Connecticut Health Scorecard

December 18, 2007

The Business Council of Fairfield County
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EXECUTIVE SUMMARY

> *The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.* (World Health Organization Constitution)

The failure of the federal government to enact comprehensive health care reform has forced states to experiment with a variety of health care reform strategies. Without doubt, healthcare has emerged as a top issue in Connecticut. During the past legislative session, the Connecticut legislature created two new health-related planning entities, (1) a HealthFirst Connecticut Authority to recommend alternatives for affordable quality health care coverage for un- and underinsured people and cost containment measures and insurance financing mechanisms and (2) a Statewide Primary Care Authority to develop a universal system for providing primary care services, including prescription drugs, to all Connecticut residents. Both panels will be issuing their reports in December 2008 setting the stage for the 2010 Connecticut gubernatorial campaign.

Our health care system is one of the costliest in the world and has serious gaps in quality. Further too many Americans lack access to appropriate health care due to the lack of health insurance. We believe that quality, cost, and access of the health care system are interrelated and that all three factors must be addressed in Connecticut's health care reform strategy. The purpose of the health care system is to reduce continually the burden of illness, injury, and disability, and to improve the health status and functioning of the people of the United States.[1] Expanding access to a system that does not deliver necessary services will not result in optimal health outcomes which should be our primary goal. Recent studies indicate that U.S. adults receive half of the recommended services.[2] Similar results were reported for our nation's youngest citizens.[3] The status quo is no longer acceptable or sustainable.

In 2006, the Business Council of Fairfield County issued the *Connecticut Health Scorecard*. The Scorecard measured 26 indicators of Connecticut's health. The Scorecard clearly showed areas where Connecticut excels as a state, but more importantly, it reveals many more areas where Connecticut lags behind the rest of the nation and in some cases, ranks in the bottom 50 percent of states. The Scorecard pointed to a number of troubling factors, such as personal behaviors, risk factors, and health policies that threaten to undermine the health of Connecticut's residents and workforce.

The 2007 Scorecard reports on areas where Connecticut has made progress as well as areas where additional interventions are needed. Here are our key findings:

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[1] Institute of Medicine, *To Err is Human: Building a Safer Health Care System*, November 1999, http://www.iom.edu/file.asp?id=4117

[2] Rand Health, The First National Report Card on Health in America, 2006, Santa Monica, CA, www.rand.org

[3] Mangione-Smith, Rita, et al., The Quality of Ambulatory Care Delivered to Children in the United States, The New England Journal of Medicine, 357:15, October 11, 2007, www.NEJM.org.

- **Premiums for employer sponsored health insurance in Connecticut are among the highest in the nation.** Cost is the major reason why employers and employees do not have health insurance. Connecticut health care premiums for single coverage are the fifth costliest in the nation at $4,390 per year and health care premiums in Connecticut for family coverage are the 3rd costliest in the nation at $11,717.

- **Too many Connecticut residents do not have access to appropriate healthcare due to the lack of health insurance.** Simply put, not having health insurance is bad for your health.
    - Health insurance is a major factor affecting access to the nation's health care system. Those without health insurance are less likely to have a regular source of health care than their insured counterparts. The uninsured are less likely to receive preventative care, more likely to be hospitalized for avoidable health problems, and are more likely to be diagnosed in late stages of disease. Some 325,000 persons in Connecticut lack health insurance. It is unacceptable that anyone should lack health insurance.
    - When the uninsured are unable to pay their medical expenses those costs are passed on to others in the form of higher fees.

- **The rising prevalence of chronic disease contributes to increased health care costs and demand for services**.
    - Connecticut ranks 40th in the nation in cancer incidence per 100,000 people, 40th in adult asthma, and 25th in childhood asthma.
    - Connecticut like the rest of the nation faces an obesity epidemic. More than 1 out of 5 adults in Connecticut are classified as obese and nearly 6 out of 10 adults are overweight or obese. Obesity has serious health consequences for children and adults and comes with some staggering health costs.
    - Mental illness is a major source of disability, distress, and social burden. Frequent mental distress is a proxy for depression and anxiety disorders. Approximately nine percent of Connecticut adults suffer from frequent mental distress.
    - Over one-fourth (27.8 percent) of Connecticut High School students engaged in episodic heavy drinking in the in 2005. Research is showing that alcohol consumption has detrimental affects on the developing brain.

- **Connecticut has one of the highest average medical malpractice claims paid out in the nation ranking 48th in the nation.**
    - High malpractice awards are believed to be one of the factors that have contributed to the high cost of medical malpractice insurance. While the issue of medical malpractice tort reform is a contentious issue, the escalating cost of medical malpractice insurance premiums and the departure of many insurance companies from the medical malpractice marketplace has created an affordability and availability crisis in certain areas of the United States. Both the Connecticut Insurance Department and the Program Review and Investigations Committee agree that the medical malpractice insurance market in Connecticut is not competitive.
    - The high cost of medical malpractice insurance is especially a concern in Connecticut because physicians and surgeons are among the seven categories of practitioners who must maintain insurance coverage if they provide direct patient care.

- **Many Connecticut residents are not getting recommended preventive services indicating gaps in the quality of care.** Immunization of children and adults against life-threatening diseases represents one of the greatest triumphs of the public health system in the United States, and one of the best bargains in medicine in terms of cost effectiveness. Connecticut falls short on many national goals for immunization and preventive screenings. Once a national leader on childhood immunizations, Connecticut now ranks 6th nationally. Connecticut adult immunization lags behind childhood immunization leaving many adults unprotected from influenza and pneumonia. The national goal is to raise immunization coverage to 90 percent. More than one out of ten mothers did not receive early prenatal care. Prenatal care is more likely to be effective if women begin receiving care early in pregnancy.

- **Health disparities are prevalent**. The Black and Hispanic population generally fare worse on most health indicators and health outcome measures.

- **Connecticut's spending on prevention is sub-optimal.** While a number of measures have been introduced to curb smoking and exposure to second hand smoke since the 1964 Surgeon General's first report on smoking, too many individuals continue to smoke putting their lives and those around them at risk for serious disease.
    - In Connecticut, 17 percent of adults aged 18 and over smoke up in 2007 up from 16.5% the previous year.
    - Despite receiving funding from tobacco revenues and the state tobacco lawsuit settlement, Connecticut invests only minimal funding to prevent or reduce tobacco use. Connecticut's FY07 tobacco prevention spending is $2 million or about 9.4% of the recommended CDC funding level of $21.2 million earning Connecticut the rank of 36 nationally. Annual tobacco industry marketing is estimated at $13.4 billion with an estimated $121.1 million spent in Connecticut!

- **Assuring an adequate health care workforce is an essential public health service.** However, Connecticut does not have a good system for tracking the available health care workforce in Connecticut. Connecticut's data system only reports the number of licenses issued; it does not indicate whether or not licensee is currently practicing, caring for patients, or specialty area. Since many individuals hold more than one license, the figures appear to overstate the number of potential health care providers.

- **Consumers want and should have an open and transparent system that will provide quality and price information sufficient to make an informed decision when choosing a health care provider, health plan, or treatment.** Connecticut does not have an adequate system for providing this information to consumers. Connecticut's medical error reporting system appears to understate the number of medical errors and does not provide hospital specific information. A healthcare associated infection (HAI) reporting system is just getting underway but will only deal with a limited number of HAI. A robust system that reports facility and doctor specific information is needed to assist consumers in making informed decisions.

As the Health First Connecticut Authority and the Statewide Primary Care Authority begin their important work, we offer the following policy recommendations for their consideration:

1. **First, make Health our top priority.** Our overarching goal should be a commitment

to health and well-being. Connecticut should commit to the following goal:

"Connecticut will be the healthiest state in the nation, with individuals accepting responsibility for healthy living and high quality health care delivered by the most effective, efficient, safe, timely, patient centered and equitable health care system. All residents will have access to health coverage that is universal, continuous, affordable to individuals and families, affordable and sustainable for the state and its employers, and that enhances health and well being."

2. **All elements of the health care system should be aligned to reduce continually the burden of illness, injury and disability and to improve the health status of Connecticut's residents.** Individuals, health care providers, health insurers, employers, and governments all have a role in the health care system and therefore should be working in concert to improve health status of the population and to reduce the burden of disease. Elimination of health disparities must be an objective of our efforts.

   a. **The State of Connecticut** should undertake a dispassionate, careful, and transparent examination of health insurance benefits mandated in Connecticut. A qualified consultant should be retained to undertake this review. A broad-based stakeholder steering committee, including clinicians, insurers, health care advocates, bioethicists, employers and consumers, should be created to guide the work with the consultant. An outcome of this effort is to ensure insurance coverage will provide access to care that will reduce the burden of illness, injury, and disability and improve the health status of the individual, not to develop limited-benefit plans. The study should also include recommendation for establishment of a credible on-going mechanism to evaluate additional health benefits that may be proposed in the future.

   b. **Individuals** should be encouraged to be responsible for their own health, to purchase health insurance, to take an active role in improving their health, and to be actively engaged in their own health care. Coverage should provide incentives that encourage individuals to be health-, cost-, and quality- conscious in their health and health care decisions.

   c. **Employers** should promote health and wellness at their worksites. They should:
      - Encourage employees to take an active role in improving their health.
      - Empower employees with evidence-based tools to more actively participate in decisions concerning their health and health care.
      - Purchase health care that enhances health and well being by promoting access to high quality care that is effective, efficient, safe, timely, patient centered and equitable**.**

   d. **Insurers** should be required to provide coverage to anyone in the individual market independent of their medical conditions (guaranteed issue) who applies and pays the premium. Strong protections should be instituted prohibiting insurers from charging excessive premiums, limiting benefits, or refusing to renew coverage.

   e. **Health care providers** should be responsible for providing only high quality evidence based care as cost effectively and efficiently as possible. They must be fairly reimbursed for their services, including time spent educating and coaching patients. The unintended consequences of the "fee for service" payment system need to be re-evaluated. Payment systems need to reward doctors who consistently deliver evidence based care and are more cost effective.

3. **Connecticut must focus efforts on all three levels of disease prevention**. Prevention and chronic disease management should be a priority. Over 75 percent of health care spending is on chronic disease that is largely preventable. As a first step, Connecticut should increase its investment in effective state and local programs to prevent and reduce tobacco use and obesity and to increase the immunization rate of children and adults.

   Each state and municipal agency and department should identify how it can contribute to improved health status and quality of life for all of Connecticut residents and align their policies and programs accordingly. The nation's disease prevention and health promotion agenda, Healthy People 2010, provides a framework for each state and municipal agency and department to follow. State officials need to track population health data and outcomes and use this data to make fact-based decisions that will drive performance of the entire health care system. Results based accountability needs to be institutionalized within the executive branch of government with the Office of Policy and Management being designated as the lead agency. Performance information should be posted on a Health Information Portal so that progress can be tracked.

4. **Improve the efficiency of the health care system.** Incentives need to be provided to avoid wasting health care resources. Connecticut should encourage adoption of health information technology, including electronic medical records, Computerized Physician Order Entry system (CPOE), etc. The New England Journal of Medicine and McKinsey report high administrative expenses associated with the U.S. health care system. A detailed analysis of administrative expenses should be undertaken relative to our multi-payer system to more fully understand where efficiencies can be achieved.

5. **Connecticut should become a national leader in the information it provides to public and private sector leaders, policy makers, and consumers to improve community and individual health.** We need an open and transparent system that provides consumers and purchasers of health care with cost and quality information in order to make better decisions when selecting a health plan, hospital, clinical practice, or treatment plan. During the past session, the Legislature authorized the Connecticut Department of Public Health and UConn Health Center to develop a Connecticut Health Information Network plan. The first order of business should be to develop Health Information Portal that provides cost and quality information to consumers and purchasers of health care.

   Connecticut needs to develop a robust statewide reporting system for quality and patient safety including adverse events, healthcare associated infection rates, etc. that are provider specific. Deficits in health care quality pose a serious threat to the health of Connecticut's residents and come with a huge price tag adding billions in unnecessary health care expenditures.

6. **Study feasibility and effectiveness of alternative injury compensation systems that are patient-centered and focused on safety.** The study should include an analysis of policies requiring immediate and open disclosure and apology to patients when medical care goes wrong (e.g. the consensus statement of Harvard Hospital), health courts, and "no fault medical compensation boards" (e.g. New Zealand Accident Compensation Corporation).

7. **Stop paying for poor quality of care.** Reform the payment system to improve safety and quality of care and to reduce errors. Health care providers should waive costs associated with National Quality Forum's List of Never Events and not seek reimbursement from the patient or third party payers. These events include surgery

on the wrong body part; surgery performed on the wrong patient; incorrect surgery performed on a patient; retention of a foreign object inside a patient after surgery; and death during or immediately after surgery.

8. **Proactively address any potential conflict of interests in the health care system.** A recent study by McKinsey & Company found that physician frequently co-own outpatient facilities and diagnostic testing and procedure laboratories and receive a share of profits from these facilities.[4] Other sources of potential conflict of interest are the relationship between private industry and the medical community. A study in the New England Journal of Medicine reported that virtually all physicians (94%) had some type of relationship with private industry.[5] Most commonly, physicians report receiving food and beverages in the workplace (83%) or being given drug samples by a manufacturer's representative (78%). More than one third of physicians (35%) receive reimbursement for costs associated with professional meetings or continuing medical education, and more than one quarter (28%) receive payments for consulting, speaking, or enrolling patients in trials.[6] Private industry's relationship is not limited to just individual physicians. A recent study reported in the Journal of the American Medical Association indicated that almost two thirds of the Department Chairs at medical academic institutions had some form of personal relationships with private industry[7].

   Some states have implemented disclosure laws related to payments made to physicians by pharmaceutical and medical device providers. The Pharma Voluntary Code on Interactions with Healthcare Professionals could serve as a basis for possible legislative action.

9. **Connecticut must ensure an adequate supply of qualified allied health professionals.** Connecticut's future on-line licensing should be developed to determine information on the current healthcare workforce such as who is currently practicing and in what specialty area as well as who is providing direct patient care. Connecticut must increase the supply of nursing and allied health care professionals. Higher education must develop the infrastructure to graduate more health care professionals. Additionally, Connecticut needs to provide incentives to encourage more individuals to enter healthcare professions. Connecticut should consider joining the Nurse Licensure Compact which allows a nurse to have one license (in his or her state of residency) and to practice in other states (both physical and electronic), subject to each state's practice law and regulation.

10. **Connecticut must do a better job addressing substance abuse.** The State of Connecticut should retain a consultant under the auspices of the Connecticut Office of Policy and Management to develop a comprehensive substance abuse plan to address this serious issue. A broad-based stakeholder steering committee should be created to guide the work with the consultant.

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[4] McKinsey & Company, Accounting for the Cost of Health Care in the United States, January 2007, www.mckinsey.com/mgi.

[5] Eric G. Campbell, Ph.D, Doctors and Drug Companies-Scrutinizing Influential Relationships, New England Journal of Medicine 357:18, http://content.nejm.org/cgi/content/full/357/18/1796

[6] Ibid.

[7] Eric G. Campbell, Ph.D, et al., Institutional Academic-Industry Relationships, *JAMA.* 2007;298:1779-1786, http://jama.ama-assn.org/cgi/content/abstract/298/15/1779

2007 Connecticut Health Scorecard — How are we doing?

	US	CT	State Ranking CT	State Ranking Best	Fairfield County	National Goal	CT Score*
Health indicators							
■ Asthma							
❑ Childhood	8.9%	8.7%	25	Idaho		No goal for these indicators	
❑ Adult	8.5%	↑ 9.3%	40	Louisiana	8.7%		
■ Cancer incidence per 100,000	459.9	↓ 489.4	40	New Mexico		No goal for this indicator	
■ Diabetes	7.5%	↔ 6.4%	7	Colorado	5.9%	2.5%	
■ Hypertension	25.5%	↓ 23.8%	12	Utah	22.7%	14%	
■ Mental Health and Substance Abuse							
❑ Mental Distress	10.0%	↔ 9.0%	18	North Dakota		No goal for these indicators	
❑ Youth Episodic Heavy Drinking	25.5%	27.8%	24	Utah			
■ Obesity	25.1%	↔ 20.6%	3	Colorado	17.8%	15%	
■ Oral Health							
❑ Dental visit in past 12 months	70.3%	↔ 80.5%	1	**CT**	80.4%	No goal for this indicator	
❑ Had all teeth extracted (age 65+)	19.3%	↔ 12.8%	2	Hawaii	9.9%	22%	
Smokers	20.1%	↑ 17.0%	4	Utah	14.5%	12%	
Community Risk Factors							
■ Medical errors						Safe, high quality health care.	
■ Medical Malpractice Claims							
❑ Number per 1,000 active, nonfederal physicians	17.1	↓10.0	24	Alabama		Eliminate errors.	
❑ Average claim payments paid	$308,593	↓ $500,276	48	Nebraska			
Health Care Access							
■ Uninsured (percent)	15.8%	↓9.4%	6	Rhode Island		0% uninsured	
■ Health Insurance Premium						Affordable, sustainable premiums.	
❑ Single coverage	$3,991	↑ $4,390	47	Hawaii			
❑ Family coverage	$10,728	↑ $11,717	49	North Dakota			
■ Health Care Workforce							
❑ Physicians per 100,000 population	281	369	5	District of Columbia		Competent, diverse to meet demand	
❑ Nurses per 100,000 population	799	972	9	District of Columbia			
Health Policies							
■ Vaccination Rates							
❑ Childhood vaccination	80.0%	↓ 85.0%	6	FL, MA		90%	
❑ Adult flu shot	65.5%	↔71.1%	20	Minnesota	71.6%	90%	
❑ Adult pnemococcal vaccination	64.5%	↓ 68.1%	22	North Dakota	67.1%	90%	
■ Early Prenatal Care (1st Trimester)	83.9%	↓ 87.2%	8	Rhode Island		90%	
■ Per capita public health spending	$164	↑ $173	18	Hawaii, Alaska		No goal for this indicator	
Outcomes							
■ Heart Disease Deaths per 100,000 population	232.3	↓ 201.8	18	Minnesota		162.0	
■ Cancer Deaths per 100,000 population	190.1	↓ 182.1	15	Utah		158.6	
■ Infant Deaths per 1,000 live births	6.9	↓ 6.0	13	New Hampshire		4.5	

Notes: State rank of **#1** is the best; rank of **#51** is the worst. The National Goal is based upon Healthy People 2010 that is a comprehensive set of disease prevention and health promotion objectives for the nation to achieve over the first decade of the new century. There are 28 focus areas and measurable objectives. We did not include all measurable objectives.

↑↔↓ Indicates the direction of trend **Red** Indicates a worsening trend **Green** Indicates an improving trend **Blue** Indicates stable/no change

A question is assigned if data is inconclusive or limited.

A star is assigned if trend is improving or stable and state rank is 1-12.

Warning lights assigned if trend is worsening and state rank is 1-12 or state and is 13-38 with any trend.

An alarm is assigned if any trend and state rank is 39-50.

Source: The Business Council of Fairfield County, 2007 Connecticut Scorecard, November 2007.

Connecticut Health Scorecard

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INTRODUCTION

The failure of the federal government to enact comprehensive health care reform has forced states to experiment with a variety of health care reform strategies. Without doubt, healthcare has emerged as a top issue in Connecticut. During the past legislative session, the Connecticut legislature created two new health-related planning entities, (1) a HealthFirst Connecticut Authority to recommend alternatives for affordable quality health care coverage for un- and underinsured people and cost containment measures and insurance financing mechanisms and (2) a Statewide Primary Care Authority to develop a universal system for providing primary care services, including prescription drugs, to all Connecticut residents. Both panels will be issuing their reports in December 2008 setting the stage for the 2010 Connecticut gubernatorial campaign.

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   State officials need to track population health data and outcomes and use this data to make fact-based decisions that will drive performance of the entire health care system. Results based accountability needs to be institutionalized within the executive branch of government with the Office of Policy and Management being designated as the lead agency. Performance information should be posted on a Health Information Portal so that progress can be tracked.

4. **Improve the efficiency of the health care system.** Incentives need to be provided to avoid wasting health care resources. Connecticut should encourage adoption of health information technology, including electronic medical records, Computerized Physician Order Entry system (CPOE), etc. The New England Journal of Medicine and McKinsey report high administrative expenses associated with the U.S. health care system. A detailed analysis of administrative expenses should be undertaken relative to our multi-payer system to more fully understand where efficiencies can be achieved.

5. **Connecticut should become a national leader in the information it provides to public and private sector leaders, policy makers, and consumers to improve community and individual health.** We need an open and transparent system that provides consumers and purchasers of health care with cost and quality information in order to make better decisions when selecting a health plan, hospital, clinical practice, or treatment plan. During the past session, the Legislature authorized the Connecticut Department of Public Health and UConn Health Center to develop a Connecticut Health Information Network plan. The first order of business should be to develop Health Information Portal that provides cost and quality information to consumers and purchasers of health care.

   Connecticut needs to develop a robust statewide reporting system for quality and patient safety including adverse events, healthcare associated infection rates, etc. that are provider specific. Deficits in health care quality pose a serious threat to the health of Connecticut's residents and come with a huge price tag adding billions in unnecessary health care expenditures.

6. **Study feasibility and effectiveness of alternative injury compensation systems that are patient-centered and focused on safety.** The study should include an analysis of policies requiring immediate and open disclosure and apology to patients when medical care goes wrong (e.g. the consensus statement of Harvard Hospital), health courts, and "no fault medical compensation boards" (e.g. New Zealand Accident Compensation Corporation).

7. **Stop paying for poor quality of care.** Reform the payment system to improve safety and quality of care and to reduce errors. Health care providers should waive costs associated with National Quality Forum's List of Never Events and not seek reimbursement from the patient or third party payers. These events include surgery on the wrong body part; surgery performed on the wrong patient; incorrect surgery performed on a patient; retention of a foreign object inside a patient after surgery; and death during or immediately after surgery.

8. **Proactively address any potential conflict of interests in the health care system.** A recent study by McKinsey & Company found that physicians frequently co-own outpatient facilities and diagnostic testing and procedure laboratories and receive a share of profits from these facilities.[11] Another source of potential conflict of interest is the relationship between private industry and the medical community. A study in the New England Journal of Medicine reported that virtually all physicians (94%) had some type of relationship with private industry.[12] Most commonly, physicians report receiving food and beverages in the workplace (83%) or being given drug samples by a manufacturer's representative (78%). More than one third of physicians (35%) receive reimbursement for costs associated with professional meetings or continuing medical education, and more than one quarter (28%) receive payments for consulting, speaking, or enrolling patients in trials.[13] Private industry's relationship is not limited to just individual physicians. A recent study reported in the Journal of the American Medical Association indicated that almost two thirds of the Department Chairs at medical academic institutions had some form of personal relationships with private industry. Some states have implemented disclosure laws related to payments made to physicians by pharmaceutical and medical device providers.[14] The Pharma Voluntary Code on Interactions with Healthcare Professionals could serve as a basis for possible legislative action.

9. **Connecticut must ensure an adequate supply of qualified allied health professionals.** Connecticut's future on-line licensing should be developed to determine information on the current healthcare workforce such as who is currently practicing and in what specialty area as well as who is providing direct patient care. Connecticut must increase the supply of nursing and allied health care professionals. Higher education must develop the infrastructure to graduate more health care professionals. Additionally, Connecticut needs to provide incentives to encourage more individuals to enter healthcare professions. Connecticut should consider joining the Nurse Licensure Compact which allows a nurse to have one license (in his or her state of residency) and to practice in other states (both physical and electronic), subject to each state's practice law and regulation.

10. **Connecticut must do a better job addressing substance abuse.** The State of Connecticut should retain a consultant under the auspices of the Connecticut Office of Policy and Management to develop a comprehensive substance abuse plan to address this serious issue. A broad-based stakeholder steering committee should be created to guide the work with the consultant.

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[11] McKinsey & Company, Accounting for the Cost of Health Care in the United States, January 2007, www.mckinsey.com/mgi.

[12] Eric G. Campbell, Ph.D, Doctors and Drug Companies-Scrutinizing Influential Relationships, New England Journal of Medicine 357:18, http://content.nejm.org/cgi/content/full/357/18/1796

[13] Ibid.

