connecticut AIDS Resource Coalition

Trini A. Mathew

University of Connecticut Health Center, Division of

Infectious Diseases

Michael Parry

Stamford Hospital

Lisa Pippa

Meriden Health Department

Jean L. Rexford

Connecticut Center for Patient Safety

Lynn Sosa

Connecticut Department of Public Health

## **GOAL**

Prevent, reduce and ultimately eliminate the infectious disease burden in Connecticut.

## WHY THIS GOAL IS IMPORTANT

Infectious diseases are largely preventable. Substantial reductions in the incidence of infectious disease, achieved through the use of antibiotics, immunizations, and other preventive practices, have contributed to reductions in infectious disease mortality and increased life expectancy. Infectious diseases remain an important cause of preventable illness, disability, and death in Connecticut, however.

## **Vaccine-preventable Diseases**

## **Rationale**

Vaccines are responsible for the eradication and control of many infectious diseases that were once common in the United States and around the world, and have saved millions of lives. 46 Although Connecticut ranks among the top 10 states for vaccination coverage, 1 in 5 children under the age of 36 months still have not completed the recommended vaccination series, <sup>47</sup> and vaccination rates for diseases such as pertussis, influenza, and pneumonia still have room for improvement. Continuing efforts are needed to increase vaccination and vaccine completion rates among children and adults, to meet the recommendations of the Advisory Committee on Immunization Practices.

## OBJECTIVE ID-1 Ph1



Increase by 5% the vaccination coverage levels for ACIP recommended vaccines among children and adults.

Target Population(s)	Baseline	2020 Target	Data Source
Children 19-36 months of age (completed recommended series)	79.0% (2011)	83.0%	Connecticut Department of Public Health, Immunization Program, survey data
Adolescents 13-17 years of age (2+ doses of varicella vaccine)	93.5% (2012)	98.2%	National and State Vaccination Coverage among Adolescents Aged 13 to 17 Years: United States. Morbidity and Mortality Weekly Report
Adolescents 13-17 years of age (1+ doses of Tdap)	89.3% (2012)	93.8%	
Adolescents 13-17 years of age (1+ doses of meningococcal conjugate)	88.8% (2012)	93.2%	

## **Strategies**

Advocacy and Policy

Assure costs of vaccines/administration for all ages are covered by all insurers.

## Planning & Development

Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).

## Surveillance

- Maintain and enhance Connecticut immunization registry, including across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to identify disparities and target vaccine strategies.

## **OBJECTIVE ID-2**

Reduce by 5% the incidence of pertussis.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	183 cases	174 cases	Connecticut Department of Public Health, Infectious
	(2012)		Disease Section, Reported Cases of Disease by County

## **Strategies**

Advocacy and Policy

• Assure costs of vaccines/administration for all ages are covered by all insurers.

Communication, Education and Training

• Educate providers about testing vaccine protocols and parents about vaccine acceptance.

Planning & Development

- Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).
- Continue cocooning immunization strategy to protect neonates.
- Enhance availability of Tdap vaccine (tetanus, diphtheria, and pertussis) for pregnant women.

#### Surveillance

- Maintain and enhance Connecticut immunization registry; include across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to examine disparities and target vaccine strategies.
- Calculate incidence using 5-year rolling average to measure reduction in incidence rates.

## OBJECTIVE ID-3 (DEVELOPMENTAL) [Ph1]

Increase vaccination levels of pregnant women and child care providers.

## **Strategies**

Advocacy and Policy

• Assure costs of vaccines/administration for all ages are covered by all insurers.

**Communications** 

- Identify and encourage the implementation of Computerized Reminder System.
- Encourage use of chart reminders in health care settings.
- Develop and implement Mailed/Telephoned Reminder.
- Encourage use of Personal Health Record by provider and client.

## **Education and Training**

- Train professional staff in how to use Computer Reminder System.
- Provide culturally and linguistically appropriate patient education.

### Planning & Development

- Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).
- Ensure Standing Orders are in place.
- Expand access to clinical settings.
- Offer vaccinations for child care providers at child care settings

## Surveillance

- Maintain and enhance Connecticut immunization registry; include across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to examine disparities and target vaccine strategies.

## **OBJECTIVE ID-4**

Reduce by 5% the incidence of invasive pneumococcal infections.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	315 cases	299 cases	Connecticut Department of Public Health,
	(2012)		Infectious Disease Section, Reported Cases of
			Disease by County

## **Strategies**

## Advocacy and Policy

Assure costs of vaccines/administration for all ages are covered by all insurers.

## **Education and Training**

• Educate providers and adults, focusing on outreach to high-risk populations.

## Planning & Development

- Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).
- Improve vaccination rates of adults over age 65.
- Maintain vaccination rates in children.

#### Surveillance

- Maintain and enhance Connecticut immunization registry; include across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to examine disparities and target vaccine strategies.

## OBJECTIVE ID-5 Ph1



Increase by 5% the percentage of adults who are vaccinated annually against seasonal influenza.

Target Population(s)	Baseline	2020 Target	Data Source
Adults 18-34 years of age	26.8% (2012)	28.1%	Connecticut Behavioral Risk Factor Surveillance System
Adults 35-54 years of age	34.9% (2012)	36.6%	
Adults 55+ years of age	53.1% (2012)	55.8%	

## **Strategies**

## Advocacy and Policy

Assure costs of vaccines/administration for all ages are covered by all insurers.

#### Communication

• Identify other methods for reaching out to the public (e.g. social media).

## **Education and Training**

Maintain annual education of providers and the public about flu vaccine.

## Planning & Development

- Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).
- Develop new and diverse venues for influenza vaccine administration and culturally appropriate outreach to ensure access to all population groups.
- Maintain and drill plans.

## Surveillance

- Maintain and enhance Connecticut immunization registry; include across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to examine disparities and target vaccine strategies.
- Develop new systems for measuring vaccine coverage among all age groups.

## **OBJECTIVE ID-6**

Reduce by 5% the incidence of hepatitis B infections.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	19 cases (2011)	18 cases	Connecticut Department of Public Health

## **Strategies**

## Advocacy and Policy

- Assure costs of vaccines/administration for all ages are covered by all insurers.
- Promote and ensure screening for hepatitis B in high-risk populations, according to CDC guidelines.
- Maintain access to Hepatitis B vaccine for high-risk populations according to CDC guidelines.
- Ensure access to care for infected persons.

### **Education and Training**

Continue provider and patient education.

#### Planning & Development

- Maintain and expand access to Advisory Committee on Immunization Practices (ACIP) recommended vaccines for children (HPV, hepatitis A, rotavirus, influenza).
- Expedite electronic laboratory reporting for hepatitis reports.
- Improve completion rates for Hepatitis B series among high risk groups.
- Maintain vaccination rates among children.

#### Surveillance

- Maintain and enhance Connecticut immunization registry; include across lifespan; implement comprehensive reminder/recall systems.
- Use new and existing data systems to measure vaccine coverage among populations to examine disparities and target vaccine strategies.

## OBJECTIVE ID-7 Ph1



Increase by 20% HPV vaccination rates for male and female adolescents 13 to 17 years of age to meet CDC guidelines.

Target Population(s)	Baseline	2020 Target	Data Source
Males 13-17 years of	8.5%	10.2%	National and State Vaccination
age	(2012)		Coverage among Adolescents Aged 13 to 17 Years: United States, Morbidity
Females 13-17 years	43.6%	52.3%	and Mortality Weekly Report
of age	(2012)		

## **Strategies**

Advocacy and Policy, Communications

- Advocate expanding patient eligibility for free HPV vaccine available through the Connecticut Vaccine Program to include all age-eligible children.
- Promote the use of HPV for the Vaccines for Children Program (VCP), and in targeted settings including School Based Health Clinics, to effectively reach prime audience.
- Advocate for coverage of the HPV vaccine by commercial and public insurers.

## **Education and Training**

- Educate providers about vaccine availability, delivery, cost and practice guidelines.
- Educate parents and providers about the cancer prevention benefits of the HPV vaccine. (See CD-7)

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Social Services, Connecticut Department of Correction, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Veterans' Affairs (VA Hospital), State Department of Education, local public health agencies, public health professional associations, pediatricians and other primary care providers, community health centers, birthing hospitals, long term care facilities, and college and university health services, health professional associations, pharmacists, health insurers, other organizations and coalitions that address vaccine preventable diseases, faith based organizations, and others.

## **Sexually Transmitted Diseases**

## **Rationale**

Although sexually transmitted diseases are largely preventable, they remain a significant public health issue, with implications for reproductive health and other health conditions.<sup>48</sup> STDs also increase the risk of HIV transmission.<sup>49</sup> Chlamydia and gonorrhea are the most common reportable STDs in the US.<sup>50</sup> Both infections increase the risk of pelvic inflammatory disease, which is associated with infertility, ectopic pregnancies, and chronic pelvic pain.<sup>51</sup> Risk of chlamydia and gonorrhea is greatest for black non-Hispanics, American Indians, Hispanics, women, and persons between 15 and 24 years of age.<sup>52</sup>

Since the 1980s, rates of chlamydia infections among women have increased.<sup>53</sup> In addition, infection with certain types human papillomavirus (HPV), which is most prevalent among persons aged 20-24, causes all cervical cancers.<sup>54</sup>

Reducing incidence of sexually transmitted diseases through education, screening, and targeted prevention strategies for young people between 15 and 24 years of age and especially the black and Latino populations is critical for ensuring reproductive health and normal life expectancy.

## **OBJECTIVE ID-8**



Reduce chlamydia incidence rates by 5% among youths 15-24 years of age, by 10% among blacks, and by 10% among Hispanics.

Target Population(s)	Baseline	2020 Target	Data Source
15-19 years of age	1,659 per 100,000 (2011)	1,576 per 100,000	Connecticut Department of Public Health, TB, HIV, STD & Viral Hepatitis
20-24 years of age	2,422 per 100,000 (2011)	2,301 per 100,000	Section
Black	1,213 per 100,000 Blacks (2011)	1,092 per 100,000	
Hispanic	422 per 100,000 Hispanics (2011)	380 per 100,000	

## **Strategies**

## **Communications**

Promote use of "Expedited Partnership Therapy".

## **Education and Training**

- Educate the population at risk through appropriate venues and technology using culturally appropriate methods.
- Educate and train providers about resources and available referral services and culturally appropriate treatment interventions.

## Planning and Development

Implement testing and screening according to recommended standards.



# OBJECTIVE ID-9 Ph1



Reduce gonorrhea incidence rates by 5% among youths 15-24 years of age, by 10% among blacks, and by 10% among Hispanics.

Target Population(s)	Baseline	2020 Target	Data Source
15-19 years of age	234 per 100,000 (2011)	222 per 100,000	Connecticut Department of Public Health, TB, HIV, STD & Viral
20-24 years of age	379 per 100,000 (2011)	360 per 100,000	Hepatitis Section
Black	317 per 100,000 (2011)	285 per 100,000	
Hispanic	67 per 100,000 (2011)	60 per 100,000	

## **Strategies**

#### **Communications**

Promote use of "Expedited Partnership Therapy".

#### **Education and Training**

- Educate the population at risk through appropriate venues and technology using culturally appropriate
- Educate and train providers about resources and available referral services and culturally appropriate treatment interventions.

## Planning and Development

Implement testing and screening according to recommended standards.

#### **OBJECTIVE ID-10**

Reduce by 10% the incidence of primary and secondary syphilis.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	57 new cases	51 cases	Connecticut Department of Public Health, TB,
	(2012)		HIV, STD & Viral Hepatitis Section

## **Strategies**

## **Education and Training**

- Educate providers about syphilis in men who have sex with men.
- Educate providers about appropriate testing and available resources and culturally appropriate prevention, treatment and follow-up interventions.
- Educate target population about available treatment, resources and drug availability, using culturally appropriate methods.

## Planning & Development

Ensure routine syphilis screening of HIV-infected persons, with emphasis on males and men who have sex with men.

## OBJECTIVE ID-11 (DEVELOPMENTAL)

Reduce the incidence of syphilis in HIV-infected men who have sex with men (MSM)

## **Strategies**

**Education and Training** 

- Educate providers about syphilis in MSM.
- Educate providers about appropriate testing and available resources and culturally appropriate prevention, treatment and follow-up interventions.
- Educate target population about available treatment, resources and drug availability using culturally appropriate methods.

Planning & Development

Ensure routine syphilis screening of HIV infected persons, with emphasis on males and MSM.

## **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Correction; Connecticut Department of Social Services; State Department of Education; Connecticut Department of Mental Health and Addiction Services; local public health agencies; public health professional associations; faith-based organizations; laboratories; health care providers including primary care and infectious disease physicians; community health centers; hospitals; university and college health services; health professional associations; community service providers that address youth of color; LGBT organizations; other organizations and coalitions that address sexually transmitted diseases and the health of at-risk populations; schools of public health, nursing, and medicine; and others.

## HIV

#### Rationale

HIV is the virus that can lead to acquired immunodeficiency syndrome (AIDS). Once the virus is acquired, a person has it for life. Although there is no cure for HIV, it can be treated effectively. Treatment not only prolongs life but also lowers the chance of infecting others.

During the past decade, the number of new cases of HIV in Connecticut declined by about 60%, and deaths from AIDS fell by nearly 50%, whereas the number of people living with HIV increased by more than 20%. Disparities in populations at risk of HIV persist. Blacks, Hispanics, men who have sex with men, and women who engage in unprotected sex with high-risk partners have the highest new case rates of HIV infection.<sup>55</sup> Because more than half of new HIV infections occur as a result of infection transmission by people who have HIV but do not know it, increasing condom use, screening, early intervention, and treatment are critical for controlling the spread of HIV.

# OBJECTIVE ID-12 Ph1



Reduce by 5% the number of diagnosed cases of HIV overall, among men who have sex with men (MSM) and among black females.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	348 (2011)	331	Connecticut Department of Public Health, TB, HIV, STD & Viral Hepatitis Section
MSM	156 (2011)	148	
Black females	41 (2011)	39	

## **Strategies**

#### Advocacy and Policy

Ensure housing support for persons with HIV/AIDS.

## **Communications**

- Promote utilization of partner referral services for HIV-positive individuals.
- Promote condom use among sexually active youth and adults.

#### **Education and Training**

- Educate and train providers about routine HIV prevention, screening and treatment.
- Educate providers about CDC guidelines regarding testing and early treatment, referrals to prevention and treatment services, and culturally appropriate prevention, treatment and follow-up interventions.

## Planning & Development

- Implement routine screening programs to increase early detection of HIV.
- Implement syringe exchange, drug treatment and other harm reduction measures.
- Implement interventions to link and retain persons with HIV in care.

## Surveillance

- Develop coordinated HIV surveillance, prevention and care data systems to monitor Connecticut trends in the HIV continuum and effectively target resources/interventions.
- Explore use of pre-exposure prophylaxis (PrEP) as preventive measure for persons engaging in high-risk behaviors.

## OBJECTIVE ID-13 (DEVELOPMENTAL) Ph1



Increase the proportion of known HIV-positive individuals with suppressed viral loads (i.e., 200 or less copies of virus per milliliter)

## **Strategies**

## Advocacy and Policy

Ensure housing support for persons with HIV/AIDS.

#### **Communications**

- Promote utilization of partner referral services for HIV-positive individuals.
- Promote condom use among sexually active youth and adults.

#### **Education and Training**

- Educate and train providers about routine HIV prevention, screening and treatment.
- Educate providers about CDC guidelines regarding testing and early treatment, referrals to prevention.

#### Planning & Development

- Implement routine screening programs to increase early detection of HIV.
- Implement syringe exchange, drug treatment and other harm reduction measures.
- Implement interventions to link and retain persons with HIV in care.
- Explore use of pre-exposure prophylaxis (PrEP) as preventive measure for persons engaging in high risk behaviors.

#### Surveillance

Develop coordinated HIV surveillance, prevention and care data systems to monitor Connecticut trends in the HIV continuum and effectively target resources/interventions.

## **OBJECTIVE ID-14**

Decrease by 20% the proportion of people who progress to AIDS within 1 year of initial diagnosis.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	42.8%	34.2%	Connecticut Department of Public Health, TB,
	(2011)		HIV, STD & Viral Hepatitis Section

## **Strategies**

## Advocacy and Policy

Ensure housing support for persons with HIV/AIDS.

### **Communications**

- Promote utilization of partner referral services for HIV+ individuals.
- Promote condom use among sexually active youth and adults.

## **Education and Training**

- Educate and train providers about routine HIV prevention, screening and treatment.
- Educate providers about CDC guidelines regarding testing and early treatment, referrals to prevention and treatment services and culturally appropriate prevention, treatment and follow-up interventions.

## Planning & Development

- Implement routine screening programs to increase early detection of HIV.
- Implement syringe exchange, drug treatment and other harm reduction measures.
- Implement interventions to link and retain persons with HIV in care.
- Explore use of pre-exposure prophylaxis (PrEP) as preventive measure for persons engaging in high risk behaviors.

#### Surveillance

• Develop coordinated HIV surveillance, prevention and care data systems to monitor Connecticut trends in the HIV continuum and effectively target resources/interventions.

## **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Correction; Connecticut Division of Criminal Justice; State Department of Education; local public health agencies, public health professional associations; faith-based organizations; laboratories; health care providers including primary care and infectious disease physicians, community health centers, college and university health services, and hospitals; health professional associations; health insurers; pharmaceutical companies; community service agencies that address specific populations such as women, youth, homeless people, communities of color, and LGBT populations; organizations and coalitions focused on HIV/AIDS; schools of public health and medicine; HIV/AIDS research programs and institutes; and others.

## **Tuberculosis**

## Rationale

Tuberculosis (TB) is a bacterial disease caused by *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but can attack any part of the body such as the kidney, spine, and brain. If not treated properly, tuberculosis can be fatal.<sup>56</sup>

During the past 20 years, the rate of new cases of tuberculosis has declined in the US.<sup>57</sup> Mirroring US trends, there was a decline in the rate of new tuberculosis cases among Connecticut residents during the past decade. The incidence of new cases of TB was highest among Asians and Hispanics. Most new cases were among persons who were born outside the United States.

Tuberculosis can be largely prevented by educating, screening, and treating people representing or engaged with high-risk populations.

#### **OBJECTIVE ID-15**

Reduce by 5% the overall incidence rate of tuberculosis.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	2.3 per 100,000 (2011)	2.19 per 100,000	Connecticut Department of Public Health, TB, HIV, STD & Viral Hepatitis Section

## **Strategies**

Advocacy and Policy

- Promote and ensure screening and treatment of persons at high risk for TB.
- Maintain state funding for TB treatment and services.

## **Education and Training**

 Educate providers about at risk groups, screening protocols and follow-up referral services for disease control.

#### Planning & Development

- Maintain Direct Observed Therapy (DOT) as the standard for people with TB disease.
- Implement culturally congruent outreach and health care interventions for persons at risk of latent TB infection and TB disease.

## **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Correction; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; local public health agencies; public health professional associations; faith-based organizations; laboratories; health care providers including primary care and infectious disease physicians, community health centers, and hospitals, TB clinics, and college and university health services; health professional associations; community service providers that address at-risk populations; organizations that assist immigrants; other organizations and coalitions that address TB and co-infections such as HIV/AIDs; and others.

## **Hepatitis C**

## Rationale

Hepatitis C is a serious liver disease that results from infection with the Hepatitis C virus. People can get infected and not know it. Some people are able to get rid of the virus, but most people who get infected develop a chronic infection that over time can cause liver damage, liver failure, and even liver cancer. <sup>58</sup>

Although there has been a decline from 2007 to 2011 in the number of Hepatitis C cases past or present reported or diagnosed, there were

"We are seeing a huge influx of people in Willimantic with hepatitis C. The numbers are getting bigger. We help by providing clean needles but we do this for free and we need a formal needle exchange program in Windham County. This town needs to come to the reality that there is a drug problem. We need to work toward helping people out and erasing this stigma. (Windham)"

more than 60 cases of Hepatitis C reported in Connecticut towns in 2011, suggesting a need to increase Hepatitis C screening among high risk populations to address this trend.

## **OBJECTIVE ID-16 (DEVELOPMENTAL)\***

Reduce by 5% the number of cases of acute hepatitis C (HCV).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	47	45*	Connecticut Department of
	(2011)*		Public Health, TB, HIV, STD &
			Viral Hepatitis Section

<sup>\*</sup>Hepatitis surveillance ended in November, 2012, when the CDC redirected funding. As a result, this objective will be considered "developmental" until a mechanism for tracking HCV is re-established.

## **Strategies**

Communications, Education and Training

- Educate providers about risk factors and screening guidelines, such as importance of screening birth cohort born between 1945 and 1965.
- Implement targeted and culturally appropriate education on primary prevention measures to avoid transmission and contracting Hepatitis C.
- Implement culturally congruent outreach and screening interventions.
- Educate all payers on the current CDC guidelines for Hepatitis C screening and treatment.
- Implement a general public education campaign on Hepatitis C.

