

# **COMMUNITY HEALTH DATA SCAN FOR CONNECTICUT**

A Report Commissioned by the Connecticut Health Foundation

March 2007



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The opinions included in this report are solely those of the author.

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## REPORTING NOTES

### Note on race and ethnicity labeling conventions

Use of race and ethnicity labels is a complex issue. In much of the health-related literature, black and white are not capitalized, while Hispanic and Asian are capitalized. In some places (e.g., the U.S. Census Bureau) black and African American are used interchangeably, although black is a more inclusive term, and it includes individuals who would identify as black but not African American. Latino and Hispanic are also used interchangeably, and there appears to be some regional variation in preferences for these terms. Following most but not all practice, the terms Asian, black, Hispanic, and white will be used in the text and capitalized in the tables. In some datasets there is a distinction between white and white-alone, black and black-alone, and Asian and Asian-alone. The latter terms remove persons who choose multiple race identifiers. Finally, in some places, Asian-alone non-Hispanic, white-alone non-Hispanic, and black-alone non-Hispanic are used to clearly identify persons who claim single race, and do not claim Hispanic ethnicity. State agencies may report, for example, a count for black residents with a particular health condition. The rate calculated for this *Data Scan* may use total black-alone non-Hispanic residents as a denominator. This may introduce a slight bias in the rate calculation, since the denominators will be slightly too low, and the resulting rates slightly too high, due to possible misclassification of multiracial individuals in the counts. The extent of multiracial identification in Connecticut is described in the report. A variety of orderings of race and ethnicity groups are used, typically following the ordering used in U.S. Census Bureau and the Connecticut Department of Public Health (DPH) tables. Ordering by population size is sometimes used as an alternative.

### Comments on Statistical Analysis of Results

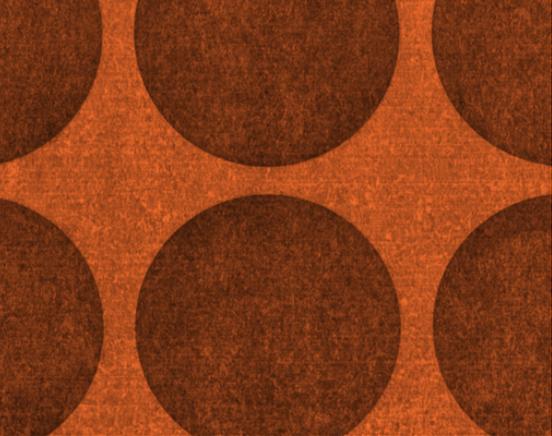
The analysis of data in this report has been accompanied by statistical tests to assure that small differences in rates are not over-interpreted. Specifically, for all rates, confidence intervals were calculated. In cases where there was no overlap in the confidence intervals for two rates, the difference in rates was termed statistically significant. This is a somewhat “conservative” procedure. It produces few false positive results (concluding that a difference between two rates exists when none does), at the expense of some false negatives (concluding that no difference exists when one does truly exist). The narrative is written to draw attention only to differences that are statistically significant.

The choice not to present explicit statistical tests in the report was taken to improve the readability of the report. With six Health Reference Groups (HRGs) crosscutting counts, crude rates, age-adjusted rates, white, black, Hispanic and Asian specific rates, it was believed that the introduction of additional statistical figures would detract from the readability of the presentation.

Selected data and charts used in the report are presented at [www.cthealth.org](http://www.cthealth.org) and include the rates and associated confidence intervals, for the statistically minded reader.

### Comments on Calculated and “Official” Rates

In this report, many rates are calculated beyond those provided by state agency case counts. The rates reported are not a substitute for “official” rates that may be available or calculated in future years, based on population information currently not available. In some cases slight differences in population estimation will produce small differences between rates calculated for this report and rates calculated by state agencies. The purpose of the report is to provide a guide for understanding the community health data available; to offer an analysis of health disparities among different types of communities and different race and ethnicity groups; and to use such analysis to suggest priorities for action.



# EXECUTIVE SUMMARY

## INTRODUCTION



The *Community Health Data Scan for Connecticut* was developed by the Connecticut Health Foundation (CHF) for several purposes: to help the foundation set priorities for funding programs and policy studies; to help citizens better understand a range of key health risk, health care and health outcome issues; and to provide state policy-makers and community leaders with information that can be used in developing sound public policy. The *Data Scan* reports quantitative data on the social characteristics, health and well-being of Connecticut's residents gathered from a variety of sources at the federal, state and town levels, as well as from non governmental sources. Some data presented in the analyses will be superseded in the near future, indeed, by the time of publication. Indicators were selected that typically change only slowly over time, such that the major study conclusions are unlikely to be affected. This document is not intended to be an exhaustive report on all possible health indicators for Connecticut.

Racial and ethnic disparities are one of the main concerns investigated in the *Data Scan*. This issue provided a consistent theme for the analysis, along with a report of data on different kinds of communities arrayed in Health Reference Groups (HRGs). The *Data Scan* provides an analysis of the data, prioritizes areas for health promotion effort and includes six recommended focus areas. This report does not focus on children's mental and oral health since CHF is already addressing these problems and other reports focus on these topics.

## ADVISORY COMMITTEE ROLE

The CHF Advisory Committee provided suggestions and possible measures to be investigated, emphasizing the need to track health disparities among racial and ethnic groups.

## ORGANIZATION OF THE EXECUTIVE SUMMARY

The Executive Summary is organized to present the basic methods used in the study, including an innovation called Health Reference Groups (HRGs), and findings and recommendations in six priority areas.

## MEASUREMENT SCAN METHODOLOGY

The *Data Scan* investigated six sources of data:

1. Relevant Connecticut state government web sites
2. Key Connecticut state agency data available offline
3. U.S. Census Bureau datasets available online and via CD-ROM
4. Federal web sites containing state-level data
5. Data defining state and federal legislative districts
6. Data from other agencies, e.g., Boys and Girls Clubs, Jack and Jill Clubs

## THE INDICATORS

The many quantitative indicators for the report are summarized in more than 170 tables and figures.

## HEALTH REFERENCE GROUPS

The *Data Scan* uses a principal methodology of HRGs to report data. These HRGs were especially useful in considering small towns where the community size and indicator counts would be too small to obtain reliable estimates, or where Connecticut agencies would suppress the data for reasons of confidentiality.

Six HRGs were formed via statistical cluster analysis. These clusters were named:

- 1) Urban Centers (the three largest cities: Bridgeport, Hartford and New Haven);
- 2) Manufacturing Centers; 3) Diverse Suburbs; 4) Wealthy Suburbs; 5) Mill Towns; and
- 6) Rural Towns. A map showing the towns and HRG clusters is in the Executive Summary Appendix. Additional town-level data and maps are available for some indicators at [www.cthealth.org](http://www.cthealth.org). A list of the towns in each HRG is in Appendix A, and a detailed description of the HRGs is in Appendix B.

**EXECUTIVE SUMMARY TABLE 1: HEALTH REFERENCE GROUPS AND THEIR POPULATIONS**

HEALTH REFERENCE GROUPS	1	2	3	4	5	6
<b>DESCRIPTIVE</b>	Urban Centers (UC)	Manufacturing Centers (MC)	Diverse Suburbs (DS)	Wealthy Suburbs (WS)	Mill Towns (MT)	Rural Towns (RT)
<b>Number of Cities/Towns</b>	3	10	15	27	39	75
<b>Total Population</b>	384,733	662,398	587,504	487,620	698,517	584,793
<b>Average City/Town Population Size</b>	128,244	66,240	39,167	18,060	17,911	7,797
<b>Percentage of Connecticut Population</b>	11.3%	19.5%	17.3%	14.3%	20.5%	17.2%

Source: U.S. Census 2000, SF1; Table P1.

## RACE AND ETHNICITY

The author made a considerable effort to define Connecticut populations in racial and ethnic terms following, where possible, requirements of the U.S. Census Bureau and the federal Office of Management and Budget (OMB) Directive 15 (1997 Revision).<sup>1</sup>

## POPULATION CHANGE

Any discussion of health priorities should take into account the growth pattern in the population. Connecticut's population will change markedly over the next 25 years, increasing between 2000 and 2025 and then remaining stable through 2030. The total change between 2000 and 2030 is projected at 8.3 percent.

The population will also change in composition. Projections show that there will be virtually no growth in the "white race" population through 2025 (+2.5 percent). The "black race" population is expected to increase by more than 50 percent, the "Hispanic ethnicity" population by 99 percent, and the "Asian race" population by 113 percent.

The Hispanic population is currently the youngest group (74 percent are under 35), followed by the black race population (59 percent), the Asian race population (55 percent), and the white race population (41 percent).

## KEY RISK FACTORS FOR MORBIDITY AND MORTALITY

Another context for examining the health data is research-based knowledge of the major risk factors for leading causes of morbidity and mortality, such as smoking, diet and exercise, alcohol abuse, microbial agents, toxic agents, firearms, sexual behavior, and motor vehicle crashes. Many of these issues are analyzed in the report. The report also considers problems of health care access, health care quality and environmental health.

## A SYSTEMS VIEW

Health-related behaviors can be understood only in their relevant contexts — including health care and health promotion access, utilization and quality; peer group and cultural norms; the physical environment — and by examining both assets and barriers to good health.

## Six Priority Areas and Recommendations

The *Data Scan* suggests six priority areas. The detailed findings and rationale are provided in the *Data Scan*, and they are summarized in Chapter 11, Summary and Recommendations.

### 1. FOCUS ON THE HEALTH REFERENCE GROUPS AND RACIAL/ETHNIC GROUPS IN GREATEST NEED

The three Urban and 10 Manufacturing centers in Connecticut need the greatest health-promoting investments. Within these communities, black/African American and Hispanic residents are in greatest need.

### 2. FOCUS ON DIABETES AND OTHER CONDITIONS IN THE METABOLIC SYNDROME

Risk factors for diabetes and related conditions — called the metabolic syndrome — are increasing nationwide and are prevalent in Connecticut in several populations, especially in the black/African American population. To address the problem effectively, public policy solutions must be developed and prevention-focused support given to organizations that serve youth and adults. It will be important to focus on health care access and quality (e.g., better primary care access and utilization) and for primary care to focus on the key metabolic syndrome issues.

### 3. FOCUS ON ENSURING A MEDICAL HOME FOR ALL CONNECTICUT RESIDENTS

Overuse of emergency department (ED) care and many hospital admissions could be avoided if every Connecticut resident had, and used, a primary care “medical home.” Reducing avoidable ED and hospital utilization will require a whole systems approach focused on increasing access to and comfort with the language and cultural surroundings of the medical home; using the medical home to discuss issues of chronic disease and child and youth safety; and promoting adherence to medical regimens prescribed in the primary care setting.

### 4. FOCUS ON THE BINGE DRINKING AND SMOKING CULTURE

Smoking and binge drinking are major contributors to many health problems and to premature mortality. The youth and young adult white population is especially at risk for binge drinking and smoking, and these behaviors may spread to immigrant populations as they acculturate. Methods of changing the culture of chronic and binge drinking and smoking could include: increasing the level of information about the signs and consequences of alcohol abuse and tobacco use; supporting stronger coverage of the tobacco ban for small workplaces; and supporting changes in the law that would clarify which state level agencies are charged with enforcement of tobacco-related regulations.

### 5. FOCUS ON YOUTH RISKS AND OPPORTUNITIES

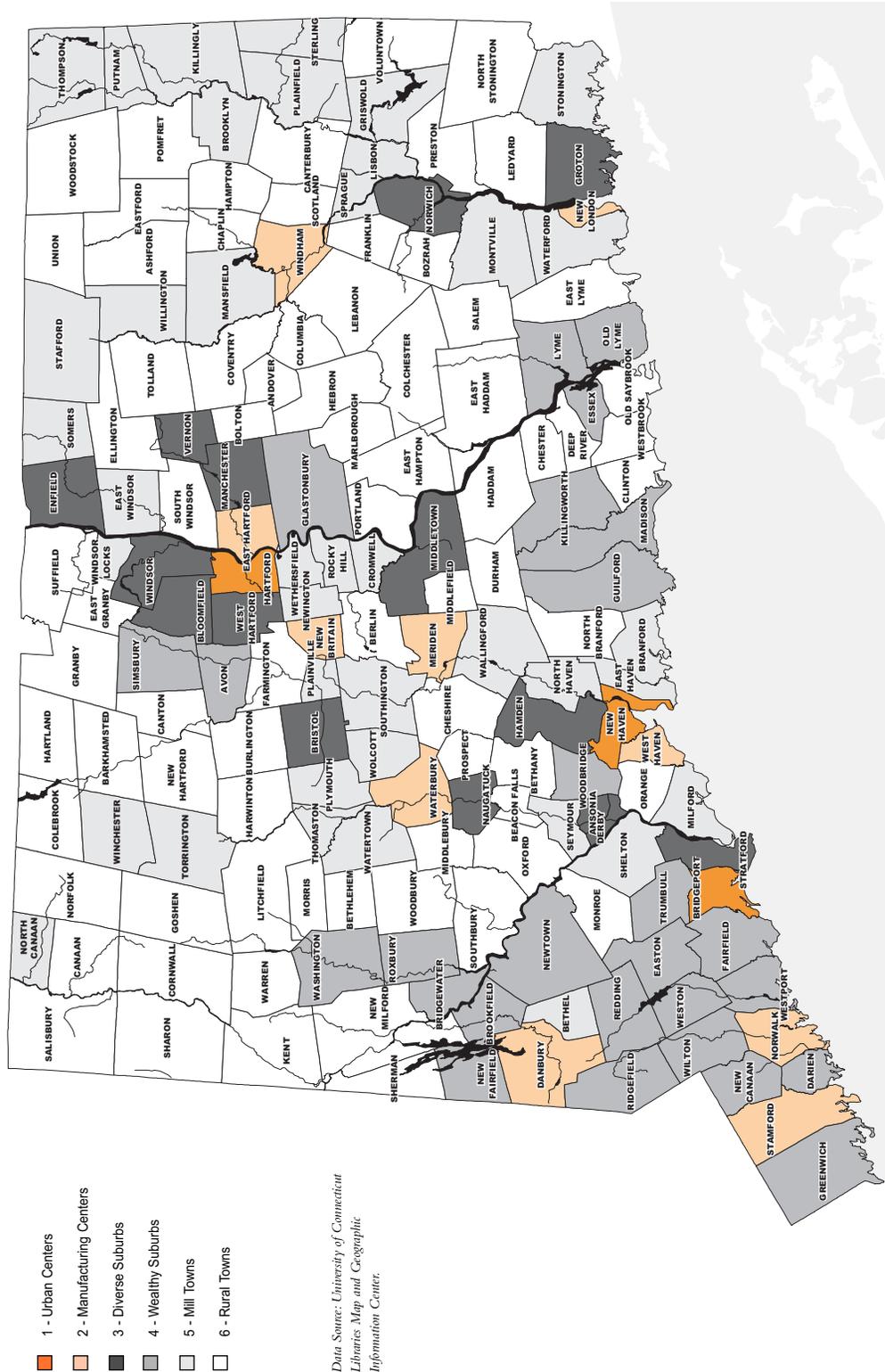
Major youth health risks include sexually transmitted diseases (STDs), teen pregnancy, lack of use of seat belts and bicycle helmets, and child abuse. There is a need for broad initiatives on child and youth risk taking and safety, focused especially on the Urban and Manufacturing centers, and with black and Hispanic children and youth, who are most at risk regarding a variety of safety and risk issues. Some of these problems could be addressed through support for focused initiatives by youth out-of-school programs.

### 6. IMPROVE THE HEALTH DATA SYSTEM

The health data system could be improved in many areas to provide data where none currently exists and make data more easily available to the public. Issues that need to be addressed include: data access, data delays, mapping information, health observations, race and ethnicity categories, health care quality indices, mental health data, out-of-school data, and documentation about the data (meta-data).

EXECUTIVE SUMMARY APPENDIX

FIGURE 1: HEALTH REFERENCE GROUPS MAP



# CHAPTER 1

Background, Goals and Scope





# CHAPTER 1

## BACKGROUND, GOALS AND SCOPE

### GOALS

The *Community Health Data Scan for Connecticut* was developed by the Connecticut Health Foundation (CHF) for several purposes: to help the foundation set priorities for funding programs and policy studies; to help citizens better understand a range of key health risk, health care and health outcome issues; and to provide state policy-makers and community leaders with information that can be used in developing sound public policy. It reports quantitative data on the social characteristics, health and well-being of Connecticut residents gathered from a variety of federal, state and nongovernmental sources.

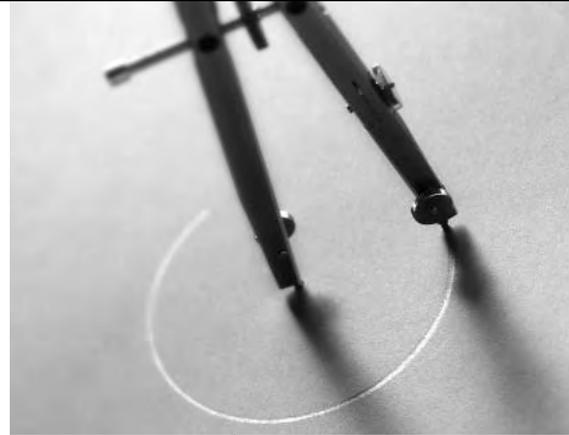
Racial and ethnic disparities were prominent among the concerns investigated. These disparities were a consistent theme for the analysis, along with a report of data on different kinds of communities arrayed in Health Reference Groups (HRGs). The *Data Scan* provides an analysis of the data, prioritizes areas for health promotion effort and includes six recommended focus areas.

### ADVISORY COMMITTEE ROLE

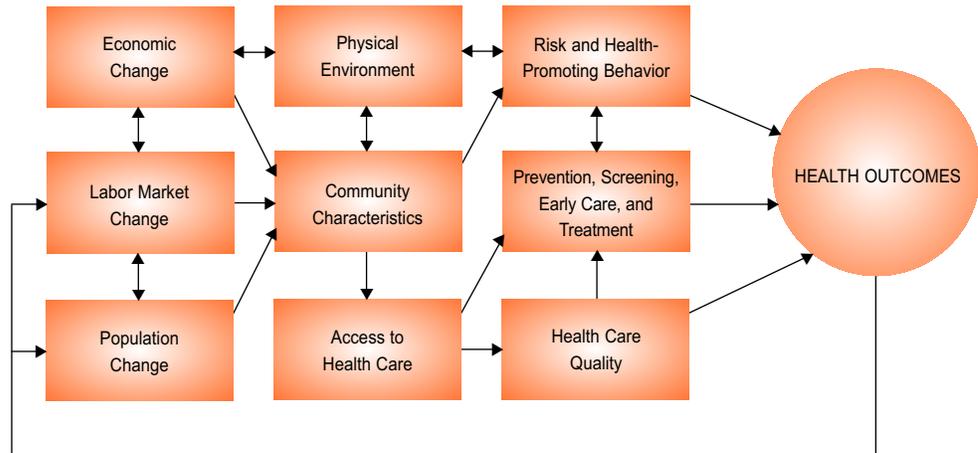
CHF's *Data Scan* Advisory Committee met on Oct. 29, 2004, and on March 2, 2005. The committee provided suggestions and possible measures to be investigated. E-mail and telephone follow-up elicited further useful information and emphasized the need to track and understand health disparities. Finally, committee members provided feedback on a presentation of the results at a CHF board of directors retreat on Nov. 5, 2005.

### ORGANIZATION OF FINDINGS

The findings of the *Data Scan* are organized to follow a causal model, as shown in Figure 1. This causal model has been adapted to examine both geographic and racial/ethnicity disparities.



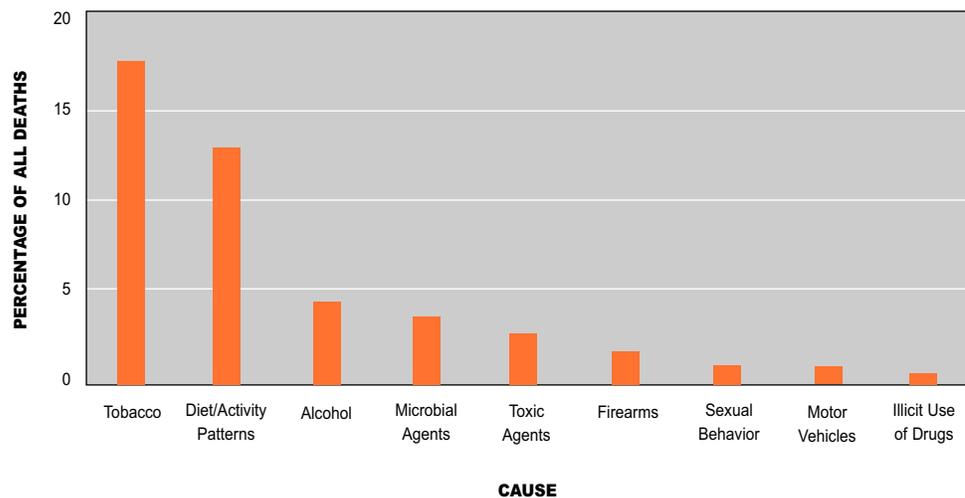
**FIGURE 1: A CAUSAL MODEL FOR COMMUNITY HEALTH**



**PRIORITY-SETTING CONTEXT**

Areas for health promotion efforts have been prioritized in two ways: (1) by the types of communities found to be most in need; and (2) by the “leading risk factors for mortality” framework contained in McGinnis and Foege’s classic study of the risk factors behind the leading categories of death — including heart disease, diabetes, injury-related death, and cancers.<sup>2</sup> The causes of these deaths include such factors as smoking, poor diet, lack of exercise, and alcohol abuse, as illustrated in Figure 2. Focusing system changes on these factors, along with problems of health care access and quality, can help communities promote greater health.

**FIGURE 2: PERCENTAGE OF TOTAL MORTALITY ATTRIBUTABLE TO LEADING RISK FACTORS, UNITED STATES**



Source: McGinnis MJ, Foege WH. Actual Causes of Death in the United States. *Journal of the American Medical Association*. 1993;270:2207-2212.

# CHAPTER 2

## Data Scan Methodology





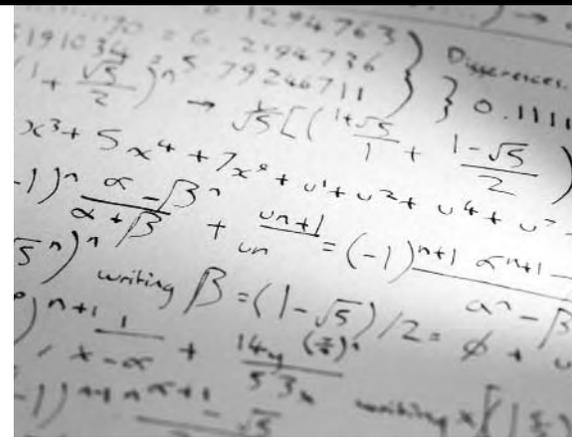
## CHAPTER 2

### DATA SCAN METHODOLOGY

#### ANALYSIS OF COMMUNITY HEALTH AND RELATED DATA IN CONNECTICUT

Four fundamental problems must be addressed in health data reporting: 1) ascertaining the existence of data; 2) obtaining access to data; 3) developing methods to analyze data; and 4) developing display methods that maximize understanding and use of data. Some key analysis problems are discussed in the next section because the answers to these problems frame the methods used in the *Data Scan*.

Many data items are available for Connecticut, statewide. But sub-state level data are indispensable for analytic and public policy purposes, and to encourage local (including legislative) interest and action. As stated in the Washington state query driven system of health data (called VISTA), “Assessment is most likely to be translated into successful policy and assurance activities if the analysis is specific to a well-defined community ... the capacity to perform assessment at the community level is critical.”<sup>3</sup>



### THE “TOWN PROBLEM”

Data from individual cities and towns need to be combined in some rational way to provide better rate estimates because when analyzed alone, the towns are mostly too small to produce reliable rates of health outcomes. Also, some measures, such as child abuse and neglect and emergency department (ED) visits, for which there are few cases in small towns, are “suppressed” for confidentiality reasons.

Grouping towns into “like” clusters provides meaningful information about all communities and avoids data suppression. This approach will have impact and suggest public policy and programmatic efforts related to the characteristics of these clusters.

The number of clusters must be large enough that decision makers will see them as fairly capturing meaningful differences. But the number also must be small enough that each one contains large numbers of households/residents to provide stable community health estimates and avoid data suppression. As outlined below, various strategies have been examined.

### GEOGRAPHICALLY BASED COMMUNITY GROUPINGS AND THEIR LIMITATIONS

Several groupings of Connecticut communities are now or recently have been used. Each offers both advantages and limitations, as outlined below:

1. **Statewide:** Using statewide data misses local or regional differences that may be compelling for local activists. Statewide data also do not portray the true complexity of the pattern of health disparities that may have public policy implications.
2. **City and Town:** With 169 cities and towns, some of them very small (e.g., Union has only 683 residents), town-level analysis will yield unsatisfactory reliability due to large random fluctuations in rates in small communities. In other cases, individual town-level data are reported only for towns with more than a criterion number of cases or population. For example, a Connecticut Department of Public Health (DPH) report on ED visits includes only communities with 10 or more asthma-related ED visits and/or hospitalizations for a two-year interval. It listed only 100 individual cities and towns for asthma ED visits, leaving 16 towns “paired” with other towns for reporting purposes and 53 towns whose data were completely suppressed for confidentiality reasons.<sup>4</sup> These were mainly small rural communities and were therefore “missed” in the analysis.
3. **Health District:** This level still yields numbers too small for effective analysis. Connecticut has 30 cities and towns with municipal health departments, 107 towns combined in 20 districts with full-time health directors, and another 32 towns with only part-time health directors.

**4. County:** Connecticut counties mask significant town-by-town variation within them, and they have few relevant operational or policy functions.

**5. Uniform Service Regions (USR) or Emergency Medical Service Regions**

**(EMSR):** The five USRs, and almost identical EMSRs are useful as organizing tools only to the extent that they can drive programmatic effort. Like counties, USR/EMSR-specific health rates mask much meaningful variation.

### REFERENCE GROUPS OF TOWNS

Some government reports use aggregates of big cities. A DPH asthma report, for example, aggregates the five large cities (Bridgeport, Hartford, New Haven, Stamford, and Waterbury) and the “rest of the state” for analytic purposes.<sup>5</sup> Although Stamford is included in the big city cluster because of its population of over 117,000, its socio-demographic characteristics and consequent health rates are much more like those of communities such as Norwalk and Danbury than like the other communities in the large city cluster. In other places, DPH characterizes data by such groupings as “urban” and “suburban” when examining youth smoking.<sup>6</sup> The reports do not indicate exactly how these groupings are defined.

There are several options to solve the “town problem,” including: (1) use the “Five Connecticut” scheme published by the University of Connecticut’s Center for Population Research; (2) use the nine established Education Reference Groups (ERGs) of school districts devised by the Connecticut State Department of Education (SDE); or (3) create new HRGs based on city and town data. These options are reviewed below.

### The “Five Connecticut” of the Connecticut Center for Population Research

Based on seven indicators, the Center for Population Research created five clusters of Connecticut communities, including Rural, Suburban, Wealthy, Urban Periphery, and Urban Core.<sup>7</sup> Although these have some intrinsic meaning, the population in one of these groups (the “wealthy” towns) was too small — only 184,437 — to be suitable for some of the health data analyses anticipated.

### **Connecticut Educational Reference Groups (ERGs)**

Analysts at the SDE in 1996 issued a “third generation” of clusters for Connecticut school districts. They defined nine ERGs<sup>8</sup> using a combination of school district and other state data from the U.S. Census 1990 National Center for Educational Statistics. They used statistical clustering to establish the nine clusters. School superintendents were then given the option to “move” into a different (but socio-demographically adjacent) cluster. The nine final clusters correlate highly with such educational measures as Connecticut Academic Performance Test (CAPT) exam scores. An ERG update using the U.S. Census 2000 data and additional measures was constructed in Spring 2005.

The ERG system offers several positive features: (1) It has a strong methodological base, only slightly corrupted by giving individual school superintendents the option to move to a different ERG; (2) The system, according to its author, is well accepted in Connecticut; and (3) ERGs have been used to analyze data outside of the SDE. For example, DPH drafted an extensive cardiovascular disease (CVD) report that includes analyses using the ERG clusters.<sup>9</sup> The ERG clusters were also used in a DPH report on cancer.<sup>10</sup> ERGs appear to differentiate adult smoking and other behavioral risk rates quite well.

From a health perspective, the ERG system has several drawbacks: (1) Most of the clustering variables are based on data about public school parents, rather than the whole population; (2) Superintendents are able to move districts into different clusters at their discretion, as noted above; (3) The system is school district-based rather than city/town-based, and thus aggregates 25 towns for which individual reports are unavailable into two- or three-town school districts; (4) The system does not directly utilize measures of race/ethnicity, which are of great interest in analyses of health disparities; (5) The ERG’s nine clusters can result in sample sizes for some surveys, such as Behavioral Risk Factor Surveillance System (BRFSS) surveys, that are too small to permit more refined analyses of health risk and outcome disparities (This is why the nine ERGs were reduced to only five on a few measures in the DPH reports on CVD and cancer); and (6) The ERG update for 2005 was not approved by the SDE in time for use in the *Data Scan*.

### **Connecticut Health Reference Groups (HRGs)**

An alternative, chosen for this report, was to create a smaller number of HRGs that avoid the problems of other groupings and allow meaningful analysis of health disparities and trends below the state level.

Six HRGs were formed using normalized and standardized transformations of the measures in Table 1. These measures were selected because they were known correlates of health. However, none of the measures is itself a health indicator. This strategy was chosen so that the HRGs would embody good predictors of health, based on highly reliable and accessible data, rather than being health indicators in themselves. A statistical clustering procedure, called “SAS Proc FastClus,” was used to group Connecticut communities. The clusters feature the characteristics shown in Table 2 and are numbered somewhat in order of urbanization.

**TABLE 1: INDICATORS USED FOR HEALTH REFERENCE GROUPS**

INDICATOR	POPULATION GROUP	SOURCE	YEAR
<b>Number of Residents</b>	Total Population	U.S. Census 2000, SF1: Table P1	2000
<b>Percent of Total Property Valuation that is Residential</b>	Town Total	Connecticut Department of Revenue	2004
<b>Residential Property Valuation Per Capita</b>	Town Total	Connecticut Department of Revenue and U.S. Census, 2000 SF1: Table P1	2004
<b>Single Female-Headed Families with Related Children Under 18</b>	Total Families	U.S. Census 2000, SF1: Table P35	2000
<b>Percent Black-alone Not Hispanic</b>	Total Population	U.S. Census 2000, SF1: Table P4	2000
<b>Percent Hispanic</b>	Total Population	U.S. Census 2000, SF1: Table P4	2000
<b>Population Density</b>	Total Population	U.S. Census 2000, SF1: Table GCT-PH1	2000
<b>Percent that are College Graduates Among Residents 25 and Over</b>	Population 25 and Over	U.S. Census 2000, SF3: Table P37	2000
<b>Percent Below Federal Poverty Criteria</b>	Total Population	U.S. Census 2000, SF3: Table P87	2000

**TABLE 2: HEALTH REFERENCE GROUPS AND THEIR CHARACTERISTICS**

HEALTH REFERENCE GROUP	1	2	3	4	5	6
DESCRIPTIVE TOTALS AND AVERAGES	Urban Centers (UC)	Manufacturing Centers (MC)	Diverse Suburbs (DS)	Wealthy Suburbs (WS)	Mill Towns (MT)	Rural Towns (RT)
<b>Number of Cities/Towns</b>	3	10	15	27	39	75
<b>Total Population</b>	384,733	662,398	587,504	487,620	698,517	584,793
<b>Percent of Total Property Valuation that is Residential</b>	51.7	66.7	72.8	88.8	74.1	84.7
<b>Residential Property Valuation Per Capita</b>	\$11,989	\$26,216	\$28,459	\$106,0665	\$32,688	\$51,197
<b>Average Town Population</b>	128,244	66,240	39,167	18,060	17,911	7,797
<b>Percent of Family Households Headed by Single Females with Children Under 18</b>	32.3	17.2	12.4	4.6	8.7	5.9
<b>Percent Black-alone Not Hispanic Population</b>	33.6	12.2	11.2	0.8	1.8	1.0
<b>Percent Hispanic Population</b>	31.2	18.9	5.4	2.0	2.7	1.7
<b>Population Density Per Square Mile</b>	7,435	3,315	1,830	649	821	277
<b>Percent College Graduates Among Residents 25 and Over</b>	17.2	21.9	26.3	56.2	23.8	34.5
<b>Percent Below Poverty Criteria</b>	46.9	28.7	18.7	7.2	15.8	10.9

Source: See Table 1.

