

PART V
APPENDICES, REFERENCES

APPENDIX I
PLACE OF BIRTH OF CONNECTICUT RESIDENT
WOMEN WHO GAVE BIRTH, 2006

This appendix lists reported places of birth of Connecticut resident women who gave birth in 2006. "Places of birth" may include countries, provinces, states, territories, and protectorates.

Afghanistan	Denmark	Kyrgyzstan
Albania	Dominica	Laos
Algeria	Dominican Republic	Latvia
Angola	Ecuador	Lebanon
Antigua/Barbuda/Redonda	Egypt	Liberia
Argentina	El Salvador	Libya
Armenia	England	Lithuania
Aruba	Estonia	Macedonia
Australia/Ashmore Island/ Cartier Island	Ethiopia	Malaysia
Austria	Finland	Malta
Azerbaijan	France	Mexico
Bahamas	Gambia	Moldova
Bangladesh	Georgia (Republic)	Mongolia
Barbados	Germany	Morocco
Belarus	Ghana	Montserrat
Belgium	Greece	Mozambique
Belize	Grenada	Nepal
Benin	Grenadines/St. Vincent	Netherlands Antilles
Bermuda Islands	Guam	Netherlands
Bolivia	Guatemala	New Zealand
Bosnia/Hercegovina	Guinea	Nicaragua
Brazil	Guyana	Niger
British Columbia	Haiti	Nigeria
Bulgaria	Honduras	Northern Ireland
Burkina Faso/Upper Volta	Hong Kong	Norway
Burma	Hungary	Ontario
Burundi	Iceland	Pakistan
Cambodia	India	Panama
Cameroon	Indonesia	Paraguay
Canada	Iran	Peru
Cape Verde	Iraq	Philippine Islands
Chile	Ireland	Poland
China	Israel	Portugal/Azores
Colombia	Italy	Puerto Rico
Congo (Brazzaville)	Ivory Coast	Qatar
Costa Rica	Jamaica	Romania
Croatia	Japan	Russia (Federation)
Cuba	Jordan	Rwanda
Cyprus	Kazakhstan	Saudi Arabia
Czech Republic	Kenya	Scotland
	Kuwait	Senegal

Sierra Leone	Switzerland	Uruguay
Singapore	Syria	Uzbekistan
Slovakia	Taiwan (Republic of China)	Venezuela
Slovenia	Tanzania	Vietnam
South Africa	Thailand	Virgin Islands (British)
South Korea	Togo	Virgin Islands (U.S.)
Somalia	Trinidad/Tobago	Yemen
Spain	Tunisia	Yugoslavia
Sri Lanka	Turkey	Zaire
St. Kitts-Nevis	Uganda	Zambia
St. Lucia	Ukraine	
Sudan	United Kingdom	
Surinam	United States	
Sweden		

Source: DPH 2008r.

APPENDIX II
TRIBAL AFFILIATIONS OF CONNECTICUT'S
AMERICAN INDIAN OR ALASKA NATIVE RESIDENTS,
2000

The following is a partial list of tribal affiliations of Connecticut residents and the five tribes recognized by the State of Connecticut.

American Indians

Abenaki Nation of Missiquoi	Chickahominy Indian Tribe	Natchez
Algonquin	Chickasaw	Golden Hill Paugussett
Apache	Chippewa	Southeastern Indians
Apache	Bad River Band of the	Susquehanock
Mescalero Apache	Lake Superior Tribe	Waccamaw Siouan
San Carlos Apache	Grand Portage	Meherrin Indian Tribe
White Mountain Apache	Grand Traverse Band of	Shoshone-Bannock Tribes of
Arapahoe	Ottawa and Chippewa Indi-	the Fort Hall Reservation
Arikara	ans	Haliwa-Saponi
Blackfeet	Keweenaw Bay Indian	Hidatsa
Brotherton	Community of the L'Anse	United Houma Nation
Caddo	and Ontonagon Bands	Indians of Person County
Cahuilla	Minnesota Chippewa	Iroquois
Agua Caliente Band of	Red Lake Band of	Cayuga Nation
Cahuilla Indians	Chippewa Indians	Iroquois
California Tribes	Saginaw Chippewa	Mohawk
Mattole	St. Croix Chippewa	Oneida Nation of New
Bear River Band of	Sault Ste. Marie Chippewa	York
Rohnerville Rancheria	Turtle Mountain Band	Onondaga
Canadian and Latin Ameri-	White Earth	Seneca
can Indian	Rocky Boy's Chippewa Cree	Seneca Nation
Canadian Indian	Chitimacha Tribe of Louisi-	Tuscarora
Central American Indian	ana	Juaneno (Acjachemem)
French American Indian	Choctaw	Karuk Tribe of California
Mexican American Indian	Mississippi Band of	Kickapoo
South American Indian	Choctaw	Kiowa
Spanish American Indian	Oklahoma Choctaw	Klamath
Catawba Indian Nation	Choctaw-Apache Community	Long Island
Chemehuevi	of Ebarb	Montauk
Cherokee	Coharie	Poospatuck
Cherokee	Colville	Luiseno
Cherokee Alabama	Comanche	Pala Band of Luiseno
Cherokees of Northeast	Costanoan	Mission Indians
Alabama	Coushatta	Pechanga Band of Luiseno
Eastern Cherokee	Cowlitz	Mission Indians
Echota Cherokee	Cree	Lumbee
Nothern Cherokee Nation	Creek	Maidu
of Missouri and Arkansas	Muscogee (Creek) Nation	Maliseet
Western Cherokee	Poarch Creek	Menonminee
White River Band of the	Croatan	Miami
Chickamauga-Cherokee	Crow	Indiana Miami
Cheyenne	Delaware	Miami
Cheyenne	Delaware	Oklahoma Miami
Northern Cheyenne	Lenni-Lanape	Micmac
Chickahominy	Ramapough Mountain	Aroostook Band
	Eastern Tribes	Micmac
	Biloxi	Me-Wuk

Mohegan	Seminole	Alaskan Athabascan Ne-
Monocan	Shasta	nana Native Association
Nanticoke	Shawnee	Pedro Bay Village
Narragansett	Absentee Shawnee Tribe	Native Village of Tyonek
Navajo	of Indians of Oklahoma	Kenaitze Indian Tribe
Tohajiileehee Navajo	Shawnee	Tlingit-Haida
(Canoncito)	Shinnecock	Haida
Navajo	Shoshone	Tlingit
Nez Perce	Sioux	Tsimshian
Nipmuc	Blackfoot Sioux	Eskimo Tribes
Northwest Tribes	Brule Sioux	Eskimo
Columbia	Crow Creek Sioux	Inuit
Oneida Tribe of Wisconsin	Dakota Sioux	Inupiat Eskimo
Osage	Lower Brule Sioux	King Island Native Com-
Otoe-Missouria	Oglala Sioux	munity
Ottawa	Shakopee Mdewakanton	Yup'ik
Paiute	Sioux Community (Prior	Algaaciq Native Village
Paiute	Lake)	(St. Mary's)
Walker River	Rosebud Sioux	Aleut
Pamunkey Indian Tribe	Sioux	Chugach Aleut
Passamaquoddy	Sisseton-Wahpeton	Koniag Aleut
Pawnee	Sisseton Sioux	Unangan Aleut
Penobscot	Standing Rock Sioux	Qagan Tayagungin Tribe
Pequot	Teton Sioux	of Sand Point Village
Mashantucket Pequot	Yankton Sioux	Alaska Native
Pequot	Stockbridge-Munsee Com-	(Tribe Not Specified)
Paucatuck Eastern Pequot	munity of Mohican Indians of	Alaska Indian
Pima	Wisconsin	(Tribe Not Specified)
Pit River	Tohono O'Odham	American Indian or Alaska
Pit River Tribe of Cali-	Ute	Native
formia	Wampanoag	(Tribe Not Specified)
Ponca	Gay Head (Aquinnah)	
Potawatomi	Wampanoag	
Citizen Potawatomi Nation	Mashpee Wampanoag	
Potawatomi	Seaconeke Wampanoag	
Prairie Band of	Wampanoag	
Potawatomi Indians	Washoe	
Powhatan	Winnebago	
Pueblo	Ho-Chunk Nation of	
Hopi	Wisconsin	
Isleta	Winnebago	
Laguna	Wintun	
Pueblo	Cachil Dehe Band of	
Santo Domingo	Wintun Indians of the	
Zia	Colusa Rancheria	
Zuni	Wintun	
Puget Sound Salish	Wiyot	
Nooksack	Yaqui	
Snoqualmie	Yuman	
Quapaw	Hualapai	
Sac and Fox	Quechan	
Sac and Fox Tribe of the	Yurok	
Mississippi in Iowa	American Indian	
Sac and Fox	(Tribe Not Specified)	
Salish		
Salish and Kootenai		
Schaghticoke	<u>Alaska Natives</u>	
Seminole		
Florida Seminole	Alaskan Athabascan	

Source: U.S. Census Bureau
2004b.

APPENDIX III DATA SOURCES USED IN THIS REPORT

A. CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)

BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based random-digit-dialed telephone survey of civilian, non-institutionalized adults aged 18 years and older conducted in the 50 states, the District of Columbia, Puerto Rico, and other U.S. Territories. The survey, which is coordinated by the U.S. Centers for Disease Control and Prevention (CDC), is designed to monitor the prevalence of major behavioral risks associated with chronic disease, injuries, and preventable infectious diseases among adults. Hispanic or Latino ethnicity is determined by one question, and race designations are obtained from another question, and include the categories: White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native, or Other. Race and ethnicity are based on the self-report of the interviewee.

The CDC defines a core set of questions that are asked by all states as part of the BRFSS. Individual states have the option of including additional questions on a variety of health topics. Since surveys such as the BRFSS include only a sample of the population of interest, all prevalence percentages represent an estimate of the true population percent. In order to calculate these estimates, data from the sample are weighted to be more representative of the entire population. BRFSS data are weighted to reflect the age and gender distribution of the Connecticut population as well as to account for the probability of selection for the survey. In addition, selection probability is affected by the number of individuals living in a household and the number of phone numbers serving a particular household.