## Partnership and Collaboration

• Provide opportunities for Continuing Education Unites (CEUs) and Continuing Medical Education (CMEs) to engage providers in education on Hepatitis C.

## Surveillance

Re-establish surveillance for hepatitis C.

## **OBJECTIVE ID-17 (DEVELOPMENTAL)**



Increase hepatitis C screening among high risk populations, consistent with Centers for Disease Control and Prevention (CDC) guidelines.

## **Strategies**

Communications, Education and Training

- Educate providers about risk factors and screening guidelines, such as importance of screening birth cohort born between 1945 and 1965.
- Implement targeted and culturally appropriate education on primary prevention measures to avoid transmission and contracting Hepatitis C.
- Implement culturally congruent outreach and screening interventions.
- Educate all payers on the current CDC guidelines for Hepatitis C screening and treatment.
- Implement a general public education campaign on Hepatitis C.

#### Partnership and Collaboration

• Provide opportunities for Continuing Education Unites (CEUs) and Continuing Medical Education (CMEs) to engage providers in education on Hepatitis C.

## **OBJECTIVE ID-18 (DEVELOPMENTAL)**

Increase the proportion of persons with identified Hepatitis C infection who are receiving appropriate treatment and care.

## **Strategies**

Communications, Education and Training

- Educate providers about risk factors and screening guidelines, such as importance of screening birth cohort born between 1945 and 1965.
- Implement targeted and culturally appropriate education on primary prevention measures to avoid transmission and contracting Hepatitis C.
- Implement culturally congruent outreach and screening interventions.
- Educate all payers on the current CDC guidelines for Hepatitis C screening and treatment.
- Implement a general public education campaign on Hepatitis C.

## Partnership and Collaboration

• Provide opportunities for Continuing Education Unites (CEUs) and Continuing Medical Education (CMEs) to engage providers in education on Hepatitis C.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Correction; Connecticut Division of Criminal Justice; Connecticut Department of Veterans' Affairs (VA Hospital); State Department of Education; local public health agencies; public health professional associations; HIV/AIDS research programs and institutes; faith-based organizations; laboratories; health care facilities including transplant centers, hepatitis C and methadone maintenance clinics, community health centers, hospitals, and college and university health services; health care providers including primary care and infectious disease physicians; professional medical associations; community service agencies that address specific populations such as women, youth, elderly, the homeless, communities of color and LGBT populations; other organizations and coalitions that address Hepatitis and co-infections such as STDs and HIV/AIDS, liver health, and cancer; philanthropic and research organizations that address hepatitis; and others.

## **Vector-borne Diseases**

#### Rationale

Vector-borne diseases are illnesses caused by microorganisms that are transmitted to humans by insects and other blood-sucking arthropods. In the United States and Connecticut, two common vector-borne diseases, Lyme disease and West Nile virus, are transmitted by ticks and mosquitoes, respectively. Lyme disease symptoms commonly include fever, headache, fatigue, and a "bulls-eye" skin rash. Most cases are successfully treated through a course of antibiotics. If left untreated, however, infection can spread to joints, the heart, and the nervous system.<sup>59</sup> There are no treatments for West Nile virus, but in most cases those infected are not symptomatic and progress to full recovery.

In the US, the number of reported Lyme disease cases, which is more common in the Northeast, has increased, while the number of new reported cases of West Nile virus has declined.<sup>60</sup>

About 3,000 cases of Lyme disease are reported in Connecticut each year, but it is estimated that for every reported case, 10 others are not reported. Annual cases of West Nile Virus ranged from 0 to 21 since 2006. During the past decade, the number of new cases of Lyme disease was highest in northeastern and eastern Connecticut, whereas the number of West Nile Virus cases was highest in the southwest.

Vector-borne diseases are among the most difficult diseases to prevent and control, first, because it is difficult to predict the behavior of ticks and mosquitoes, and second, because most vector-borne microbes also infect animals. Increasing awareness of these issues and providing public education on how to limit exposure to ticks and mosquitoes are the key strategies for prevention.

## **OBJECTIVE ID-19**

Decrease by 5% the incidence of Lyme disease.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	2,658 cases (2012)*	2,525 cases	Connecticut Department of Public Health, Infectious Disease
			Section.

<sup>\*</sup>Over the years, Lyme disease has been reported in different ways (physician reporting with or without laboratory reporting), depending on goals, resources, and the national case definition. As a result, since 2002, reported cases have varied from 1,348 to 4,631 (average about 3,000 per year) and do not represent true numbers or trends.

## **Strategies**

**Education and Training** 

- Enhance public education programs regarding prevention strategies, including tick avoidance.
- Expand health care provider education regarding evidence-based tick-borne disease diagnosis and treatment.

#### Planning & Development

- Increase the number of clinical laboratories that report positive Lyme disease test results electronically.
- Develop and implement consistent tick reduction strategies statewide.

## Surveillance

• Improve surveillance to better identify the true incidence of Lyme disease.

## **OBJECTIVE ID-20**

Decrease by 5% the incidence of West Nile Virus infection.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	21 cases	20 cases	Connecticut Department of Public Health,
	(2012)		Infectious Disease Section

## **Strategies**

Communications, Education and Training

Enhance public education programs regarding prevention strategies to minimize exposure to mosquitoes.

## Planning & Development

• Develop and implement consistent mosquito reduction strategies statewide.

#### Surveillance

• Calculate average annual incidence, using a rolling 5-year average (due to year-to-year variability in incidence rates).

## **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Energy and Environmental Protection, Connecticut Agriculture Experiment Station, Connecticut Department of Consumer Protection, University of Connecticut Cooperative Extension System, College of Agriculture and Natural Resources, local public health agencies, laboratories, primary care and infectious disease physicians, professional associations, local coalitions that address vector-borne diseases and illness, schools of public health and medicine, and others.

## **Foodborne Illness and Infection**

#### Rationale

Foodborne illness ("food poisoning") is a common but preventable public health problem. The CDC estimates that 1 in 6 Americans gets a food-borne illness each year by eating or drinking contaminated food; many such illnesses require hospitalization, and some cause death.

In recent years in Connecticut, the number of cases of *Campylobacter* increased, whereas the number of cases for other food-borne illnesses remained relatively steady. Food-borne illness and infection can be controlled by safe food handling and preparation--including routine and thorough handwashing-- and enforcement of food code and regulations for all food-handling institutions.

## OBJECTIVE ID-21

Reduce by 5% the overall incidence of illnesses caused by enteric pathogens and toxins.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	1,266 laboratory-confirmed cases (2012)	1,203 laboratory-confirmed cases	Connecticut Department of Public Health, Infectious Disease Section, Connecticut FoodNet

## **Strategies**

Advocacy and Policy

- Expand Connecticut Qualified Food Operator (QFO) mandate to include all relevant employee groups in licensed food service establishments.
- Update food code/regulations and assure regulatory compliance within the food industry.
- Use standard risk-based protocols for FSE inspections and code enforcement across local jurisdictions.

## Communications, Education and Training

- Educate consumers on food safety practices for home and work environments and how to report suspected foodborne illness.
- Provide education on importance of evaluating and reporting suspected foodborne illness by consumers and health care providers to enhance surveillance and effective abatement of real and potential outbreak situations.
- Disseminate and enhance guidance and protocols for food protection during extreme events, natural and other disasters.
- Ensure appropriate training of food service employees.
- Promote engagement of food service establishments (FSE) and food service workers in food safety education programs and application of food safety principles in practice.
- Enhance institutional education on food safety practices and compliance with food code/regulations (day care, schools, residential programs, correctional facilities, long term care facilities, facilities serving older adults and immune-compromised populations).
- Provide culturally congruent education on food safety for ethnic consumer groups and ethnic food service establishments.
- Enhance inspector/sanitarian and industry training, and focus on risk-based inspections through training and field monitoring.

### Research, Surveillance

- Promote utilization of Connecticut Food Core Program by local health departments with limited foodborne disease follow up capacity.
- Ensure follow-up interviews for Campylobacter infections by state or local public health personnel.
- Ensure that appropriate laboratory infrastructure and systems are in place for more rapid and timely identification and characterization of pathogens.
- Continue state public health laboratory participation in the FDA ISO 17025 Laboratory Accreditation
  Cooperative Agreement Program to adapt standardized laboratory testing methods for food pathogens,
  and provide increased food testing capacity.

## OBJECTIVE ID-22

Reduce by 5% the incidence of infections associated with the most common foodborne bacterial pathogens, *Salmonella* and *Campylobacter*.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	111 cases Salmonellosis (2012)	105 cases	Connecticut Department of Public Health, Infectious Disease Section,
	599 cases <i>Campylobacter</i> (2012)	569 cases	Connecticut FoodNet

## **Strategies**

## Advocacy and Policy

- Expand Connecticut Qualified Food Operator (QFO) mandate to include all relevant employee groups in licensed food service establishments.
- Update food code/regulations and assure regulatory compliance within the food industry.
- Use standard risk-based protocols for FSE inspections and code enforcement across local jurisdictions.

## Communications, Education and Training

- Educate consumers on food safety practices for home and work environments and how to report suspected foodborne illness.
- Provide education on importance of evaluating and reporting suspected foodborne illness by consumers and health care providers to enhance surveillance and effective abatement of real and potential outbreak situations.
- Disseminate and enhance guidance and protocols for food protection during extreme events, natural and other disasters.
- Ensure appropriate training of food service employees.
- Promote engagement of food service establishments (FSE) and food service workers in food safety education programs and application of food safety principles in practice.
- Enhance institutional education on food safety practices and compliance with food code/regulations (day care, schools, residential programs, correctional facilities, long term care facilities, facilities serving older adults and immune-compromised populations).
- Provide culturally congruent education on food safety for ethnic consumer groups and ethnic food service establishments.
- Enhance inspector/sanitarian and industry training, and focus on risk-based inspections through training and field monitoring.

## Research, Surveillance

- Promote utilization of Connecticut Food Core Program by local health departments with limited foodborne disease follow up capacity.
- Ensure follow-up interviews for Campylobacter infections by state or local public health personnel.



- Ensure that appropriate laboratory infrastructure and systems are in place for more rapid and timely identification and characterization of pathogens.
- Continue state public health laboratory participation in the FDA ISO 17025 Laboratory Accreditation
  Cooperative Agreement Program to adapt standardized laboratory testing methods for food pathogens,
  and provide increased food testing capacity.

## OBJECTIVE ID-23

Reduce by 5% the incidence of infections caused by foodborne pathogens associated with significant morbidity and mortality, such as *E.coli* 0157 and non-0157, shiga-toxin-producing *E.coli* (STEC), and *Listeria*.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	19 cases	18 cases	Connecticut Department of
	E. coli 0157		Public Health, Infectious
	(2012)		Disease Section, Connecticut
	32 cases Non-0157 STEC (2012)	30 cases	FoodNet
	23 cases	22 cases	
	Listeria		

## **Strategies**

Advocacy and Policy

- Expand Connecticut Qualified Food Operator (QFO) mandate to include all relevant employee groups in licensed food service establishments.
- Update food code/regulations and assure regulatory compliance within the food industry.
- Use standard risk-based protocols for FSE inspections and code enforcement across local jurisdictions.

#### Communications, Education and Training

- Educate consumers on food safety practices for home and work environments and how to report suspected foodborne illness.
- Provide education on importance of evaluating and reporting suspected foodborne illness by consumers and health care providers to enhance surveillance and effective abatement of real and potential outbreak situations.
- Disseminate and enhance guidance and protocols for food protection during extreme events, natural and other disasters.
- Ensure appropriate training of food service employees.
- Promote engagement of food service establishments (FSE) and food service workers in food safety education programs and application of food safety principles in practice.
- Enhance institutional education on food safety practices and compliance with food code/regulations (day care, schools, residential programs, correctional facilities, long term care facilities, facilities serving older adults and immune-compromised populations).
- Provide culturally congruent education on food safety for ethnic consumer groups and ethnic food service establishments.
- Enhance inspector/sanitarian and industry training, and focus on risk-based inspections through training and field monitoring.

## Research, Surveillance

 Promote utilization of Connecticut Food Core Program by local health departments with limited foodborne disease follow up capacity.



- Ensure follow-up interviews for *Campylobacter* infections by state or local public health personnel.
- Ensure that appropriate laboratory infrastructure and systems are in place for more rapid and timely identification and characterization of pathogens.
- Continue state public health laboratory participation in the FDA ISO 17025 Laboratory Accreditation
  Cooperative Agreement Program to adapt standardized laboratory testing methods for food pathogens,
  and provide increased food testing capacity.

# OBJECTIVE ID-24

Reduce by 5% the number of annual outbreaks attributed to norovirus.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	10	9	Connecticut Department of
	Foodborne norovirus outbreaks		Public Health, Infectious
	(2012)		Disease Section.

## **Strategies**

Advocacy and Policy

- Expand Connecticut Qualified Food Operator (QFO) mandate to include all relevant employee groups in licensed food service establishments.
- Update food code/regulations and assure regulatory compliance within the food industry.
- Use standard risk-based protocols for FSE inspections and code enforcement across local jurisdictions.

## Communications, Education and Training

- Educate consumers on food safety practices for home and work environments and how to report suspected foodborne illness.
- Provide education on importance of evaluating and reporting suspected foodborne illness by consumers and health care providers to enhance surveillance and effective abatement of real and potential outbreak situations.
- Disseminate and enhance guidance and protocols for food protection during extreme events, natural and other disasters.
- Ensure appropriate training of food service employees.
- Promote engagement of food service establishments (FSE) and food service workers in food safety education programs and application of food safety principles in practice.
- Enhance institutional education on food safety practices and compliance with food code/regulations (day care, schools, residential programs, correctional facilities, long term care facilities, facilities serving older adults and immune-compromised populations).
- Provide culturally congruent education on food safety for ethnic consumer groups and ethnic food service establishments.
- Enhance inspector/sanitarian and industry training, and focus on risk-based inspections through training and field monitoring.

## Research, Surveillance

- Promote utilization of Connecticut Food Core Program by local health departments with limited foodborne disease follow up capacity.
- Ensure follow-up interviews for Campylobacter infections by state or local public health personnel.
- Ensure that appropriate laboratory infrastructure and systems are in place for more rapid and timely identification and characterization of pathogens.
- Continue state public health laboratory participation in the FDA ISO 17025 Laboratory Accreditation
  Cooperative Agreement Program to adapt standardized laboratory testing methods for food pathogens,
  and provide increased food testing capacity.

## **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Energy and Environmental Protection; State Department of Education; Connecticut Department of Agriculture; Connecticut Department of Consumer Protection; local public health agencies; infectious disease specialists; primary care providers; hospitals; food and restaurant industry; professional associations; food training providers; schools of agriculture and public health; organizations and coalitions focused on food, agriculture, and the environment; community service providers that focus on food security for at-risk populations; and others.

## **Waterborne Illness and Infections**

## Rationale

Access to clean, safe water is essential to human health and life; but water can cause illness when it is contaminated with disease-causing microorganisms.

Connecticut has some of the highest quality water in the country, largely due to the strong public health infrastructure that regulates and monitors water in an effort to protect watersheds and to promote water quality and safety.

#### **OBJECTIVE ID-25**

Maintain at zero the overall incidence of illnesses caused by waterborne pathogens.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	0	0	Connecticut Department of Public
	(2012)		Health, Infectious Disease Section

## **Strategies**

Partnership and Collaboration

• Strengthen collaboration between DPH and DEP to identify and investigate potential waterborne contamination problems and outbreaks.

Research and Surveillance

- Revise the Reportable Disease and Laboratory Findings list to maximize the ability to detect waterborne illnesses.
- Strengthen surveillance mechanisms for waterborne diseases and ensure epidemiological and laboratory capacity.

## **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Energy and Environmental Protection, Connecticut Department of Consumer Protection, local public health agencies, consumers, drinking water providers, national and state professional associations focused on drinking water access and quality, health care providers including primary care, emergency physicians and infectious disease physicians, emergency medical services, community health centers, and hospitals, professional associations, other organizations and coalitions focused on water quality and safety, and others.

## **Healthcare Associated Infections**

## Rationale

Healthcare-associated infections (HAIs) are infections that patients get in healthcare facilities while receiving medical or surgical treatment for other conditions. They are the most important complication of hospital care, and are considered a leading cause of preventable death in the US.

HAIs can occur in all types of healthcare settings, including outpatient hospitals, ambulatory surgical centers and outpatient clinics, and long-term care facilities.

The major kinds of HAIs include central-line-associated bloodstream infections, multi-drug-resistant bacteria such as methicillin-resistant *Staphylococcus aureus* (MRSA),

catheter-associated urinary tract infections, surgical site infections, and diarrhea caused by *Clostridium difficile*.

"The statistics are alarming regarding the infectious diseases of our children. Growing up, students and children are not educated and/or aware about what these diseases are. How can we educate our children in schools so that they are aware about infectious diseases?" (Hartford)

HAIs in various types of healthcare facilities can be reduced by ensuring that staff, patients, their caregivers, and their visitors follow evidence-based infection prevention procedures, such as hand hygiene.

## **OBJECTIVE ID-26**

Reduce by 5% the incidence rates for multidrug resistant organisms (MDROs), specifically vancomycin-resistant enterococcus (VRE) and methicillin-resistant *Staphylococcus aureus* (MRSA).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	8.1 per 100,000 VRE (2011)	7.7 per 100,000	Connecticut Department of Public Health, Infectious Disease Section, Active
	4.2 per 100,000 MRSA, Healthcare facility onset (2012)	4.0 per 100,000	Bacterial Core Surveillance Program and Healthcare Associated Infections Program
	11.8 per 100,000 MRSA, Healthcare-associated, community onset (2012)	11.2 per 100,000	

## **Strategies**

Communications, Education and Training

• Enhance public education about the prudent use of antimicrobials and other prevention strategies (e.g., hand washing, wound dressing).

Partnership and Collaboration, Planning & Development

 Implement and integrate current evidence-based prevention strategies, including antimicrobial stewardship.

## Surveillance

 Ensure clinical and reference laboratory ability and capacity to detect and report MDRO isolates in a timely fashion.

## **OBJECTIVE ID-27 (DEVELOPMENTAL)**



Maintain and enhance the State's public reporting infrastructure for healthcare associated infections (HAIs) to include additional types of healthcare facilities, facility locations, or types of HAIs reported.

## **Strategies**

Advocacy and Policy

 Advocate for increasing the types of HAI's that are publically reported via the National Healthcare Safety Network (NHSN).

Communications, Education and Training

- Develop improved methods (user friendly tools) for communicating information about HAI's to the public.
- Educate the public; empower them to make informed healthcare decisions.

Partnership and Collaboration

Recruit and train additional types of healthcare facilities to use NHSN for public reporting of HAI's.

Surveillance

• Maintain and enhance the State's public reporting infrastructure for HAI's.

## **OBJECTIVE ID-28 (DEVELOPMENTAL)**



Achieve and maintain Standard Infection Ratios (SIRs) of less than or equal to one (≤1) for Acute Care Hospital HAIs, including central-line-associated bloodstream infections (CLABSI's), catheter-associated urinary tract infections (CAUTI's), surgical site infections (SSI's), *Clostridium difficile* infections (CDI's), and methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia.

## **Strategies**

Planning & Development

• Implement and integrate current evidence-based prevention strategies, including antimicrobial stewardship.

## OBJECTIVE ID-29 (DEVELOPMENTAL)



Reduce the rate of catheter-associated urinary tract infections (CAUTI's) and *Clostridium difficile* infections in Long Term Care facilities.

## **Strategies**

Planning & Development

 Implement and integrate current evidence-based prevention strategies, including antimicrobial stewardship.

Surveillance

• Establish reporting of infections via the National Healthcare Safety Network.

## **OBJECTIVE ID-30 (DEVELOPMENTAL)**

Reduce the rate of central line-associated bloodstream Infection (CLABSI) in Hemodialysis facilities.

Ph1

## **Strategies**

Planning & Development

• Implement and integrate current evidence-based prevention strategies, including antimicrobial stewardship.

#### Surveillance

• Establish reporting of infections via NHSN.

## **OBJECTIVE ID-31 (DEVELOPMENTAL)**



Reduce the number of surgical site infections (SSI's) in Ambulatory Surgical Centers (ASC's).

## **Strategies**

Partnership and Collaboration

 Establish collaboration between the public health system and ASC's and the Connecticut Association of Ambulatory Surgery Centers regarding HAI's.

Planning & Development

• Implement and integrate current evidence-based prevention strategies.

#### Surveillance

Establish reporting of infections via NHSN.

## **OBJECTIVE ID-32 (DEVELOPMENTAL)**

Reduce the number of catheter-associated urinary tract infections (CAUTI's) and surgical site infections (SSI's) in Homecare and Hospice programs.