The HRGs are based on an integration of the nine indicators in Table 1. The placement of communities within HRGs would vary if one or more of the indicators were dropped or others were added. But given the correlations among indicators used in building the HRG structure, such variation is likely to be small. Since HRGs are based on socio-demographic similarity, they do not correspond to regions, such as counties, Health Districts or Uniform Service Regions. These latter regions comprise many dissimilar communities, and health differences will tend to be “averaged out,” diminishing the analysis of disparities. In addition, the HRGs can focus on disparities related to poverty and concentrated disadvantage that might not come through in the analysis of race and ethnicity alone.<sup>a</sup> A map of the HRGs can be viewed in the Executive Summary and at [www.cthealth.org](http://www.cthealth.org). A list of the towns in each HRG is in Appendix A.

Race and ethnicity counts are included in Table 3 for reference in the analyses of health disparities. The U.S. Census 2000 allowed people to claim more than one race, and either Hispanic ethnicity or not, making many combinations possible. Since it has been demonstrated that persons claiming more than one race have different health risks than those claiming only one race, the analysis is restricted to those claiming one race only and Hispanic ethnicity, regardless of race.

**TABLE 3: POPULATIONS OF HEALTH REFERENCE GROUPS AND SELECTED CITIES, BY RACE AND ETHNICITY**

CITY OR HRG AND NUMBER OF TOWNS WITHIN HRG	All Races and Ethnicities	Percentage	White-alone, Not Hispanic	Black-alone, Not Hispanic	Asian-alone, Not Hispanic	Hispanic Ethnicity, Any Race	All Other
<b>Urban Centers (3)</b>	384,733	11.3	108,814	129,347	11,133	120,181	15,258
<b>Bridgeport</b>	139,529		43,158	40,974	4,459	44,478	6,460
<b>Hartford</b>	121,578		21,677	43,775	1,898	49,260	4,968
<b>New Haven</b>	123,626		43,979	44,598	4,776	26,443	3,830
<b>Manufacturing Centers (10)</b>	662,398	19.5	416,548	83,623	20,874	122,686	18,667
<b>Diverse Suburbs (15)</b>	587,504	17.3	471,405	56,430	14,928	31,586	13,155
<b>Wealthy Suburbs (27)</b>	487,620	14.3	452,449	5,126	12,460	12,633	4,952
<b>Mill Towns (39)</b>	698,517	20.5	641,045	12,572	13,718	21,347	9,835
<b>Rural Towns (75)</b>	584,793	17.2	548,584	8,473	8,451	11,890	7,395
<b>Connecticut (169)</b>	3,405,565	100.0	2,638,845	295,571	81,564	320,323	69,262

Source: U.S. Census 2000, SF1: Tables PCT 12H, I, J, L.

## **SUMMARY OF HEALTH REFERENCE GROUP CHARACTERISTICS AND THEIR HISTORICAL DEVELOPMENT**

The six HRGs were created for this report on the basis of relative similarity. These groups are labeled for convenience, with the understanding that all such labels will be approximations and that there will be a few communities that seem to fall outside the pattern. We have named the six HRGs: (1) Urban Centers; (2) Manufacturing Centers; (3) Diverse Suburbs; (4) Wealthy Suburbs; (5) Mill Towns; and (6) Rural Towns.

The historical geography of the HRGs is briefly described below and more extensively in Appendix B.<sup>b</sup>

### **Urban Centers**

The three Urban Centers (Bridgeport, Hartford and New Haven) are traditional large population centers, which benefited after 1830 from the movement of industry from small mill towns to larger population centers. These towns already were large, and the growth of industry added to their economic mix. Their populations became more diverse throughout the 20th century with the in-migration of blacks and, later, Hispanics. Post-World War II suburbanization and deindustrialization, however, helped to create large concentrations of poor black and Hispanic populations within these Urban Centers.

### **Manufacturing Centers**

The 10 Manufacturing Centers were the most successful mill towns in the early 1800s. Early industries in these towns became highly specialized, dominated national markets, and flourished in the 1800s and into the 1900s. For example, Danbury was identified with hat-making, Waterbury with precision manufacturing, Windham with thread, and New Britain with hardware. As the white population became better educated, manufacturing labor demand in the 20th century was met through the in-migration of black and Hispanic workers. These cities and their populations have suffered from suburbanization and deindustrialization. Their poverty and economic development problems are as or more difficult than those of the three Urban Centers because they have a less diverse economic base.

### **Diverse Suburbs**

The 15 Diverse Suburbs are not as readily defined and may be thought of as a set of relatively dense, medium-sized towns with diverse populations. Some of these towns, such as Manchester and Vernon, were medium-sized mill towns. Their stories would be similar to those of other such towns except that they are located close enough to large population clusters that they have benefited by becoming suburban communities. Another subset of the Diverse Suburbs is more properly labeled inner-ring suburbs. Hamden and West Hartford, for example, experienced a wave of suburbanization after 1900. They have an older housing stock and an increasingly diverse population, but their stability is ensured through demand for their housing and good educational opportunities. The Diverse Suburbs are similar in the age of their housing stock, density, population size, and population diversity.

### **Wealthy Suburbs**

The 27 Wealthy Suburbs were largely untouched by industrialization and retained their rural character well into the 1900s. Improvements in transportation, increasing incomes and federal government policies all contributed to their suburbanization after World War II. These towns are generally located in Fairfield County adjacent to New York or along Long Island Sound.

### **Mill Towns**

The 39 Mill Towns are generally the smaller, earliest mill towns that never succeeded on a national scale. Their industrial base was retained until recently, but their slow growth in the 1900s meant they never experienced large black or Hispanic in-migration. Thus, these towns face many of the same problems of entrenched poverty as the Manufacturing Centers, but they are not as large. Also, their populations are predominately white. We have labeled them Mill Towns, but so much of their industrial base has been eroded that it may be more appropriate to speak of them as “former mill towns.”

### **Rural Towns**

The 75 Rural Towns were largely untouched by industrialization, suburbanization or deindustrialization. Their populations consist of people whose families have lived in town for generations (if not centuries) and for various reasons (e.g., distance and lack of transportation infrastructure) have escaped large-scale suburbanization. Many of these towns have seen the development of low-density, high-end housing by wealthy in-migrants. Thus, the rural towns face some degree of conflict over the loss of their rural character and over the provision of town services. However, these towns remain relatively rural, low-density, residential communities with a traditional New England landscape.

## **HEALTH REFERENCE GROUP CONCLUSIONS**

Several “test” health indicators were analyzed using the HRG model and marked differences were found — such as in lead poisoning and child abuse and neglect statistics. The HRG model was adopted for the *Data Scan* because of the rigor with which the HRGs were defined, their capacity to clearly differentiate communities in demographics and health outcomes, their “reasonableness” when examined by the CHF’s Advisory Committee and other reviewers, and the lack of a current rigorously defined alternative.

# CHAPTER 3

Connecticut Community Profile





## CHAPTER 3

# CONNECTICUT COMMUNITY PROFILE

This chapter presents data on these key aspects related to health:

- Concepts for understanding community differences
- Demographics
- Births
- Community assets

### CONCEPTS FOR UNDERSTANDING COMMUNITY DIFFERENCES

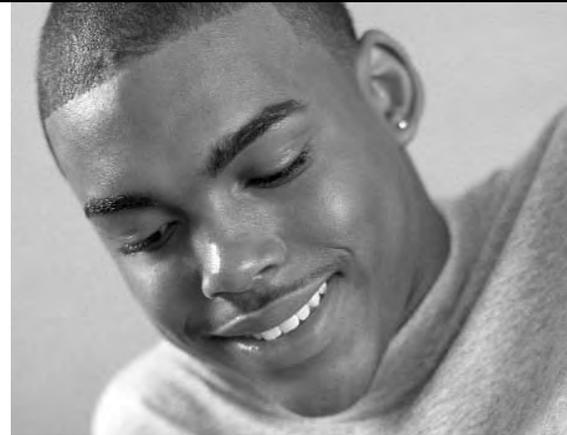
Community health researchers use several key concepts to understand community differences, including composition, context and selective migration.

#### Composition Effects

The composition effect, a key notion in research on community differences,<sup>11</sup> asserts that the difference in health status rates among communities is due to the differences in the individuals who compose them. For example, the rate of black teen births is more than six times higher in Connecticut's Urban Centers (61.7 per 1,000 black teens) than it is in the Rural Towns (9.5 per 1,000 black teens). This might reflect some difference in the personal characteristics of the black teens living in the Urban Centers as compared to those living in the Rural Towns.

The composition effect implies that these differences are characteristics the teens will “take with them” wherever they go. Health program interventions would need to target individual change — improving individual circumstances and character — if all health outcomes were due to composition effects.

A concern with composition effects could lead to further data collection about other characteristics of individuals, families and households, such as employment, education or poverty levels.





### **Context Effects**

The context effect asserts that people are affected by their community of residence. In this interpretation, the difference between black teen birth rates in the Urban Centers versus the Rural Towns is due to some kind of protective effect of life in the Rural Towns or a “health-demoting” aspect of life in the Urban Centers. Context effects imply that intervention at the community level may have important consequences for health outcomes.

A concern with context effects could lead to further data collection and analysis of assets and barriers at the community level, such as the number of out-of-school youth programs available or problems in transportation to these programs.

There is a particular context effect, called “hypersegregation,” that may be important for understanding the Urban Centers. Hypersegregation refers to the intersection and cumulative effect of distinct aspects of segregation that may influence the lives of black and (in Connecticut) Puerto Rican Hispanic residents in these cities — including dissimilarity, isolation, clustering, centralization, and concentration.<sup>12</sup> The concepts of segregation and hypersegregation are discussed in more detail in Appendix C.

### **Combinations of Composition and Context Effects**

As with most such concepts, the distinction between composition and context effects can be oversimplified. Both composition and context effects may result in rate differences. For example, the substantial health rate differences between black residents in the Urban Centers and Rural Towns could be due to both composition and context effects, rather than to either one alone.

### **Selective Migration**

Another effect, related to both composition and context, is selective migration. For example, selective immigration to the United States means that immigrants tend to be younger and healthier than the “average” person in their home countries and may also be younger and healthier than others in their U.S. communities. Thus, a heavily immigrant Connecticut community may tend to be younger and healthier than the same community would be without the influx of immigrants.<sup>c</sup> On the other hand, certain diseases such as tuberculosis may be more prevalent in some immigrant populations.

There also may be more complex effects for migration (e.g., from the Commonwealth of Puerto Rico) from other states or internally within Connecticut. For example, persons who suffer reverses in personal circumstance, such as divorce or unemployment, may move to larger urban areas in search of work or more affordable or subsidized housing.

## POPULATION PROJECTIONS

Any planning analysis will include both current population data and future projections, knowing that these projections will contain a healthy margin of error.

### United States Projections

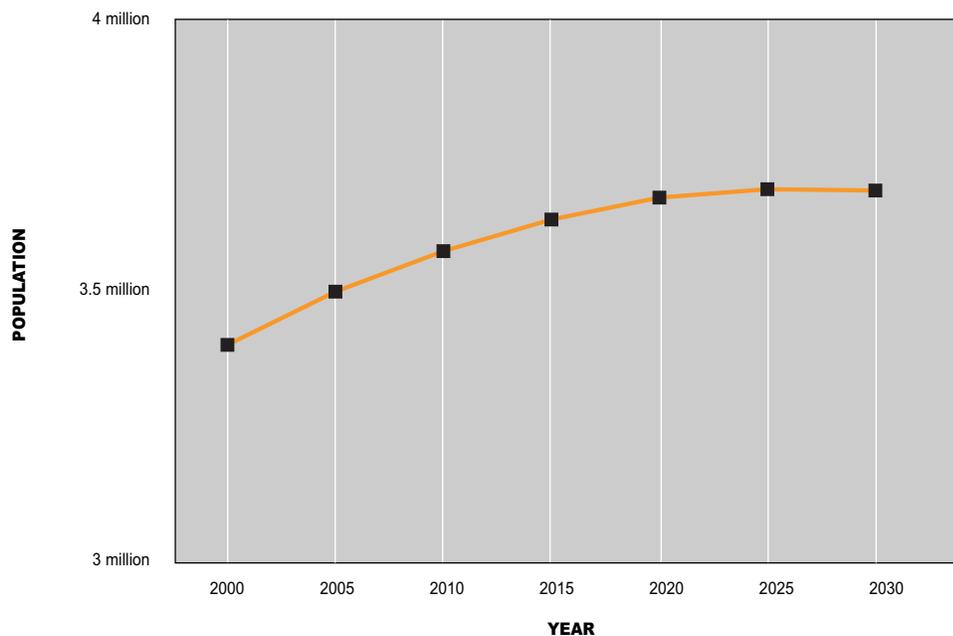
Based on recent population data, racial/ethnic “minorities” are growing at a faster pace than the “majority” population. According to U.S. Census 2000 data, one of every four residents self-reported as a “person of color.” By the year 2010, this number will rise to one in three, and by 2050 the projected number is one in two.<sup>13</sup>

The Asian-alone population nationally will grow 111.3 percent by 2030, and the Hispanic population will grow by 105.1 percent in the same period. The black-alone population will grow by 40.8 percent, and the white-alone population will grow by 20.6 percent. The white-alone, non-Hispanic share of the population will decline from 69.4 percent in 2000 to 57.5 percent in 2030 and further to 50.1 percent in 2050.<sup>14</sup>

### Connecticut Projections

The current projection is that Connecticut’s population will increase through 2025, and decline slightly between 2025 and 2030, as illustrated in Figure 3.

**FIGURE 3: POPULATION PROJECTIONS FOR CONNECTICUT**



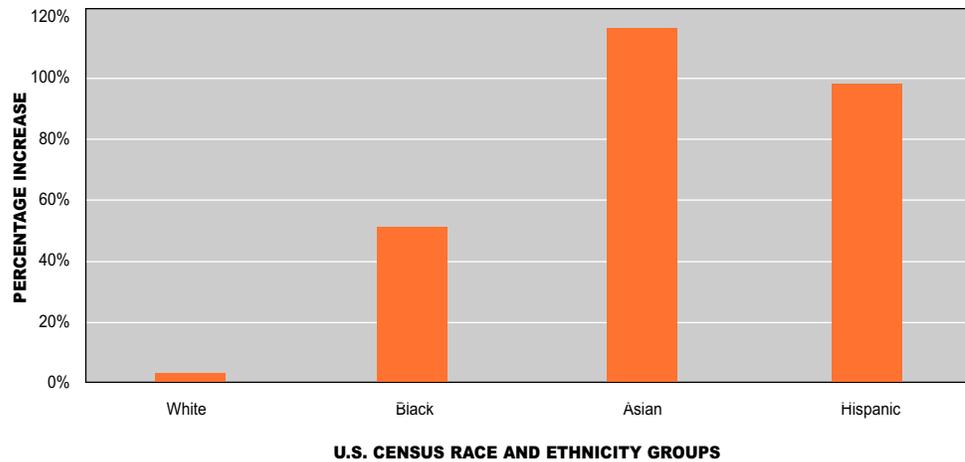
Source: U.S. Census Bureau, Population Division. *Interim State Population Projections, 2005, Table 3.* Available at: <http://www.census.gov/population/www/projections/projectionsagesex.html>.



Overall, Connecticut will experience only slight population growth between 2000 and 2030, from 3,405,565 to a projected 3,688,630 — 8.3 percent, compared to U.S. population growth of 29.2 percent over the same time span. Connecticut will decline in rank among states from 29th to 30th in overall population. As with much of the country, Connecticut’s population will grow older, from 13.8 percent to 21.5 percent age 65 and over. This compares with 12.4 percent age 65 and over in the United States in 2000, and 19.7 percent in 2030.<sup>15</sup> Additionally, the race and ethnicity composition of the population will change. While neither the U.S. Census Bureau nor Connecticut state authorities have yet released race and ethnicity projections based on the U.S. Census 2000, the Census Bureau has released projections from the 1990s forward to 2025, shown in Figure 4.

Detailed population projections for cities and towns by race, ethnicity and age to 2050 are anticipated in 2007.<sup>16</sup>

**FIGURE 4: PROJECTED PERCENTAGE INCREASE IN CONNECTICUT POPULATION GROUPS BETWEEN 2000 AND 2025**



Source: U.S. Census Bureau. *Projected State Populations, by Sex, Race and Hispanic Origin: 1995-2025*. Available at: <http://www.census.gov/population/projections/state/stpjrace.txt>.

The projections in Figure 4 indicate that Connecticut’s Asian population will grow by more than 113 percent between 2000 and 2025, the Hispanic population by more than 99 percent, the black population by more than 50 percent, and the white population by only 2.5 percent. Further analysis shows that the nonwhite population is a younger population than the white population. As of 2000, 41.1 percent of the white population was under 35 years old, in contrast with the black population (59.3 percent under 35), the Asian population (55.2 percent under 35), and the Hispanic population (73.7 percent under 35).<sup>17</sup> Thus, if current trends continue, Connecticut will be increasingly characterized by an older white, and a younger black, Asian and Hispanic population. And the trend may be underestimated in the available data. While the overall undercount of population in Connecticut is small, younger black, Asian, Hispanic, and immigrant populations are more likely to be undercounted, according to several U.S. Census Bureau analyses.<sup>d</sup>

## DEMOGRAPHICS

Understanding Connecticut's demographic composition can alert health organizations to racial and ethnic disparities in risk factors and health outcomes for potential intervention. Research shows there are disparities for many health conditions. A primary goal of *Healthy People 2010*, the federal government's major national initiative to improve health, is to reduce and eliminate disparities, especially along racial and ethnic lines.

The Connecticut Health Foundation's (CHF) web site ([www.cthealth.org](http://www.cthealth.org)) features charts and maps that report data by the major cities of the Urban Centers, HRGs and for the state as a whole, selected state Senate and House districts, town-level, census tract, block group, and block data.

In this chapter the focus is on several U.S. Census Bureau items of interest from a community health perspective, as shown in Table 4.

**TABLE 4: DATA ITEMS AVAILABLE ON CENSUS 2000 SHORT AND LONG FORMS**

SHORT FORM ITEMS ON THE CENSUS 2000	LONG FORM ITEMS ON THE CENSUS 2000
<ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Households</li> <li>• Family structure, including marital status and unmarried partners</li> <li>• Ethnicity</li> </ul>	<ul style="list-style-type: none"> <li>• Education</li> <li>• Income</li> <li>• Disability status</li> <li>• Language and linguistic isolation</li> <li>• Country of origin</li> <li>• Transportation type to work</li> <li>• Commuting time to work</li> </ul>

### Race, Ethnicity and Ancestry Concepts

Data on the race/ethnicity/ancestry distribution of Connecticut residents is important because of the well-documented correlations of race and ethnicity with health risks and health outcomes discussed in *Healthy People 2010*.<sup>18</sup>

Recently, some have claimed that race is a “social construct” without biological meaning. “Race is historically created (and recreated) by how people are perceived and treated in the normal actions of everyday life.”<sup>19</sup> Camara Jones, the epidemiologist, has stated that “race is a contextual variable, not a characteristic of the person.”<sup>20</sup>

The issues raised by this debate are beyond the scope of the *Data Scan*, but those interested in further reading on the topic should check issues of the *American Psychologist* (January 2005), *Nature Genetics* (published online Oct. 26, 2004) and the *American Journal of Public Health* (AJPH) (November 2000), all dedicated to the topic of race and ethnicity. The latter issue describes Office of Management and Budget (OMB) Directive 15 (1997 Revision) standards now required by the U.S. government for categorizing people in race/ethnicity terms. This directive has current or future application to virtually all public data.



Following OMB Directive 15, the U.S. Census Bureau includes a variety of ways for respondents to describe backgrounds, including race, ethnicity, ancestry, and origin.

There were six race categories in the U.S. Census 2000: American Indian or Alaska Native, Asian, black, Native Hawaiian or Pacific Islander, Other, and white. Respondents, rather than census takers, classified their own race and ethnicity. Beginning with U.S. Census 2000, residents could mark more than one race category. Ethnicity is a separate question and can be marked either Hispanic/Latino or non-Hispanic/Latino. Ancestry is an open-ended item to be filled in by respondents according to their own choices. This question, unlike race and ethnicity, is asked only on the census long form, sent to about one in six households.

U.S. Census 2000 defines “black race” as persons who specified their race as black/African American or Negro. Whites are defined as persons with origins in any of the original peoples of Europe, the Middle East or North Africa. The U.S. Census Bureau defines Latino ethnicity (which it uses interchangeably with Hispanic ethnicity) as persons identifying themselves as Mexican, Puerto Rican, Cuban, Central or South American, or of some other Latino (Spanish-speaking) origin. Asians may check several places of origin, including China, Vietnam or Asian Indian.

In summary, combinations like white-alone, non-Hispanic and white-alone Hispanic or black-Asian-white-Hispanic, or Other race-alone, Hispanic are all possible. For the U.S. Census 2000, an individual could be recorded as of Brazilian ancestry and white-Asian race and non-Hispanic ethnicity. An individual could also be of African ancestry, white-alone race and non-Hispanic ethnicity — as some North or South African immigrants might claim, for example.

### **Environmental Justice (EJ) Block Groups**

Environmental justice reflects an hypothesis that people in some neighborhoods may be more exposed to adverse environmental conditions that negatively affect their health. Neighborhoods with environmental justice block groups, reflecting high concentrations of low-income, “minority,” or people with limited English-speaking proficiency, are of specific concern.

### **Immigration and Migration**

Connecticut is characterized by disparate community histories, settlement patterns, and in- and out-migration. The state is experiencing several current, well-known trends that will be increasingly important in the future. Migration to Connecticut from Latin and Asian areas in the last 20 years has changed the “landscape” of many Connecticut communities, and it presents both opportunities and challenges.

Without the young Latino/Hispanic and Asian populations, Connecticut would suffer a stagnant and increasingly elderly population. To the extent that Connecticut maintains a young working-age population, it will be due to immigration. One researcher has noted: Connecticut “is one of only seven states in which the number of immigrants from 2000 to 2004 is larger than both the number of newcomers from other states ... and the ‘natural increase’ calculated by subtracting deaths from births.”<sup>21</sup> The other states are Massachusetts, New Jersey, New York, Oregon, Pennsylvania, and Rhode Island.

National and state leadership will need to attend to trends in immigrant health. Connecticut's immigrant population is typically a "healthy" young population, so it currently puts little burden on the chronic disease care system.<sup>6</sup> But this picture is likely to change, as explored in later chapters. Briefly, the more acculturated black and Hispanic immigrants become, the worse their health is likely to be.<sup>22, 23</sup>

As far as U.S. Census Bureau data allow, the different characteristics of Connecticut communities are demonstrated below. The HRGs are used as a way of summarizing results for all 169 Connecticut cities and towns, as shown in Table 5. See also [www.cthealth.org](http://www.cthealth.org).

**TABLE 5: PERCENTAGES OF PERSONS OF SELECTED RACES AND ETHNICITIES  
WITHIN HEALTH REFERENCE GROUPS**

AREA	All Races and Ethnicities	White-alone, Not Hispanic	Black-alone, Not Hispanic	Asian-alone, Not Hispanic	Hispanic Ethnicity, Any Race	All Other
<b>HRG 1 (3)-UC</b>	11.3	4.1	43.8	13.6	37.5	22.0
<b>Bridgeport</b>	4.1	1.6	13.9	5.5	13.9	9.3
<b>Hartford</b>	3.6	0.8	14.8	2.3	15.4	7.2
<b>New Haven</b>	3.6	1.7	15.1	5.9	8.3	5.5
<b>HRG 2 (10)-MC</b>	19.5	15.8	28.3	25.6	38.3	27.0
<b>HRG 3 (15)-DS</b>	17.3	17.9	19.1	18.3	9.9	19.0
<b>HRG 4 (27)-WS</b>	14.3	17.1	1.7	15.3	3.9	7.1
<b>HRG 5 (39)-MT</b>	20.5	24.3	4.3	16.8	6.7	14.2
<b>HRG 6 (75)-RT</b>	17.2	20.8	2.9	10.4	3.7	10.7
<b>Connecticut</b>	100.0	100.0	100.0	100.0	100.0	100.0

Source: U.S. Census 2000, SF1: Tables PCT 12H, I, J, L.

Table 5 illustrates the clustering of black residents in the Urban and Manufacturing centers. This is not surprising since the percentage of black residents was one of the variables used in defining the HRGs, so as to reveal racial and ethnic disparities. Nevertheless, it is noteworthy that almost half (43.8 percent) of black residents in Connecticut reside in just three cities: Bridgeport, Hartford and New Haven, and almost three-quarters (72.1 percent) live in either the Urban or Manufacturing centers. This fact will have consequences for the analysis of health conditions and outcomes.

Likewise, Hispanic residents tend to be clustered in the three large cities (37.5 percent) or the Manufacturing Centers (38.3 percent). This is also not surprising, since one of the variables used in defining the HRGs was the percentage of Hispanic residents. Yet, the concentration of Hispanic residents is demonstrably less than that of black residents. See Appendix C for a detailed discussion of segregation and hypersegregation in Connecticut, and the relative degree of segregation of black, Puerto Rican and non-Puerto Rican Hispanic residents.

### Race, Ethnicity and Age

A key problem in the analysis of race- and ethnicity-specific health data is the difference in age distribution, since older persons are likely to suffer from chronic diseases and the white population is older. Table 6 demonstrates the differences in race- and ethnicity-specific age distributions for the Urban Centers cities, HRGs and the state as indexed by the percentage under 35 years of age.

**TABLE 6: PERCENTAGE UNDER 35 YEARS OLD, BY RACE AND ETHNICITY, CITIES, HEALTH REFERENCE GROUPS, AND CONNECTICUT**

AREA	All Races and Ethnicities	White-alone, Not Hispanic	Black-alone, Not Hispanic	Asian-alone, Not Hispanic	Hispanic, any Race
<b>HRG 1 (3)-UC</b>	57.6	41.9	59.1	71.3	68.4
<b>Bridgeport</b>	55.5	37.2	59.8	67.1	66.9
<b>Hartford</b>	58.1	38.4	56.8	64.2	67.6
<b>New Haven</b>	59.6	48.3	60.5	77.9	72.6
<b>HRG 2 (10)-MC</b>	49.0	40.2	57.8	60.8	68.6
<b>HRG 3 (15)-DS</b>	45.7	41.8	56.2	60.1	68.7
<b>HRG 4 (27)-WS</b>	41.1	40.1	47.8	48.2	56.0
<b>HRG 5 (39)-MT</b>	43.2	41.6	55.3	59.5	65.3
<b>HRG 6 (75)-RT</b>	42.4	41.3	55.0	54.2	63.9
<b>Connecticut</b>	46.0	41.1	57.7	59.3	67.7

Source: U.S. Census 2000, SF1: Tables P12, P12H, PCT 12I, J, L.

The large differences in age and by race and ethnicity can be summarized as follows: Overall, the median age for Connecticut residents is 37.4 years; for white-alone residents it is 39.6, for black-alone residents it is 29.9, for Asian-alone residents it is 30.7, for Hispanic residents it is 25.4. For white-alone, non-Hispanic residents the median age is 40.2.<sup>f</sup> Thus, there is a 15-year gap between white-alone non-Hispanics and Hispanics, and a 10-year gap between white-alone, non-Hispanic and black-alone or Asian-alone, non-Hispanic residents of Connecticut. These gaps have a profound impact on the analysis and interpretation of health data of all kinds.

Table 6 shows that the HRGs differ substantially in the percentage of young persons (below age 35). The Urban Centers are dominated by a young population (57.6 percent), while the other HRGs are all below 50 percent on this indicator. The oldest population overall is in the Wealthy Suburbs.

But the overall figures hide significant differences among race and ethnicity groups. For example, the age distribution for whites is essentially the same across all HRGs, and whites consistently have the lowest percentage under age 35. The black and Asian populations have close to 60 percent under age 35. But the Wealthy Suburbs have an older black population (only 47.8 percent under 35) and the Asian population is substantially younger in the Urban Centers (71.3 percent under 35) and substantially older in the Wealthy Suburbs.

The Hispanic population is the youngest population in the state, but it varies significantly with a substantially older Hispanic population in the Wealthy Suburbs than in other HRGs.

These patterns suggest important demographic variations among the black, Asian and Hispanic populations that are worth exploring further. This also means that “crude” race and ethnicity-specific rates of disease are inappropriate indicators, and they should be replaced by age-adjusted rates wherever possible, as this “adjusts out” the differences in age composition.

### Ancestry

The U.S. Census Bureau allows respondents to claim multiple ancestries, and publishes tables of up to two ancestries, estimated from the long form census survey sample. Detailed results are available in Appendix D. There is significant variation by city and town. For example, while only 6.8 percent of all Connecticut residents are of Polish first-ancestry, this ancestry accounts for 20.1 percent of the residents of New Britain.

### Race, Ethnicity, Origins, Types, and Ancestries

Table 7 shows a more detailed breakdown of Asians by specific origin. Table 8 shows Hispanics by “type” and, Table 9 shows blacks by ancestry. These results have important social and public health implications.

**TABLE 7: PERCENTAGE OF ASIANS BY SPECIFIC ORIGIN**

AREA	Asian Indian	Cam-bodian	Chinese, Not Taiwanese	Filipino	Japanese	Korean	Laotian	Vietnamese	All Asian
<b>HRG 1 (3)-UC</b>	20.7	5.1	22.0	4.7	4.7	8.3	6.1	16.4	11,526
<b>Bridgeport</b>	18.2	10.4	11.2	3.1	4.9	4.8	11.2	26.1	4,626
<b>Hartford</b>	32.6	0.5	17.2	5.7	1.8	5.8	1.3	27.1	2,007
<b>New Haven</b>	18.1	2.1	34.0	5.7	5.7	12.5	3.2	2.9	4,893
<b>HRG 2 (10)-MC</b>	35.0	5.0	18.9	10.6	2.5	4.7	4.4	9.6	21,505
<b>HRG 3 (15)-DS</b>	29.5	2.5	21.1	11.2	2.8	8.3	3.3	10.6	14,815
<b>HRG 4 (27)-WS</b>	24.5	0.7	27.9	8.7	16.6	12.6	0.3	3.1	12,689
<b>HRG 5 (39)-MT</b>	30.4	2.1	24.8	9.3	2.7	8.7	4.0	9.5	14,632
<b>HRG 6 (75)-RT</b>	27.4	0.9	28.0	10.2	3.9	12.8	2.2	5.8	8,622
<b>Connecticut</b>	28.9	3.0	23.0	9.3	5.2	8.6	3.5	9.3	83,789

Source: U.S. Census 2000, SF1: Table PCT5.

**TABLE 8: PERCENTAGE OF HISPANICS BY TYPE**

AREA	Puerto Rican	Central American	South American	Mexican	Dominican	Cuban	Other	Hispanic Total
<b>HRG 1 (3)-UC</b>	74.4	2.0	5.0	0.6	2.0	1.6	14.3	120,181
<b>Bridgeport</b>	72.3	3.2	4.5	1.2	2.0	2.2	14.5	44,478
<b>Hartford</b>	80.4	0.9	4.9	0.0	2.1	1.2	10.5	49,260
<b>New Haven</b>	66.9	2.2	6.2	0.4	1.7	1.4	21.2	26,443
<b>HRG 2 (10)-MC</b>	54.5	6.7	11.6	1.0	4.4	1.3	20.5	122,686
<b>HRG 3 (15)-DS</b>	59.6	2.4	10.2	1.3	2.3	3.1	21.0	30,448
<b>HRG 4 (27)-WS</b>	23.4	5.3	27.2	0.8	1.8	6.9	34.6	12,633
<b>HRG 5 (39)-MT</b>	51.4	2.5	12.2	1.6	3.1	4.3	24.9	22,485
<b>HRG 6 (75)-RT</b>	45.5	2.9	14.0	0.8	2.0	6.3	28.6	11,890
<b>Connecticut</b>	60.7	4.1	9.8	0.9	3.0	2.2	19.4	320,323

Source: U.S. Census 2000, Table QT-P9.

**TABLE 9: RATIOS OF SELF-REPORTED WEST INDIAN AND AFRICAN ANCESTRY TO TOTAL BLACK-ALONE, NOT HISPANIC POPULATION**

AREA	Black-alone, Not Hispanic Population	West Indian (Excluding Hispanic) and African Population	Ratio of West Indian (Excluding Hispanic) and African Ancestry to Black-alone, Not Hispanic Population
<b>HRG 1 (3)-UC</b>	129,347	25,241	0.20
<b>Bridgeport</b>	40,974	10,387	0.25
<b>Hartford</b>	43,775	10,858	0.25
<b>New Haven</b>	44,598	3,996	0.09
<b>HRG 2 (10)-MC</b>	83,623	21,283	0.25
<b>HRG 3 (15)-DS</b>	56,430	13,257	0.23
<b>HRG 4 (27)-WS</b>	5,126	1,968	0.38
<b>HRG 5 (39)-MT</b>	12,572	3,320	0.26
<b>HRG 6 (75)-RT</b>	8,473	1,828	0.22
<b>Connecticut</b>	295,571	66,897	0.23

Source: U.S. Census 2000 SF1: Table P4; SF3: Table P16.