Connecticut BRFSS presents estimates for the following racial and ethnic population subgroups: White, Non-Hispanic; Black, Non-Hispanic; and Hispanic. The numbers of American Indians or Alaska Natives, Asians, and Native Hawaiian or Other Pacific Islanders surveyed in Connecticut are too small to present reliable estimates.

B. U.S. CENSUS BUREAU

CENSUS OF THE POPULATION

The 2000 Census was conducted mainly through self-enumeration. Responses were based mostly on self-administered questionnaires. For the telephone and in-person interviews, census interviewers were instructed to read the questions directly from the questionnaire. The decennial census has two parts: 1) the “short form,” which counts the population; and 2) the “long form,” which obtains demographic, housing, social, and economic information from a 1-in-6 sample of households. Information from the long form is used for the administration of federal programs and the distribution of billions of federal dollars.

Hispanic or Latino ethnicity was asked prior to asking about race. The 2000 Census included fifteen separate response categories for race and three areas where respondents could write in a more specific race group. The response categories and write-in answers were combined to create the five Office of Management and Budget race categories (White, Black or African American, Asian, Native Hawaiian or Other Pacific Islander, American Indian or Alaska Native), plus “Some other race” (U.S. Census Bureau 2002, 3).

AMERICAN COMMUNITY SURVEY (ACS)

The ACS is a nationwide survey that will replace the decennial census’ “long form” in future censuses and is a critical element in the Census Bureau’s reengineered 2010 Census. The ACS collects and produces population and housing information every year instead of every ten years. In 2005, the ACS expanded its sample to housing units in all counties in the 50 states and the District of Columbia and to all 78 *municipios* in Puerto Rico. About three million housing unit addresses are sampled annually throughout the United States and Puerto Rico. In 2006, the ACS sample was expanded to include the population living in group quarters (e.g., nursing homes, correctional facilities, military barracks, and college/university housing) (U.S. Census Bureau 2008c). The ACS is conducted using three methods of data collection to contact households: Mail (Self-enumeration through mail-out/mail-back); telephone (Computer Assisted Telephone Interviewing [CATI]); and by personal visits (Computer Assisted Personal Interviewing [CAPI]) (U.S. Census Bureau 2008c).

“Beginning with the 2005 ACS, and continuing every year thereafter, 1-year estimates of demographic, social, economic and housing characteristics are available for geographic areas with

a population of 65,000 or more. This includes the nation, all states and the District of Columbia, all congressional districts, approximately 800 counties, and 500 metropolitan and micropolitan statistical areas, among others” (U.S. Census Bureau 2008c). For rural areas and city neighborhoods or population groups of less than 20,000 people, it will take five years to accumulate a sample that is similar to that of the decennial census.

POPULATION ESTIMATES BY AGE, SEX, RACE, AND HISPANIC ORIGIN: 2000–2005

State population estimates by age, sex, race and Hispanic ethnicity (ASRH) are produced annually by the National Center for Health Statistics (NCHS). NCHS provides annual population estimates by race using broad, single-race categories. This is a simpler race classification format than the 31 single and multiple-race categories published by the U.S. Census in 2000 (DPH 2008y).

“Bridged estimates” are the result of statistically reallocating multiple-race counts to single-race categories. Bridged population estimates are particularly useful since many health data systems still collect information using single-race categories (e.g. White, Black, American Indian/Alaskan Native, and Asian/Pacific Islander). Bridged estimates provide rate denominators that can be used to calculate the race-specific rates used to monitor many health indicators (DPH 2008y).

These files contain estimates of the population of Connecticut by single year of age (age 0 to 4, 5 to 9, . . . 85 and over), sex (male, female), modified race, and Hispanic Origin. Racial and ethnic categories for these population estimates are reported as follows: White (Hispanic); White (non-Hispanic); Black (Hispanic); Black (non-Hispanic); American Indian, Eskimo, and Aleut (Hispanic); American Indian, Eskimo, and Aleut (non-Hispanic); Asian and Pacific Islander (Hispanic); and Asian and Pacific Islander (non-Hispanic). Yearly estimates produced by DPH appear at the department website (<http://www.ct.gov/dph>) under Population Statistics. There is one file for each year’s estimates, July 1, 2000; July 1, 2001; July 1, 2002; July 1, 2003; July 1, 2004; July 1, 2005 (DPH 2008y).

C. U.S. DEPARTMENT OF LABOR

SURVEY OF OCCUPATIONAL INJURIES AND ILLNESSES (SOII)

The Survey of Occupational Injuries and Illnesses (Annual Survey), conducted by the Bureau of Labor Statistics (BLS) in the U.S. Department of Labor, provides annual estimates of the numbers and incidence rates of work-related injuries and illnesses among private sector workers nationwide. Information is collected through an Annual Survey mailed to a stratified random sample of establishments. Employers are asked to provide information on all work-related injuries and illnesses recorded as required under the Occupational Safety and Health Administration (OSHA) record-keeping standard 29 CFR 1904. Recordable injuries and illnesses include those that result in loss of consciousness, one or more days away from work to recuperate, restricted work activity, transfer to another job, or medical treatment beyond simple first aid. More detailed information on worker demographics and the nature and circumstances of the injuries and illnesses is collected for cases resulting in days away from work. The Annual Survey also collects data on the average number of workers employed and the total hours worked at each establishment, information that allows BLS to calculate rates. Since 1996, the Survey sample has included approximately 180,000 private sector establishments nationwide.

The BLS collects labor force, employment, and unemployment statistics for Whites, Blacks or African Americans, Asians, and persons of Hispanic or Latino ethnicity (U.S. Bureau of Labor Statistics (BLS) 2008).

Because the Annual Survey is based on a sample of all establishments, the Survey findings are estimates with corresponding sampling errors. In some participating states, the sample sizes are insufficient to generate statistically reliable state-specific results for all the detailed categories BLS publishes for the nation. BLS adheres to strict publication guidelines based on the reliability of the estimates; numbers and rates are not published or released by BLS if the estimates do not meet these guidelines.

The self-employed, farms with fewer than 11 employees, private households, federal agencies, and the military are not covered in the Survey. In states that do not participate or choose not to collect public sector data, the Survey also does not cover state and municipal employees. In addition, it is well recognized that the Survey undercounts work-related illnesses, especially long-latency illnesses that may not appear until years after individuals have left their place of employment. There is also some evidence that work-related injuries are underreported.

CENSUS OF FATAL OCCUPATIONAL INJURIES (CFOI)

The Census of Fatal Occupational Injuries (CFOI), conducted by the BLS in the U.S. Department of Labor, is a federal-state cooperative program that compiles an annual census of fatal occupational injuries at both the state and national levels. For a death to be counted, the decedent must have been working for pay, compensation or profit at the time of the event, engaged in a legal work activity, or present at the site of the incident as a requirement of his or her job. The census includes unintentional injuries (e.g., falls, electrocutions, motor vehicle crashes) and intentional injuries (homicide and suicide). Deaths due to occupational illnesses are excluded.

CFOI uses multiple data sources to identify and document work-related injury deaths. These sources include, among others, death certificates, workers' compensation records, reports to regulatory agencies, and medical examiner and police reports, as well as reports in the news media. Multiple sources are used because studies have found that no single source captures all deaths. In addition, two or more sources are required to ensure an accurate count by independently substantiating that incidents were work-related. Due to this methodology, CFOI counts are considered a complete or nearly complete ascertainment of work-related injury deaths.

CURRENT POPULATION SURVEY (CPS)

The Current Population Survey (CPS) is a monthly survey of about 60,000 households representing the civilian non-institutionalized population of the United States. It is conducted by the U.S. Census Bureau for the Bureau of Labor Statistics. The CPS ascertains demographics, employment status, weekly hours worked, and industry and occupation of each household member aged 15 years and older. The inquiry relates to activity or status during the calendar week that includes the 12th day of the month.

The CPS undercounts certain workers who have no permanent address or are migratory in nature. Because CPS estimates are based on a survey rather than a complete census of the population, they are subject to sampling error. The categories for collecting data on race or ethnicity are as follows: White, Black or African American, Asian (as of 2002), and Hispanic or Latino ethnicity (BLS 2008).

The occupational and industrial classifications of CPS data for 1992 through 2002 were based on the coding systems used in the 1990 Census. Since then, the CPS has changed its coding sys-

tems for occupation and industry. More information can be found at the U.S. Census Bureau website: <http://www.census.gov>.

D. CONNECTICUT DEPARTMENT OF PUBLIC HEALTH (DPH)

INFECTIOUS DISEASES SECTION

The Infectious Diseases Section collects data on the occurrence of selected infectious diseases for which reporting by health care providers and laboratories to DPH is required pursuant to Connecticut General Statutes Section 19a-215 and the Annual Lists of Reportable Diseases and Laboratory Findings. Reports on each individual with a reportable disease or laboratory finding are submitted by health care providers and laboratories to DPH. Among the required elements for each report, if the information is available, is information on the race and on the ethnicity of each person being reported.

The recorded race and ethnicity of each person may be self-reported, if the individual filled out his/her own registration information on site, or it may be based on the observation of the health care provider. The Department of Public Health does not attempt to validate the reported race and ethnicity. While the standard state report forms contain separate categories for race and ethnicity and options based on the U.S. Bureau of the Census, it is unusual when “Hispanic” is checked to have a race category also completed. Thus, most reportable disease information is reported to DPH in mutually exclusive race and ethnicity categories: White, non-Hispanic; Black, non-Hispanic; Hispanic of any race; Asian or Pacific Islander, non-Hispanic; American Indian or Alaska Native, non-Hispanic; and Other, non-Hispanic.

Completeness of reporting of race and ethnicity is variable. It is 99–100% complete for diseases for which there is routine medical chart review or follow-up of the patient or a need to get additional information. Such diseases include: syphilis, tuberculosis, most vaccine-preventable diseases of childhood, hepatitis B and AIDS. Race and ethnicity data are less complete for diseases for which most reporting is laboratory-based and for which the laboratories are not directly attached to clinical settings where information on the person’s race and ethnicity is available. Such diseases include: chlamydia (66% complete), gonorrhea (75% complete) and most food-borne diseases (as low as 20% complete).