## **Strategies**

Surveillance

- Implement a baseline prevalence survey to establish the burden of HAIs in Homecare programs.
- Establish surveillance and reporting system for homecare-associated infections with appropriate partners (state, regional, and national).

## **OBJECTIVE ID-33 (DEVELOPMENTAL)**

Reduce the number of healthcare associated influenza outbreaks.

## **Strategies**

Partnership and Collaboration, Planning & Development

- Improve healthcare worker influenza vaccination rates in all healthcare facilities.
- Improve influenza vaccination rates for residents of Long Term Care facilities.
- Implement and integrate current evidence-based prevention strategies for influenza.

## **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Correction, Connecticut Department of Veterans' Affairs, health care facilities including hospitals, dialysis centers, ambulatory surgical centers, nursing homes, and long term care facilities, health care providers, health professional associations, local public health agencies, training consultants, organizations and coalitions focused on quality and safety in health care settings, philanthropic and research organizations focused on quality of care and patient safety, and others.

## **Emergency Preparedness for Emerging Infectious Diseases**

## Rationale

With the help of the Centers for Disease Control (CDC), state and local health departments have created emergency preparedness and response plans for infectious diseases. The plans include early detection, rapid diagnosis, and treatment with antibiotics or antivirals. Emergency preparedness and response use quarantine and isolation as primary strategies to contain the spread of contagious disease, by limiting people's exposure to it.

## **OBJECTIVE ID-34 (DEVELOPMENTAL)**



Reduce the adverse impact of emerging infectious disease on population health through early detection and control by maintaining support for and expanding the current Emerging Infections Program.

## **Strategies**

#### **Communications**

- Enhance public health communication systems and dissemination of data for the public and providers.
- Ensure guidelines are developed and available.
- Provide single source, up to date information for the public and providers.

## Planning & Development

Ensure all hazards plans are up-to-date and drilled.

#### Surveillance

 Modernize and optimize surveillance systems and laboratory technology to detect and respond to public health emergencies.

## **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Energy and Environmental Protection; State Department of Education; Connecticut Department of Emergency Services and Public Protection (Division of Emergency Management and Homeland Security); Connecticut Department of Correction; local public health agencies; public health professional associations; laboratories; health care providers including primary care, emergency department and infectious disease physicians, emergency medical services, community health centers, and hospitals; community service agencies for underserved populations; other state and regional organizations and coalitions that address public health preparedness; and others.

# Injury and Violence Prevention

- Unintentional Injury
  - Falls
  - Poisoning
  - Motor Vehicle Crashes
- Intentional Injury
  - Suicide
  - Homicide and Community Violence
  - Traumatic Brain Injury
  - Child Maltreatment
  - Sports Injuries
  - Occupational Injuries



## WORK GROUP ON INJURY AND VIOLENCE PREVENTION

**Co-Chairs** 

Pina Violano

Yale New Haven Children's Hospital, Injury

**Prevention Program** 

Amanda Durante

New Haven Health Department

**Members** 

Paula Crombie

Yale New Haven Hospital

Phyllis DiFiore

Connecticut Department of Transportation

Nadine Fraser

Connecticut Hospital Association

Peggy Gallup

Southern Connecticut State University

Amy Hanoian

Connecticut Poison Control Center

Pamela Puchalski

Connecticut Council for Occupational Safety & Health

Deb Shulansky

Brain Injury Alliance of Connecticut

Faith Vos Winkel

Connecticut Office of the Child Advocate

Karen Wexell

University of Connecticut School of Nursing &

Connecticut Poison Control Center

#### **GOAL**

Create an environment in which exposure to injuries is minimized or eliminated.

#### WHY THIS GOAL IS IMPORTANT

Unintentional injuries and violence are among the leading causes of death and premature death in the United States and also contribute to disability, poor mental health, high health care costs, and lost productivity. It is estimated that injuries cost the US health system \$80.2 billion annually, and result in productive losses of \$326 billion annually. Nearly all injuries and related disability and death are preventable. In Connecticut, Injury and Poisoning, including violent injuries, is the leading cause of visits to hospital emergency rooms. Suicide is the leading cause of injury death in our state, and during the last decade, falls and accidental poisoning overtook motor vehicle accidents as the leading causes of death due to unintentional injury.

## **Unintentional Injury**

## **Falls**

#### Rationale

In the United States, falls are the leading cause of injury and death among older adults 65 years of age and older. Falls can cause serious injuries such as head trauma and fractures that require emergency treatment or hospitalization. In addition, older adults may require a year or more to recover from these injuries and may never be able to return to their homes. 63 Non-fatal falls among older adults result in \$19 billion in annual medical costs.<sup>64</sup>

In Connecticut falls account for \$1.37 billion a year in lifetime costs. They are the leading cause of emergency department (ED) visits for injuries, and cause nearly all hip fractures and one-third of all traumatic brain injuries. Children under 18 years of age and adults 65 years of age and older each account for about 3 out of every 10 ED visits for falls. During the last decade, the number of deaths due to falls nearly doubled, and falls overtook accidental poisoning and motor vehicle accidents as the leading cause of unintentional injury death. 65

Fall risk assessment and reduction strategies in a variety of settings-- including physical activity and exercise; balance training; medication review and management; vision, hearing, and foot care; and home/environment modification-- can reduce the number of, and physical, emotional, and economic costs associated with, falls.

# OBJECTIVE IV-1 Ph1





Decrease by 10% the number of fall deaths among persons of all ages.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	327 deaths	294 deaths	Connecticut Department of Public Health,
	(2010)		Vital Statistics, Registration Reports, Table 9

## **Strategies**

## **Communications**

Promote implementation of evidence-based multi-faceted programs for community dwelling older adults that integrate fall risk reduction strategies (physical activity, exercise, balance training, medication review and management, vision, hearing, and foot care, and home/environment modification).

#### **Education and Training**

Educate healthcare, childcare, and other care providers on fall prevention.

## Partnership and Collaboration

- Partner with athletic, sports, and recreation stakeholders to develop strategies, policies, and training on use of appropriate protective equipment.
- Collaborate with regulators and other partners to promote development and maintenance of playgrounds that meet guidelines for Public Playground Safety.

## Planning & Development

- Develop comprehensive home safety program for families and caregivers, focusing on injury risks for
- Prevent an increase in fall related deaths among adults aged 65 years and older.

### Surveillance

- Identify, access, and analyze potential alternative sources of data on causes of and locations of falls for specific age groups, including home, recreational, and sports-related falls.
- Develop procedures for improving the coding of data on causes and locations of falls.

# OBJECTIVE IV-2

Reduce by 10% the number of fall-related Emergency Department visits among persons of all ages.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	98,851	88,966	Connecticut Department of Public
	(FFY2012)		Health, Office of Health Care Access

## **Strategies**

Communication, Education and Training

- Develop and implement a public education campaign about the risks of using multiple medications (polypharmacy).
- Promote implementation of evidence-based multi-faceted programs for community dwelling older adults
  that integrate fall risk reduction strategies (physical activity, exercise, balance training, medication review
  and management, vision, hearing, and foot care, and home/environment modification).

#### **Education and Training**

• Educate healthcare, childcare, and other care providers on fall prevention.

#### Partnership and Collaboration

- Partner with athletic, sports, and recreation stakeholders to develop strategies, policies, and training on use of appropriate protective equipment.
- Collaborate with regulators and other partners to promote development and maintenance of playgrounds that meet guidelines for Public Playground Safety.

#### Planning & Development

- Develop comprehensive home safety program for families and caregivers, focusing on injury risks for children.
- Prevent an increase in fall related deaths among adults aged 65 years and older.

#### Surveillance

- Identify, access, and analyze potential alternative sources of data on causes of and locations of falls for specific age groups, including home, recreational, and sports-related falls.
- Develop procedures for improving the coding of data on causes and locations of falls.

## **Potential Partners**

Connecticut Department of Public Health; State Department on Aging; Connecticut Department of Social Services; Connecticut Department of Labor; State Department of Education; Connecticut Department of Consumer Protection; Commission on Children; Office of the Child Advocate; local public health agencies; injury prevention centers; health care providers including nurses, physicians, physical therapists, pharmacists, emergency medical services, hospitals, home care agencies, and rehabilitation facilities; health professional associations; recreation associations and recreational providers; child care providers and consultants; schools; coaches and athletic associations; state and local building inspectors; organizations and coalitions focused on fall and injury prevention for youth, adult, and elderly populations; community service providers for seniors, youth, and families; national and state philanthropic and medical research organizations; academic institutions with geriatric programs; and others.

#### **Poisoning**

#### **Rationale**

Chemicals in and around the home can poison people and cause long-term health effects. Every 13 seconds, a poison control center in the United States answers a call about a possible poisoning resulting from the accidental ingestion of medicines, pesticides, household cleaning products, carbon monoxide, or lead.<sup>66</sup>

From 2001 to 2010, the number of deaths due to accidental poisoning increased. Over the 2006 to 2010 period, combined, the age-adjusted mortality rate for all unintentional injuries was highest for accidental poisoning for each racial and ethnic group. Strategies aimed at preventing unintentional poisoning will address a key contributor to premature death in Connecticut.

#### **OBJECTIVE IV-3**

Reduce by 10% the number of deaths caused by unintentional poisonings.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	311 deaths	280 deaths	Connecticut Department of Public Health, Vital
	(2010)		Statistics, Registration Reports, Table 9.

#### **Strategies**

#### **Policy**

• Improve surveillance and understanding of circumstances surrounding poisoning deaths by securing an enforceable legislative mandate that requires reporting of all poisonings to the poison center.

#### Surveillance

• Improve surveillance and understanding of circumstances surrounding poisoning deaths by creating a legislatively mandated death review panel for all decedents who are suspected to have died by poisoning. The purpose of the panel is to look for systems changes and lessons learned from these deaths in order to inform prevention, training, policy, and surveillance. The panel will include co-chairs with toxicology expertise from the poison center and the medical examiner's office. Other members might have expertise in suicide, older adults, children, substance abuse, and mental health to name a few.

#### **Education and Training**

 Train death scene investigators in issues and investigatory techniques pertinent to prescription opioids, diversion, and other poisoning trends.

### **OBJECTIVE IV-4**

Decrease by 10% the number of hospitalizations for unintentional poisonings

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	1,428	1,285	Connecticut Department of Public Health,
	(2011)		Hospitalization Tables, Table H-1.

#### **Strategies**

Communications, Education and Training

- Expand awareness and usage of Connecticut Poison Control Center services to reduce unnecessary
  hospital and emergency department visits among the general public, health care practitioners, and
  underrepresented/at-risk populations in Connecticut.
- Educate the public on the causes and prevention of poisonings.

#### Partnership and Collaboration

• Expand the role of health care and other service providers in providing poison prevention education.

#### **OBJECTIVE IV-5**

Increase by 10% the hospital calls and the 911/EMS calls to the Connecticut Poison Control Center among all poison center calls.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	4,920	5,412	Connecticut Poison Control
	Hospital calls		Center
	(2012)		
	319	351	
	911/EMS calls		
	(2012)		

#### **Strategies**

Communications, Education and Training

• Publicize and provide targeted trainings to hospital-based health care providers, emergency medical services and fire departments, police departments and state troopers, and 911 dispatchers.

#### Partnership and Collaboration

- Expand current and develop new collaborations with appropriate partners.
- Standardize consultation with Connecticut Poison Control by collaborating with medical control and/or
  policy makers to ensure all 911 Emergency Medical Dispatching programs/guidelines and vendor card sets
  incorporate the poison center as appropriate; and collaborating with hospital administration and/or policy
  makers to ensure all health care providers report poisonings to the poison center and follow poison
  center standard of care.

#### **Potential Partners**

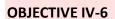
Connecticut Department of Public Health; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Consumer Protection; Connecticut Department of Veterans' Affairs; Connecticut Department of Social Services; Connecticut Poison Control Center; Commission on Children; Office of the Child Advocate; state and local substance abuse prevention service providers; local public health agencies; emergency medical services; hospitals; pharmacists and other health care providers; health professional associations; community service providers for families, youth, and seniors; organizations and coalitions focused on prevention of injury and poisonings; and others.

#### **Motor Vehicle Crashes**

#### Rationale

Injuries resulting from motor vehicle crashes account for more than 300 deaths, 2,000 hospitalizations, and 30,000 visits to hospital emergency rooms each year in Connecticut. About 50 of the fatalities each year are motorcyclists, and of these, nearly two-thirds were not wearing helmets. More than 4 in 10 of the motor vehicle fatalities involved alcohol-related driving. Lifetime costs of crashrelated injuries and deaths in Connecticut was \$900 million in 2012.

Efforts to prevent injuries from motor vehicle crashes include increasing the use of seatbelts and child safety seats, reducing impaired driving, and focusing on drivers at highest risk of injury and death: males and drivers 16 to 24 years.







Reduce by 5% the number of deaths from motor vehicle crashes.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	318 deaths	302 deaths	Connecticut Department of Public Health, Vital
	(2010)		Records, Registration Reports, Table 9.

#### **Strategies**

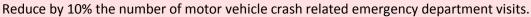
Advocacy and Policy

- Advocate for increased DUI and sobriety check-points.
- Advocate for re-testing for drivers aged 80 and over.
- Advocate for high visibility enforcement of distracted driving laws.
- Advocate for increased public awareness of the adverse effects of polypharmacy, especially among the older adult population.

Communications, Education and Training

- Expand the current educational awareness campaign on driving under the influence.
- Expand the current educational awareness campaign on Connecticut graduated driving licensing laws.

### **OBJECTIVE IV-7**



Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	30,795	27,715	Connecticut Department of Public
	(FFY 2012)		Health, Office of Health Care Access

#### **Strategies**

Advocacy and Policy

- Advocate for increased DUI and sobriety check-points.
- Advocate for driver re-testing for drivers aged 80 and over.
- Advocate for high visibility enforcement of distracted driving laws.
- Advocate for increased public awareness of the adverse effects of polypharmacy (especially among the older adult population).

Communications, Education and Training

- Expand the current educational awareness campaign on driving under the influence.
- Expand the current educational awareness campaign on Connecticut graduated driving licensing laws.

### OBJECTIVE IV-8 Ph1

Increase to 90% the statewide observed seatbelt rate.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	88%	90%	Connecticut Department of Transportation,
	(2010)		annual Highway Safety Plans

#### **Strategies**

Communications, Education and Training

• Expand the current educational awareness campaign on the consequences of not wearing a seatbelt.

Partnership and Collaboration

• Expand the number of State agencies conducting high-visibility enforcement events.

## OBJECTIVE IV-9 Ph1

Increase by 10% the proportion of children in automobile child safety restraints.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	84.9%	93.4%	Connecticut Department of Transportation,
	(2009)		annual Highway Safety Plans

#### **Strategies**

Advocacy and Policy

Align State child safety restraint requirement with American Academy of Pediatric guidelines.

Communications, Education and Training

• Develop educational materials for non-English speaking and low literacy populations on child passenger safety.

Planning & Development

- Recruit and train child passenger safety technicians.
- Expand screening and distribution of child restraint seats.

### OBJECTIVE IV-10 Ph1

Reduce by 10% the number of motorcycle operator and passenger fatalities.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	54 Operators (2010)	49	Connecticut Department of Transportation, annual Highway Safety Plans
	3 Passengers (2010)	2	

#### **Strategies**

Advocacy and Policy

Advocate for reinstatement of a helmet law for motorcycle drivers and passengers.

Communications, Education and Training

 Expand educational awareness and public awareness of the dangers of riding a motorcycle without a helmet.

#### **OBJECTIVE IV-11**

Reduce by 10% the number of injuries to motorcycle operators and passengers.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	1,086 Operators (2010)	977	Connecticut Department of Transportation, annual Highway Safety Plans
	118 Passengers (2010)	106	

#### **Strategies**

Advocacy and Policy

• Advocate for reinstatement of a helmet law for motorcycle drivers and passengers.

Communications, Education and Training

 Expand educational awareness and public awareness of the dangers of riding a motorcycle without a helmet.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Motor Vehicles; Connecticut Office of the Child Advocate; State Department of Education; Connecticut Judicial Branch; Connecticut Department of Transportation; Office of the Child Advocate; National Highway Traffic Safety Administration and other federal agencies; law enforcement; regional planning organizations; local public health agencies; health care providers including hospitals, emergency medical services, nurses, and emergency physicians; health professional associations; organizations and coalitions focused on prevention of motor vehicle crashes, injuries, and child safety; and others.

#### **Intentional Injury**

#### Suicide and Self-inflicted Injury

#### Rationale

Suicide and self-inflicted injury is the leading cause of injury death in Connecticut. Each year, there are more than 300 suicide deaths and 2,000 hospitalizations and 5,000 emergency room visits related to self-inflicted injuries. The economic cost of suicide and self-inflicted injury is considerable, with lifetime costs of injury and death totaling \$644 million in 2012.

The Connecticut suicide rate is highest for persons 45 to 54 years of age, and males are 1.6 times more likely than females to die from suicide; about one-third of suicides involve firearms. Suicide and self-inflicted injury are closely tied to depression and other mental health issues. Effective prevention strategies are needed to promote awareness of suicide and reduce the factors the increase risk.



OBJECTIVE IV-12 Ph1

Reduce by 10% the age-specific suicide rates for persons 15 to 64 years of age.

Target Population(s)	Baseline	2020 Target	Data Source
15-19 years of age	4.4 per 100,000	4.0 per 100,000	Connecticut Department of
	(2010)		Public Health, Registration
20-34 years of age	10.9 per 100,000	9.8 per 100,000	Reports, Table 10
	(2010)		
25-34 years of age	10.9 per 100,000	9.8 per 100,000	
	(2010)		
35-44 years of age	13.1 per 100,000	11.8 per 100,000	
	(2010)		
45-54 years of age	15.1 per 100,000	13.6 per 100,000	
	(2010)		
55-64 years of age	15.0 per 100,000	13.5 per 100,000	
	(2010)		

#### **Strategies**

#### Advocacy and Policy

Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to promote efforts to reduce access to lethal means of suicide among individuals with identified risks, including youth and veterans.

#### **Education and Training**

Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to provide training to community and clinical service providers on prevention of suicide and related behaviors.

#### Planning & Development

- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address integration of prevention efforts across sectors and settings.
- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address developing, implementing and monitoring effective programs that promote wellness and prevent suicide and related behaviors for adolescents; lesbian, gay, bisexual, and transgender youth; and veterans.

#### Surveillance

Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to increase timeliness
and usefulness of surveillance systems and improve ability to collect, analyze and use information.



Reduce by 5% the number of emergency department visits for suicide and self-inflicted injury.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	5,190	4,671	Connecticut Department of Public Health,
	(FFY 2012)		Office of Health Care Access

#### **Strategies**

#### Advocacy and Policy

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to promote efforts to reduce access to lethal means of suicide among individuals with identified risks, including youth and veterans.

#### **Education and Training**

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to provide training to community and clinical service providers on prevention of suicide and related behaviors.

#### Planning & Development

- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address integration of prevention efforts across sectors and settings.
- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address developing, implementing and monitoring effective programs that promote wellness and prevent suicide and related behaviors for adolescents; lesbian, gay, bisexual, and transgender youth; and veterans.

#### Surveillance

• Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to increase timeliness and usefulness of surveillance systems and improve ability to collect, analyze and use information.

## OBJECTIVE IV-14 Ph1

Reduce by 20% the proportion of students in grades 9-12 who attempted suicide in the past 12 months.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	6.7%	5.4%	Connecticut School Health Survey
	(2011)		

#### **Strategies**

#### Advocacy and Policy

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to promote efforts to reduce access to lethal means of suicide among individuals with identified risks.

#### **Education and Training**

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to provide training to community and clinical service providers on prevention of suicide and related behaviors.

#### Planning & Development

Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address integration
of prevention efforts across sectors and settings.

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address developing, implementing and monitoring effective programs that promote wellness and prevent suicide and related behaviors for adolescents; lesbian, gay, bisexual, and transgender youth.

#### Surveillance

• Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to increase timeliness and usefulness of surveillance systems and improve ability to collect, analyze and use information.

#### **OBJECTIVE IV-15**

Reduce by 20% the proportion of students in grades 9-12 who seriously considered attempting suicide.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	14.6%	11.7%	Connecticut School Health Survey
	(2011)		

#### **Strategies**

#### Advocacy and Policy

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to promote efforts to reduce access to lethal means of suicide among individuals with identified risks.

#### **Education and Training**

 Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to provide training to community and clinical service providers on prevention of suicide and related behaviors.

#### Planning & Development

- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address integration of prevention efforts across sectors and settings.
- Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to address developing, implementing and monitoring effective programs that promote wellness and prevent suicide and related behaviors for adolescents; lesbian, gay, bisexual, and transgender youth.