[14] Eric G. Campbell, Ph.D, et al., Institutional Academic-Industry Relationships, *JAMA.* 2007;298:1779-1786, http://jama.ama-assn.org/cgi/content/abstract/298/15/1779

2007 Connecticut Health Scorecard — How are we doing?

	US	CT	State Ranking CT	State Ranking Best	Fairfield County	National Goal	CT Score*
Health indicators							
■ Asthma							
❑ Childhood	8.9%	8.7%	25	Idaho		No goal for these indicators	
❑ Adult	8.5%	↑ 9.3%	40	Louisiana	8.7%		
■ Cancer incidence per 100,000	459.9	↓ 489.4	40	New Mexico		No goal for this indicator	
■ Diabetes	7.5%	↔ 6.4%	7	Colorado	5.9%	2.5%	
■ Hypertension	25.5%	↓ 23.8%	12	Utah	22.7%	14%	
■ Mental Health and Substance Abuse							
❑ Mental Distress	10.0%	↔ 9.0%	18	North Dakota		No goal for these indicators	
❑ Youth Episodic Heavy Drinking	25.5%	27.8%	24	Utah			
■ Obesity	25.1%	↔ 20.6%	3	Colorado	17.8%	15%	
■ Oral Health							
❑ Dental visit in past 12 months	70.3%	↔ 80.5%	1	**CT**	80.4%	No goal for this indicator	
❑ Had all teeth extracted (age 65+)	19.3%	↔ 12.8%	2	Hawaii	9.9%	22%	
Smokers	20.1%	↑ 17.0%	4	Utah	14.5%	12%	
Community Risk Factors							
■ Medical errors						Safe, high quality health care.	
■ Medical Malpractice Claims							
❑ Number per 1,000 active, nonfederal physicians	17.1	↓10.0	24	Alabama		Eliminate errors.	
❑ Average claim payments paid	$308,593	↓ $500,276	48	Nebraska			
Health Care Access							
■ Uninsured (percent)	15.8%	↓9.4%	6	Rhode Island		0% uninsured	
■ Health Insurance Premium						Affordable, sustainable premiums.	
❑ Single coverage	$3,991	↑ $4,390	47	Hawaii			
❑ Family coverage	$10,728	↑ $11,717	49	North Dakota			
■ Health Care Workforce							
❑ Physicians per 100,000 population	281	369	5	District of Columbia		Competent, diverse to meet demand	
❑ Nurses per 100,000 population	799	972	9	District of Columbia			
Health Policies							
■ Vaccination Rates							
❑ Childhood vaccination	80.0%	↓ 85.0%	6	FL, MA		90%	
❑ Adult flu shot	65.5%	↔71.1%	20	Minnesota	71.6%	90%	
❑ Adult pnemococcal vaccination	64.5%	↓ 68.1%	22	North Dakota	67.1%	90%	
■ Early Prenatal Care (1st Trimester)	83.9%	↓ 87.2%	8	Rhode Island		90%	
■ Per capita public health spending	$164	↑ $173	18	Hawaii, Alaska		No goal for this indicator	
Outcomes							
■ Heart Disease Deaths per 100,000 population	232.3	↓ 201.8	18	Minnesota		162.0	
■ Cancer Deaths per 100,000 population	190.1	↓ 182.1	15	Utah		158.6	
■ Infant Deaths per 1,000 live births	6.9	↓ 6.0	13	New Hampshire		4.5	

Notes: State rank of **#1** is the best; rank of **#51** is the worst. The National Goal is based upon Healthy People 2010 that is a comprehensive set of disease prevention and health promotion objectives for the nation to achieve over the first decade of the new century. There are 28 focus areas and measurable objectives. We did not include all measurable objectives.

↑↔↓ Indicates the direction of trend **Red** Indicates a worsening trend **Green** Indicates an improving trend **Blue** Indicates stable/no change

A question is assigned if data is inconclusive or limited.

A star is assigned if trend is improving or stable and state rank is 1-12.

Warning lights assigned if trend is worsening and state rank is 1-12 or state and is 13-38 with any trend.

An alarm is assigned if any trend and state rank is 39-50.

Source: The Business Council of Fairfield County, 2007 Connecticut Scorecard, November 2007.

Health indicators

Asthma

Asthma represents a significant public health burden ranking in the top ten most common diagnoses in emergency department visits and outpatient visits.[15] Asthma is a chronic disease of the airways that causes symptoms such as wheezing, trouble breathing, chest tightness, and coughing.[16] The Connecticut Department of Public Health (DPH) considers asthma to be a serious public health problem in Connecticut.[17] Direct and indirect costs associated with asthma in Connecticut during 2001 were estimated at $268.3 million.[18]

CHILDHOOD ASTHMA[19]

Connecticut Target: no goal set for this measure 2003: 8.7 percent

What does this measure?

The percent of children, age 0-17 years, who currently have asthma.

How are we doing?

Asthma is one of the most common chronic diseases of childhood.[20] Inflammation of the airways is the common finding in all asthma patients. Recent studies indicate that this inflammation is virtually always causative in the asthmatic condition. This inflammation is produced by allergy, viral respiratory infections, and airborne irritants among others. Childhood asthma is a disorder with genetic predispositions and a strong allergic component.

Nationally, 8.9 percent of children have asthma; in Connecticut, 8.7 percent of children have asthma. Connecticut ranks 25th nationally in terms of childhood asthma, with Idaho ranking #1 with the lowest percent of childhood asthma and Hawaii and Delaware ranking #50 with the highest percent of childhood asthma in the nation.

Percent of Children with Asthma
2003

	Percent
United States	8.9%
Connecticut	8.7%

Source: National Survey of Children's Health, 2003, Maternal and Child Health Bureau, U.S. Department of Health and Human Services, http://nschdata.org/, January 3, 2006.

[15] HealthyPeople, Healthy People 2010-Chapter 24 Respiratory Disease, www.healthypeople.gov/document/HTML/Volume2/24Respiratory.htm, p. 3.
[16] U.S. Department of Health and Human Services, National Institute of Health, National Heart, Lung, and Blood Institute, What is Asthma?, http://www.nhlbi.nih.gov/health/dci/Diseases/Asthma/Asthma_WhatIs.html.
[17] Connecticut Department of Public Health, Connecticut State Asthma Plan, http://www.dph.state.ct.us.
[18] Ibid., p. 2
[19] At the time of this publication, the most current information available from the National Survey of Children's Health is 2003. Therefore, data is the same as reported in the 2006 Scorecard.
[20] American Lung Association, Childhood Asthma Overview, http://www.lungusa.org/site/apps/s/content.asp?c=dvLUK9O0E&b=34706&ct=67436

Percent of Children with Asthma, 2003

Rank		Asthma Percent
	Nationwide	**8.9%**
1	Idaho	5.7%
2	South Dakota	5.8%
3	Minnesota	6.2%
3	Utah	6.2%
5	Oregon	6.5%
5	Wyoming	6.5%
7	Iowa	6.6%
7	North Dakota	6.6%
9	Nebraska	6.8%
10	Nevada	7.0%
11	Montana	7.1%
12	Washington	7.4%
13	California	7.5%
14	Illinois	7.6%
15	Colorado	7.7%
16	New Hampshire	7.9%
17	Vermont	8.1%
18	Alaska	8.3%
19	Arkansas	8.3%
20	Pennsylvania	8.4%
20	Virginia	8.4%
22	New Jersey	8.5%
23	Arizona	8.6%
23	Tennessee	8.6%
25	**Connecticut**	**8.7%**
25	Missouri	8.7%
25	Wisconsin	8.7%
28	New Mexico	8.9%
29	North Carolina	9.0%
30	Mississippi	9.1%
31	Oklahoma	9.2%
32	South Carolina	9.3%
33	Florida	9.5%
34	Alabama	9.6%
34	Georgia	9.6%
36	New York	10.0%
36	Ohio	10.0%
36	Texas	10.0%
39	Michigan	10.1%
39	Rhode Island	10.1%
41	Kentucky	10.2%
42	Massachusetts	10.3%
43	Maryland	10.4%
44	Kansas	10.6%
45	Louisiana	10.7%
45	Maine	10.7%
47	Indiana	10.9%
48	West Virginia	11.1%
49	District of Columbia	11.8%
50	Delaware	11.9%
50	Hawaii	11.9%

Source: National Survey of Children's Health, 2003,http://nschdata.org/, January 3, 2006.

ADULT ASTHMA

Connecticut Target: no goal set for this measure 2006: 9.3 percent

What does this measure?

The percent of adults aged 18 years and over, who currently have asthma.

How are we doing?

Nationally, 8.5 percent of adults have asthma. Connecticut ranks 40th nationally in terms of adult asthma tied with Vermont with 9.3 percent of adults who have asthma. Louisiana ranked 1st with the lowest percent of adult asthma and Rhode Island ranked 51st with the highest percent of adult asthma in the nation.

Percent of Adults with Asthma

	2002	2003	2004	2005	2006
United States	7.6%	7.5%	8.2%	8.0%	8.5%
Connecticut	8.5%	8.3%	9.7%	8.0%	9.3%
Fairfield County	5.6%	6.9%	7.7%	6.6%	8.7%

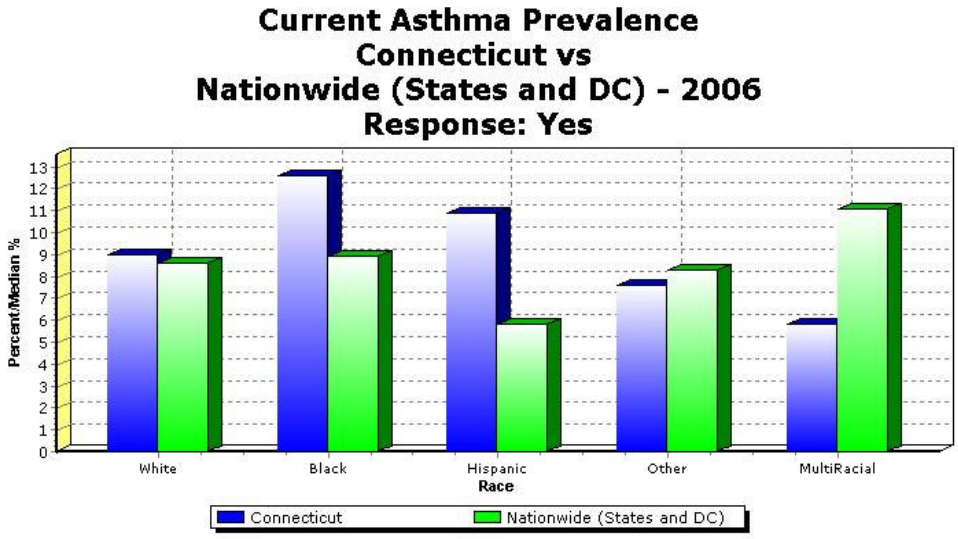
Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older.
Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

The percent of the black population with asthma in Connecticut is 12.6 percent compared to 10.9 percent of the Hispanic population and 9.0 percent of the white population. Health disparities in Connecticut are much higher than the national figures.

Adults aged 18 years and over
Percent Adults with Asthma by Race/Ethnicity
2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	9.0%	12.6%	10.9%	7.6%	5.8%.
United States	8.6%	8.9%	5.8%	8.3%	11.1%

Source: CDC, Behavioral Risk Factor Surveillance Study (BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Most of the problems caused by asthma can be prevented if persons with asthma and their health care providers managed the disease according to established guidelines.[21] Four components of effective management of asthma include: controlling exposure to factors that trigger asthma episodes, adequately managing asthma with medicine, monitoring the disease by using objective measures of lung function, and educating asthma patients to become partners in their own care.[22] DPH identified several barriers to care: nature of the disease (e.g. symptoms recur on irregular basis, irregular duration or severity, etc.); patient education; low provider adherence to National Asthma Education and Prevention Program (NAEPP) Guidelines; systems issues and disparities in care (e.g. lack of provider coordination); lack of insurance; poverty; cultural issues; low literacy levels; and lack of awareness of asthma.[23]

Links:

American Lung Association, www.lungusa.org

Asthma and Allergy Foundation of America, www.aafa.org

Center for Disease Control, Asthma, www.cdc.gov/asthma/default.htm.

Connecticut Department of Environmental Protection-Air Quality, http://www.dep.state.ct.us/airmonitoring/aqi.asp

Connecticut Department of Public Health, www.dph.state.ct.us/BCH/new_asthma/asthma_home.htm

National Heart, Lung and Blood Institute, "Guidelines for the Diagnosis and Treatment of Asthma", www.nhlbi.nih.gov/guidelines/index.htm.

[21] HealthyPeople, Op.Cit, p. 2.
[22] Ibid, p.2.
[23] Connecticut Department of Public Health, Connecticut State Asthma Plan, http://www.dph.state.ct.us.

Percent of Adults with Asthma, 2006

Rank		Asthma Percent
	United States	**8.5%**
1	Louisiana	5.9%
2	Iowa	6.5%
3	North Carolina	6.8%
4	Mississippi	6.9%
5	North Dakota	7.1%
6	Florida	7.2%
7	Texas	7.3%
8	Nebraska	7.5%
9	Arkansas	7.6%
9	California	7.6%
9	New Jersey	7.6%
12	Nevada	7.7%
12	South Carolina	7.7%
12	South Dakota	7.7%
15	Minnesota	7.8%
16	Colorado	7.9%
17	Georgia	8.0%
18	Hawaii	8.1%
19	Kentucky	8.2%
20	Illinois	8.3%
20	Kansas	8.3%
20	Montana	8.3%
23	Indiana	8.4%
23	Utah	8.4%
23	Virginia	8.4%
26	New Mexico	8.5%
26	New York	8.5%
26	Tennessee	8.5%
29	Missouri	8.6%
29	West Virginia	8.6%
31	Wyoming	8.7%
32	Pennsylvania	8.8%
32	Wisconsin	8.8%
34	Alabama	8.9%
34	Arizona	8.9%
34	Maryland	8.9%
34	Oklahoma	8.9%
34	Washington	8.9%
39	Idaho	9.2%
40	**Connecticut**	**9.3%**
40	Vermont	9.3%
42	Alaska	9.5%
43	Delaware	9.6%
43	Michigan	9.6%
45	Maine	9.7%
45	New Hampshire	9.7%
47	Ohio	9.8%
47	Oregon	9.8%
49	Massachusetts	9.9%
50	District of Columbia	10.0%
51	Rhode Island	10.5%

Source: CDC, BRFSS, Asthma- 2006 www.cdc.gov/brfss.

Cancer

Cancer is a group of diseases characterized by uncontrolled growth and spread of abnormal cells.[24] Left uncontrolled, the disease can result in death. Cancer is the second leading cause of death in Connecticut.[25] Cancer is caused by a number of factors including: tobacco, chemicals, radiation, infectious organisms, inherited mutations, hormones, immune conditions and mutations that occur from metabolism.[26] The lifetime risk of developing cancer is about 1 in 2 for men and approximately 1 in 3 for women in the United States.[27] Cancer cost the United States an estimated $206.3 billion in 2006.[28]

CANCER INCIDENCE[29]

Connecticut	Target: No goal has been set for this measure	2003:	489.4 cancer incidence per 100,000

What does this measure?

Cancer incidence per 100,000 population

How are we doing?

Overall, Connecticut has a higher incidence of cancer compared to the United States with a cancer incidence of 489.4 per 100,000 population. Nationally cancer incidence is 459.9 per 100,000 population nationally. The cancer incidence is declining both nationally as well as in Connecticut. According to the American Cancer Society, 1,444,920 new cancer cases are expected to be diagnosed in 2007. This figure includes 19,780 new cancer cases in Connecticut. The most frequently diagnosed cancers in males include prostate, lung, colorectal, bladder, and melanoma and in females include breast, lung, colorectal, and uterus.[30]

Cancer Incidence per 100,000 population

	2000	2002	2003
United States	475.8	462.2	459.9
Connecticut	516.3	494.6	489.4

Footnotes

* Data are from selected statewide cancer registries that met data quality criteria for publication in *United States Cancer Statistics: 2002 Incidence and Mortality*. U.S. rates cover approximately 91% of the population.
† Excludes basal and squamous cell carcinomas of the skin except when these occur on the skin of the genital organs, and *in situ* cancers except urinary bladder.
‡ Rates are age-adjusted to the 2000 U.S. standard population (19 age groups - Census P25-1130).
Source: U.S. Cancer Statistics Working Group. *United States Cancer Statistics:* 1999–2002 *Incidence and Mortality Web-based Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention *and* National Cancer Institute; 2005. Available at: www.cdc.gov/cancer/npcr/uscs.

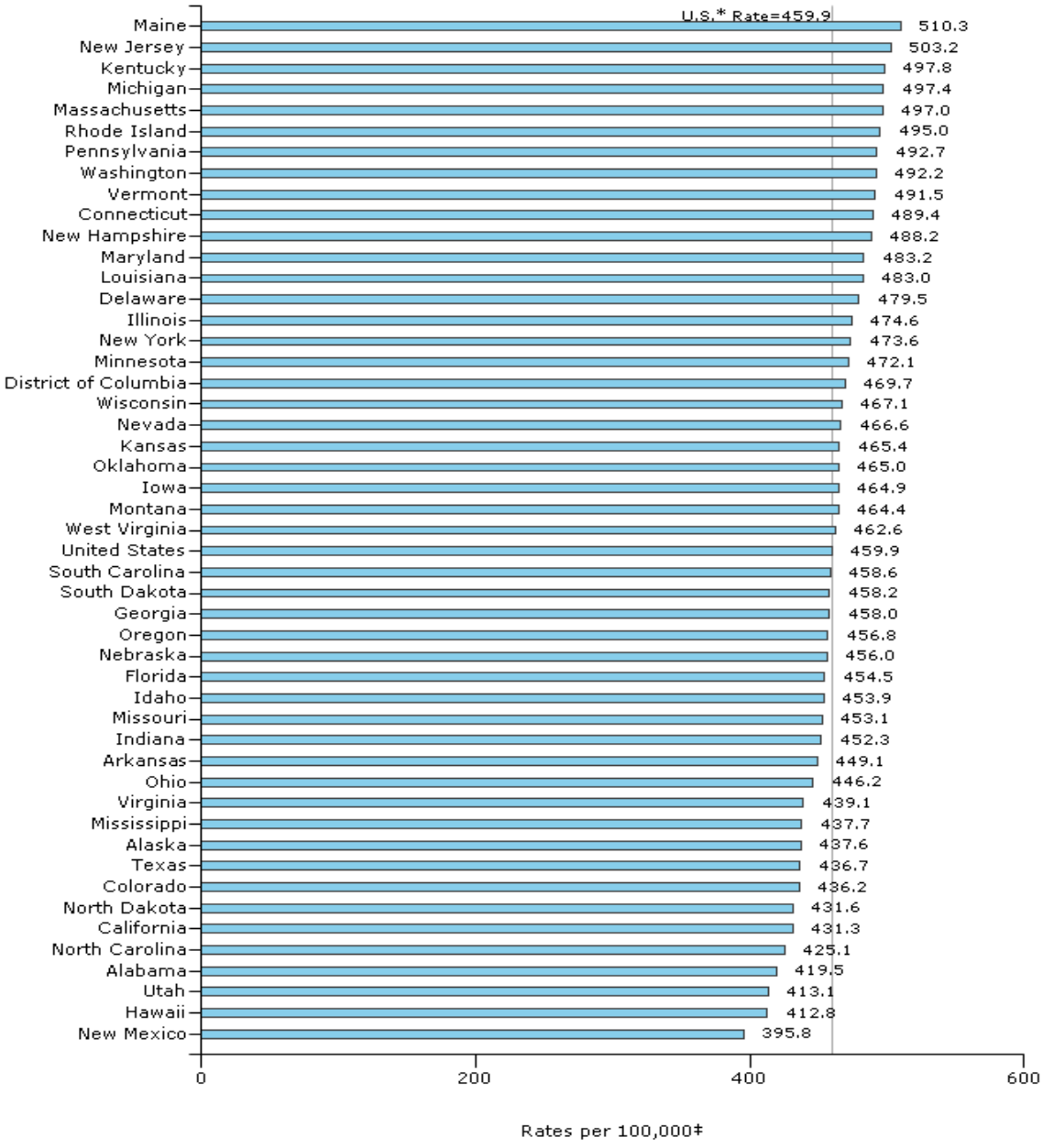
[24] American Cancer Society, Cancer Facts and Figures-2007, Atlanta: American Cancer Society; 2007.
[25] Connecticut Department of Public Health, Connecticut Comprehensive Cancer Control Plan 2005-2008, June 2005, www.ct.gov/dph.
[26] Ibid.
[27] Ibid.
[28] Ibid.
[29] Note: Data is the same as reported in the 2006 Connecticut Health Scorecard.
[30] U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999–2002 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2005. Available at: www.cdc.gov/cancer/npcr/uscs.

Cancer Incidence per 100,00 population, 2003

Rank		Rate
	Nationwide	**459.9**
1	New Mexico	395.8
2	Hawaii	412.8
3	Utah	413.1
4	Alabama	419.5
5	North Carolina	425.1
6	California	431.3
7	North Dakota	431.6
8	Colorado	436.2
9	Texas	436.7
10	Alaska	437.6
11	Mississippi	437.7
12	Virginia	439.1
13	Ohio	446.2
14	Arkansas	449.1
15	Indiana	452.3
16	Missouri	453.1
17	Idaho	453.9
18	Florida	454.5
19	Nebraska	456.0
20	Oregon	456.8
21	Georgia	458.0
22	South Dakota	458.2
23	South Carolina	458.6
24	United States	459.9
25	West Virginia	462.6
26	Montana	464.4
27	Iowa	464.9
28	Oklahoma	465.0
29	Kansas	465.4
30	Nevada	466.6
31	Wisconsin	467.1
32	District of Columbia	469.7
33	Minnesota	472.1
34	New York	473.6
35	Illinois	474.6
36	Delaware	479.5
37	Louisiana	483.0
38	Maryland	483.2
39	New Hampshire	488.2
40	**Connecticut**	**489.4**
41	Vermont	491.5
42	Washington	492.2
43	Pennsylvania	492.7
44	Rhode Island	495.0
45	Massachusetts	497.0
46	Michigan	497.4
47	Kentucky	497.8
48	New Jersey	503.2
49	Maine	510.3

Source: Graph and Table from U.S. Cancer Statistics Working Group downloaded from www.cdc.gov/cancer/npcr/uscs.

Rankings by State: 2003, Male and Female, All Sites



Percent of Adults who have had Cancer Screening

	Colon cancer screening				Breast cancer screening Women aged 40+ who had Mammogram in past 2 yrs.		Cervical cancer screening Women aged 18+ who had Pap Test in past 3 yrs.	
	Adults 50+ who had Blood Stool Test in past 2 yrs.		Adults 50+ who ever had sigmoidoscopy or colonscopy					
	2004	**2006**	**2004**	**2006**	**2004**	**2006**	**2004**	**2006**
CT	30.7%	26.9%	63.6%	68.7	81.1%	82.0%	87.7%	86.8%
US	26.4%	24.2%	52.9%	57.1%	74.6%	76.5%	85.9%	84.0%
H.P. goal	33.0%		50.0%		70.0%		90.0%	

Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.
Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Many cancers could be prevented by more systematic efforts to reduce tobacco use, improve diet and physical activity, and expand use of established screening tests. [31] Regular use of screening tests can prevent the development of cancer by finding and removing premalignant abnormalities; screening tests can also improve survival by detecting cancer at an early stage when treatment is more effective.[32]

Regular colon cancer screening is recommended for adults aged 50 years of age and over. Connecticut exceeds the goal for the percent of adults who have had a sigmoidoscopy or colonoscopy. However, Connecticut lost ground on the percent of adults who had had a blood stool test in the past two years dropping to 26.9 percent from 30.7 percent in 2004.

Regular mammography screening has been shown to be effective in reducing breast cancer deaths. It is recommended that women aged 40+ have regular mammograms every 1-2 years. The national goal is to increase the percent of women aged 40 years of age and over who have had a mammogram in the past two years to 70 percent. Connecticut exceeds the national goal.

Regular pap smears are recommended for cervical cancer screening. The national goal is to increase the percent of women aged 18 years and over who had a pap test in the past 3 three years to 90 percent. Connecticut has almost reached the national goal for cervical cancer screening, although the figures dropped to 86.8 percent from 87.7 percent in 2004.

[31] American Cancer Society, Cancer Prevention and Early Detection Facts and Figures 2007, Atlanta: American Cancer Society, 2007, page 1.
[32] Ibid.

Links:

American Cancer Society, www.cancer.org

Cancer Control Planet, http://cancercontrolplanet.cancer.gov/

Center for Disease Control, http://cdc.gov/cancer

Community Preventive Services, http://www.thecommunityguide.org/cancer

National Cancer Institute, http://www.cancer.gov

Diabetes

Diabetes is the sixth leading cause of death in the United States.[33] Persons with diabetes are at increased risk for serious health problems. The estimated direct and indirect costs of diabetes are $132 billion annually.[34]

ADULT DIABETES

Connecticut Target: 2.5% 2006: 6.4%

What does this measure?

The percent of respondents 18 years of age and over who report yes to the question: "Have you ever been told by a doctor that you have diabetes?"

How are we doing?

Connecticut's diabetes rate has remained stable over the past several years. Connecticut has one of the lowest percentages of adults diagnosed with diabetes ranking 7th nationally, a rank held in 2004. However, Connecticut's rate is more than twice the Healthy People goal of 2.5 percent.

Percent of Population Aged 18 years and over Diagnosed with Diabetes

	2002	2003	2004	2005	2006
United States	6.7%	7.2%	7.0%	7.3%	7.5%
Connecticut	5.9%	5.9%	6.0%	6.5%	6.4%
Fairfield County	4.4 %	4.7%	5.3%	5.0%	5.9%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

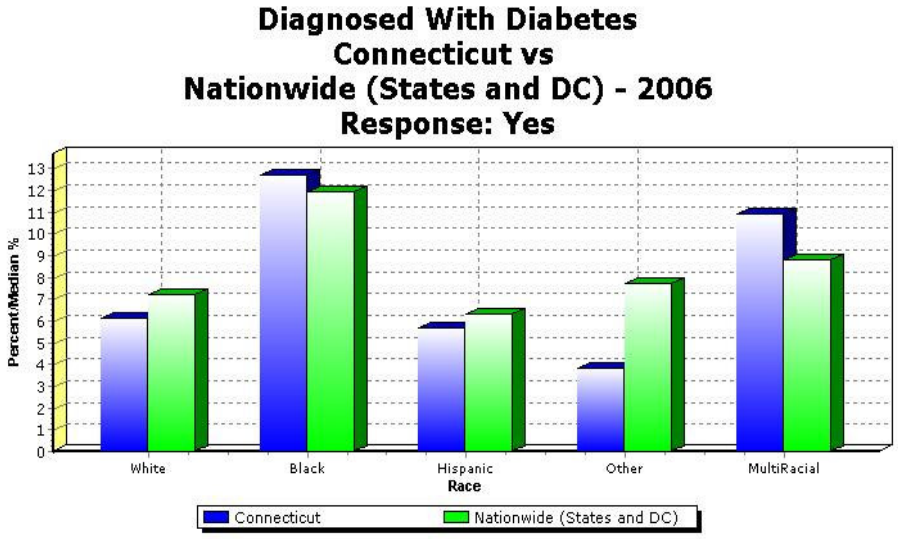
[33] American Diabetes Association, National Diabetes Fact Sheet, http://www.diabetes.org/diabetes-statistics/national-diabetes-fact-sheet.jsp.
[34] Ibid

In Connecticut, diabetes among the black population is much higher than the white population with the percent of adults diagnosed with diabetes at 12.7 percent compared to 6.1 percent of the white population. The rate of diabetes among the black population in Connecticut is more than 5 times the national goal of 2.5 percent.