A caveat to interpreting race and ethnicity data when reporting is less than 100% complete is that race and ethnicity data are apt to be more complete when they come from urban areas rather

than suburban areas. For chlamydia for 2007, for example, the reports of persons living in the largest urban areas included race and ethnicity status 73% of the time, whereas those coming from other parts of the state recorded race and ethnicity only 55% of the time. This creates a possible bias toward reporting race and ethnicity status more often on Blacks and Hispanics than Whites, given that these two minority groups make up a higher percentage of the population of urban than non-urban areas of Connecticut. Thus, the relative risk of disease for these two minority groups could be somewhat over-estimated for some diseases such as chlamydia and gonorrhea.

Other considerations when interpreting race and ethnicity data for reportable diseases are whether there could be any selective bias in detection/diagnosis of the diseases by race and ethnicity (only confirmed cases are counted, so if one does not get tested, one does not get counted), and whether there could be any selective reporting of the diseases once diagnosed by race and ethnicity.

OFFICE OF VITAL RECORDS: BIRTH AND DEATH REGISTRIES

These registries are part of the state's vital statistics database that contains records pertaining to births and deaths that occur within the state as well as those events involving Connecticut residents that occur in other states and Canada. Registration of births in Connecticut is complete and there is virtually no underreporting of deaths. Birth data are highly reliable for two reasons: the race and ethnicity designations of infants are based on the mothers' self-reports. The statistics surrounding birth events are calculated using the number of live births in the denominator, thus both the numerator and the denominator are from the same source. The race and ethnicity designation is reported in mutually exclusive race and ethnicity categories: "White, non-Hispanic;" "Black, non-Hispanic;" "Hispanic of any race;" "Asian or Pacific Islander, non-Hispanic;" "American Indian or Alaska Native, non-Hispanic;" and "Other, non-Hispanic."

The race and ethnicity designation for death statistics is less reliable than that of birth statistics because the information is typically based on report by next of kin, a funeral director, coroner, or other official. Race and ethnicity designation based on observation may be reported incorrectly. A second source of error is the fact that death rates are calculated using two different sources of data—the death certificate for the numerator and the Census Bureau population estimates for the denominator. Errors in under- or over-counting populations by race and ethnicity will affect the death rates reported for these groups. Mortality data are reported using race categories that include persons of Hispanic origin (all Whites; all Blacks; all American Indians, Eskimos, and Aleuts; all Asian and Pacific Islanders) and by Hispanic ethnicity (Hispanics of any race).

Data for the Birth and Death Registries follows National Center for Health Statistics guidelines for coding race and Hispanic ethnicity of persons. In this coding scheme, persons of Brazilian ancestry or origin are included in the Hispanic category.

CONNECTICUT LINKED FILE OF LIVE BIRTHS AND INFANT DEATHS

This file comprises linked vital records for infants born in a given year who died in that year or the next year before their first birthday. The use of linked files avoids discrepancies in the reporting of race between the birth and infant death certificates. Data from this file are reported by race categories that include persons of Hispanic origin (all Whites; all Blacks; all American Indians, Eskimos, and Aleuts; all Asian and Pacific Islanders) and by Hispanic ethnicity (Hispanics of any race).

LEAD POISONING PREVENTION AND CONTROL PROGRAM (LPPCP)

LPPCP at the Department of Public Health collects data on blood lead levels for children who have not yet reached their sixth birthday. These values are reported on a mandatory basis by health care providers and laboratories according to state statute (Connecticut Public Act 07-2). Laboratories that perform blood lead tests are required to submit elevated blood lead test reports (i.e., ≥ 10 mcg/dL) to the CT DPH and to the local health department serving the town where the person or child lives. At least monthly, laboratories are required to submit to CT DPH a comprehensive report of all blood lead test results for Connecticut residents. Effective January 1, 2009, primary care providers in Connecticut will be required to conduct annual lead screening of every child age 9 months through 35 months, and to conduct lead screening of any child 36 through 72 months who has not previously been screened. Passed in 2007, Connecticut's Public Act No. 07-2 will expand screening to all Connecticut children, regardless of income or location.

At the end of 2004, the LPPCP upgraded the blood lead surveillance system and now has the ability to link birth records, Medicaid data, environmental data and child blood lead data. It should be noted that prior to 2004, lead surveillance reports were based on the number of valid or confirmed blood tests. Between 2004 and 2006, the surveillance reports were based on the number of individual children. Hispanic or Latino ethnicity is determined by one question, and race designations are obtained from another question, and include the categories: White, Black, Asian, Hawaiian or Pacific Islander, Native American, or Unknown. In this database, race categories *include* persons of Hispanic or Latino ethnicity.

E. OFFICE OF HEALTH CARE ACCESS

CONNECTICUT HOSPITAL DISCHARGE ABSTRACT AND BILLING DATABASE

This database, maintained by the Office of Health Care Access (OHCA), is the source of inpatient hospitalization data. It contains patient-level demographic, clinical, and billing data for all non-federal acute care hospitals in the state. In addition to age, gender, and town of residence, the demographic data elements include race and ethnicity. Based upon observation of the patient rather than self-reporting by the patient, race is designated as: White, non-Hispanic; Black, non-Hispanic; Asian and Pacific Islander, non-Hispanic; and American Indian, Asian/Pacific Islander, and Other Non-White, Non-Hispanic. Ethnicity is designated as: Hispanic or Non-Hispanic. There is a separate hospitalization category—but no separate population category—for “Other Non-White, Non-Hispanic.” There is a missing race and ethnicity frequency of 8 (DPH 2008e).

It should be noted that counts reflect hospitalizations, not persons. For example, a patient admitted to a hospital on two separate occasions in 2005 would be counted twice in these data. Another limitation of the data is the fact that it is an administrative data set. It contains diagnoses and procedures based on ICD-9-CM codes. The literature contains many reports on the validity and reliability of hospital discharge data with clinical conditions emphasizing discrepancies between ICD-9-CM codes and the clinical data.

F. CONNECTICUT HOSPITAL ASSOCIATION: ChimeData

Connecticut Hospital Association (CHA) Data Services provides offers data collection and reporting services to its acute care hospital members through its ChimeData program. ChimeData maintains a proprietary healthcare information system, which incorporates clinical, financial, patient demographic, and provider information data submitted voluntarily by Connecticut’s acute care, non-governmental hospitals. ChimeData collects and edits administrative discharge data from inpatient admissions, hospital-based outpatient surgery, and emergency department (ED) non-admissions. Data are submitted to CHIME under individual contract with each participating facility (Peng, Rodriguez, and Hewes 2008; CHA 2008).

ChimeData's is the most comprehensive hospital database in the state, containing nearly 31 million patient encounters dating back to 1980. ChimeData collects and edits administrative discharge (UB92 claims-based) data from inpatient admissions, hospital-based outpatient surgery, and emergency department (ED) non-admissions.

Data elements for patient race and ethnicity are based upon observation of the patient rather than self-report. As such, they are more subject to misclassification. Data are presented in racial categories exclusive of Hispanic ethnicity (White, non-Hispanic; Black, non-Hispanic; Other, non-Hispanic) and Hispanic ethnicity (Hispanics of any race).

APPENDIX IV GLOSSARY

acculturation. The cultural give-and-take between two groups of people due to “continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (Redfield, Linton, and Herskovits 1936, 149). Acculturative processes especially affect persons in non-dominant social or economic positions, as they may have to give up their customs and beliefs in order to survive in their new environment.

African American. See **Black or African American.**

age-adjusted BRFSS rates. Some of the Behavioral Risk Factor Surveillance System (BRFSS) rate estimates presented in this report were age-adjusted, using the direct method, in order to eliminate differences in crude rates in populations of interest that result from differences in the populations’ age distributions, such as those of Hispanics and Whites. The following age distributions and age-adjustment weights, based on the 2000 projected U.S. population, were used (Klein and Schoenborn 2001):

Table 1. Age Distributions and Age-adjustment Weights, 2000 Projected U.S. Population

Age	Population in thousands	Adjustment weight
18 years and over	203,851	1.000000
18 – 24 years	26,258	0.128810
25 – 44 years	81,892	0.401725
45 – 64 years	60,991	0.299194
65 years and over	34,710	0.170271

age-adjustment. “Age adjustment, using the direct method, is the application of observed age-specific rates to a standard age distribution to eliminate differences in crude rates in populations of interest that result from differences in the populations’ age distributions. This adjustment is usually done when comparing two or more populations at one point in time or one population at two or more points in time. Age adjustment is particularly relevant when populations being compared have different age structures, for example, the U.S. white and Hispanic populations....” (Klein and Schoenborn 2001).

age-adjusted hospitalization rates (AAHR). AAHRs are used to compare relative hospitalization risk across groups and overtime. Age distributions were based on the 2000 U.S. standard million population distribution in 18 age groups. These 18 age groups are presented in Table 1 below, under **age-adjusted mortality rates.**

age-adjusted mortality rates (AAMR). AAMRs are used to compare relative mortality risk across groups and over time. They are not actual measures of mortality risk but rather an index of risk. They are weighted statistical averages of the age-specific death rates, in which the weights represent the fixed population proportions by age (Murphy 2000). The age-adjusted rates in these tables were computed by the direct method. Calculation of AAMRs was based on Fleiss’s (1981) formula and calculation of the standard error of AAMRs was based on that of Keyfitz (1966). The 1940 and 2000 U.S. standard million population distributions are shown below:

Table 2. 1940 and 2000 U.S. Standard Million Population

Age group	1940	2000
0–4	80,057	69,136
5–9	81,151	72,533
10–14	89,209	73,032
15–19	93,665	72,169
20–24	88,002	66,477
25–29	84,280	64,529
30–34	77,787	71,044
35–39	72,501	80,762
40–44	66,744	81,851
45–49	62,696	72,118
50–54	55,116	62,716
55–59	44,559	48,454
60–64	36,129	38,793
65–69	28,519	34,264
70–74	19,519	31,773
75–79	11,423	26,999
80–84	5,878	17,842
85+	2,765	15,508
Total	1,000,000	1,000,000

age standardization. This is a technique that allows for the comparison of death rates in two or more populations. The National Center for Health Statistics (NCHS) used the 1940 standard million population in reporting national mortality statistics for over 50 years. Implementation of the new year 2000 population standard began with deaths occurring in 1999. Age-adjustment based on the year 2000 standard often results in age-adjusted death rates that are larger than those based on the 1940 standard. The new standard affects trends in age-adjusted death rates for certain causes of death and decreases race and ethnicity differentials in age-adjusted death rates (Anderson and Rosenberg 1998).