#### Surveillance

• Align with objectives and strategies in the Connecticut Suicide Prevention Strategy to increase timeliness and usefulness of surveillance systems and improve ability to collect, analyze and use information.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Children and Families, State Department of Education, Connecticut Department of Developmental Services, State Department on Aging, Connecticut Department of Veterans' Affairs, Connecticut Department of Correction, Connecticut Judicial Branch, Commission on Aging, Office of the Child Advocate, Connecticut Poison Control Center, local public health agencies, law enforcement, hospitals and emergency medical services, LGBT youth organizations, organizations and coalitions focused on suicide prevention and addiction recovery, professional associations for human services and community providers, community-based service providers, philanthropic and research organizations that address suicide, and others.

#### Homicide

#### Rationale

From 1981–2009, homicide ranked within the top four leading causes of death among U.S. residents 1 to 40 years of age. Homicide can have profound, long-term emotional consequences on families and friends of victims and on witnesses to the violence.

In Connecticut, there has been no significant change in homicide death rates since 1999. Males are more than 4 times more likely than females to be homicide victims, and compared to white non-Hispanics, homicide rates are 12 times greater for blacks and 5 times greater for Hispanics. Community factors such as poverty and economic inequality and individual factors such as unemployment and involvement in criminal activities can play a substantial role in these persistent disparities in homicide rates. In Connecticut, the 2012 lifetime cost of homicide was \$443 million.

New public health strategies are needed to prevent violence and save lives in communities at high risk for homicide.<sup>67</sup>

#### **Community Violence**

#### Rationale

Domestic and family violence and sexual violence are serious problems that have lasting, harmful effects on victims and ripple effects on their families, friends, and communities. Six in ten sexual assault victims develop psychological problems (depression, post-traumatic stress disorder), and they also are substantially more likely to become drug abusers. Females and children are the primary victims. There were more than 900 reported rapes in Connecticut in 2012—the greatest number in 10 years.

Although many strategies have been proposed to prevent domestic and family violence, and CDC lists many effective and promising practices for sexual violence prevention, research on evidence-based programs has been specific to certain groups and settings, and more effective strategies are needed.

## OBJECTIVE IV-16 Ph1

Reduce by 10% the number of firearm homicides.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	96	86	Connecticut Department of Public Health, Vital
	(2010)		Records, Registration Reports

#### **Strategies**

Advocacy and Policy

- Advocate for and increase programs that support employment opportunities for all skill sets.
- Advocate for and support programs that offer educational incentives to stay in school.
- Ensure the implementation of the gun offender registry and penalties for use of a firearm in the commission of a crime legislation.

#### Partnership and Collaboration

• Support and promote anti-gang or violent group initiatives, such as Project Longevity.

#### **OBJECTIVE IV-17**

Reduce by 10% the number of Emergency Department visits related to domestic and family violence.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	301	271	Connecticut Department of Public Health,
	(FFY 2012)		Office of Health Care Access

#### **Strategies**

#### Advocacy and Policy

• Advocate for the implementation of school-based programs to reduce violence and promote healthy relationships for middle and high school-aged youth.

#### **Communications**

Disseminate and publicize evidence-based, comprehensive prevention and intervention methods that
address substance abuse and mental health issues for families experiencing domestic violence and for the
abuser.

### OBJECTIVE IV-18 Ph1

Reduce by 10% the incidence of sexual violence.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	16.8 per 100,000	15.12 per 100,000	Connecticut Department of Emergency
	(Sexual assault rate)		Services and Public Protection, Uniform
	(2010)		Crime Reports: Offense Statistics (2010).

#### **Strategies**

Advocacy and Policy

• Advocate for sexual assault educator training to build capacity for prevention efforts.

#### **Communications**

• Disseminate best practices and effective primary prevention strategies of sexual violence.

#### Planning and Development

• Identify and highlight best evidence-based youth programs to prevent intimate partner violence.

#### **OBJECTIVE IV-19**

Reduce by 10% the number of family violence arrests.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	21,386 arrests	19,247 arrests	Connecticut Department of Emergency
	(2011)		Services and Public Protection, Family Violence
			Arrests Annual Report

#### **Strategies**

Advocacy and Policy

• Advocate for the implementation of school-based programs to reduce violence and promote healthy relationships for middle and high school-aged youth.

#### Partnership and Collaboration

• Support community anti-violence initiatives.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Children and Families; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Judicial Branch; Connecticut Department of Correction; Connecticut Department of Labor; State Department of Education; The Governor's Prevention Partnership; law enforcement; local public health agencies; schools and educational providers; media; organizations and coalitions focused on safe communities, violence, and injury prevention; professional associations for human services and community providers; community service providers for families, youth, and seniors; and others.

#### **Traumatic Brain Injury**

#### **Rationale**

A traumatic brain injury (TBI) is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. In Connecticut, an average of 360 deaths per year is attributed to traumatic brain injuries. In addition there are 3,000 to 4,000 inpatient hospitalizations and more than 2,000 emergency department visits. Considerable numbers of TBIs result from sports-related injuries and from falls among the elderly. In addition, the number of TBI cases in some communities has resulted from veterans returning from overseas combat.

TBI death rates are highest for Connecticut residents 75 years of age and older and for males of all ages. Children less than 18 years of age account for 8 in 10 emergency room visits. Half of all TBI hospitalizations are people 65 years of age and older. Most TBI hospitalizations among white non-Hispanics are among older adults, whereas most TBIs among black and Hispanic individuals are 18 to 44 years of age. Survivors of traumatic brain injuries are more likely than others to die young, from accidents and suicide. All coaches, parents, and athletes need to learn concussion prevention, signs and symptoms, and what to do if a concussion occurs, to reduce health, memory, and learning impairments caused by traumatic brain injury.



Decrease by 10% the number of hospitalizations resulting from traumatic brain injury.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	3,698	3,328	Connecticut Department of Public Health,
	(2011)		Hospital Discharge Database

#### **Strategies**

Communications, Education and Training

- Collaborate with partners to provide education about leading causes of and prevention measures for TBI including falls, sports concussion, combat concussion, motor vehicle crashes, suicide attempts, abusive head trauma in children and domestic violence, to children, to the public and to providers.
- Educate the public and providers about the effects of TBI including the long term effects associated with head injury.
- Educate the public and providers that concussions are brain injuries and the signs, symptoms and the appropriate treatment for concussions.
- Develop and distribute standardized protocol for post-concussion management.

#### Partnership and Collaboration

• Expand partnerships with community agencies serving underserved populations and persons with or at risk of TBI, especially youths, older adults, and veterans.



Decrease by 10% the number of Emergency Department visits resulting from traumatic brain injury.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	2,159	1,943	Connecticut Department of Public
	(FFY 2012)		Health, Office of Health Care Access

#### **Strategies**

Communications, Education and Training

- Collaborate with partners to provide education about leading causes of and prevention measures for TBI including falls, sports concussion, combat concussion, motor vehicle crashes, suicide attempts, abusive head trauma in children and domestic violence, to children, to the public and to providers.
- Educate the public and providers about the effects of TBI including the long term effects associated with head injury.
- Educate the public and providers that concussions are brain injuries and the signs, symptoms and the appropriate treatment for concussions.
- Develop and distribute standardized protocol for post-concussion management.

#### Partnership and Collaboration

• Expand partnerships with community agencies serving underserved populations and persons with or at risk of TBI, especially youths, older adults, and veterans.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Children and Families; State Department of Education; Connecticut Department of Veterans' Affairs; Commission on Children; Office of the Child Advocate; health care providers including emergency medical services, hospitals, nurses, emergency physicians, long-term care facilities, and rehabilitation facilities; traumatic brain injury service providers; health professional associations; other organizations and coalitions that address brain injury; and others. See additional partners under other injuries that are the leading causes of traumatic brain injury (motor vehicle crashes, falls, homicide, suicide, sports injury).

#### **Child Maltreatment**

#### Rationale

Neglect, physical abuse, custodial interference and sexual abuse are types of child maltreatment that can lead to poor physical and mental health. Child maltreatment is associated with violent behavior in adolescence and adulthood, delinquency, alcohol and drug abuse, and abusive behavior.

In fiscal year 2012, there were 8,151 cases of child abuse or neglect reported in Connecticut, a decline from the prior year; numbers increased steadily through 2011, however, and state rates consistently were greater than national rates. Child abuse or neglect was highest among children less than 1 year of age and among African Americans and Hispanics; it is believed to be under-reported in groups with higher socioeconomic status. About 8% of the victims had disabilities.

Providing education on coping strategies and resources to young and first time parents, particularly those most at risk for child maltreatment, is important for ensuring the physical, psychological, and behavioral health of children during all phases of development. There is a poor evidence base for prevention, as child maltreatment is often related to substance abuse, poverty, and other social factors.

#### **OBJECTIVE IV-22**



Decrease by 10% the number of child maltreatment cases.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	8,151	7,336	US DHHS, Administration on Children, Youth, and
	(FY 2012)		Families, Children's Bureau, Child Maltreatment
			National Child Abuse and Neglect Data Systems,
			annual reports.

#### **Strategies**

Advocacy and Policy

- Advocate for increased screening, surveillance, recognition and reporting for mandatory reporters.
- Advocate for the expansion of who is a mandatory reporter.
- Advocate for programs to address and serve families "at risk" for child maltreatment.

#### Communications

- Widely distribute information about the Careline for medical personnel.
- Disseminate information on positive parenting techniques that are culturally and linguistically appropriate through a variety of community-based and provider-based channels.

#### **Education and Training**

Train mandatory reporters on signs and symptoms of child maltreatment.

#### **OBJECTIVE IV-23**

Decrease by 10% the number of child maltreatment deaths.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	6	5	US DHHS, Administration on Children, Youth, and
	(FY 2012)		Families, Children's Bureau, Child Maltreatment
			National Child Abuse and Neglect Data Systems,
			annual reports.

#### **Strategies**

#### Advocacy and Policy

- Advocate for increased screening, surveillance, recognition and reporting for mandatory reporters.
- Advocate for the expansion of who is a mandatory reporter.
- Advocate for programs to address and serve families "at risk" for child maltreatment.

#### **Communications**

- Widely distribute information about the Careline for medical personnel.
- Disseminate information on positive parenting techniques that are culturally and linguistically appropriate through a variety of community-based and provider-based channels.

#### **Education and Training**

• Train mandatory reporters on signs and symptoms of child maltreatment.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Children and Families, State Department of Education, Connecticut Department of Mental Health and Addiction Services, State Department of Education, Connecticut Department of Social Services, Connecticut Department of Developmental Services, Connecticut Judicial Branch, Commission on Children, Office of the Child Advocate, state and local law enforcement, local public health agencies, health care providers including pediatricians and other primary care providers, hospitals, and emergency medical services, health professional associations, child care providers, media, organizations and coalitions focused on violence prevention and safe communities, human services and community provider associations, children's advocacy organizations, community service providers for families and youth, and others.

#### **Sports Injuries**

#### **Rationale**

Taking part in sports and recreation activities is an important part of a healthy, physically active lifestyle; however, more than 2.6 million children under 19 years of age are treated in emergency departments each year in the United States for sports- and recreation-related injuries.<sup>68</sup> Most sports injuries are musculoskeletal, but they also can affect the brain and spinal cord; they can lead to poor mental functioning, missed school, and missed work.

In Connecticut in FFY 2012, there were more than 36,000 emergency department visits for sports-related injuries--greater than double the number in 2008. The rates were highest for males and for persons 5 to 14 and 15 to 19 years of age.

The use of helmets and other protective equipment; warm-ups and stretches; and targeted muscle strengthening exercises are effective strategies for preventing sports-related injuries.

#### **OBJECTIVE IV-24**

Decrease by 10% the number of Emergency Department visits for sports-related injuries.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	36,182 (FY 2012)	32,564	Connecticut Department of Public Health, Office of Health Care Access.

#### **Strategies**

Advocacy and Policy

• Advocate for the mandatory use of helmets by bicyclists.

#### **Education and Training**

- Train athletes on the importance of and methods of warming up, stretching, increasing flexibility, taping, using joint braces, eccentric muscle strengthening, etc. to prevent specific injuries.
- Promote use of the CDC's free online courses for health professionals and school coaches, parents, and athletes on preventing, recognizing, and responding to a concussion http://www.cdc.gov/concussion/.

#### Partnership and Collaboration

- Partner with coaches, educators, athletic and recreational groups to promote use of appropriate protective clothing and equipment for sports and recreational activities.
- Form partnerships among State agencies and schools to incorporate sports injury prevention into health education programs.

#### Planning & Development

• Identify and implement evidence-based team sports prevention programs, such as the Santa Monica PEP Program (Prevent Injury and Enhance Performance Program).

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Children and Families; State Department of Education; Connecticut Department of Developmental Disabilities; Office of the Child Advocate; Commission on Children, health care providers including emergency medical services, hospitals, nurses, emergency physicians, pediatricians, and rehabilitation facilities; media; local public health agencies; schools; coaches and athletic associations; community service providers for families and youth; schools of public health, allied health, and medicine; and others.

#### **Occupational Injuries**

#### Rationale

Although occupational safety and health have improved over the last several decades, work-related injuries, illnesses, and death persist.<sup>69</sup> In Connecticut in 2012, there were 36 deaths and 53,800 injuries classified as occupational injuries. The death rate for work-related injuries in transportation, utility, construction, and professional and business services industries exceeded that for the state overall; young workers and Latinos also have higher death rates compared to other groups. Workers at hospitals and nursing homes, police, firemen, construction, and utilities workers were more likely than others to be injured.

The Occupational Safety and Health Administration (OSHA) has evidence-based workplace injury prevention programs. Making such programs mandatory, developing culturally appropriate materials, and outreach to employers and workers in targeted industries can help reduce deaths and injuries due to unsafe work practices and environments.

#### **OBJECTIVE IV-25**

Decrease by 10% the number of fatal occupational injuries.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	36	32	Bureau of Labor Statistics, Census of Fatal
	(2012)		Occupational Injuries. Fatal Work Injury Rates,
			Connecticut

#### **Strategies**

Communications, Education and Training

• Identify or develop educational materials in English and other languages and for low-literacy readers, on worker safety, targeting job-related injuries in specific occupations.

Partnership and Collaboration

• Expand partnerships around work-related injuries, and collaborate to increase public awareness of major work-related hazards.

#### **OBJECTIVE IV-26**

Decrease by 10% the rate of nonfatal occupational injuries.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	4.7 per 100 FTEs* (2011)	4.2 per 100 FTEs*	Bureau of Labor Statistics, Incidence Rates of Nonfatal Occupational Injuries and Illnesses by Industry and Case Types, Connecticut (Table 6)

<sup>\*</sup> FTEs = Full time equivalent workers

#### **Strategies**

Advocacy and Policy

• Support enforcement of occupational health and safety labor laws, and advocate strengthening and enforcing State and federal child labor laws.

 Support implementation of workplace policies and procedures that reduce injury risks, including violencerelated injury.

Communications, Education and Training

- Provide and promote employer education and training programs for risk reduction.
- Educate employers, parents, teens and educators about the requirements of Connecticut and Federal child labor laws.

#### **Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Labor; United States Department of Labor; Connecticut Workforce Investment Boards; employers; labor unions; professional associations for business and industry; local public health agencies; health care providers including emergency medical services, hospitals, nurses, emergency physicians, and rehabilitation facilities; community service providers for youth; organizations and coalitions focused on occupational health and safety; schools of public health, allied health, and medicine; and others.

## Mental Health, Alcohol, and Substance Abuse

- Mental Health and Mental Disorders
- Alcohol Abuse
- Substance Abuse
- Autism Spectrum Disorders
- Exposure to Trauma



#### WORK GROUP ON MENTAL HEALTH, ALCOHOL, AND SUBSTANCE ABUSE

#### **Co-Chairs**

Barbara Geller

Connecticut Department of Mental Health and

Addiction Services

Marcus M. McKinney

St. Francis Hospital Center for Health Equity

**Members** 

Jennifer Bogin

Connecticut Department of Developmental Services

Bernadette D'Almeida

Community Health Network of Connecticut, Inc.

**Nadine Fraser** 

Connecticut Hospital Association

Dorlana Vicedomini

Connecticut Autism Action Coalition

Kristy Kovel

Alzheimer's Association, Connecticut Chapter

Tim Marshall

Connecticut Suicide Advisory Board

Steve Merz

Yale New Haven Hospital

Alice Minervino

Connecticut Department of Mental Health and

**Addiction Services** 

Karen Ohrenberger

Connecticut Department of Mental Health and

**Addiction Services** 

Michelle Seagull

Connecticut Department of Consumer Protection

Janet Storey

Connecticut Department of Mental Health and

**Addiction Services** 

#### **GOAL**

Improve overall health through the lifespan, through access to quality behavioral health services that include screening, early intervention, prevention and treatment.

#### WHY THIS GOAL IS IMPORTANT

Mental and physical health is intricately connected.<sup>70</sup> Mental illness is among the leading causes of disability in the US.<sup>71</sup> Likewise, substance abuse affects individuals, families, and communities and exacts substantial social, physical, and mental costs.<sup>72</sup> Mental health is therefore critical to the overall wellbeing of individuals across the United States and in the communities of Connecticut.<sup>73</sup>

#### Mental Health and Mental Disorders

#### Rationale

People of all ages with untreated mental health disorders are at high risk for many unhealthy and unsafe behaviors, including alcohol or drug abuse, violent or self-destructive behavior, and suicide. Mental health disorders also have a serious impact on physical health and are associated with many chronic diseases, including diabetes, heart disease, and cancer. In Connecticut, there is an upward trend in the incidence of mental health related health issues as demonstrated by the increasing rate of emergency department visits for mental health across all age groups over the period 2008 - 2011. Mental health screening and training on effective integration of behavioral health into primary care are essential strategies for reversing this trend and preventing increases in related health concerns.

#### **OBJECTIVE MHSA-1**



Decrease by 5% the rate of mental health emergency department visits.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	2,680 per 100,000 (2011)	2,546 per 100,000	Connecticut Department of Public Health, OHCA from Connecticut Hospital Association Chime, Inc. Emergency Department Database (FY2011)

#### **Strategies**

Advocacy and Policy

Advocate for affordable housing.

Communications, Education and Training

- Promote depression screening by primary care providers for adults over 18 and for youth 12-17 yrs. of age through:
  - Identification and implementation of standardized health and behavioral health screening tools during patient assessments and;
  - Development of policies to address training, continuing education, and workforce needs of providers and entities participating in integrated health care practices.

#### Partnership and Collaboration

- Promote reciprocal referrals between mental health and primary care providers by identifying and implementing methods for collaboration and integration.
- Identify and implement strategies to encourage integration in both public and the private sector programs to connect homeless individuals and families with mental health problems to mental health services.
- Encourage coordination between healthcare and permanent supportive housing and homeless service agencies.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Social Services, Connecticut Department of Children and Families, Connecticut Office of the Healthcare Advocate, Connecticut Department of Correction, Connecticut Department of Consumer Protection, Connecticut Suicide Advisory Board, local mental health authorities, inpatient treatment facilities, other primary care and behavioral health providers, faith-based organizations, coalitions and organizations that focus on mental health and mental disorders, academic health centers, community service providers for families and youth, and others.

#### **Alcohol Abuse**

#### Rationale

Substance abuse—involving drugs, alcohol, or both—is associated with a range of destructive social conditions, including family disruptions, financial problems, lost productivity, failure in school, domestic violence, child abuse, and crime. Estimates of the total overall costs of substance abuse in the United States, including lost productivity and health- and crime-related costs exceed \$600 billion annually. In Connecticut, emergency department visits for alcohol abuse or dependence increased from FY 2007 to FY 2011 across age groups.

Although binge drinking behavior decreased significantly with age, and among the student population grades 9-12, there was an increase in binge drinking of alcoholic beverages among all adults, which was significantly higher among white non-Hispanics and Hispanics as compared to black non-Hispanics. Policies and programs that discourage underage drinking will reduce the overall impact of excessive alcohol consumption on health and safety in Connecticut by preventing alcohol abuse before it starts.

#### **OBJECTIVE MHSA-2**



Reduce by 5% the proportion of people (from grade 9 and older) who drink excessively across the lifespan.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	22.3%; Binge drinking among students (grades 9-12)	21.2%	Connecticut School Health Survey (CSHS) (2005-2011).
	(2011) 17.5% Binge drinking among adults (18+	16.6%	Connecticut Department of Public Health, Connecticut Behavioral
	years of age) (2012)		Risk Factor Surveillance System (2003-2011).

#### **Strategies**

#### Advocacy and Policy

- Advocate for an annual requirement for primary care and emergency department providers to receive
  continuing education on evidence-based strategies for screening, brief intervention, and referral to
  treatment.
- Review existing policies relative to alcohol sales and regulations.