Adults aged 18 years and over
Percent Adults with Diabetes by Race/Ethnicity 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	6.1%	12.7%	5.7%	3.8%	10.9%
United States	7.2%	11.9%	6.3%	7.7%	8.8%

Source: CDC, Behavioral Risk Factor Surveillance Study (BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Under diagnosis and inadequate treatment of diabetes results in unnecessary expenditures as well as premature death, limb amputations, kidney disease, and blindness. In fact, only about one half of adults (52.7%) diagnosed with diabetes age 18 and over reported receiving all three recommended tests for diabetes care (HbA1c test, retinal exam, foot exam).[35]

[35] Agency for Healthcare Research and Quality, 2005 National Healthcare Quality Report, AHRQ Publication No. 06-0018, December 2005, USDHHS, Rockville, MD.

Links:

American Diabetes Association, www.diabetes.org

Better Diabetes Care, www.betterdiabetescare.nih.gov

Diabetes at Work, www.diabetesatwork.org

National Diabetes Education Program, http://ndep.nih.gov

Percent of Adults with Diabetes, 2006

Rank		Percent Diabetes
	United States	**7.5%**
1	Colorado	5.3%
2	Minnesota	5.7%
2	Utah	5.7%
4	Alaska	5.9%
4	Vermont	5.9%
6	Wisconsin	6.2%
7	**Connecticut**	**6.4%**
7	Massachusetts	6.4%
7	Montana	6.4%
7	Wyoming	6.4%
11	South Dakota	6.5%
12	North Dakota	6.7%
12	Ohio	6.7%
12	Oregon	6.7%
15	Idaho	6.8%
16	Maine	6.9%
17	Washington	7.1%
18	Iowa	7.3%
18	Kansas	7.3%
18	New Mexico	7.3%
21	Missouri	7.4%
21	Nebraska	7.4%
21	New Hampshire	7.4%
21	Rhode Island	7.4%
21	Virginia	7.4%
26	Nevada	7.5%
26	New Jersey	7.5%
28	New York	7.6%
29	Maryland	7.9%
30	Texas	8.0%
31	Arkansas	8.1%
31	Delaware	8.1%
31	District of Columbia	8.1%
31	Illinois	8.1%
31	Indiana	8.1%
36	California	8.2%
36	Hawaii	8.2%
38	Arizona	8.5%
38	Florida	8.5%
38	Pennsylvania	8.5%
41	Michigan	9.0%
42	Georgia	9.1%
42	North Carolina	9.1%
44	Louisiana	9.2%
45	South Carolina	9.6%
46	Kentucky	9.9%
47	Alabama	10.0%
48	Oklahoma	10.0%
49	Tennessee	10.7%
50	Mississippi	10.9%
51	West Virginia	12.1%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Hypertension

Heart disease and stroke—the principal components of cardiovascular disease—are the first and third leading causes of death for both men and women in the United States, accounting for nearly 40% of all deaths.[36] Two of the major independent risk factors for cardiovascular disease are high blood pressure and high blood cholesterol.[37] In 2004, the estimated cost of high blood pressure in the United States is $55.5 billion; $41.5 billion in direct medical expenditures and $14 billion in indirect expenditures such as absenteeism and lost work productivity.[38]

HYPERTENSION

Connecticut Target: 14% 2005: 23.8%

What does this measure?

The percent of persons 18 years of age and over who have high blood pressure. Respondents 18 years of age and over were asked the following question, "Have you ever been told by a doctor, nurse, or other health professional that you have high blood pressure?"

How are we doing?

More than one out of four adults nationally (25.5 percent) have high blood pressure. Connecticut's rate is on par with national figures with 23.8 percent of adults having high blood pressure.[39] While Connecticut ranks 12th nationally, Connecticut's hypertension rate is more than 1.5 times the national goal of 14 percent.

Percent of Adults aged 18 years and over Diagnosed with Hypertension

	1999	2001	2003	2005
United States	23.9%	25.6%	24.8%	25.5%
Connecticut	20.4%	24.0%	24.2%	23.8%
Fairfield County	N.A.	N.A.	23.3%	22.7%

Source: CDC, Behavioral Risk Factor Surveillance Study, www.cdc.gov/brfss
Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.

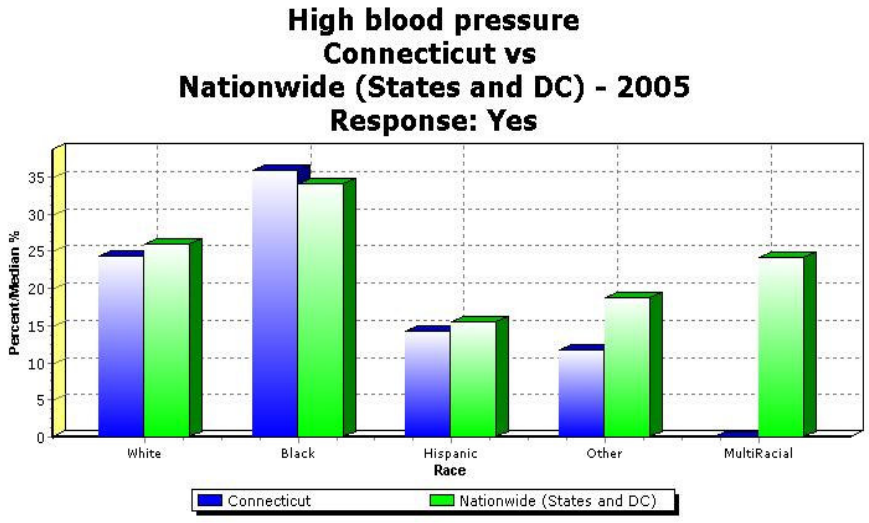
[36] CDC, Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers 2005, www.cdc.gov.
[37] Ibid.
[38] NCQA, The State of Health Quality-2004 Industry Trends and Analysis, 2004, Washington, D.C., 2004, page 33
[39] CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

In Connecticut, 35.9 percent of the black population have hypertension compared to 24.3 percent of the white population and 14.3 percent of the Hispanic population. The hypertension rate for blacks is more than 2.5 times the national goal of 14 percent.

Adults aged 18 years and over
Percent Adults with Hypertension by Race/Ethnicity, 2005

	White	Black	Hispanic	Other	Multiracial
Connecticut	24.3%	35.9%	14.3%	11.8%	N/A
United States	26.0%	34.1%	15.5%	18.8%	24.1%

Source: CDC, Behavioral Risk Factor Surveillance Study (BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Untreated high blood pressure causes stroke, coronary heart disease, kidney failure, and blindness.[40] Among those treated for high blood pressure, **only 29** percent **have it under control**.[41] The Healthy People target is 50 percent and at the current rate of improvement will not be met for 20 years.[42] State level data was not available.[43]

Clearly enhanced efforts to detect, treat, and control high blood pressure are needed. Lifestyle modifications and drug therapy can be effective in reducing high blood pressure.

Effective strategies to prevent the onset of hypertension include:

- Maintain a health body weight
- Keep physically active
- Reduce salt intake

[40] NCQA, The State of Health Quality-2004 Industry Trends and Analysis, 2004, Washington, D.C., 2004, page 33.
[41] Agency for Healthcare Research and Quality, 2005 National Healthcare Quality Report, AHRQ Publication No. 06-0018, December 2005, USDHHS, Rockville, MD.
[42] Ibid.
[43] Ibid.

- Drink alcohol in moderation
- Follow a healthy eating plan (e.g. Dietary Approaches to Stop Hypertension).[44]

Links:

American Heart Association, www.heart.org

Center for Disease Control, http://www.cdc.gov/nccdphp/publications/aag/cvh.htm

National Heart, Lung, and Blood Institute (NHLBI), www.nhlbi.nih.gov/index.htm

[44] National Heart, Lung, and Blood Institute, How Can I Prevent High Blood Pressure, www.nhlbi.nih.gov.

Percent of Adults with hypertension, 2005

Rank		Hypertension Percent
	United States	**25.5%**
1	Utah	18.4%
2	Colorado	20.1%
3	Alaska	21.5%
4	Minnesota	21.9%
5	Arizona	22.3%
6	New Mexico	22.8%
7	New Hampshire	23.3%
7	North Dakota	23.3%
7	Wyoming	23.3%
10	Idaho	23.6%
10	Oregon	23.6%
12	Vermont	23.7%
12	**Connecticut**	**23.8%**
14	Montana	24.0%
15	Nevada	24.1%
15	Washington	24.1%
17	Hawaii	24.2%
17	Kansas	24.2%
19	Texas	24.3%
20	Iowa	24.5%
20	Nebraska	24.5%
22	Massachusetts	24.8%
23	Wisconsin	25.0%
24	South Dakota	25.1%
25	New Jersey	25.4%
26	Illinois	25.5%
26	New York	25.5%
28	Maine	25.6%
29	California	25.7%
30	Maryland	26.0%
31	Indiana	26.2%
32	Rhode Island	26.3%
33	Georgia	26.4%
34	Virginia	26.8%
35	Ohio	27.0%
36	District of Columbia	27.1%
37	Pennsylvania	27.2%
38	Missouri	27.3%
39	Florida	27.7%
40	Michigan	27.8%
41	Delaware	28.0%
42	Kentucky	28.2%
43	Arkansas	29.0%
44	North Carolina	29.2%
45	Louisiana	29.4%
46	Oklahoma	29.8%
47	Tennessee	30.2%
48	Alabama	31.2%
49	South Carolina	31.4%
50	West Virginia	34.4%
51	Mississippi	33.3%

Note: #1 has lowest percent of adult with hypertension;
#51 has the highest percent of adults with hypertension.

Source: CDC, BRFSS-Hypertension Awareness (2005), www.cdc.gov/brfss.

Mental Distress and Substance Abuse

Poor mental health is a major source of disability, distress, and social burden.

FREQUENT MENTAL DISTRESS

Connecticut Target: No goal has been set for this measure. 2005: 9.0%

What does this measure?

The percent of adults aged 18 years and over reporting "frequent mental distress". Frequent mental distress is defined as 14 or more days in the past 30 days for which the respondent said their mental health, including stress, depression, and problems with emotions was not good. The 14-day minimum period was selected since physicians use it and researchers use this period as a marker for clinical depression and anxiety disorders.[45] Respondents were asked the following question "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"

How are we doing?

Nationally, one out of ten adults report frequent mental distress. Nine percent of Connecticut adults report frequent mental distress. The rate has been fairly stable since 2001. North Dakota had the lowest percent of adults reporting frequent mental distress, Kentucky had the highest percent of adults reporting frequent mental distress. Connecticut ranked 18th nationally.

Percent of Population 18 yrs. and older with 14 or more mentally unhealthy days

	2000	2001	2003	2004	2005
United States	9.6%	10.0%	10.2%	10.4%	10.0%
Connecticut	8.3%	9.4%	9.2%	9.2%	9.0%
Fairfield County	N.A.	N.A.	N.A.	N.A.	N.A.

Source: CDC, BRFSS-Health related quality of life, http://www.cdc.gov/hrqol/

Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.

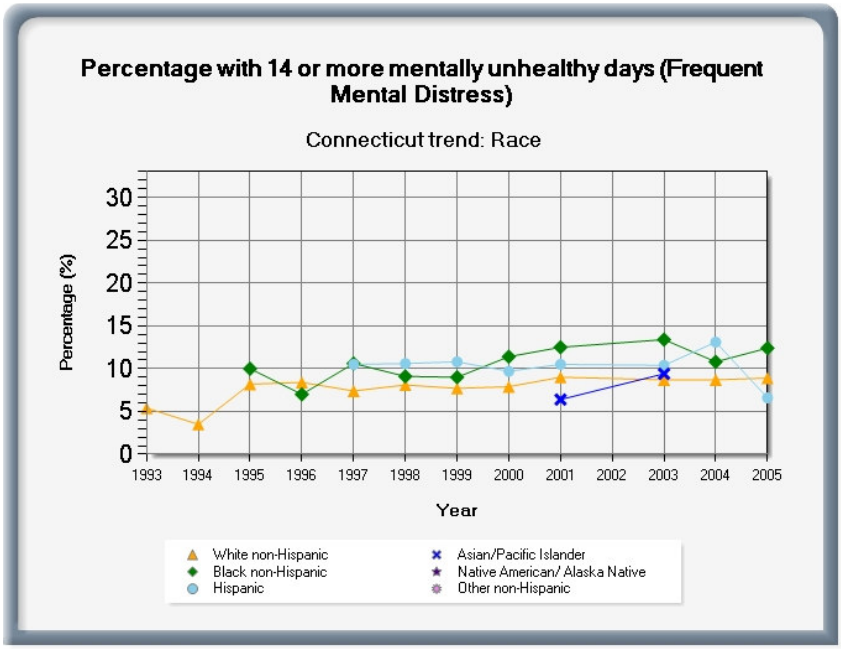
[45] Center for Disease Control, Self-Reported Frequent Mental Distress Among Adults-United States, 1993-2001, MMWR Weekly, October 22, 2004, 53(41), pp. 963-966.

Within Connecticut, 16.5 percent of the adult Asian/Pacific Islanders population and 12.4 percent of the adult black population reported frequent mental distress in 2005.

Adults aged 18 years and over
Percent Adults with Frequent Mental Distress by Race/Ethnicity, 2005

	White	Black	Hispanic	Asian/Pacific Islander	Native American/ Alaska Native	Other non-Hispanic
Connecticut	8.9%	12.4%	6.6%	16.5%	N/A	6.6%
United States	9.6%	11.8%	10.2%	6.1%	18.1%	14.5%

Source: CDC, Health Related Quality of Life (HRQOL), www.cdc.gov/hrqol.



Source of graph: Center for Disease Control, www.cdc.gov/hrqol

One of the nation's health goals is to improve mental health and ensure access to appropriate, quality mental health services.[46]

[46] SAMHSA, Healthy People 2010 Progress Review Focus Area 18: Mental Health and Mental Disorders, http://oas/samhsa.gov/mentalHealthHP2010/mentalHealth.cfm

Percent of Population 18 yrs. and older with 14 or more mentally unhealthy days, 2005

Rank		Frequent Mental Distress
	United States	**10.0%**
1	North Dakota	6.8%
2	District of Columbia	7.4%
2	Nebraska	7.4%
2	South Dakota	7.4%
5	Wisconsin	7.8%
6	Arizona	8.0%
7	Hawaii	8.5%
7	Minnesota	8.5%
9	New Hampshire	8.7%
9	Wyoming	8.7%
11	Iowa	8.8%
11	Kansas	8.8%
11	Montana	8.8%
14	Colorado	8.9%
14	Louisiana	8.9%
14	New Jersey	8.9%
14	Ohio	8.9%
18	**Connecticut**	**9.0%**
18	Texas	9.0%
20	Illinois	9.2%
21	Utah	9.3%
22	Alaska	9.4%
22	Delaware	9.4%
22	Massachusetts	9.4%
22	Virginia	9.4%
26	Maryland	9.5%
26	Vermont	9.5%
28	Washington	9.6%
29	Idaho	9.7%
30	North Carolina	9.8%
30	Rhode Island	9.8%
32	Pennsylvania	10.2%
33	California	10.3%
33	Missouri	10.3%
35	New York	10.5%
36	Nevada	10.6%
37	Maine	10.7%
38	Michigan	10.8%
39	New Mexico	10.9%
39	Oregon	10.9%
41	Indiana	11.0%
41	Tennessee	11.0%
43	Florida	11.1%
43	Georgia	11.1%
45	Arkansas	11.5%
45	South Carolina	11.5%
47	Oklahoma	12.0%
48	Alabama	12.2%
49	Mississippi	13.0%
50	West Virginia	14.8%
51	Kentucky	15.0%

Note: #1 has lowest percent of adult with frequent mental distress; #51 has the highest percent of adults with frequent mental distress.

Source: CDC, BRFSS-Health related quality of life, http://www.cdc.gov/hrqol/

YOUTH SUBSTANCE ABUSE

The estimated cost of illicit drug use to society is estimated at $181 billion.[47] When combined with alcohol and tobacco costs, they exceed $500 billion including healthcare, criminal justice, and lost productivity.[48] The total costs for alcohol and other drug abuse to the residents of Connecticut are estimated to be over $3.7 billion annually, or $1,140 for every man, woman and child.[49] From youth to the elderly, substance abuse affects our families, schools, workplaces and communities and places tremendous burdens on Connecticut's health, economic, social and justice systems.[50]

Alcohol use by persons under age 21 is a major public health problem.[51] Alcohol is the most commonly used and abused drug among youth in the United States, more than tobacco and illicit drugs.[52] According to the CDC, excessive alcohol consumption is associated with approximately 75,000 deaths per year.[53] Alcohol is a factor in approximately 41% of all deaths from motor vehicle crashes. Among youth, the use of alcohol and other drugs has also been linked to unintentional injuries, physical fights, academic and occupational problems, and illegal behavior.[54] Health problems resulting from long term alcohol abuse include with liver disease, cancer, cardiovascular disease, and neurological damage as well as psychiatric problems such as depression, anxiety, and antisocial personality disorder.[55]

EPISODIC HEAVY DRINKING

Connecticut Target: No goal has been set for this measure. 2005: 27.8%

What does this measure?

The percent of high school students who had five (5) drinks of alcohol in a row (i.e., within a couple of hours) on one (1) or more of the 30 days preceding the survey (i.e., episodic heavy drinking) based upon the Youth Behavioral Risk Surveillance Survey Study. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

How are we doing?

Nationwide, 25.5% of students had five or more drinks of alcohol in a row (i.e., within a couple of hours) on one or more days of the 30 days preceding the survey (i.e., episodic heavy drinking). Overall, the prevalence of episodic heavy drinking was higher among white (29.9%) than black (11.1%) and Hispanic (25.3%) students; higher among Hispanic (25.3%) than black (11.1%) students. Similar trends were found for Connecticut where the

[47] National Institute on Drug Abuse, Treatment Approaches for Drug Addiction, August 2006, www.drugabuse.gov
[48] Ibid.
[49] Connecticut Department of Mental Health and Addiction Services, The Connecticut Drug and Alcohol Policy Council, http://www.ct.gov/DMHAS/cwp/view.asp?a=2908&q=334676
[50] Connecticut Department of Mental Health and Addiction Services, The Connecticut Drug and Alcohol Policy Council, http://www.ct.gov/DMHAS/cwp/view.asp?a=2908&q=334676
[51] CDC, Quick Stats on Underage Drinking, http://www.cdc.gov/alcohol/quickstats/underage_drinking.htm
[52] Ibid.
[53] CDC, Alcohol and Drug Use, http://www.cdc.gov/HealthyYouth/alcoholdrug/index.htm
[54] Ibid.
[55] Ibid.

prevalence of episodic heavy drinking was higher among white (31.2%) than Black (18.2%) and Hispanic (19.2%) students.

Episodic Heavy Drinking Among High School Students, 2005

	White	Black	Hispanic	Other	Total
Connecticut	31.2%	18.2%	19.6%	30.3%	27.8%
United States	29.9%	11.1%	25.3%	18.3%	25.5%

Source: CDC, Youth Risk Behavior Surveillance-United States-2005, Morbidity and Mortality Weekly Report, June 9, 2006, Volume 55, number SS-5, http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5505a1.htm.

On a national basis, Connecticut ranked 24th among the 40 states that participated in the YBRFS survey with 27.9 percent of high school students engaged in episodic heavy drinking. Utah had the lowest prevalence of episodic heavy drinking at 8.8 percent while Montana had the highest prevalence at 34.4 percent.

No single agency or department in Connecticut is responsible for substance abuse and addiction services. There are thirteen agencies are involved in providing substance abuse services: Department of Mental Health and Addiction Services, Judicial, Department of Children and Families, Department of Corrections, State Department of Education, Department of Motor Vehicles, Department of Transportation, Department of Public Health, Department of Public Safety, Department of Social Services, Department of Veterans Affairs, Office of Policy and Management, and Parole. During State Fiscal Year 2005, Connecticut expended $267 million on substance abuse services.[56] Of this amount, $59 million was spent on prevention, $5.8 million was spent on deterrence, and $202 million was spent on treatment.[57] While Connecticut has spent $267 million on substance abuse services, a significant number of persons have not received needed services.

In 2004, approximately 22.5 million Americans aged 12 or older needed treatment for substance abuse (alcohol or illicit drug) abuse and addiction.[58] In Connecticut, 291,000 persons 12 years of age and over need, but are not receiving treatment for illicit drug or alcohol use in Connecticut. Of these people, 33,000 are between the ages of 12-17 years of age. The definition of a person needing but not receiving treatment for an illicit drug or alcohol problem is that they meet the criteria for abuse or dependence on illicit drugs or alcohol according to DSM-IV, but has not received specialty treatment in the past year.

Untreated substance abuse adds significant costs to communities, including violent and property crimes, prison expenses, court and criminal costs, emergency room visits, child abuse and neglect, lost child support, foster care and welfare costs, reduced productivity, unemployment, and victimization.[59]

[56] DMHAS, Collection and Evaluation of Data Related to Substance Abuse, Abuse and Addiction Services, June 2007.
[57] Ibid.
[58] NIDA, Op.Cit., page 1.
[59] NIDA, Treatment for Drug Abuse in the Criminal Justice System, http://www.nida.nih.gov/PDF/InfoFacts/CJTreatment06.pdf.

Numbers of Persons 12 years of Age and Over Needing, but Not Receiving Treatment of Illicit Drugs or Alcohol Use in Connecticut 2003-2004

Measure	Total 12 years of age and over (000's)	Number in 000's		
		12-17 years of age	18-25 years of age	26 years or older
Needing but not receiving treatment for illicit drug use	79	15	31	33
Needing but not receiving treatment for alcohol use	212	18	64	130
Total	291	33	95	163

Note: Needing but not receiving treatment refers to respondents classified as needing treatment for illicit drugs or alcohol, but not receiving treatment for an illicit drug or alcohol problem at a specialty facility (i.e. drug and alcohol rehabilitation facilities [inpatient or outpatient], hospital [inpatient] and mental health centers).

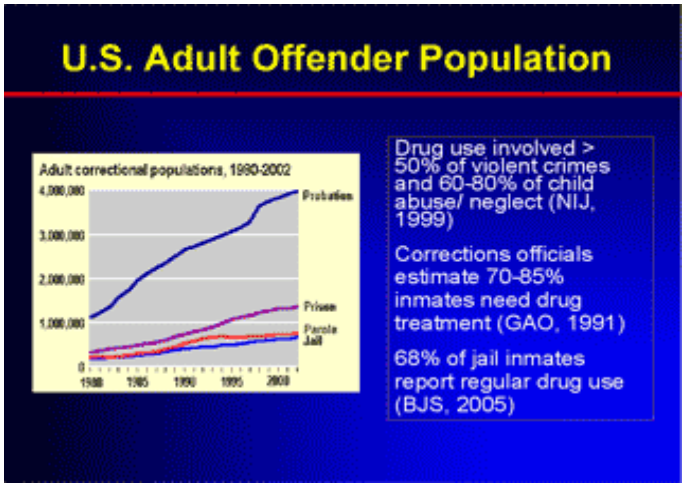
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2003 and 2004.

We should be very concerned about these figures, especially for our youth. During the transition from childhood to adulthood, adolescents establish patterns of behavior and make lifestyle choices that affect both their current and future health. Serious health and safety issues such as motor vehicle crashes, violence, substance abuse, and sexual behavior adversely affect adolescents and young adults.[60]

Research is showing that the adolescent brain may be susceptible to long term negative consequences from alcohol use.[61] Alcohol consumption has the potential to trigger long term biological changes that may be detrimental to the developing brain.[62]

Additionally, the connection between substance abuse and crime has been well documented. According to national figures, 80% of prison inmates have serious alcohol or drug problems[63]. In Connecticut, about 88 percent of the inmates who come into the system have a substance abuse history that suggests a significant need for some level of substance abuse treatment.[64]

[60] CDC, Healthy Youth-Adolescent Health!, http://www.cdc.gov/HealthyYouth/AdolescentHealth/#3
[61] U.S. Department of Health and Human Services, The Surgeon General Call to Action to Prevent and Reduce Underage Drinking, U.S. D. H.H.S., Office of the Surgeon General, 2007, www.surgeongeneral.gov
[62] Ibid.
[63] Craig Love, Ph.D. Analysis of the Cost Effectiveness of Correctional Substance Abuse Treatment Programs, January, 2005, http://www.saprp.org/m_pr_archives_detail.cfm?AppID=584
[64] Connecticut Department of Corrections, Health and Addiction Services, http://www.ct.gov/doc/cwp/view.asp?a=1503&q=265560&docNav=|



Source of Graph: National Institute on Drug Abuse, http://www.nida.nih.gov/DrugPages/CJfactsheet.html

A number of studies indicate that the behavioral health system for children and adolescents is in gridlock. An investigation by the Attorney General and Child Advocate reported that countless children and adolescents receive inadequate psychiatric treatment if they receive treatment at all.[65] Many child and adolescent psychiatrists refuse to participate with any of Connecticut's seven largest managed care plans. Doctor's in the study indicated that managed care companies have forced psychiatrists to abandon quality, relationship based psychiatric care in favor of inappropriately focused care solely on the use of prescription drugs by reducing reimbursement to cover only a brief visit and denying coverage or requiring substantial documentation for a longer visit.