AIDS. Acquired immunodeficiency syndrome.

Alaska Native. See **American Indian or Alaska Native.**

American Indian and Alaska Native. Race category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons who trace their ancestry to any of the original peoples of North America, including Alaska, and who maintain cultural identification by self-identification or tribal affiliation. “Alaska Native” encompasses the

U.S. Census designations of Eskimo and Aleut (See Appendix II) (U.S. Census Bureau 2000a, 2001, 2).

Asian. Race category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent; for example, people who indicated their race or races as “Asian Indian,” “Chinese,” “Filipino,” “Korean,” “Japanese,” “Vietnamese,” “Other Asian,” “Burmese,” “Hmong,” “Pakistani,” or “Thai” (U.S. Census Bureau 2000a, 2001, 2).

Asian/Pacific Islander, Asian American/Pacific Islander (A/PI, AAPI). See **Asian** and **Native Hawaiian or Other Pacific Islander**.

Behavioral Risk Factor Surveillance System (BRFSS). See Appendix III: Data Sources, under Centers for Disease Control and Prevention.

birth rate. This rate, expressed as live births per thousand population, is calculated by dividing the number of live births in a population in a given year by the midyear resident population estimate or census population, according to the equation:

$$\text{Birth rate} = \frac{\text{Total live births}}{\text{Total population}} \times 1000$$

birth weight. The first weight of a fetus or infant at time of delivery. This weight is usually measured during the first hour of life, before postnatal weight loss occurs.

Black or African American. Race category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons having origins in any of the Black racial groups of Africa (U.S. Census Bureau 2001, 2). It includes people who indicated their race or races on the Census as “Black, African American, or Negro,” or wrote in entries such as African American, Afro American, Nigerian, or Haitian (U.S. Census Bureau 2001, 2).

body mass index (BMI). Body mass index (BMI), or weight adjusted for height, is a widely used screening method for obesity. Medical guidelines identify normal/desirable weight as a BMI under 25, overweight as a BMI of 25 to 29.9, and obese as a BMI of 30 or more (U.S. Preventive Services Task Force 2005).

cause-of-death classification. Mortality statistics were compiled in accordance with the World Health Organization (WHO) regulations, which specify that member nations classify causes of death by the current Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, which is the Tenth Revision of the International Classification of Diseases [ICD-10] (World Health Organization 1992).

Tabulations of cause-of-death statistics are based solely on the underlying cause of death unless otherwise stated. The “underlying” cause of death is the disease or injury that initiated the series of events leading directly to death, or the circumstances of the event that resulted in the fatal injury. If more than one cause or condition of death is entered, the underlying cause is then determined by the sequence of conditions on the death certificate and selection rules of the ICD (Murphy 2000).

Examination of the combination of all listed causes can shed additional light on factors related to mortality. Therefore, for selected diseases, “related” causes of death including both underlying and non-underlying (or “contributing”) causes, are reported. Appendix V contains the coding for causes of deaths included in this report with their ICD-10 codes.

cause-of-death rankings. Cause of death rankings are based on the National Center for Health Statistics List of 113 Selected Causes of Death (Anderson 2001). Ranks are based on the total number of deaths occurring during a specific time period. These tables rank number of deaths by gender, race and ethnicity for the period 2000–2004.

cline, clinal. Refers to gradual changes in morphology or physiology in human groups across environmental or geographic areas.

culture. The learned, patterned sets of ideas and behaviors that are acquired and used by people as members of society (Lavenda and Schultz 2007). Culture includes both non-material products (such as ideas, beliefs, languages, and religions) and material products, (such as food, clothes, houses, and cities).

current smokers. Persons who reported smoking at least 100 cigarettes in their lifetimes and presently smoke some days or every day.

disability. The U.S. Census 2000 defined people as having a disability if they responded “yes” to: 1) having a “sensory, physical, mental, or self-care disability; 2) having difficulty “going outside the home”; and/or 3) having an “employment disability” (U.S. Census Bureau 2003c, 2–3). The Americans with Disabilities Act of 1990 defines disabilities as: “a) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; b) a record of such and impairment; or c) being regarded as having such impairment” (Americans with Disabilities Act of 1990, 42 U.S.C. Chap. 126 § 12102).

disparity. “The quantity that separates a group from a specified reference point on a particular measure of health that is expressed in terms of a rate, percentage, mean, or some other quantitative measure” (Keppel et al. 2005).

emergency department (ED). A hospital facility that provides unscheduled outpatient services 24 hours a day for conditions requiring immediate care.

environmental justice. This refers to “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies” (U.S. Environmental Protection Agency [EPA] 2008). As signed by President Clinton in 1994, Executive Order 12898 requires that all human health and environment-related federal programs ensure that no group should disproportionately bear negative environmental consequences, and that potentially affected residents should have meaningful opportunities to take part in decision-making processes about environment- and health-related operations (EPA 2008).

ethnicity. This term refers to the cultural, behavioral, religious, linguistic, and/or geographical commonalities imputed to people belonging to a particular group, as opposed to genetic heritability. The boundaries of authenticity (that is, who or what “counts” as being a member of an ethnic group) are often changeable and can depend on social, political and historical situations. In the United States, federal officials have determined that for data collection purposes, there are two “ethnicities”: Hispanic or Latino, or Not Hispanic or Latino (OMB 1997; U.S. Census Bureau 2000a, 2001) (See Appendix VII).

excess deaths, excess events. Excess deaths or excess events refer to those deaths that would not have occurred if one population subgroup (e.g., Black or male) had the same death rate as another population subgroup (White or female). Excess deaths (or events) are calculated as follows:

$$\text{Excess deaths (or events)} = \text{Number of deaths (or events)} \times [1 - (1 / \text{relative risk})]$$

The estimated excess death (events) figures provided in these tables use the overall age-adjusted rate as the basis for assessing the relative risk in each race, ethnic, and gender group. For purposes of these estimates, the relative risk is treated as being equal over all ages. This assumption may not be true to the same extent for each cause of death or for each race, ethnic, and gender subgroup.

gender. This term refers to the cultural roles assigned to males or females, which vary considerably by society (how to behave like a “man” or a “woman”). The term “*sex*” refers to the physical characteristics that distinguish males from females in a species. In common usage, however, the two terms often become conflated (See Appendix VII).

gender identity minority. Gender identity refers to the ways in which one identifies with the available gender categories in a society (in the U.S.: “man” and “woman”) (GLMA and LGBT Health Experts 2001, 445). A person’s gender identity may not always match his or her biological sex. In this case the person might be termed a “*transgender*” individual: “a person whose gender identity or gender expression is not congruent with his or her biological sex” (GLMA and LGBT Health Experts 2001, 448).

Hispanic or Latino. See **ethnicity** and Appendix VII. Ethnicity category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons of Mexican, Puerto Rican, Cuban, South or Central American, or other Spanish culture or origin. Individuals identified as “Hispanic or Latino” can be of any race, and are also counted in the race breakdown as either “White,” “Black or African American,” “Asian” Native Hawaiian or Other Pacific Islander,” “American Indian or Alaska Native.” The category includes persons of Hispanic origin who self-identify as Spanish, Spanish-American, Hispanic, Hispano, or Latino (U.S. Census Bureau 2000a, 2001).

Hispanic mortality paradox. See **Latino mortality paradox.**

HIV. Human immunodeficiency virus.

homeless. The McKinney-Vento Homeless Assistance Act of 1986 (42 U.S.C [11301] [1987]) defines a “homeless” individual as someone who: “lacks a fixed, regular, and adequate nighttime residence; and has a primary nighttime residence that is (a) a supervised publicly or privately operated shelter designed to provide temporary living accommodations, (b) an institution that provides a temporary residence for individuals intended to be institutionalized, or (c) a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings” (e.g., vehicles, streets, parks, subway tunnels, or abandoned buildings) (42 U.S.C. [11301] [1987]). Other categories include “precariously housed” or “near homeless” populations who may be “doubled-up” in friends’ or family residences, or in crowded or substandard housing (U.S. Department of Housing and Urban Development 2007:1–2; MATRIX Public Health Consultants 2003, 52–3; Connecticut Coalition to End Homelessness et al. 2007, 13).

hospitalization. Admission as a registered inpatient into one of Connecticut’s acute care general hospitals, with a stay of 24 hours or more. In this report, the term is used synonymously with discharge (the formal release of a patient from a hospital), because patient-specific information on hospitalizations derive from the hospital discharge abstract and billing data base maintained by the Office of Health Care Access.

Table 3. Coding Used for Selected Causes of Hospitalizations

Cause of Hospitalization	ICD-9-CM Code ^a
Asthma	493
Circulatory Conditions	390–459
Diabetes	250
Diabetes with Lower Extremity Amputation	Any diagnosis of 250 with a procedure code 84.1 and not having 895–897. Denominator for rate is total population, not the estimated number of persons with diabetes.
^a Principal diagnosis unless otherwise specified.	

immigrant. The term “immigrant” as used by the U.S. Census Bureau includes people who are considered to be “foreign-born” and refers to: “anyone who is not a U.S. citizen at birth. This includes naturalized U.S. citizens, Lawful Permanent Residents (immigrants), temporary migrants (such as students), humanitarian migrants (such as refugees), and persons illegally present in the United States” (U.S. Census Bureau Question and Answer Center 2007).