#### **Communications**

• Identify and disseminate information about community coalitions that use evidence-based programs to address underage drinking.

#### Partnership and Collaboration

 Partner with the Connecticut Hospital Association to expand the use of evidence-based screening, tools, brief intervention, and referral to treatment in emergency departments.

## OBJECTIVE MHSA-3 Ph1



Reduce by 5% the proportion of drinking for youth in grades 9-12 (ages 14-18).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	41.5%	39.4%	Connecticut School Health
	students (grades 9-12)		Survey (CSHS) (2005-2011).
	(2011)		

#### **Strategies**

Advocacy and Policy

- Advocate for stronger penalties for driving under the influence for under age drivers.
- Advocate for an annual requirement for primary care, college health, and emergency department providers to receive continuing education on evidence-based strategies for screening, brief intervention, and referral to treatment.
- Advocate for combined enforcement and policy strategies on college campuses such as nuisance party enforcement operations, checkpoints, and social host ordinances.

Communications, Education and Training

- Educate the public relative to existing laws and regulations regarding underage drinking.
- Identify and disseminate information about community coalitions that use evidence-based programs to address underage drinking.

Partnership and Collaboration

Promote collaboration between colleges and communities to work together to enforce relevant alcoholrelated laws and establish consistent messages about responsible hospitality.

Surveillance

Strengthen enforcement relative to existing laws and regulations regarding underage drinking.

#### **OBJECTIVE MHSA-4**

Reduce by 5% the rate of emergency department visits for people who are alcohol dependent across the lifespan.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	219 per 100,000 emergency department visits; alcohol dependence; all ages	208 per 100,000	Connecticut Department of Public Health, OHCA from Connecticut Hospital Association CHIME, Inc.
	(2011)		Emergency Department Database (FY2011).

#### **Strategies**

**Communications** 

Identify and disseminate information about community coalitions that use evidence-based programs to address underage drinking.

Partnership and Collaboration

Partner with the Connecticut Hospital Association to expand the use of evidence-based screening, tools, brief intervention, and referral to treatment in emergency departments.

Research

Research and identify diverse recovery opportunities.



#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, State Department of Education, Connecticut Department of Children and Families, Connecticut Office of the Healthcare Advocate, Connecticut Department of Correction, Connecticut Department of Consumer Protection, The Governor's Prevention Partnership, health care facilities, primary care and behavioral health providers, faith-based organizations, legal system including court support services, other organizations and coalitions that focus on mental health and alcohol addictions, academic institutions, community service providers for families and youth, and others.

#### **Substance Abuse**

#### Rationale

In Connecticut, residents are more likely to die from an unintentional drug overdose than a motor vehicle accident. The majority of these deaths are attributable to overdose of prescription opioid painkillers. Non-medical uses of these drugs are 2-3 times higher for 18-25 year olds. In addition, the rate of emergency department visits for substance abuse or dependence increased for persons 18 to 64 years of age over the period 2007-2011. Drug control and education/awareness about the benefits and risks of prescription opioid painkillers among those aged 12 and older are key prevention strategies for addressing this growing threat to Connecticut's health.

#### **OBJECTIVE MHSA-5**



Reduce by 5% the non-medical use of pain relievers across the lifespan (ages 12 and older).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	4.4%	4.2%	Substance Abuse and Mental Health
	(2010-2011)		Services Administration (SAMHSA),
			Survey on Drug Use and Health Model-
			Based Estimates (2010-2011).

#### **Strategies**

Communications, Education and Training

- Educate and inform consumers regarding the risks and benefits of regulated products using strategies appropriate to culture, language, and literacy skills (e.g., prescription drug safety and side effects, public health alerts, general information about safe and appropriate medication use).
- Educate health care professionals on proper opioid prescribing, brief screening, intervention referral and treatment, and effective use of prescription drug monitoring programs.
- Educate and inform consumers regarding the risks and benefits of regulated products using strategies appropriate to culture, language, and literacy skills (e.g., prescription drug safety and side effects, public health alerts, general information about safe and appropriate medication use).

#### Partnership and Collaboration

- Facilitate controlled drug disposal programs, including official prescription take-back events and local drop-boxes.
- Educate prescribers on the benefits of the Connecticut Prescription Monitoring and Reporting System (CPMRS).

#### Surveillance

• Explore opportunities to review aggregate data from the Connecticut Prescription Monitoring and Reporting System (CPMRS) to identify prevention opportunities.

## OBJECTIVE MHSA-6 Ph1



Reduce by 5% the use of illicit drugs across the lifespan (ages 12 and older).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	13.4%	12.7%	Substance Abuse and Mental Health Services
	Marijuana		Administration (SAMHSA), Survey on Drug Use
	(2010-2011)		and Health Model-Based Estimates (2010-2011).
	1.9%	1.8%	
	Cocaine		
	(2010-2011)		

#### **Strategies**

#### **Communications**

• Promote and disseminate information about self-help recovery groups.

#### Planning & Development

- Identify and implement evidence-based prevention and early intervention programs and strategies.
- Identify and implement techniques for increasing engagement and retention in recovery.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, State Department of Education, Connecticut Department of Children and Families, Connecticut Office of the Healthcare Advocate, Connecticut Department of Correction, Connecticut Department of Consumer Protection, The Governor's Prevention Partnership, Connecticut Suicide Advisory Board, health care facilities and clinics, primary care and behavioral health providers, professional associations focused on substance abuse prevention and treatment, faith-based organizations, legal system including court support services, other organizations and coalitions that focus on addiction and recovery, community service providers for families and youth, and others.

#### **Autism Spectrum Disorders**

#### Rationale

Autism spectrum disorders, or neurodevelopment disorders, are associated with social impairments, communication difficulties, and the engagement in repetitive or restrictive behaviors. Genetics and environmental exposures are risk factors for autism spectrum disorders. There was a 23% increase in the estimated prevalence of autism in 8 year old boys since 2009, according to the Centers for Disease Control, which represents an important trend to address in Connecticut. Screening children for autism spectrum disorders can assist children and families to access services as early as possible and identify the best interventions for physical, mental, and emotional well-being.

#### **OBJECTIVE MHSA-7**



Increase by 10% the number of children who are referred to Connecticut Birth to Three System following a failed Modified Checklist for Autism in Toddlers screening.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	21 referrals	23 referrals	Connecticut Birth to Three System. Connecticut
	(FY 2010 1st quarter)		Birth to Three System Year to Year Comparison:
			Referrals and Eligibility Rates by Program: FY
			2010 1st Quarter).

#### **Strategies**

#### **Communications**

- Promote Modified Checklist for Autism in Toddlers screening for children prior to age 2 yrs.
- Promote and distribute educational materials that identify signs and symptoms for autism.

#### **Education and Training**

 Educate primary care providers on appropriate referrals for children under 3 who fail Modified Checklist for Autism (M-CHAT) screening.

#### Surveillance

• Establish a baseline of the % of children receiving Modified Checklist for Autism in Toddlers screening prior to age 2 yrs.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, State Department of Education, Connecticut Office of Early Childhood, Connecticut Department Developmental Services (Autism Division), Connecticut Department of Children and Families, Connecticut Department of Social Services, health professional associations, organizations and coalitions that focus on autism and autism advocacy, community service organizations for family and youth, academic research centers, and others.

#### **Exposure to Trauma**

#### **Rationale**

Exposure to trauma may affect mental health, physical health, and functioning in the family, at school, or among peers. Traumatic events include experiences of sexual abuse, physical abuse, domestic violence, community and school violence, medical trauma, motor vehicle accidents, acts of terrorism, war, natural disasters, suicides, and other events. 81

In 2012, an estimated 200,000 residents in Connecticut reported experiencing at least 5 adverse childhood experiences. While exact prevalence estimates vary, mental health experts agree that trauma experiences shape how individuals respond to mental health services. Screening people for a history of trauma acknowledges the role trauma plays in their lives and can better inform needed services. 82

#### **OBJECTIVE MHSA-8**



Increase by 5% trauma screening by primary care and behavioral health providers.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	25,085	26,339	Department of Mental Health and Addiction
	(FY 2011)		Services. DMHAS Clients Who Screen Positive
			for Trauma in SFY11.

#### **Strategies**

#### **Communications**

• Develop a directory of trauma-informed treatment providers.

#### Planning & Development

- Establish and promote evidence-based trauma screening tool for children and adults.
- Conduct trauma screening for all referrals on an out-patient basis for children and adults.

#### Surveillance

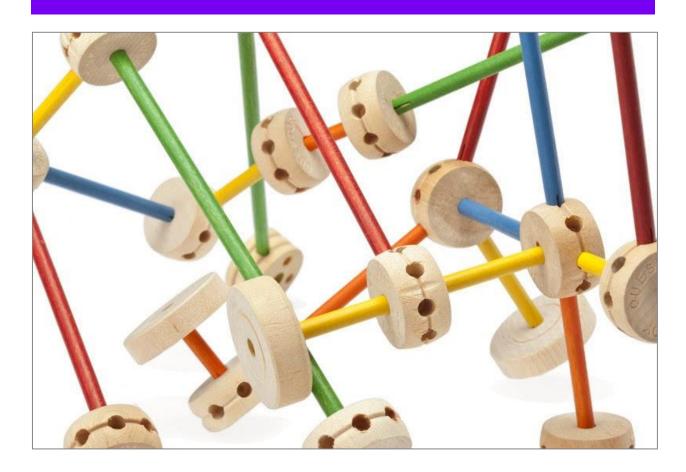
• Establish mechanism to determine baseline for trauma screening.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Children and Families, Connecticut Office of the Healthcare Advocate, Connecticut Department of Correction, Connecticut Department of Veterans' Affairs, State Department of Education, health care facilities, primary care and behavioral health providers, organizations and coalitions that address trauma, medical and behavioral health professional associations, and others.

## **Health Systems**

- Access to Health Services
- Quality of Care and Patient Safety
- Health Literacy, Cultural Competency and Language Services
- Electronic Health Records
- Public Health Infrastructure
- Primary Care and Public Health Workforce
- Financing Systems
- Emergency Preparedness and Response



#### **WORK GROUP ON HEALTH SYSTEMS**

**Co-Chairs** 

Katrina Clark

Fairhaven Community Health Center

Kathi Traugh

Connecticut Public Health Association

**Members** 

Patricia Baker

Connecticut Health Foundation

Nadine Fraser

Connecticut Hospital Association

Colleen Gallagher

Connecticut Department of Correction

Mario Garcia

New Haven Health Department

**Bruce Gould** 

Connecticut Area Health Education Centers

Laurie Julian

Alzheimer's Association, Connecticut Chapter

**Edith Karsky** 

Connecticut Association for Community

Action Agencies

William Knight
Connecticut Council on Developmental Disabilities

Maria Mojica

Hartford Foundation for Public Giving

Lisa Pellegrini

Connecticut Conference of Municipalities

Jean L. Rexford

Connecticut Center for Patient Safety

Lori-Anne Russo

Community Health Center Association of Connecticut

Minakshi Tikoo

University of Connecticut, School of Medicine

Donna Lynn Wallace Obloj

Connecticut Department of Education

Jesse White-Frese

Connecticut Association of School Based Health

Centers

Tracy Wodatch

Connecticut Association for Homecare and Hospice

Barbara Parks Wolf

Connecticut Office of Policy and Management

Alicia Woodsby

Partnership for Strong Communities

Carolyn Wysocki

Ecological Health Organization, Inc. & Connecticut

Association of Local Boards of Health

Katherine Yacavone

Southwest Community Health Center, Inc.

Jill B. Zorn

Universal Health Care Foundation of Connecticut

#### **GOAL**

Align efforts of health systems stakeholders to achieve sustainable, equitable, and optimal population health.

#### WHY THIS GOAL IS IMPORTANT

Equitable access to quality health care is important for eliminating health inequities, reducing health care costs, and improving quality of life.<sup>83</sup> Improvements in health insurance; quality of and access to health care services; the size and diversity of the health care workforce; and integration of clinical care and public health, are critical to enhancing care delivery, reducing health care expenditures, and preventing illness to improve population health.

#### **Access to Health Services**

#### Rationale

Persons without health insurance coverage are less likely to receive needed medical care, more likely to have poor health, and more likely to experience premature mortality than those with health insurance. Health insurance coverage is expected to increase nationally and in Connecticut upon implementation of the Patient Protection and Affordable Care Act (ACA).

Safety net providers such as hospitals, clinics, and community health centers, also provide important sources of care especially for specific populations who may experience inequities in health care access.<sup>85</sup>

"Some of the primary health issues I see are lack of people's ability to afford medication. Without insurance, people go to the emergency room for treatment, and get prescriptions that they cannot afford. There is also a high population of underinsured -- people who are working, but don't have the money to afford treatment." (Hartford)

#### **OBJECTIVE HS-1**



Increase by 10% the percentage of Connecticut adults 18 – 64 years of age who have health coverage through either public or private sector

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	87.1 %	95.8%	US Census Bureau, American Community
	(2012)		Survey, 1-Year Estimates (2012), DP03 File.

#### **Strategies**

#### Advocacy and Policy

- Improve and expand Medicaid eligibility and enrollment.
- Maximize Federal funding towards health insurance coverage.

#### **Communications**

• Invest in community outreach and consumer engagement.

#### Planning & Development

- Support the development of the Health Insurance Exchange (HIE), and, ensure that health equity, management of chronic disease, and wellness is included in plans.
- Improve and enhance interoperability between Exchange and Medicaid.
- Develop an enrollment and eligibility system that ensures continuity of coverage.

#### Surveillance

• Improve reporting/data for public accountability.

## OBJECTIVE HS-2 (DEVELOPMENTAL) Ph1



Increase the number of community based health services in communities who have demonstrated need and/or vulnerable populations to create a strong, integrated statewide safety net system.

#### **Strategies**

Partnership and Collaboration

Explore systems linkages between Federally Qualified Health Centers (FQHC's), School-based Health Centers (SBHC's) and Board of Education for comprehensive continuum of care delivery (SBHC's as satellites of FQHC's).

Planning & Development

- Conduct Needs Assessment to determine target communities for placement of safety net services, including rural communities.
- Assure adequate funding for safety net service providers.

## OBJECTIVE HS-3 (DEVELOPMENTAL) Ph1



Increase access to accredited patient-centered medical homes (PCMH)/ health homes to include dental

#### **Strategies**

Advocacy and Policy

Provide incentives for Patient-Centered Medical Home (PCMH) accreditation.

Planning and Development

- Explore and support models and programs that coordinate community services and link primary and specialty care.
- Support telemedicine for specialty care links.

**Communications** 

Establish a listing/registry of practices that are Patient-Centered Medical Home (PCMH) accredited.

### **OBJECTIVE HS-4 (DEVELOPMENTAL)**



Decrease the number of patients expressing difficulty in accessing health services due to the lack of nonemergency transportation services.

#### **Strategies**

Advocacy and Policy

Advocate for extended bus routes or other transportation options to core providers, especially to/from rural areas.

Partnership and Collaboration

Partner with transportations agencies to create a universal map that identifies routes for public transportation, noting points of services.

Planning and Development

Expand bus hours to cover service hours.

Surveillance

Establish a baseline and monitor progress by exploring use of existing survey vehicles such as Connecticut Behavioral Risk Factor Surveillance System (BRFSS).

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Office of Policy and Management, Connecticut Department of Children and Families, Connecticut Department of Consumer Protection, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Social Services, Connecticut Department of Transportation, Connecticut Office of Rural Health, Office of the Healthcare Advocate, Office of Health Care Reform and Innovation, local public health agencies, municipal government, health care providers, health professional associations, other organizations and coalitions focused on access to health services, community service organizations serving specific populations (children, older adults, underserved populations), faith-based organizations, local and state boards of education, business, health insurers, philanthropic organizations that address access to health services, and others.

### **Quality of Care and Patient Safety**

#### Rationale

Improving the quality of health care by making it safer, more reliable, and less costly is important for the public's health. Health care-associated conditions include infections, falls, pressure ulcers (or bed sores), and blood clots. These conditions are common and cause significant morbidity, mortality, and excess healthcare expenditures. They can be prevented by adopting evidence-based practices and using those practices consistently in facilities and settings across the spectrum of health care. Creating, disseminating, and enforcing safety and performance standards are key components of quality patient care and require a robust partnership between heath providers and facilities and public health.



OBJECTIVE HS-5 (DEVELOPMENTAL) Ph1 =

Establish quality and patient safety standards for health system service providers across the continuum of care, with standardized performance measures that include racial/ethnic disparities.

#### **Strategies**

Communications and Surveillance

Make use of new sources of data (i.e., the All Payer Claims Database (APCD)) to provide a critical health care decision making tool for all residents and a means for providers to evaluate their care delivery.

#### Partnership and Collaboration

Establish a collaborative of health system service providers.

#### Planning & Development

- Work with collaborative of health systems to develop standards.
- Work with collaborative of health systems to establish standardized quality and patient safety measures (include ethnic/race disparities) to be reviewed and approved by DPH advisory council (QAC).
- Consider potential quality metrics including:
  - **Environment of Care**
  - Infection Control
  - Personnel training/competency
  - **Patient Safety**
  - Preventable Harm

## OBJECTIVE HS-6 (DEVELOPMENTAL)



Increase the number of health system service providers within the care continuum who meet standardized quality and patient safety measures that include measures for ethnic/racial disparities.

#### **Strategies**

Advocacy and Policy

Promote/encourage/incentivize National Accreditation (i.e., Patient-Centered Medical Homes PCMH).

#### Planning & Development

- Identify a baseline of the percentage of providers performing at or above the standards
- Identify and incorporate best practices to ensure that standards and practices are met.
- Implement quality improvement strategies to reduce disparities.
- Explore the feasibility of statewide accreditation and credentialing.

Award accreditation or "gold seal" for service providers who meet the standardized quality and patient safety measures.

## OBJECTIVE HS-7 (DEVELOPMENTAL)



All standardized quality and patient safety measures are publicly accessible and understandable.

#### **Strategies**

**Communications** 

- Work with appropriate partners to build on or establish a platform to make information publicly accessible and understandable.
- Promote the availability of this information through multiple avenues such as social media and provider websites.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Children and Families, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Social Services, Connecticut Department of Developmental Services, Office of Health Care Reform and Innovation, local public health agencies, health care providers, health professional associations, other organizations and coalitions focused on quality of care and patient safety, community service organizations serving specific populations (children, older adults, underserved populations), health insurers, philanthropic and research organizations that address health care quality and patient safety, and others.

### **Health Literacy, Cultural Competency and Language Services**

#### Rationale

Health communication influences the way people understand and use health information and may influence decisions they make pertaining to their health. Differences in belief systems, communication styles, understanding of health information, and responses to health information influence health literacy, or the extent to which individuals have access to, process, and understand health information in order to make informed health decisions. Implementing National Culturally and Linguistically Appropriate Services (CLAS) Standards across health system service providers would facilitate access to relevant health information by providers and patients alike and thereby enhance informed decision-making among all those involved in patient care.

### **OBJECTIVE HS-8 (DEVELOPMENTAL)**



Increase the number of Connecticut health and social service agencies that have adopted and taken (documented) steps to implement National Culturally and Linguistically Appropriate Services (CLAS) Standards.

#### **Strategies**

Advocacy and Policy

• Explore incentives at the Federal level.

Planning & Development

- Support the establishment of training and quality control/testing standards for health and social service providers.
- Explore licensing for medical interpreters.

#### Research

• Support research and evaluation of effective health literacy and needs of population.

#### Surveillance

• Establish inclusion criteria and baseline.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Social Services, State Department of Education, Connecticut Department of Developmental Services, Connecticut Department of Energy and Environmental Protection, African-American Affairs Commission, Asian and Pacific Islander Affairs Commission, Latin and Puerto Rican Affairs Commission, Connecticut Council on Developmental Disabilities, Commission on Health Equity, Permanent Commission on the Status of Women, local public health agencies, other organizations and coalitions focused on health literacy and access to care, community service providers serving specific populations (children, older adults, underserved populations), faith-based organizations, health insurance providers, health care facilities, health care providers, health educators and community health workers, health professional associations, colleges and universities with health and social service programs, philanthropic and research organizations that address health literacy, and others.

### **Electronic Health Records**

#### Rationale

Converting from paper to electronic health records (EHRs) has the potential to improve health care quality, efficiency and safety. EHRs allow for the systematic collection and management of patient health information in a form that can be shared and communicated among providers and across care sites. These systems also have the potential to promote use of preventive services, assist with patient education and self-management, improve public health surveillance, and support population health research. Although the potential is great, EHRs are costly and complicated to put in place which affects implementation nationally as well as in Connecticut.

#### **OBJECTIVE HS-9**

Increase to 100% the percentage of providers who have access to Electronic Health Records (EHR) that meet national data/regulatory standards for interoperability, data integrity, and patient privacy.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	53.5% (2013)	100%	Connecticut Department of Public Health, Connecticut's Health Information Technology Exchange Evaluation Process: Baseline Assessments & Updates (2011) and Connecticut Department of Public Health, Personal Communication.