According to the Office of Health Care Access, each of the 31 acute care hospitals in Connecticut faces the challenges of pediatric patients presenting at the emergency department with a behavioral health diagnosis and having to wait, sometimes days, for an available "inpatient bed".[66] Currently, only four of these hospitals have inpatient psychiatric units for children (ages 0-12) and six for adolescents (ages 13 to 18).

[65] Richard Blumenthal and Jeanne Milstein, Connecticut Children Losing Access to Psychiatric Care-A Report of the Attorney General and Child Adocate's Investigation into Mental Health Care Available to Children in Connecticut, April 12, 2007.
[66] Office of Health Care Access, Report to the Committee to Examine Hospital Inpatient Behavioral Health Bed Capacity for Children, January 2006, www.ct.gov/ohca

Connecticut Acute Pediatric Behavioral Health Beds, FY2004

Number of Operational Beds					
Acute Care Hospitals	**Age 0-12**	**Age 13-17**	**Swing Beds**	**Age 0-17**	**Location**
Hospital of St Raphael	10	5	5	20	New Haven
Yale New Haven Psychiatric Hospital	15	14	0	29	New Haven
St. Francis Medical Center	12	8	0	20	Hartford
Hartford/Institute of Living/CT Children's	9	13	0	22	Hartford
Manchester Hospital	0	10	0	10	Manchester
Waterbury Hospital	0	5	0	5	Waterbury
Subtotal	**46**	**55**	**5**	**106**	
Psychiatric Hospitals					
Public					
Riverview Children& Youth			85	85	Middletown
Subtotal			**85**	**85**	
Free Standing					
Hall-Brooke Behavioral Health	**-**	-	20-34	20-34	Westport
Silver Hill Hospital	0	10	0	10	New Canaan
Natchaug Hospital	6	12	3	21	Mansfield
Stonington Institute	0	4	0	4	N. Stonington
Subtotal	**6**	**26**	**23-37**	**55-69**	
STATEWIDE	**52**	**81**	**113-127**	**246-260**	

Source: Office of Health Care Access, Report of the Committee To Examine Hospital Inpatient Behavioral Health Bed Capacity for Children for Submission to Connecticut General Assembly, January 2006

The healthy development of our youth is a goal that is threatened by alcohol and substance abuse. Policy makers need to ensure that the state is providing sufficient resources to provide the full array of services needed to indentify, assess, and treat children and adolescents for substance abuse. The research suggests unmet need for screening, referral, and treatment for adolescent drug and alcohol use dependence. The Surgeon General has identified the following contributing factors to unmet need: cost of intervention, lack of insurance coverage, lack of access to care, lack of awareness of the problem (both the individual and the health provider), limited developmentally, gender and culturally appropriate treatment, and transportation barriers.[67]

No one state agency is responsible for addressing this issue, therefore, we recommend that the State of Connecticut retain a consultant under the auspices of the Connecticut Office of Policy and Management to develop a comprehensive substance abuse plan to address this serious issue. A broad-based stakeholder steering committee should be created to guide the work with the consultant.

[67] U.S.D.H.H.S., Op.Cit, page 32.

Episodic Heavy Drinking Among High Schoolers-2005

Rank		Percent
	United States	**25.5**
1	Utah	8.8
2	Hawaii	18.8
3	Georgia	20.8
4	Maryland	20.8
5	Florida	21.3
6	Michigan	22.5
7	North Carolina	23.1
8	South Carolina	23.6
9	Alabama	23.8
10	New York	23.9
11	Delaware	24.4
12	Rhode Island	24.5
13	Indiana	24.6
14	Nevada	24.8
15	Missouri	24.9
16	Tennessee	24.9
17	Vermont	24.9
18	Kentucky	25.2
19	Maine	25.2
20	Ohio	26.1
21	Massachusetts	26.5
22	Oklahoma	26.6
23	New Jersey	27.2
24	**Connecticut**	**27.8**
25	Idaho	28.3
26	New Hampshire	28.4
27	New Mexico	28.6
28	West Virginia	28.8
29	Kansas	29.0
30	Texas	29.6
31	Arkansas	29.7
32	Nebraska	29.8
33	Colorado	30.6
34	Arizona	30.8
35	Iowa	31.0
36	Wisconsin	31.0
37	Wyoming	32.0
38	North Dakota	33.8
39	South Dakota	34.2
40	Montana	34.4

Source: CDC, YBRFSS, 2005, www.cdc.gov.

Links:

National Alliance on Mental Illness, http://www.nami.org

National Institute on Drug Abuse, http://nida.nih.gov

Substance Abuse ad Mental Health Services Administration, http://oas.samhsa.gov

Obesity

Obesity has serious health consequences for both adults and adolescents. The Surgeon General reports that overweight and obesity have reached nationwide epidemic proportions.[68] Overweight and obesity contribute to many preventable causes of death. Obesity, physical inactivity, and poor nutrition are major risk factors for cancer, second only to tobacco use.[69] Because obesity is associated with higher risk of chronic disease, obesity comes with some staggering health costs. One study found that obese adults have 36 percent higher annual expenditures compared to those of normal weight.[70] Nationally, obesity attributable medical expenditures for 2003 are estimated at $75 billion, with $17 billion financed by Medicare and $21 billion financed by Medicaid. In Connecticut, the estimated figure is $856,000,000, with $246,000,000 financed by Medicare and $419,000,000 financed by Medicaid.

ADULT OBESITY

Connecticut Target: 15% 2006: 20.6%

What does this measure?

The percent of persons 18 years of age and over who report that their Body Mass Index (BMI) is 30.0 or more. BMI is used to determine the weight status for adults.[71]
It is a number that shows body weight adjusted for height.

BMI	Weight Status
Below 18.5	Underweight
18.5 – 24.9	Normal
25.0 – 29.9	Overweight
30.0 and Above	Obese

Source: CDC, BMI: What does this mean? http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-means.htm

The formula for BMI is as follows:

$$BMI = \left(\frac{\text{Weight in Pounds}}{(\text{Height in inches}) \times (\text{Height in inches})} \right) \times 703$$

Source: CDC, Body Mass Index for Adults, http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-adult-formula.htm

[68] United States Department of Health and Human Services. The Surgeon General's call to action to prevent and decrease overweight and obesity. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General; 2001, p. v.
[69] American Cancer Society, Cancer Prevention and Early Detection Facts and Figures 2007, Atlanta: American Cancer Society, page 17.
[70] Finkelstein, Eric, Ian Fiebelkorn and Guijing Wan, State Level Estimates of Annual Medical Expenditures Attributable to Obesity, Obesity Research, Volume 12, No. 1, January 2004, www.obesityresearch.org.
[71] Center for Disease Control (CDC), Body Mass Index, http://www.cdc.gov/nccdphp/dnpa/bmi/bmi-adult.htm.

How are we doing?

Nationally, one fourth of the adult population is obese. The United States has the highest obesity rate in the world.[72] In 2006, one out of five adults in Connecticut are obese. While Connecticut has one of the lowest rates of obese adults nationwide at 20.6 percent giving the state a rank of #3, Connecticut is far from reaching the national goal of 15 percent putting many Connecticut residents at increased risk for disease. Colorado had the lowest percent of obese adults nationwide, while Mississippi had the highest percent of obese adults.

Percent of Adults aged 18 years and over who are Obese (BMI 30.0 or greater)

	2002	2003	2004	2005	2006
United States	22.2%	22.8%	23.1%	24.4%	25.1%
Connecticut	18.0%	19.1%	19.6%	20.1%	20.6%
Fairfield County	14.2 %	17.8%	17.1%	16.0%	17.8%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/
Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.

Nearly 6 out of 10 Connecticut adults are either overweight or obese (58.8 percent). Fairfield County's rate is only slightly better with 53.9 percent of the adult population as either overweight or obese.

Percent of Population 18 years and over With BMI 25.0 or greater 2004-2006

	Overweight BMI 25.0-29.9		Obese BMI 30.0 or greater		Total BMI 25.0 or greater	
	2004	2006	2004	2006	2004	2006
United States	36.8%	36.5%	23.1%	25.1%	59.9%	61.6%
Connecticut	36.4%	38.2%	19.6%	20.6%	56.0%	58.8%
Fairfield County	36.0%	36.1%	17.1%	17.8%	53.1%	53.9%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

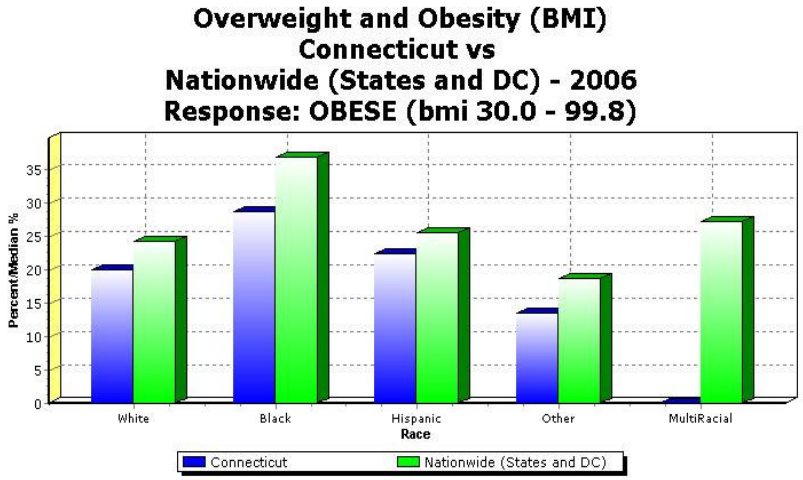
[72] OECD, health Data 2005, www.oecd.org/health/healthdata

Within Connecticut, 28.6 percent of the black population and 22 percent of the Hispanic population are obese and at increased risk for disease compared to 20 percent of the white population. The obesity rate for the black population in Connecticut almost twice the national goal of 15 percent.

Obese Adults aged 18 years and over
Percent by Race/Ethnicity, 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	20.0%	28.6%	22.4%	13.5%	N/A
United States	24.2%	36.8%	25.5%	18.6%	27.2%

Source: CDC, Health Related Quality of Life (HRQOL), www.cdc.gov/brfss.



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Good nutrition and physical activity are essential elements to prevent obesity.

Links:

Center for Disease Control, http://www.cdc.gov/nccdphp/dnpa/obesity/

Connecticut Department of Public Health,
http://www.dph.state.ct.us/bch/HEMS/Obesity.html

National Heart, Lung, and Blood Institute, Clinical Guidelines on the Identification, Evaluation and Treatment of Overweight and Obesity in Adults
www.nhlbi.nih.gov/guidelines/obesity/ob_home.htm

NAASO, The Obesity Society, www.naaso.org
www.obesityresearch.org

Overweight and Obesity Information, http://www.cdc.gov/nccdphp/dnpa/obesity/index.htm

Percent of Adults Aged 18 years and over who are Obese, 2006

Rank		Obesity Rate
	United States	**25.1**
1	Colorado	18.2
2	Massachusetts	20.3
3	**Connecticut**	**20.6**
4	Hawaii	20.6
5	Montana	21.2
5	Vermont	21.2
7	Rhode Island	21.4
8	Utah	21.9
9	New Hampshire	22.4
10	District of Columbia	22.5
11	New Jersey	22.6
12	Arizona	22.9
12	New Mexico	22.9
12	New York	22.9
15	Florida	23.1
16	Maine	23.1
17	California	23.3
17	Wyoming	23.3
19	Pennsylvania	24.0
20	Idaho	24.1
21	Washington	24.2
22	Minnesota	24.7
23	Oregon	24.8
24	Maryland	24.9
25	Nevada	25.0
26	Illinois	25.1
26	Virginia	25.1
28	North Dakota	25.4
29	South Dakota	25.4
30	Iowa	25.7
31	Kansas	25.9
32	Delaware	26.0
33	Texas	26.1
34	Alaska	26.2
35	North Carolina	26.6
35	Wisconsin	26.6
37	Arkansas	26.9
37	Nebraska	26.9
39	Georgia	27.1
39	Louisiana	27.1
41	Missouri	27.2
42	Indiana	27.8
43	Kentucky	28.0
44	Ohio	28.4
45	Michigan	28.8
45	Oklahoma	28.8
45	Tennessee	28.8
48	South Carolina	29.4
49	Alabama	30.5
50	West Virginia	31.0
51	Mississippi	31.4

Note: #1 has lowest percent of obese adults; #51 has the highest percent of obese adults.

Source: CDC, Behavioral Risk Factor Surveillance Study, Obesity: 2006, www.cdc.gov/brfss.

Oral Health

Oral health is essential to general health and well being.[73] However, many Americans suffer with disabilities and pain of diseases of the mouth. [74] Poor oral health can result in pain, difficulty speaking, chewing and swallowing, increase costs of care, loss of self esteem; decreased economic productivity, and in extreme cases death.[75] It is a national goal to prevent and control oral and craniofacial diseases, conditions, and injuries and improve access to related services. Oral health issues include: dental caries, oral and pharyngeal cancers, and birth defects such as cleft lip and cleft palate.[76]

Effective prevention strategies include: water fluoridation, dental sealants, and periodic dental cleanings. [77] Barriers to dental care include: cost; lack of dental insurance, public programs, or providers; fear of dental visits; and limited oral health literacy.[78]

ORAL HEALTH

Connecticut Target: No goal set for this measure 2006: 80.5%

What does this measure?

The percent of adults aged 18 years and over who have visited a dentist or dental clinic within the past year for any reason.

How are we doing?

Nationally, the proportion of adults who have visited a dentist in the past year has remained fairly stable. Connecticut and Fairfield County have a higher proportion of adults who visited a dentist in the past year than the United States. Connecticut ranks #1 in the nation with the highest percent of adults who visited a dentist in the past year.

Dental Visit within the past year for any reason
Percent of Population Aged 18 years and over

	2002	2004	2006
United States	70.8%	70.2%	70.3%
Connecticut	81.6%	80.6%	80.5%
Fairfield County	80.5%	79.2%	80.4%

Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.
Source: CDC, Behavioral Risk Factor Surveillance Study, www.cdc.gov/brfss

Both nationally and within Connecticut, there was a lower proportion of blacks and Hispanics who visited a dentist within the past year compared to the white population. Only 71

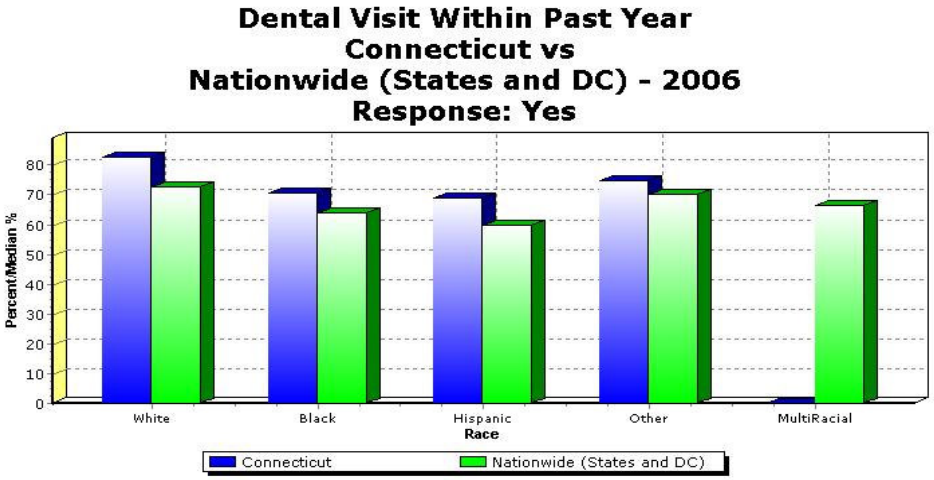
[73] Office of the Surgeon General, A Call for Action: Policy Initiatives, May 2000, http://www.cdc.gov/oralhealth/factsheets/sgr2000-fs2.htm
[74] Healthy People 2010, Op.Cit., p. 21-3.
[75] Ibid.
[76] Ibid.
[77] CDC, Oral Health: Preventing cavities, gum disease, and tooth loss-At a Glance, 2005, http://www.cdc.gov/nccdphp/publications/aag/oh.htm
[78] Healthy People 2010, Op.Cit., p. 21-5.

percent of the black population and 69 percent of the Hispanic population visited a dentist in the past year.

Dental Visit within the past year for any reason
Population Aged 18 years and over
Percent by Race/Ethnicity, 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	82.7%	70.6%	69.1%	74.7	N/A
United States	72.6%	63.8%	60.0%	70.1%	66.4%

Source: CDC, Behavioral Risk Factor Surveillance Survey(BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Percent of Adults who visited a dentist in the past year, 2006

Rank		% Adults Dental visits
	United States	**70.3**
1	**Connecticut**	**80.5**
2	Rhode Island	80.4
3	Minnesota	78.7
4	Massachusetts	78.1
5	New Hampshire	77.1
6	Delaware	76.3
6	Wisconsin	76.3
8	Michigan	75.1
9	Maryland	75.0
10	New Jersey	74.5
11	Hawaii	73.7
11	Iowa	73.7
13	Vermont	73.5
14	Ohio	73.4
15	Virginia	73.2
16	Washington	73.2
17	Nebraska	72.6
18	North Dakota	72.2
19	New York	71.8
20	District of Columbia	71.4
21	Pennsylvania	71.3
22	Maine	70.9
23	Georgia	70.7
24	Utah	70.6
25	Kansas	70.4
26	Colorado	70.3
27	South Dakota	69.5
28	Illinois	68.8
29	Florida	68.7
30	Oregon	68.6
31	Arizona	68.5
31	California	68.5
33	Montana	68.3
34	Wyoming	68.2
35	Alabama	68.0
35	Indiana	68.0
37	North Carolina	67.0
38	Alaska	66.9
38	Idaho	66.9
40	Nevada	66.2
41	South Carolina	66.2
42	New Mexico	64.9
43	Tennessee	64.8
44	Louisiana	63.5
44	Texas	63.5
44	Kentucky	63.3
47	Missouri	61.7
48	West Virginia	61.4
49	Arkansas	60.2
50	Mississippi	59.4
51	Oklahoma	58.0

Note: #1 has highest percent of adults who visited a dentist in the past year; #51 has the lowest percent of adults who visited a dentist in the past year.
Source: CDC, Behavioral Risk Factor Surveillance Study, www.cdc.gov/brfss

ADULT TOOTH LOSS

Connecticut Target: 22% 2006: 12.8%

What does this measure?

The percent of adults aged 65 years and over that have had all of their teeth extracted.

How are we doing?

Healthy People 2010 set a national goal to reduce the proportion of older adults who have had all of their natural teeth extracted to 22 percent. Based upon data from the Center for Disease Control, Connecticut and Fairfield County have exceeded this.

All Teeth Extracted
Percent of Population 65 years of age and over

	2002	2004	2006
United States	22.3%	21.2%	19.3%
Connecticut	15.9%	12.4%	12.8%
Fairfield County	14.0%	7.3%	9.9%

Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.

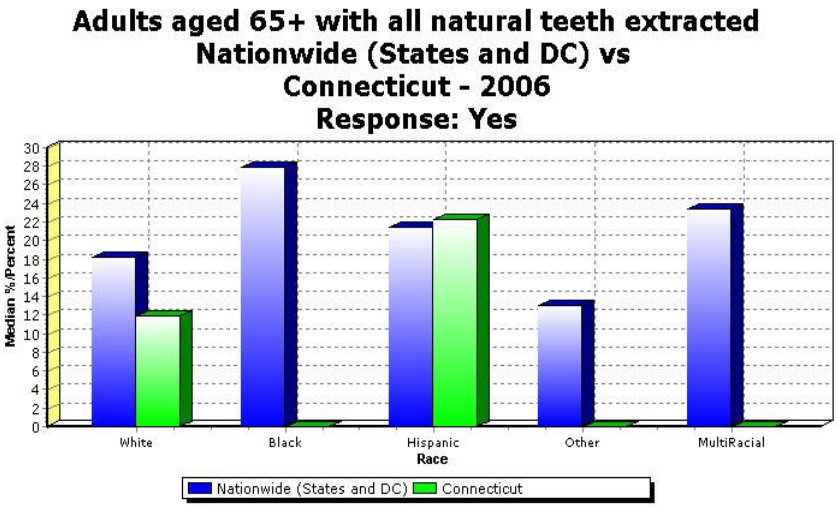
Source: CDC, Behavioral Risk Factor Surveillance Study, www.cdc.gov/brfss

Nationally, there was a higher proportion of blacks and Hispanics who have had all of their teeth extracted compared to the white population.

All Teeth Extracted
Population Aged 65 years and over
Percent by Race/Ethnicity, 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	11.9%	N.A.	22.3	N.A.	N.A.
United States	18.2%	27.9%	21.4%	13.1%	23.4%

Source: CDC, Behavioral Risk Factor Surveillance Survey(BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Links:

American Dental Association
http://www.ada.org/

Healthy People 2010
http://www.healthypeople.gov/Document/pdf/Volume2/21Oral.pdf

National Oral Health Surveillance System
www.cdc.gov/nohss

Oral Health Resources
www.cdc.gov/oralhealth

All Teeth Extracted
Percent of Population 65+, 2006

Rank		% Teeth Extracted
	United States	**19.3**
1	Hawaii	9.6
2	**Connecticut**	**12.8**
3	Colorado	12.9
4	California	14.0
5	Arizona	14.3
6	Virginia	14.4
7	Utah	14.8
8	Washington	15.4
9	Oregon	15.9
10	Maryland	16.2
11	Wisconsin	16.9
12	Massachusetts	17.2
13	Michigan	17.3
14	Florida	17.4
15	New York	17.5
16	Delaware	17.8
17	Rhode Island	17.9
18	Montana	18.2
18	New Jersey	18.2
20	Nevada	18.4
21	Minnesota	18.6
21	Nebraska	18.6
21	New Hampshire	18.6
21	Texas	18.6
25	Kansas	19.1
26	Illinois	19.3
27	Idaho	19.7
27	Vermont	19.7
29	Iowa	19.8
30	Wyoming	20.1
31	District of Columbia	20.8
32	Indiana	21.2
33	South Dakota	21.4
34	Georgia	21.5
35	Ohio	21.6
36	North Carolina	22.6
37	Arkansas	22.7
38	North Dakota	22.9
39	South Carolina	23.0
40	Alaska	23.6
41	New Mexico	23.8
42	Pennsylvania	23.9
43	Missouri	24.1
44	Maine	26.2
45	Alabama	27.2
46	Oklahoma	28.3
47	Louisiana	28.9
48	Mississippi	31.5
49	Tennessee	34.9
50	Kentucky	38.9
51	West Virginia	40.5

Note: #1 has lowest percent of adult aged 65+ who have had all teeth extracted; #50 has the highest percent adults aged 65+ who have had all teeth extracted.
Source: CDC, Behavioral Risk Factor Surveillance Study, www.cdc.gov/brfss

Smoking

Tobacco use is the leading cause of preventable illness and death in the United States.[79] Smoking is harmful. Quitting smoking at any age will improve health.

According to the Center for Disease Control, tobacco use remains the leading preventable cause of death in the United States, causing more than 438,000 premature deaths each year.[80] In Connecticut an estimated 4,900 persons die annually as a result of cigarette smoking.[81] Other sobering facts about smoking include:

- For 1997–2001, cigarette smoking was estimated to be responsible for $167 billion in annual health-related economic losses in the United States ($75 billion in direct medical costs, and $92 billion in lost productivity), or about $3,561 per adult smoker.
- The total economic costs associated with cigarette smoking are estimated at $7.18 per pack of cigarettes sold in the United States.
- Cigarette smoking results in 5.5 million years of potential life lost in the United States annually.[82]

In 2004, direct medical expenses attributed to smoking reached $1,631,000,000 in Connecticut.[83] Additionally, each pack of cigarettes sold in Connecticut, cost an estimated $8.81 in direct medical expenses attributable to smoking.[84]

Second hand smoke, a known carcinogen, is responsible for an estimated 3,000 lung cancer deaths annually in nonsmokers and 35,000 deaths annually from cardiovascular disease.[85] There is no safe level of second hand smoke. Young children are especially at risk from second hand smoke.

CURRENT SMOKERS

Connecticut Target: 12% 2006: 17.0%

What does this measure?

The percent of persons 18 years of age and over reporting have smoked at least 100 cigarettes in their lifetime and are currently smoking.

How are we doing?

[79]CDC, Report of the Surgeon General 2004: The Health Consequences of Smoking, http://www.cdc.gov/tobacco/sgr/sgr_2004/pdf/executivesummary.pdf
[80] CDC, Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses-United States, 1997-2001, MMWR, Volume 54, No. 25, July 2005.
[81] CDC, Sustaining State Programs for Tobacco Control: Data Highlights 2006,http://www.cdc.gov/tobacco.
[82] CDC, Economic Facts about U.S. Tobacco Use and Tobacco Production, July 2007, http://www.cdc.gov/tobacco/data_statistics/Factsheets/economic_facts.htm
[83] CDC, Sustaining State Programs for Tobacco Control: Data Highlights 2006,http://www.cdc.gov/tobacco.
[84] Ibid.
[85] U.S. Department of Health and Human Services, Progress Review Tobacco Use, May 14, 2003, www.healthypeople.gov/data/2010prog/focus27/default.htm.