ICD-9. See **International Classification of Diseases.**

ICD-9-CM. The International Classification of Diseases, Ninth Edition, Clinical Modification, which provides procedure codes for morbidity data. The procedures are classified as diagnostic and other non-surgical procedures or as surgical operation. See also **International Classification of Diseases.**

ICD-10. See **International Classification of Diseases.**

incidence: The number of cases of an illness having their onset during given period of time in a specified population (e.g., for infectious diseases); more generally, the number of new events, commonly expressed as a rate.

$$\text{Incidence rate} = \frac{\text{Number of new cases}}{\text{Population at risk}} \times 1000 \text{ or } 100,000$$

infant death. A death of an individual less than 1 year (365 days) of age.

infant mortality rate (IMR). This is the number of deaths of infants less than one year old, per 1000 live births. The IMR is often used as a barometer of a nation’s commitment to care for its most vulnerable members.

$$\text{Infant death rate} = \frac{\text{Number of infant deaths}}{\text{Number of live births}} \times 1,000$$

International Classification of Diseases (ICD). The ICD has been the internationally accepted coding system for determining cause of death since the early 1900s. It is periodically revised. The Ninth Revision (**ICD-9**) was in use from 1975 through 1998. Beginning with 1999 deaths, the Tenth Revision (**ICD-10**) is being used.

intersex, intersexual. “A broad term that is used to describe individuals who were born with a procreative or sexual anatomy that is different from the ‘standard’ categorical definitions of sex as male or female. There are many causes of intersex, and intersex anatomy can take a variety of forms. Intersex characteristics may not be visible until puberty or when an individual attempts to reproduce. *Intersex* has replaced the term *hermaphrodite*” (Ferber, Holcomb, and Wentling 2009, 556) (See Appendix VII).

late or no prenatal care. No prenatal care received at any time during the pregnancy, or prenatal care that was initiated after the first pregnancy.

Latino. See **Hispanic or Latino**.

Latino (Hispanic) mortality paradox. A term used by researchers to describe the following observation: Despite their less favorable socioeconomic profile, which would supposedly predispose them to higher mortality rates, Latinos in the United States have lower age-adjusted, all-cause mortality than do White, non-Latinos. This observation stands in contrast to the Black or African American mortality pattern, which is a lower socioeconomic profile and a higher all-cause mortality rate compared with Whites (Abraido-Lanza, et al. 1999; Smith and Bradshaw 2006).

leading cause of death. See **cause of death rankings**.

live birth. The complete expulsion or extraction from the mother of a product of conception, regardless of the duration of pregnancy; after such separation, shows signs of life (e.g., heartbeat, pulsation of the umbilical cord, or movement of voluntary muscles).

low birth weight. A birth weight of less than 2,500 grams (approximately 5 lbs., 8 oz).

minority. A group of people that relative to others in the sociopolitical hierarchy, is in a position of cultural and political non-dominance and disadvantage (Kottak 2007, 62–3).

morbidity. The extent of illness, injury, or disability in a defined population, expressed as general or specific rates of incidence or prevalence. Sometimes used to refer to any episode of disease.

Native American. See **American Indian and Alaska Native**.

Native Hawaiian and Other Pacific Islander (NHOPI). Race category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands (U.S. Census Bureau 2001, 2). It includes people who indicated their race or races as “Native Hawaiian,” “Guamanian or Chamorro,” “Samoan,” or “Other Pacific Islander,” or wrote in entries such as Tahitian, Mariana Islander, or Chuukese (U.S. Census Bureau 2001, 2). U.S. citizens form a part of this category (e.g., people born in Hawaii, Guam, and other Territories or Protectorates of the U.S.), but this category also encompasses citizens of other Pacific Island states and of Pacific Island sociocultural heritage and geographic ancestry.

obesity. See **body mass index (BMI)**.

Office of Management and Budget (OMB). Part of the Executive Branch of the federal government, the OMB “analyzes issues and presents options for national policy in the areas of budget, legislation, regulation, information, financial management, and procurement.” In addition, the OMB “coordinates agencies’ implementation of laws and develops government-wide policies that guide Federal agencies in areas such as procurement, privacy and security, and financial manage-

ment” (OMB 2008). The OMB’s *Race and Ethnic Standards for Federal Statistics and Administrative Reporting (Statistical Policy Directive No. 15)* of 1977 was the first attempt by the U.S. government to standardize race and ethnicity categories across all state agencies (OMB 1977; Nepal, Hynes, and Stratton 2007). The 1977 categories “implemented the requirements of Public Law 94-311 of June 16, 1976, which called for the collection, analysis, and publication of economic and social statistics on persons of Spanish origin or descent” (OMB 1977). The OMB’s *Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity* continued refining these standards, and required that all producers of federal statistics should be compliant with the standards by January 1, 2003 (Nepal, Hynes, and Stratton 2007).

“Other” race. The categories “Other” or “Unknown” are sometimes used by databases to report and to record information race or ethnicity information. The term may mean a number of things: 1) that numbers of respondents were so small that the database compiled all information on smaller minority groups into one larger “Other” category; 2) that individuals filling out forms did not identify with the particular race or ethnicity choices given; or 3) that an observer filling out forms did not know or could not decide the race or ethnicity of the patient or client. (See Appendix VII).

overweight. See **body mass index (BMI)**.

Pacific Islander. See **Native Hawaiian and Other Pacific Islander**.

population bases. Population bases for computing rates are taken from the U.S. Census Bureau’s *Estimates of the population of states by age, sex, race, and Hispanic origin*. These data are estimates of the population of Connecticut by 5-year age groups (age 0 to 4, 5 to 9, ... 85 and over), sex (male, female), modified race (White; Black or African American; American Indian or Alaska Native; Asian and Pacific Islander) and Hispanic origin (Hispanic or non-Hispanic) for each year, July 1, 2000 through July 1, 2005.

poverty. The federal government issues two different measures of poverty: poverty thresholds and poverty guidelines. *Poverty thresholds* are the original version of the federal poverty measure developed by the Social Security Administration, and are used for statistical purposes. The thresholds are updated annually by the U.S. Bureau of the Census based on changes in the consumer price index, and comprise a set of income thresholds that vary by family size and composition, taking into account age (under age 65 or age 65+) and number of related children under age 18. *Poverty guidelines* are simplified poverty thresholds, used for determining eligibility for programs. They are updated annually by the U.S. Department of Health and Human Services, and printed in the Federal Register. Poverty guidelines pertain to family units by size only, without regard to age or number of children. The 2007 poverty thresholds and 2008 poverty guidelines for family units of four or fewer persons are shown below.

Table 4. Federal Poverty Guidelines (2008) and Thresholds (2007)

	2008 U.S. DHHS Poverty Guidelines	2007 U.S. Census Bureau Poverty Thresholds					
Size of Family Unit		Related children under 18 years of age					
		None	One	Two	Three	Four	Five
One person	\$10,400						
<65 years		\$10,787					
65+ years		9,944					
Two persons	14,000						
One <65 yrs.		13,884	\$14,291				
One 65+ yrs.		12,533	14,237				
Three persons	17,600	16,218	16,689	\$16,705			
Four persons	21,200	21,386	21,736	21,027	\$21,100		
Five persons	24,800	25,791	26,166	25,364	24,744	\$24,366	
Six persons	28,400	29,664	29,782	29,168	28,579	27,705	\$27,187
Seven persons	32,000	34,132	34,345	33,610	33,098	32,144	31,031

Source: Adapted from U.S. Census Bureau 2008b.

prevalence. The total number of individuals in a specified population who have a disease or other condition at a given time (e.g., for chronic diseases). Prevalence is often expressed as a rate.

$$\text{Prevalence rate} = \frac{\text{Number of existing cases}}{\text{Total population}} \times 1,000 \text{ or } 100,000$$

race. In the United States, racial and ethnic classifications are used by federal, state and local governments, private agencies, as well as in research for the purpose of defining group characteristics, tracking morbidity and mortality, and documenting the health status of population groups. Race is widely considered a meaningful *social* characteristic, but not a valid biological or genetic category (Lewontin, 1995; Gould 1981). Available scientific evidence indicates that racial and ethnic classifications do not capture biological distinctiveness, and that there is more genetic variation within racial groups than there is between racial groups (Williams, Lavizzo-Mourey, and Warren 1994; American Anthropological Association 1998). Contemporary race divisions result from historical events and circumstances and reflect current social realities. Thus, racial categories may be viewed more accurately as proxies for social and economic conditions that put individuals at higher risk for certain disease conditions (See Appendix VII).

random variation. The mortality data in this report represent all Connecticut resident deaths and are, therefore, not subject to sampling error. Mortality data, however, may be affected by random variation. When the number of events is small (less than 100) and the probability of such an event is small, random variation may be relatively large, and thus considerable caution must be used in interpreting the data. Random variation is typically measured in terms of variance or standard error. The following formula was used in calculating the standard error for mortality rates in this report:

Standard error of the age-adjusted mortality rate:

$$\sqrt{\sum_{i=1}^{18} d_i \left(\frac{\text{std}_i}{n_i}\right)^2}$$

where

- *Index i represents 18 age groups in five year increments ranging from ages 0 to 85 and older;
- * d_i is the total number of deaths for age group i ;
- * std_i is the standard population for age group i , and
- * n_i is the population for age group i .

refugee. An individual who is unable or unwilling to return to his or her country of nationality because of persecution or a well-founded fear of persecution. The persecution may be based on race, religion, nationality, membership in a particular social group, or political opinion.

relative risk. The ratio of the rate or percentage in the minority (or male) group to the rate or percentage for the comparison (White or female) group.

$$\text{Relative risk} = \frac{\text{Minority (or male) rate}}{\text{White (or female) rate}}$$

reportable disease. A reportable or notifiable disease is one that, when diagnosed, health care providers or laboratories are required, usually by law, to report to state or local public health officials. Reportable diseases are of interest usually because of their contagiousness, severity, or frequency of occurrence.

residence. The usual place of abode of the person to whom the event occurred. For births, residence is defined as the mother's usual place of domicile.