### **Strategies**

Advocacy and Policy

- Provide incentives for providers to adopt certified EHR technology.
- Support providers to exchange health data across care settings through the use of national interoperability standards.
- Support providers to achieve Meaningful Use (e.g., funds for doctors that serve Medicaid/Medicare populations to help purchase certified systems and meet certain guidelines).

Communications, Education and Training

- Support providers via education for:
  - Technical assistance for EHR's
  - Targeted education about the public health measures & implications
  - Timely communication via EHR's and secure messaging between providers in order to decrease duplication of tests/efforts

### **OBJECTIVE HS-10 (DEVELOPMENTAL)**

Increase the number of Connecticut residents who want and have access to their own personal health record.

### **Strategies**

Communications, Education and Training

- Use national interoperability standards for transmission of data.
- Develop a training strategy so that residents know how to access and interpret their EHR.

Partnership and Collaboration, Planning & Development

- Determine which records should be accessible.
- Recommend one central portal for each resident to access their records.

### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Social Services, Connecticut Department of Mental Health and Addiction Services, Office of Health Care Reform and Innovation, eHealth Connecticut, federal Office of the National Coordinator for Health Information Technology, community colleges and universities, health care providers, health care facilities, health insurers, health professional associations, organizations and coalitions that focus on quality of care and patient safety, and others.

# 7

### **Public Health Infrastructure**

#### Rationale

A strong public health infrastructure provides the capacity to prepare for and respond to emerging and ongoing threats to the public's health. Key infrastructure components vary both in Connecticut as well as across the nation. These components include a capable and qualified workforce; up-to-date data and information systems; and the capability of assessing and responding to population health concerns. Ref. Accreditation through the national Public Health Accreditation Board (PHAB) provides an opportunity to strengthen the infrastructure and improve the quality and performance of governmental public health agencies. Quality standards address delivery of the 10 essential public health services, beginning with routine assessment of population health needs in our communities.

### **OBJECTIVE HS-11**

Increase to 50% the percentage of governmental public health jurisdictions that meet National Public Health Accreditation Board (PHAB) standards.

Target Population(s)	Baseline	2020 Target	Data Source	
Connecticut Overall	0	38	National Public Health	
	(2013)		Accreditation Board	

### **Strategies**

Advocacy and Policy

Provide financial incentives to health jurisdictions for accreditation and to those who are accredited.

Planning & Development

• Align Community Health Improvement Plans with goals and strategies in Healthy Connecticut 2020.

### **OBJECTIVE HS-12 (DEVELOPMENTAL)**

All Connecticut communities are covered by a community health assessment.

### **Strategies**

**Communications** 

• Identify a central repository for assessment reports.

Planning & Development

- Encourage regional health assessments.
- Develop and implement a systematic, statewide health planning infrastructure and network.
- Establish linkages with educational institutions to provide support for needs assessments.

Surveillance

• Establish a baseline of the number of communities currently covered by a community health assessment.

### **Potential Partners**

Connecticut Department of Public Health, Office of Policy and Management, local public health agencies, public health professional associations, municipal governments and planning agencies, other organizations and coalitions that address public health, community service organizations serving specific populations (children, older adults, underserved populations), health care providers, health professional associations, academic institutions that prepare the public health workforce, philanthropic organizations that address public health infrastructure, and others.

### **Primary Care and Public Health Workforce**

### **Rationale**

Primary care providers are critical sources of ongoing medical care and primary prevention. With implementation of the Affordable Care Act (ACA), the need for primary care providers is expected to increase. Persons with primary care providers whom they see for ongoing care are more likely to trust their provider, experience good patient-provider communication, and receive appropriate health care. Over the years, however, there has been a decline in the number of medical students interested in careers in primary care, decreasing funding for public health agencies and growing gaps in service areas for primary care providers. These trends contribute to health professional shortage areas (HPSA) and medically underserved areas (MUAs) across the state.

### OBJECTIVE HS-13 (DEVELOPMENTAL) Ph1

Identify and reduce professional health workforce shortages.

### **Strategies**

### Advocacy and Policy

- Support development of the future pipeline for primary care and public health workforce to address the needs of population health.
- Invest in emerging health disciplines (i.e., community health workers, patient navigators, certified medical translators).

### Planning & Development

- Conduct gap analysis to identify shortages.
- Leverage/build upon existing health workforce enhancement initiatives.
- Develop at least one new statewide incentive to attract/retain/redistribute identified gap providers for Public Health/Health Care.

### Surveillance

- · Monitor health professional workforce shortage areas and medically underserved areas
- Gather or develop reliable, reproducible data on existing workforce by type and FTE practicing in the state of Connecticut.

### OBJECTIVE HS-14 (DEVELOPMENTAL) [Ph1]



Increase the diversity of the health workforce.

### **Strategies**

#### Advocacy and Policy

Support development of the future pipeline for primary care and public health workforce to address diversity of the workforce.

#### **Education and Training**

- Identify existing trainings to address identified gaps.
- Work with appropriate Health Professions Programs to train and update needed providers with appropriate skill sets (knowledge, attitudes, behaviors, quality, and safety).
- Engage training and education institutions to develop and enlarge programs to address identified gaps

#### Surveillance

Develop, analyze, distribute and maintain reliable reproducible data on qualitative measures of workforce diversity and skills.

### **Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Office of Higher Education; Connecticut Department of Labor; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Social Services; Connecticut Office of Rural Health; Office of Health Care Reform and Innovation; local public health agencies; federal health agencies; national health provider accrediting bodies; other organizations and coalitions focused on health workforce issues; community service organizations serving specific populations (children, older adults, underserved populations); health insurers; community health centers and hospitals; health professional associations; schools of public health, allied health, nursing and medicine; philanthropic organizations that address access to care and health workforce issues; and others.

Health Systems
Financing Systems

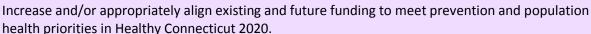
### **Financing Systems**

### Rationale

Public health and health care are funded by multiple funding sources and driven by often competing priorities and goals. Health care reform demands that public health and health care providers explore new and innovative ways to prevent disease and disability, increase the value of health services, decrease costs and ensure equitable service delivery across the system of care. Increasing and/or ensuring appropriate alignment of existing and future funding to meet shared prevention and population health priorities is fundamental to meeting these demands.

"I am very concerned about the movement of hospitals to for profit status. How will this affect us as residents, especially poor and uninsured or underinsured?" (Tolland)

### OBJECTIVE HS-15 (DEVELOPMENTAL) [Ph1]



### **Strategies**

Advocacy and Policy

- Advocate for sin tax revenue (cigarettes, alcohol,) and tobacco settlement revenue to support population health priorities.
- Ensure that Community Benefits resources are allocated to meet community needs and aligned with priorities of the Plan.
- Support policy change to align payment systems with population health, not just illness care.
- Support payment mechanisms that support proven community-based health promotion and prevention models/programs.

Partnership and Collaboration

• Strengthen and establish partnerships to leverage existing resources so that they are distributed more efficiently and evenly.

#### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Mental Health and Addiction Services, Connecticut Department of Social Services, Office of Health Care Reform and Innovation, local public health agencies, federal health agencies, other organizations and coalitions focused on health financing, community service organizations serving specific populations (children, older adults, underserved populations), health insurers, business and business associations, health care facilities, health care providers, health professional associations, philanthropic organizations that address health care delivery and financing systems, and others.

# 7

### **Emergency Preparedness and Response**

### Rationale

Emergency Preparedness and Response includes all communication, information, and mechanisms designed to ensure that public health and safety officials, as well as citizens at large, are prepared for and can cope with natural and manmade disasters, acts of terror, emerging disease outbreaks, trauma, and other threats to the public's health. The public health agencies play a vital role in ensuring the communities' capacity to anticipate, plan for, respond to, and recover from emergency events.

### **OBJECTIVE HS-16**

Achieve a composite score of 90 or greater for the Medical Countermeasure Distribution and Dispensing capabilities.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	58.6 (2013)	<u>&gt;</u> 90	Connecticut Department of Public Health (2013).

### **Strategies**

Planning & Development

• Complete statewide, full-scale Medical Countermeasure Distribution exercises in 2014 and 2015.

#### **OBJECTIVE HS-17**

Increase by 10% the number of public health volunteers in order to enhance community resilience in response to and recovery from emergencies.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	2,463	2,709	Connecticut Department of Public Health (2013).
	(2013)		

### **Strategies**

Communications

Increase public awareness about volunteer opportunities.

**Education and Training** 

• Conduct regional recruitment and training events.

### **Potential Partners**

Connecticut Department of Public Health, Connecticut Department of Consumer Protection, Connecticut Department of Correction, Connecticut Department of Emergency Services and Public Protection (Division of Emergency Management and Homeland Security), local public health agencies, law enforcement, municipal governments, local planning agencies, local community emergency response teams, medical reserve corps, public health professional associations, hospitals, community health centers, and others.

## **APPENDICES**

Appendix A: Key Informants

Appendix B: Partners and Contributing Organizations

Appendix C: Advisory Council Appendix D: DPH Contributors

Appendix E: Criteria for Rating and Ranking

Appendix F: Objectives by Implementation Phase

Appendix G: Index of Acronyms

### **Appendix A: Key Informants**

**Community Services** 

The Conference of Churches

Hartford Gay & Lesbian Health Collective

Shelley Best
Linda Estabrook

**Public Health Professional Associations** 

Connecticut Association of Directors of Health

Karen Spargo
Connecticut Public Health Association

Kathi Traugh

Government

Connecticut Department of Energy & Environmental Protection Robert Girard
Connecticut Department of Public Health Ellen Blaschinski

Connecticut Department of Public Health Renee Coleman-Mitchell

Connecticut Department of Public Health Matthew Cartter
Department of Mental Health & Addiction Services Lauren Siembab

Connecticut State Data Center Michael Howser
Connecticut Commission on Children Elaine Zimmerman
Connecticut Department of Developmental Services Daniel Micari
Connecticut Office of Health Reform & Innovation Jeanette DeJesus
Connecticut Office of the Health Care Advocate Victoria Veltri
Connecticut General Assembly Rep Elizabeth Ritter

Connecticut General Assembly

University of Connecticut, Institute for Public Health Research

Robert Aseltine

Mohegan Health Department Scott Sjoquist

Commission on Health Equity Raja Staggers-Hakim

Education

Connecticut Area Health Education Center Bruce Gould
Connecticut Department of Education Stephanie Knutson

**Health Care** 

Community Health Center Association of Connecticut Evelyn Barnum
Connecticut Hospital Association James Iacobellis

**Business & Industry** 

Connecticut Business Industry Association John Rathgeber

**Organizations & Coalitions** 

Connecticut Association for Community Action

Edith Pollack Karsky
Connecticut Health Foundation

Patricia Baker

Connecticut Cancer Partnership

Universal Health Care Foundation of Connecticut, Inc.

Connecticut Oral Health Initiative

Edith Pollack Karsky

Patricia Baker

Andrew Salner

Frances Padilla

Mary Moran Boudrau

### **Appendix B: Partners and Contributing Organizations**

Administrators' Association of Health and Physical Education

African-American Affairs Commission

All Our Kin, Inc.

Alzheimer's Association, Connecticut Chapter

American Academy of Pediatrics, Connecticut Chapter

Asian Pacific American Affairs Commission

Brain Injury Alliance of Connecticut

Bridgeport Health Department

**Bridgeport Hospital** 

Central Area Health Education Center, Inc.

Community Health Center Association of Connecticut

Connecticut Academy of Nutrition & Dietetics

Connecticut AIDS Resource Coalition

Connecticut Association for Community Action

Connecticut Association for Homecare and Hospice

Connecticut Association of Directors of Health

Connecticut Association of Health, Physical Education, Recreation and Dance

Connecticut Association of Local Boards of Health

Connecticut Association of School Based Health Centers

Connecticut Business and Industry Association

**Connecticut Cancer Partnership** 

Connecticut Center for Patient Safety

Connecticut Children's Medical Center

Connecticut Coalition for Environmental Justice

Connecticut Commission on Aging

Connecticut Commission on Health Equity

Connecticut Conference of Municipalities

Connecticut Council for Occupational Safety & Health

Connecticut Council on Developmental Disabilities

Connecticut Dental Health Partnership

Connecticut Department of Agriculture

Connecticut Department of Children and Families

Connecticut Department of Consumer Protection

Connecticut Department of Correction

Connecticut Department of Education

Connecticut Department of Energy and

**Environmental Protection** 

Connecticut Department of Mental Health and

Addiction Services

**Connecticut Department of Motor Vehicles** 

Connecticut Department of Public Health

Connecticut Department of Transportation

Connecticut Department of Veterans' Affairs

Connecticut Emergency Medical Services Advisory

Board

Connecticut Environmental Health Association

Connecticut Fair Housing Center

Connecticut Food Specialty Association

Connecticut General Assembly

Connecticut Health Foundation

Connecticut Health Policy Project

Connecticut Hospital Association

**Connecticut Legal Services** 

**Connecticut Nurses Association** 

Connecticut Office of Policy and Management

Connecticut Office of Protection and Advocacy for

Persons with Disabilities

Connecticut Office of the Child Advocate

Connecticut Office of the Healthcare Advocate

Connecticut Oral Health Initiative

Connecticut Public Health Association

Northwest Connecticut Chamber of Commerce **Connecticut State Dental Association** 

**Connecticut State Department of Education** Omega Foundation

**Connecticut State Medical Society Ovation Benefits** 

Connecticut Suicide Advisory Board Partnership for Strong Communities

Connecticut-Rhode Island Public Health Training Planned Parenthood of Southern New England

Center Qualidigm

Early Childhood Alliance

New Haven Health Department

Day Kimball Healthcare Saint Francis Hospital, Center for Health Equity

**Donaghue Foundation** Saint Vincent's College

Sickle Cell Disease Association of America, Southern

**Ethnic Marketing Solutions Connecticut Chapter** 

South Central Connecticut Regional Water Authority Fairhaven Community Health Center

Foodshare Southern Connecticut State University

**Greenwich Hospital** Southwest Community Health Center, Inc.

Hartford Foundation for Public Giving Southwestern Connecticut Agency on Aging

Hartford Health Department Torrington Area Health District

Kids As Self Advocates Uncas Health District

March of Dimes University of Connecticut, School of Dental Medicine

Mohegan Health Department University of Connecticut, Connecticut Area Health

**Education Center Network Program** Murtha Cullina, LLP

University of Connecticut, School of Community New England Dairy and Food Council

Winding Trails, Inc.

Medicine and Health Care

University of Hartford Northeast District Department of Health

Northern Connecticut Black Nurses Association Yale New Haven Health System

### **Appendix C: Advisory Council**

**Sharon Lewis** 

Executive Director, Connecticut Coalition for

**Environmental Justice** 

Linda Schwartz

Commissioner, Department of Veterans' Affairs

Alternate: Dr. Babatunde Green

Director of Planning

Dr. James Gatling

Chair, Connecticut Association for Community Action;

President/CEO New Opportunities, Inc.,

Katrina Clark

Executive Director (retired),

Fairhaven Community Health Center

Lisa Pellegrini

Public Health and Human Services Chair;

CT Conference of Municipalities First Selectman, Town of Somers

**Robin Cabelus** 

Transportation Planning Director, Connecticut

Department of Transportation

Alternate: Phyllis DiFiore

Occupant Protection Program Manager

JoAnn Ryan

President and CEO,

Northwest Connecticut Chamber of Commerce

Barbara Geller

Director, Statewide Services Division, Connecticut Department of Mental Health and Addiction Services

Alice Pisani

Chair, Southwestern Connecticut Agency on Aging

Linda Kelly

President, Hartford Foundation for Public Giving

Dr. Prasad Srinivasan

State Representative, Connecticut General Assembly

Scott Sjoquist

Director of Health, Mohegan Health Department

Linda Colangelo

Education and Communications Coordinator, Northeast District Department of Health

Bill Mauke

Partner/President, Workforce Health,

Ovation Benefits

Roberta Friedman

Director, Public Policy,

Rudd Center for Food Policy & Obesity

Mary Moran-Boudreau

Executive Director, Connecticut Oral Health Initiative

**Gregory Jones** 

Founder and Chairman, Omega Foundation

Colleen Gallagher

Health Services Program Director,

Department of Correction

Marilyn Alverio

CEO, Ethnic Marketing Solutions

Bill Knight

Chairman, Connecticut Council on Developmental

Disabilities

Kate Powell

Vice President, Water Quality and Outreach,

South Central Connecticut Regional Water Authority

Kristin duBay Horton

Director, Bridgeport Health Department

Rev. Frederick Streets

Acting Pastor, Dixwell Avenue Congregational

United Church of Christ

Katherine Yacavone

President and CEO,

Southwest Community Health Center, Inc.

### **Appendix D: DPH Contributors**

Mattie Adgers Rebecca Foreman Chuck Nathan

Frederico Amadeo Wendy Furniss Randy Nelson Chris Andresen Bill Gerrish Rachel Nowek

Olga Armah Ann Gionet Chinedu Okeke

Joan Ascheim Lou Gonsalves Jon Olson

Diane Ave

**Brian Carney** 

Kathy Graff Regina Owusu Karyn Backus Laurie Greci Christine Parker

Nancy Barrett Linda Greengas Susan Petit

Jonathan Best Mary Ann Harward Mary Pettigrew

Susan Hewes Rosa Biaggi Francesca Provenzano

Ellen Blaschinski Margaret Hynes Alison Rau

Suzanne Blancaflor Maureen Reault Angela Jimenez

Carol Bower **Dermot Jones** Kaila Riggott Janet Brancifort Celeste Jorge Corinne Rueb Marianne Buchelli Vanessa Kapral Leslie Scoville

Marc Camardo Mark Keenan Dana Sitler Ronald Capozzi Jill Kentfield Sharon Sharp

Stephen Carragher Kathy Kudish Suzanne Speers Matt Cartter Thomas St. Louis Fay Larson

Elizabeth Keyes

Lynn Sosa

Barbara Cass Steven Lazarus Christopher Stan

Marcie Cavacas Susan Logan Carol Stone Renee Coleman-Mitchell Kim Martone Alison Stratton

**Abby Cotto** Lori Mathieu Kristin Sullivan

Carmen Cotto Sheila Mayo-Brown Ahmadali Tabatabai

Mehul Dalal Rose McClellan Ryan Tetreault

Johanna Davis Lisa McCooey **Robin Tousey-Ayers** 

Richard Melchreit Barbara Dingfelder **Brian Toal** 

Celeste Dowdell Marijane Mitchell Krista Veneziano

Juanita Estrada Amy Mirizzi Danny White Linda Ferraro

Jennifer Morin Lloyd Mueller John Fontana

### **Appendix E: Criteria for Phasing of Objectives**

Туре	Examples
<b>Relevance</b> How Important Is It?	<ul> <li>Burden (magnitude and severity; economic cost; urgency) of the problem         <ul> <li>Size: Many people affected</li> <li>Trend: Getting worse</li> <li>Seriousness: Deaths, hospitalizations, disabilities</li> <li>Causes: Can identify root causes/social determinants</li> <li>Research/evidence-based</li> <li>Preventable</li> </ul> </li> <li>Community concern: community cares about it, is likely to mobilize around it, will accept that the problem is important</li> <li>Degree of relatedness to local, state, or national health improvement plans and priorities</li> <li>Focus on equity and accessibility</li> </ul>
Appropriateness Should We Do It?	<ul> <li>Ethical and moral issues (fit with mission, vision, values)</li> <li>Human rights issues</li> <li>Legal aspects         <ul> <li>Do statutes or ordinances permit this change/intervention? Is it worth advocating for regulatory or legislative change if not?</li> <li>Whose legal mandate is it to address?</li> <li>Is there legal liability associated with change?</li> </ul> </li> <li>Political and social acceptability</li> <li>Public attitudes and values</li> <li>Adequacy and usefulness of current knowledge base</li> </ul>
Impact What Will We Get Out of It?	<ul> <li>Effectiveness</li> <li>Coverage</li> <li>Builds on or enhances current work</li> <li>Can move the needle and demonstrate measurable outcomes for both short and long term</li> <li>Proven strategies to address multiple wins/catalytic actions</li> <li>Easy short-term wins</li> </ul>
Feasibility Can We Do It?	<ul> <li>Community capacity</li> <li>Technical capacity</li> <li>Economic capacity (resources available or likely; makes economic sense to address)</li> <li>Political capacity/will</li> <li>Socio-cultural aspects</li> <li>Ethical aspects</li> <li>Can identify and implement proven strategies to address multiple wins/catalytic actions</li> <li>Can identify easy short-term wins</li> </ul>

### **Appendix F: Objectives by Implementation Phase**

### Phase 1 Objectives

### **Phase 2 Objectives**

### Maternal, Infant, and Child Health

### **OBJECTIVE MICH-1**



Reduce by 10% the rate of unplanned pregnancies.