Reducing cigarette smoking is a national objective. The national goal is to reduce the prevalence of cigarette smoking among adults to 12 percent by 2010. While the rate of cigarette smoking has been declining, the nation has a long way to go in order to meet this goal.

Based upon recent data, one out of five adults in the United States smoke and put themselves at risk for smoking-related illnesses. Seventeen percent of adults in Connecticut smoke. While Connecticut has one of the lowest proportions of adult smokers in the nation, ranking 4th nationwide, increased efforts will be needed to reach the national goal of 12 percent. The only state in the nation to exceed the national goal of 12 percent was Utah.

Adults aged 18 years and over
Percent Current Smokers

	2002	2003	2004	2005	2006
United States	23.0%	22.0%	20.8%	20.6%	20.1%
Connecticut	19.4%	18.6%	18.0%	16.5%	17.0%
Fairfield County	18.1%	17.8%	15.0%	13.6%	14.5%

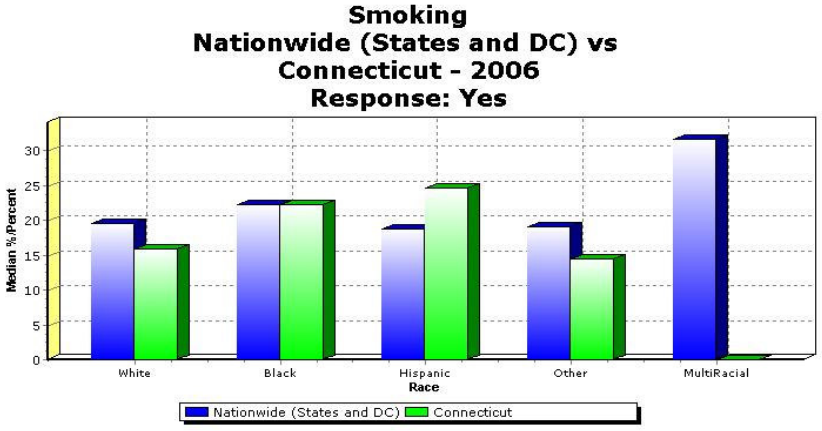
Source: CDC, Behavioral Risk Factor Surveillance Study (BRFSS), www.cdc.gov/brfss

In Connecticut, 22 percent and 25 percent of the black and Hispanic population smoke compared to 16 percent of the white population. Nationally the proportion of adult black, Hispanic and white smokers is 22.3 percent, 18.8 percent, and 19.0 percent respectively.

Adults aged 18 years and over
Percent Current Smokers by Race/Ethnicity
2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	15.9%	22.2%	24.6%	14.4%	N.A.
United States	19.5%	22.3%	18.8%	19.0%	31.6%

Source: CDC, Behavioral Risk Factor Surveillance Study (BRFSS), www.cdc.gov/brfss



Source of graph: Center for Disease Control, www.cdc.gov/brfss

Advice from a practitioner to quit smoking has been demonstrated to be an effective intervention.[86] Yet about a third of nation's smokers who visited a doctor during the past year were not advised to quit smoking. Nationally, in 2002, only 63.5 percent of current smokers age 18 and over with routine office visits during the preceding year reported that their providers had advised them to quit. In Connecticut, only 77.1 percent of current smokers age 18 years of age and over who had a routine office visit during the preceding were advised to quit smoking.[87] Thus, almost one out of four Connecticut's smokers who visited a doctor during the past year were not advised to quit smoking. This gap represents a major quality of care problem.

According to the CDC, effective state based tobacco control programs include the following components:

- Community programs that reduce tobacco use,
- Chronic disease programs that reduce the burden of tobacco related diseases,
- School programs,
- Enforcement programs,
- Statewide programs that promote media advocacy, smoke free policies, and tax increases or that have access to different racial, ethnic and diverse communities,
- Counter marketing campaigns such as anti-smoking ads,
- Cessation programs and policies (smoking cessation telephone services, benefits coverage for tobacco cessation therapies),
- Surveillance and evaluation programs,
- Strong administrative and management structure.

Despite receiving funding from tobacco revenues and the state tobacco lawsuit settlement, Connecticut invests only minimal funding to prevent or reduce tobacco use. Connecticut's FY07 tobacco prevention spending is $2 million or about 9.4% of the recommended CDC funding level of $21.2 million earning Connecticut the rank of 36 nationally.[88] Only three states, Maine, Delaware, and Colorado exceeded the CDC's recommended funding level. FY07 Tobacco settlement funding for Connecticut is estimated at $108.4 million. The cumulative total of tobacco settlement funds SFY2000 through SY2005 is $773,108,992. Annual tobacco industry marketing is estimated at $13.4 billion with $121.1 million spent in Connecticut.[89]

As of 2005, 41 states plus the District of Columbia provide tobacco dependence treatment. Connecticut does not provide coverage to Medicaid beneficiaries for smoking cessation therapies.[90] In 2004, Medicaid costs for treating smoking related diseases were approximately $430,000,000.[91]

The Institute of Medicine has urged enhanced anti-smoking efforts. Their recommendations include:

- States should adopt a funding strategy designed to provide stable support for the level of tobacco control funding recommended by the Centers for Disease Control.
- The state and federal government should increase tobacco excise taxes.

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[86] President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: Improving Quality in a Changing Health Care Industry, Chapter One-The State of Health Care Quality: How Good is Care?, www.hcqualitycommission.gov/final/chap01.html.
[87] Agency for Healthcare Research and Quality, 2005 National Healthcare Quality Report, AHRQ Publication No. 06-0018, December 2005, USDHHS, Rockville, MD.
[88] Campaign for Tobacco Free Kids, State Tobacco Settlement 2006, www.tobaccofreekids.org
[89] Ibid.
[90] State Health Facts, www.statehealthfacts.org.
[91] CDC, Sustaining State Programs for Tobacco Control: Data Highlights 2006,http://www.cdc.gov/tobacco

- States and localities should enact complete bans on smoking in all non-residential indoor locations, including workplaces, malls, restaurants, and bars.
- Parents should make vehicles and homes smoke free zones.
- All retail outlets choosing to carry tobacco products should be licensed and monitored; all states should ban the sale of tobacco products directly through mail or internet or other electronic systems.
- School boards should require all middle schools and high schools to adopt evidence based smoking prevention programs and implement them with fidelity, coordinating these programs with public activities and/or annual mass media programming.
- A national, youth oriented media campaign should be a permanent component of the nation's strategy to reduce tobacco. State and community tobacco control programs should supplement this national media campaign with coordinated youth prevention activities.
- All insurance, managed care, and employee benefit plans, including Medicaid and Medicare should cover reimbursement for effective tobacco cessation programs as a lifetime benefit.
- Physicians, dentists, and other health care providers should screen and educate their patients about tobacco use at their annual health visits.
- State tobacco control programs, the CDC, philanthropic foundations and voluntary organizations should continue to support efforts of community coalitions advocating for tobacco use prevention and cessation, smoke free environments, and other policies and programs for reducing tobacco use.
- Congress should confer upon the Food and Drug Agency or another regulatory agency broad regulatory authority over the manufacture, distribution, marketing and use of tobacco products.
- Tobacco manufacturers should be required to discuss all chemical compounds found both in their products and smoke; to disclose to the public the content and delivery of nicotine based on standard established by the FDA or another regulatory agency; and to discuss to the public research on their product as well as behavioral aspects of its use.
- Congress should strengthen the federally mandated warning labels for tobacco products and should delegate authority to the FDA to update and revise these warnings on a regular basis.
- Congress should also restrict advertising and promotion by tobacco manufacturers.[92]

Links:

American Lung Association, http://lungusa.org
Center for Disease Control-Tobacco and Information Prevention Source (TIPS), www.cdc.gov/tobacco
National Cancer Institute-Smoking and Tobacco Control Monographs, Http://cancercontrol.cancer.gov/tcrb/monographs/
The Surgeon General, U.S. Department of Health and Human Services, www.surgeongeneral.gov/tobacco
Treating Tobacco Use and Dependence: A Clinical Practice Guideline, http://www.surgeongeneral.gov/tobacco/treating_tobacco_use.pdf
World Health Organization-Tobacco Free Initiative, http://www.who.int/tobacco/en/
You can quit smoking now, www.smokefree.gov

[92] Institute of Medicine, Ending the Tobacco Problem: A Blueprint for the Nation, May 2007, www.iom.edu.

Percent of Adults 18 years and over who are Smokers, 2006

Rank		Percent
	United States	**20.1**
1	Utah	9.8
2	California	14.9
3	Idaho	16.8
4	**Connecticut**	**17.0**
5	Washington	17.1
6	Hawaii	17.5
7	Maryland	17.7
8	Massachusetts	17.8
9	Colorado	17.9
9	District of Columbia	17.9
9	Texas	17.9
12	New Jersey	18.0
12	Vermont	18.0
14	Arizona	18.2
14	New York	18.2
16	Minnesota	18.3
17	Oregon	18.5
18	Nebraska	18.7
18	New Hampshire	18.7
20	Montana	18.9
21	Rhode Island	19.2
21	Virginia	19.3
23	North Dakota	19.5
24	Georgia	19.9
25	Kansas	20.0
26	New Mexico	20.1
27	South Dakota	20.3
28	Illinois	20.5
29	Wisconsin	20.8
30	Maine	20.9
31	Florida	21.0
32	Iowa	21.4
33	Pennsylvania	21.5
34	Wyoming	21.6
35	Delaware	21.7
36	North Carolina	22.1
37	Nevada	22.2
38	South Carolina	22.3
39	Michigan	22.4
39	Ohio	22.4
41	Tennessee	22.6
42	Alabama	23.2
42	Missouri	23.2
44	Louisiana	23.4
45	Arkansas	23.7
46	Alaska	24.0
47	Indiana	24.1
48	Mississippi	25.1
48	Oklahoma	25.1
50	West Virginia	25.7
51	Kentucky	28.5

Notes: #1 has lowest percent of adult smokers; #51 has the highest percent of smokers.
Sources: CDC, BRFSS, 2006

Community Risk Factors

Medical Safety

The health care system should be safe and patients should not be injured by care that is intended to help them. According to the Institute of Medicine, medical errors are one of the Nation's leading causes of death and injury.[93] The Institute of Medicine estimates that as many as 44,000 to 98,000 people die in U.S. hospitals each year as the result of medical errors.[94] The IOM defines medical error as "the failure to complete a planned action as intended or the use of a wrong plan to achieve an aim." An adverse event is defined as "an injury caused by medical management rather than by the underlying disease or condition of the patient."

According to the Agency for Health Care Research and Quality most medical errors can be prevented.[95] Medical errors are also costly. Medical errors cost the nation about $37.6 billion each year, with about $17 billion associated with preventable medical errors.[96]

MEDICAL SAFETY

Connecticut Target: The goal is to be error free. 2006: 242 adverse events

What does this measure?

The number of "adverse events" reported to the Connecticut Department of Public Health by Connecticut Hospitals.

How are we doing?

Connecticut has a mandatory medical error reporting law that requires hospitals and outpatient medical facilities to report "adverse events" to the Connecticut Department of Public Health within specified time periods. According to the Connecticut Department of Public Health, there were just 242 events reported between July 1, 2005 and September 14, 2006.[97] These events were primarily falls, perforations from endoscopic procedures and pressure ulcers.

About one-third of Americans (34 percent) report that they have been personally involved in a situation where a preventable medical error was made in their own care or that of a family member.[98] On a comparison survey of physicians in 2002, slightly more than one third of

[93] Institute of Medicine, *To Err is Human: Building a Safer Health Care System*, November 1999, http://www.iom.edu/file.asp?id=4117
[94] Ibid.
[95] Agency for Health Care Research and Quality, Medical Errors: The Scope of the Problem –An Epidemic of Fears, www.ahrq.gov/qual/errback.htm.
[96] *Medical Errors: The Scope of the Problem*. Fact sheet, Publication No. AHRQ 00-P037. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/qual/errback.htm .
[97] Connecticut Department of Public Health, *Legislative Report to the General Assembly-Adverse Event Reporting*, October 2006, Hartford, CT.
[98] Survey by Henry J. Kaiser Family Foundation, Agency for Healthcare Research and Quality, Harvard School of Public Health. Methodology: Fieldwork Conducted by Princeton Survey Research Associates International, July 7-September 5, 2004 and based on telephone interviews with a national adult sample of 2,012. Consumers' Experiences with Patient Safety and Quality Information Survey [July, 2004]

physicians (35 percent) report that they have been personally involved in a situation where a preventable medical error was made in their own care or that of a family member.[99]

However, the data on adverse events collected by the Connecticut Department of Public Health appears to be incomplete. The Connecticut Office of Health Care Access using hospital discharge data and extrapolating from national figures in the IOM report estimated that the number of adverse events statewide is 11,081 to 14,138, the number of preventable adverse events is 5,873 to 8,200 per year, and the number of preventable adverse events that result in death is 517 to 1,115 per year.[100] Thus, the number of adverse events reported to the Connecticut Department of Public Health falls far short of expected levels. Data is only reported at the state level; no facility specific information is available.

Connecticut Adverse Event Reporting

Adverse Event	#	%
SURGICAL EVENTS		
Surgery performed on the wrong body part	2	0.8
Surgery performed on the wrong patient	0	0.0
Wrong surgical procedure performed on a patient	1	0.4
Retention of a foreign object in a patient after surgery or other procedure	16	6.6
Intraoperative or immediately post-operative death in an American Society of Anesthesiologists (ASA) Class I patient	0	0.0
PRODUCT OR DEVICE EVENTS		
Patient death or serious disability associated with the use of contaminated drugs, devices, or biologics provided by the healthcare facility	0	0.0
Patient death or serious disability associated with the use of function of a device in patient care in which the device is used or functions other than as intended	6	2.5
Patient death or serious disability associated with intravascular air embolism that occurs while being cared for in a healthcare facility	1	0.4
PATIENT PROTECTION EVENTS		
Infant discharged to the wrong person	0	0.0
Patient death or serious disability associated with patient elopement (disappearance) for more than four hours	0	0.0
Patient suicide, or attempted suicide resulting in serious disability, while being cared for in a healthcare facility	2	0.8
CARE MANAGEMENT EVENTS		
Patient death or serious disability associated with a medication error (*e. g.*, errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation or wrong route of administration)	7	2.9
Patient death or serious disability associated with a hemolytic reaction due to the administration of incompatible blood or blood products	0	0.0
Maternal death or serious disability with labor or delivery in a low-risk pregnancy while being cared for in a healthcare facility	3	1.2
Patient death or serious disability associated with hypoglycemia, the onset of which occurs while the patient is being cared for in a healthcare facility	0	0.0
Death or serious disability (kernicterus) associated with failure to identify and treat hyperbilirubinimia in neonates	0	0.0
Stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility	23	9.5

[99] Medical Errors Survey [April, 2002] Survey by Henry J. Kaiser Family Foundation, Harvard School of Public Health. Methodology: Fieldwork conducted by Harris Interactive, April 24-July 22, 2002 and based on mail and online surveys with a sample of 831 physicians.

[100] Office of Health Care Access, ACHIEVE Issue Brief-Improving Quality and Patient Safety, July 2001.

Patient death or serious disability due to spinal manipulative therapy	0	0.0
ENVIRONMENTAL EVENTS Patient death or serious disability associated with an electric shock while being cared for in a healthcare facility	0	0.0
Any incident in which a line designated for oxygen or other gas to be delivered to a patient contains the wrong gas or is contaminated by toxic substances	0	0.0
Patient death or serious disability associated with a burn incurred from any source while being cared for in a healthcare facility	1	0.4
Patient death associated with a fall while being cared for in a healthcare facility	1	0.4
Patient death or serious disability associated with the use of restraints or bedrails while being cared for in a healthcare facility	1	0.4
CRIMINAL EVENTS Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider	0	0.0
Abduction of a patient of any age	0	0.0
Sexual assault on a patient within or on the grounds of a healthcare facility	9	3.7
Death or significant injury of a patient or staff member resulting from a physical assault (*i. e.*, battery) that occurs within or on the grounds of a healthcare facility	1	0.4
CONNECTICUT SPECIFIC EVENTS Perforations during open, laparoscopic and/or endoscopic procedures resulting in death or serious disability;	42	17.3
Falls resulting in serious disability while being cared for in a health care facility	112	46.2
Obstetrical events resulting in death or serious disability to the neonate	9	3.7
Significant medication reactions resulting in death or serious disability	2	0.8
Laboratory or radiologic test results not reported to the treating practitioner or reported incorrectly which result in death or serious disability due to incorrect or missed diagnosis in the emergency department.	0	0.0
Nosocomial infections defined as reportable sentinel events by the Joint Commission on Accreditation of Health Care Organizations	3	1.2
TOTAL	**242**	**100**

Note: Reporting period is July 1, 2005-September 14, 2006. The Connecticut Department of Public Health believes use of the NQF list of serious reportable events will lead to more reliable identification and reporting of such events, and that it will reduce incentives for underreporting. The number of events, awareness of such events, and willingness to report them will influence the number of events ultimately reported. The number does not reflect errors that occur in other settings such as physician offices, pharmacies, home, etc.

Source: Connecticut Department of Public Health, Legislative Report to the General Assembly-Adverse Event Reporting, October 2006, Hartford, CT.

In October 2006 the National Quality Forum (NQF) updated and endorsed a list of 28 serious reportable events in healthcare. Connecticut's reporting system included the earlier list of NQF serious reportable events. The Leap Frog Group, a voluntary program aimed at mobilizing employer purchasing power to alert America's health industry that big leaps in health care safety, quality and customer value will be recognized and rewarded, issued a call to hospitals to commit to its new "Never Events Policy".[101] Hospitals would be given the opportunity for public recognition for agreeing to do the following if a "never event" occurs within their facility:

- Apologize to the patient and/or family affected by the never event.
- Report the event to at least one reporting program: The Joint Commission on Accreditation of Healthcare Organizations (JCAHO); a state reporting program; or a Patient Safety Organization.
- Perform a root cause analysis, consistent with the chosen reporting program.

[101] The LeapFrogGroup, The LeapFrog Group Issues Call for Hospitals to Commit to New Policy on Health Care Never Events, November 15, 2006, http://www.leapfroggroup.org/media/file/Never_Events_release_FINAL.pdf

- Waive all costs directly related to the never event and refrain from seeking reimbursement from the patient or a third party payer.[102]

Recently in August 2007, Medicare will no longer pay the extra costs of treating preventable errors, injuries, and infections that occur in hospitals.

Hospital infections

Another measure of patient safety is the rate of healthcare associated infections. According to the Centers for Disease Control (CDC), healthcare-associated infections are infections that patients acquire during the course of receiving treatment for other conditions or that healthcare workers acquire while performing their duties within a healthcare setting.

Health-care associated infections occur worldwide and affect both developed and resource poor countries.[103] In the United States, one in 136 hospital patients become seriously ill as a result of acquiring an infection in a hospital.[104] Nationally, health-care associated infections account for an estimated 2 million infections, claims 90,000 lives, and result in $4.5 billion in excess health care costs annually.[105]

The Pennsylvania Cost Containment Council released its first hospital specific report on hospital-acquired infections that includes information on approximately 1.6 million patients treated in 168 acute care hospitals during 2005. Among the findings were:

- Hospitals reported 19,154 cases in which patients contracted a hospital-acquired infection, a rate of 12.2 per 1,000 cases. The hospitalizations in which these infections occurred amounted to 394,129 hospital days and $3.5 billion in hospital charges.
- The mortality rate for patients with hospital-acquired infection was 12.9 percent; the mortality rate for patients without a hospital-acquired infection was 2.3 percent.
- The average length of stay for patients with a hospital-acquired infection was 20.6 days; the average length of stay for patients with out a hospital-acquired infection was 4.5 days.
- The average hospital charge for patients with a hospital-acquired infection was $185,260; the average charge for patients without a hospital-acquired infection was $31,389.
- When looking at private sector insurance reimbursements (which do not include Medicare and Medicaid), the average payment for a case with a hospital-acquired infection was $53,915, while the average payment for a case without a hospital-acquired infection was $8,311.[106]

According to the World Health Organization, hand hygiene remains the primary measure to reduce healthcare acquired infections, but compliance is very low throughout the world.[107] According to a recent report, average compliance with hand hygiene recommendations varies between hospital wards, among professional categories of health care workers, and

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[102] Ibid.
[103] World Health Organization, WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft): A Summary, WHO, 2005.
[104] Ibid.
[105] Center for Disease Control, Hospital Acquired Infections, http://www.cdc.gov/ncidod/dhqp/healthDis.html
[106] Pennsylvania Cost Containment Council, Hospital-Acquired Infections in Pennsylvania-2005, November 14, 2006, www.phc4.org.
[107] WHO, WHO Guidelines on Hand Hygiene in Health Care (Advanced Draft): A Summary, WHO, 2005.

according to working conditions, as well as according with definitions used in the studies.[108] Compliance with hand hygiene recommendations is usually estimated at less than 50 percent.[109] The low rate of hand washing represents a serious patient safety challenge.[110] In addition to low hand washing compliance, other factors contributing to an increase in health care acquired infections include:

- Sicker and more immunocompromised patients in hospitals,
- Infrastructure repairs and renovations to aging hospitals and new construction on existing campuses creating risk of airborne fungal diseases caused by dust and spores released during demolition and construction, and
- Increasing antimicrobial use in hospital and long-term care facilities creating a large reservoir of resistant microbial strains.[111]

Currently, data on healthcare associated infections is not tracked by the State of Connecticut. However, during the 2006 legislative session, Public Act 06-142, An Act Concerning Hospital Acquired Infections, was passed. This new law requires Connecticut hospitals to report hospital-acquired infections to the Connecticut Department of Health; the first report indicating the results of the reporting system is due on or about October 1, 2008. One of the shortcomings of this legislation is that the Connecticut Department of Public Health is required to implement the recommendations of Committee on Healthcare Associated Infections, within available appropriations. Considering the burden of health care acquired infections (HAI) and its associated costs, public policy makers need to commit to an effective reporting and prevention system for HAI.

Medication errors

Medication errors are another important health care quality measure. In any given week, four out of every five U.S. adults will use prescription medicines, over-the-counter drugs, or dietary supplements of some sort, and nearly one-third of adults will take five or more different medications.[112]

More than 1.5 million preventable medication errors occur every year in the United States.[113] Comparable data at the state level is not available. However, as part of Connecticut's mandatory reporting law, seven (7) cases of patient death or serious disability associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation or wrong route of administration) were reported to the Connecticut Department of Public Health during the period is July 1, 2005-September 14, 2006.

Medication errors can result in significant financial costs. It is estimated that one Adverse Drug Event adds more than $8,750 to the cost of a hospital stay.[114] Multiple factors can result in medication errors including: packaging and labeling, similar drug names, medication orders (illegible handwriting), abbreviations.

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[108] CDC, Improving Adherence to Hand Hygiene Practice: A Multidisciplinary Approach, March-April 2001, www.cdc.gov/ncidod/eid/vol7no2/pittet.htm
[109] Ibid.
[110] Joseph, A, The Impact of Environment on Infections in Healthcare Facilities, Issue Paper 1, July 2006, The Center for Health Design, www.healthdesign.org
[111] Ibid.
[112] Institute of Medicine, Preventing Medication Errors: Quality Chasm Series, July 2006, www.iom.edu.
[113] Ibid.
[114] Ibid.

Rand researchers indicated that if all hospitals had a Health Information Technology system including Computerized Physician Order Entry systems for medications, around 200,000 adverse drug events could be eliminated each year, at an annual savings of $1 billion.[115] Hospitals with over 100 beds generated most of the savings.[116] Additionally, patients aged 65 years and over accounted for the majority of avoided adverse drug events.

Medication errors also occur in community settings. In a recent report by the Agency for Healthcare Quality and Research (AHQR), 3.1 percent of the noninstitutionalized population aged 65 years of age and over used at least one of the eleven drugs that should always be avoided by the elderly and 18.4 percent of elderly persons used at least 1 out of 33 drugs that are inappropriate for the elderly.[117] State level data was not reported.

Links:

Agency for Health Care and Quality, http://www.ahrq.gov/

Connecticut Department of Public Health, http://www.dph.state.ct.us/hcquality/Quality/qcr.htm

Institute of Medicine, www.iom.edu

Kaiser Family Foundation, http://www.kff.org/kaiserpolls/

[115] Rand, Health Information Technology-Can HIT Lower Costs and Improve Quality? 2005, www.rand.org
[116] Ibid.
[117] Agency for Healthcare Research and Quality, 2005 National Healthcare Quality Report, AHRQ Publication No. 06-0018, December 2005, USDHHS, Rockville, MD.

Medical Malpractice

The cost and availability of medical malpractice insurance is causing a major problem in many states nationwide. The number and amount of medical malpractice awards has been cited as a factor contributing to the high cost of medical malpractice insurance. Connecticut is one of 20 states designated by the American Medical Association as a Medical Liability Crisis state.[118]

MEDICAL MALPRACTICE CLAIMS

Connecticut	Target:	The goal is to eliminate errors in the health care system	2006:	10.0 per 1,000 active non-federal physicians.

What does this measure?

The number of paid medical malpractice claims Per 1,000 Active, non-federal physicians.

How are we doing?

Connecticut ranks 23rd nationwide with 10.0 medical malpractice claims per 1,000 active, non-federal physicians below the national rate was 13.0 per 1,000 active non-federal physicians. Nationally, 12,513 claims were paid in 2006; this included 151 claims in Connecticut. Alabama has the lowest number of medical malpractice claims at 4.0 medical malpractice claims paid per 1,000 active, non-federal physicians. Louisana has the highest rate of medical malpractice claims per 1,000 active, non-federal physicians.