rural. Connecticut State Office of Rural Health (ORH) states that, "All towns in a designated Micropolitan Statistical Area with a population of less than 15,000 and those towns in Metropolitan Statistical Areas with a population of less than 7,000 are designated rural for the purposes of the Connecticut Office of Rural Health" (ORH 2007).

sexual orientation minority. Sexual orientation and sexual identity can be defined in terms of one's sexual behavior, self-identity, and or one's objects of desire, affection, or attraction. Sexual identity and sexual identity are fluid and changeable over time and across societies. Sexual identity, or "what people call themselves with respect to their sexuality" (GLMA and LGBT Health Experts 2001, 448), reflects the parameters of a particular society's options for expressions of sexuality. In the United States, we recognize labels such as "heterosexual," "bisexual," "lesbian," "undecided," "gay," "asexual," and "questioning" as having to do with human sexuality and sexual identity and behavior (GLMA and LGBT Health Experts 2001, 448) (See Appendix VII).

social capital. *Social capital* has been defined as "those features of social structures—such as levels of interpersonal trust, and norms of reciprocity and mutual aid—which act as resources for individuals and facilitate collective action" (Kawachi and Berkman 2000, 175). Self-reported levels of health status, perceived trustworthiness of others, perceived norms of reciprocity and helpfulness, and membership in voluntary organizations are some measures of social capital used in health research (Kawachi and Berkman 2000, 182).

social cohesion. *Social cohesion* “refers to the extent of connectedness and solidarity among groups in society” (Kawachi and Berkman 2000, 175). Narrowly, we might conceive of such cohesion obtaining in industrial nations where there is universal, “cradle-to-grave,” health care, housing, unemployment safety nets. A cohesive society might be a also small group, tribe, or clan who feel obliged to assist each other, knowing that they will also be assisted in time of need.

social gradient. This refers to the social and health differences that exist among populations in different socioeconomic positions in a society. If one occupies a lower SEP, the higher the tendency to have premature mortality, higher morbidity and increased rates of disability. No matter where one stands on the social ladder, one will always be worse off than one’s “social superiors,” even within the highest socioeconomic brackets (e.g., Marmot 2000; Wilkinson and Marmot 2003).

social network. The term *social network* describes ties between people and groups that cut across boundaries of family, work, class, and residential area (Berkman and Glass 2000, 140). For example, network analysis has been used to measure network influence on: access to jobs, social power, use of support systems, health behaviors, disease transmission, and information exchange (Berkman and Glass 2000, 142).

social support. This refers to the individuals, networks, and cohorts that share experiences and histories throughout the life course and provide various forms of support to each other (e.g., material, informational, emotional) (Berkman and Glass 2000, 144; Berkman and Syme 1979, quoted in National Research Council 2001, 97).

socioeconomic position (SEP). This term refers to “[a]n aggregate concept that includes both resource-based and prestige-based measures, as linked to both childhood and adult social class position” (Krieger 2001).

socioeconomic status (SES). A person’s overall position or “class” within a social system. Measures of socioeconomic status used in health research include a person’s educational level, occupational level, place of residence, and per capita income.

transgender. “(1) An umbrella term that includes persons who change, cross, or go beyond... the culturally defined gender categories ([e.g.,] woman/man); (2) a person whose gender identity is different from their biological or birth-assigned sex; common identity terms include transsexual, transwoman, transman, FtM, MtF” (Ferber, Holcomb and Wentling 2009, 557).

“Unknown” race. See **“Other” race.**

wealth. One’s net worth, or “the sum of the market value of assets owned by every member of the household minus liabilities (secured or unsecured) owed by household members. The estimates represent the net worth of households at the end of the appropriate reference period. The net worth concept is based on the value of all assets minus all liabilities” (U.S. Census Bureau 2003a).

White. Race category used by the U.S. Census Bureau, according to current Office of Management and Budget (OMB) standards, to refer to persons having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicated their race or races as “White” or wrote in entries such as Irish, German, Italian, Lebanese, Near Easterner, Arab, or Polish (U.S. Census Bureau 2001).

APPENDIX V
CODING FOR CAUSES OF DEATH

Cause of Death	ICD-10 Code
All Causes	A00.0 – Y89.9
HIV Infection	B20 – B24
All Cancers	C00 – C97
Diabetes Mellitus	E10 – E14
Diseases of the Heart	I00 – I09, I11, I13, I20 – I51
Cerebrovascular Disease (Stroke)	I60 – I69
Asthma	J45 – J46
Unintentional Injuries	V01 – X59, Y85 – Y86
Suicide	X60 – X84, Y87.0
Homicide	X85 – Y09, Y87.1

APPENDIX VI
LIST OF SELECTED ACRONYMS

AAMR	age-adjusted mortality rate
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CSDE	Connecticut State Department of Education
DPH	Connecticut Department of Public Health
ED	emergency department
GAO	U.S. Government Accountability Office
HHC	Hispanic Health Council
IMR	infant mortality rate
IOM	Institute of Medicine
LEP	limited English proficiency
NIH	National Institutes of Health
OHCA	Connecticut Office of Health Care Access
OMB	U.S. Office of Management and Budget
U.S. DHHS	U.S. Department of Health and Human Services
WHO	World Health Organization

APPENDIX VII

TECHNICAL NOTES

“RACE,” “ETHNICITY,” “OTHER”

In the United States, racial and ethnic classifications are used by federal, state and local governments, private agencies, as well as in research, for the purpose of defining group characteristics, tracking morbidity and mortality, and documenting the health status of population groups. Race is widely considered a meaningful *social* characteristic, but not a valid biological or genetic category (Lewontin 1995; Gould 1981). Available scientific evidence indicates that racial and ethnic classifications do not capture biological distinctiveness, and that there is more genetic variation within racial groups than there is between racial groups (Williams, Lavizzo-Mourey, and Warren 1994; American Anthropological Association 1998). Contemporary race divisions result from historical events and circumstances and reflect current social realities. Thus, racial categories may be viewed more accurately as proxies for social and economic conditions that put individuals at higher risk for certain disease conditions.

EXPLANATION OF RACE AND HISPANIC ORIGIN CATEGORIES

The race and Hispanic origin categories used by the U.S. Census Bureau are mandated by the Office of Management and Budget *Statistical Policy Directive No. 15*, which requires all federal record keeping and data presentation to use five race categories (American Indian and Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, White) and two ethnicity categories (Hispanic or Latino and Not Hispanic or Latino). This system treats also race and ethnicity as separate and independent categories. This means that within the federal system everyone is classified as both a member of one of the above five race groups *and also* as either Hispanic or non-Hispanic. These classifications are designed to promote consistency in federal record keeping and data presentation. In addition, the U.S. Census Bureau notes that “[t]he concept of race the Bureau of the Census uses reflects self-identification by respondents; that is the individual’s perception of his/her racial identity. The concept is not intended to reflect any biological or anthropological definition” (U.S. Census Bureau n.d.).

In 2000, the U.S. Census Bureau included the category “Some Other Race” for people who were unable to identify with the five standard Office of Management and Budget race categories. People who wrote in entries such as Moroccan, South African, Belizean, or a Hispanic origin (for

example, Mexican, Puerto Rican, or Cuban) were included in the Some Other Race category (U.S. Census Bureau 2001, 2). This means that Some Other Race includes race as well as ethnicity responses. The U.S. Census Bureau has reported that 97% of people reporting their race as “Some Other Race alone” are of Hispanic or Latino ethnicity, as are 90% of people who reported Some Other Race in combination with another race (U.S. Census Bureau 2001, 11). The U.S. Census Bureau is reviewing whether the Some Other Race category will be asked in Census 2010 (U.S. Census Bureau News 2003).

Information on other ancestry groups may be collected in the “Not Hispanic or Latino” category. To count and describe persons and populations who claim ancestry or heritage from a *non*-Spanish speaking country or culture, public officials use terms such as “place of birth,” “ancestry,” “heritage,” and “language spoken at home.”

Demographic and health information for racial or ethnic subpopulations in Connecticut is often not easily or accurately obtained. For this reason, statistically meaningful subpopulation comparisons are not possible for many of the health indicators included in this report.

“OTHER” OR “UNKNOWN” RACE CLASSIFICATIONS

Databases will often use the classification “Other” to indicate several issues with race or ethnicity data. People may be classified as “Other” by the database or record if the patient did not respond to the questions; if the data collector did not know or could not guess the race; if the records provide for such a classification (such as hospital charts); or if small numbers of people in some racial groups (in Connecticut: American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander) are being reflected in a combined category.

“Unknown” race is also indicated in many databases, reflecting either that an observer did not know the race of the person, or that no response was given by the patient or respondent.

QUALITY OF RACE AND ETHNICITY DATA

Several studies have examined the reliability of racial status reported on the death certificate by comparing race on the death certificate with that reported on another data source, such as the census or a survey. Differences occur as a result of differences in who provides race information on the two records. Race information on the death certificate is reported by the funeral director as provided by a next of kin or on the basis of observation. Race information on the Census or on the

Current Population Survey (CPS) is obtained by self-report of the individual or by another household member. As such, racial information reported on the census and CPS is considered more valid than death certificate information. High levels of agreement between the death certificate and the census or survey report are indicative of unbiased death rates by race (Hoyert, Kochanek, and Murphy 1999). The National Longitudinal Mortality Study (NMLS) has been used to evaluate discrepancies in these records.

Several studies show that persons self-reported as American Indian or Asian on census or survey records are sometimes reported as White on the death certificate. The net effect of such misclassification is an underestimate of deaths and death rates for races other than White and Black. In addition, under-coverage of minority groups in the census and resultant population estimates introduces biases into death rates by race (Hoyert, Kochanek, and Murphy 1999). It is estimated that the net effect of the combined bias due to race misclassification on death certificates and under-numeration on the 1990 census has resulted in an overstatement of death rates for Whites and Blacks by about one and five percent, respectively, in official U.S. publications. Mortality rates for American Indians or Alaska Natives continue to be understated, as there has been little improvement over time in the substantial misclassification of this population on death certificates (Arias et al. 2008). Race misclassification on death certificates for Asians or Pacific Islanders has been reduced over time, but Asian or Pacific Islander mortality rates due to these corrections did not change greatly (Arias et al. 2008).