Tables 7, 8 and 9 demonstrate that simplistic concepts of race and ethnicity mask significant intrarace and intra-ethnic variation. For example, while Chinese background residents are distributed throughout the HRGs, Japanese and Korean residents show large percentages in the Wealthy Suburbs, while Vietnamese, Cambodians and Laotians show significant percentages in the Urban Centers and Vietnamese especially so in Bridgeport and Hartford. The three latter Asian subgroups are significantly underrepresented in the Wealthy Suburbs.

Although Puerto Rican Hispanics represent the largest share of Hispanics in Connecticut, and the largest percentage in the Urban Centers, they rank third among Hispanic subgroups in the Wealthy Suburbs. South Americans represent the largest percentage of Hispanics in the Wealthy Suburbs.

The U.S. Census Bureau has no comparable origin data for whites and blacks within the race and ethnicity question as it does for Hispanics, Asians, American Indians, and Pacific Islanders. The nearest question to these concepts is the “ancestry” question on the long form of the census. These data allow us to compare the numbers of persons indicating black “race” and various ancestries that are predominantly black, including West Indian and African.

Table 9 shows that there is significant variation between the numbers of persons indicating black race alone and those self-reporting West Indian or African ancestry. The Wealthy Suburbs have the largest ratios (.38:1) of persons indicating West Indian or African ancestry to persons reporting black-alone race.

### Multiracial Individuals

An increasing percentage of U.S. residents consider themselves to be multiracial. Multiracial persons have been demonstrated to have different health experience and behaviors than “single race” persons. The patterns are complex. The health-risk rates for multiracial persons are not simply the “average” health risk rates of their single race “components.”<sup>24</sup> Multiraciality is neither evenly distributed throughout the United States nor in Connecticut, as shown in Table 10.

**TABLE 10: MULTIRACIAL IDENTIFICATION FOR NOT HISPANIC BLACK AND ASIAN RESIDENTS**

AREA	Percentage of Persons Self-Identifying as Black and Also Some Other Race Category, U.S. Census 2000	Percentage of Persons Self-Identifying as Asian and Also Some Other Race Category, U.S. Census 2000
<b>HRG 1 (3)-UC</b>	6.2	16.2
<b>Bridgeport</b>	7.3	15.5
<b>Hartford</b>	6.4	25.8
<b>New Haven</b>	5.0	12.2
<b>HRG 2 (10)-MC</b>	9.1	12.1
<b>HRG 3 (15)-DS</b>	10.0	14.2
<b>HRG 4 (27)-WS</b>	16.5	13.1
<b>HRG 5 (39)-MT</b>	13.0	12.7
<b>HRG 6 (75)-RT</b>	16.0	15.7
<b>Connecticut</b>	8.6	13.7
<b>Boston</b>	8.5	7.0
<b>Massachusetts</b>	13.8	10.1
<b>Windham County, VT</b>	37.7	28.2
<b>United States</b>	4.8	13.9

Source: U.S. Census 2000, SF1: Table P4.



Table 10 illustrates that a significant number of Connecticut residents identify themselves in more than one racial category. This identification varies by HRG and by race. For example, 16.2 percent of persons with any Asian identification in the Urban Centers identify multiracially. Only 6.2 percent of persons with any black identification identify multiracially in the Urban Centers. In contrast, slightly larger percentages (16.5 percent) of blacks in the Wealthy Suburbs use multiple race identification than do Asians (13.1 percent). The black rate of multiracial identification in Connecticut as a whole is almost double that for the United States, while the Asian rate is similar to that for the United States. Both groups in Connecticut have far lower rates of multiracial identification than, for example, Windham County in southeastern Vermont, where 37.2 percent of blacks and 28.2 percent of Asians identify multiracially.

### Same-Sex Unmarried Partners

Same-sex unmarried partner households are of increasing interest due to the political debates over “gay marriage” and “civil unions,” especially in New England. In addition, research on the topic of intimate partner abuse has recently expanded to examine same-sex partnerships.<sup>25</sup> The U.S. Census Bureau for the first time in 2000 provided data on such households, as shown in Table 11.

**TABLE 11: PERCENTAGE OF SAME-SEX UNMARRIED PARTNER HOUSEHOLDS**

AREA	Same-Sex Unmarried Partner Households, as a Percentage of All Unmarried Partner Households	Same-Sex Unmarried Partner Households as a Percentage of All Households
<b>HRG 1 (3)-UC</b>	10.9	0.8
<b>Bridgeport</b>	11.1	0.8
<b>Hartford</b>	9.5	0.8
<b>New Haven</b>	12.2	0.8
<b>HRG 2 (10)-MC</b>	11.3	0.7
<b>HRG 3 (15)-DS</b>	12.4	0.7
<b>HRG 4 (27)-WS</b>	19.6	0.5
<b>HRG 5 (39)-MT</b>	10.9	0.5
<b>HRG 6 (75)-RT</b>	15.4	0.7
<b>Connecticut</b>	12.5	0.6

Source: U.S. Census 2000, SF3:Table PCT001.

The Wealthy Suburbs lead the state in same-sex unmarried partner households as a percentage of all unmarried partner households, followed by the Rural Towns. The differences among the other HRGs are not significant.

### Demographic Conclusions

These results suggest that ancestry, countries of origin and circumstances of origin may make a significant difference in the “mix” of race and ethnicity groups in the cities and towns of Connecticut. The “broad brush” approach is insufficient to understand the complexities of race, ethnicity and ancestry. These more detailed factors should be taken into account in analyses of the health data for Connecticut’s cities and towns, even where ancestry-specific health data may not be available.

### EDUCATIONAL ATTAINMENT

Educational attainment, income and home ownership sketch a picture of “social class” in Connecticut. These measures are important since they correlate highly with health risks and health outcomes.

Educational attainment has been shown to correlate with health. As a predictor of health, educational attainment may be preferred to alternatives such as income and occupation, since (1) educational attainment can be measured for all persons, whereas not everyone has income or occupation; and (2) “health impairments that emerge in adulthood rarely affect educational attainment since educational attainment is normally complete by the early adult years.”<sup>26</sup> Table 12 shows significant HRG and race and ethnicity differences in educational attainment in Connecticut.

**TABLE 12: PERCENTAGE OF PERSONS 25 YEARS AND OLDER WHO ARE COLLEGE GRADUATES**

AREA	All Residents	White-alone	Black-alone	Asian-alone	Hispanic	White-alone, Not Hispanic
<b>HRG 1 (3)-UC</b>	17.0	24.7	9.6	51.0	6.2	28.9
<b>Bridgeport</b>	12.2	15.1	8.9	30.6	5.1	18.0
<b>Hartford</b>	12.4	22.2	7.7	38.3	5.1	27.8
<b>New Haven</b>	27.1	38.0	12.5	77.3	10.5	41.4
<b>HRG 2 (10)-MC</b>	24.1	26.3	13.3	53.9	8.4	27.9
<b>HRG 3 (15)-DS</b>	27.7	28.3	17.4	54.5	17.2	28.4
<b>HRG 4 (27)-WS</b>	57.0	57.2	29.6	71.1	36.0	57.5
<b>HRG 5 (39)-MT</b>	26.2	25.8	23.2	57.3	20.2	25.9
<b>HRG 6 (75)-RT</b>	36.6	36.6	22.4	61.6	28.4	36.7
<b>Connecticut</b>	31.4	33.5	13.7	57.7	11.3	34.2

Source: U.S. Census 2000, SF3: Tables P037, P148A, P148B, P148D, P148H, P148I.



Educational attainment results for residents 25 years and older show a complex pattern of differences by race and ethnicity and by HRG. Whites have a higher educational level than blacks and Hispanics in every HRG, but these differences are minimal in the Mill Towns. Blacks have a slightly higher rate of educational attainment statewide than Hispanics (13.7 percent versus 11.3 percent are college graduates). However, blacks have a much higher rate than Hispanics in the Manufacturing Centers and a lower educational attainment level than Hispanics in the Wealthy Suburbs. The latter patterns may be associated with the different origins of Hispanic residents in the HRGs, as the Wealthy Suburbs are home to mainly non-Puerto Rican Hispanics. Statewide data indicate that this group has higher educational attainment levels than Puerto Rican Hispanics.

Table 13 illustrates the differences that are demonstrable for subregions of the state and subgroups of Hispanic residents. In each area, Puerto Rican Hispanic residents have lower levels of educational attainment than non-Puerto Rican Hispanic residents. These differences are undoubtedly due to different migration and immigration histories.

**TABLE 13: PERCENTAGE OF RESIDENTS 25 AND OVER WHO ARE COLLEGE GRADUATES, HISPANIC SUBGROUPS**

AREA	All Residents	Not Hispanic	Hispanic, Not Puerto Rican	Hispanic, Puerto Rican
<b>Bridgeport</b>	12.8	15.4	8.7	4.6
<b>Hartford</b>	11.5	14.9	11.1	3.4
<b>New Haven</b>	26.9	30.4	17.9	5.5
<b>Balance of Connecticut</b>	33.7	34.6	19.1	11.9
<b>Connecticut</b>	31.2	32.7	17.4	7.4

Source: U.S. Census 2000, PUMA Database.

Overall, Asians 25 years and older have the highest educational attainment of any group — more than half have a college degree or more. Asians are by far the most highly educated group in each HRG. But there are significant differences by location. For example, Asians in Bridgeport and Hartford have lower educational attainment than in any other HRG. This is most likely due to subgroup differences within the Asian population who go to college or settle in these cities rather than in New Haven or the rest of the state, as shown in Table 14.

**TABLE 14: PERCENTAGE OF RESIDENTS 25 AND OVER WHO ARE COLLEGE GRADUATES, ASIAN SUBGROUPS**

AREA	All Residents	All Asian	Asian, Other	Asian, Cambodian	Asian, Laotian	Asian, Vietnamese
<b>Bridgeport</b>	12.8	32.2	53.4	NA	NA	25.9
<b>Hartford</b>	11.5	28.2	35.7	NA	18.6	9.7
<b>New Haven</b>	26.9	77.0	81.6	NA	NA	NA
<b>Balance of Connecticut</b>	33.8	57.0	66.3	NA	6.1	NA
<b>Connecticut</b>	31.2	55.0	65.6	1.5	5.8	22.6

Source: U.S. Census 2000, PUMA Data. Note: Asian, Other refers to not Cambodian, Laotian or Vietnamese.

**TABLE 15: PERCENTAGE OF RESIDENTS 25 AND OVER WHO ARE COLLEGE GRADUATES, BLACK SUBGROUPS**

AREA	All Residents	Black, Not Hispanic	Black, Not Hispanic: African	Black, Not Hispanic: African American	Black, Not Hispanic: Haitian	Black, Not Hispanic: West Indian/Caribbean	Black, Not Hispanic: Other
<b>Bridgeport</b>	12.8	9.7	12.8	9.2	23.7	9.7	7.3
<b>Hartford</b>	11.5	6.9	9.4	8.1	19.8	7.1	3.2
<b>New Haven</b>	26.9	13.4	7.3	13.5	NA	41.1	7.5
<b>Balance of Connecticut</b>	33.8	17.0	30.1	16.8	10.7	17.5	14.1
<b>Connecticut</b>	31.2	14.0	23.8	14.1	16.1	15.1	10.3

Source: U.S. Census 2000, PUMA Database.

The level of educational attainment among blacks is higher outside the Urban Centers, as shown in Table 15. There also are significant variations in educational attainment among different subgroups of black residents. For Connecticut as a whole, residents of African ancestry age 25 and over have a higher level of educational attainment (23.8 percent are college graduates or more) than do Haitians (16.1 percent), West Indians (15.1 percent), or African Americans (14.1 percent). But these patterns are different in the different locations. For example, 41.1 percent of West Indian/Caribbean Islanders in New Haven are college graduates.

It is important to note that the data on educational attainment show immigrant and migrant groups at a particular moment in history. Future changes in educational attainment will be driven by current trends in high school achievement, dropout and graduation rates, as well as the differentials in educational experiences prior to immigration and the differentials in in- and out-migration patterns.



## HOUSEHOLD INCOME

Household income closely correlates with education, and both correlate with health risks and outcomes. Table 16 presents the percentage of households with income of \$35,000 or more, showing the wide variation in household income by HRG and by race and ethnicity.

**TABLE 16: PERCENTAGE OF HOUSEHOLDS WITH HOUSEHOLD INCOME OF \$35,000 OR MORE IN 1999**

AREA	All Households	White-alone Householder	Black-alone Householder	Asian-alone Householder	Hispanic Householder	White-alone, Not Hispanic Householder
<b>HRG 1 (3)-UC</b>	43.2	48.6	40.5	47.8	36.1	50.7
<b>Bridgeport</b>	49.6	51.2	47.6	68.6	44.4	53.2
<b>Hartford</b>	35.9	42.8	35.6	39.3	29.5	45.5
<b>New Haven</b>	43.4	49.2	39.3	37.3	35.3	50.8
<b>HRG 2 (10)-MC</b>	60.7	63.6	51.7	71.9	45.7	65.0
<b>HRG 3 (15)-DS</b>	66.6	67.4	60.6	74.7	60.6	67.4
<b>HRG 4 (27)-WS</b>	84.4	84.5	75.2	89.0	73.4	84.7
<b>HRG 5 (39)-MT</b>	71.0	71.0	74.5	73.0	69.7	71.0
<b>HRG 6 (75)-RT</b>	78.8	78.9	71.6	86.5	79.5	78.9
<b>Connecticut</b>	68.2	71.3	50.1	72.8	46.8	72.0

Source: U.S. Census 2000, SF3: Tables P052, P151A,B,D,H,I.

Data note: Most Hispanic/Latino respondents to the census list themselves as "Some Other Race." Hispanic/Latino respondents who also list themselves as white, black or Asian may be counted twice in this table, since black-alone non-Hispanic, and Asian-alone non-Hispanic data are not available in the Summary File 3 tables in the U.S. Census 2000. The difference for Bridgeport between white-alone (51.2 percent) and white-alone non-Hispanic (53.2 percent) is produced by those who classify themselves as white-alone Hispanic.

The income differentials in Connecticut are large. The Connecticut average of 68.2 percent of households with \$35,000 or greater income obscures the fact that the Urban Centers are 25 percentage points lower at 43.2 percent. Hartford is still lower at 35.9 percent and the Wealthy Suburbs are more than 15 percentage points higher at 84.4 percent.

White and Asian household incomes are approximately equal in Connecticut (71.3 percent and 72.8 percent \$35,000 and over, respectively). Asian households in the Wealthy Suburbs have the highest income of any group in the state (89.0 percent at \$35,000 and over), and Asian household income is greater than white household income in every HRG but the Urban Centers. This may be due to the different intrarace composition of the Asian population in the Urban Centers as compared with the other HRGs. The Urban Centers are more heavily populated with Vietnamese, Cambodian and Laotian residents rather than more established Asian populations or immigrants who may have arrived under a different immigration status.

Asian households show extreme variation, from a low of 37.3 percent at \$35,000 and more in New Haven to a high of 89.0 percent in the Wealthy Suburbs. This may be due partly to different groups among householders identifying as Asian, and in part to the low incomes of Asian student households in New Haven.

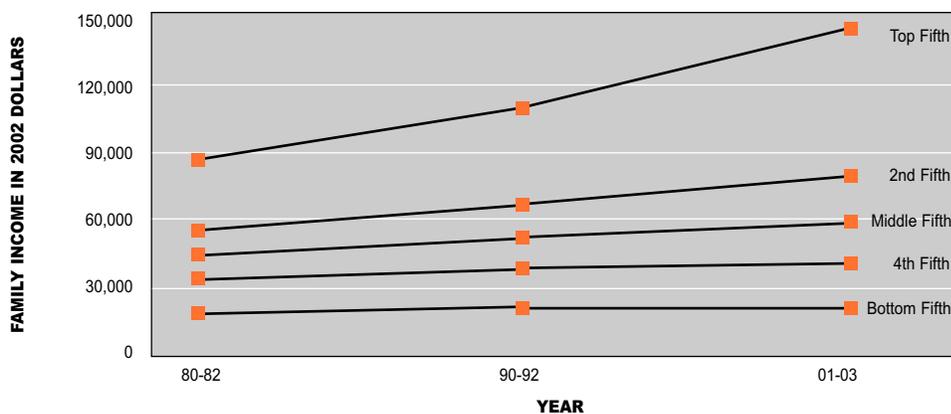
More generally, in examining the educational and economic status of immigrants, we must consider the influence of changes in immigration laws, particularly those targeted to refugees and those with special occupational skills.

Statewide, black household income trails (50.1 percent at \$35,000 and over), and Hispanic income is still lower (46.8 percent at \$35,000 and over). There are also very large HRG differences in income, not surprising since a correlate of income — poverty level — was one factor used to define the HRGs. But a complex pattern emerges when examining the cross-tabulation of HRG and race/ethnicity. Hispanic households show extreme variation, from 29.5 percent at \$35,000 and higher in Hartford to 79.5 percent at \$35,000 and higher in the Rural Towns. Hispanics are the only group to show higher household income in the Rural Towns than in the Wealthy Suburbs. These differences likely also arise from origin differences in the Hispanic population.

### INCOME TRENDS

Income disparities are increasing, as demonstrated in a recent report by the Economic Policy Institute/Center on Budget and Policy Priorities. Analyzing each quintile (fifth) of the population, the institute finds the income changes shown in Figure 5. These data indicate that inequality in family incomes has accelerated during the past decade; the average income of the bottom fifth of families in Connecticut has actually decreased slightly. Increasing income inequality is a nationwide trend. Connecticut ranks 28th among states in income inequality.<sup>27</sup> The growth in income inequality may have social and political consequences. For example, rates of bankruptcy and divorce are highest in U.S. counties with the largest income disparities. The report also notes that as families are increasingly stressed by income disparity and loss, they may be less willing to pay for public services, including public health services.<sup>28</sup>

**FIGURE 5: FAMILY INCOME TRENDS BY FIFTHS OF CONNECTICUT FAMILIES**



Source: Economic Policy Institute/Center on Budget and Policy Priorities. *Pulling Apart: A State-by-State Analysis of Income Trends*, January 2006. Available at: [http://www.epinet.org/studies/pulling06/pulling\\_apart\\_2006.pdf](http://www.epinet.org/studies/pulling06/pulling_apart_2006.pdf) <[http://www.epinet.org/studies/pulling06/pulling\\_apart\\_2006.pdf](http://www.epinet.org/studies/pulling06/pulling_apart_2006.pdf)>. Accessed Jan. 27, 2006.



### FEMALE-HEADED FAMILY HOUSEHOLDS WITH CHILDREN UNDER 18

There is much research indicating that single female-headed family households with children are very stressed,<sup>29</sup> making this an important indicator to consider in examining health-risk differences. Connecticut children growing up in single female-headed households are likely to experience poverty, across all types of communities and racial and ethnic groups.

**TABLE 17: PERCENTAGE OF FAMILY HOUSEHOLDS THAT ARE FEMALE-HEADED, NO HUSBAND PRESENT AND WITH CHILDREN UNDER 18**

AREA	All Family Households	White-alone Headed	Black-alone Headed	Asian-alone Headed	Hispanic Headed, Any Race	White-alone, Not Hispanic Headed
<b>HRG 1 (3)-UC</b>	32	16	44	9	39	10
<b>Bridgeport</b>	27	15	40	9	34	10
<b>Hartford</b>	38	20	45	18	45	10
<b>New Haven</b>	32	15	46	5	38	11
<b>HRG 2 (10)-MC</b>	16	10	37	5	31	9
<b>HRG 3 (15)-DS</b>	12	9	32	6	29	9
<b>HRG 4 (27)-WS</b>	5	5	20	4	11	5
<b>HRG 5 (39)-MT</b>	8	8	23	4	18	8
<b>HRG 6 (75)-RT</b>	6	6	14	4	10	6
<b>Connecticut</b>	12	8	37	5	32	7

Source: U.S. Census 2000, SF1: Tables P035, P035A,B,D,H,I.

Table 17 demonstrates both racial and ethnic differences. It also shows that these differences vary across different kinds of communities. There are large differences between Asian families — at 5 percent, they are least likely to be single female-headed households with children under 18 — followed by white families (8 percent), Hispanic families (32 percent) and black families (37 percent). But the rates are dramatically different for all racial/ethnic groups in the different HRGs. Asian and white-only non-Hispanic rates vary from 9 percent and 10 percent at their highest levels, respectively, to their lowest levels of 4 percent and 5 percent. The rate differences are much more dramatic for black-alone and Hispanic families. For example, rates of black-alone female-headed family households with no husband present and with children under 18 drops from 44 percent in the Urban Centers to only 14 percent in the Rural Towns. Similarly, Hispanic rates decline from 39 percent in the Urban Centers to 10 percent in the Rural Towns.

It is not known whether these rate differentials result from composition or context effects, or from differential migration of single female-headed families to the larger urban areas.



## CHILD POVERTY

Poverty is clearly associated with single female-headed households and with health risk and health outcome. Therefore, the author has chosen poverty among children as a good “index” of poverty level. Table 18 indicates the overall level of child poverty, along with disparities in this indicator.

**TABLE 18: PERCENTAGE OF CHILDREN IN POVERTY  
(AMONG FAMILY HOUSEHOLDS WITH RELATED CHILDREN UNDER 18 ONLY)**

AREA	All Families with Related Children Under 18	White-alone Families with Related Children Under 18	Black-alone Families with Related Children Under 18	Asian-alone Families with Related Children Under 18	Hispanic Families, Any Race with Related Children Under 18	White-alone, Not Hispanic Families with Related Children Under 18
<b>HRG 1 (3)-UC</b>	32	26	31	10	41	14
<b>HRG 2 (10)-MC</b>	16	10	22	6	31	6
<b>HRG 3 (15)-DS</b>	8	6	15	7	19	5
<b>HRG 4 (27)-WS</b>	2	2	5	5	7	2
<b>HRG 5 (39)-MT</b>	4	4	12	7	13	4
<b>HRG 6 (75)-RT</b>	3	2	15	3	3	2
<b>Connecticut</b>	10	5	24	6	31	4

Source: U.S. Census 2000, SF3: Tables PCT076A,B,D,H,I.

The percentages of children under 18 living below the poverty line are highly correlated with differences in family structure. For example, 31 percent of black children in the Urban Centers are below the poverty line. This is associated with 41.5 percent of black-alone single female-headed families in poverty in the Urban Centers (see Table 19) — a frequent family structure for black children in the Urban Centers (see Table 20).

**TABLE 19: PERCENTAGE OF CHILDREN UNDER 18 BELOW POVERTY CRITERION, BY FAMILY TYPE**

AREA	All Families with Related Children Under 18		White-alone Families with Related Children Under 18		Black-alone Families with Related Children Under 18		Asian-alone Families with Related Children Under 18		Hispanic Families, Any Race with Related Children Under 18		White-alone, Not Hispanic Families with Related Children Under 18	
	SF	M	SF	M	SF	M	SF	M	SF	M	SF	M
<b>HRG 1 (3)-UC</b>	47.0	13.7	48.8	11.6	41.5	11.6	22.3	8.2	56.8	18.6	30.2	8.8
<b>HRG 2 (10)-MC</b>	36.8	5.6	31.8	4.2	33.7	4.5	18.4	4.9	48.6	14.6	24.4	2.8
<b>HRG 3 (15)-DS</b>	25.4	2.6	20.9	2.3	28.0	3.1	11.9	7.0	39.3	4.7	19.3	2.1
<b>HRG 4 (27)-WS</b>	13.2	1.3	12.7	1.1	9.2	3.2	26.7	4.2	28.9	3.6	12.3	1.1
<b>HRG 5 (39)-MT</b>	18.6	1.9	18.0	1.6	16.8	9.1	1.9	6.8	35.9	4.2	16.9	1.5
<b>HRG 6 (75)-RT</b>	12.7	1.4	12.5	1.3	27.6	11.5	5.3	2.4	11.2	1.7	12.6	1.3
<b>Connecticut</b>	32.3	3.2	23.3	2.2	36.3	7.2	14.8	5.5	50.7	12.5	17.8	1.7

SF indicates single female-headed household M indicates married-couple family

Source: U.S. Census 2000, SF3: Tables PCT052; PCT076A,B,D,H,I.



The results in Table 19 show the association of family structure with poverty. For every racial and ethnic group, “single female-headed no husband present” families are more likely to be below the federal poverty criterion, which adjusts income for family size. The relative difference ranges up to a ratio of more than 10 to 1 (12.3 percent for single female-headed families to 1.1 percent for married-couple families for white-alone, non-Hispanic families in the Wealthy Suburbs).

**TABLE 20: RATIO OF CHILDREN UNDER 18 IN MARRIED-COUPLE FAMILIES TO CHILDREN UNDER 18 IN SINGLE FEMALE-HEADED FAMILIES (with Related Children Under 18 Only)**

AREA	All Families with Related Children Under 18	White-alone Families with Related Children Under 18	Black-alone Families with Related Children Under 18	Asian-alone Families with Related Children Under 18	Hispanic Families, Any Race with Related Children Under 18	White-alone, Not Hispanic Families with Related Children Under 18
<b>HRG 1 (3)-JC</b>	0.8	1.7	0.5	8.0	0.7	3.2
<b>HRG 2 (10)-MC</b>	2.0	3.7	0.7	8.3	1.1	5.1
<b>HRG 3 (15)-DS</b>	3.3	4.6	1.2	8.6	1.5	4.8
<b>HRG 4 (27)-WS</b>	11.8	12.4	1.7	19.0	6.1	12.6
<b>HRG 5 (39)-MT</b>	5.5	5.9	1.5	15.9	2.5	6.0
<b>HRG 6 (75)-RT</b>	8.7	9.0	3.1	12.8	6.6	9.1
<b>Connecticut</b>	3.4	5.9	0.7	11.0	1.1	6.9

Source: U.S. Census 2000, SF3:Tables PCT076A,B,D,H,I.

Table 20 reveals the very different family structures for racial and ethnic groups in different HRGs. Statewide, Asian-alone children are least likely of all groups to be in single female-headed family households, and even more unlikely to be in such households in the Wealthy Suburbs. Children in the Wealthy Suburbs are most likely in married-couple families for all groups, except for Hispanics, for whom the Wealthy Suburbs and Rural Towns show approximately equal ratios. Black-alone race children are most likely to be growing up in “single female-headed, no husband present families” in every HRG. For black children, the likelihood of growing up in a married-couple family is greatest in the Rural Towns (3.1:1).

Table 18 indicates that there is a large percentage (32 percent) of children in poverty in the Urban Centers. Taking the results of Table 19 and Table 20 together, it is apparent that a major contributor to this level of poverty is the association of single female-headed, no husband present family structure and poverty, and the large representation of such families in the Urban Centers.

The Connecticut Department of Children and Families (DCF) monitors poverty among young people using Medicaid eligibility as an indicator. DCF notes that low-income families are overrepresented in the department’s caseload, indicating that children and youth in poverty need more assistance with social/health, basic needs, and specific health, substance abuse and other critical areas.<sup>30</sup>

According to Kids Count, a national initiative sponsored by the Annie E. Casey Foundation, 10.4 percent of Connecticut residents age 18 and under lived in poverty in 1999, compared to a national rate of 16.6 percent during the same period. Approximately 12.1 percent of children 18 and under lived in “high-poverty neighborhoods” where 20 percent or more of the total population lives below the poverty line. This is significantly less than in the nation as a whole: 20.4 percent of all children in the United States live in high-poverty neighborhoods.<sup>31</sup>

Additional “safety net” statistics can be found in Appendix E.

## INCOME AND WEALTH

The larger disparities in wealth between blacks and whites, in comparison to the disparities in income, have been widely discussed in recent years. Since World War II, whites have accumulated wealth more than blacks because of such factors as access to good educational institutions; access to decent jobs and fair wages; accumulated retirement benefits through company programs, union membership and Social Security; and home ownership policies and programs allowing purchase of property in rising neighborhoods.<sup>32</sup>

There are likely to be underlying, long-term disparities in wealth even as disparities in access to education and jobs are addressed. Home ownership is a chief means of wealth accumulation by moderate-income families, providing a “platform” of support for succeeding generations. Although the post-World War II GI bill, for example, supported educational and home ownership benefits for black veterans, these veterans did not benefit to the same degree and with the same effect as for white veterans because the black veterans could not purchase property in many “rising” neighborhoods due to formal and informal color bars.<sup>33</sup>

Current differences in home ownership may reflect: different income-generated capacities to save or propensities to save; different amounts of family support in the form of inter-generational gifts; operations of the home mortgage market; increasing costs of home ownership for “new groups” in an era of rising home prices; different lengths of time required to accumulate the capital to purchase a home; or differences between generations in their desire to own a home rather than use income in other ways. Still another factor is that homes in white neighborhoods increase in value an average of 28 percent more than homes in black neighborhoods over the course of a 30-year mortgage.<sup>34</sup> Thus, homes in black neighborhoods provide less of a “cushion” of support in lean economic times, and black home owners are more at risk. Finally, there is conclusive evidence that black residents nationwide and in Connecticut are likely to live in segregated (and even in what are frequently called “hypersegregated”) neighborhoods, as described in Appendix C.

### Owner Occupancy — A Measure of Wealth

Home ownership is a key source of family and community stability. It is an indicator of commitment to community that may have other health-related consequences.

**TABLE 21: PERCENTAGE OF OCCUPIED HOUSING UNITS THAT ARE OWNER-OCCUPIED**

AREA	All Households	White-alone Householder	Black-alone Householder	Asian-alone Householder	Hispanic Householder, Any Race	White-alone, Not Hispanic Householder
<b>HRG 1 (3)-UC</b>	32.8	42.1	29.4	21.9	19.0	46.5
<b>Bridgeport</b>	43.2	52.6	37.2	38.3	27.7	58.5
<b>Hartford</b>	24.6	33.0	26.2	17.4	12.6	39.4
<b>New Haven</b>	29.6	36.0	26.0	12.0	17.1	38.4
<b>HRG 2 (10)-MC</b>	53.7	60.8	32.3	41.9	25.1	63.7
<b>HRG 3 (15)-DS</b>	64.2	66.7	52.5	43.6	40.3	67.1
<b>HRG 4 (27)-WS</b>	84.3	85.2	56.8	71.0	58.0	85.5
<b>HRG 5 (39)-MT</b>	74.6	75.7	50.9	51.4	51.4	76.0
<b>HRG 6 (75)-RT</b>	83.8	84.2	70.5	76.7	68.8	84.3
<b>Connecticut</b>	66.8	72.5	36.5	48.1	28.1	73.9

Source: U.S. Census 2000, SF1: Tables H16, H16A,B,D,H,I.

Since home ownership is a key vehicle for savings and wealth accumulation, one test of disparities is the percentage of home owners by race and ethnicity in Connecticut and for the HRGs, illustrated in Table 21. But the crude home ownership percentage by group is somewhat misleading since blacks, Asians and Hispanics are younger than whites in Connecticut, and home ownership is typically concentrated in somewhat older groups. However, even with statistical control for age, disparities still exist.

**TABLE 22: PERCENTAGE OF OCCUPIED HOUSING UNITS THAT ARE OWNER-OCCUPIED, BY HOUSEHOLDER AGE AND RACE/ETHNICITY**

RACE/ETHNICITY	All Households	Age 15-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65-74	Age 75-84	Age 85+
<b>All Residents</b>	66.8	12.3	43.6	67.3	76.1	79.3	78.8	73.8	61.5
<b>White-alone Householder</b>	72.5	14.8	50.7	73.5	80.7	83.4	81.9	75.5	62.5
<b>Black-alone Householder</b>	36.5	7.5	21.3	36.4	45.7	50.6	48.3	43.9	39.6
<b>Asian-alone Householder</b>	48.1	9.3	24.1	54.8	70.0	75.2	66.5	53.7	37.8
<b>Hispanic Householder</b>	28.1	6.5	20.5	33.1	38.2	39.1	34.6	29.9	20.9
<b>White-alone, Not Hispanic Householder</b>	73.9	15.7	52.6	75.0	81.9	84.5	82.6	75.9	62.8

Source: U.S. Census 2000, SF1: Tables H016, H016A,B,D,H,I.

Table 22 illustrates that home ownership rises with age, and for each racial/ethnic group peaks between 55 and 64 years old. In the 55–64 age group, home ownership is highest among whites, followed closely by Asians. It is lowest among blacks and Hispanics. It is important to point out that this “broad brush” does not distinguish different rates for different types and ancestry groups among Asians, blacks and Hispanics. It is unknown why home ownership rates are lower among Asians even though their household income equals or even exceeds that of whites.