Number of Paid Medical Malpractice Claims Per 1,000 Active, Non-Federal Physicians

	2003	2005	2006
United States	18.8	17.1	13.0
Connecticut	16.8	11.0	10.0

Notes:
CT ranks 23rd with #1 having the lowest number of paid claims per 1,000 active, non-federal physicians.

Sources: Kaiser Family Foundation analysis of data from the National Practitioner Data Bank (NPDB), Public Use Data File (NPDB0606.POR), accessed 7/31/07, www.statehealthfacts.org.

[118] American Medical Association, Medical liability crisis map, 2005, www. http://www.ama-assn.org/ama/noindex/category/11871.html.

Number of Paid Claims Per 1,000 Active, Non-Federal Physicians, 2006

Rank		Claim Rate
	United States	**13**
1	Alabama	4
1	Hawaii	4
1	Minnesota	4
1	Wisconsin	4
5	North Carolina	6
5	Virginia	6
7	Maine	7
7	North Dakota	7
7	Oregon	7
7	Vermont	7
11	Alaska	8
11	Maryland	8
11	Massachusetts	8
11	New Hampshire	8
11	Washington	8
16	Arkansas	9
16	California	9
16	Colorado	9
16	Illinois	9
16	Iowa	9
16	Ohio	9
16	Tennessee	9
23	**Connecticut**	**10**
23	Idaho	10
23	Rhode Island	10
23	South Dakota	10
27	Georgia	11
27	Texas	11
29	Delaware	12
29	Michigan	12
29	Missouri	12
29	Utah	12
33	Arizona	13
33	Nebraska	13
35	Indiana	14
36	Florida	15
36	Kentucky	15
36	Nevada	15
36	Oklahoma	15
36	West Virginia	15
41	Mississippi	16
41	New Jersey	16
41	South Carolina	16
41	Wyoming	16
45	District of Columbia	17
45	Kansas	17
45	New Mexico	17
48	Montana	18
49	Pennsylvania	19
50	New York	20
51	Louisiana	27

Sources: Kaiser Family Foundation analysis of data from the National Practitioner Data Bank (NPDB), Public Use Data File (NPDB0606.POR), accessed 8/15/07, www.statehealthfacts.org

AVERAGE MEDICAL MALPRACTICE CLAIMS PAYMENTS

Connecticut Target: No goal has been set for this measure 2006: $509,276

What does this measure?

Average medical malpractice claims payments. Data limited to those payments made during 2006+ for medical malpractice claims for allopathic physicians (MDs), allopathic interns and residents (MDs), osteopathic physicians (DOs), and osteopathic interns and residents (DOs). Payments are based on physician's work state.

How are we doing?

Connecticut has one of the highest average medical malpractice claims paid nationally; Connecticut ranks 48th with an average claims payment of $509,276. The national average was $308,593. Michigan had the lowest average claims payment.

Average Medical Malpractice Claims Payments

	2003	2005	2006
United States	$291,236	$290,984	$308,593
Connecticut	$486,759	$731,695	$509,276

Sources: Kaiser Family Foundation analysis of data from the National Practitioner Data Bank, www.statehealthfacts.org, accessed 8/15/07.

Each year the Medical Liability Monitor conducts a national state-by-state survey of major writers of professional liability insurance for physicians. Rates are provided for three specialties: internal medicine, OB/gyn, and general surgery.

As shown in the following three tables rates vary significantly by specialty, with those in high-risk specialties (e.g. OB/gyn, surgeons) paying higher premiums. Rates have also increased significantly in recent years .

Medical Liability Insurance Premiums
Connecticut- Internal Medicine

Year	Provider				
	Connecticut Medical Insurance Company	Doctor's Company	PHICO Insurance Company	ProSelect	American Healthcare Indemnity Co.
1991	$5,615				
1992	$5,615				
1993	$5,615				
1994	$5,980				
1995	$5,980				
1996	$6,279				
1997	$6,279	$12,649	$8,560	$5,951	
1998	$6,279		$8,560	$5,957	
1999	$6,279		$8,560	$5,951	$10,568
2000	$7,736		$8,560	$5,951	$10,568
2001	$9,863		$8,560	$6,171	$15,809
2002	$13,820			$7,405	
2003	$21,420			$8,622	
2004	$28,917			$12,197	

Source: Medical Liability Monitor, 1991 to 2004.

Medical Liability Insurance Premiums
Connecticut- Obstetricians/Gynecologists

Year	Provider				
	Connecticut Medical Insurance Company	Doctor's Company	PHICO Insurance Company	ProSelect	American Healthcare Indemnity Co.
1991	$44,920				
1992	$44,920				
1993	$50,538				
1994	$53,820				
1995	$53,820				
1996	$56,511				
1997	$56,511	$46,964	$45,366	$55,848	
1998	$56,511		$45,366	$55,848	
1999	$56,511		$45,366	$55,848	$43,327
2000	$63,292		$45,366	$55,848	$43,327
2001	$77,533		$45,366	$57,905	$64,817
2002	$94,978			$69,499	
2003	$123,470			$80,904	
2004	$148,164			$105,367	

Source: Medical Liability Monitor, 1991 to 2004.

Medical Liability Insurance Premiums

Connecticut- General Surgeons

Year	Provider				
	Connecticut Medical	Doctor's Company	PHICO Insurance Company	ProSelect	American Healthcare Indemnity Co.
1991	$29,198				
1992	$29,198				
1993	$29,198				
1994	$31,096				
1995	$31,096				
1996	$32,651				
1997	$32,651	$31,182	$26,211	$25,140	
1998	$32,651		$26,211	$25,140	
1999	$32,651		$26,211	$25,140	$30,646
2000	$32,651		$26,211	$25,140	$30,646
2001	$34,283		$26,211	$36,192	$45,846
2002	$36,854			$43,438	
2003	$42,385			$50,566	
2004	$57,220			$65,198	

Source: Medical Liability Monitor, 1991 to 2004.

Links:
American Medical Association
http://www.ama-assn.org/

Kaiser Family Foundation-Medical Malpractice Law in the United States
http://www.kff.org/insurance/7328.cfm

National Council of State Legislatures
http://www.ncsl.org/standcomm/sclaw/medmaloverview.htm

Average Claims Payments 2006

Rank		Average Claims Paid
	United States	**$308,593**
1	Michigan	$132,380
2	Vermont	$145,111
3	Kansas	$154,905
4	Texas	$169,980
5	South Carolina	$170,763
6	West Virginia	$182,640
7	New Mexico	$197,342
8	Louisiana	$213,952
9	Nebraska	$219,739
10	South Dakota	$224,625
11	California	$230,384
12	Oklahoma	$239,896
13	Florida	$241,809
14	Arkansas	$242,561
15	Utah	$251,286
16	Iowa	$255,599
17	Mississippi	$258,395
18	Indiana	$261,075
19	Idaho	$279,460
20	Arizona	$285,473
21	Washington	$285,713
22	Kentucky	$285,812
23	Georgia	$289,360
24	North Dakota	$298,333
25	Virginia	$299,828
26	Alaska	$302,385
27	Oregon	$308,720
28	Colorado	$310,206
29	Ohio	$311,294
30	Tennessee	$314,204
31	Montana	$325,500
32	New Hampshire	$325,914
33	District of Columbia	$333,080
34	Missouri	$333,161
35	Pennsylvania	$334,179
36	Hawaii	$339,184
37	Maryland	$340,870
38	Nevada	$349,656
39	Maine	$353,086
40	North Carolina	$363,090
41	Rhode Island	$373,005
42	Alabama	$387,012
43	New Jersey	$393,808
44	New York	$413,747
45	Wyoming	$423,056
46	Massachusetts	$473,684
47	Minnesota	$477,873
48	**Connecticut**	**$509,276**
49	Wisconsin	$517,593
50	Delaware	$560,970
51	Illinois	$629,107

Sources: Kaiser Family Foundation analysis of data from the National Practitioner Data Bank Downloaded from State Health Facts, 8/15/07.

ACCESS TO HEALTH CARE

Uninsured Population

Providing access to quality and affordable health care is a key issue. Health insurance is a major factor affecting access to the health care system. Those without health insurance are less likely to have a regular source of health care than their insured counterparts. They are less likely to receive preventative care, more likely to be hospitalized for avoidable health problems, and are more likely to be diagnosed in late stages of disease.

Additionally, the lack of health insurance affects the financial well being of families. When the uninsured are unable to pay their medical expenses those costs are passed on to others. According to the Institute of medicine, a high rate of uninsured can put strain on certain services and institutions as well as adversely affect the overall health status of the community.[119] The Connecticut Hospital Association reported that in 2003, $62 million of $149 million of Connecticut hospitals' uncompensated care was associated with inpatient and outpatient care provided to the uninsured.[120] The cost of uncompensated care is passed on to individuals and businesses through higher fees.

UNINSURED POPULATION

Connecticut Target: 0.0% uninsured 2006: 9.4%

What does this measure?

The percent of persons without health insurance.

How are we doing?

The Nation's goal is to increase the proportion of adults who have health insurance to 100 percent. Data from the Current Population Survey put the number of uninsured persons in 2006 at 46,995,000 nationally or 15.8 percent of the population. Between 2003 and 2005, the number of uninsured increased by 4.5 percent or by 2,034,000 persons nationwide.

In Connecticut, 325,000 persons do not have insurance comprising 9.4 percent of the population. Between 2003 and 2006, the number of uninsured decreased 8.9 percent or by 32,000 persons.

Rhode Island ranks 1st with the lowest percentage of uninsured persons. Texas has the higherst percent of uninsured persons; nearly one-fourth of the Texas population do not have health insurance. Connecticut ranks 6th nationwide.

[119] Institute of Medicine, *A Shared Destiny: Effects of Uninsurance on Individuals, Families, and Communities,* National Academy of Sciences, 2003, http://www.iom.edu/project.asp?id=4660.
[120] Connecticut Hospital Association, *Fact Sheet-Connecticut's Uninsured,* May 2005, http://www.chime.org/ChimeData/ChimeDataFactSheets.html.

Uninsured Population
(in 000's)

	2003			2004			2006			Change 2003-2006	
	Total Pop.	**Un-insured**	**%**	**Total Pop**	**Un-insured**	**%**	**Total Pop**	**Un-insured**	**%**	**#**	**%**
CT	3,421	357	10.4	3,493	407	11.6	3,462	325	9.4	-32	-8.9
US	288,280	44,961	15.6	291,155	45,820	15.7	296,824	46,995	15.8	2,034	4.5

Source: Current Population Survey, Table HI06-Health Insurance Coverage Status by State for all people, http://www.census.gov/hhes/www/hlthins/historic/hihistt4.html

In 2005, 63.8 percent of private sector establishments in Connecticut offered health insurance compared to 56.3 percent nationally. Also, in 2005, 98.9 percent of private sector establishments with 50 or more employees in Connecticut offered health insurance to employees and 53.5 percent of private sector establishments with fewer than 50 or more employees in Connecticut offered health insurance to employees.

Policy options that have been debated include:

- Continuation of the system of employer sponsored health insurance with an employer mandate,
- Individual health insurance mandate,
- Single payer health system,
- Expansion of existing public programs for vulnerable populations,
- Consumer directed health care.

The Institute of Medicine offers a set of principle for guiding the debate and evaluating various strategies:

- Health care coverage should be universal.
- Health care coverage should be continuous.
- Health care coverage should be affordable to individuals and families.
- The health insurance strategy should be affordable and sustainable for society.
- Health insurance should enhance health and well-being by promoting access to high-quality care that is effective, efficient, safe, timely, patient-centered, and equitable.[121]

[121] Institute of Medicine, *Insuring America's Health: Principles and Recommendations,* January 2004, National Academy of Science, www.iom.edu.

Percent Uninsured 2006

Rank		Percent Uninsured
	United States	**15.8**
1	Rhode Island	8.6
2	Hawaii	8.8
3	Wisconsin	8.8
4	Minnesota	9.2
5	Maine	9.3
6	**Connecticut**	**9.4**
7	Pennsylvania	10.0
8	Ohio	10.1
9	Massachusetts	10.4
10	Iowa	10.5
11	Michigan	10.5
12	New Hampshire	11.5
13	Indiana	11.8
14	South Dakota	11.8
15	Washington	11.8
16	Delaware	12.1
17	North Dakota	12.2
18	Kansas	12.3
19	Nebraska	12.3
20	Missouri	13.3
21	Virginia	13.3
22	West Virginia	13.5
23	Tennessee	13.7
24	Maryland	13.8
25	Illinois	14.0
26	New York	14.0
27	Wyomin	14.6
28	Alabama	15.2
29	Idaho	15.4
30	New Jersey	15.5
31	Kentucky	15.6
32	South Carolina	15.9
33	Alaska	16.5
34	Montana	17.1
35	Colorado	17.2
36	Utah	17.4
37	Georgia	17.7
38	North Carolina	17.9
39	Oregon	17.9
40	California	18.8
41	Arkansas	18.9
42	Oklahoma	18.9
43	Nevada	19.6
44	Mississippi	20.8
45	Arizona	20.9
46	Florida	21.2
47	Louisiana	21.9
48	New Mexico	22.9
49	Texas	24.5
	District of Columbia	
	Vermont	

Source: U.S. Census Bureau, August 28, 2006

Percent of Private Sector Establishments that offer health insurance to employees by firm size

Employee Size	Connecticut		United States	
	2003	2005	2003	2005
Less than 10	46.1	44.1	35.6	35.7
10-24 employees	88.4	78.4	66.2	64.0
25-99 employees	84.8	97.8	81.0	82.6
100-999 employees	99.1	97.8	93.5	94.2
1000 or more employees	96.5	99.2	98.6	98.9
Two Categories				
• Less than 50 employees	54.6	53.5	43.2	43.4
• 50 or more employees	96.2	98.9	95.4	95.7
Total	65.3	63.8	56.2	56.3

Source: Agency for Healthcare Research and Quality, Center for Financing, Access, and Cost Trends, 2004 and 2003 Medical Expenditure Panel Survey - Insurance Component. Table II.A.2: Percent of private sector establishments that offer health insurance by firm size. http://www.meps.ahrq.gov/mepsweb/data_stats/summ_tables/insr/state/series_2/2005/tiia2.htm, accessed 7/31/2007.

Links:

Cover The Uninsured Week, http://covertheuninsuredweek.org/

Institute of Medicine-Consequences of Uninsurance, http://www.iom.edu/project.asp?id=4660

Kaiser Commission on Medicaid and the Uninsured, http://www.kff.org/about/kcmu.cfm

Kaiser Family Foundation, Expanding Health Care Coverage to the Uninsured-Background Brief, www.kaiserEDU.org

Cost of Health Insurance

The cost of health insurance impacts employers as well as employees. Premium cost is the main reason why employers do not offer employer sponsored health insurance.[122] The cost of insurance is also a major reason uninsured adults give for being without coverage and why employed persons turn down workplace health insurance.[123]

The cost of health insurance is a major competitiveness issue for businesses facing stiff global competition from companies abroad where companies rely on government supported health systems financed by taxes.

Employer Based Health Premium

Connecticut	Target:	Affordable, predictable, and sustainable premiums	2005:	$4,390 single $11,717 family

What does this measure?

The average annual cost of employment-based health insurance for single and family coverage.

How are we doing?

In Connecticut health insurance premiums rose 30 percent for single and family coverage between 2002 and 2005.

Average Annual Cost of Employment-Based Health Insurance

	2002	2003	2004	2005	Change 2002-2005	
					$	%
United States						
Single coverage	$3,189	$3,481	$3,705	$3,991	$802	25.0%
Family coverage	$8,469	$9,249	$10,006	$10,728	$2,259	27.0%
Connecticut						
Single coverage	$3,373	$3,676	$3,864	$4,390	$1,017	30.0%
Family coverage	$9,047	$10,119	$11,035	$11,717	$2,670	29.5%

Source: Kaiser Family Foundation, www.statehealthfacts.org. The data was downloaded from the Kaiser Family Foundation, State Health Facts site. The original source of data is from the Medical Expenditure Panel Survey Insurance Component which is an annual survey of establishments that collects information about employer-

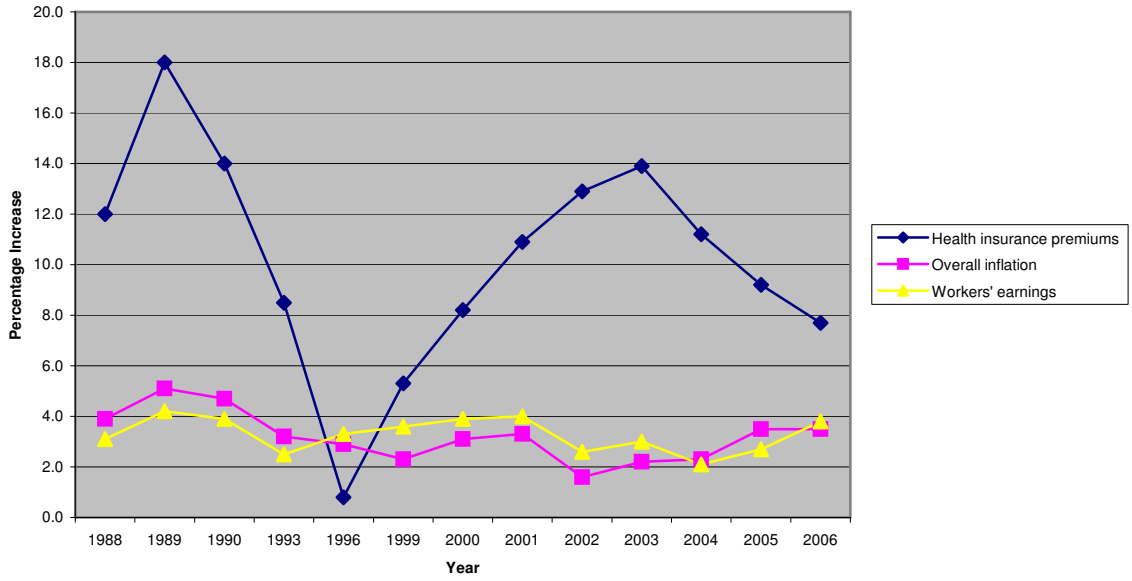
[122] Connecticut Office of Health Care Access, *2004 Small Health Insurance Survey-Focus on Results*, November 2004, http://www.ct.gov/ohca/lib/ohca/publications/2004_employer_survey_brief11-1_with_banner.pdf

[123] Institute of Medicine, *A Shared Destiny: Effects of Uninsurance on Individuals, Families, and Communities,* National Academy of Sciences, 2003, http://www.iom.edu/project.asp?id=4660.

sponsored health insurance offerings in the United States: Agency for Healthcare Research and Quality, Center for Cost and Financing Studies. 2002, 2003, and 2004 Medical Expenditure Panel Survey - Insurance Component.

Not only do rising health care costs affect Connecticut employers, but they also affect Connecticut's employees. Many employees find that their wages are not keeping pace with their increasing medical plan payroll deductions and out-of-pocket costs.[124] The data below show that premiums continue to increase faster than overall inflation and worker's wages.

Percentage Increase in Health Insurance Premiums Compared to Other Indicators



	1988	1989	1990	1993	1996	1999	2000	2001	2002	2003	2004	2005	2006
Health insurance premiums	12.0	18.0	14.0	8.5	0.8	5.3	8.2	10.9	12.9	13.9	11.2	9.2	7.7
Overall inflation	3.9	5.1	4.7	3.2	2.9	2.3	3.1	3.3	1.6	2.2	2.3	3.5	3.5
Workers' earnings	3.1	4.2	3.9	2.5	3.3	3.6	3.9	4.0	2.6	3.0	2.1	2.7	3.8

Source: Kaiser Family Foundation, Employer Health Benefits 2006 Survey, www.kkf.org.

Employees continue to bear a greater percentage of costs for themselves and dependents with employee contributions having increased 126% over the past five years.[125] Taxpayers, too, are affected by rising health care costs, as heath care is a cost driver in both state and municipal budgets.

The United States ranks far ahead of other countries in terms of health spending per capita, with spending of $6,401, more than twice the OECD average of $2,759 in 2005.[126] McKinsey & Company determined the that overriding cause of high US health care costs is

[124] Hewitt Associates, Employers and Employees Struggle with Health Care Costs: Rate Hikes Continue to Outpace Inflation and Salary Increases, October 10, 2005, www.hewitt.com.
[125] Hewitt Associates, Health Care Expectations: Future Strategy and Direction 2005" Executive Summary of Hewitt Teleconference, November 17, 2004. www.hewitt.com
[126] OECD, OECD Health Data 2007-How does the United States Compare? www.oecd.org.

the failure of the intermediation system (e.g. payers, employers, regulators, and government) to (a) provide sufficient incentives to patients and consumers to be value-conscious in their demand decisions, and (b) establish the necessary incentives or mandates to promote rational supply by providers or other suppliers.[127] They determined that there were no reliable mechanisms to drive down input prices or stem the high usage of consultations and outpatient testing and imagining. McKinsey found that overall US drug costs to the system are 50 to 70 percent higher that in peer countries. Physician compensation contributes to additional spending over peer countries. The fee for service creates incentives to see more patients. Also, physicians frequently co-own outpatient facilities and diagnostic testing and procedure laboratories and receive a share of profits from these facilities. Further, the U.S. health care system incurs a number of costs not borne by other countries that are unique to the U.S. with its significant for-profit element and its multiple-state, multiple-payer administrative structure.[128] A study published in the New England Journal of Medicine estimated that administration accounted for 31 percent of health care expenditures in the United States. Included in the administrative figures were administrative costs of health insurers, employers' health benefits programs, hospitals, nursing homes and home health care agencies.[129]

Health care costs in Connecticut are not competitive. Health insurance costs in Connecticut are among the highest in the nation. Connecticut health care premiums for family coverage are the third costliest in the nation at $11,717 per year and health care premiums in Connecticut for single coverage are the fifth costliest in the nation at $4,390.

While most agree that something must be done to stem the rising cost of health insurance, there is no silver bullet that can bring about the required changes. It is clear that a multi-faceted approach involving prevention and chronic disease management, reducing the number of uninsured, improvements in quality and safety of the health care system, government regulation reform and tort reform, streamlined administration, performance based provider compensation, and long-term commitment on the part of policy makers, practitioners, employers, and consumers to address these issues will be required.

Links:

Kaiser Family Foundation-Health Insurance Costs, http://www.kff.org/insurance/index.cfm

[127] McKinsey & Company, Accounting for the Cost of Health Care in the United States, January 2007, www.mckinsey.com/mgi.
[128] Ibid.
[129] Woolhander, Steffie, Terry Campbell, and David U. Himmelstein, Costs of Health Care Administration in the United States and Canada, New England Journal of Medicine, August 21, 2003; 349:768-75.

Cost of Health Insurance
Single Coverage, 2005

Rank		Cost
	United States	**$3,991**
1	Hawaii	$3,339
2	Mississippi	$3,402
3	Alabama	$3,419
4	North Dakota	$3,438
5	Arkansas	$3,590
6	Utah	$3,633
7	Iowa	$3,686
8	Virginia	$3,734
9	Missouri	$3,741
10	Nevada	$3,752
11	Kansas	$3,755
12	Nebraska	$3,777
13	South Dakota	$3,796
14	North Carolina	$3,802
15	New Mexico	$3,813
16	Tennessee	$3,822
17	California	$3,823
18	Kentucky	$3,823
19	Maryland	$3,834
20	Georgia	$3,861
21	Colorado	$3,891
22	Montana	$3,898
23	Ohio	$3,928
24	Louisiana	$3,931
25	Minnesota	$3,932
26	South Carolina	$3,943
27	Washington	$3,975
28	Florida	$4,003
29	Indiana	$4,042
30	Illinois	$4,049
31	Oregon	$4,051
32	Idaho	$4,078
33	Oklahoma	$4,088
34	Texas	$4,108
35	West Virginia	$4,128
36	New Hampshire	$4,175
37	Pennsylvania	$4,195
38	District of Columbia	$4,220
39	Wisconsin	$4,223
40	Massachusetts	$4,235
41	New York	$4,239
42	Michigan	$4,287
43	Maine	$4,290
44	Arizona	$4,294
45	New Jersey	$4,332
46	Wyoming	$4,388
47	**Connecticut**	**$4,390**
48	Vermont	$4,392
49	Rhode Island	$4,417
50	Delaware	$4,623
51	Alaska	$5,088

Source: State Health Facts, downloaded August 9, 2007.

Cost of Health Insurance, Family Coverage 2005

Rank		Cost
	United States	**$10,728**
1	North Dakota	$8,334
2	Arkansas	$9,190
3	Iowa	$9,359
4	Hawaii	$9,392
5	Alabama	$9,420
6	North Carolina	$9,657
7	Kansas	$9,734
8	Nebraska	$9,805
9	Missouri	$9,948
10	Mississippi	$9,987
11	Nevada	$10,011
12	Montana	$10,058
13	Georgia	$10,262
14	Arizona	$10,268
15	Utah	$10,282
16	Virginia	$10,292
17	South Dakota	$10,312
18	Tennessee	$10,361
19	Idaho	$10,398
20	South Carolina	$10,436
21	Maryland	$10,528
22	California	$10,551
23	Illinois	$10,574
24	Louisiana	$10,602
25	Kentucky	$10,617
26	New Mexico	$10,637
27	Ohio	$10,662
28	Indiana	$10,678
29	Minnesota	$10,846
30	Colorado	$10,850
31	Florida	$10,852
32	Oregon	$10,898
33	West Virginia	$10,900
34	Delaware	$10,964
35	Wisconsin	$10,983
36	Oklahoma	$10,985
37	Michigan	$11,005
38	Washington	$11,018
39	Pennsylvania	$11,108
40	New York	$11,280
41	Maine	$11,289
42	New Jersey	$11,403
43	Vermont	$11,420
44	Massachusetts	$11,435
45	Wyoming	$11,467
46	Texas	$11,533
47	Alaska	$11,542
48	District of Columbia	$11,623
49	**Connecticut**	**$11,717**
50	New Hampshire	$11,835
51	Rhode Island	$11,924

Source: State Health Facts, downloaded August 9, 2007

Health Care Workforce

The nation's physician and nursing workforce are critical to the delivery of health care in the United States. Ongoing tracking and assessments of the workforce are necessary to guide the higher education community, policy makers, prospective workers, and others concerned about health care in this nation.