In 1988, the Connecticut death certificate was revised to include a question regarding the Hispanic origin of the decedent and the change was implemented in 1989. There was an extensive amount of incomplete Hispanic origin information for the 1989 deaths with only 32.8% of 1989 Connecticut resident death certificates reporting Hispanic-origin status (Mueller et al. 1989). Reliability of Hispanic origin data nationwide has been assessed by the National Center for Health Statistics (NCHS). Death rates for the Hispanic-origin population are affected by biases in the numerator (underreporting of deaths) and the denominator (underestimates of the population). Taking both sources of bias into account it was estimated that Hispanics death rates are understated by 2 percent in official mortality statistics of the U.S. produced by NCHS (Rosenberg et al. 1999). Accuracy of Hispanic origin data has improved during over time nationally and in Connecticut; however, mortality measures for subgroups of Hispanics still need to be improved, especially due to the important intragroup differences in Hispanic or Latino health and mortality profiles (Arias et al. 2008).

The studies above refer to the 1977 race and ethnicity classifications promulgated by the OMB; further study using the updated 1997 OMB racial and ethnic categories will be possible when more states adopt the U.S. 2003 Standard Death Certificate (Arias et al. 2008).

SEX, GENDER, SEXUAL ORIENTATION, AND GENDER IDENTITY

“*Sex*” is the term used for the physical characteristics that are the evidence of sexual dimorphism in human beings, (i.e., genitalia, body hair, body shape, etc.) (Lavenda and Schultz 2007, 106). Not all people are born with biologically distinct female or male physical or genital characteristics. Individuals with ambiguous or both sets of genitalia are today termed “*intersex*” persons. It is estimated that at least 1 in 2000 births in the U.S. have ambiguous external genitalia (Dean et al. 2000, 134), and that between 100–200 sex reassignment surgeries are done annually (Dean et al. 2000, 134). In some cases these surgeries are medically necessary, but the majority of the surgeries are not (Dean et al. 2000, 134). Parents and medical professionals may view sex reassignment surgery as *socially* necessary in order to avoid the stigma that ambiguous genitals might cause over the life course (Dean et al. 2000, 134). Increasingly, these procedures are being questioned, as a growing number of post-operative intersex adults are being more vocal about their experiences of surgical complications, incompatibility with their assigned sex and gender identity, or (Dean et al. 2000; Intersex Society of North America 2008).

Sexual orientation and *sexual identity* can be defined in terms of one’s sexual behavior, self-identity, and or one’s objects of desire, affection, or attraction. Additionally, human sexuality and sexual identity are fluid and changeable over time and across societies. Sexual identity (“what people call themselves with respect to their sexuality” [GLMA and LGBT Health Associates 2001, 448]) has to do with how people define themselves and their sexuality within the possible options in a given society. Here in the United States, we recognize labels such as “heterosexual,” “bisexual,” “lesbian,” “undecided,” “gay,” “asexual,” “queer,” and “questioning” as having to do with human sexuality and sexual identity and behavior (GLMA and LGBT Health Associates 2001, 448).

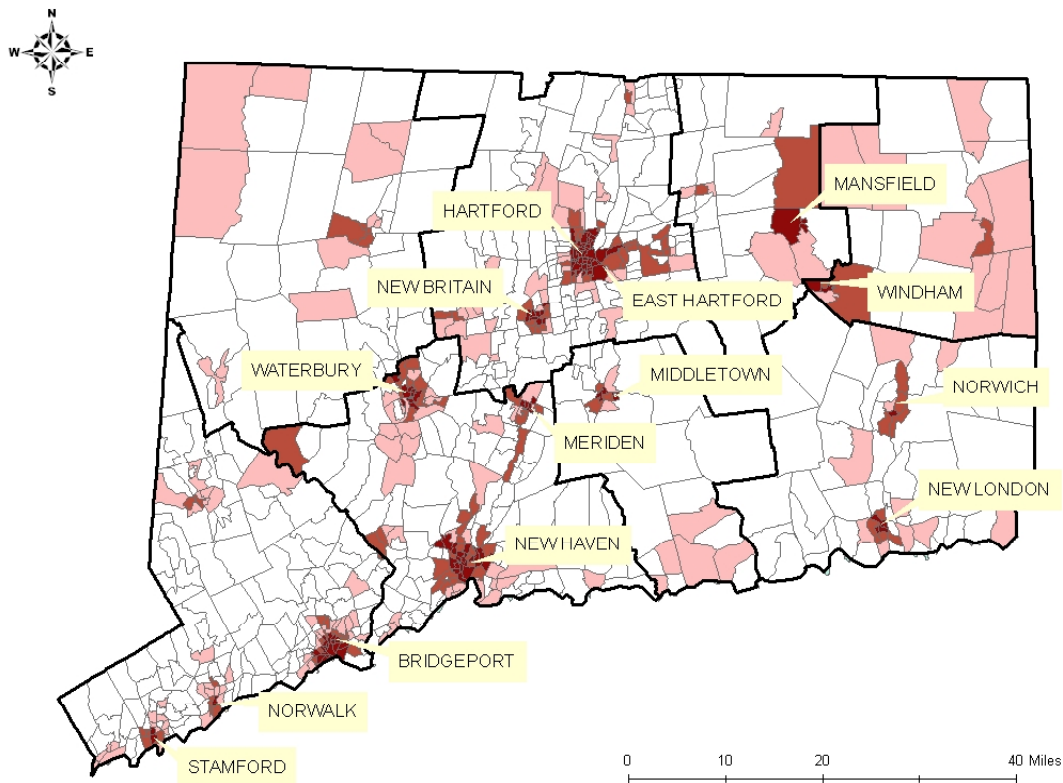
The term “*gender*” refers to the cultural roles assigned to males or females, which vary considerably by society (e.g., how to behave like a “man” or a “woman”) (Lavenda and Schultz 2007, 106). “Gender” roles and categories are created and changed over time by members of a society in order to reflect social changes as they occur.

“Gender identity” is not the same as sexual identity. Gender identity has to do with how and in what ways one identifies with the available gender categories in a society (in the U.S.: “man” and “woman”) (GLMA and LGBT Health Associates 2001, 445). A person’s gender identity may not always match his or her biological sex. That is, a person may have been born with female genitalia but identify as a man. In this case the person might be termed a **“transgender”** individual: “a person whose gender identity or gender expression is not congruent with his or her biological sex” (GLMA and LGBT Health Associates 2001, 448). “Transgender” is also used as an umbrella term to describe other people who are cross-dressers/transvestites, androgynes, and transsexuals, although this use masks the differences in sexual and gender identity, behaviors, and community feeling of these different populations (Ferber, Holcomb and Wentling 2009; GLMA and LGBT Health Associates 2001, 448). Cross-culturally there are many examples of “in-between” or “third or fourth gender” categories or identities (e.g., Davies 2006; Kottak 2007; Nanda 1998) but in the U.S. there are few opportunities to act outside the two fundamental gender categories without societal opprobrium.

Health databases generally do collect data on sex or gender. Health databases often do not collect information on gender identity or sexual orientation, unless they are of explicitly programmatic interest.

APPENDIX VIII GEOGRAPHICAL DISTRIBUTION OF POVERTY, CONNECTICUT, 1999

This map presents the percent of persons living below poverty level in 1999, by census tract. In 1999, the federal poverty threshold for a 4-person family with two related children under 18 years old was \$16,896 (See Appendix IV for poverty definitions).



Source: Hayward 2008. Based on U.S. Census 2000 Tables, Matrix P87, 'Poverty Status in 1999'.

Percent Below Poverty Level

- 0.00-4.99
- 5.00-9.99
- 10.00-19.99
- 20.00-100.00

County Boundaries



APPENDIX IX
LEADING CAUSES OF DEATH BY GENDER AND RACE
OR ETHNICITY, CONNECTICUT, 2000–2004

These tables present the leading causes of death by gender, for five racial and ethnic groups in Connecticut for the years 2000–2004.

Appendix IX. Leading Causes of Death^a by Gender and Race or Ethnicity – All Connecticut Residents and American Indian/Alaska Native Residents, 2000–2004^b				
Cause of Death (ICD-10 classification)	All Connecticut Residents		American Indian/Alaska Native Residents	
	All Deaths	Rank – Deaths ^a	All Deaths	Rank – Deaths ^a
<i>All Residents</i>				
Diseases of the heart	42,434	1	61	1
All cancer	35,434	2	36	2
Cerebrovascular disease (stroke)	9,318	3	14	3
Chronic lower respiratory diseases	7,339	4	13	4
Unintentional Injuries	5,693	5	12	5
Diabetes mellitus	3,541	7	6	6
Septicemia	2,757	10	6	6
Nephritis, nephritic syndrome, nephrosis	2,827	9	6	6
Chronic liver disease and cirrhosis	1,544	11	5	9
Suicide	1,395	12	5	9
<i>All Males</i>				
Diseases of the heart	20,012	1	34	1
All cancer	17,624	2	20	2
Chronic lower respiratory diseases	3,126	5	6	3
Unintentional injuries	3,686	3	6	3
Nephritis, nephritic syndrome, nephrosis	1,346	8	4	5
Pneumonia and Influenza	1,825	6	4	5
Cerebrovascular disease	3,448	4	4	5
Diabetes mellitus	1,683	7	3	8
Septicemia	1,239	9	3	8
Chronic liver disease and cirrhosis	979	11	3	8
<i>All Females</i>				
Diseases of the heart	22,422	1	27	1
All cancer	17,808	2	16	2
Cerebrovascular disease (stroke)	5,870	3	10	3
Chronic lower respiratory diseases	4,213	4	7	4
Unintentional Injuries	2,007	7	6	5
Diabetes mellitus	1,858	8	3	6
Septicemia	1,518	9	3	6
Nephritis, nephritic syndrome, nephrosis	1,481	10	2	8
Chronic liver disease and cirrhosis	565	12	2	8
Suicide	293	15	2	8

Source: DPH 2008b.

^a Ranks are based on the National Center for Health Statistics (NCHS) leading causes of death list. 2000–2004 deaths are classified according to the ICD-10 system (See Appendix V).