### ENVIRONMENTAL JUSTICE AND HEALTH DISPARITIES

The principle of EJ began as a grassroots movement in the 1970s by activists who believed people were suffering disproportionately from illness because of where they lived. Environmental justice reflects a concern that neighborhoods with a high concentration of low-income, minority, immigrant, or limited English proficiency residents may be more exposed to adverse environmental conditions that would negatively affect residents’ health. In 1994, President Bill Clinton signed Executive Order 12898, directing the federal government to consider the principles of environmental justice in its decision making.<sup>35</sup>

Environmental justice areas are identified from U.S. Census block group data in U.S. Census 2000. Environmental justice block groups include any areas that meet at least one of the following criteria:

- At least 25 percent minority residents
- Less than \$30,515 in median household income in 1999
- More than 25 percent of residents not proficient in spoken English
- More than 25 percent foreign-born residents

Identifying these EJ block groups does not necessarily “prove” the presence of environmental hazards. In fact, the evidence is mixed for linking EJ block groups to the actual presence of environmental hazards. The causal patterns are complex even if correlation can be shown. Do potential environmental hazards get placed in low-income communities? Or do housing prices fall as a result of their placement, and make neighborhoods affordable for low-income persons? Or is the pattern even more complex? Regardless of the answers to such causal questions, the presence of EJ block groups should alert decision-makers to the possible connections in local community settings.



### LINGUISTIC ISOLATION

Because the state’s population distribution will age, the state will retard the “graying” tendency only to the extent that it welcomes young immigrants and migrants from other states and territories. This provides both an opportunity to maintain a growing economy as well as significant challenges — particularly the problem of linguistic isolation.

Linguistic isolation is a key measure, accessible from the U.S. Census 2000, with social, economic and health implications. The U.S. Census Bureau defines linguistic isolation as a household in which all members 14 years old and over speak a non-English language and also speak English less than ‘very well’ (have difficulty with English). All the members of a linguistically isolated household are tabulated as linguistically isolated, including members under 14 years old who may speak only English.”<sup>36</sup> As shown in Table 23, Spanish language linguistic isolation varies considerably by HRG: It is of principal concern in the Urban Centers and somewhat less so in the Manufacturing Centers.

**TABLE 23: PERCENTAGE OF HOUSEHOLDS THAT ARE LINGUISTICALLY ISOLATED**

AREA	Total Percentage of Linguistically Isolated Households	Spanish Language Linguistic Isolation	Other Indo-European Language Linguistic Isolation	Asian/PI Language Linguistic Isolation	Other Language Linguistic Isolation
<b>HRG 1 (3)-UC</b>	12.3	7.8	3.3	0.9	0.2
<b>Bridgeport</b>	13.3	7.4	4.5	1.0	0.3
<b>Hartford</b>	15.9	11.2	3.9	0.7	0.2
<b>New Haven</b>	7.7	5.1	1.5	1.0	0.1
<b>HRG 2 (10)-MC</b>	8.4	4.2	3.4	0.5	0.1
<b>HRG 3 (15)-DS</b>	3.1	0.7	1.9	0.5	0.1
<b>HRG 4 (27)-WS</b>	1.6	0.3	0.8	0.4	0.1
<b>HRG 5 (39)-MT</b>	2.2	0.4	1.4	0.4	0.1
<b>HRG 6 (75)-RT</b>	1.1	0.1	0.7	0.2	0.1
<b>Connecticut</b>	4.4	2.0	1.9	0.5	0.1

Source: U.S. Census 2000, SF3: Table P020.

## DISABILITY

Disability levels have a direct bearing on health and community development. The U.S. Census Bureau reports the following types of disability for the civilian noninstitutionalized population: mental disability, physical disability, sensory disability, self-care disability, “go-outside-the-home” disability, and employment disability. The indicators are available for various age groups, and relevant samplings of these data are reported in Tables 24–26.

**TABLE 24: PERCENTAGE OF NONINSTITUTIONALIZED PERSONS 21-64 WHO REPORT A DISABILITY**

AREA	All Residents	White-alone	Black-alone	Asian-alone	Hispanic	White-alone, Not Hispanic
<b>HRG 1 (3)-UC</b>	27.7	23.7	30.3	16.9	33.1	20.5
<b>Bridgeport</b>	28.1	27.0	28.9	22.8	32.4	24.1
<b>Hartford</b>	31.1	26.0	32.3	20.4	35.4	20.9
<b>New Haven</b>	24.1	18.7	29.4	10.3	30.5	17.0
<b>HRG 2 (10)-MC</b>	20.8	19.4	24.5	18.1	26.9	18.4
<b>HRG 3 (15)-DS</b>	18.1	17.4	24.2	15.0	23.1	17.2
<b>HRG 4 (27)-WS</b>	9.4	9.2	16.7	9.0	14.1	9.1
<b>HRG 5 (39)-MT</b>	15.2	15.0	18.2	12.0	19.0	14.9
<b>HRG 6 (75)-RT</b>	12.4	12.1	20.0	13.3	19.1	12.1
<b>Connecticut</b>	16.8	15.1	26.3	14.5	27.5	14.5

Source: U.S. Census SF3: Tables P042 and PCT06&A,B,D,H,I.

These tables indicate that persons in the Urban Centers are most likely to report a disability, followed by the Manufacturing Centers, Diverse Suburbs, Mill Towns, Rural Towns, and Wealthy Suburbs. Disability rates for white-alone non-Hispanics and Asian-alone (almost entirely non-Hispanics) are similar (14.5 percent each), while rates for blacks and Hispanics are similarly higher (26.3 percent and 27.5 percent, respectively). The disability rates for those who self-report black-alone race and Hispanic ethnicity are nearly twice the rates for whites and Asians. The rates in the Wealthy Suburbs are the lowest of all HRGs, for all racial/ethnic groups.

The data can also be analyzed for specific disabilities among all racial/ethnic groups, such as employment-related disability. A familiar pattern emerges: Urban Centers > Manufacturing Centers > Diverse Suburbs > Mill Towns > Rural Towns > Wealthy Suburbs, in order of decreasing percentage with an employment-related disability.

The results show that the Urban Centers have the highest rate of employment-related disabilities, but they account for less total employment-related disability than the Manufacturing Centers, which have a larger total population aged 21–64.

**TABLE 25: PERCENTAGE OF NONINSTITUTIONALIZED PERSONS 21-64 WHO REPORT AN EMPLOYMENT-RELATED DISABILITY**

AREA	Employment-Related Disability (Employed or Unemployed)	Population Aged 21 to 64	Percent of Persons With Employment-Related Disability	Percent of All Employment-Disability in State
<b>HRG 1 (3)-UC</b>	37,300	210,638	17.7	16.9
<b>Bridgeport</b>	13,976	76,648	18.2	6.3
<b>Hartford</b>	12,973	65,079	19.9	5.9
<b>New Haven</b>	10,351	68,911	15.0	4.7
<b>HRG 2 (10)-MC</b>	55,433	385,670	14.4	25.2
<b>HRG 3 (15)-DS</b>	40,457	322,748	12.5	18.4
<b>HRG 4 (27)-WS</b>	17,646	274,341	6.4	8.0
<b>HRG 5 (39)-MT</b>	41,076	412,241	10.0	18.6
<b>HRG 6 (75)-RT</b>	28,386	339,786	8.4	12.9
<b>Connecticut</b>	220,298	1,945,424	11.3	100.0

Source: U.S. Census 2000, SF3:Table PCT 032.

Employment-related disability also varies by both race/ethnicity and country of origin, a rough indicator of immigrant or migrant status, although not of how recently immigration occurred. For white and black residents, country of birth makes little difference. Puerto Rican Hispanics born in the continental United States have a slightly higher rate of employment-related disability than other Hispanic subgroups. For non-Puerto Rican Hispanics, disability rates for those born in the United States are lower than for all non-Puerto Rican Hispanics. The reasons for this discrepancy are not clear, although it may be due to the fact that non-Puerto Rican Hispanics born in the United States are younger than those born outside the United States and could, therefore, be expected to have lower disability levels.

**TABLE 26: PERCENTAGE WITH EMPLOYMENT-RELATED DISABILITY BY RACE, ETHNICITY AND COUNTRY OF ORIGIN, RESIDENTS AGES 16-64**

AREA	All	White Not Hispanic	White Not Hispanic Born in U.S.	Black Not Hispanic	Black Not Hispanic, Born in U.S.	Puerto Rican Born in Puerto Rico	Puerto Rican Born in Continental U.S.	Hispanic Not Puerto Rican	Hispanic Non-Puerto Rican, Born in U.S.
<b>HRG 1</b>	13.8	9.8	9.4	18.6	18.2	20.0	17.3	17.6	15.3
<b>Balance of CT</b>	10.6	9.6	9.5	15.4	14.8	20.2	13.8	16.4	8.6
<b>CT</b>	11.1	9.6	9.5	16.9	16.4	20.1	15.3	16.7	10.3

Source: U.S. Census 2000, PUMA Data.

Data Note: Due to the different sources and age definitions, there will be slight differences between tables.

## UNEMPLOYMENT

Many communities with health problems have high rates of unemployment. Unemployment is a “wasted” resource of potential human productivity and can be a barrier to community organization for successful health intervention. Connecticut closely parallels the U.S. unemployment rate. The U.S. seasonally adjusted rate was 4.7 percent in August 2006 compared with 4.5 percent in Connecticut.<sup>37</sup>

Table 27 shows the significant variation in unemployment among Connecticut HRGs. The Urban Centers cities had the highest average rate of unemployment in 2005, followed in descending order by the Manufacturing Centers > Diverse Suburbs > Mill Towns > Rural Towns > Wealthy Suburbs. Hartford has more than double the state rate of unemployment (10.1 percent versus 4.9 percent). These rates are likely underestimates of the true rates of unemployment since they do not take into account the “discouraged worker” who has stopped actively looking for work.

**TABLE 27: LABOR FORCE PARTICIPATION AND UNEMPLOYMENT RATE AVERAGES FOR 2005<sup>38</sup>**

AREA	Active Labor Force	Employed	Unemployed	Percentage Unemployed	Percentage of All Unemployed in Connecticut
<b>HRG 1 (3)-UC</b>	163,644	150,072	13,572	8.3	15.2
<b>Bridgeport</b>	61,791	56,913	4,878	7.9	5.5
<b>Hartford</b>	47,734	42,899	4,835	10.1	5.4
<b>New Haven</b>	54,119	50,260	3,859	7.1	4.3
<b>HRG 2 (10)-MC</b>	348,375	328,787	19,588	5.6	22.0
<b>HRG 3 (15)-DS</b>	312,253	296,340	15,913	5.1	17.8
<b>HRG 4 (27)-WS</b>	249,041	240,548	8,493	3.4	9.5
<b>HRG 5 (39)-MT</b>	396,326	377,834	18,492	4.7	20.7
<b>HRG 6 (75)-RT</b>	333,524	320,433	13,091	3.9	14.7
<b>Connecticut</b>	1,803,163	1,714,014	89,149	4.9	100.0

Source: Connecticut Department of Labor (DOL), Office of Research, Annual Average 2005, Not Seasonally Adjusted; Connecticut Towns. See reference note for complete reference.

## TRANSPORTATION TO WORK

Access to and use of transportation are important aspects of public health and safety for several reasons. First, adequate transportation provides a means of travel to work and to health care providers. Second, it could provide a “denominator” useful in working with transportation-related injury data. Third, pollution is likely to increase and levels of physical exercise are likely to decline when many persons use private auto transportation. Fourth, those who depend upon local public transportation to work may have more circumscribed work possibilities, leading to lower levels of employment and employment in more racially and ethnically isolated settings. Finally, the connection between lack of transportation and public health problems was demonstrated in the summer 2005 floods in New Orleans, where poor people with high rates of disabilities and low rates of private car access were unable to evacuate. Emergency response agencies can be alerted to potential needs for transportation away from disaster areas by examining these data.



Tables 28, 29 and 30 illustrate that there are clear race and ethnicity differences for Connecticut and among the HRGs regarding transportation and use of public transportation.

The highest rates of public transportation use by white-alone residents are in the Urban Centers and Wealthy Suburbs, the latter due to the extensive use of rail transportation in the Fairfield County area. For black-alone workers, the greatest use of public transportation is in the Urban and Manufacturing Centers. The highest rates among Asian-alone workers are in the Wealthy Suburbs, again reflecting use of the rails, with a somewhat lower rate in the Urban Centers. For Hispanics, the highest rate is in the Urban Centers followed by the Wealthy Suburbs.

These results demonstrate that broad brush use of categories like “black,” “Asian” and “Hispanic” obscures important differences within these groups. For example, the differences between the Asian-Indian computer entrepreneur taking the commuter rail from Darien to Manhattan and the Cambodian immigrant who relies on bus transportation to work in a service occupation locally in Hartford are not fairly captured by the simple labels “Asian” and “public transportation.”

**TABLE 28: PERCENTAGE USING PUBLIC TRANSPORTATION TO WORK**

AREA	All Employed Persons, 16 and Over	White-alone	Black-alone	Asian-alone	Hispanic	White-alone, Not Hispanic
<b>HRG 1 (3)-UC</b>	12.2	6.5	18.3	9.5	13.9	5.0
<b>Bridgeport</b>	8.4	5.3	12.0	6.6	10.8	3.8
<b>Hartford</b>	18.6	9.5	24.7	18.8	18.8	6.2
<b>New Haven</b>	11.1	6.3	18.3	7.9	11.6	5.7
<b>HRG 2 (10)-MC</b>	5.6	4.3	11.6	7.4	8.6	3.8
<b>HRG 3 (15)-DS</b>	2.1	1.6	6.9	2.4	4.1	1.5
<b>HRG 4 (27)-WS</b>	7.6	7.4	8.1	13.4	9.3	7.4
<b>HRG 5 (39)-MT</b>	1.2	1.1	2.6	2.4	2.3	1.0
<b>HRG 6 (75)-RT</b>	1.0	1.0	1.8	1.2	1.5	1.0
<b>Connecticut</b>	4.0	2.9	12.4	6.1	9.1	2.7

Source: U.S. Census 2000, SF3: Tables P03, PCT065A,B,D,H,I.

**TABLE 29 : PERCENTAGE OF WORKERS TRAVELING MORE THAN ONE HOUR TO WORK**

AREA	Percent Traveling More Than 1 Hour to Work
<b>HRG 1 (3)-UC</b>	7.3
<b>Bridgeport</b>	8.3
<b>Hartford</b>	6.8
<b>New Haven</b>	6.7
<b>HRG 2 (10)-MC</b>	6.9

AREA	Percent Traveling More Than 1 Hour to Work
<b>HRG 3 (15)-DS</b>	4.7
<b>HRG 4 (27)-WS</b>	14.9
<b>HRG 5 (39)-MT</b>	5.7
<b>HRG 6 (75)-RT</b>	6.8
<b>Connecticut</b>	7.3

Source: U.S. Census 2000, SF3: Table P032.

Those in the Wealthy Suburbs appear to have the longest travel times to work. An examination of individual towns suggests that this is mainly a commuter suburb phenomenon. For example, over 20 percent of workers in Darien, Westport, Weston, Greenwich, Sherman, and New Fairfield travel more than one hour per day to work. Of these, only Sherman (a Rural Town) is not a wealthy suburban town, and it is within a long commute to New York City.

**TABLE 30: PERCENTAGE OF HOUSEHOLDS WITH NO PRIVATE VEHICLE AVAILABLE**

AREA	All Households	White-alone Households	Black-alone Households	Asian-alone Households	Hispanic Households	White-alone, Not Hispanic Households
<b>HRG 1 (3)-UC</b>	29.7	22.9	35.0	23.9	37.5	20.2
<b>Bridgeport</b>	23.8	19.3	28.9	17.0	31.4	16.7
<b>Hartford</b>	36.1	28.2	38.7	23.7	43.4	23.4
<b>New Haven</b>	29.7	23.8	36.5	29.5	36.1	22.1
<b>HRG 2 (10)-MC</b>	13.2	10.8	22.8	8.6	23.0	9.8
<b>HRG 3 (15)-DS</b>	8.4	7.6	12.3	7.1	14.5	7.6
<b>HRG 4 (27)-WS</b>	3.3	3.3	5.1	2.5	7.6	3.2
<b>HRG 5 (39)-MT</b>	5.7	5.6	10.4	3.9	10.3	5.5
<b>HRG 6 (75)-RT</b>	3.3	3.2	7.0	3.0	5.6	3.2
<b>Connecticut</b>	9.6	7.1	25.5	8.4	26.3	6.5

Source: U.S. Census 2000, SF3: Tables, H044, HCT033A,B,D,H,I.

The patterns in Table 30 suggest that race and ethnicity rates for the indicator “no private vehicle available” vary considerably by kind of community and by race/ethnicity. The rates of black and Hispanic households with no private transportation available are considerably higher and more variable than for other groups in the population.

## BIRTHS

Birth rates are important for several reasons. First, fertility is a key process for maintaining population, especially a population of working age. So a low birth rate is of special concern in Connecticut and other states with a declining or flat population base. Second, however, a high birth rate may indicate large family size, which may correlate with lowered women’s status and education.

A high birth rate may also indicate small spaces between births, with demonstrable health consequences. As noted by Population Services International ([www.psi.org](http://www.psi.org)), children born at least three years apart are at significantly lower risk for illness and death in their first year of life and have a better chance of survival beyond their fifth year; and women who practice birth spacing are at lower risk of pregnancy- or childbirth-related death and illness.<sup>39</sup> Finally, the planning of pediatric health care requires knowledge of birth rates and their distribution. Table 31 shows birth rates for women in the state and the HRGs by race and ethnicity.



**TABLE 31: ANNUALIZED BIRTH RATE PER 1,000 WOMEN 15-49, 1999-2003**

RACE/ETHNICITY/ ORIGIN	HRG 1 (UC)	HRG 2 (MC)	HRG 3 (DS)	HRG 4 (WS)	HRG 5 (MT)	HRG 6 (RT)	State
<b>All Races</b>	48.1	44.7	38.4	41.6	34.6	35.9	40.1
<b>White Not Hispanic</b>	31.7	37.2	35.6	39.9	33.6	35.8	35.9
<b>Black Not Hispanic</b>	52.6	46.4	45.4	32.8	36.9	25.0	48.0
<b>Asian Not Hispanic</b>	64.8	78.6	88.2	70.9	83.1	80.9	78.1
<b>Hispanic</b>	60.2	63.6	54.2	46.1	47.9	41.2	58.9
<b>Puerto Rican</b>	59.9	62.3	54.5	52.9			59.7
<b>Non-Puerto Rican Hispanic</b>	61.2	65.2	53.6	42.2			57.8

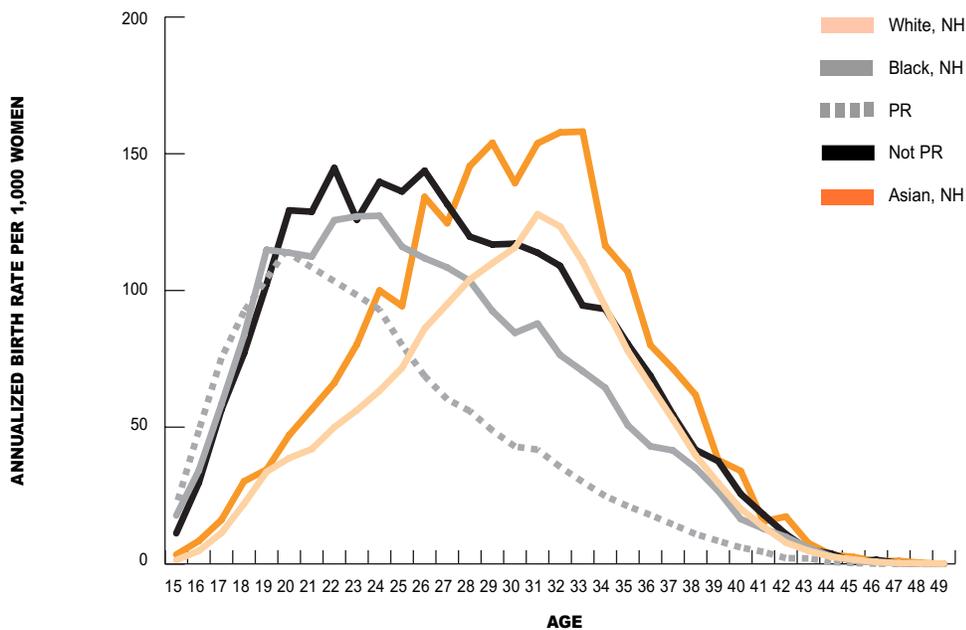
Source: Connecticut Department of Public Health (DPH), Vital Statistics; U.S. Census 2000, SF1: Tables PCTH, IJJ, L and SF4: Tables PCT3.

The birth rates for Puerto Rican and non-Puerto Rican Hispanic mothers are similar in the Urban and Manufacturing centers and Diverse Suburbs. They are lower for non-Puerto Rican Hispanics in the Wealthy Suburbs, Mill and Rural towns. Black non-Hispanic birth rates are the lowest of any group in the Wealthy Suburbs and Rural Towns.

We conclude that controlling for HRG of residence, race and ethnicity differences are much smaller for all births than are observed for teen births alone (see Chapter 4, Health Risk and Health-Promoting Behaviors, for detailed data on teen births). The age-specific birth rate differences between race and ethnicity groups are shown in Figure 6. Hispanic and black women have very high birth rates at younger ages. Non-Puerto Rican Hispanic women maintain high birth rates longer than do Puerto Rican and black women. Asian women tend to have low birth rates in the teen years, similar to those of white women, and peak at a higher point than do white women. Asian subgroups appear to have very different birth rate patterns, but the data are currently too scanty and not well enough understood to provide reliable birth rate estimates of, for example, Chinese, Japanese, Vietnamese, and Cambodian women.<sup>8</sup>

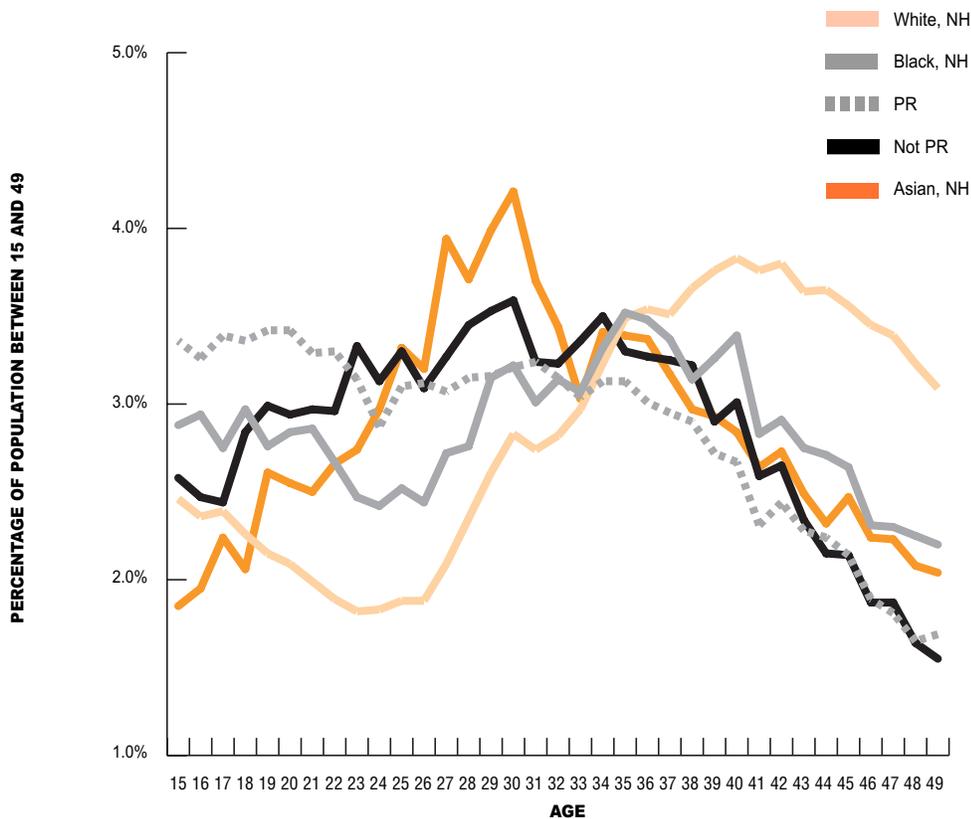
Figure 7 shows marked race and ethnicity differences in the female age distribution in the childbearing years, 15 to 49. White women have many years between generations because of the differences in age-specific birth rates, combined with differences in the age distribution, while the years between generations for black and Puerto Rican Hispanic women are much shorter and are slightly shorter for Asian women.

**FIGURE 6: ANNUALIZED BIRTH RATES FOR WOMEN 15-49, 1999-2003**



Source: DPH, U.S. Census 2000, SF2: Table PCT 3.

**FIGURE 7: AGE DISTRIBUTION FOR WOMEN 15-49, U.S. CENSUS 2000**



Source: U.S. Census SF2: Table PCT 3.



### Birth Data – By Educational Attainment Level

The U.S. Census Bureau provides educational attainment levels for persons 25 and over for a limited selection of communities, and DPH has provided the birth data, by educational level attained and race/ethnicity, for women 25 and over. Table 32 shows an inconsistent pattern of birth rates. Statewide, women ages 25–49 with higher educational levels appear to have a higher birth rate than women in this age range — the range for which educational attainment data are available — with a lower educational level. The discrepancy is particularly marked for white and Asian females outside of the Urban Centers.

The fact that women in some racial/ethnic groups with higher education also have higher birth rates may reflect a postponement of childbearing to complete at least some college and participate in the work force. Non-Puerto Rican Hispanics show such an effect, however, only within the Urban Centers. The educational level effects are minimal for black women. Further clarification of these trends will require additional analyses of racial/ethnic subgroups.

**TABLE 32: ANNUALIZED BIRTH RATES PER 1,000 WOMEN 25-49, BY HRG AND RACE/ETHNICITY, 1999-2003**

	Urban Centers		Balance of Connecticut		Connecticut	
	High School Graduate or Less	At Least Some College	High School Graduate or Less	At Least Some College	High School Graduate or Less	At Least Some College
<b>White Not Hispanic</b>	42.1	37.9	36.3	53.5	36.6	53.0
<b>Hispanic Puerto Rican</b>	34.4	43.5	39.7	50.5	37.0	48.0
<b>Hispanic Non-Puerto Rican</b>	64.0	82.5	64.2	64.2	64.2	66.6
<b>Black Not Hispanic</b>	45.1	50.1	43.6	47.8	44.4	48.7
<b>Asian Not Hispanic</b>	97.9	74.3	61.1	91.4	66.1	89.4

*Source: DPH; U.S. Census 2000 PUMA Tables. Note: Cases where educational level was unknown were omitted from the table. Statewide, 0.8 percent of whites, 1.8 percent of Asians, 3.5 percent of blacks, 3.3 percent of Puerto Ricans, and 3.6 percent of non-Puerto Rican Hispanics omitted educational level. To the extent that there is omission, the birth rates are slightly underestimated.*

## COMMUNITY ASSETS

### Voting Participation

In *Bowling Alone: The Collapse and Revival of American Community*, Robert Putnam shows the importance of social capital for health and how voting participation is one indicator of social capital correlated with health.<sup>40</sup> Thus, it is of interest to examine the voting participation rates in Connecticut.

**TABLE 33: VOTING PARTICIPATION, PRESIDENTIAL ELECTION 2004**

AREA	Registered	Voted	Percentage Voted
<b>HRG 1 (3)-UC</b>	166,999	106,162	63.6
<b>Bridgeport</b>	59,102	37,717	63.8
<b>Hartford</b>	49,803	28,987	58.2
<b>New Haven</b>	58,094	39,458	67.9
<b>HRG 2 (10)-MC</b>	338,620	242,502	71.6
<b>HRG 3 (15)-DS</b>	356,620	276,956	77.7
<b>HRG 4 (27)-WS</b>	329,234	282,891	85.9
<b>HRG 5 (39)-MT</b>	445,687	359,968	80.8
<b>HRG 6 (75)-RT</b>	407,021	339,329	83.4
<b>Connecticut</b>	2,044,181	1,607,808	78.7

Source: Connecticut Secretary of State, File as of Nov. 29, 2004.

As shown in Table 33, there is a large gap among the HRGs in voting participation by registered voters. There is a gap of more than 20 percent between the Wealthy Suburbs and the Urban Centers. Since denominators for these rates do not include unregistered residents, voting rates calculated as a percentage of all of those eligible to register who both register and vote is likely to be far lower than shown here.

### Out-of-School Activity Participation

To the extent that youth are involved in adult-sponsored activities — such as Scouts, Jack and Jill Clubs, and youth athletic leagues — they observe a positive model of adult behavior and reap the benefits of learning teamwork as well as physical conditioning. Adult sponsored out-of-school activity participation has been shown to be health-promoting for youth.<sup>41</sup> It is also an indicator of adult willingness to volunteer time and thereby build social capital and invest in the future. Several indicators are available for Connecticut, including youth soccer, Boys and Girls Clubs, Boy Scouts of America, Girl Scouts of America, and Jack and Jill Clubs through their national, state or local offices.

### Sports Participation

Membership in volunteer-staffed sports leagues — such as Pop Warner, Little League, youth hockey, and youth soccer — is one indicator of child sports participation. Data from the Connecticut Junior Soccer Association (Table 34) indicate large differences among HRGs in youth soccer participation. Participation increases from the very low rate of the Urban Centers, to a higher rate in Manufacturing Centers, and still higher in the Diverse Suburbs and Mill Towns. Wealthy Suburbs and Rural Towns have the highest rates. As the following sections show, this “shortfall” in the Urban Centers does not seem to be made up by alternative adult-sponsored out-of-school activities.

**TABLE 34: YOUTH SOCCER PARTICIPATION, 2005**

AREA	Number Participating, 2005	Number in Age Group 5-17, 2000	Participation Rate per 1,000
<b>HRG 1 (3)-UC</b>	1,426	77,424	18.4
<b>HRG 2 (10)-MC</b>	6,534	110,869	58.9
<b>HRG 3 (15)-DS</b>	10,732	98,505	108.9
<b>HRG 4 (27)-WS</b>	17,025	98,302	173.2
<b>HRG 5 (39)-MT</b>	14,509	119,935	121.0
<b>HRG 6 (75)-RT</b>	20,562	113,309	181.5
<b>Connecticut</b> Assignable to Town	70,788	618,344	114.5
<b>Connecticut</b> All Players	82,339	618,344	133.2

Source: Connecticut Junior Soccer Association; U.S. Census 2000, SF1: Table PCT 12.

### Boy Scouts

As Table 35 shows, the major differences in Boy Scout participation are between Urban Centers (9.3 percent participation in Cub Scouts) Manufacturing Centers, (12.9 percent participation) and the rest of the HRGs. The Rural Towns have the highest participation rate. Although Wealthy Suburbs have the highest voting participation — an index of social capital — they are slightly lower than Rural Towns in Boy Scout participation, another measure of social capital. This may be due to the effects of recent boycotts, or other cultural differences.<sup>h</sup>

**TABLE 35: PERCENTAGE OF BOYS AND YOUTH PARTICIPATING IN SCOUTING, 2004**

AREA	Cub Scouts Ages — 7-10	Boy Scouts Ages — 11-17
<b>HRG 1 (3)-UC</b>	9.3	3.5
<b>Bridgeport</b>	13.4	5.2
<b>Hartford</b>	5.8	2.3
<b>New Haven</b>	8.2	2.8
<b>HRG 2 (10)-MC</b>	12.9	3.9
<b>HRG 3 (15)-DS</b>	20.2	6.5
<b>HRG 4 (27)-WS</b>	30.4	10.1
<b>HRG 5 (39)-MT</b>	26.0	7.5
<b>HRG 6 (75)-RT</b>	33.3	11.6
<b>Connecticut</b>	22.6	7.4

Source: Boy Scouts of America National Headquarters; U.S. Census 2000, SF1: Table PCT 12.



### Girl Scouts

Girl Scout membership rates (Table 36) illustrate marked differences in both youth and adult volunteer participation. The participation rate for girls is lowest and the ratio of girls to adult volunteers is lowest in the Urban Centers.

This form of after-school activity is unlikely to succeed in the Urban Centers without more adult participation.