PHYSICIAN WORKFORCE

Connecticut	Target:	A competent culturally diverse workforce sufficient to meet the needs of the population.	2004:	369 physicians per 100,000 population

What does this measure?

The number of non-federal physicians per 100,000 population.

How are we doing?

In terms of the number of physicians per 100,000 population, Connecticut is well above the national average of 281. Data on the health care workforce in Connecticut is severely limited. One fundamental public health service is to assure an adequate and competent public health workforce.[130] However, the Connecticut Department of Public Health's database is limited in its ability to assess health care workforce trends, patterns, and shortages. According to a recent report by the Program Review and Investigations Committee, the Connecticut Department of Public Health does not know how many doctors are involved in patient care, the number of doctors actually practicing under each specialty in patient care, the number of doctors who are limiting their specialty or changing specialties, or the trends in physician employment.[131] In 2001, the Connecticut Department of Health acknowledged that it had limited data available to assess health care workforce shortages in Connecticut.[132]

The Council on Graduate Medical Education (COGME) is authorized by Congress to assess workforce trends. Among the trends are: a growing population, younger physicians wanting to work few hours, an aging population, and an increased demand for specialists' services. By the year 2020, they predicted that there will be a national shortage of 85,000 physicians.[133]

[130] Public Health Functions Steering Committee, Public Health in America, Fall 1994, http://www.health.gov/phfunctions/public.htm
[131] Legislative Program Review and Investigations Committee, Op.Cit.
[132] Connecticut Department of Public Health, Health Care Workforce Shortages-A review of available data and measures for selected professions, May, 2001, http://www.dph.state.ct.us/Commissioner/Work_Force/hwsfinal%20report.pdf
[133] Council on Graduate Medical Education, Physician Workforce Policy Guidelines for the United States, 2000-2020.www.cogme.gov./report16.htm.

Nonfederal physicians per 100,000 population

	2003	2004	Change 2003-3004	
			#	%
United States	281	281	0	0.0%
Connecticut	367	369	2	0.5%

Notes: Nonfederal physicians are not employed by the federal government and include medical doctors and osteopaths. They represent 98% of total physicians.
Sources: Data was retrieved from State Health Facts, www.statehealthfacts.org

NURSING WORKFORCE

Connecticut	Target:	A competent culturally diverse workforce sufficient to meet the needs of the population.	2005:	972 nurses per 100,000 population

What does this measure?

The number of registered nurses per 100,000 population.

How are we doing?

Connecticut also had 972 registered nurses per 100,000 population, well above the national figures of 799 per 100,000 population.

Rate of Registered Nurses Per 100,000 Population

	2002	2005	Change 2002-2005	
			#	%
United States	780	799	19	2.4%
Connecticut	910	972	62	6.8%

Notes: Registered Nurses include advance practice nurses such as nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists.

Sources: Data was retrieved from State Health Facts, www.statehealthfacts.org

Nonfederal physicians per 100,000 population, 2004

Rank		Rate
	United States	**281**
1	District of Columbia	752
2	Massachusetts	451
3	New York	401
4	Maryland	389
5	**Connecticut**	**369**
6	Vermont	363
7	Rhode Island	361
8	New Jersey	333
9	Pennsylvania	332
10	Hawaii	302
10	Maine	302
12	Michigan	289
12	Ohio	289
14	Illinois	284
15	Minnesota	283
16	Delaware	272
17	Oregon	269
18	Colorado	268
19	Missouri	267
19	New Hampshire	267
21	Washington	266
22	Virginia	264
23	Louisiana	262
23	Tennessee	262
25	Wisconsin	262
26	California	261
27	Florida	258
28	West Virginia	254
29	North Carolina	252
30	North Dakota	244
31	Nebraska	243
32	New Mexico	238
33	Kansas	235
34	Kentucky	233
35	South Carolina	231
36	Arizona	225
37	Montana	224
38	Indiana	222
39	Georgia	219
39	Texas	219
41	Iowa	218
42	Alaska	217
42	South Dakota	217
44	Alabama	216
45	Utah	215
46	Arkansas	205
46	Oklahoma	205
48	Nevada	196
49	Wyoming	191
50	Mississippi	182
51	Idaho	175

Source: State Health Facts, www.statehealthfacts.org.

A report by the U.S. Department of Health and Human Services puts the shortage of nurses at 21,791 in the year 2020 in Connecticut. Nationally, the shortage is estimated at 808,416 in 2020.[134]

Supply Versus Demand Projections for FTE Registered Nurses
Connecticut and US 2000-2020

Year	Supply	Demand	Excess or Shortage	Percentage of shortage
2000 CT	26,407	30,137	-3,730	-12%
US	1,889,243	1,999,950	-110,707	-6%
2005 CT	24,175	31,919	-7,744	-24%
US	2,012,444	2,161,831	-149,387	-7%
2010 CT	22,422	34,158	-11,736	-34%
US	2,069,369	2,344,584	-275,215	-12%
2015 CT	19,841	36,786	-16,945	-46%
US	2,055,491	2,562,544	-507,063	-20%
2020 CT	17,870	39,661	-21,791	-55%
US	2,001,998	2,810,414	-808,416	-29%

Source: U.S. Department of Health and Human Services, Health Resources and Services Administration, Projected Supply, Demand, and Shortages of Registered Nurses-2000-2020, July 2002.

Factors contributing to the nursing shortage include:

- Enrollment in schools of nursing is not growing fast enough to meet the projected demand for nurses over the next ten years.
- A shortage of nursing school faculty is restricting nursing program enrollments.
- The nursing workforce is aging and will be leaving the workforce.
- As the Baby Boomers age, the demand for more nurses will increase.
- Job burnout and dissatisfaction are driving nurses to leave the profession.[135]

A recent reported completed for the Business Council of Fairfield County identified growing workforce shortages as the most important issue affecting the prospects of the region's health care industry.[136]

Links:

American Association of Colleges of Nursing,
http://www.aacn.nche.edu/Media/shortageresource.htm

Connecticut Department of Public Health-Office of Health Workforce Development
http://www.dph.state.ct.us/Commissioner/Work_Force/work_force.htm

Council on Graduate Medical Education, www.cogme.gov

[134] U.S. Department of Health and Human Services, Health Resources and Services Administration, Projected Supply, Demand, and Shortages of Registered Nurses 2000-2020, July 2002.
[135] American Association of Colleges of Nursing, Nursing Fact Sheet, June 2005, http://www.aacn.nche.edu/Media/FactSheets/NursingShortage.htm.
[136] Holt, Wexler, Farnan, One Coast One Future Health Care Cluster Initative, December 2006.

Government Accounting Office, http://www.gao.gov/new.items/d01912t.pdf

Kaiser Family Foundation-Addressing the Nursing Shortage
http://www.kaiseredu.org/topics_im.asp?imID=1&parentID=61&id=138

Legislative Program Review and Investigations Committee
http://www.cga.ct.gov/2003/pridata/Studies/Medical_Mal_Final_Report.htm

National League for Nursing, http://www.nln.org/index.cfm

State Health Facts, http://www.statehealthfacts.kff.org/cgi-bin/healthfacts.cgi

United States Department of Health and Human Resources,
http://bhpr.hrsa.gov/healthworkforce/reports/rnproject/report.htm

Registered Nurses per 100,000 population, 2005

Rank		Rate
	United States	799
1	District of Columbia	1,515
2	Massachusetts	1,201
3	South Dakota	1,165
4	North Dakota	1,059
5	Iowa	1,009
5	Maine	1,009
7	Pennsylvania	995
8	Rhode Island	987
9	**Connecticut**	**972**
10	Minnesota	962
11	Nebraska	936
12	New Hampshire	932
13	Ohio	930
14	New Jersey	928
15	Kansas	923
16	Missouri	921
17	Delaware	914
18	Kentucky	904
19	Vermont	892
20	Mississippi	889
21	Maryland	875
22	Tennessee	874
23	Louisiana	873
24	West Virginia	861
25	Wisconsin	856
26	New York	854
27	Indiana	834
28	North Carolina	831
29	Alabama	818
30	Michigan	804
31	Illinois	803
32	Montana	800
33	Florida	780
34	Wyoming	774
35	Oregon	768
36	Washington	762
37	Alaska	761
38	South Carolina	732
39	Arkansas	729
40	Hawaii	725
41	Virginia	712
42	Colorado	708
43	Oklahoma	695
44	Georgia	658
45	Idaho	657
46	Texas	656
47	Utah	630
48	California	626
49	Nevada	579
49	New Mexico	579
51	Arizona	522

Source: State Health Facts, www.statehealthfacts.org.

Health Policies

Vaccination Rates

Infectious diseases are a major cause of illness, disability and death.[137] Many infections can be prevented through the use of vaccinations. Vaccination rates are a measure of use/under use of a service or procedure whose benefits exceed its risks and thus represent an indicator of quality of health care.[138]

Vaccines protect more than the individual vaccinated.[139] They also protect society when vaccination rates are high. Individuals who are unable to be vaccinated are protected because of group immunity.[140]

"Under use" of health care services occurs when there is evidence that a patient did not receive a service or procedure whose benefits exceeded its risks.[141] A classic case of "under use" of services is immunizations.[142] Immunizations are important for reducing mortality and morbidity, yet many individuals do not receive recommended immunizations!

CHILDHOOD IMMUNIZATION COVERAGE

Connecticut Target: 90% 2006: 85%

What does this measure?

The percent of children aged 19-35 months who are immunized. Immunized children are those who receive **4:3:1:3:3**, which is four or more doses of diphtheria, tetanus, and pertussis, three or more doses of poliovirus vaccine, one or more doses of any measles containing vaccine (MCV), three or more doses of Haemophilius Influenza type B (Hib), and three or more doses of hepatitis B vaccine (HepB).[143]

How are we doing?

Once a leader in childhood immunization, Connecticut ranks 4th nationally tied with Alabama, Illinois, Nebraska and South Carolina. The national goal is to increase the proportion of children immunized to 90 percent. No state has reached this goal, although Connecticut had exceeded the goal in 2003.

Nationally, the proportion of black and Hispanic children that were immunized was 75 percent and 78 percent respectively. Detailed racial and ethnic data were not available for Connecticut.

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[137] Healthy People, Immunization and Infectious Diseases, http://www.healthypeople.gov/Document/HTML/Volume1/14Immunization.htm

[138] President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: Improving Quality in a Changing Health Care Industry, Chapter One-The State of Health Care Quality: How Good is Care?, www.hcqualitycommission.gov/final/chap01.html.

[139] Healthy People 2010, Focus Area 14: Immunization and Infectious Diseases, http://www.healthypeople.gov/Document/pdf/Volume1/14Immunization.pdf

[140] Ibid.

[141] President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: Improving Quality in a Changing Health Care Industry, Chapter One-The State of Health Care Quality: How Good is Care?, www.hcqualitycommission.gov/final/chap01.html.

[142] Ibid.

[143] State Health Facts, Percent of Children Age 19-35 Months Who Are Immunized, 2004, www.statehealthfacts.org, downloaded July 26, 2006

Children Age 19-35 Months
Who Are Immunized,
Percent

	2003	2004	2006
Connecticut	91.0%	88.8%	85.0%
United States	78.0%	81.0%	80.0%

Sources: Downloaded from State Health Facts, www.statehealthfacts.org on 7/31/07.

Children Age 19-35 Months
Who Are Immunized By Race and Ethnicity, 2006
Percent

	White	Black	Hispanic	American Indian/Alaskan Native	Asian	Multiple Races
Connecticut	90%	N.A.	N.A.	N.A.	N.A.	N.A.
United States	83%	76%	78%	75%	77%	80%

Source: State Health Facts, www.statehealthfacts.org, 7/31/07

The Vaccines for Children program pays for all vaccinations recommended by the Advisory Committee on Immunization Practices (ACIP) of the Center for Disease Control for children who are enrolled in the Medicaid program, have no health insurance, or are American Indian/Alaska Native origin. While under insured children may obtain immunizations financed through the Vaccines for Children Program, they can only access them at federally qualified health centers or rural health centers.

Percent Children Age 19-35 Months Who Are Immunized, 2006

Rank		Rate
	United States	**80%**
1	Massachusetts	89%
2	Kentucky	86%
2	South Dakota	86%
4	Alabama	85%
4	**Connecticut**	**85%**
4	Illinois	85%
4	Nebraska	85%
4	South Carolina	85%
9	Georgia	84%
9	Iowa	84%
9	North Dakota	84%
12	Delaware	83%
12	Tennessee	83%
12	Vermont	83%
12	Wisconsin	83%
16	Colorado	82%
16	Kansas	82%
16	Maryland	82%
16	Minnesota	82%
16	New York	82%
16	North Carolina	82%
16	Ohio	82%
23	Florida	81%
23	Michigan	81%
23	New Hampshire	81%
23	New Jersey	81%
23	Pennsylvania	81%
23	Virginia	81%
29	Arizona	80%
30	Hawaii	80%
30	Maine	80%
30	Missouri	80%
30	Rhode Island	80%
34	Indiana	79%
35	Alaska	78%
35	Mississippi	78%
35	West Virginia	78%
38	California	77%
38	New Mexico	77%
38	Utah	77%
38	Washington	77%
42	District of Columbia	76%
42	Idaho	76%
42	Louisiana	76%
42	Texas	76%
42	Wyoming	76%
47	Oklahoma	75%
48	Montana	74%
48	Oregon	74%
50	Arkansas	70%
51	Nevada	69%

Sources: Downloaded from State Health Facts website, www.statehealthfacts.org, 7/31/07.

ADULT INFLUENZA VACCINATION COVERAGE

Among adults, influenza vaccination is recommended annually for those over age 65 and for those with selected chronic health problems. Each year in the United States:

- 5-10 percent of the population gets the flu;
- more than 200,000 are hospitalized from flu complications; and
- about 36,000 people die from the flu.

Connecticut Target: 90% 2006: 71.1%

What does this measure?

The percent of adults aged 65 years and over that had a flu shot in the past 12 months.

How are we doing?

Data from the CDC clearly demonstrate that adult flu immunization lags behind that of childhood immunization leaving many adults unprotected from influenza. In 2006, an estimated 71.1 percent of adults aged 65 years of age and older in Connecticut had been vaccinated against influenza during the preceding 12 months, compared with 73 percent in 2004. Connecticut ranks 20th nationally. The national goal is 90 percent coverage.

Adults 65 years of age and over
who had a flu shot in the past 12 months
Percent

	2002	2004	2005	2006
United States	68.4%	67.8%	65.5%	69.1
Connecticut	71.4%	73.0%	71.1%	71.1
Fairfield County	70.5%	68.0%	73.6%	71.6

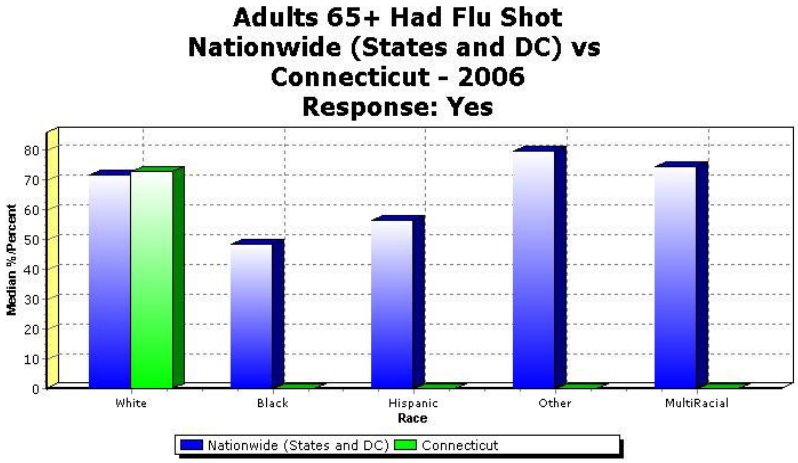
Note: The BRFSS is an on going, state based, random digit dialed telephone survey of non-institutionalized adults aged 18 years and older. The BRFSS is the largest continuously conducted telephone health surveillance system in the world.
Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Nationally, the proportion of black and Hispanic adults who had a flu shot in the past year was 48.5 percent and 56.5 percent, well below the national goal of 90 percent.

Adults 65 years of age and over
who had a flu shot in the past 12 months by Race and Ethnicity
Percent, 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	72.5%	N.A.	N.A.	N.A.	N.A.
United States	71.3%	48.5%	56.5%	79.5%	74.2%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/



Source of graph: Center for Disease Control, www.cdc.gov/brfss

PNEUMOCOCCAL VACCINATION COVERAGE

Among adults, pneumococcal vaccination is recommended once for persons over age 65 and for those at increased risk of serious complications from pneumonia.

Connecticut Target: 90% 2005: 68.1%

What does this measure?

The percent of adults 65 years of age and over who have ever had a pneumonia vaccination Percent

How are we doing?

Pneumococcal disease is a serious disease that can result in death. Data show that, in 2006 68 percent of Connecticut adults aged 65 years and over had at some time received pneumococcal vaccine, compared to 64.5 percent in 2002. The national target is 90 percent coverage. Efforts to increase vaccination coverage for the elderly population will be needed to reach the national goal of 90 percent.

Adults 65 years of age and over who have ever had a pneumonia vaccination Percent

	2002	2004	2005	2006
United States	62.9%	64.5%	65.7%	66.9%
Connecticut	64.5%	67.7%	69.3%	68.1%
Fairfield County	57.5%	62.2%	64.3%	67.1%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Percent of Adults 65+ years who had a flu shot in the past 12 months, 2006

Rank		% Flu shot
	United States	**69.6**
1	Colorado	75.9
2	Hawaii	75.7
3	Rhode Island	74.7
4	South Dakota	74.1
5	Minnesota	73.8
6	Iowa	73.6
7	Nebraska	73.3
8	Massachusetts	73.1
9	Vermont	72.8
10	Montana	72.6
11	Kansas	72.5
12	Missouri	72.2
13	Utah	72.1
14	Maine	72.0
14	Wisconsin	72.0
16	New Hampshire	71.9
17	North Dakota	71.4
18	Michigan	71.3
18	Oregon	71.3
20	**Connecticut**	**71.1**
21	Wyoming	70.8
22	Oklahoma	70.6
23	Washington	70.6
24	Tennessee	70.4
25	Delaware	70.3
26	North Carolina	69.6
27	Virginia	69.1
28	Arkansas	68.6
29	Pennsylvania	68.3
30	Ohio	68.2
31	New Mexico	67.6
32	California	66.9
33	Illinois	66.4
33	Texas	66.4
35	West Virginia	66.4
36	New Jersey	66.3
37	Maryland	66.1
38	Kentucky	66.0
39	Arizona	65.4
39	Mississippi	65.4
41	Indiana	65.3
42	Idaho	65.2
43	Georgia	64.8
44	New York	64.7
45	Louisiana	64.4
46	South Carolina	62.9
47	Alaska	62.5
48	Alabama	62.0
49	Florida	61.5
50	District of Columbia	61.2
51	Nevada	57.7

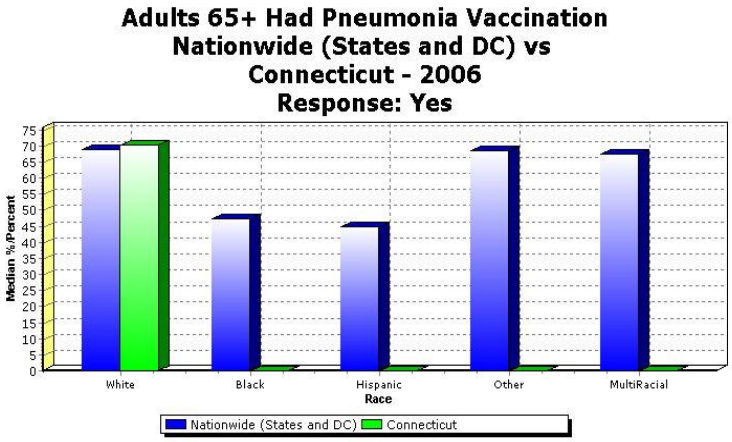
Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Nationally, both black and Hispanic adults were less likely to have ever had a pneumonia vaccination compared to the white adults.

Adults 65 years of age and over
who have ever had a pneumonia vaccination by Race and Ethnicity
Percent, 2006

	White	Black	Hispanic	Other	Multiracial
Connecticut	70.3%	N.A.	N.A.	N.A.	N.A.
United States	69.0%	47.3%	44.8%	68.4%	67.6%

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/



Source of graph: Center for Disease Control, www.cdc.gov/brfss

The Institute of Medicine noted that the current financing, development and distribution system for vaccines in the United States has several deficiencies:

- Increasing disparities in access to recommended vaccines noting substantial variations across states and within states (e.g. children, older adolescents, and adults).
- Eroding insurance coverage and increasing provider burden.
- Increasing costs of the immunizations.
- Shortages in the supply of vaccines and disappearing manufacturers.
- Inadequate basis for determining the value of individual vaccines.[144]

The IOM made the following recommendations:

- A vaccine coverage mandate that would apply to all private and public health plans (including Medicare, Medicaid, and the State Children's Health Insurance Program);
- A new federal subsidy to cover mandated vaccine costs and administration fees;
- A voucher system for uninsured populations;
- A process to distinguish between vaccines that have strong and weak societal benefits; and
- A process to calculate subsidy levels for different vaccines based upon estimates of their society benefits.[145]

[144] Institute of Medicine, Financing Vaccines in the 21st Century: Assuring Access and Availability, August 2003, www.iom.edu.
[145] Ibid.

Percent Adults 65+ years who have ever had a pneumonia vaccination, 2006

Rank		% Pneumonia vaccination
	United States	**66.9**
1	Oregon	74.7
2	Colorado	72.9
3	Rhode Island	72.5
4	Wisconsin	71.9
5	Montana	71.5
6	Iowa	71.1
6	Minnesota	71.1
8	Massachusetts	70.8
9	Oklahoma	70.2
10	Wyoming	69.7
11	Washington	69.6
12	Kansas	69.5
13	North Dakota	69.4
14	Nevada	69.1
15	Hawaii	68.8
15	Pennsylvania	68.8
17	Mississippi	68.7
18	North Carolina	68.5
18	Ohio	68.5
20	New Hampshire	68.4
21	Nebraska	68.3
22	**Connecticut**	**68.1**
23	Maine	67.9
24	Missouri	67.8
25	Michigan	67.6
26	Vermont	66.9
27	Virginia	66.8
28	Arizona	66.5
28	Tennessee	66.5
30	Louisiana	66.4
31	New Jersey	66.4
32	Maryland	66.0
33	Utah	65.9
34	Delaware	65.6
35	West Virginia	65.4
36	South Dakota	65.0
37	Kentucky	64.6
38	New Mexico	64.5
39	Arkansas	64.4
40	Indiana	63.8
41	Texas	63.7
42	Georgia	63.1
43	Florida	62.9
44	Idaho	62.8
45	South Carolina	61.5
46	New York	61.0
47	California	60.0
48	Illinois	60.0
49	Alaska	59.9
50	Alabama	59.7
51	District of Columbia	52.0

Source: CDC, Behavioral Risk Factor Surveillance Study, http://www.cdc.gov/brfss/

Early Prenatal Care

A leading indicator of the quality of acute care is the proportion of pregnant women initiating prenatal care in the first trimester.[146] Prenatal care is directly related to birth outcomes. Prenatal care refers to pregnancy-related care.[147] Prenatal care includes: risk assessment, treatment for medical conditions or risk reduction, and education.[148] Each component can contribute to reductions in perinatal illness, disability, and death by identifying and mitigating potential risks and helping women to address behavioral factors, such as smoking and alcohol use that contribute to poor outcomes.[149] Prenatal care is more likely to be effective if women begin receiving care early in pregnancy.[150] Women who see a health care provider regularly during pregnancy have better birth outcomes.

EARLY PRENATAL CARE

Connecticut Target: 90% 2004: 87.2%

What does this measure?

The percent of infants born to women who received prenatal care beginning in first trimester.

How are we doing?

Prenatal care is more likely to be effective if women begin receiving care early in pregnancy.[151] Women who see a health care provider regularly during pregnancy have better birth outcomes. Nationally, 83.9 percent of mothers in 2004 began prenatal care in the first trimester; in Connecticut the figure was 87.2 percent. That means that more than 1 out of 10 mothers did not begin prenatal care in the first trimester.

Percentage of Mothers Beginning Prenatal Care in the First Trimester

	2003	2004
United States	84.1%	83.9%
Connecticut	88.7%	87.2%

Source: State Health Facts, www.statehealthfacts.org,

[146] President's Advisory Commission on Consumer Protection and Quality in the Health Care Industry: Improving Quality in a Changing Health Care Industry, Chapter One-The State of Health Care Quality: How Good is Care?, www.hcqualitycommission.gov/final/chap01.html.
[147] March of Dimes, www.marchofdimes.com/peristats/
[148] Healthy People 2010, Maternal, Infant, and Child Health, http://www.healthypeople.gov/Document/HTML/Volume2/16MICH.htm
[149] Ibid.
[150] Ibid.
[151] Ibid.