### **OBJECTIVE MICH-3**



Increase by 10% the proportion of pregnant women who receive prenatal care during the first trimester of pregnancy.

### **OBJECTIVE MICH-4**



Increase by 10% the proportion of pregnant women who receive adequate prenatal care (defined by Kotelchuck Index).

### **OBJECTIVE MICH-7**



Reduce by 10% the infant mortality rate (infant deaths per 1,000 live births).

### OBJECTIVE MICH-8 Ph1





Reduce by 10% the disparity between infant mortality rates for non-Hispanic blacks and non-Hispanic whites.

#### **OBJECTIVE MICH-10**



Increase by 10% the proportion of infants who are breastfed.

### **OBJECTIVE MICH-12**





Increase by 10% the percentage of children under 3 years of age at greatest risk for oral disease (i.e., in HUSKY A) who receive any dental care.

### **OBJECTIVE MICH-13**



Increase by 10% the percentage of parents who complete standardized developmental screening tools consistent with American Academy of Pediatrics (AAP) guidelines.

#### **OBJECTIVE MICH-2**

Increase by 10% the proportion of women delivering a live birth who discuss preconception health with a health care worker prior to pregnancy.

#### **OBJECTIVE MICH-5**

Reduce by 10% the proportion of low birthweight and very low birthweight among singleton births.

#### **OBJECTIVE MICH-6**

Reduce by 10% the proportion of live singleton births delivered at less than 37 weeks gestation.

### **OBJECTIVE MICH-9 (DEVELOPMENTAL)**

Reduce the proportion of non-medically indicated inductions/Cesarean sections prior to 39 weeks gestation.

### OBJECTIVE MICH-11



Increase by 10% the percentage of children up to 19 years of age at greatest risk for poor health outcomes that receive well-child visits (e.g., enrolled in HUSKY A).

### **Phase 2 Objectives**

### **Environmental Risk Factors and Health**

### **OBJECTIVE ENV-1**



Reduce to less than 3% the prevalence rate of children less than 6 years of age with confirmed blood lead levels at or above the CDC reference value (5  $\mu$ g/dL).

### **OBJECTIVE ENV-3 (DEVELOPMENTAL)**



Reduce the risk of waterborne disease outbreaks due to consumption of contaminated drinking water for all ground-water-based, small community public water systems following an emergency situation.

### OBJECTIVE ENV-4 Ph1



Reduce by 10% the average number of days/year the Air Quality Index (AQI) exceeds 50.

### OBJECTIVE ENV-5 (DEVELOPMENTAL)





Increase public awareness of the presence and risks of poor air quality days

### **OBJECTIVE ENV-2 (DEVELOPMENTAL)**

Reduce the risk of consumption of unsafe drinking water from ground water sources serving private wells.

### **OBJECTIVE ENV-6 (DEVELOPMENTAL)**

Increase the enforcement of minimum housing code standards through the collaboration of code enforcement agencies.

#### **OBJECTIVE ENV-7**

Increase by 10% the number of Healthy Homes inspections.

### **OBJECTIVE ENV-8 (DEVELOPMENTAL)**

Increase the number of local planning agencies and others making land-use decisions that incorporate a "health-in-all-policies" approach.

### **Phase 2 Objectives**

### **Chronic Disease Prevention and Control**

### **OBJECTIVE CD-1**





Reduce by 10% the age-adjusted death rate for heart disease.

### OBJECTIVE CD-2





Decrease by 40% the age-adjusted premature death rate for heart disease.

### **OBJECTIVE CD-4**



Reduce by 3% the proportion of adults 18 years of age and older who have been told they have high blood pressure.

### **OBJECTIVE CD-11**



Reduce by 5% the estimated number of individuals with undiagnosed Type II diabetes.

### **OBJECTIVE CD-12**



Reduce by 6% the proportion of adults 18 years of age and older with diagnosed diabetes.

### OBJECTIVE CD-16 Ph1



Decrease by 5% the rate of Emergency Department visits among all Connecticut residents for which asthma was the primary diagnosis.

### **OBJECTIVE CD-22**



Reduce to 35% the proportion of children in third grade who have dental decay.

### OBJECTIVE CD-23 Ph1 =





Reduce untreated dental decay to 15.0% in black non-Hispanic children and 12% in Hispanic children in the third-grade.

### **OBJECTIVE CD-3**



Reduce by 10% the age-adjusted death rate for stroke. **OBJECTIVE CD-5** 

Reduce by 10% the prevalence of adults 18 years of age and older who have had their cholesterol checked and have ever been told they have high cholesterol.

#### **OBJECTIVE CD-6**

Decrease by 2% the incidence of new cases of the 6 major cancers (breast, cervical, prostate, lung, colorectal, and melanoma).

#### **OBJECTIVE CD-7**

Reduce by 5% the proportion of late-stage diagnoses for 4 major cancers (breast, prostate, lung, and colorectal).

#### **OBJECTIVE CD-8**

Reduce by 5% the age-adjusted mortality rates for 6 major cancers (breast, cervical, prostate, lung, colorectal, and melanoma) through modification of major risk factors.

### **OBJECTIVE CD-9**



Increase by 5% the proportion of adults who have ever had a sigmoidoscopy/colonoscopy.

#### **OBJECTIVE CD-10**

Increase by 5% the 5-year relative survival rates for the 6 major cancers (lung, breast, prostate, colorectal, melanoma, and cervical).

### OBJECTIVE CD-13



Stabilize at 15% the prevalence of chronic kidney diseases among Medicare beneficiaries 65+ years of age.

#### **OBJECTIVE CD-14**

Decrease by 10% the age-adjusted hospital discharge rate for "diabetes-related" hospitalizations.

#### **OBJECTIVE CD-15 (DEVELOPMENTAL)**

Reduce hospitalizations due to chronic kidney disease.

### **OBJECTIVE CD-17**

Decrease by 5% the rate of hospitalizations for asthma.

### **Phase 2 Objectives**

### **Chronic Disease Prevention and Control**

### OBJECTIVE CD-26 Ph1



Decrease by 5% the percent adults age 18 and older who are obese.

### **OBJECTIVE CD-27**



Reduce by 5% the prevalence of obesity in children 5-12 years of age and students in grades 9-12.

### **OBJECTIVE CD-28**



Increase by 5% the proportion of adults who meet the recommended 150 minutes or more of aerobic physical activity per week.

### OBJECTIVE CD-29 Ph1



Reduce by 20% the prevalence of current cigarette smoking among adults 18 years of age and older.

### **OBJECTIVE CD-30**



Reduce by 25% the prevalence of smoking among students in grades 6-8 and 9-12.

#### **OBJECTIVE CD-18**

Reduce by 5% hospitalizations for chronic obstructive pulmonary disease (COPD).

### OBJECTIVE CD-19



Reduce by 5% the age-adjusted death rate for chronic lower respiratory disease.

### **OBJECTIVE CD-20**



Reduce by 10% the proportion of Medicare beneficiaries with osteoporosis.

#### **OBJECTIVE CD-21**

Reduce by 7% the proportion of Medicare Beneficiaries with Rheumatoid Arthritis/Osteoarthritis.

### **OBJECTIVE CD-24**



Increase by 4% the proportion of adults who have visited a dentist or dental clinic in the last year.

### **OBJECTIVE CD-25**



Reduce by 5% the proportion of adults over 65 who have had all their natural teeth extracted

### **Phase 2 Objectives**

### **Infectious Disease Prevention and Control**

### **OBJECTIVE ID-1**



Increase by 5% the vaccination coverage levels for ACIP recommended vaccines among children and adults.

### OBJECTIVE ID-3 (DEVELOPMENTAL) Ph1



Increase vaccination levels of pregnant women and child care providers.

### **OBJECTIVE ID-5**



Increase by 5% the percentage of adults who are vaccinated annually against seasonal influenza.

### OBJECTIVE ID-7



Increase by 20% HPV vaccination rates for male and female adolescents 13 to 17 years of age to meet CDC guidelines.

### **OBJECTIVE ID-8**





Reduce chlamydia incidence rates by 5% among youths 15-24 years of age, by 10% among blacks, and by 10% among Hispanics.

### OBJECTIVE ID-9 Ph1





Reduce gonorrhea incidence rates by 5% among youths 15-24 years of age, by 10% among blacks, and by 10% among Hispanics.

### OBJECTIVE ID-12 Ph1





Reduce by 5% the number of diagnosed cases of HIV overall, among men who have sex with men (MSM) and among black females.

### OBJECTIVE ID-13 (DEVELOPMENTAL)



Increase the proportion of known HIV-positive individuals with suppressed viral loads (i.e., 200 or less copies of virus per milliliter)

### **OBJECTIVE ID-14**



Decrease by 20% the proportion of people who progress to AIDS within 1 year of initial diagnosis.

### **OBJECTIVE ID-17 (DEVELOPMENTAL)**





Increase hepatitis C screening among high risk populations, consistent with Centers for Disease Control and Prevention (CDC) guidelines.

### **OBJECTIVE ID-27 (DEVELOPMENTAL)**



Maintain and enhance the State's public reporting infrastructure for healthcare associated infections (HAIs) to include additional types of healthcare facilities, facility locations, or types of HAIs reported.

#### **OBJECTIVE ID-2**

Reduce by 5% the incidence of pertussis.

### **OBJECTIVE ID-4**

Reduce by 5% the incidence of invasive pneumococcal infections.

#### **OBJECTIVE ID-6**

Reduce by 5% the incidence of hepatitis B infections.

#### **OBJECTIVE ID-10**

Reduce by 10% the incidence of primary and secondary syphilis.

### OBJECTIVE ID-11 (DEVELOPMENTAL)



Reduce the incidence of syphilis in HIV-infected men who have sex with men (MSM)

#### **OBJECTIVE ID-15**

Reduce by 5% the overall incidence rate of tuberculosis.

### **OBJECTIVE ID-16 (DEVELOPMENTAL)\***

Reduce by 5% the number of cases of acute hepatitis C (HCV).

### **OBJECTIVE ID-18 (DEVELOPMENTAL)**

Increase the proportion of persons with identified Hepatitis C infection who are receiving appropriate treatment and care.

#### **OBJECTIVE ID-19**

Decrease by 5% the incidence of Lyme disease.

#### **OBJECTIVE ID-20**

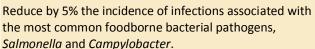
Decrease by 5% the incidence of West Nile Virus infection.

### **OBJECTIVE ID-21**



Reduce by 5% the overall incidence of illnesses caused by enteric pathogens and toxins.

### OBJECTIVE ID-22



### **OBJECTIVE ID-23**



Reduce by 5% the incidence of infections caused by foodborne pathogens associated with significant morbidity and mortality, such as E.coli 0157 and non-0157, shiga-toxin-producing E.coli (STEC), and Listeria.

### OBJECTIVE ID-24



Reduce by 5% the number of annual outbreaks attributed to norovirus.

### **OBJECTIVE ID-25**

Maintain at zero the overall incidence of illnesses caused by waterborne pathogens.

### **Phase 2 Objectives**

### **Infectious Disease Prevention and Control**

### **OBJECTIVE ID-28 (DEVELOPMENTAL)**



Achieve and maintain Standard Infection Ratios (SIRs) of less than or equal to one (≤1) for Acute Care Hospital HAIs, including central-line-associated bloodstream infections (CLABSI's), catheter-associated urinary tract infections (CAUTI's), surgical site infections (SSI's), Clostridium difficile infections (CDI's), and methicillin-resistant Staphylococcus aureus (MRSA) bacteremia.

### OBJECTIVE ID-29 (DEVELOPMENTAL)



Reduce the rate of catheter-associated urinary tract infections (CAUTI's) and Clostridium difficile infections in Long Term Care facilities.

### **OBJECTIVE ID-30 (DEVELOPMENTAL)**



Reduce the rate of central line-associated bloodstream Infection (CLABSI) in Hemodialysis facilities.

### **OBJECTIVE ID-31 (DEVELOPMENTAL)**



Reduce the number of surgical site infections (SSI's) in Ambulatory Surgical Centers (ASC's).

### OBJECTIVE ID-34 (DEVELOPMENTAL)



Reduce the adverse impact of emerging infectious disease on population health through early detection and control by maintaining support for and expanding the current Emerging Infections Program.

#### **OBJECTIVE ID-26**

Reduce by 5% the incidence rates for multidrug resistant organisms (MDROs), specifically vancomycin-resistant enterococcus (VRE) and methicillin-resistant Staphylococcus aureus (MRSA).

### **OBJECTIVE ID-32 (DEVELOPMENTAL)**

Reduce the number of catheter-associated urinary tract infections (CAUTI's) and surgical site infections (SSI's) in Homecare and Hospice programs.

### **OBJECTIVE ID-33 (DEVELOPMENTAL)**

Reduce the number of healthcare associated influenza outbreaks.

### **Phase 2 Objectives**

### **Injury and Violence Prevention**

### OBJECTIVE IV-1



Decrease by 10% the number of fall deaths among persons of all ages.

### OBJECTIVE IV-3 Ph1



Reduce by 10% the number of deaths caused by unintentional poisonings.

### OBJECTIVE IV-6 Ph1





Reduce by 5% the number of deaths from motor vehicle crashes.

### **OBJECTIVE IV-8**



Increase to 90% the statewide observed seatbelt rate.

### **OBJECTIVE IV-9**



Increase by 10% the proportion of children in automobile child safety restraints.

### OBJECTIVE IV-10 Ph1



Reduce by 10% the number of motorcycle operator and passenger fatalities.

### OBJECTIVE IV-12 Ph1





Reduce by 10% the age-specific suicide rates for persons 15 to 64 years of age.

### OBJECTIVE IV-14 Ph1



Reduce by 20% the proportion of students in grades 9-12 who attempted suicide in the past 12 months.

#### **OBJECTIVE IV-16**



Reduce by 10% the number of firearm homicides.

### OBJECTIVE IV-18 Ph1



Reduce by 10% the incidence of sexual violence.

### **OBJECTIVE IV-22**



Decrease by 10% the number of child maltreatment cases.

### **OBJECTIVE IV-2**



Reduce by 10% the number of fall-related Emergency Department visits among persons of all ages.

### **OBJECTIVE IV-4**



Decrease by 10% the number of hospitalizations for unintentional poisonings

#### **OBJECTIVE IV-5**

Increase by 10% the hospital calls and the 911/EMS calls to the Connecticut Poison Control Center among all poison center calls.

### **OBJECTIVE IV-7**



Reduce by 10% the number of motor vehicle crash related emergency department visits.

#### **OBJECTIVE IV-11**

Reduce by 10% the number of injuries to motorcycle operators and passengers.



Reduce by 5% the number of emergency department visits for suicide and self-inflicted injury.

#### **OBJECTIVE IV-15**

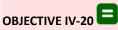
Reduce by 20% the proportion of students in grades 9-12 who seriously considered attempting suicide.

### **OBJECTIVE IV-17**

Reduce by 10% the number of Emergency Department visits related to domestic and family violence.

#### **OBJECTIVE IV-19**

Reduce by 10% the number of family violence arrests.



Decrease by 10% the number of hospitalizations resulting from traumatic brain injury.

### **OBJECTIVE IV-21**



Decrease by 10% the number of Emergency Department visits resulting from traumatic brain injury.

### **OBJECTIVE IV-23**

Decrease by 10% the number of child maltreatment deaths.

### **OBJECTIVE IV-24**

Decrease by 10% the number of Emergency Department visits for sports-related injuries.

### **OBJECTIVE IV-25**

Decrease by 10% the number of fatal occupational iniuries.

#### **OBJECTIVE IV-26**

Decrease by 10% the rate of nonfatal occupational iniuries.

### **Phase 2 Objectives**

### Mental Health, Alcohol, and Substance Abuse

### OBJECTIVE MHSA-1



Decrease by 5% the rate of mental health emergency department visits.

### OBJECTIVE MHSA-2



Reduce by 5% the proportion of people (from grade 9 and older) who drink excessively across the lifespan.

### OBJECTIVE MHSA-3 Ph1



Reduce by 5% the proportion of drinking for youth in grades 9-12 (ages 14-18).

### OBJECTIVE MHSA-5



Reduce by 5% the non-medical use of pain relievers across the lifespan (ages 12 and older).

### OBJECTIVE MHSA-6 Ph1



Reduce by 5% the use of illicit drugs across the lifespan (ages 12 and older).

### **OBJECTIVE MHSA-7**



Increase by 10% the number of children who are referred to Connecticut Birth to Three System following a failed Modified Checklist for Autism in Toddlers screening.

### OBJECTIVE MHSA-8 Ph1



Increase by 5% trauma screening by primary care and behavioral health providers.

### **OBJECTIVE MHSA-4**

Reduce by 5% the rate of emergency department visits for people who are alcohol dependent across the lifespan.

### Phase 2 Objectives

### **Health Systems**

### **OBJECTIVE HS-1**



Increase by 10% the percentage of Connecticut adults 18 - 64 years of age who have health coverage through either public or private sector

### OBJECTIVE HS-2 (DEVELOPMENTAL) [Ph1]





Increase the number of community based health services in communities who have demonstrated need and/or vulnerable populations to create a strong, integrated statewide safety net system.

### OBJECTIVE HS-3 (DEVELOPMENTAL) Ph1



Increase access to accredited patient-centered medical homes (PCMH)/ health homes to include dental.

### **OBJECTIVE HS-4 (DEVELOPMENTAL)**



Decrease the number of patients expressing difficulty in accessing health services due to the lack of nonemergency transportation services.

### **OBJECTIVE HS-5 (DEVELOPMENTAL)**





Establish quality and patient safety standards for health system service providers across the continuum of care, with standardized performance measures that include racial/ethnic disparities.

### **OBJECTIVE HS-8 (DEVELOPMENTAL)**





Increase the number of Connecticut health and social service agencies that have adopted and taken (documented) steps to implement National Culturally and Linguistically Appropriate Services (CLAS) Standards.

### OBJECTIVE HS-13 (DEVELOPMENTAL) Ph1



Identify and reduce professional health workforce shortages.

### OBJECTIVE HS-14 (DEVELOPMENTAL) Ph1





Increase the diversity of the health workforce.

### OBJECTIVE HS-15 (DEVELOPMENTAL)



Increase and/or appropriately align existing and future funding to meet prevention and population health priorities in Healthy Connecticut 2020.

### **OBJECTIVE HS-6 (DEVELOPMENTAL)**



Increase the number of health system service providers within the care continuum who meet standardized quality and patient safety measures that include measures for ethnic/racial disparities.

### OBJECTIVE HS-7 (DEVELOPMENTAL)



All standardized quality and patient safety measures are publicly accessible and understandable.

#### **OBJECTIVE HS-9**

Increase to 100% the percentage of providers who have access to Electronic Health Records (EHR) that meet national data/regulatory standards for interoperability, data integrity, and patient privacy.

### **OBJECTIVE HS-10 (DEVELOPMENTAL)**

Increase the number of Connecticut residents who want and have access to their own personal health record.

### **OBJECTIVE HS-11**

Increase to 50% the percentage of governmental public health jurisdictions that meet National Public Health Accreditation Board (PHAB) standards.

### **OBJECTIVE HS-12 (DEVELOPMENTAL)**

All Connecticut communities are covered by a community health assessment.

#### **OBJECTIVE HS-16**

Achieve a composite score of 90 or greater for the Medical Countermeasure Distribution and Dispensing capabilities.

### **OBJECTIVE HS-17**

Increase by 10% the number of public health volunteers in order to enhance community resilience in response to and recovery from emergencies.