**TABLE 36: GIRL SCOUT AND ADULT PARTICIPATION, 2005**

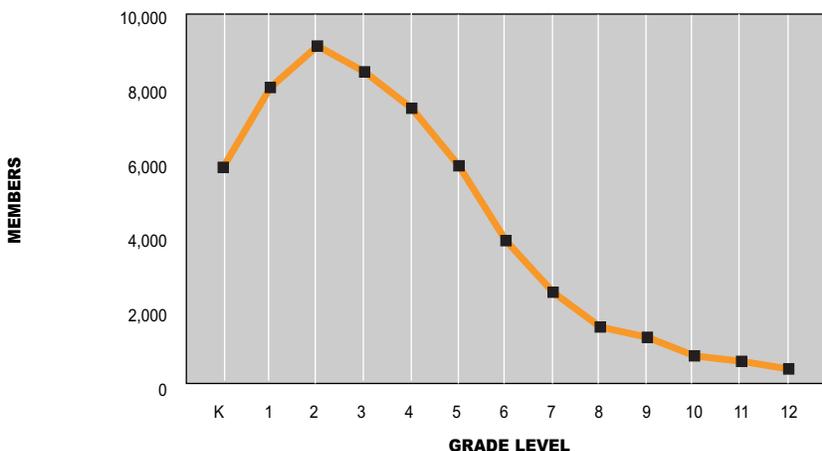
AREA	Total Girl Scouts	Total Adult Volunteers	Percentage of Girls Participating in Girl Scouts – All Age Groups	Ratio of Girl Scouts to Adult Volunteers
HRG 1 (3)-UC	3,650	294	9.7	12.4
HRG 2 (10)-MC	7,522	1,662	13.9	4.5
HRG 3 (15)-DS	8,050	2,370	16.6	3.4
HRG 4 (27)-WS	11,936	6,775	25.0	1.8
HRG 5 (39)-MT	10,713	3,979	18.4	2.7
HRG 6 (75)-RT	13,270	5,739	24.2	2.3
Connecticut	55,141	20,819	18.3	2.6

Source: Membership Department, National Office, Girl Scouts of America; U.S. Census 2000, SF1-PCT 12.

### Age-Related Drop in Youth Membership

It is noteworthy that participation falls off dramatically between Cub Scouts (22.6 percent participation statewide) and Boy Scouts (7.4 percent participation statewide), as shown in Table 35. Connecticut girls show the same pattern (Figure 8). The Connecticut results are consistent with national patterns.<sup>42</sup>

**FIGURE 8: CONNECTICUT GIRL SCOUT MEMBERSHIP, 2005**



Source: Girls Scouts of America, with permission of all Connecticut Girl Scout Councils.



### **Boys and Girls Clubs and Jack and Jill Clubs**

Boys and Girls Clubs mainly serve urban youth, though they actually serve fewer than an estimated one in 10 (8.8 percent) of all youth in the Urban Centers.<sup>43</sup> The Jack and Jill Clubs, an important mothers' volunteer program geared toward black and multiracial children and youth, have an estimated 456 members in Connecticut in chapters in Greater Hartford, New Haven, Bridgeport, and Stamford-Norwalk. Only about half the children reside in the cities; the other half reside in the suburban areas surrounding these cities.<sup>44</sup> Thus, the vast majority of black and Hispanic children and youth in the Urban Centers appear not to be adequately involved in adult-sponsored activities that are not associated with a church. The number involved in church-sponsored organizations is not known.

### **Adult Sports Participation**

Adult sports participation — sometimes known as the “over-the-hill” leagues — improves cardiovascular health and maintains community connections. For example, the United States Adult Soccer Association lists 4,943 members in Connecticut as of October 2006.<sup>45</sup> Rates of non-association soccer participation and other forms of adult sports participation are unknown.

### **Large Differences in Social Capital**

Connecticut communities exhibit significant differences in both demographics and social capital measures. The Wealthy Suburbs are strongest in social capital and the Urban Centers weakest, to the extent that these factors can be measured with publicly available data. The weaknesses of the Urban Centers will affect potential solutions to the health risks and health outcomes discussed in chapters to follow, and suggest needs for additional support.

# CHAPTER 4

Health Risk and Health-Promoting Behaviors





## CHAPTER 4

### HEALTH RISK AND HEALTH-PROMOTING BEHAVIORS

This chapter considers a selection of health risk and health-promoting behaviors in Connecticut. These include:

- School performance, dropout and suspension data
- Child endangerment
- Crime data
- Travel safety
- Youth risk behavior
- Sexually transmitted diseases
- Teen births
- Obesity, diet and exercise
- Drug use and abuse — drinking and smoking



### SCHOOL PERFORMANCE

School performance has been shown to correlate with health risk.<sup>46</sup> The Connecticut State Department of Education (SDE) has made available data on student performance on the Connecticut Academic Performance Test (CAPT) (Table 37); on high school graduation (Table 38); and school suspension and expulsion (Table 39). These data may identify groups of students “at risk” and disparities in risk.

**TABLE 37: HIGH SCHOOL MATH PERFORMANCE ON CONNECTICUT ACADEMIC PERFORMANCE TEST (CAPT), 2006, BY HOME COMMUNITY HEALTH REFERENCE GROUP**

Percentage Scoring Below Basic on CAPT, 2006, by Gender and Race/Ethnicity, For Students with Valid Test Scores Only								
Gender	Race/Ethnicity	HRG 1 (UC)	HRG 2 (MC)	HRG 3 (DS)	HRG 4 (WS)	HRG 5 (MT)	HRG 6 (RT)	State
Female	Asian	5.7	6.6	0.9	1.4	0.8	0.0	2.1
Male		18.9	6.3	3.4	2.1	2.3	2.2	4.1
Female	Black	26.9	24.9	14.6	13.7	17.9	16.7	22.5
Male		30.7	27.5	19.6	19.4	15.9	9.9	25.5
Female	Hispanic	23.0	23.6	15.5	5.4	18.6	7.8	20.5
Male		25.0	23.4	16.4	2.5	13.5	8.0	20.4
Female	White	10.4	8.2	3.9	1.4	4.1	1.9	3.4
Male		13.0	6.4	5.4	1.5	4.8	3.1	4.0
Percentage Without a Valid Test Score*								
Female	Asian	2.8	2.8	3.4	0.7	3.1	0.0	2.1
Male		7.5	3.1	3.3	1.4	2.2	2.1	2.7
Female	Black	10.2	4.3	5.1	3.8	6.4	3.2	6.9
Male		17.9	7.8	10.2	1.5	6.1	6.6	12.1
Female	Hispanic	13.8	8.0	4.6	1.5	2.3	3.8	8.5
Male		20.7	12.2	8.3	3.2	6.1	5.0	13.1
Female	White	5.5	3.4	2.4	1.4	2.0	1.6	2.0
Male		11.5	4.7	3.9	2.1	4.3	2.7	3.5

Source: SDE. Data are from a file supplied by SDE for 44,652 10th-grade students. Data in the table include 44,123 students (99 percent of all students) for whom gender, district and race/ethnicity could be identified and who were white, black, Asian, or Hispanic and who were not English Language Learners who took the math test with less than 10 months in a U.S. school.

\*In Math, an invalid score includes: Absent, one or more sessions of Math, Special Modifications, Blank, (no responses and “blank” bubbled by the district administrator) Grade 10 retesters who previously met certification in Math, Medical Exempt and Skills Checklist (Special Education Only). (R. Mooney; SDE; e-mail communication; October 2006). Statewide, most invalid scores are due to absentees.

The data in Table 37 show that the below basic rates for black and Hispanic students with valid test scores are higher than the parallel below basic rates for white and Asian students. For black and Hispanic students, the highest below basic rates are in the Urban and Manufacturing centers.

Black and Hispanic students in the Urban Centers show significantly higher rates of invalid (e.g., absent, blank and skills checklist) test scores than other groups. Their invalid test rates are lower in all other Health Reference Groups (HRGs). Black and Hispanic male students have invalid tests significantly more than black and Hispanic female students in the Urban and Manufacturing centers.

## School Graduation and Dropout Rates

A measure of attachment to school is the high school graduation rate, and conversely, the school dropout rate, shown in Table 38 as calculated by the Connecticut State Department of Education (SDE) based on submissions by each school district. High school graduation rates for each HRG are in declining order: Wealthy Suburbs > Rural Towns > Mill Towns > Diverse Suburbs > Manufacturing Centers > Urban Centers. The Connecticut vocational-technical high school system shows a high graduation rate and a low dropout rate, according to the data reported to the SDE.

**TABLE 38 : ACADEMIC HIGH SCHOOL GRADUATION PERCENTAGE AND CUMULATIVE DROPOUT RATE BY HEALTH REFERENCE GROUP**

AREA	Graduation Percent, 2005	Cumulative Dropout Rate, Class of 2005
<b>HRG 1 (3)-UC</b>	74.1	16.4
<b>Bridgeport</b>	74.7	18.9
<b>Hartford</b>	72.3	14.3
<b>New Haven</b>	75.0	16.6
<b>HRG 2 (10)-MC</b>	85.8	10.9
<b>HRG 3 (15)-DS</b>	91.1	7.6
<b>HRG 4 (27)-WS</b>	97.5	1.9
<b>HRG 5 (39)-MT</b>	92.0	7.4
<b>HRG 6 (75)-RT</b>	95.3	4.4
<b>Connecticut</b>	90.1	8.3
<b>CT Voc-Tech HS</b>	97.3	1.8

Source: SDE, available at: [http://www.cde.state.ct.us/public/cedar/cedar/grads/2005\\_Grad\\_Rate\\_by\\_Dist.xls](http://www.cde.state.ct.us/public/cedar/cedar/grads/2005_Grad_Rate_by_Dist.xls) and [http://www.cde.state.ct.us/public/cedar/cedar/dropout/resources/cumulative\\_dropout\\_rate\\_district.xls](http://www.cde.state.ct.us/public/cedar/cedar/dropout/resources/cumulative_dropout_rate_district.xls). Average graduation rates are shown for HRGs and Connecticut. Regional school districts assigned to an HRG according to the majority of towns in district. Most regional districts are comprised of Rural Towns. Only districts with both graduation rates, dropout rates and assignable to an HRG are included. Vocational-technical high schools not included in Connecticut total and are listed separately. The table accounts for 99.5 percent of Connecticut high school graduating students. The cumulative dropout rate is a class rate that reflects the proportion of students within a high school class who dropped out of school across four consecutive years. For example, the Class of 2004 Cumulative Dropout Rate = (2000-01 Grade 9 dropouts + 2001-02 Grade 10 dropouts + 2002-03 Grade 11 dropouts + 2003-04 Grade 12 dropouts), Grade 9 enrollment as reported on Oct. 1, 2000.

## Suspension and Expulsion Rates

Another measure of school attachment is the suspension/expulsion rate, shown in Table 39, which varies significantly by HRG and by race/ethnicity.

**TABLE 39: SUSPENSION AND EXPULSION (ALL TYPES) RATE PER 1,000 HIGH SCHOOL STUDENTS, FOR SCHOOL YEAR 2003-2004**

AREA	White	Black	Hispanic	Asian	Total
<b>HRG 1 (3)-UC</b>	52	155	112	85	125
<b>HRG 2 (10)-MC</b>	47	150	119	32	90
<b>HRG 3 (15)-DS</b>	40	122	111	21	59
<b>HRG 4 (27)-WS</b>	30	64	39	28	32
<b>HRG 5 (39)-MT</b>	50	179	118	43	56
<b>HRG 6 (75)-RT</b>	52	113	62	15	53
<b>Connecticut</b>	45	143	110	31	65

Source: Analysis of files provided by the SDE, Summer 2005.

Asian students are least likely to be suspended or expelled, followed by white students, Hispanic students and black students, who are most likely to be suspended/expelled. Black and Hispanic students are least likely to be expelled in the Wealthy Suburbs. Black students are most likely to be suspended or expelled in the Mill Towns, Urban Centers and Manufacturing Centers. Asian students are most likely to be suspended/expelled in the Urban Centers.

The order of suspension/expulsion is Urban Centers > Manufacturing Centers > Diverse Suburbs > Mill Towns > Rural Towns > Wealthy Suburbs, although the rates for the Diverse Suburbs, Mill Towns and Rural Towns are virtually equal.

Three additional conclusions can be drawn from other available statewide suspension/expulsion data for all grades Pre-K – 12: Boys are much more likely to be sanctioned than girls; there are no significant race/ethnicity differences in the severity of sanction as indexed by the percent of students sanctioned who were expelled; and sanctioning rates and disparities in them are minimal in the primary years, maximal in the middle school years and decline again in the late high school years.

Table 40 indicates the relative segregation of schools in the Urban Centers — 89.3 percent of all public school students are black and Hispanic in these cities.

**TABLE 40: BLACK AND HISPANIC STUDENTS AS A PERCENTAGE OF ALL STUDENTS, 2004**

HRG 1 (UC)	HRG 2 (MC)	HRG 3 (DS)	HRG 4 (MT)	HRG 5 (MT)	HRG 6 (RT)
89.3	50.7	26.9	4.4	6.6	3.7

Source: SDE, CAPT Eligible Student File.

**Summary of School-Based Indicators**

To the extent that the bond between students and schools can be measured by the indicators of CAPT test-taking (valid scores), CAPT passing, suspension/expulsion, and graduation rates, there are significant disparities by race and ethnicity and by gender. These disparities are accentuated in communities characterized by a high density of black and Hispanic students in the schools, as shown in the Urban Centers, and to a lesser degree in the Manufacturing Centers.

To put it another way, the communities with the fewest black and Hispanic students — the Wealthy Suburbs and the Rural Towns — are the most “protective” of them in the sense of helping to maintain a positive school-student bond and fostering school achievement. The Mill Towns are somewhat anomalous since they have a relatively low number of black students in school yet have a high suspension/expulsion rate for black students.

## CHILD ENDANGERMENT

### Reports to the Connecticut Department of Children and Families

The frequency of child endangerment reported to and substantiated by the Connecticut Department of Children and Families (DCF) in various regions and the state overall is another indicator of the threats to Connecticut's children. The DCF considers an individual to be a "child" if s/he is under 18, or under 21 and a client of the DCF. It classifies "accepted reports" of child endangerment as those reports made to the child abuse/neglect hotline that contain "allegations that meet the operational definition of abuse and/or neglect."<sup>47</sup> "Substantiated reports" are the accepted reports in which an investigation "resulted in a finding of reasonable cause to believe that neglect and/or abuse has occurred."<sup>48</sup>

DCF's Child Protective Services Division is responsible for investigating all reports of alleged child maltreatment throughout the state and arranging follow-up services as necessary. In a 2004 needs assessment analysis, DCF reported 3,796 open investigations and 14,431 ongoing services cases within Child Protective Services, for a total of 18,227 cases.<sup>49</sup>

Table 41 shows the rates of accepted and substantiated cases for fiscal years 2001-2005 combined. Child abuse rates are, in decreasing order: Urban Centers > Manufacturing Centers > Diverse Suburbs > Mill Towns > Rural Towns > Wealthy Suburbs.

**TABLE 41: ACCEPTED AND SUBSTANTIATED CHILD ABUSE CASES, ANNUAL AVERAGE, FISCAL YEARS 2001-2005**

AREA	Accepted Cases	Population 0-17	Accepted Cases Rate per 1,000	Substantiated	Substantiated Cases Rate per 1,000	Substantiation Percentage
<b>HRG 1 (3)-UC</b>	7,348	107,686	68.2	2118	19.7	28.8
<b>Bridgeport</b>	2,312	39,672	58.3	680	17.1	29.4
<b>Hartford</b>	2,897	36,568	79.2	676	18.5	23.3
<b>New Haven</b>	2,139	31,446	68.0	762	24.2	35.6
<b>HRG 2 (10)-MC</b>	8,314	156,315	53.2	2477	15.8	29.8
<b>HRG 3 (15)-DS</b>	5,913	134,837	43.8	1550	11.5	26.2
<b>HRG 4 (27)-WS</b>	1,304	133,604	9.8	326	2.4	25.0
<b>HRG 5 (39)-MT</b>	5,103	159,571	32.0	1253	7.9	24.6
<b>HRG 6 (75)-RT</b>	2,964	149,675	19.8	725	4.8	24.5
<b>Connecticut</b>	30,945	841,688	36.8	8450	10.0	27.3

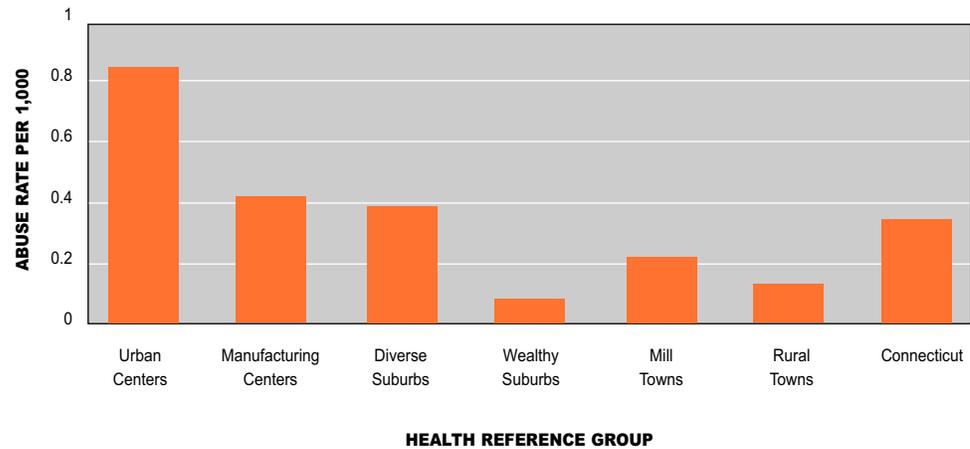
Source: DCF; U.S. Census 2000, SF1: Table PCT 12.

### Abuse Rates Using an Emergency Department Visit Indicator

The author examined child and adult abuse rates by HRG, using 2002–2003 Connecticut Emergency Department (ED) data from the Connecticut Health Information Management and Exchange (CHIME) system. The full report is included as Appendix F. Abuse was identified using ICD-9-CM, E967 code, “perpetrator of child and adult abuse.”

Adjusted for age and gender differences, the ED visit rate for abuse was highest in the Urban Centers and lowest in the Wealthy Suburbs (0.85 per 1,000 vs. 0.09 per 1,000: a ratio of 9.7 to 1) as illustrated in Figure 9. The highest rate among children was found for 10- to 14-year-old females in the Urban Centers (1.75 per 1,000) — a rate 16 times that for females the same age in the Wealthy Suburbs, as shown in Table 42.

**FIGURE 9: CHILD AND ADULT ABUSE: ANNUAL RATES OF EMERGENCY DEPARTMENT VISITS PER 1,000, ADJUSTED FOR AGE AND GENDER**



Source: CHIME Database, Connecticut Hospital Association (CHA); U.S. Census 2000, SF1: Table P1.

Many more cases are reported to DCF than those that appear in and are coded in emergency departments. But the HRG patterns are similar. It also appears that female children are at greater risk for abuse than male children. Clearly, children need better protection, especially those in the Urban Centers, Manufacturing Centers, Diverse Suburbs, and Mill Towns, as shown in Table 42.

**TABLE 42: INDICES OF ABUSE FOR CHILDREN AND ADULTS**

AREA	DCF Accepted Cases per 1,000 Children 0-17	Emergency Department "Abuse" Visits (ICD-9-CM Code E967) per 1,000		Emergency Department "Abuse" Visits for All Ages, Age-Adjusted Rate per 1,000
		Male, 10-14	Female 10-14	
<b>Urban Centers</b>	68.2	1.16	1.75	.85
<b>Manufacturing Centers</b>	53.2	0.36	0.65	.42
<b>Diverse Suburbs</b>	43.8	0.26	0.34	.39
<b>Wealthy Suburbs</b>	9.8	0.08	0.24	.09
<b>Mill Towns</b>	32.0	0.06	0.11	.22
<b>Rural Towns</b>	19.8	0.05	0.05	.13

Source: CHIME Database, CHA; U.S. Census 2000, SF1; Table PCT 12.

Data Note: The differences among the HRGs could be due to underreporting in the Wealthy Suburbs and Rural Towns. This seems an insufficient explanation for the observed differences in that: several data sources yield similar differences; the patterning of gender differences could not be explained in this way; and the reporting bias would need to be very extreme to account for the level of the differences observed.

## CRIME RATES

Crime is a significant health risk in several ways. First, it is directly implicated in injury and fatality. Secondly, a high incidence of even low-level crime may send a message about anti-social behavior as suggested by Wilson, Kelling, and Coles' "broken windows" theory.<sup>50</sup> Crime will escalate in a community if low-level crime — broken windows or other forms of vandalism — is seen as being accepted in the community or impossible to deter.

There may also be community disinvestment as capital "flees," leading to further social disorder and increases in health-demotioning behavior. Research has shown the connections of "broken windows" to health outcomes such as elevated sexually transmitted disease (STD) rates even after controlling statistically for poverty and race.<sup>51</sup>

Crime in Connecticut varies substantially by HRG, as shown in Table 43.

**TABLE 43: ANNUALIZED CRIME REPORT RATE PER 1,000 RESIDENTS, 2002-2003**

AREA	Population	Crimes Reported per 1,000 Residents
<b>HRG 1 (3)-UC</b>	384,733	76.1
<b>Bridgeport</b>	139,529	58.5
<b>Hartford</b>	121,578	92.6
<b>New Haven</b>	123,626	79.8
<b>HRG 2 (10)-MC</b>	662,398	39.5
<b>HRG 3 (15)-DS</b>	587,509	29.5
<b>HRG 4 (27)-WS</b>	487,620	13.0
<b>HRG 5 (39)-MT</b>	698,458	22.7
<b>HRG 6 (75)-RT</b>	584,847	12.1
<b>Connecticut</b>	3,405,565	30.0

*Source: Crimes Analysis Unit, Connecticut State Police; U.S. Census 2000, SF1: Table P1. For some towns (e.g., New Haven) there may be several police organizations providing data, including New Haven police, Yale University police and Southern Connecticut State University police.*

As with many other indicators, crime rates vary in decreasing order as follows: Urban Centers > Manufacturing Towns > Diverse Suburbs > Mill Towns. The Wealthy Suburbs and Rural Towns are lowest in overall crime rate. The HRG variation may be partly due to differences in age distribution, but this was not provable from the current data. Age-specific crime rate data are not available without considerable labor on the part of the Connecticut State Police unit responsible for the data, to bring together several databases.<sup>52</sup> Differences in age distribution cannot account for the vast disparity in crimes reported. The rate ratio of Urban Centers to Rural Towns is 76.1:12.1 = 6.3:1.

Related data are available on incarceration rates. According to analysis of U.S. Census 2000 data, there were 199 (white), 2,991 (black) and 1,669 (Hispanic) inmates per 100,000 residents, overall. The overall ratio of black to white confinement was 15.0:1 for Connecticut — ranking the state third in the nation — but just 6.6:1 for the United States as a whole. For Hispanic residents, the ratio was 8.4:1 for Connecticut but 2.4:1 for the United States as a whole.

For youth under 18 there were 56 (white), 334 (black) and 208 (Hispanic) residents confined per 100,000 residents. The overall ratio of black to white youth confinement was 6.0:1 for Connecticut — ranking the state eighth in the nation — but just 3.3:1 for the United States as a whole. For Hispanic youth, the ratio was 1.2:1 for Connecticut, but 1.5:1 for the U.S. as a whole.<sup>53</sup>

## TRAVEL SAFETY

Several aspects of travel safety were examined for the *Data Scan*, including the use of seat belts, bicycle helmets, ED visits for bicycle injury, and the incidence of auto crashes with injury. These indicators show significant variation by HRG and race/ethnicity.

### Seat Belt Use

Asian respondents have the highest overall rate of always or almost always wearing seat belts, as shown in Table 44. Their rates are significantly higher, being 10.2 percent above those of black respondents, 6.1 percent above those of white respondents and 6.6 percent higher than those of Hispanic respondents.

**TABLE 44: SELF-REPORTED PERCENTAGE USING SEAT BELTS (ALWAYS OR ALMOST ALWAYS)**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	87.9	87.8	91.3	89.1	82.0	
<b>Hartford</b>	86.0	87.5	85.3	84.4	88.9	
<b>New Haven</b>	86.7	86.3	87.9	75.8	88.4	
<b>HRG 1 (3)-UC</b>	86.9	87.0	88.3	83.8	86.7	
<b>HRG 2 (10)-MC</b>	88.9	89.0	87.8	84.4	90.5	94.9
<b>HRG 3 (15)-DS</b>	89.1	89.0	89.0			
<b>HRG 4 (27)-WS</b>	92.6	92.1	92.2			
<b>HRG 5 (39)-MT</b>	87.3	86.8	86.7	81.3	88.1	96.1
<b>HRG 6 (75)-RT</b>	90.7	90.4	90.5			
<b>Connecticut</b>	89.3	89.1	89.2	85.1	88.7	95.3

Source: Behavioral Risk Factor Surveillance System (BRFSS) Survey Data; DPH 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

The data for the adult population are reasonably consistent for all groups — except black New Haven residents, of whom the sample size is small — falling within plus or minus eight points of the overall Connecticut average of 89.1 percent.

**TABLE 45: USED A SEAT BELT NEVER OR RARELY, HIGH SCHOOL STUDENTS, 2005**

GROUP	Total	Black	Hispanic	White
<b>Total</b>	11.4	18.0	15.1	9.1
<b>Male</b>	15.0	19.5	20.3	12.9
<b>Female</b>	7.5	16.6	10.9	4.9

Source: DPH, Planning Branch. Connecticut High School Survey, 2005. Available at: <http://www.dph.state.ct.us/PB/HISR/CSHS.htm>. Accessed Feb. 7, 2007.

Note: Percentages based on self-report of students who “never or rarely wore a seat belt when riding in a car driven by someone else.” Students listed as “all other races” and “multiple races” are not included.

The youth data in Table 45 show some statistically significant differences in seat belt use rate between white students (9.1 percent never or rarely use) and black (18.0 percent rarely or never use) or Hispanic students (15.1 percent rarely or never use). There is also a statistically significant difference between Hispanic female and male use rates and white female and male use rates, but not between black female and male use rates. The data are reasonably consistent with the survey results presented below on bike helmet use.

**Bike Helmet Use**

Bike helmet use is another indicator of youth risk. Use of a helmet may indicate greater self-care or a greater degree of health-promoting parental supervision or differences in peer group norms.

**TABLE 46: ADULT REPORT OF BICYCLE HELMET USE FOR CHILDREN AGES 5-16 WHO RIDE BICYCLES**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	53.7	44.5	70.9	44.3	42.0	
<b>Bridgeport</b>	66.9	64.8				
<b>Hartford</b>	45.4	46.2				
<b>New Haven</b>	49.0	43.4				
<b>HRG 2 (10)-MC</b>	66.3	60.9	69.6	59.3	48.3	
<b>HRG 3 (15)-DS</b>	73.9	66.3	76.8			
<b>HRG 4 (27)-WS</b>	86.8	77.1	76.7			
<b>HRG 5 (39)-MT</b>	76.2	77.0	74.9			
<b>HRG 6 (75)-RT</b>	82.4	83.4	84.2			
<b>Connecticut</b>	74.7	70.5	76.0	55.2	60.2	75.9

Source: BRFSS Survey Data; DPH 1999-2003.

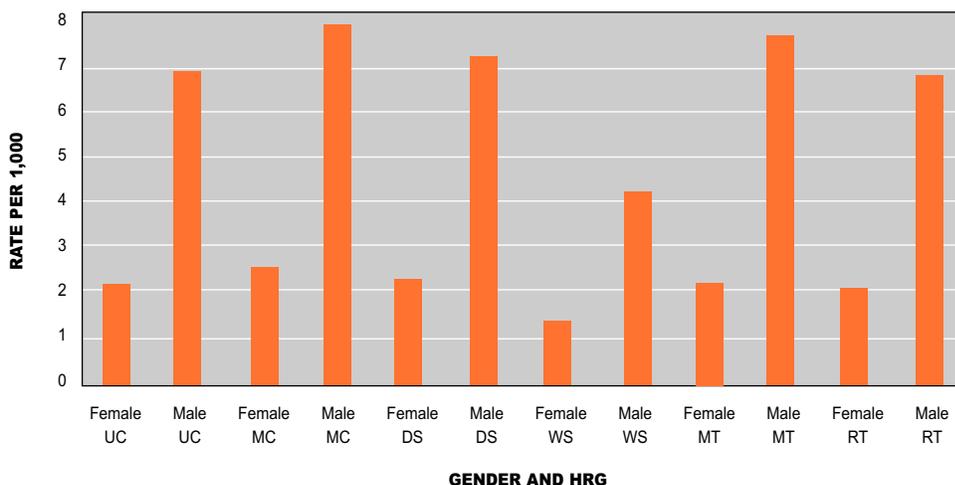
Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

The results for bike helmet use reported by parents suggest relatively large and statistically significant differences in use rates by HRG and by race and ethnicity. Among children who ride bikes, black and Hispanic children show significantly lower use of bicycle helmets.

There are also bicyclist injury data for children and youth ages 5 to 19 developed from data in the CHIME emergency department database and shown in Figure 10. These data indicate highly significant gender differences for each HRG. They also indicate a significantly lower rate of ED visits for bicyclist injuries in the Wealthy Suburbs than for any other HRG. There are no significant differences among the other HRGs. These differences may be due to differences in helmet use, the “riskiness” of bicycle use, the overall level of bicycle use, and road conditions or other conditions of use.

**FIGURE 10: ANNUALIZED EMERGENCY VISIT RATES FOR 5- TO 19-YEAR-OLD CYCLIST INJURIES NOT INVOLVING AUTOMOBILES 2002-2003, BY HEALTH REFERENCE GROUP**



Source: CHIME Database, CHA; U.S. Census 2000, SF1: Table P12.

### Car Crashes

Car crashes with injury can result from a number of factors, including road conditions and congestion; weather conditions; driving behavior; crash protection access and use, such as air bags and restraint devices; and insurance fraud. The Connecticut Department of Transportation (DOT) maintains a database of all crashes, but there is incomplete reporting of cases not involving injury. The following analyses are therefore, based solely on crashes involving injury. Table 47 shows annualized average results for 2003-2004.

**TABLE 47: CRASHES INVOLVING FATALITY OR INJURY BY CRASH LOCATION, RATE PER 1,000 POPULATION, ANNUAL AVERAGES 2003-2004**

AREA	Total Population	Average Total Crashes With Injury	Total Crash Rate per 1,000	Interstate Crash Rate per 1,000	U.S. Route Crash Rate per 1,000	State Road Crash Rate per 1,000	Local Road Crash Rate per 1,000
<b>HRG 1 (3)-UC</b>	384,733	5,530	14.4	2.2	1.3	2.8	8.2
<b>HRG 2 (10)-MC</b>	662,398	6,976	10.5	1.4	1.3	3.0	4.9
<b>HRG 3 (15)-DS</b>	587,509	5,056	8.6	0.7	0.7	4.1	3.1
<b>HRG 4 (27)-WS</b>	487,620	3,596	7.4	1.2	1.3	2.9	1.9
<b>HRG 5 (39)-MT</b>	698,458	5,720	8.2	1.0	1.1	4.0	2.1
<b>HRG 6 (75)-RT</b>	584,847	4,307	7.4	0.6	1.1	4.1	1.6
<b>Connecticut</b>	3,405,565	31,182	9.2	1.1	1.1	3.5	3.4

Source: DOT Accident Records Section; U.S. Census 2000, Table P1.

The data in Table 47 show that auto crash rates are significantly higher in the Urban Centers than in the other HRGs and that this difference is produced mainly by the difference in crash rates on local roads. This occurs despite the fact that Urban Center residents have far fewer vehicles per population than any other HRG and spend far less time commuting to work on nonpublic transportation (e.g., cars, vans and trucks) than residents of any other HRG. A caution in the interpretation of these crash injury statistics is that the DOT classifies crashes by the location of the crash, and the residential location of the driver is not available in electronic format.<sup>54</sup> This means that nonresidents of the Urban Centers, for example, may contribute to the crash rate in the Urban Centers because of a crash on an interstate highway in Hartford and that, conversely, residents of the Urban Centers may contribute to crashes in other HRGs. Whether these competing factors cancel out is unknown. The fact that the highest crash counts are on state or local roads and that national data indicates that “three out of four crashes causing death occur within 25 miles of home”<sup>55</sup> suggests that many accidents causing injuries are close to home and in the city or town of residence. But a statistical connection between crash site and residence cannot be absolutely demonstrated in the available data. “Miles-driven,” a better denominator for crash rates than population, is also not available. Studies should be done to analyze the residential location and other characteristics of the drivers involved in injury-related crashes to ascertain whether there are significant differences among drivers residing in the various HRGs. This might lead to targeted driving safety campaigns.