Percentage of Mothers Beginning Prenatal Care in the First Trimester, 2004

Rank		Percent
	United States	**83.9%**
1	Rhode Island	90.0%
1	Vermont	90.0%
3	Massachusetts	89.6%
4	Maine	88.5%
5	Iowa	88.4%
6	Missouri	88.2%
7	Ohio	87.8%
8	**Connecticut**	**87.2%**
9	California	87.1%
10	Kansas	86.5%
11	Minnesota	86.3%
12	West Virginia	86.0%
13	Michigan	85.9%
14	North Dakota	85.7%
15	Virginia	85.6%
16	Illinois	85.5%
16	Louisiana	85.5%
18	Wisconsin	85.3%
19	Wyoming	85.2%
20	Delaware	85.1%
21	Mississippi	84.4%
22	Alabama	84.0%
22	North Carolina	84.0%
24	Georgia	83.9%
25	Montana	83.2%
26	Nebraska	82.9%
27	Arkansas	82.3%
28	Maryland	82.3%
29	Hawaii	81.8%
29	Texas	81.8%
31	Indiana	80.8%
32	Alaska	80.7%
33	Oregon	80.5%
34	Colorado	80.2%
35	Utah	80.0%
36	New Jersey	79.1%
37	Oklahoma	78.1%
38	South Dakota	77.9%
39	District of Columbia	77.8%
40	New York	77.2%
41	Arizona	76.3%
42	Nevada	75.0%
43	Kentucky	74.5%
44	Pennsylvania	73.2%
45	Idaho	71.6%
46	Washington	71.4%
47	Tennessee	69.8%
48	New Mexico	69.4%
49	South Carolina	68.0%
	Florida	NA
	New Hampshire	NA

Notes: Data for New York does not include New York City. Prenatal care data for New York, which implemented the 2003 Revision of the U.S. Certificate of Live Birth, are not comparable with data of other states or New York City, which are based on the 1989 Revision of the U.S. Certificate of Live Birth. Prenatal care data for Idaho, Kentucky, New York, Pennsylvania,

South Carolina, Tennessee, and Washington, which implemented the 2003 Revision of the U.S. Certificate of Live Birth, are not comparable with data of other states, which are based on the 1989 Revision of the U.S. Certificate of Live Birth.
Source: State Health Facts, www.statehealthfacts.org, 4/12/07.

Nearly 25 percent of black and Hispanic mothers did not receive prenatal care in the first trimester in Connecticut. Similar trends were reported nationally.

Percentage of Mothers Beginning Prenatal Care in the First Trimester by Race/Ethnicity, 2004

	White	Black	Hispanic
Connecticut	92.3%	77.4%	75.6%
United States	89.9%	76.5%	77.5%

Source: State Health Facts, www.statehealthfacts.org, 4/15/07

Links:

American College of Obstetricians and Gynecologists
http://www.acog.org

American Academy of Family Physicians
Http://familydoctor.org

Association of State and Territorial Health Officials, http://www.astho.org/

National Association of County and City Health Officials
http://www.naccho.org/index.cfm

Center for Disease Control
www.cdc.gov/reproductivehealth/maternalinfanthealth/index.htm

March of Dimes
http://www.marchofdimes.com/professionals/680_1239.asp

National Center on Birth Defects and Developmental Disabilities
http://www.cdc.gov/ncbddd

National Women's Health Information Center
www.womenshealth.gov

Public Health Spending

Spending is an indicator of the relative importance of public health programs in the state. High spending would indicate that the state is proactively implementing preventive and education programs targeted at improving the health of all populations within a state.[152]

PUBLIC HEALTH SPENDING[153]

Connecticut	Target:	No goal has been set for this measure	2003: $173 per capita

What does this measure?

Public health spending consists the dollars per person that are spent on public or population health in the state. It includes expenditures in the following three categories defined by the National Association of State Budget Officers:

1. Direct public health care: Includes local health clinics and Indian health care. It also may include: pharmaceutical assistance for the elderly, chronic disease hospitals and programs, hearing aid assistance, adult day care for persons with Alzheimer's disease, health grants, medically handicapped children, Women, Infants, and Children (WIC) programs, pregnancy outreach and counseling, chronic renal disease treatment programs, AIDs treatment, breast and cervical cancer treatment, tuberculosis (TB) programs, emergency health services, adult genetics programs, and phenylketonuria (PKU) testing.
2. Community based services: Includes funds spent on health services provided in a community based setting. Examples include rehabilitation services, alcohol and drug abuse treatment, mental health community services, developmental disabilities community services, and vocational rehabilitation services.
3. Population health expenditures includes: prevention of epidemics and the spread of disease, protection against environmental hazards, injury prevention, promotion of chronic disease control and encouragement of healthy behavior, disaster preparation (e.g. only population health related costs), disaster response (e.g. only population health related costs), and health infrastructure.[154]

How are we doing?

Connecticut spends about $173 per capita on public health spending, compared to $164 nationally. This moderate level of spending earned Connecticut a national rank of 18. Alaska and Hawaii spent the most per capita on public health spending at $482; Iowa spent the least per capita on public health spending.

[152] United Health Foundation, America's Health Rankings-2005 Edition, www.unitedhealthfoundation.org.p.26
[153] At the time of this publication, the FY2003 data is the most current information available. Therefore, the data is the same as reported in the 2006 Scorecard.
[154] Milbank Memorial Fund, the National Association of State Budget Officers, and The Reforming States Group, 2002-2003 State Health Expenditure Report, June 2005, http://www.milbank.org/reports/05NASBO/.

Public Health Spending

	Public Health Spending Per Capita	
	FY 2002	FY2003
United States	$153	$164
Connecticut	$161	$173

Source: Milbank Memorial Fund, the National Association of State Budget Officers, and The Reforming States Group, 2002-2003 State Health Expenditure Report, June 2005, http://www.milbank.org/reports/05NASBO/.

With regard to spending on prevention or "population health spending" per capita, quite a different picture emerges. In FY 2002 and 2003, CT ranks among the lowest nationally in per capita "population health" spending with a rank of 43 and 44 respectively. Additionally, in FY2002 and 2003, Connecticut was among the states that spent the smallest proportion of their health budgets on population health earning a rank of 45 and 47 respectively. Alaska spent the most per capita in FY2003 at $307 and New Jersey spent the least at $20. Montana had the highest percent of its health budget allocated to population health spending at 17.1 percent; Indiana and New Jersey tied for last place at 1.3 percent.

"Population Health" Spending

	Population Health Spending Per Capita		Population Health Spending as Percent of Health Budget	
	FY 2002	FY2003	FY2002	FY2003
United States	$60	$67	5.3%	5.4%
Connecticut	$23	$23	1.6%	1.5%

Note: Public health expenditures or "population health expenditures" includes: prevention of epidemics and the spread of disease, protection against environmental hazards, injury prevention, promotion of chronic disease control and encouragement of healthy behavior, disaster preparation (e.g. only population health related costs), disaster response (e.g. only population health related costs), and health infrastructure.

Source: Milbank Memorial Fund, the National Association of State Budget Officers, and The Reforming States Group, 2002-2003 State Health Expenditure Report, June 2005, http://www.milbank.org/reports/05NASBO/.

Clearly, Connecticut needs to focus more efforts on prevention with a specific goal to reduce the burden of disease and injury and to reduce health disparities.

Links:

American Public Health Association, http://www.apha.org/

Association of Schools of Public Health, http://www.asph.org/

Center for Disease Control and Prevention, www.cdc.gov

Connecticut Department of Public Health, www.ct.gov/dph

Connecticut Association of Health Directors, http://www.cadh.org/

Partners in Information Access for the Public Health Workforce, http://phpartners.org/

National Association of County and City Health Officials, http://www.naccho.org/index.cfm

The Association of State and Territorial Health Officials, http://www.astho.org/

National Public Health Performance Standards Program
http://www.cdc.gov/od/ocphp/nphpsp/

What is Public Health? http://www.whatispublichealth.org/

World Health Organization, http://www.who.int/en/

Healthy People, Public Health Infrastructure,
http://www.healthypeople.gov/document/HTML/Volume2/23PHI.htm

Public Health Spending Per Capita
FY2003

Rank		Public Health Spending Per Capita
	United States	**$164**
1	Hawaii	$482
1	Alaska	$482
3	Wyoming	$354
4	New York	$316
5	Montana	$293
6	Delaware	$256
7	Minnesota	$249
8	Pennsylvania	$248
9	New Jersey	$231
10	South Carolina	$219
11	Mississippi	$197
12	Nebraska	$190
12	Illinois	$190
14	Maryland	$189
15	Texas	$179
16	Oregon	$177
17	North Dakota	$174
18	**Connecticut**	**$173**
19	Rhode Island	$169
20	Alabama	$159
21	Maine	$158
21	New Hampshire	$158
23	Michigan	$154
24	Missouri	$153
25	Nevada	$151
26	Massachusetts	$150
27	Florida	$142
28	Georgia	$138
29	Oklahoma	$132
30	California	$130
31	Ohio	$127
31	North Carolina	$127
33	Louisiana	$121
34	Indiana	$117
35	Kentucky	$116
36	New Mexico	$113
37	South Dakota	$110
37	Virginia	$97
39	Kansas	$95
39	West Virginia	$95
41	Colorado	$93
42	Vermont	$92
43	Tennessee	$91
44	Washington	$81
45	Arizona	$80
45	Wisconsin	$80
47	Idaho	$71
48	Utah	$70
49	Arkansas	$64
50	Iowa	$59

Source: Milbank Memorial Fund, the National Association of State Budget Officers, and The Reforming States Group, 2002-2003 State Health Expenditure Report, June 2005, http://www.milbank.org/reports/05NASBO/.

Outcomes

Heart Disease Deaths

Heart disease is the leading cause of death in the United States.[155] Two of the major independent risk factors for cardiovascular disease are high blood pressure and high blood cholesterol.[156] Other risk factors for heart disease are: cigarette smoking, overweight, physical inactivity, and diabetes.[157] Primary prevention through healthy lifestyles, early identification and treatment of heart attacks, and risk factor control through adherence to treatment regimen will be necessary to reduce deaths due to heart disease.[158]

HEART DISEASE DEATHS

Connecticut	Target:	162 deaths per 100.000 population	2003:	201.8 deaths per 100,000 population

What does this measure?

Number of heart disease deaths per 100, 000 population.

How are we doing?

In 2003, there were 232.3 deaths per 100,000 person attributed to heart disease. While Connecticut ranks 18th nationally, Connecticut's heart death rate is far from the national goal of 162 deaths per 100,000 persons. Minnesota had the lowest rate at 152.0 per 100,000 and was the only state to exceed the national goal. Mississippi ranked 51st with 310.3 deaths per 100,000.

Heart Disease Deaths
Rate per 100,000 population

	2001	2002	2003
United States	246.8	240.8	232.3
Connecticut	216.4	216.9	201.8
Fairfield County	N.A.	N.A.	N.A.

Notes: These figures are age-adjusted to the total U.S. population in 2000.
Definitions: Causes of death attributable to heart disease mortality include ICD-10 Codes I00-I09; I11; I13; I20-I51.
Sources: Data was downloaded from the State Health Facts Website. Original information sources of the data are United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Compressed Mortality File (CMF) compiled from 1999-2002, Series 20, No. 2H 2004 on CDC WONDER On-line Database.

[155] CDC, Preventing Heart Disease and Stroke: Addressing the Nation's Leading Killers 2005, www.cdc.gov.
[156] Ibid.
[157] Healthy People, Heart Disease and Stroke, www.cdc.gov/cvh/hp2010/objectives.htm
[158] Ibid.

Heart Disease Deaths
Rate per 100,000 population, 2003

Rank		Rate
	United States	232.3
1	Minnesota	152.0
2	Hawaii	176.9
3	Colorado	178.0
4	Oregon	181.6
5	Alaska	181.8
6	Utah	183.5
7	Washington	188.6
8	Montana	190.7
9	New Mexico	191.5
10	Nebraska	196.9
11	Idaho	197.0
12	Arizona	198.3
13	Massachusetts	198.4
14	North Dakota	198.5
15	Vermont	199.3
16	Wyoming	199.5
17	Maine	200.6
18	**Connecticut**	**201.8**
19	Wisconsin	205.1
20	South Dakota	208.0
21	Iowa	208.1
22	New Hampshire	210.8
23	Kansas	212.5
24	Florida	212.7
25	Virginia	218.1
26	California	219.8
27	Rhode Island	227.7
28	North Carolina	231.9
29	South Carolina	234.5
30	New Jersey	234.8
31	Illinois	235.1
32	Maryland	235.6
33	Texas	237.8
34	Pennsylvania	241.8
35	Nevada	242.6
36	Delaware	243.1
37	Indiana	246.3
38	Ohio	247.9
39	Georgia	251.8
40	Michigan	254.0
41	Arkansas	258.4
42	Missouri	262.9
43	New York	266.0
44	Tennessee	273.4
45	Louisiana	274.2
46	Kentucky	275.9
47	Alabama	281.7
48	West Virginia	284.6
49	District of Columbia	287.3
50	Oklahoma	300.1
51	Mississippi	310.3

Notes: Age-adjusted rates per 100,000 U.S. standard population. Populations used for computing death rates are postcensal estimates based on the 2000 census estimated as of July 1, 2003. Since death rates are affected by the population composition of a given area, age-adjusted death rates should be used for comparisons between areas because they control for differences in population composition. Data are for 2003.
Sources: The Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics, National Vital Statistics Report Volume 54, Number 13, April 19, 2006, Table 29. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_13.pdf. Data were downloaded from www.statehealthfacts.org on April 10, 2007.

In 2002, rates of death from diseases of the heart were higher among black population than among white population.

Number of Heart Disease Deaths per 100,000 Population by Race/Ethnicity, 2002

	Race/Ethnicity Rate per 100,000		
	White	Black	Other
Connecticut	215.2	240.3	125.2
United States	236.7	308.4	138.3

Sources: United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Compressed Mortality File (CMF) compiled from 1999-2002, Series 20, No. 2H 2004 on CDC WONDER On-line Database.

Data were downloaded from www.statehealthfacts.org on November 2, 2006

Links:

American Heart Association, www.heart.org

Center for Disease Control, http://www.cdc.gov/nccdphp/publications/aag/cvh.htm

National Heart, Lung, and Blood Institute (NHLBI), www.nhlbi.nih.gov/index.htm

Cancer Deaths

In 2005, 570,280 persons are expected to die of cancer in the United States or more than 1,500 people a day.[159] Cancer is the second leading cause of death in the United States, accounting for one out of four deaths.[160] More than 7,000 persons are expected to die of Cancer in Connecticut this year.[161]

According to the Connecticut Department of Public Health, it is estimated that at least half of the cancer cases could be avoided or delayed if knowledge related to risk factors were put into practice. Risk factors for cancer include: cigarette smoking, diet, heavy alcohol consumption, physical inactivity, obesity, infectious agents, radiation exposure, and socioeconomic status.[162]

CANCER DEATHS

Connecticut	Target:	158.6 deaths per 100,000 population	2003:	182.1 deaths per 100,000 population

What does this meas

The number of cancer deaths per 100,000 population.

How are we doing?

The cancer death rate in Connecticut has been declining. However, the cancer death rate of 182.1 is far from the national goal is of 158.6. Both Utah and Hawaii have exceeded the national Healthy People goal for cancer death rate. Utah has the lowest cancer death rate in the nation and ranks #1 with a cancer death rate of 144.9. Connecticut ranks 15th. Kentucky has the highest cancer death rate.

Cancer Death Rate per 100,000 population

	2001	2002	2003
United States	195.6	193.5	190.1
Connecticut	187.2	186.0	182.1
Fairfield County	N.A.	N.A.	N.A.

Sources: U.S. Cancer Statistics Working Group. *United States Cancer Statistics:* 1999–2003 *Incidence and Mortality Web-based Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention *and* National Cancer Institute; 2007. Available at: www.cdc.gov/uscs

In 2002, rate of death from cancer was higher among black population than among white population.

[159] American Cancer Society, Cancer Facts and Figures: 2005, Atlanta: American Cancer Society; 2005.
[160] Ibid.
[161] Ibid.
[162] Connecticut Department of Health, Op. Cit.

Number of Cancer Deaths per 100,000 Population by Race/Ethnicity, 2002

	Race/Ethnicity Rate per 100,000		
	White	Black	Other
Connecticut	185.8	205.9	79.5
United States	191.7	238.8	115.4

Sources: United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Compressed Mortality File (CMF) compiled from 1999-2002, Series 20, No. 2H 2004 on CDC WONDER On-line Database.

Data were downloaded from www.statehealthfacts.org on November 2, 2006.

Most of the cancer deaths in Connecticut were due to cancers of the lung, colon/rectum, female breast, and prostate.[163] Lung cancer accounts for one fourth of the cancer deaths in Connecticut and is one of the most preventable cancers.[164]

Breast cancer is the second leading cause of cancer death among women in Connecticut.[165] Risk factors include: age, family history of breast cancer or previous breast cancer, inherited genetic mutations, and reproductive and hormonal factors.[166] Prostate cancer is the second leading cause of death among Connecticut men.[167] Colorectal cancer was the third leading cause of death among men and women and accounted for 10% of all deaths in 2002.[168]

[163] Ibid.
[164] Ibid.
[165] Ibid.
[166] Ibid.
[167] Ibid.
[168] Ibid.

Cancer Death Rate per 100,000 population, 2003

Rank		Cancer death rate
	United States	**190.1**
1	Utah	144.9
2	Hawaii	154.3
3	New Mexico	169.8
4	Colorado	170.1
5	Arizona	172.3
6	California	172.5
7	Nebraska	178.3
7	North Dakota	178.3
9	New York	178.6
10	Minnesota	181.2
11	Florida	181.3
12	Montana	181.5
13	Idaho	181.7
14	Vermont	181.8
15	**Connecticut**	**182.1**
16	Wisconsin	182.8
17	Kansas	185.5
18	Texas	186.3
19	Iowa	187.1
20	Wyoming	188.4
21	Alaska	188.5
22	South Dakota	188.9
23	Rhode Island	189.5
24	Washington	189.6
25	New Hampshire	189.9
26	Oregon	192.7
27	Massachusetts	193.0
27	Michigan	193.0
29	Maryland	194.9
30	New Jersey	195.1
31	North Carolina	195.6
32	Illinois	197.0
33	Georgia	197.4
34	Virginia	197.6
35	Pennsylvania	197.9
36	Oklahoma	199.7
37	Delaware	200.4
38	District of Columbia	201.1
39	Missouri	201.7
40	Nevada	203.0
41	South Carolina	203.7
42	Maine	204.1
43	Ohio	204.3
44	Arkansas	205.5
45	Indiana	207.2
46	Alabama	207.7
47	West Virginia	211.6
48	Mississippi	212.0
49	Tennessee	212.9
50	Louisiana	222.6
51	Kentucky	223.9

Sources: U.S. Cancer Statistics Working Group. *United States Cancer Statistics:* 1999–2003 *Incidence and Mortality Web-based Report*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention *and* National Cancer Institute; 2007. Available at: www.cdc.gov/uscs

It is estimated that approximately fifty percent of all cancers can be prevented through smoking cessation and improved dietary habits.[169] Maintenance of a healthy weight and physical activity also contributes to the prevention of cancer.[170] To reduce deaths from breast cancer and colorectal cancer, adults will need to comply with appropriate screening recommendations.

Cancer Death Rates by Site and State, US, 1999-2003

	All Sites		Breast	Colon and Rectum		Lung and Bronchus		Non-Hodgkin Lymphoma		Pancreas		Prostate
	Male	Female	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
CT	228.5	160.2	25.3	23.7	16.6	62.7	40.2	9.7	6.3	12.8	9.4	27.1
US	243.7	164.3	26.0	24.3	17.0	74.8	41.0	9.9	6.4	12.2	9.2	29.1
HP 2010 Goal	158.6		21.3	13.7		43.3						28.2

Note: Healthy People goals are for both sexes where noted.

Source: American Cancer Society, Cancer Facts and Figures 2005. Atlanta: American Cancer Society, 2007. www.cancer.org.
Healthy People 2010, Focus Area 3-Cancer, www.healthypeople.gov

Links:

American Cancer Society, www.cancer.org

Cancer Control Planet, http://cancercontrolplanet.cancer.gov/

Center for Disease Control, http://www.cdc.gov/cancer/

Community Preventive Services, http://www.thecommunityguide.org/cancer

Connecticut Department of Public Health, http://www.dph.state.ct.us/communications/pwd/cancerpl2005.pdf

National Cancer Institute, http://www.cancer.gov

[169] HealthyPeople, Focus Area 3-Cancer, http://www.healthypeople.gov/Document/HTML/Volume1/03Cancer.htm
[170] Ibid

Infant mortality

Infant mortality is an important measure of a nation's health and a worldwide indicator of health status and social being.[171] The leading causes of infant death in the United States are:

- Birth defects;
- Prematurity/low birthweight;
- Sudden infant death syndrome;
- Maternal complications of pregnancy;
- Complications of placenta, cord and membranes;
- Accidents;
- Diseases of the circulatory system;
- Respiratory distress syndrome;
- Bacterial sepsis of newborn; and
- Neonatal hemorrhage.[172]

INFANT MORTALITY

Connecticut	Target:	4.5 deaths per 1,000 live births	2003:	5.9 deaths per 1, 000 live births

What does this measure?

Infant mortality is the number of deaths of children under one year of age expressed as a rate per 1,000 live births.

How are we doing?

Compared with other countries, the United States has one of the highest infant mortality rates in the world. This ranking is due in part to the large disparities that exist between various racial and ethnic groups in the United States particularly African Americans. Connecticut ranks 13th nationally in terms of infant mortality. In Connecticut, the black to white ratio in infant death is 2.4.

[171] Healthy People 2010, Maternal, Infant, and Child Health, http://www.healthypeople.gov/Document/HTML/Volume2/16MICH.htm

[172] Center for Disease Control, National Vital Statistics, Volume 53, number 15, Deaths: Preliminary Data for 2003, February 28, 2005, http://www.cdc.gov/nchs/data/nvsr/nvsr53/nvsr53_15.pdf.

Infant Mortality Rate (Deaths per 1,000 Live Births) by Race/Ethnicity, 2001-2003 Linked Files

	Race/Ethnicity			
	White	Black	Hispanic	Total
Connecticut	5.0	13.2	6.3	5.9
United States	5.7	13.6	5.6	6.9

Notes: Infant mortality rates varied considerably by State and within States by race and Hispanic origin of mother for 2001–2003. To obtain statistically reliable rates by race and Hispanic origin, three years of data were combined. Infant death rates are calculated by dividing the number of infant deaths in a calendar year by the number of live births registered in the same period. Infants are defined as children under one year of age. They are presented as rates per 1,000.
Race/ethnicity for infant deaths is determined by the race of the decedent, and the race/ethnicity for live births is determined by the race of the mother as reported on the infant's birth certificate.

Sources: Matthews, TJ, M.S., et. al. Infant Mortality Statistics from the 2003 Period Linked Birth/Infant Death Data Set. Division of Vital Statistics. National Vital Statistics Report, Vol 54, No. 16, May 3, 2006. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_16.pdf.

Data were downloaded from www.statehealthfacts.org on April 10, 2007.

Links:

American College of Obstetricians and Gynecologists, http://www.acog.org

American Academy of Family Physicians, Http://familydoctor.org

Center for Disease Control,
www.cdc.gov/reproductivehealth/maternalinfanthealth/index.htm

March of Dimes, http://www.marchofdimes.com/professionals/680_1239.asp

National Center on Birth Defects and Developmental Disabilities, http://www.cdc.gov/ncbddd

National Women's Health Information Center, www.womenshealth.gov

Infant Mortality Rate, 2003

Rank		Infant Mortality Rate
	United States	**6.9**
1	New Hampshire	4.3
2	Massachusetts	4.9
3	Vermont	5.1
3	Minnesota	5.1
5	Utah	5.2
5	Maine	5.2
7	California	5.3
8	Oregon	5.6
8	Iowa	5.6
10	Washington	5.7
11	Nevada	5.8
12	New Jersey	5.9
13	Wyoming	6.0
13	New York	6.0
13	**Connecticut**	**6.0**
13	Colorado	6.0
17	New Mexico	6.1
18	Texas	6.2
18	Idaho	6.2
20	Nebraska	6.4
21	Kentucky	6.6
21	Arizona	6.6
23	Wisconsin	6.8
23	Alaska	6.8
25	South Dakota	6.9
25	Rhode Island	6.9
27	Kansas	7.1
27	Hawaii	7.1
29	Montana	7.3
30	Pennsylvania	7.4
30	Florida	7.4
32	Virginia	7.5
32	North Dakota	7.5
34	Illinois	7.6
35	Indiana	7.7
36	Oklahoma	7.8
36	Ohio	7.8
38	West Virginia	7.9
38	Missouri	7.9
40	Maryland	8.0
41	Michigan	8.2
42	North Carolina	8.3
43	Arkansas	8.5
44	Georgia	8.7
45	South Carolina	8.9
46	Alabama	9.0
47	Tennessee	9.1
48	Delaware	9.5
49	Louisiana	9.8
50	Mississippi	10.5
51	District of Columbia	10.9

Source: Data were downloaded from www.statehealthfacts.org on April 10, 2007.