### **Appendix G: Index of Acronyms**

Acquired immune deficiency syndrome (AIDS)

Advisory Committee on Immunization Practices (ACIP)

Affordable Care Act (ACA)

Air Quality Index (AQI)

All Payer Claims Database (APCD)

American Academy of Pediatrics (AAP)

American Association of Diabetes Educators (AADE)

American Indian/Alaska Natives (AI/AN)

Americans with Disabilities Act (ADA)

Behavioral Risk Factor Surveillance System (BRFSS)

Catheter-associated urinary tract infection (CAUTI)

Centers for Disease Control and Prevention (CDC)

Central line-associated bloodstream Infection (CLABSI)

Chronic obstructive pulmonary disease (COPD)

Closed crankcase ventilation systems (CCV)

Community Health Assessment (CHA)

Connecticut Prescription Monitoring and Reporting System (CPMRS)

Connecticut School Health Survey (CSHS)

Continuing Education Units (CEUs)

Continuing Medical Education (CMEs)

Culturally and Linguistically Appropriate Services (CLAS) Standards

Department of Public Health (DPH)

Diabetic Foot Study Group (DFSG)

Diabetes Self-Management Education (DSME)

Diesel oxidation catalysts (DOC)

Diesel particulate filters (DPF)

Direct Observed Therapy (DOT)

Division of Emergency Management and Homeland Security (DEMHS)

Drinking Water State Revolving Fund (DWSRF)

Early Childhood Education (ECE)

Electronic Health Records (EHR)

Electronic Medical Records (EMR)

**Emergency Department (ED)** 

Environmental Protection Agency's (EPA's)

Federally Qualified Health Centers (FQHC's)

Food and Drug Administration (FDA)

Food service establishments (FSE)

Health Insurance Exchange (HIE)

Health professional shortage areas (HPSA)

Healthcare Effectiveness Data and Information Set (HEDIS)

Healthcare-associated infection (HAI)

Health Enhancement Program (HEP)

Human immunodeficiency virus (HIV)

Human papillomavirus (HPV)

HUSKY Health Program - Connecticut's Health Insurance Program for eligible children and adults

Lesbian, gay, bisexual, transgender (LGBT)

Local health departments (LHD)

Long Term Care (LTC)

Low Birth weight (LBW) <2,500 g or 5 lbs, 8 0z

MAVEN -A web-based, business application used by DPH for surveillance and data management.

Medical Reserve Corps (MRC)

Men who have sex with men (MSM)

Methicillin-resistant Staphylococcus aureus (MRSA)

Mobilization for Action through Planning and Partnerships (MAPP)

Morbidity and Mortality Weekly Report (MMWR)

Multi Drug Resistant Organism (MDRO)

Culturally and Linguistically Appropriate Services (CLAS) Standards

National Association of County and City Health Officials (NACCHO)

National Healthcare Safety Network (NHSN)

Patient-centered medical home (PCMH)

Pelvic inflammatory disease (PID)

Pre-exposure prophylaxis (PrEP)

Pregnancy Risk Assessment and Tracking System (PRATS)

Primary Care Medical Home (PCMH)

Public Health Accreditation Board (PHAB)

Qualified Food Operator (QFO)

School-based Health Centers (SBHC's)

Sexually transmitted infections (STIs)

Shiga-toxin-producing E.coli (STEC)

Standard Infection Ratio (SIR)

State Health Assessment (SHA)

State Health Improvement Plan (SHIP)

State Plan to Improve Birth Outcomes (PIBO)

Substance Abuse and Mental Health Services Administration (SAMHSA)

Surgical Site Infection (SSI)

Technical Assistance (TA)

Traumatic brain injury (TBI)

Tuberculosis (TB)

Vaccines for Children Program (VCP)

Vancomycin-resistant enterococcus (VRE)

Very low birth weight (VLBW) <1,500 g or 3 lbs, 5 oz

Veterans' Affairs (VA)

## **REFERENCES AND NOTES**

### **REFERENCES AND NOTES**

<sup>1</sup> US Department of Health and Human Services. *Physical Activity*. Healthy People 2020. [Online] [Cited November 4, 2013] HealthyPeople.gov http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx

- <sup>4</sup> MAPP, a comprehensive, planning process for improving health, is a strategic framework that local public health departments across the country have utilized to help direct their strategic planning efforts. MAPP is comprised of four distinct assessments that are the foundation of the planning process, and includes the identification of strategic issues and goal/strategy formulation as prerequisites for action. Since health needs are constantly changing as a community and its context evolve, the cyclical nature of the MAPP planning/implementation/ evaluation/correction process allows for the periodic identification of new priorities and the realignment of activities and resources to address them. Advanced by the National Association of County and City Health Officials (NACCHO), MAPP's vision is for communities to achieve improved health and quality of life by mobilizing partnerships and taking strategic action. Facilitated by public health leaders, this framework helps communities apply strategic thinking to prioritize public health issues and identify resources to address them. More information on MAPP can be found at: http://www.naccho.org/topics/infrastructure/mapp/
- <sup>5</sup> US Department of Health and Human Services. *Maternal, Infant, and Child Health*. Healthy People 2020. [Online] [Cited September 28, 2013] http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=26
- <sup>6</sup> Mayer JP, Unintended childbearing, maternal beliefs, and delay of prenatal care, Birth, 1997, 24(4):247–252.
- <sup>7</sup> US Department of Health and Human Services. *Maternal, Infant, and Child Health*. Healthy People 2020. [Online] [Cited May 3, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=26
- <sup>8</sup> Martin JA, Hamilton BE, Ventura SJ, Osterman MJK, Wilson EC, Mathews TJ. *Births: Final Data for 2010*. National Vital Statistics Report. 2012; 61 (1).
- <sup>9</sup> Martin JA, Hamilton BE, Ventura SJ, Osterman MJK, Wilson EC, Mathews TJ. *Births: Final Data for 2010*. National Vital Statistics Report. 2012; 61 (1).
- <sup>10</sup> US Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breasfteeding*. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General, 2011.
- <sup>11</sup> US Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breasfteeding*. Washington, DC: US Department of Health and Human Services, Office of the Surgeon General, 2011.
- <sup>12</sup> Center for Disease Control and Prevention. *National Survey of Children's Health*. Center for Disease Control and Prevention. [Online] [Cited March 7, 2014] <a href="http://www.cdc.gov/nchs/slaits/nsch.htm">http://www.cdc.gov/nchs/slaits/nsch.htm</a>.
- <sup>13</sup> Agency for Toxic Substances and Disease Registry. *Toxicological Profile for Lead*. Atlanta, GA: US Department of Health and Human Services, CDC, Agency for Toxic Substances and Disease Registry. 2007. [Online] [Cited July 11, 2013] <a href="http://www.atsdr.cdc.gov/toxprofiles/tp13.pdf">http://www.atsdr.cdc.gov/toxprofiles/tp13.pdf</a>
- <sup>14</sup> Agency for Toxic Substances and Disease Registry. *Toxicological Profile for Lead*. Atlanta, GA: US Department of Health and Human Services, CDC, Agency for Toxic Substances and Disease Registry. 2007. [Online] [Cited July 11, 2013] <a href="http://www.atsdr.cdc.gov/toxprofiles/tp13.pdf">http://www.atsdr.cdc.gov/toxprofiles/tp13.pdf</a>
- <sup>15</sup> Wheeler W and Brown MJ. *Blood Lead Levels in Children Aged 1-5 Years*: United States, 1999-2010. *MMWR*. 2013; 62(13): 245-248.
- <sup>16</sup> Connecticut Department of Public Health, Healthy Homes Initiative. *Connecticut Healthy Homes Data Book*. 2012. Connecticut Department of Public Health.

<sup>&</sup>lt;sup>2</sup> US Department of Health and Human Services. *Physical Activity*. Healthy People 2020. [Online] [Cited November 4, 2013] HealthyPeople.gov http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx

<sup>&</sup>lt;sup>3</sup> United Way of Greater Mercer County, Community Health Assessment. [Online] [Cited March 12, 2014] www.uwgmc.org/CHA

<sup>17</sup> US Department of Health and Human Services. *Environmental Health*. Healthy People 2020. [Online] [Cited July 10, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=12

- <sup>18</sup> US Department of Health and Human Services. *Environmental Health*. Healthy People 2020. [Online] [Cited July 10, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=12
- <sup>19</sup> Environmental Protection Agency. Our Nation's Air Status and Trends through 2010: Six Common Pollutants. 2012. Environmental Protection Agency. [Online] [Cited July 10, 2013] <a href="http://www.epa.gov/airtrends/2011/report/sixcommon.pdf">http://www.epa.gov/airtrends/2011/report/sixcommon.pdf</a>
- Romley JA, Hackbarth A, Goldman DP. The Impact of Air Quality on Hospital Spending. 2010. RAND Technical Report. [Online] [Cited September 24, 2013] http://www.rand.org/content/dam/rand/pubs/technical\_reports/2010/RAND\_TR777.sum.pdf
- <sup>21</sup> Connecticut Department of Public Health, Healthy Homes Initiative. *Connecticut Healthy Homes Data Book*. 2012. Connecticut Department of Public Health.
- <sup>22</sup> US Department of Health and Human Services. Winnable Battles. Centers for Disease Control and Prevention. Centers for Disease Control and Prevention. [Online] [Cited September 30, 2013] <a href="http://www.cdc.gov/winnablebattles/">http://www.cdc.gov/winnablebattles/</a>
- <sup>23</sup> The Center for Public Health and Health Policy. *The Economic Impact of Prevention*. 2008. University of Connecticut.
- <sup>24</sup> The Center for Public Health and Health Policy. *The Economic Impact of Prevention*. 2008. University of Connecticut.
- <sup>25</sup> The Center for Public Health and Health Policy. *The Economic Impact of Prevention*. 2008. University of Connecticut.
- <sup>26</sup> US Department of Health and Human Services. *Heart Disease and Stroke*. Healthy People 2020. [Online] [Cited April 17, 2013] <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21">http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21</a>
- <sup>27</sup> Connecticut Department of Public Health. Personal Communication. August 16, 2013.
- <sup>28</sup> US Department of Health and Human Services. Cancer. Healthy People 2020. [Online] [Cited April 17, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=5
- <sup>29</sup> US Department of Health and Human Services. Cancer. Healthy People 2020. [Online] [Cited April 17, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=5
- <sup>30</sup> American Cancer Society. *Economic Impact of Cancer*. American Cancer Society. [Online] [Cited June 2, 2013] http://www.cancer.org/cancer/cancerbasics/economic-impact-of-cancer
- 31 http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=8
- <sup>32</sup> Robert Wood Johnson Foundation Commission to Build a Healthier America. *Improving the Health of All Americans through Better Nutrition: Commission Recommendations on Nutrition Policy*. Robert Wood Johnson Foundation. 2009.
- <sup>33</sup> The Center for Public Health and Health Policy. *The Economic Impact of Prevention*. 2008. University of Connecticut.
- <sup>34</sup> American Lung Association, <a href="http://www.lung.org/lung-disease/asthma/learning-more-about-asthma/">http://www.lung.org/lung-disease/asthma/learning-more-about-asthma/</a> and CDC: <a href="http://www.cdc.gov/asthma/faqs.htm">http://www.cdc.gov/asthma/faqs.htm</a>
- <sup>35</sup> Brault MW, Hootman J, Helmick CG, Theis KA, Armour BS. Prevalence and Most Common Causes of Disability among Adults, United States, 2005. *Morbidity and Mortality Weekly Report*. 2009;58(16):421-26.
- <sup>36</sup> US Department of Health and Human Services. *Arthritis, Osteoporosis, and Chronic Back Conditions*. Healthy People 2020. [Online] [Cited April 15, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=3#Ref-02
- <sup>37</sup> US Department of Health and Human Services. Arthritis, Osteoporosis, and Chronic Back Conditions. Healthy People 2020. [Online] [Cited April 15, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=3#Ref-02

- <sup>39</sup> Connecticut Department of Public Health Office of Oral Health. "Every Smile Counts": The Oral Health of Connecticut's Children. Draft Report, 2012.
- <sup>40</sup> US National Library of Medicine, http://www.ncbi.nlm.nih.gov/pubmed/19410676
- <sup>41</sup> Trust for America's Health. *Prevention for a Healthier America: Investments in Disease Prevention Yield Significant Savings, Stronger Communities*. Trust for America's Health. 2009.
- <sup>42</sup> Olshansky SJ, Passaro DJ, Hershow RC, Layden J, Carnes BA, Brody J, Hayflick L, Butler RN, Allison DB, Ludwig DS. A Potential Decline in Life Expectancy in the United States in the 21<sup>st</sup> Century. New England Journal of Medicine. 2005; 352(11): 1138-1145.
- <sup>43</sup> Hung HC, Joshipura KJ, Jiang R, HU FB, Hunter D, Smith-Warner SA, et al. *Fruit and vegetable intake and risk of major chronic disease*. J Natl Cancer Inst 2004; 96(21):1577-84.
- <sup>44</sup> Hiatt RA, Rimer BK. *A new strategy for cancer control research*. Cancer Epidemiol Biomarkers Prev 1999; 8(11): 957-64.
- <sup>45</sup> American Lung Association, <a href="http://www.lung.org/stop-smoking/how-to-quit/why-quit/">http://www.lung.org/stop-smoking/how-to-quit/why-quit/</a>
- <sup>46</sup> Centers for Disease Control, http://www.cdc.gov/vaccines/vac-gen/howvpd.htm
- <sup>47</sup> Centers for Disease Control, http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6135a1.htm
- <sup>48</sup> US Department of Health and Human Services. *Sexually Transmitted Diseases*. Healthy People 2020. [Online] [Cited August 6, 2013]. <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=37">http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=37</a>
- <sup>49</sup> US Department of Health and Human Services. Sexually Transmitted Disease Surveillance 2010. 2011. Centers for Disease Prevention and Control, Division of STD Prevention. [Online] [Cited September 15, 2013] <a href="http://www.cdc.gov/std/stats10/surv2010.pdf">http://www.cdc.gov/std/stats10/surv2010.pdf</a>
- 50 US Department of Health and Human Services. Sexually Transmitted Disease Surveillance 2010. 2011. Centers for Disease Prevention and Control, Division of STD Prevention. [Online] [Cited September 15, 2013] <a href="http://www.cdc.gov/std/stats10/surv2010.pdf">http://www.cdc.gov/std/stats10/surv2010.pdf</a>
- <sup>51</sup> US Department of Health and Human Services. Sexually Transmitted Disease Surveillance 2010. 2011. Centers for Disease Prevention and Control, Division of STD Prevention. [Online] [Cited September 15, 2013] <a href="http://www.cdc.gov/std/stats10/surv2010.pdf">http://www.cdc.gov/std/stats10/surv2010.pdf</a>
- 52 US Department of Health and Human Services. Health Disparities in HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis: Issues, Burden, and Response, A Retrospective Review, 2000-2004. 2007. Centers for Disease Control and Prevention. [Online] [Cited September 15, 2013] http://www.cdc.gov/nchhstp/healthdisparities/
- <sup>53</sup> US Department of Health and Human Services. Sexually Transmitted Disease Surveillance 2010. 2011. Centers for Disease Prevention and Control, Division of STD Prevention. [Online] [Cited September 15, 2013] <a href="http://www.cdc.gov/std/stats10/surv2010.pdf">http://www.cdc.gov/std/stats10/surv2010.pdf</a>
- <sup>54</sup> US Department of Health and Human Services. *Sexually Transmitted Diseases*. Healthy People 2020. [Online] [Cited September 15, 2013] <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/">http://www.healthypeople.gov/2020/topicsobjectives2020/</a>
- 55 US Department of Health and Human Services. Health Disparities in HIV/AIDS, Viral Hepatitis, Sexually Transmitted Diseases, and Tuberculosis: Issues, Burden, and Response, A Retrospective Review, 2000-2004. 2007. Centers for Disease Control and Prevention. [Online] [Cited September 15, 2013] <a href="http://www.cdc.gov/nchhstp/healthdisparities/">http://www.cdc.gov/nchhstp/healthdisparities/</a>
- <sup>56</sup> CDC http://www.cdc.gov/tb/publications/factsheets/general/tb.htm
- <sup>57</sup> Miramontes R, Pratt R, Price SF, Navin TR. *Trends in Tuberculosis: United States, 2012*. Morbidity and Mortality Weekly Report. 2013; 62(11): 201-205.
- 58 CDC http://www.cdc.gov/hepatitis/hcv/pdfs/hepctesting-diagnosis.pdf

<sup>&</sup>lt;sup>38</sup> US Department of Health and Human Services. *Arthritis, Osteoporosis, and Chronic Back Conditions*. Healthy People 2020. [Online] [Cited April 15, 2013] http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=3#Ref-02

- <sup>59</sup> CDC http://www.cdc.gov/niosh/topics/westnile/ and http://www.cdc.gov/lyme/
- <sup>60</sup> Adams DA, Gallagher KM, Jajosky RA, et al. *Summary of Notifiable Diseases: United States, 2011*. Morbidity and Mortality Weekly Reports. 2013; 60(53): 1-120.
- <sup>61</sup> US Department of Health and Human Services. *Injury and Violence Prevention*. Healthy People 2020. [Online] [Cited June 11, 2013]
  - http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24#two
- <sup>62</sup> Finkelstein EA, Corso PS, Miller TR. *Incidence and Economic Burden of Injuries in the United States. 2006.* Oxford: Oxford University Press.
- 63 CDC http://www.cdc.gov/homeandrecreationalsafety/images/cdc\_guide-a.pdf
- <sup>64</sup> Stevens JA, Corso PS, Finkelstein EA, Miller TR. *The Costs of Fatal and Non-Fatal Falls among Older Adults*. Injury Prevention. 2006; 12: 290-295.
- <sup>65</sup> Connecticut Department of Public Health, Vital Statistics, 2010, Table 10.
- <sup>66</sup> CDC: http://www.cdc.gov/healthyhomes/bytopic/poisoning.html
- <sup>67</sup> CDC http://www.cdc.gov/mmwr/preview/mmwrhtml/su6203a28.htm
- <sup>68</sup> Center for Disease Control and Prevention, *Protect the Ones You Love: Child Injuries are Preventable*. http://www.cdc.gov/SafeChild/Sports Injuries/index.html
- <sup>69</sup> US Department of Health and Human Services. *Occupational Safety and Health.* Healthy People 2020. [Online] [Cited June 11, 2013]. <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=30">http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=30</a>
- 70 US Department of Health and Human Services. Mental Health and Mental Disorders. Healthy People 2020.
  [Online] [Cited October 6, 2013].
  - http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28
- <sup>71</sup> US Department of Health and Human Services. *Mental Health and Mental Disorders*. Healthy People 2020. [Online] [Cited October 6, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28
- <sup>72</sup> US Department of Health and Human Services. *Mental Health and Mental Disorders*. Healthy People 2020. [Online] [Cited October 6, 2013].
  - http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28
- <sup>73</sup> US Department of Health and Human Services. *Mental Health and Mental Disorders*. Healthy People 2020. [Online] [Cited October 6, 2013]. <a href="http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28">http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=28</a>
- <sup>74</sup> HP2020 http://www.healthypeople.gov/2020/LHI/mentalHealth.aspx
- <sup>75</sup> HP2020: http://www.healthypeople.gov/2020/LHI/substanceAbuse.aspx
- <sup>76</sup> Trust for America's Health. *Prescription Drug Abuse: Strategies to Stop the Epidemic.* October, 2013. Trust for America's Health.
- <sup>77</sup> Green TC, Grau LE, Carver HW, Kinzly M, Heimer R. *Epidemiologic Trends and Geographic Patterns of Fatal Opioid Intoxications in Connecticut, USA*: 1997-2007. Drug and Alcohol Dependence. 2001; 115: 221-228.
- <sup>78</sup> APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents. *Children and Trauma: Update for Mental Health Professionals*. 2008. American Psychological Association.
- <sup>79</sup> Kubzansky LD and Koenen KC. *Is Posttraumatic Stress Disorder Related to Development of Heart Disease? An update*. Cleveland Clinic Journal of Medicine. 2009; 76(2): S60-S65.
- <sup>80</sup> Gupta RS, Zhang X, Springston EE, Sharp LK, Curtis LM, Shalowitz M, Shannon JJ, Weiss KB. *The Association Between Community Crime and Childhood Asthma Prevalence*. Annals of Allergy Asthma Immunology. 2010; 104: 299-306.
- <sup>81</sup> APA Presidential Task Force on Posttraumatic Stress Disorder and Trauma in Children and Adolescents. *Children and Trauma: Update for Mental Health Professionals*. 2008. American Psychological Association.
- 82 National Center for Trauma-Informed Care, http://www.samhsa.gov/nctic/

<sup>&</sup>lt;sup>83</sup> US Department of Health and Human Services. *Access to Health Services*. Healthy People 2020. [Online] [Cited September 16, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1

<sup>&</sup>lt;sup>84</sup> US Department of Health and Human Services. *Access to Health Services*. Healthy People 2020. [Online] [Cited September 16, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1

National Association of Public Hospitals and Health Systems. Safety Net Health Systems: An Essential Partner in Reducing Health Care Disparities. National Association of Public Hospitals and Health Systems. [Online] [Cited September 25, 2013] <a href="http://www.naph.org/Main-Menu-Category/Publications/Disparities/HCR-Health-Disparities.aspx">http://www.naph.org/Main-Menu-Category/Publications/Disparities/HCR-Health-Disparities.aspx</a>

<sup>&</sup>lt;sup>86</sup> HP2020: http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=35

<sup>&</sup>lt;sup>87</sup> US Department of Health and Human Services. Access to Health Services. Healthy People 2020. [Online] [Cited September 16, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1

<sup>&</sup>lt;sup>88</sup> US Department of Health and Human Services. Access to Health Services. Healthy People 2020. [Online] [Cited September 16, 2013]. http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=1