Age is related to the frequency of being a driver in a car crash involving injuries or fatalities. Rates rise from the early teen years through the late teens and early 20s. For each of the years 18–22, annualized rates based on 2003–2004 are 40 per 1,000 or higher (18 = 40; 19 = 44; 20 = 42; 21 = 41; 22 = 40). Rates decline rapidly in the late 20s and are relatively low through age 95 when they begin to climb again (95 = 9; 96 = 19; 97 = 27; 98 = 29; 99 = 42; 100–104 = 75).<sup>56</sup> These results are consistent with a recommendation of greater attention to driving behavior and “progressive licensing” in the younger age group, and the possibility of relicensing requirements for the oldest old drivers.

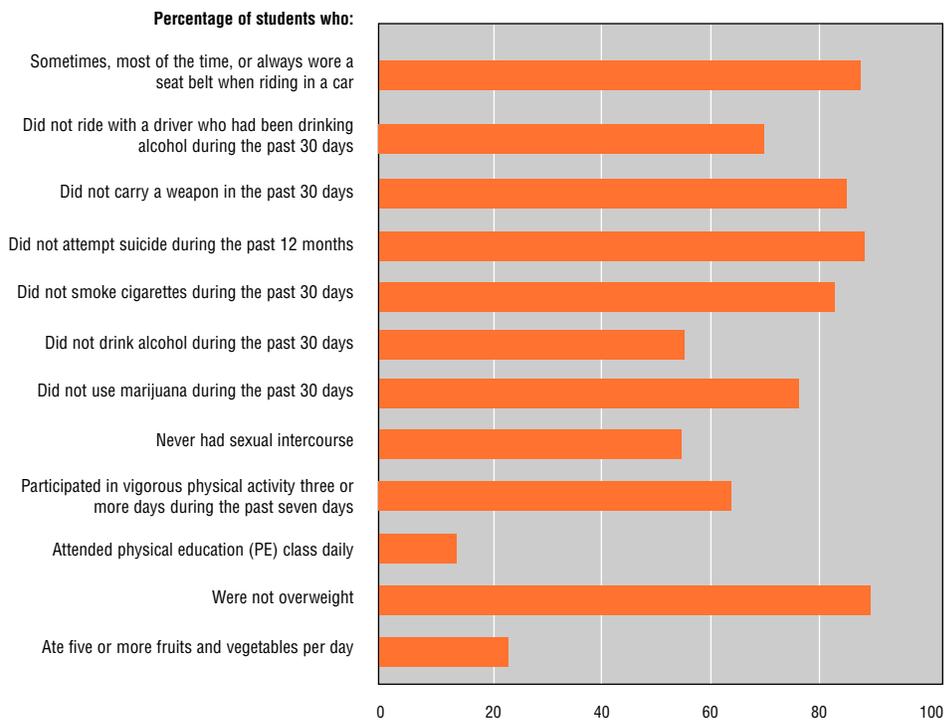
Age is also related to nonuse of seat belts among drivers in injury-present crashes. In the age group 15–24, 7.3 percent are classified as unbelted. The rate declines gradually with age to 5.5 percent for those age 40 and over.

Seat belt use varies somewhat by HRG crash site among drivers in crashes involving injury in 2003–2004. The Urban Centers (7.1 percent), Mill Towns (7.4 percent) and Rural Towns (7.5 percent) have nonuse rates significantly higher than the Manufacturing Centers (5.9 percent), Diverse Suburbs (5.5 percent) and Wealthy Suburbs (4.8 percent). To the extent that crash site and residence location are correlated, this may imply lower seat belt use rates for residents in the former three types of communities. This hypothesis can be checked only upon the possible future availability of the residential information in the DOT crash data.

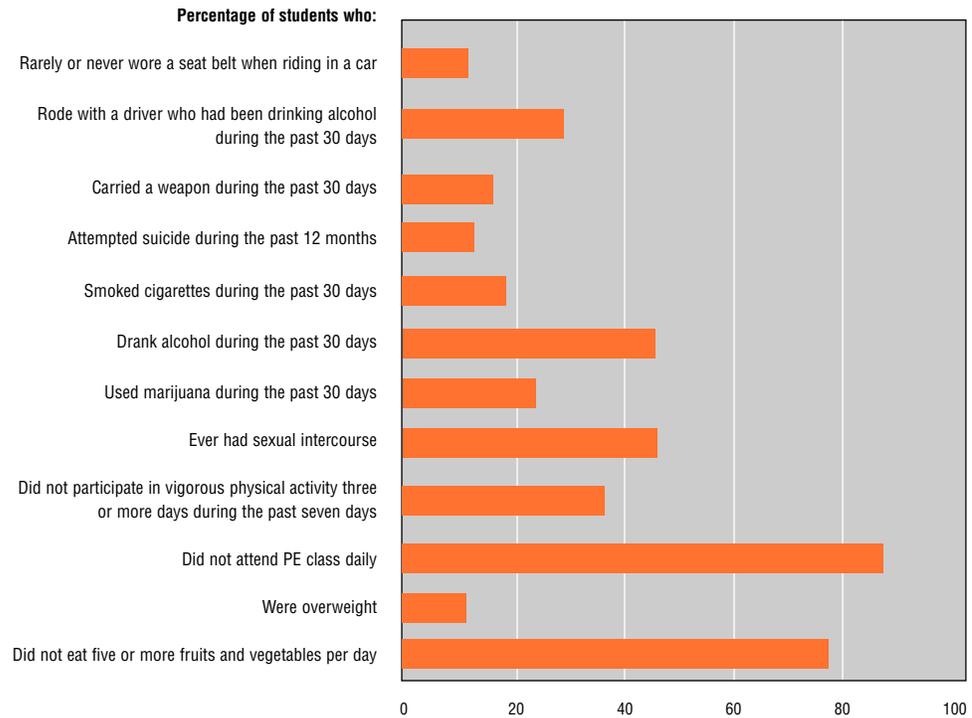
## YOUTH RISK BEHAVIOR SURVEY

Every odd year, DPH conducts a “Youth Risk Behavior Survey” (YRBS) based on items constructed by the Centers for Disease Control and Prevention (CDC) in cooperation with the states. The survey, called the Connecticut High School Survey, is distributed to a limited number of schools on a sampling basis. Results are shown in Figures 11 and 12.

**FIGURE 11: CONNECTICUT HIGH SCHOOL SURVEY, POSITIVE (HEALTH-PROMOTING) BEHAVIOR PERCENTAGES, 2005**



Reproduced from DPH Connecticut High School Survey. Available at:  
[http://www.dph.state.ct.us/PB/HISR/2005CT\\_Summary\\_Graphs.pdf](http://www.dph.state.ct.us/PB/HISR/2005CT_Summary_Graphs.pdf)  
 Accessed Feb. 3, 2007.

**FIGURE 12: CONNECTICUT HIGH SCHOOL SURVEY, HEALTH RISK BEHAVIOR PERCENTAGES**

Reproduced from DPH Connecticut High School Survey. Available at:  
[http://www.dph.state.ct.us/PB/HISR/2005CT\\_Summary\\_Graphs.pdf](http://www.dph.state.ct.us/PB/HISR/2005CT_Summary_Graphs.pdf).  
 Accessed Feb. 3, 2007.

## SEXUALLY TRANSMITTED DISEASES

Sexually transmitted diseases (STDs) are a good indicator of sexual risk-taking behavior (e.g., unprotected sex, having multiple sexual partners) in that they are reportable diseases and are eventually symptomatic. But sexual risk taking may have far different consequences in different contexts. Risk-taking behavior manifests itself in disease only in the context of a high incidence “pool” of disease. Thus, sexual risk taking in the Wealthy Suburbs is not as likely to manifest as disease as in the Urban Centers.

A possible reason for the STD rate differences demonstrated in Table 48 is differential reporting. This might occur if the large clinics in the Urban Centers report all cases while private physicians in the Wealthy Suburbs, for example, do not. Differential reporting would lead to differential rates and not recognize the underlying equality of disease rates. Although there are no data with which to test such a claim, it seems unlikely that this differential reporting could explain the observed rate differences. First, while persons from other communities may use the clinics in the Urban Centers, their cases are referred back to their towns of residence for rate calculation purposes. Reports also come in from STD testing labs as well as private physicians, meaning that unless the patient is treated without testing, and the physician does not report, a case will eventually be reported to DPH.

There would have to be a huge reporting differential to account for the large differences observed in Table 48, and for the race and ethnicity disparities noted within the HRGs. For example, such reporting differences could not account for the Asian/black difference in STD rates within the Urban Centers as shown in Table 49. Finally, these results are comparable to results in other states and nationally.<sup>57</sup>

**TABLE 48: ANNUALIZED CRUDE CASE RATE OF SEXUALLY TRANSMITTED DISEASES PER 1,000 RESIDENTS, 2000-2004 AND CASES, 2005**

AREA	Population	Annual Average Count, 2000-2004 and Count, 2005	Annual Average Rate per 1,000, 2000-2004	Percentage of Cases, 2000-2004
<b>HRG 1 (3)-UC</b>	384,733	4,970 (5,653)	21.5	42.2%
<b>Bridgeport</b>	139,529	1,437 (1,728)	17.2	12.2%
<b>Hartford</b>	121,578	2,147 (2,145)	29.4	18.2%
<b>New Haven</b>	123,626	1,387 (1,780)	18.7	11.8%
<b>HRG 2 (10)-MC</b>	662,398	3,016 (3,492)	7.6	25.6%
<b>HRG 3 (15)-DS</b>	587,509	1,617 (2,051)	4.6	13.7%
<b>HRG 4 (27)-WS</b>	487,620	235 (318)	0.8	2.0%
<b>HRG 5 (39)-MT</b>	698,458	697 (1,001)	1.7	5.9%
<b>HRG 6 (75)-RT</b>	584,847	378 (568)	1.1	3.2%
<b>Unknown Residence</b>		870 (761)		7.4%
<b>Connecticut</b>	3,405,565	11,782 (13,846)	5.8	100.0%

Source: DPH; U.S. Census 2000, SF1; Table P1.

Data note: These data are incident cases. Over the five-year period tabulated, a single individual may have many more than one case of an STD. Thus, the data should not be interpreted as the probability that a single individual will be infected.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Table 49 shows all cases for which race, ethnicity, HRG, and age could be ascertained in the age range 15 to 34.

**TABLE 49: ANNUALIZED SEXUALLY TRANSMITTED DISEASE CASE RATE PER 1,000 FOR PERSONS 15 TO 34 YEARS OLD, 2000-2004**

AREA	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	6.3	53.5	22.7	2.7
<b>HRG 2 (10)-MC</b>	3.3	29.7	11.1	1.6
<b>HRG 3 (15)-DS</b>	2.5	26.1	10.0	1.8
<b>HRG 4 (27)-WS</b>	0.6	9.0	3.7	0.4
<b>HRG 5 (39)-MT</b>	1.3	11.4	4.4	1.2
<b>HRG 6 (75)-RT</b>	1.0	6.9	3.3	2.1
<b>Connecticut</b>	2.2	39.3	15.1	1.9

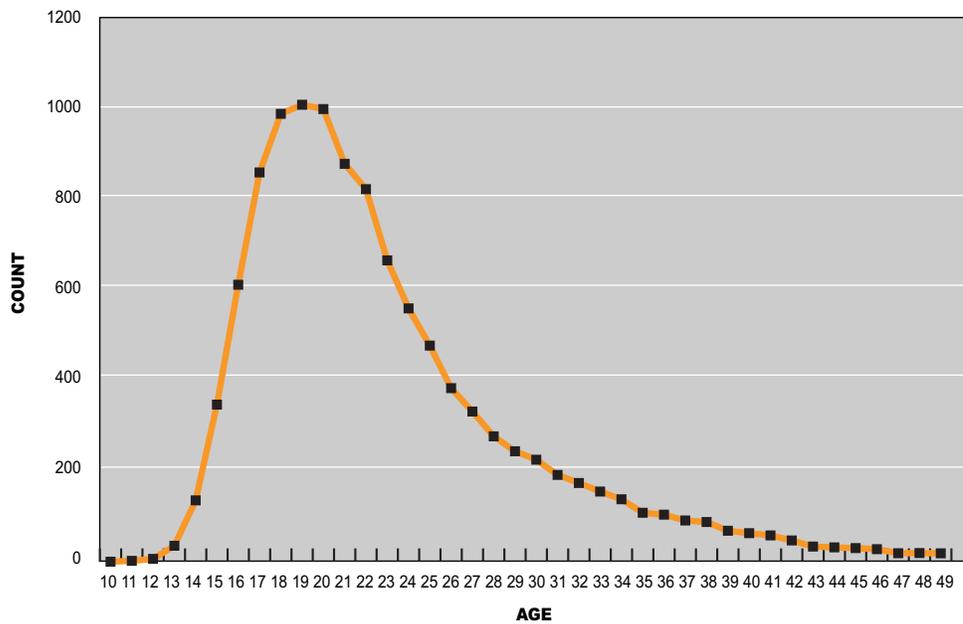
Source: DPH; U.S. Census 2000.

These results demonstrate significant effects for both race/ethnicity and for HRGs. Whites, blacks and Hispanics residing in the Urban Centers have double the STD rates as in the Manufacturing Centers. The Manufacturing Centers' and Diverse Suburbs' rates are similar, and higher than rates in Wealthy Suburbs, Mill Towns and Rural Towns. Asians have the lowest STD rate, except in the Rural Towns, but the base numbers here are very small, and the difference is of doubtful significance. Blacks consistently have a higher STD rate than Hispanics, whites or Asians, and an extremely high rate in the Urban Centers.

Recent data for 2005 indicate a modest increase from the average number of cases in 2000-2004. The increase appears in all HRGs and may not be accounted for by a reduction in the number of cases with unknown residence.

Residents between ages 15 and 34 account for 90.4 percent of all STD cases for which age could be ascertained. The modal age of incidence is 20 years old, as illustrated in Figure 13.

**FIGURE 13: AVERAGE ANNUAL SEXUALLY TRANSMITTED DISEASE COUNTS, BY AGE, FOR PERSONS 10 TO 49 YEARS OLD, 2000-2004**



Source: DPH.

## HIV/AIDS

HIV/AIDS is an indicator related to STDs in some modes of transmission. Table 50 shows the number of adult AIDS cases, by gender and mode of transmission for 2006. These results indicate that men who have sex with men (MSM) predominate among white males. But for black and Hispanic males, the dominant mode of transmission is intravenous drug use (IDU). The mode of transmission for women also differs by race and ethnicity, as shown in Table 50.

The overall counts of AIDS cases declined for both men and women in 1998. For both groups AIDS counts have remained relatively constant since that time, at about 400 cases per year for adult men and about 200 cases per year for adult women, with some year-to-year variation for both genders. AIDS death rates have dropped markedly over the past decade, due in part to improved therapies. In 2006, approximately 50 percent of all AIDS cases were incident in the Urban Centers. An additional 25 percent of all AIDS cases were incident in the Manufacturing Centers.

**TABLE 50: ADULT AIDS CASES IN CONNECTICUT, 2006**

MODE OF TRANSMISSION	Race/Ethnicity	Adult Male	Adult Female
<b>MSM</b>	White	47	
	Black	16	
	Hispanic	27	
	Other	2	
<b>IDU</b>	White	31	19
	Black	28	12
	Hispanic	58	26
	Other	4	
<b>MSM/IDU</b>	White	2	
	Black	2	
	Hispanic	2	
	Other		
<b>HETEROSEXUAL</b>	White	3	16
	Black	12	23
	Hispanic	12	28
	Other	2	2
<b>OTHER / UNKNOWN</b>	White	23	10
	Black	27	19
	Hispanic	39	31
	Other	5	6

*Data and Reference Note: HIV/AIDS data are continually updated, as case counts are de-duplicated, and as other new information, e.g., regarding transmission mode, becomes available, and data are reported from other states. Therefore, the counts reported here may be slightly different than those accessed from the DPH HIV/AIDS web site at another point in time. Access current data and historical series at: [http://www.dph.state.ct.us/BCH/infectiousdise/2003/final%20pages/topic\\_index\\_X.htm](http://www.dph.state.ct.us/BCH/infectiousdise/2003/final%20pages/topic_index_X.htm).*

## TEEN BIRTHS

Teen childbearing is a serious problem with profound health, social and economic consequences. Infants of adolescent mothers are more likely to face adverse health outcomes, including low birth weight, preterm birth and infant mortality. Teen mothers are more likely to be unmarried, high school dropouts and living in poverty. Their children also are more likely to live in poverty years after birth.<sup>58</sup>

Table 51 illustrates that Connecticut's teen birth rate has fallen significantly between 1991 and 2002, as it has for the United States and all New England states.

**TABLE 51: HISTORICAL CHANGE IN TEEN BIRTH RATE PER 1,000 TEENS AGES 15-19, 1991 TO 2002**

STATE	1991	2002
<b>CONNECTICUT</b>	40.1	25.8
<b>MASSACHUSETTS</b>	37.5	23.3
<b>RHODE ISLAND</b>	44.7	35.6
<b>MAINE</b>	43.5	25.4
<b>NEW HAMPSHIRE</b>	33.1	20.0
<b>VERMONT</b>	39.2	24.2
<b>UNITED STATES</b>	61.8	42.9

Source: National Campaign to Prevent Teen Pregnancy, from data at CDC, National Center for Health Statistics. Web-based data accessed at: [www.teenpregnancy.org](http://www.teenpregnancy.org), Sept. 16, 2005.

**TABLE 52: ANNUALIZED TEEN (15-19) BIRTH RATE PER 1,000, BY RACE/ETHNICITY, 1999 TO 2003**

RACE/ETHNICITY/ORIGIN	Teen Births	Teen Population	Rate per 1,000 Teens
<b>All Races</b>	12,644	105,336	24.0
<b>White Not Hispanic</b>	4,288	73,851	11.6
<b>Black Not Hispanic</b>	2,992	11,872	50.4
<b>Asian Not Hispanic</b>	269	2,731	19.7
<b>Hispanic</b>	4,969	13,918	71.4
<b>Puerto Rican</b>	3,946	9,303	84.8
<b>Non-Puerto Rican Hispanic</b>	1,023	4,615	44.3

Source: DPH; U.S. Census 2000.

Note: A small number (344) of births at ages younger than 15 were excluded from this table. Over half, 180 of these, were born to black non-Hispanic (79) and Puerto Rican Hispanic (101) teens. A small number of unknowns were also excluded from the table.

There are clear disparities in teen birth rates in Connecticut. Analysis of the rates shown in Table 52 illustrates the dangers in the broad brush approach. While Hispanic teens have the highest birth rates, the aggregation of all Hispanics together obscures important variation. The non-Puerto Rican Hispanic teen rate (44.3 per 1,000) is only slightly more than half the Puerto Rican teen rate (84.8 per 1,000). Very young teens giving birth, under age 15, are overwhelmingly black and Puerto Rican girls. Thus, teen pregnancy prevention programs could prioritize the key populations at risk: Puerto Rican Hispanic teens, followed by black and non-Puerto Rican Hispanic teens.

There are very large HRG differences in teen births, even after controlling for race and ethnicity, as shown in Table 53. For each group, teen birth rates in the Urban and Manufacturing centers are higher than for the remaining HRGs. The Wealthy Suburbs show the lowest rate for each group, except for black non-Hispanic teens whose rates are lowest in the Rural Towns. Teen birth rates by HRG are, in decreasing order: Urban Centers > Manufacturing Centers > Diverse Suburbs > Mill Towns > Rural Towns > Wealthy Suburbs.

**TABLE 53: TEEN (15-19) ANNUALIZED BIRTH RATE PER 1,000, BY RACE AND ETHNICITY, CONNECTICUT AND HRG, 1999-2003**

RACE/ETHNICITY/ ORIGIN	HRG 1 (3)-UC	HRG 2 (10)-MC	HRG 3 (15)-DS	HRG 4 (27)-WS	HRG 5 (39)-MT	HRG 6 (75)-RT	State
<b>All Races</b>	57.3	39.9	22.2	2.9	13.0	7.3	24.0
<b>White Not Hispanic</b>	19.8	20.4	16.2	2.3	12.3	6.9	11.6
<b>Black Not Hispanic</b>	61.7	45.9	41.4	11.0	24.8	9.5	50.4
<b>Asian Not Hispanic</b>	31.0	32.0	27.4	5.2	8.5	7.1	19.7
<b>Hispanic</b>	83.5	79.7	52.3	14.6	30.4	19.0	71.4
<b>Puerto Rican</b>	90.8	95.5	63.1	29.3*			84.8
<b>Non-Puerto Rican</b>	55.9	53.8	32.1	18.8*			44.3

Source: DPH; U.S. Census 2000, SF4: Table PCT5.

\*Separate HRG estimates for Puerto Rican and non-Puerto Rican Hispanic populations for HRGs 4-6 are not available due to the suppression rules of the U.S. Census Bureau. Many cities and towns in these HRGs had no denominator data for calculating rates due to small total numbers (e.g., fewer than 100) of Puerto Rican residents.

In summary, the disparities for teens are very large — in contrast to the data for women age 25 to 49 presented in Chapter 3, Connecticut Community Profile, showing only small “broad” race and ethnicity birth rate differences. Puerto Rican teens are especially at risk for teen birth in the Urban and Manufacturing centers.

### RISK FACTORS FOR METABOLIC SYNDROME AND DIABETES

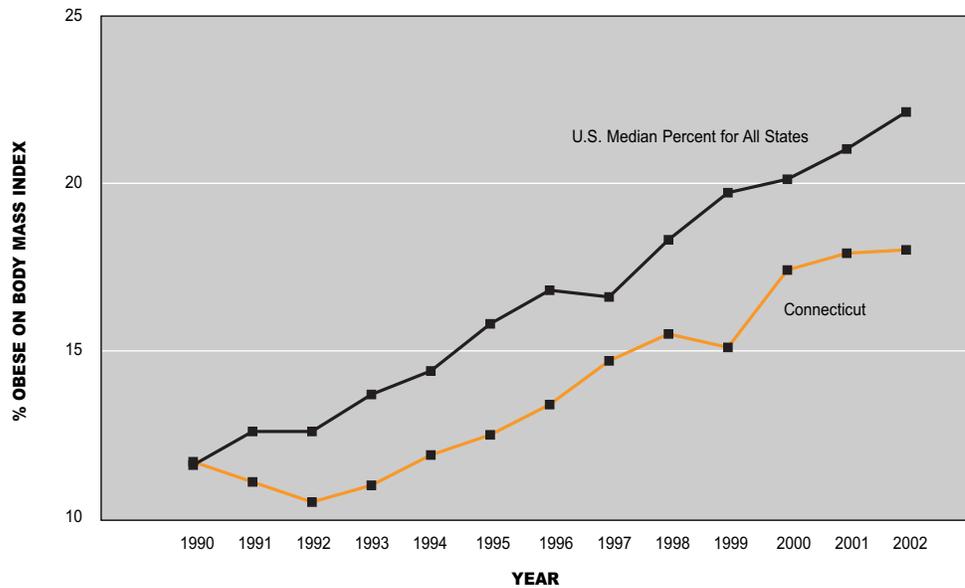
Poor diet and a lack of physical activity are responsible for a cluster of metabolic disorders — referred to as “metabolic syndrome” — including high blood pressure, high insulin levels, excess body weight, and abnormal levels of cholesterol. These disorders can cause such serious diseases as diabetes, heart disease and stroke. In combination, they dramatically boost a person’s chances of premature mortality.

### Overweight and Obesity

Overweight and obesity are defined by the body mass index (BMI), a ratio of body weight to height. An adult is overweight if s/he has a BMI of 25 to 29.9 (145 pounds for an adult 5'4") and obese if the BMI is 30 or higher (174 pounds for an adult 5'4").

Overweight and obesity are risk factors for a wide range of chronic diseases, including diabetes, hypertension, heart disease, gall bladder disease, and osteoarthritis.<sup>59</sup> The federal government’s *Healthy People 2010* objective is to reduce the level of obesity among Americans to 15 percent or less.<sup>60</sup> But the percentage of adults who are overweight and obese has increased in recent years — making obesity a leading public health issue.

**FIGURE 14: PERCENTAGE OBESE, CONNECTICUT AND UNITED STATES, 18 AND OLDER**



Source: CDC BRFSS web site at: <http://www.cdc.gov/brfss>.

As of 2000, more than 53 percent of Connecticut adults were overweight and more than 17 percent were obese. There were marked differences among the HRGs in the percentage of overweight and obese adults, as presented in Table 54. The Urban Centers had more than twice the percentage of obese adults as the Wealthy Suburbs. There were also differences in overweight and obesity by city. Bridgeport had a particularly high percentage of overweight and obese adults: More than two-thirds of Bridgeport adult residents were overweight and one-quarter of them obese.

In Connecticut overall, overweight and obesity were highest among black and Hispanic residents. Although there was a higher prevalence of overweight and obesity among black adults in all HRGs (when sufficient data was available), the prevalence among Hispanics in the Diverse Suburbs, Mill Towns and Rural Towns was similar to that of whites. Asian adults have by far the lowest rates of obesity, and their rates do not vary significantly by type of community.

**TABLE 54: PERCENTAGE OBESE BY BODY MASS INDEX (BMI)**

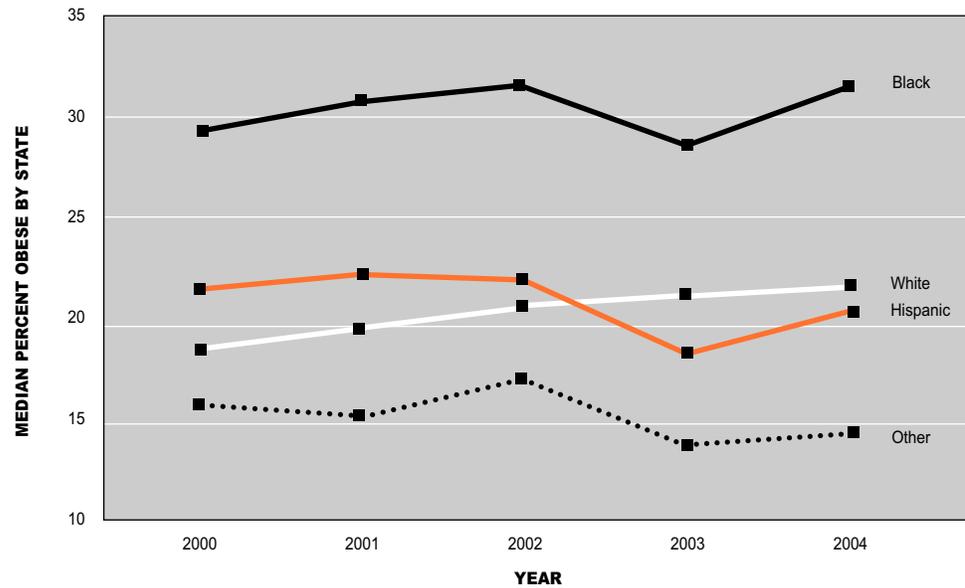
AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	25.3	26.2	20.7	34.2	24.4	
<b>Hartford</b>	24.1	25.4	17.8	29.4	36.5	
<b>New Haven</b>	21.2	22.6	16.6	35.1	24.1	
<b>HRG 1 (3)-UC</b>	23.5	24.6	18.1	33.8	29.7	
<b>HRG 2 (10)-MC</b>	18.2	18.6	17.2	30.0	21.0	3.2
<b>HRG 3 (15)-DS</b>	19.2	19.2	19.1	31.0	15.5	
<b>HRG 4 (27)-WS</b>	11.0	10.4	10.3		11.6	
<b>HRG 5 (39)-MT</b>	18.0	17.7	17.7	25.9	13.5	4.8
<b>HRG 6 (75)-RT</b>	15.1	14.5	14.4		14.8	
<b>Connecticut</b>	17.2	17.1	15.9	30.9	21.6	4.2
<b>United States</b>	21.0	21.0	19.8	30.2	20.3	

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss). BMI calculated from self-reported height and weight.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

FIGURE 15: OBESITY BY RACE AND ETHNICITY: NATIONAL TRENDS



Source: CDC BRFSS web site at: <http://www.cdc.gov/brfss>.

There are no readily available longtime trend data on obesity by race and ethnicity. The available series of national medians<sup>1</sup> by year, shown in Figure 15, suggests that increases in obesity among whites over a period of five years have driven the increasing national levels of obesity. The lowest levels are in the “other” category, which includes Asians and all other groups, followed by whites and Hispanics.

Black residents show the highest percentage of obesity among those groups reported in the Behavioral Risk Factor Surveillance System (BRFSS) survey, 1999–2003. Within this group there are significant age and gender disparities such that black women have a higher percentage obese than black men in age group 18–29 (23.9:20.3 percent), 30–44 (36.1:27.4 percent), 45–59 (41.6:31.9 percent), and 60 and over (36.3:23.8 percent). The male–female differences are statistically significant except in the youngest age group. These results have significant implications for long-term health outcomes. No systematic data are available on environmental factors such as access to healthy foods and exercise venues. Also, there is no systematic data about cultural factors such as attitudes towards diet and exercise or ideal body type available to explain these age/gender trends and the broader race/ethnicity disparities reported here.

### High Blood Pressure and High Blood Cholesterol

Both high blood pressure and high cholesterol are closely related to cardiovascular disease. The higher the blood pressure, the greater the chance of heart attack, heart failure, stroke, and kidney disease.<sup>61</sup> High levels of blood cholesterol, particularly low-density lipoprotein (LDL) cholesterol, increases the build up of cholesterol in the arteries and may block blood flow, leading to heart disease.<sup>62</sup>

Thirty-one percent (crude rate) of Connecticut adults self-reported high blood pressure, and 29 percent reported high cholesterol. The Wealthy Suburbs had the lowest prevalence of both high blood pressure and high cholesterol. The other HRGs did not vary much in prevalence of high blood pressure and cholesterol, and there were no significant differences between the cities of the Urban Centers.

A higher percentage of Connecticut black adults than white adults reported high blood pressure, as shown in Table 55. This pattern was also seen within the Urban and Manufacturing centers and the Diverse Suburbs. Although there were no differences for the state overall in reported high cholesterol by race/ethnicity, the percentage of Hispanics in the Diverse Suburbs reporting high cholesterol was lower than that reported by whites and blacks, as seen in Table 56.

The federal government's *Healthy People 2010* objectives are to reduce the rates of American adults with high blood pressure to 16 percent and those with high cholesterol to 14 percent.<sup>63</sup> For each of these indicators, Connecticut residents in all HRGs are far above the national objectives.

**TABLE 55: PERCENTAGE WHO HAVE BEEN TOLD THEY HAVE HIGH BLOOD PRESSURE**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	33.5	33.1	32.0	38.2	35.7	
<b>Hartford</b>	23.7	25.2	21.3	27.3	28.7	
<b>New Haven</b>	29.3	30.0	26.6	45.1	26.7	
<b>HRG 1 (3)-UC</b>	28.9	29.6	26.6	36.1	30.7	
<b>HRG 2 (10)-MC</b>	29.1	28.6	28.3	35.2	32.3	24.7
<b>HRG 3 (15)-DS</b>	31.6	28.5	27.9	44.9	21.1	
<b>HRG 4 (27)-WS</b>	29.0	24.7	23.8			
<b>HRG 5 (39)-MT</b>	33.7	30.5	30.7	35.1	19.7	26.4
<b>HRG 6 (75)-RT</b>	29.8	27.0	27.0			
<b>Connecticut</b>	30.9	28.4	28.0	37.1	27.2	26.5

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 56: PERCENTAGE WHO HAVE BEEN TOLD THEY HAVE HIGH CHOLESTEROL**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	27.5	26.8	29.0	22.2	28.2	
<b>Hartford</b>	22.8	22.6	28.5	16.6	25.6	
<b>New Haven</b>	26.6	26.1	28.8	24.1		
<b>HRG 1 (3)-UC</b>	25.7	25.3	28.8	22.2	24.9	
<b>HRG 2 (10)-MC</b>	27.9	26.5	26.7	24.1	24.3	23.9
<b>HRG 3 (15)-DS</b>	31.2	28.2	28.7	28.5	18.5	
<b>HRG 4 (27)-WS</b>	28.0	24.8	24.6			
<b>HRG 5 (39)-MT</b>	30.5	27.8	27.9	22.2	29.3	24.7
<b>HRG 6 (75)-RT</b>	28.4	26.4	26.6			
<b>Connecticut</b>	28.9	26.6	27.0	24.0	25.2	26.1

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

### Physical Activity and Diet

Physical activity has been shown to reduce levels of obesity and improve cardiovascular health.

Table 57 and Table 58 show significant differences in levels of physical activity by HRG and race/ethnicity. There are only limited data for Connecticut on diet, another important indicator, as shown in Table 59. Black and Hispanic adults are far more likely than white adults to report no physical activity and less likely to report regular exercise. Asian adults are least likely to report consuming “five or fewer” fruits and vegetables per day as shown in Table 59, indicating a possibly healthier diet.