^b Race groupings exclude persons of Hispanic ethnicity. Race and ethnicity information on the death certificate is typically based on report by next of kin, a funeral director, coroner, or other official. Race or ethnicity designation based on observation may be reported incorrectly.

**Appendix IX. Leading Causes of Death^a by Gender and Race or Ethnicity –
All Connecticut Residents and Asian/ Pacific Islander Residents, 2000–2004^b**

Cause of Death (ICD-10 classification)	All Connecticut Residents		Asian/ Pacific Islander Residents	
	All Deaths	Rank – Deaths ^a	All Deaths	Rank – Deaths ^a
<i>All Residents</i>				
All cancer	35,434	2	174	1
Diseases of the heart	42,434	1	160	2
Cerebrovascular disease (stroke)	9,318	3	46	3
Unintentional injuries	5,693	5	25	4
Pneumonia and Influenza	4,343	6	18	5
Nephritis, nephritic syndrome, nephrosis	2,827	9	17	6
Chronic lower respiratory diseases	7,339	4	15	7
Diabetes mellitus	3,541	7	13	8
Septicemia	2,757	10	10	9
Suicide	1,395	12	10	9
<i>All Males</i>				
Diseases of the heart	20,012	1	93	1
All cancer	17,624	2	76	2
Cerebrovascular disease (stroke)	3,448	4	25	3
Unintentional injuries	3,686	3	20	4
Pneumonia and Influenza	1,825	6	9	5
Nephritis, nephritic syndrome, nephrosis	1,346	8	9	5
Chronic lower respiratory diseases	3,126	5	9	5
Diabetes mellitus	1,683	7	9	5
Suicide	1,102	10	9	5
Chronic liver disease and cirrhosis	979	11	5	10
<i>All Females</i>				
All cancer	17,808	2	98	1
Diseases of the heart	22,422	1	67	2
Cerebrovascular disease (stroke)	5,870	3	21	3
Pneumonia and Influenza	2,518	5	9	4
Nephritis, nephritic syndrome, nephrosis	1,481	10	8	5
Chronic lower respiratory diseases	4,213	4	6	6
Septicemia	1,518	9	6	6
Unintentional injuries	2,007	7	5	8
Aortic aneurysm and dissection	435	13	5	8
Diabetes mellitus	1,858	8	4	10

Source: DPH 2008b.

^a Ranks are based on the National Center for Health Statistics (NCHS) leading causes of death list. 2000–2004 deaths are classified according to the ICD-10 system (See Appendix V).

^b Race groupings exclude persons of Hispanic ethnicity. Race and ethnicity information on the death certificate is typically based on report by next of kin, a funeral director, coroner, or other official. Race or ethnicity designation based on observation may be reported incorrectly.

**Appendix IX. Leading Causes of Death^a by Gender and Race or Ethnicity –
All Connecticut Residents and Black or African American Residents, 2000–2004^b**

Cause of Death (ICD-10 classification)	All Connecticut Residents		Black or African American Residents	
	All Deaths	Rank – Deaths ^a	All Deaths	Rank – Deaths ^a
<i>All Residents</i>				
Diseases of the heart	42,434	1	2,343	1
All cancer	35,434	2	2,198	2
Cerebrovascular disease (stroke)	9,318	3	549	3
Unintentional injuries	5,693	5	431	4
Diabetes mellitus	3,541	7	407	5
Human immunodeficiency virus (HIV) disease	950	15	398	6
Nephritis, nephritic syndrome, nephrosis	2,827	9	308	7
Chronic lower respiratory diseases	7,339	4	240	8
Septicemia	2,757	10	232	9
Homicide	510	17	211	10
<i>All Males</i>				
Diseases of the heart	20,012	1	1,158	1
All cancer	17,624	2	1,123	2
Unintentional injuries	3,686	3	314	3
Human immunodeficiency virus (HIV) disease	657	13	272	4
Cerebrovascular disease (stroke)	3,448	4	229	5
Homicide	375	16	180	6
Diabetes mellitus	1,683	7	158	7
Nephritis, nephritic syndrome, nephrosis	1,346	8	140	8
Chronic lower respiratory diseases	3,126	5	111	9
Septicemia	1,239	9	102	10
<i>All Females</i>				
Diseases of the heart	22,422	1	1,185	1
All cancer	17,808	2	1,075	2
Cerebrovascular disease (stroke)	5,870	3	320	3
Diabetes mellitus	1,858	8	249	4
Nephritis, nephritic syndrome, nephrosis	1,481	10	168	5
Septicemia	1,518	9	130	6
Chronic lower respiratory diseases	4,213	4	129	7
Human immunodeficiency virus (HIV) disease	293	15	126	8
Unintentional Injuries	2,007	7	117	9
Pneumonia and Influenza	2,518	5	88	10

Source: DPH 2008b.

^a Ranks are based on the National Center for Health Statistics (NCHS) leading causes of death list. 2000–2004 deaths are classified according to the ICD-10 system (See Appendix V).

^b Race groupings exclude persons of Hispanic ethnicity. Race and ethnicity information on the death certificate is typically based on report by next of kin, a funeral director, coroner, or other official. Race or ethnicity designation based on observation may be reported incorrectly.

**Appendix IX. Leading Causes of Death^a by Gender and Race or Ethnicity –
All Connecticut Residents and Hispanic Residents, 2000–2004^b**

Cause of Death (ICD-10 classification)	All Connecticut Residents		Hispanic Residents	
	All Deaths	Rank – Deaths ^a	All Deaths	Rank – Deaths ^a
<i>All Residents</i>				
Diseases of the heart	42,434	1	864	1
All cancer	35,434	2	800	2
Unintentional injuries	5,693	5	415	3
Human immunodeficiency virus (HIV) disease	950	15	247	4
Cerebrovascular disease (stroke)	9,318	3	196	5
Diabetes mellitus	3,541	7	157	6
Chronic liver disease and cirrhosis	1,544	11	135	7
Chronic lower respiratory diseases	7,339	4	129	8
Septicemia	2,757	10	112	9
Homicide	510	17	105	10
<i>All Males</i>				
Diseases of the heart	20,012	1	473	1
All cancer	17,624	2	437	2
Unintentional injuries	3,686	3	303	3
Human immunodeficiency virus (HIV) disease	657	13	172	4
Chronic liver disease and cirrhosis	979	11	100	5
Cerebrovascular disease (stroke)	3,448	4	86	6
Homicide	375	16	82	7
Diabetes mellitus	1,683	7	73	8
Suicide	1,102	10	63	9
Septicemia	1,239	9	53	10
<i>All Females</i>				
Diseases of the heart	22,422	1	391	1
All cancer	17,808	2	363	2
Unintentional injuries	2,007	7	112	3
Cerebrovascular disease (stroke)	5,870	3	110	4
Diabetes mellitus	1,858	8	84	5
Chronic lower respiratory diseases	4,213	4	82	6
Human immunodeficiency virus (HIV) disease	293	15	75	7
Septicemia	1,518	9	59	8
Pneumonia and Influenza	2,518	5	57	9
Nephritis, nephritic syndrome, nephrosis	1,481	10	48	10

Source: DPH 2008b.

^a Ranks are based on the National Center for Health Statistics (NCHS) leading causes of death list. 2000–2004 deaths are classified according to the ICD-10 system (See Appendix V).

^b Race groupings exclude persons of Hispanic ethnicity. Race and ethnicity information on the death certificate is typically based on report by next of kin, a funeral director, coroner, or other official. Race or ethnicity designation based on observation may be reported incorrectly.

**Appendix IX. Leading Causes of Death^a by Gender and Race or Ethnicity –
All Connecticut Residents and White Residents, 2000–2004^b**

Cause of Death (ICD-10 classification)	All Connecticut Residents		White Residents	
	All Deaths	Rank – Deaths ^a	All Deaths	Rank – Deaths ^a
<i>All Residents</i>				
Diseases of the heart	42,434	1	37,533	1
All cancer	35,434	2	31,227	2
Cerebrovascular disease (stroke)	9,318	3	8,171	3
Chronic lower respiratory diseases	7,339	4	6,726	4
Unintentional Injuries	5,693	5	4,409	5
Pneumonia and Influenza	4,343	6	3,927	6
Diabetes mellitus	3,541	7	2,848	7
Alzheimer's Disease	2,965	8	2,754	8
Nephritis, nephritic syndrome, nephrosis	2,827	9	2,322	9
Septicemia	2,757	10	2,319	10
<i>All Males</i>				
Diseases of the heart	20,012	1	17,425	1
All cancer	17,624	2	15,469	2
Cerebrovascular disease (stroke)	3,448	4	2,963	3
Chronic lower respiratory diseases	3,126	5	2,831	4
Unintentional injuries	3,686	3	2,756	5
Pneumonia and Influenza	1,825	6	1,630	6
Diabetes mellitus	1,683	7	1,389	7
Nephritis, nephritic syndrome, nephrosis	1,346	8	1,110	8
Septicemia	1,239	9	1,036	9
Suicide	1,102	10	917	10
<i>All Females</i>				
Diseases of the heart	22,422	1	20,108	1
All cancer	17,808	2	15,756	2
Cerebrovascular disease (stroke)	5,870	3	5,208	3
Chronic lower respiratory diseases	4,213	4	3,895	4
Pneumonia and Influenza	2,518	5	2,297	5
Alzheimer's Disease	2,095	6	1,949	6
Unintentional Injuries	2,007	7	1,653	7
Diabetes mellitus	1,858	8	1,459	8
Septicemia	1,518	9	1,283	9
Nephritis, nephritic syndrome, nephrosis	1,481	10	1,212	10

Source: DPH 2008b.

^a Ranks are based on the National Center for Health Statistics (NCHS) leading causes of death list. 2000–2004 deaths are classified according to the ICD-10 system (See Appendix V).

^b Race groupings exclude persons of Hispanic ethnicity. Race and ethnicity information on the death certificate is typically based on report by next of kin, a funeral director, coroner, or other official. Race or ethnicity designation based on observation may be reported incorrectly.