**TABLE 57: PERCENTAGE WITH NO PHYSICAL ACTIVITY**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	37.4	37.8	30.8	35.6	46.1	
<b>Hartford</b>	37.5	36.9	23.6	38.8	48.7	
<b>New Haven</b>	27.5	27.7	19.8	31.8	45.3	
<b>HRG 1 (3)-UC</b>	34.0	34.0	24.0	36.2	46.9	
<b>HRG 2 (10)-MC</b>	29.6	29.8	24.1	39.0	44.6	24.6
<b>HRG 3 (15)-DS</b>	23.2	22.9	21.4	32.0	28.4	
<b>HRG 4 (27)-WS</b>	15.2	14.6	14.1		24.1	
<b>HRG 5 (39)-MT</b>	24.4	23.7	22.7	26.8	37.1	27.1
<b>HRG 6 (75)-RT</b>	19.6	19.2	18.4		36.6	
<b>Connecticut</b>	23.8	23.6	20.3	34.9	40.6	28.3
<b>United States</b>	25.6	25.6	23.1	32.2	32.3	

Source: DPH BRFSS Survey Data 1999-2003; CDC BRFSS Survey Data BRFSS at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 58: PERCENTAGE WHO GET REGULAR EXERCISE**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	41.6	41.4	42.4	40.2	32.8	
<b>Hartford</b>	38.2	36.7	39.5	32.7	40.5	
<b>New Haven</b>	44.8	42.3	49.0	37.1	25.8	
<b>HRG 1 (3)-UC</b>	41.7	40.0	45.8	36.1	31.9	
<b>HRG 2 (10)-MC</b>	47.0	46.2	51.0	35.6	32.4	28.4
<b>HRG 3 (15)-DS</b>	48.6	48.6	50.4	35.0	47.9	
<b>HRG 4 (27)-WS</b>	55.9	57.2	59.0	47.2	45.8	
<b>HRG 5 (39)-MT</b>	48.9	49.7	50.9	30.4	42.1	41.7
<b>HRG 6 (75)-RT</b>	54.1	54.5	55.5	31.3	51.3	
<b>Connecticut</b>	50.0	50.3	53.2	35.4	37.8	32.9
<b>United States</b>	44.4	44.4	46.2	36.5	42.5	

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 59: PERCENTAGE CONSUMING FEWER THAN FIVE FRUITS AND VEGETABLES PER DAY**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	72.0	72.1	83.0	77.5	76.4	
<b>Hartford</b>	75.5	74.9	70.4	74.8	76.2	
<b>New Haven</b>	67.9	67.9	73.6	69.2	56.2	
<b>HRG 1 (3)-UC</b>	71.7	71.5	68.0	74.1	76.8	
<b>HRG 2 (10)-MC</b>	71.6	71.7	71.9	72.0	70.8	66.7
<b>HRG 3 (15)-DS</b>	71.5	71.8	71.6	78.3	75.1	
<b>HRG 4 (27)-WS</b>	67.4	67.9	68.3	66.5	72.1	
<b>HRG 5 (39)-MT</b>	72.9	73.0	73.5	70.2	70.4	64.0
<b>HRG 6 (75)-RT</b>	69.0	68.8	68.4	86.5	73.9	
<b>Connecticut</b>	70.8	70.9	70.7	74.3	73.7	66.2
<b>United States</b>	76.9	76.9				

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**DRUG USE AND ABUSE: SMOKING AND ALCOHOL**

According to a study published in the Journal of the American Medical Association (JAMA) about the causes of death in the United States, alcohol abuse has been associated with 60 percent to 90 percent of cirrhosis deaths; 40 percent to 50 percent of motor vehicle fatalities; 16 percent to 67 percent of home injuries, drowning, fire fatalities, and job injuries; and 3 percent to 5 percent of cancer deaths.<sup>64</sup>

Alcohol abuse is responsible for even more harm as it is implicated in child and intimate partner abuse; homicide; and loss of employment, family and community connection.

**Findings and Analysis**

Problem drinking, especially binge drinking (having five or more drinks on an occasion), is in many respects a “white” youth and young adult cultural problem. Among Connecticut adults 18 and over, 17.5 percent of whites report binge drinking, while this is true for only 9.0 percent of blacks, 14.5 percent of Hispanics and 8.2 percent of Asians. There are highly significant differences between whites and Hispanics on the one hand, and blacks and Asians on the other hand — and they are the same in every HRG for which comparative data are available. The problem is both statewide and nationwide.

**TABLE 60: PERCENTAGE WHO ENGAGED IN CHRONIC (HEAVY) DRINKING IN PAST MONTH**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	6.3	5.8	6.7	2.6	5.2	
<b>Hartford</b>	3.6	3.1	4.3	1.1	5.0	
<b>New Haven</b>	3.5	3.3	4.5	3.3	2.7	
<b>HRG 1 (3)-UC</b>	4.4	4.0	5.2	2.1	4.0	
<b>HRG 2 (10)-MC</b>	3.7	3.7	4.4	1.7	3.6	0.8
<b>HRG 3 (15)-DS</b>	4.2	4.4	4.7	1.1	3.0	
<b>HRG 4 (27)-WS</b>	5.4	6.1	7.1		2.3	
<b>HRG 5 (39)-MT</b>	4.5	4.8	4.9	2.6	3.8	2.3
<b>HRG 6 (75)-RT</b>	4.2	4.5	4.5		3.5	
<b>Connecticut</b>	4.4	4.6	5.0	1.9	3.6	1.4

Source: DPH BRFSS Survey Data, 1999-2003. Heavy or chronic drinking is defined as more than 60 drinks per month for a man and more than 30 drinks per month for a woman.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 61: PERCENTAGE WHO ENGAGED IN BINGE DRINKING IN PAST MONTH**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	13.4	12.5	14.5	9.3	12.5	
<b>Hartford</b>	14.3	13.3	19.3	11.4	12.0	
<b>New Haven</b>	15.3	13.8	18.5	10.0	11.4	
<b>HRG 1 (3)-UC</b>	14.4	13.0	17.5	9.7	11.5	
<b>HRG 2 (10)-MC</b>	15.0	14.7	17.4	8.4	14.2	6.1
<b>HRG 3 (15)-DS</b>	15.5	16.4	18.1	7.2	17.0	
<b>HRG 4 (27)-WS</b>	15.1	18.6	18.7		17.5	
<b>HRG 5 (39)-MT</b>	15.8	17.3	17.5	9.9	16.6	12.6
<b>HRG 6 (75)-RT</b>	14.7	16.4	16.5		15.9	
<b>Connecticut</b>	15.2	16.0	17.5	9.0	14.5	8.2
<b>United States</b>	15.6	15.6				

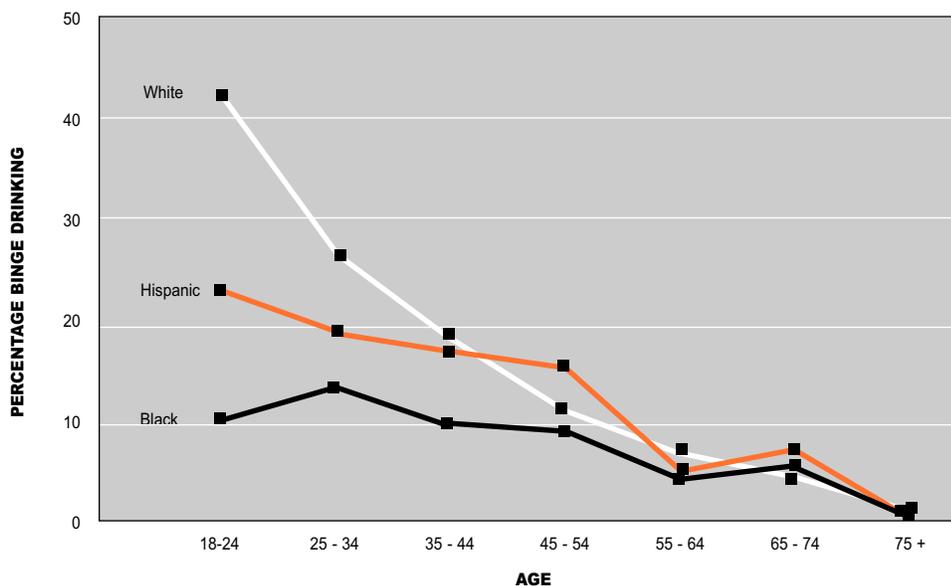
Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

The data in Figure 16 suggest that white binge drinking is particularly prevalent among 18- to 34-year-olds. By age 44, the Hispanic binge drinking rate is equal to the white rate and by age 54, the black binge drinking rate is equal to the white rate. There are no statistically significant differences among race/ethnicity groups after age 55, as all fall to a comparatively low level.

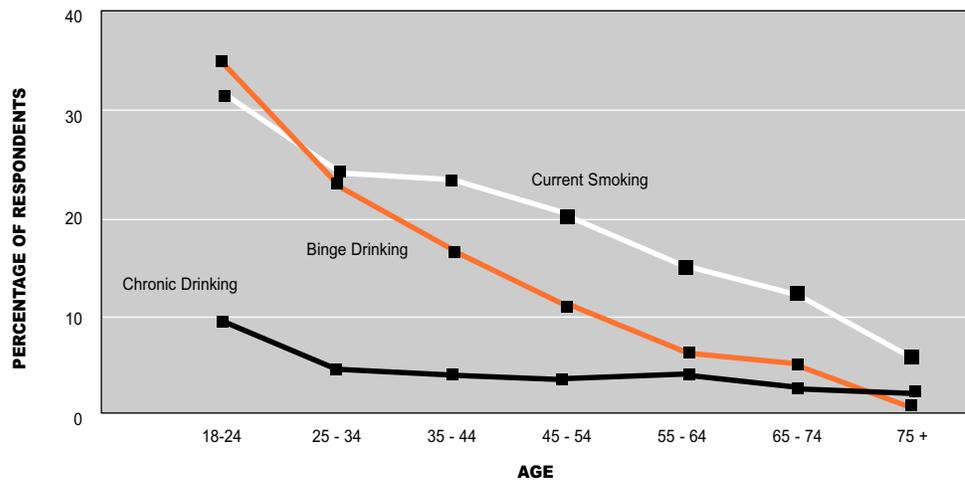
**FIGURE 16: PERCENTAGE BINGE DRINKING BY AGE AND RACE/ETHNICITY, BRFSS, 1999-2003**



Source: DPH BRFSS Survey Data, 1999-2003.

The disparities in rates for chronic drinking — more than two drinks on the average day for men; more than one drink per day for women — parallel the rates for binge drinking. Five percent of whites report chronic drinking, as compared with 1.9 percent of blacks, 3.6 percent of Hispanics and 1.4 percent of Asians. As illustrated in Figure 17, smoking and binge drinking are clearly related to age, while chronic drinking is not, except for a slightly higher rate in the youngest age group (18 to 24 years old).

**FIGURE 17: PERCENTAGES REPORTING CURRENT SMOKING, BINGE AND HEAVY (CHRONIC) DRINKING, BRFSS, 1999-2003**



Source: DPH BRFSS Survey Data, 1999-2003.

Drinking and smoking “go together” in the sense that those who smoke are also more likely to abuse alcohol. As illustrated in Table 62, the “relative risk” ratio — the association between binge drinking and smoking — is significantly elevated above 1 for every category of educational attainment. This relationship is most pronounced for those at the lowest level of educational attainment.

**TABLE 62: PERCENTAGE REPORTING CURRENT SMOKING AND BINGE DRINKING FOR CONNECTICUT RESIDENTS 25 AND OVER, BY EDUCATIONAL ATTAINMENT, 1999-2003**

EDUCATION	Current Smoking	Binge Drinking	Both	Relative Risk*
<b>LESS THAN HIGH SCHOOL GRADUATE</b>	27.1	10.1	5.7	4.2
<b>HIGH SCHOOL GRADUATE</b>	26.5	13.6	6.1	2.7
<b>1-3 YEARS COLLEGE</b>	22.0	12.4	4.4	2.2
<b>COLLEGE GRADUATE OR MORE</b>	10.8	13.5	3.1	3.1

Source: DPH BRFSS Survey Data, 1999-2003.

\*Table includes only those age 25 and older who answered all three questions: Educational Attainment, Current Smoking and Binge Drinking. Relative Risk would be 1 if there was no association between smoking and binge drinking.

Note: All race and ethnicity specific rates are age-adjusted.

Advanced educational level (college graduate or more) is a strong independent predictor of reduced smoking but not of binge drinking (five or more drinks on one occasion in the past month). College graduates are least likely to be current smokers (10.8 percent), but they are not less likely to be binge drinkers (13.5 percent). There is a strong association for persons age 25 and over between binge drinking and smoking, regardless of educational level.

## Smoking

Tobacco use is the leading cause of premature death in the United States. A JAMA article about the causes of death in the United States implicated tobacco use in 19 percent of all deaths nationally. “It contributes substantially to deaths from cancer (especially cancers of the lung; esophagus; oral cavity; pancreas; kidney; and bladder; and perhaps of other organs), cardiovascular disease (coronary artery disease, stroke, and high blood pressure), lung disease (chronic obstructive pulmonary disease and pneumonia), low birth weight; and other problems of infancy and burns.”<sup>65</sup>

As shown in Table 63, the age-adjusted rate of 20.9 percent smokers among Connecticut adults 18 years old and older is far above the *Healthy People 2010* target of 12 percent current smokers. Whites, blacks and Hispanics do not differ significantly (21.3 percent of whites, 20.9 percent of blacks and 20.6 percent of Hispanics are smokers), but they are far more likely than Asians (7.4 percent) to be smokers.

**TABLE 63: PERCENTAGE CURRENTLY SMOKING**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	25.7	25.1	30.1	26.1	19.9	
<b>Hartford</b>	24.6	24.1	26.8	21.5	21.7	
<b>New Haven</b>	19.2	19.0	19.5	25.2	15.9	
<b>HRG 1 (3)-UC</b>	23.0	22.5	24.4	24.0	19.1	
<b>HRG 2 (10)-MC</b>	23.3	23.3	25.0	20.0	22.4	7.6
<b>HRG 3 (15)-DS</b>	21.8	22.3	23.4	17.0	23.7	
<b>HRG 4 (27)-WS</b>	14.3	16.6	16.1		19.3	
<b>HRG 5 (39)-MT</b>	22.0	22.9	23.2	17.8	21.2	7.3
<b>HRG 6 (75)-RT</b>	18.0	18.9	19.1		11.3	
<b>Connecticut</b>	20.4	20.9	21.3	20.9	20.6	7.4
<b>United States</b>	22.8	22.8	22.8	23.4	22.4	

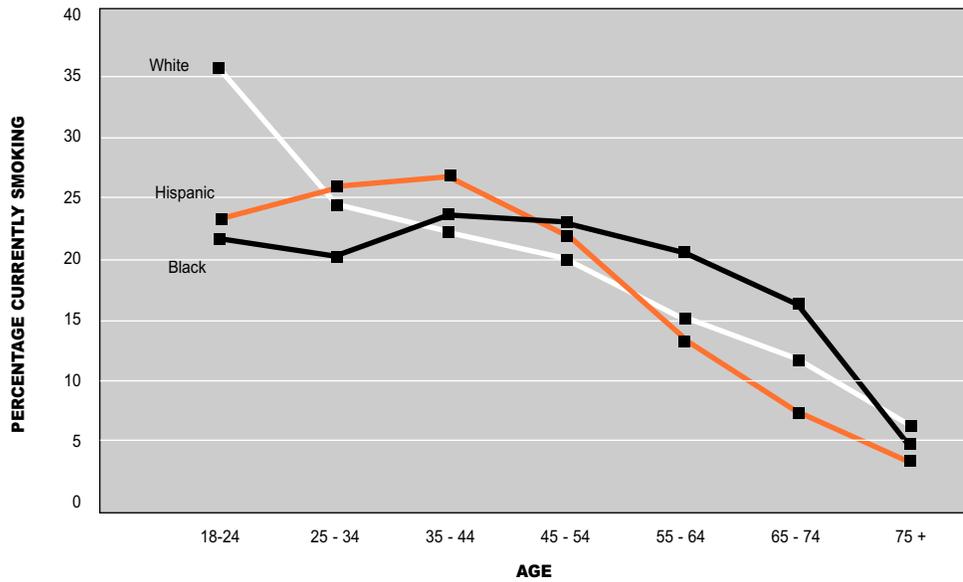
Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Although the overall smoking rates for whites, blacks and Hispanics are not different, the age patterns are somewhat different. Whites between 18 and 24 years old show a significantly higher rate but then trend consistently downward by age. Black and Hispanic respondents show a different pattern: lower rates of smoking in the youngest age group, but no consistent downward age trend over the middle years. Black respondents who smoke continue smoking until relatively late in life. What is not currently known is whether these different patterns are due to older age at initiation, greater degree of addiction due to type of cigarette smoked or depth of inhalation, as some researchers have suggested,<sup>66,67</sup> or to differential targeting or effects of smoking promotion or cessation messages in these groups.

**FIGURE 18: PERCENTAGE SMOKING BY AGE AND RACE/ETHNICITY, BRFSS, 1999-2003**



Source: DPH BRFSS Survey Data, 1999-2003.

Singh and Miller,<sup>68</sup> Diamond,<sup>69</sup> and others have demonstrated that formerly healthy immigrants suffer from prolonged exposure to American culture. Immigrants, particularly black and Hispanic immigrants, succumb to alcohol abuse and tobacco use with many negative consequences.<sup>70</sup>

## Environmental Tobacco Smoke

Many studies have shown that environmental tobacco smoke (ETS), sometimes known as “secondhand smoke,” affects the health of nonsmokers. ETS can cause developmental effects such as low birth weight and Sudden Infant Death Syndrome (SIDS); respiratory effects such as bronchitis, pneumonia, new or exacerbated asthma, and chronic respiratory symptoms and middle ear infections in children; eye and nasal irritation; lung cancer; nasal sinus cancer; heart disease mortality; and acute and chronic coronary heart disease morbidity in adults.<sup>71</sup>

One goal of the *Healthy People 2010* initiative is the establishment of smoke-free places such as school facilities, property, vehicles, and school events; private and public work-places; restaurants; public transportation; day care centers; and retail stores.<sup>72</sup>

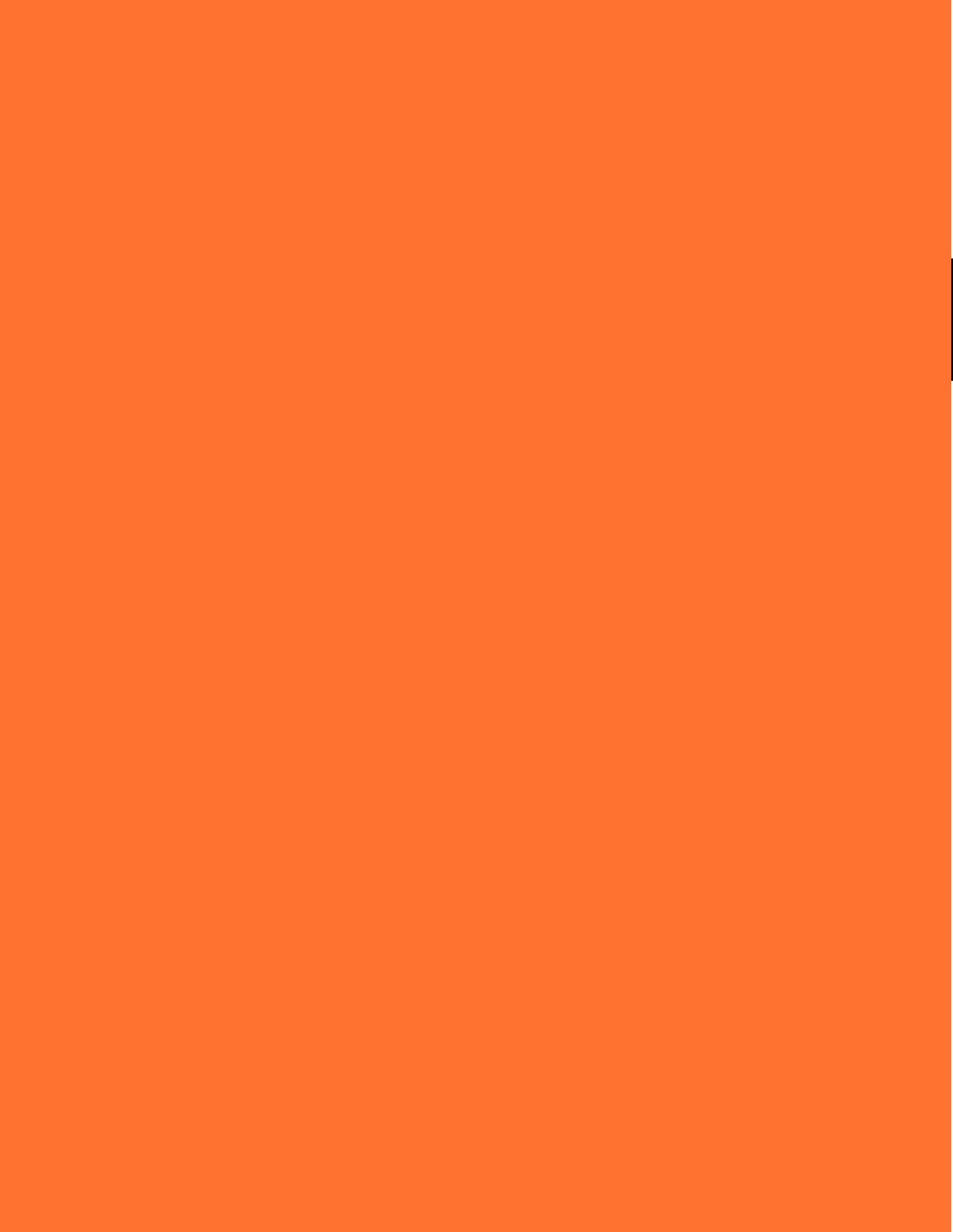
Connecticut’s smoke-free law went into effect on Oct. 1, 2003, and expanded to bars in April 2004. But some businesses (e.g., those with fewer than five employees) have weaker coverage, and they rely on employee complaint to instigate change. A weakness in the law is that no agency has been charged with enforcement. There have also been no systematic studies of compliance. Some workers, such as nurses who escort psychiatric or nursing home patients outside to smoke, are at risk — and apparently not well protected in practice. The law also does not address the effects of ETS in apartment and condominium living situations.<sup>73</sup>

In summary, there are no Connecticut data to assess compliance with regulations related to ETS or exposures to it.



# CHAPTER 5

Access to Care





## CHAPTER 5

### ACCESS TO CARE

Several factors affect access to and use of health care in Connecticut, including:

- Health insurance status
- “Safety net” programs
- Availability of health care facilities and professionals
- Language compatibility between health care providers and residents
- Adequacy of prenatal care
- Access to community water fluoridation



## HEALTH INSURANCE STATUS

Persons with no health insurance are less likely to have a regular source of health care or to receive preventive care, and experience worse health outcomes as compared to those with health insurance.<sup>74</sup> Having a regular health care provider is an important indicator as it increases use of ambulatory visits, prompt care when sick, and receipt of preventive health care.<sup>75</sup> The *Healthy People 2010* initiative aims for a goal of no adults under age 65 without health insurance, and 96 percent with a source of ongoing health care.<sup>76</sup>

The most current statistics on health insurance coverage are generated by the Current Population Survey of the U.S. Census Bureau. This survey documents a small but statistically significant annual increase in the percentage of U.S. residents who lack health insurance — defined as any type of insurance, public or private — 14.6 percent uninsured in 2001, 15.2 in 2002, 15.6 percent in 2003 and 2004, and 15.9 percent in 2005.

Connecticut remained essentially constant at 10.4 percent and 10.5 percent for the time periods 2001–2002 and 2002–2003, but increased in 2003–2004 to 11.0 percent uninsured. For the three-year average 2003–2005 Connecticut as a state ranks 11th in coverage, behind all other New England states. The uninsured rate nationally, in 2005, was 11.3 percent for white-alone non-Hispanic; 19.6 percent for black-alone non-Hispanic; 17.9 percent for Asian; and 32.7 percent for Hispanic (any race) residents.<sup>77</sup>

According to self-reports in the Behavioral Risk Factor Surveillance System (BRFSS) surveys, conducted between 1999 and 2003, almost 12 percent of Connecticut residents between the ages of 18 and 64 claimed that they did not have health insurance. Eighty-six percent of Connecticut residents age 18 and over reported having a regular source of medical care — a “medical home” — and 76 percent received a checkup in the past year during the time period 1999–2003. There were marked differences in access to care by HRG. Residents in the Urban and Manufacturing centers were less likely to have health insurance and less likely to have a regular source of care. However, they were not less likely to have had a checkup in the past year as compared with residents in other HRGs. Among the Urban Centers, a higher proportion of Hartford and Bridgeport residents reported having no health insurance than residents of New Haven, as shown in Table 64.

Hispanic and black adults were more likely than white adults to have no health insurance and less likely to have a regular source of medical care than white adults, as shown in Table 65. But the data indicate, paradoxically, that black adults were more likely to have had a checkup in the past year, as shown in Table 66.<sup>1</sup> These latter disparities were present within all HRGs. While Asians were no less likely than whites to have health insurance, they were less likely to report a regular source of medical care.

**TABLE 64: PERCENTAGE WITH NO HEALTH INSURANCE**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	27.0	26.0	17.6	28.9	33.6	
<b>Hartford</b>	23.3	21.8	13.2	20.9	28.5	
<b>New Haven</b>	14.7	13.5	8.5	11.5	25.7	
<b>HRG 1 (3)-UC</b>	21.4	20.2	12.0	20.1	29.9	
<b>HRG 2 (10)-MC</b>	16.8	16.4	10.7	22.8	33.1	11.3
<b>HRG 3 (15)-DS</b>	10.7	10.8	10.1	14.2	18.4	
<b>HRG 4 (27)-WS</b>	6.0	6.6	5.3		22.8	
<b>HRG 5 (39)-MT</b>	10.0	10.3	9.5	9.0	26.5	12.0
<b>HRG 6 (75)-RT</b>	8.2	9.0	8.2		22.6	
<b>Connecticut</b>	11.7	12.0	9.0	18.4	29.1	11.5

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 65: PERCENTAGE WITH A REGULAR SOURCE OF MEDICAL CARE**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	73.0	74.3	80.4	75.5	71.9	
<b>Hartford</b>	73.5	75.4	81.7	79.8	68.2	
<b>New Haven</b>	71.3	74.6	80.6	76.4	58.5	
<b>HRG 1 (3)-UC</b>	72.5	74.7	81.0	77.9	66.8	
<b>HRG 2 (10)-MC</b>	80.7	80.9	85.4	75.4	67.2	82.6
<b>HRG 3 (15)-DS</b>	87.8	87.3	87.9	88.8	80.7	
<b>HRG 4 (27)-WS</b>	89.4	88.1	89.4			
<b>HRG 5 (39)-MT</b>	87.8	86.6	87.3	90.2	75.7	79.3
<b>HRG 6 (75)-RT</b>	89.7	88.8	89.1			
<b>Connecticut</b>	85.6	84.8	87.5	80.7	69.7	79.6

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 66: PERCENTAGE WHO HAD A CHECKUP IN PAST YEAR**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	77.5	78.7	75.5	83.8	80.6	
<b>Hartford</b>	75.7	77.1	71.7	84.8	75.5	
<b>New Haven</b>	79.0	79.3	75.3	83.7		
<b>HRG 1 (3)-UC</b>	77.4	78.2	74.1	83.2	79.0	
<b>HRG 2 (10)-MC</b>	77.4	77.5	74.9	86.5	82.8	78.0
<b>HRG 3 (15)-DS</b>	76.4	75.6	74.7	80.1	77.8	
<b>HRG 4 (27)-WS</b>	75.0	74.0	73.3			
<b>HRG 5 (39)-MT</b>	76.1	75.8	76.1	88.0	78.3	74.2
<b>HRG 6 (75)-RT</b>	73.9	73.1	73.1			
<b>Connecticut</b>	76.1	75.6	74.4	84.3	79.2	76.8

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

## DENTAL VISITS

Oral health is an essential component of overall health status. Poor oral health and untreated oral diseases, such as dental caries and periodontal diseases, can negatively affect quality of life and lead to more serious infections. Regular dental care is an important component of oral health. Many persons do not receive preventive dental services because of lack of insurance or fear of dental visits.<sup>78</sup>

Overall, 79 percent of Connecticut adults reported visiting a dentist in the past year. The Wealthy Suburbs and Rural Towns had the highest percentages of residents reporting a recent dental visit, and the Urban and Manufacturing centers had the lowest percentages, as seen in Table 67.

In all HRGs where there were sufficient sample sizes to make a determination, Hispanic and black adults were less likely than white adults to have had a recent dental visit.

**TABLE 67: PERCENTAGE WITH DENTAL VISIT IN PAST YEAR**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	63.3	64.7	65.3			
<b>Hartford</b>	71.2	70.8	82.5	70.0	62.6	
<b>New Haven</b>	79.5	78.0	84.8	70.0		
<b>HRG 1 (3)-UC</b>	71.8	71.8	78.6	68.3	62.6	
<b>HRG 2 (10)-MC</b>	73.8	73.8	77.6	61.7	66.5	74.3
<b>HRG 3 (15)-DS</b>	77.3	77.3	78.7	61.8		
<b>HRG 4 (27)-WS</b>	85.7	85.8	87.3			
<b>HRG 5 (39)-MT</b>	80.7	80.5	81.8		71.8	
<b>HRG 6 (75)-RT</b>	83.7	83.6	84.0			
<b>Connecticut</b>	79.2	79.2	81.7	66.5	65.8	72.2

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

## SAFETY NET: NEEDY INDIVIDUALS AND FAMILIES IN CONNECTICUT

### Connecticut Department of Social Services

The Connecticut Department of Social Services (DSS) provides assistance to needy families and individuals to facilitate their access to needed medical care and help maximize their overall health. DSS tracks utilization of five major assistance programs by monthly caseload units and recipients. These DSS-tracked assistance programs are represented in Table 68 and Table 69. Appendix E includes a brief description of each of the five programs.

**TABLE 68: AVERAGE MONTHLY CASES AND PERSONS ON FOOD STAMPS, TEMPORARY FAMILY ASSISTANCE AND STATE SUPPLEMENT (STATE FISCAL YEAR 2005)**

AREA	Food Stamps		Temporary Family Assistance - Totals		State Supplement			
	Cases	Persons	Cases	Persons	Aged	Blind	Disabled	Total
<b>HRG 1 (3)-UC</b>	39,788	76,960	9,048	19,977	1,347	14	2,967	4,330
<b>Bridgeport</b>	9,837	19,630	2,274	4,787	383	4	787	1,174
<b>Hartford</b>	17,562	33,591	3,773	8,544	558	5	1,295	1,859
<b>New Haven</b>	12,389	23,739	3,001	6,646	406	5	885	1,297
<b>HRG 2 (10)-MC</b>	29,642	58,622	6,719	14,869	1,383	10	2,986	4,388
<b>HRG 3 (15)-DS</b>	14,429	26,978	3,351	7,230	1,005	16	1,928	2,959
<b>HRG 4 (27)-WS</b>	1,576	2,444	273	557	192	1	435	637
<b>HRG 5 (39)-MT</b>	9,947	17,418	1,916	4,090	598	12	1,806	2,436
<b>HRG 6 (75)-RT</b>	3,699	6,085	630	1,317	440	26	1,176	1,666
<b>Unclassified</b>			2					
<b>Connecticut</b>	99,160	188,591	22,073	48,174	5,028	93	11,370	16,492

Source: DSS, Central Office, Information Technology Services, Electronic file. E-mail communication from S. Colangelo. Sept. 25, 2006.

Note: The following program categories are not shown in the DSS tables: Refugee, Refugee Medical, State Funded Medical, and Connecticut AIDS Drug Assistance Program (CADAP). Statewide totals may not equal sums due to rounding. Due to rounding some towns may not display a case but will display recipients. This is due to most cases having more than one recipient and therefore when averaged, the recipient count will be .5 or higher, and be counted as 1. State Supplement is a state-financed cash assistance program to supplement the income of the aged, blind and disabled that have another source of income such as disability benefits or Supplemental Security Income (SSI).

**TABLE 69: CASES AND PERSONS ON MEDICAID AND STATE-ADMINISTERED GENERAL ASSISTANCE, 2005**

AREA	Total Medicaid (TFA & S. Supp & Medicaid Only (Excluding QMB/SLMB*) (December 2005 only)		State-Administered General Assistance (Average Monthly, SFY 2005)			
			Cash		Medical	
	Cases	Persons	Cases	Persons	Cases	Persons
<b>HRG 1 (3)-UC</b>	64,097	115,564	1,440	1,441	12,223	12,227
<b>Bridgeport</b>	20,007	35,986	365	365	2,865	2,866
<b>Hartford</b>	24,387	44,838	656	657	5,363	5,366
<b>New Haven</b>	19,703	34,740	419	419	3,995	3,995
<b>HRG 2 (10)-MC</b>	65,930	116,352	1,135	1,135	8,152	8,155
<b>HRG 3 (15)-DS</b>	38,536	65,733	631	637	4,035	4,044
<b>HRG 4 (27)-WS</b>	9,213	13,885	75	75	638	638
<b>HRG 5 (39)-MT</b>	34,644	57,617	525	525	3,213	3,214
<b>HRG 6 (75)-RT</b>	17,773	29,256	194	194	1,486	1,486
<b>Unclassified</b>	415	418	1	1	11	11
<b>Connecticut</b>	230,608	398,825	4,069	4,076	29,825	29,840

Source: DSS Central Office, Information Technology Services, Electronic file. E-mail communication from S. Colangelo. Oct. 1, 2006.

\* Total Medicaid counts exclude Qualified Medicare Beneficiary (QMB) and Specified Low Income Medicare Beneficiary (SLMB) cases due to program overlap.

The following program categories are not shown in the DSS tables: Refugee, Refugee Medical, State Funded Medical, and CADAP. State totals may not equal sums of HRGs due to rounding.

## PROGRAMS FOR CHILDREN AND ADOLESCENTS

The state departments of Social Services (DSS) and Children and Families (DCF) provide health-promoting services to needy Connecticut youth, including:

- Health care services
- Child protective services (including telephone hotline) to process reports of child abuse and neglect
- Youth emergency assessment and respite services (YEARS), including emergency youth shelters
- Substance abuse and mental health services
- Youth safe homes
- Foster and adoption services
- Health care and residential treatment facilities

Below are brief descriptions of selected services and data on availability and utilization.

### Healthcare for Uninsured Kids and Youth (HUSKY)

The HUSKY program provides health care services for Connecticut's younger residents via coverage for preventive care, outpatient and in-hospital care, prescription drug coverage, and mental health/substance abuse services. The HUSKY A program, for children in households at or below 100 percent of the federal poverty level (FPL), had an enrollment of 304,633 during fiscal year 2004. The HUSKY-B program, for youth under age 19 in certain households with higher incomes enrolled 14,533 youth in fiscal 2004.<sup>79</sup>

### Youth Emergency Assessment and Respite Services (YEARS)

The YEARS program makes available 101 beds in eight affiliated shelters to 11- to 17-year-old children who are in crisis due to abuse, neglect or abandonment. The eight YEARS-affiliated youth shelters are listed by HRG in Appendix G. Other youth emergency shelters operate within the state of Connecticut but are not officially affiliated with the YEARS program.

**TABLE 70: CHILDREN SERVED BY YEARS PROGRAM: SNAPSHOT, JULY-SEPTEMBER 2004**

AGE	PERCENTAGE	GENDER	PERCENTAGE	RACE/ETHNICITY	PERCENTAGE
< 5	2.2	Male	44.2	African American/Black	35.0
5-7	1.8	Female	55.8	Caucasian/White	31.4
8-12	11.9			Puerto Rican	25.2
13-17	84.1			Biracial	2.2
				Central American	1.8
				Other Spanish Speaking	1.8
				West Indies/Islander	1.3
				Other	0.9
				South American	0.4

Source: DCF, YEARS: Statistical Report, Performance-Based Contracting state fiscal year 2005 (Date Range: July 1, 2004 to Sept. 30, 2004).

During an assessment period between July and September 2004, the YEARS program served 226 youth. Of these, 57.6 percent stayed in the YEARS shelter for 45 days or less, while 42.4 percent stayed longer than 45 days. The demographic data in Table 70 reflects the 226 children served by the YEARS program in the 2004 assessment period.<sup>80</sup>

### Other Youth Placement Services

DCF offers other treatment and placement services to needy children and adolescents besides the shelters affiliated with the YEARS program. DCF's Child Protective Services Division investigates reports of child maltreatment and arranges necessary follow-up. This can include in-home services to children and families or placement of children in temporary or permanent locations outside the home.

Child Protective Services' 2004 caseload included 18,227 cases. A needs assessment was conducted based upon a random, representative sample of 375 cases. DCF found an over-representation of black and Hispanic families in the Child Protective Services caseload. Black children also were removed from their homes as a result of Child Protective Services investigation at a higher rate than children from other race and ethnicity groups.

**TABLE 71: SAMPLE CASELOAD FROM CONNECTICUT CHILD PROTECTIVE SERVICES BY RACE/ETHNICITY AND SERVICE PROVIDED, 2004**

RACE/ETHNICITY	In-Home Services	Removal From Home
WHITE	26%	22%
HISPANIC	22%	24%
BLACK/AFRICAN AMERICAN	26%	34.5%
UNABLE TO DETERMINE/UNKNOWN	22%	14%
MULTI	3%	5%
OTHER (ASIAN, AMERICAN INDIAN, ALASKAN NATIVE, NATIVE HAWAIIAN, OTHER PACIFIC ISLANDER)	<1 %	.5%

Source: DCF Needs Assessment, 2004. Oct. 24, 2004. See reference note.

Source: DCF Overview of Programs and Services: Child Welfare Services. See reference note.

Cases are children under 18 or under 21 and clients of DCF.

### Preventive Oral Health Care for Children in HUSKY A

Oral health data are available from DSS for children ages 3 to 19 who were continuously enrolled during fiscal years 2000-2002 and during calendar years 2003-2005. In 2003, 140,728 children were continuously enrolled in HUSKY A; in 2004 there were 146,598, and in 2005 there were 146,046. There were virtually no changes in either oral preventive care (40 percent for 2003 and 2004, and 41 percent for 2005) or treatment (21 percent in 2003 and 2004, and 22 percent in 2005).

The preventive oral health care rate was highest for Hispanic children ages 3 to 19 (43 percent in 2004 and 45 percent in 2005), next for white (39 percent in both years) and black (38 percent in 2004 and 39 percent in 2005) children and youth. The percentage was highest in Hartford (47 percent in 2004, 48 percent in 2005) followed by Bridgeport (40 percent in both years). There was a statistically significant increase in New Haven (35 percent in 2004 and 43 percent in 2005).<sup>81</sup>

## ELDERLY POPULATION

### Connecticut Pharmaceutical Assistance Contract to the Elderly and Disabled (ConnPACE)

DSS provides multiple health-promoting programs to needy elders in the state. ConnPACE helps elderly and disabled residents finance the cost of prescription medications. Monthly enrollment in ConnPACE averaged 51,000 in fiscal year 2004, 10.8 percent of the state population over age 65 (470,183 according to U.S. Census 2000). The DSS's Older Americans Act Program served 57,830 elders and their caregivers in fiscal year 2004 via home-delivered and group-setting meals, transportation, homemaker services, and adult day care.<sup>82</sup>

### Nursing Home Care

Connecticut has 246 Medicare/Medicaid-certified nursing homes, accounting for 29,927 beds. These are distributed as in Table 72.

**TABLE 72: MEDICARE/MEDICAID-CERTIFIED LICENSED NURSING HOMES, 2005**

AREA	Number of Licensed Nursing Home Facilities	Number of Available Beds	Beds Per 1,000 Residents Age 80 and Over
<b>HRG 1 (3)-UC</b>	18	2,793	231.8
<b>Bridgeport</b>	5	910	
<b>Hartford</b>	5	832	
<b>New Haven</b>	8	1,051	
<b>HRG 2 (10)-MC</b>	50	5,939	220.6
<b>HRG 3 (15)-DS</b>	48	6,279	214.6
<b>HRG 4 (27)-WS</b>	30	3,861	207.4
<b>HRG 5 (39)-MT</b>	64	7,690	250.7
<b>HRG 6 (75)-RT</b>	36	3,365	168.2
<b>Connecticut</b>	246	29,927	217.6

Source: Centers for Medicare and Medicaid Services (CMS): Nursing Home Compare. Available at: <http://www.medicare.gov/NHCompare>.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

The number and rate of nursing home beds is relatively large in the Mill Towns but much smaller in the Rural Towns. It seems likely that the Mill Towns, which are situated in relatively rural areas, provide a “catchment” to which elders from surrounding Rural Towns move for nursing home care.

## INDIVIDUAL HEALTH CARE PROVIDERS

DPH tracks the status of service providers statewide via its Office of Licensure and Renewal. Table 73 shows the health-related service providers licensed at the end of calendar year 2004.

**TABLE 73: CONNECTICUT LICENSED HEALTH CARE PROVIDERS, YEAR END, 2004**

PROVIDER	COUNT
Physician/Surgeon	14,721
Physician Assistant	1,233
Licensed Practical Nurse	11,526
Advanced Practice Registered Nurse	2,580
Dentist	3,107
Dental Hygienist	3,230
Dietitian/Nutritionist	548
Licensed Alcohol and Drug Counselor	585
Licensed Clinical Social Worker	4,408
Licensed Midwife	1
Licensed Nurse Midwife	200

Source: DPH, Licensure and Renewal. Licensure Statistics: Numbers of Currently Licensed Practitioners, Calendar Year-End, 2004.

Available at: [http://www.dph.state.ct.us/Licensure/apps/apps/2004\\_Year\\_End\\_ActiveLicenses.pdf](http://www.dph.state.ct.us/Licensure/apps/apps/2004_Year_End_ActiveLicenses.pdf).

**TABLE 74: CONNECTICUT LICENSED DOCTORS AND DENTISTS, AUGUST, 2005**

Doctors and Dentists: Number and Rate per 1000*					
AREA	Total Population	Doctors	Doctors per 1000	Dentists	Dentists per 1000
<b>HRG 1 (3)-UC</b>	384,733	1,842	4.8	177	0.5
<b>Bridgeport</b>	139,529	225	1.6	56	0.4
<b>Hartford</b>	121,578	587	4.8	46	0.4
<b>New Haven</b>	123,626	1,030	8.3	75	0.6
<b>HRG 2 (10)-MC</b>	662,398	1,700	2.6	483	0.7
<b>HRG 3 (15)-DS</b>	587,509	2,074	3.5	518	0.9
<b>HRG 4 (27)-WS</b>	487,620	2,831	5.8	596	1.2
<b>HRG 5 (39)-MT</b>	698,458	1,242	1.8	486	0.7
<b>HRG 6 (75)-RT</b>	584,847	1,713	2.9	484	0.8
<b>Connecticut</b>	3,405,565	11,402	3.3	2,744	0.8

Source: DPH, Licensure File, generated Aug. 16, 2005, and U.S. Census 2000, Table P1.

\*Includes addresses as given in licensure file. No claims are made as to whether these are home or business addresses. All out-of-state addressees are deleted from the file, although some may practice in Connecticut. Some residents may go out of state for care.

Doctors and dentists are not evenly distributed among the different types of communities, as shown in Table 74. While it is unclear whether licensees use their home or office addresses — there is likely a mixture of practice in this regard — it appears that the Urban Centers and the Wealthy Suburbs are relatively advantaged. Yet, the high rate for the Urban Centers is due to Hartford and, especially, New Haven, home of a large medical teaching hospital. Bridgeport, on the other hand, is very much disadvantaged, with only 1.6 physicians per 1,000 residents. The Mill Towns also have a low rate: 1.8 doctors per 1,000 residents.

With the exception of the Wealthy Suburbs, the distribution of dental practitioners is much more even across the HRGs, with a rate of 1.2 dentists per 1,000 residents. The Urban Centers have only 0.5 dentists per 1,000 residents.

### LINGUISTIC ISOLATION

Language mismatches between patients and health care professionals can impede effective care. Language is indexed in the U.S. Census Bureau by household “linguistic isolation” — defined as households in which all members 14 and over have at least some difficulty with English. Linguistic isolation is shown in Table 23. The figure for Spanish-language household linguistic isolation is 7.8 percent of all households in the Urban Centers and 4.2 percent in the Manufacturing Centers. For all other HRGs, Spanish-language linguistic isolation is negligible. In the Urban Centers 3.3 percent of “Other Indo-European language” households are linguistically isolated, while in the Manufacturing Centers 3.4 percent of “Other Indo-European language” households experience linguistic isolation. In general, Asian-language linguistic isolation is negligible. There is no readily available means to track the availability of medical professionals who share language with those persons living in linguistically isolated households, since medical licensing bodies do not track language proficiency.

### PRENATAL CARE

Prenatal care is another indicator of access to the “preventive” health care system. While the causal connections are complex, it appears that adequate prenatal care may assist in improving the health status and future reproductive health of mothers. There appears to be significant variation in access to and the timing of this care, as indicated in Table 75.

**TABLE 75: PERCENTAGE OF BIRTHS WITH INADEQUATE, LATE OR NO PRENATAL CARE, 1999-2003**

AREA	Total Population	White, Not Hispanic	Black, Not Hispanic	Hispanic	Puerto Rican	Hispanic, Non Puerto Rican	Asian
<b>HRG 1 (3)-UC</b>	37.0	29.0	34.1	43.5	39.8	54.4	
<b>HRG 2 (10)-MC</b>	31.1	21.4	39.0	44.5	43.7	45.5	
<b>HRG 3 (15)-DS</b>	22.5	19.5	29.1	32.6	32.3	32.9	
<b>HRG 4 (27)-WS</b>	11.8	11.4	22.7	24.9			
<b>HRG 5 (39)-MT</b>	19.9	18.6	29.8	33.7	24.6	31.9	
<b>HRG 6 (75)-RT</b>	17.5	16.8	31.8	25.4			
<b>Connecticut</b>	24.0	18.0	34.3	41.4	39.6	44.2	

Source: DPH, Vital Statistics.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

In general, non-Puerto Rican Hispanics have the highest rates of inadequate, late or no care. It may be that these are immigrants who are not well attached to the health care system, or they are very recent immigrants without early prenatal care in their home countries. Next are Puerto Rican Hispanics, followed by black non-Hispanics and white non-Hispanics. No data were available for Asians.

### **ACCESS TO COMMUNITY WATER FLUORIDATION**

DPH has promoted and documented the benefits of water fluoridation as reducing tooth decay by 20 percent to 40 percent.<sup>83</sup>

Connecticut's Public Water Supplies (PWS) provide optimally fluoridated drinking water to an estimated 70 percent of the total population or 2.39 million state residents. The state requires those serving at least 20,000 people to fluoridate their water to a level of 0.8 mg/1 and 1.2 mg/1, with a level of 1.0 mg/1 considered to be most beneficial to oral health. Twenty-five PWSs serving a total of 2.18 million residents are required to fluoridate their water. Eight PWSs serving 90,364 voluntarily fluoridate their water to benefit their customers. Thirty-five PWSs serving 110,715 residents purchase fluoridated drinking water from other utilities. Thirty PWSs provide naturally fluoridated water to approximately 5,300 residents.<sup>84</sup>

The extent of community water fluoridation in Connecticut is mapped in Appendix H.

# CHAPTER 6

Screening and Prevention





## CHAPTER 6

# SCREENING AND PREVENTION

Screening and prevention are closely related to health care access. They are critical aspects of a high quality health system, since they may prevent disease or alter the course of disease and prevent early mortality.

### SCREENING TESTS

#### **Breast Cancer Screening**

Breast cancer is the most common form of cancer among women, and the second leading cause of cancer-related death among women. Regular screening increases the likelihood of early detection, treatment initiation and positive outcome. The American Cancer Society recommends annual mammograms for women 40 and over.<sup>85</sup> The federal *Healthy People 2010* initiative aims for at least 70 percent of women age 40 and older to have received a mammogram within the preceding two years.<sup>86</sup>



**TABLE 76: PERCENTAGE WITH A MAMMOGRAM IN PAST TWO YEARS, WOMEN 40 AND OVER**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	81.7	82.1	83.0	77.0	81.9	
<b>Bridgeport</b>	82.5	83.1	85.4			
<b>Hartford</b>	82.6	83.2	82.6			
<b>New Haven</b>	79.9	79.7	81.7			
<b>HRG 2 (10)-MC</b>	80.6	81.9	81.3	80.8		
<b>HRG 3 (15)-DS</b>	81.2	82.1	81.9			
<b>HRG 4 (27)-WS</b>	84.2	84.9	85.2			
<b>HRG 5 (39)-MT</b>	80.9	80.8	81.5			
<b>HRG 6 (75)-RT</b>	84.4	84.5	84.1			
<b>Connecticut</b>	82.3	82.8	83.0	78.5	81.4	
<b>United States</b>	71.1	71.1	74.7	76.2	72.3	

Source: Behavioral Risk Factor Surveillance System (BRFSS) Survey Data, 1999-2003; Connecticut Department of Public Health (DPH); Centers for Disease Control and Prevention (CDC) BRFSS web site at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Nearly 83 percent of Connecticut women age 40 and older received a mammogram within the past two years, a higher rate than the U.S. population overall and the *Healthy People 2010* objectives. Recent mammogram testing was fairly consistent across HRGs and the large Connecticut cities, as shown in Table 76.

Although the percentage of black women in Connecticut who received a recent mammogram appears lower than that of white women, the sample size was too small to detect statistically significant differences or to examine race/ethnicity differences in mammogram tests among the HRGs or the Urban Centers' cities.

### Cervical Cancer Screening

The American Cancer Society estimates that more than 10,000 women in the United States will be diagnosed with cervical cancer annually. Cervical cancer is curable if detected early. The Papanicolaou (Pap) smear test is a simple, routine screening that can detect early-stage disease and precancerous cells. It can be performed in a doctor's office as part of a routine gynecological exam. The American Cancer Society guidelines prescribe regular Pap smear tests for adult women.<sup>87</sup> The *Healthy People 2010* target is for at least 90 percent of adult women to have received a Pap smear within the past three years.<sup>88</sup>

Almost 88 percent of women in Connecticut received a Pap smear within the past three years, as shown in Table 77. The percentage varied somewhat by HRG, highest in the Wealthy Suburbs and the Rural Towns, lowest in the Urban Centers. Of the three Connecticut cities examined, the Pap smear test rate was lowest in Hartford and highest in New Haven.

**TABLE 77: PERCENTAGE OF WOMEN WHO HAVE HAD A PAP SMEAR IN PAST THREE YEARS**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	85.5	85.3	87.9			
<b>Hartford</b>	77.0	79.6	84.4	81.1	71.3	
<b>New Haven</b>	89.0	89.9	90.8	91.5		
<b>HRG 1 (3)-UC</b>	83.8	84.7	88.1	86.6	77.6	
<b>HRG 2 (10)-MC</b>	86.5	85.6	86.9	83.8	88.1	76.6
<b>HRG 3 (15)-DS</b>	87.2	87.2	88.6			
<b>HRG 4 (27)-WS</b>	90.6	88.9	88.3			
<b>HRG 5 (39)-MT</b>	86.5	85.7	86.7		73.4	
<b>HRG 6 (75)-RT</b>	90.6	89.0	89.5			
<b>Connecticut</b>	87.8	87.3	88.5	85.6	80.1	76.9
<b>United States</b>	85.9	85.9	86.3	89.8	85.2	

Source: DPH BRFS Survey Data, 1999-2003; CDC BRFS web site. Available at: [www.cdc.gov/brfs](http://www.cdc.gov/brfs). Accessed Sept. 8, 2005. Includes all women 18 and over, excluding women who have had a hysterectomy.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Asian and Hispanic women are least likely to have had a recent Pap smear test. Hartford has a particularly low rate for Hispanic women, even on an age-adjusted basis, and has the lowest rate for black women as well.

### Sigmoidoscopy/Colonoscopy/Blood Stool Tests

The sigmoidoscopy and colonoscopy (Table 78) and blood stool (fecal occult blood) tests (Table 79) are recommended for detecting colorectal cancer beginning at age 50 for both men and women of average risk.

**TABLE 78: SIGMOIDOSCOPY/COLONOSCOPY TEST AGE 50 AND OVER**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	43.2	43.0	42.2	44.0		
<b>Bridgeport</b>	40.3	40.3	30.7			
<b>Hartford</b>	38.9	39.5	44.3			
<b>New Haven</b>	49.7	50.1	48.5			
<b>HRG 2 (10)-MC</b>	43.0	42.7	46.2			
<b>HRG 3 (15)-DS</b>	44.0	43.9	43.0			
<b>HRG 4 (27)-WS</b>	51.3	51.3	52.5			
<b>HRG 5 (39)-MT</b>	42.3	42.4	42.7			
<b>HRG 6 (75)-RT</b>	45.1	45.3	46.5			
<b>Connecticut</b>	44.9	45.6	45.9	46.1	41.1	
<b>United States</b>	35.7	35.7	37.0	36.4	29.9	

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Connecticut has a significantly higher sigmoidoscopy/colonoscopy rate (45.6 percent) than the United States (35.7 percent). There appears to be little difference in the rates for white, non-Hispanics, and the overall rate suggesting little disparity on this measure. Similarly, for blood stool tests (Table 79) there are virtually no differences between the U.S. rates, and black and white rates. The rate for Hispanics appears to be slightly lower than for blacks or whites.

**TABLE 79: BLOOD STOOL TEST IN PAST YEAR, AGE 50 AND OVER**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	25.7	25.6	24.2	27.3		
<b>Bridgeport</b>	23.0	23.6	19.0			
<b>Hartford</b>	19.2	20.5	18.1			
<b>New Haven</b>	33.9	34.3	32.2			
<b>HRG 2 (10)-MC</b>	26.4	26.2	26.8			
<b>HRG 3 (15)-DS</b>	26.2	26.1	26.3			
<b>HRG 4 (27)-WS</b>	32.5	32.5	33.8			
<b>HRG 5 (39)-MT</b>	28.7	28.8	29.1			
<b>HRG 6 (75)-RT</b>	28.3	28.4	29.3			
<b>Connecticut</b>	28.2	28.5	28.9	26.6	23.8	
<b>United States</b>	29.2	28.5	30.3	28.0	21.7	

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

## Prostate Screening

An annual prostate-specific antigen (PSA) blood test to detect possible prostate cancer is recommended for men beginning at age 50 and with at least a 10-year life expectancy. Men at heightened risk — black men and men with a family history of prostate cancer — are advised to start testing at 45 or even 40 years old.<sup>89</sup>

**TABLE 80: PSA TEST IN PAST YEAR, MEN AGE 50 AND OVER**

AREA	All Race and Ethnicity, Crude Rate	All Race and Ethnicity, Age-Adjusted Rate	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	57.4	58.5	59.7			
<b>HRG 2 (10)-MC</b>	55.3	57.9	60.6			
<b>HRG 3 (15)-DS</b>	57.5	58.8	62.8			
<b>HRG 4 (27)-WS</b>	58.3	59.7	59.9			
<b>HRG 5 (39)-MT</b>	56.2	57.6	57.8			
<b>HRG 6 (75)-RT</b>	58.2	60.2	60.6			
<b>Connecticut</b>	57.2	58.9	60.2			
<b>United States</b>	56.3	56.3				

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

As shown in Table 80, close to 60 percent of Connecticut men age 50 and over report that they have had a PSA test in the past year.

## HIV Tests

The number of people living with human immunodeficiency virus (HIV) infection in the United States continues to increase. Early detection is essential to reduce morbidity and mortality associated with HIV/AIDS. Some experts advocate routine HIV testing, although the Centers for Disease Control and Prevention (CDC) recommends testing based on risk assessment.<sup>90</sup>

HIV testing could be thought of as an indicator of physician practice in ordering tests for patients that they consider at high risk. It also could serve as protective behavior on the part of individuals who want the tests to protect themselves or others.

Overall, 45 percent of Connecticut adults age 18 to 64 reported ever being tested for HIV; 15 percent reported being tested in the past year. The Urban Centers had the highest percentage of reported HIV testing. There were no differences in HIV testing by city.

Black and Hispanic adults were more likely than white or Asian adults to have ever had an HIV test and to have had a test within the past year. There were higher HIV testing rates among blacks compared to whites in all HRGs with sufficient sample size to produce a reliable estimate. HIV testing among Hispanics as compared to whites was higher only in the Urban Centers and Diverse Suburbs. Asian adults were less likely than white adults to report ever being tested.

**TABLE 81: EVER HIV-TESTED, AGES 18-64**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	55.3	53.7	46.4	64.1	53.4	
<b>Hartford</b>	57.0	55.8	42.9	65.0	58.5	
<b>New Haven</b>	52.5	52.1	50.6	64.0	53.4	
<b>HRG 1 (3)-UC</b>	54.9	53.9	47.8	63.9	55.2	
<b>HRG 2 (10)-MC</b>	48.5	47.4	44.9	60.5	48.9	34.9
<b>HRG 3 (15)-DS</b>	45.8	46.2	45.2	57.1	57.4	
<b>HRG 4 (27)-WS</b>	44.1	44.0	44.1		49.0	
<b>HRG 5 (39)-MT</b>	40.4	40.6	40.6	61.3	35.8	32.5
<b>HRG 6 (75)-RT</b>	41.9	42.5	41.7		57.9	
<b>Connecticut</b>	45.3	45.4	43.5	61.3	51.6	33.6
<b>United States</b>	45.4	45.4				

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 82: HIV TEST IN PAST YEAR, AGES 18-64**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	23.5	22.0	14.9	29.2	22.8	
<b>Hartford</b>	24.4	23.7	13.7	22.7	33.1	
<b>New Haven</b>	21.7	20.5	17.2	31.9	25.0	
<b>HRG 1 (3)-UC</b>	23.1	22.0	15.8	27.1	27.2	
<b>HRG 2 (10)-MC</b>	17.5	16.8	14.0	23.5	21.7	11.8
<b>HRG 3 (15)-DS</b>	15.4	15.6	14.3	30.2	18.6	
<b>HRG 4 (27)-WS</b>	11.9	12.4	12.6		11.3	
<b>HRG 5 (39)-MT</b>	12.2	12.5	11.9	27.2	14.0	11.9
<b>HRG 6 (75)-RT</b>	10.7	11.4	10.9		15.9	
<b>Connecticut</b>	14.6	14.8	13.0	26.4	22.1	12.1
<b>United States</b>	12.4	12.4				

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available online at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

## Cholesterol Tests

Cholesterol checks are particularly important in preventing cardiovascular disease. A finding of high cholesterol may lead to medication and recommendations for changes in diet and physical activity levels. The Behavioral Risk Factor Surveillance System (BRFSS) survey asks whether the respondent has received a cholesterol check in the past five years. Results are shown in Table 83.

**TABLE 83: CHOLESTEROL CHECK IN PAST FIVE YEARS**

AREA	All Race and Ethnicity, Crude Percentage	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>Bridgeport</b>	75.6	76.6	77.8	79.5	76.2	
<b>Hartford</b>	68.8	70.9	73.5	75.1	64.7	
<b>New Haven</b>	68.7	72.7	79.1			
<b>HRG 1 (3)-UC</b>	71.0	73.4	76.7	75.3	67.2	
<b>HRG 2 (10)-MC</b>	74.6	75.1	79.3	66.6	65.1	60.1
<b>HRG 3 (15)-DS</b>	77.2	75.8	77.1	73.7	71.2	
<b>HRG 4 (27)-WS</b>	81.7	78.6	79.1			
<b>HRG 5 (39)-MT</b>	78.2	76.5	76.7	81.7	68.6	79.6
<b>HRG 6 (75)-RT</b>	79.1	77.3	77.5			
<b>Connecticut</b>	77.4	76.3	77.8	73.7	67.5	69.8
<b>United States</b>	71.5	71.5				

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

These results indicate a lower level of cholesterol checks for black, Hispanic and Asian adults statewide than for white adults, but there are no statistically significant differences among HRGs.

## CLINICAL PREVENTIVE MEASURES

### Flu Vaccine

More than 36,000 people nationally die from influenza each year. Elderly adults, young children and people with certain health conditions are at high risk for complications. The CDC recommends that all adults 50 and older receive a yearly flu vaccine. Adults over age 65 are considered one of the groups at highest risk and are given priority status for influenza vaccine administration.<sup>91</sup> The *Healthy People 2010* initiative aims for 90 percent of adults age 65 and older to have received a flu vaccine within the past year.<sup>92</sup>

Overall, 70 percent of Connecticut adults age 65 and older reported receiving a flu shot in the past year as did 40 percent of adults aged 50–64. Receipt of flu shots in both age groups varied somewhat by HRG, though sample sizes were too small to detect significant differences. Sample sizes were also insufficient to detect city differences in flu shot receipt.

Hispanic adults in the 50–64 year age group were more likely to receive a flu shot than black and white adults. Among adults age 65 and older, blacks are significantly less likely than whites to have received a flu shot.

**TABLE 84: FLU SHOT IN PAST YEAR AGES 50-64**

AREA	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	39.7	39.6	32.3		
<b>Bridgeport</b>	35.5				
<b>Hartford</b>	46.0	49.2			
<b>New Haven</b>	38.7	36.9			
<b>HRG 2 (10)-MC</b>	34.9	32.1			
<b>HRG 3 (15)-DS</b>	38.1	37.5			
<b>HRG 4 (27)-WS</b>	43.0	41.9			
<b>HRG 5 (39)-MT</b>	43.3	43.1			
<b>HRG 6 (75)-RT</b>	38.9	39.1			
<b>Connecticut</b>	40.0	39.5	34.2	51.4	

Source: DPH BRFSS Survey Data, 1999-2003.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

**TABLE 85: FLU SHOT IN PAST YEAR, AGE 65 AND OVER**

AREA	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	64.7	67.1			
<b>Bridgeport</b>	61.7	61.4			
<b>Hartford</b>	65.9				
<b>New Haven</b>	67.2	70.5			
<b>HRG 2 (10)-MC</b>	69.5	69.7			
<b>HRG 3 (15)-DS</b>	69.7	70.5			
<b>HRG 4 (27)-WS</b>	72.0	72.0			
<b>HRG 5 (39)-MT</b>	68.9	69.0			
<b>HRG 6 (75)-RT</b>	71.7	71.5			
<b>Connecticut</b>	70.0	70.5	58.5	66.5	

Source: DPH BRFSS Survey Data, 1999-2003.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

## Pneumonia Vaccine

The CDC estimates that 500,000 people nationwide contract, and 40,000 die from, pneumococcal pneumonia each year. The elderly are at greater risk than younger adults for serious illness and death from the disease. Pneumonia vaccine is recommended for all adults age 65 and older, as well as for younger adults with serious long-term health problems.<sup>93</sup> The *Healthy People 2010* initiative aims for 90 percent of adults age 65 and older to receive a pneumonia vaccine.<sup>94</sup>

**TABLE 86: PNEUMONIA SHOT EVER, AGE 65 AND OVER, 1999-2003**

AREA	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	54.3	61.4			
<b>Bridgeport</b>	53.4	56.5			
<b>Hartford</b>	49.2				
<b>New Haven</b>	60.8				
<b>HRG 2 (10)-MC</b>	58.0	59.4			
<b>HRG 3 (15)-DS</b>	61.4	62.0			
<b>HRG 4 (27)-WS</b>	60.2	60.8			
<b>HRG 5 (39)-MT</b>	63.2	63.4			
<b>HRG 6 (75)-RT</b>	60.6	61.1			
<b>Connecticut</b>	60.4	61.6	37.9	46.4	

Source: DPH BRFSS Survey Data, 1999-2003.

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.

Overall, over 60 percent of Connecticut's adults age 65 and older report ever having had pneumonia vaccine, as presented in Table 86. The percentage varied slightly by HRG, from 54 percent receiving the vaccine in the Urban Centers to 63 percent in the Mill Towns. There were no statistically significant differences in pneumonia vaccine by city.

White Connecticut residents age 65 and older were more likely than their black and Hispanic counterparts to report ever receiving a pneumonia vaccine. In contrast, white residents ages 50 to 64 were less likely than their black and Hispanic counterparts to have received pneumonia shots, as shown in Table 87.

**TABLE 87: PNEUMONIA SHOT EVER, AGES 50-64, 1999-2003**

AREA	All Race and Ethnicity, Age-Adjusted Percentage	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian, Not Hispanic
<b>HRG 1 (3)-UC</b>	21.6	16.8	22.3		
<b>Bridgeport</b>	21.4				
<b>Hartford</b>	22.5				
<b>New Haven</b>	20.9	19.6			
<b>HRG 2 (10)-MC</b>	15.6	15.1			
<b>HRG 3 (15)-DS</b>	18.3	18.6			
<b>HRG 4 (27)-WS</b>	15.3	15.1			
<b>HRG 5 (39)-MT</b>	19.2	18.4			
<b>HRG 6 (75)-RT</b>	15.5	15.2			
<b>Connecticut</b>	17.3	16.6	22.5	24.2	

Source: DPH BRFSS Survey Data, 1999-2003; CDC BRFSS web site. Available at: [www.cdc.gov/brfss](http://www.cdc.gov/brfss).

Note: All race and ethnicity specific rates are age-adjusted.

Blank cells indicate that data were not available due to small survey numbers or otherwise not calculated or available.