# Hartford Health Survey 2006



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# HARTFORD HEALTH SURVEY 2006

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#### **EXECUTIVE SUMMARY**

This report on the *Hartford Health Survey 2006* describes the health of Hartford residents within the context of its broader determinants in addition to the presence or absence of disease. The *Hartford Health Survey* was first performed in 1997 and repeated in 2000 and 2003. The present report presents the results of the most recent Hartford Health Survey completed in 2006. These surveys are part of the Hartford Health and Human Services Department's and Hartford's Community Health Partnership's commitment to elicit feedback directly from Hartford residents on their health and their community, to be responsive to the concerns of the community, and to assess whether the needs of all segments of the community are being addressed.

Recruitment of adult Hartford residents to participate in the *Hartford Health Survey 2006* was initiated by telephone. 4,597 residents were randomly contacted. 2,772 agreed to participate. 1,144 individuals returned usable surveys. The 2006 sample was comprised of a significantly higher percentage of African Americans and a significantly higher percentage of American Indian or Alaska Natives relative to the 2003 sample. In 2006, significantly more respondents live at the poverty level than reported in 2003 and the percentage of respondents living at "above low-income" levels has decreased significantly from 2003, and from 1997. Population mobility data revealed a significant increase in respondents that have lived in their current neighborhood for less than 1 year relative to 1997 and a significant decrease in each year of the survey for the number of respondents that have lived in their current neighborhood for more than 10 years. Relative to 2000 and to 1997, significant improvements were reported in 2003 and 2006 for the percentage of respondents reporting a primary place of care. Significant improvement was also reported for the percentage reporting a primary care provider since 1997. Compared to 2003, the 2006 sample reported a significant decline in the level of satisfaction with the quality of health care.

Regarding preventive screenings, significant increases were reported for cholesterol screening relative to 1997 and 2000. Mammograms had similar rates to previous years and rates of blood pressure screening remained significantly higher than in 1997, but similar to the rates in 2000 and 2003. Rates of Pap smear declined to the rates reported in 1997 after rising significantly in 2000. Non-Hispanic White men reported significantly higher rates of prostate cancer screening by rectal exam or PSA blood test compared to Black and Hispanic men. Older respondents, age 65+, were significantly more likely to have colorectal cancer screening compared to respondents ages 45-64.

Furthermore, reported rates for health screenings were significantly related to having health insurance. In 2006, a significantly higher percentage of respondents with health insurance reported having dental, cholesterol, blood pressure, diabetes, colorectal, testicular, and breast exam screenings than respondents without health insurance.

Regarding chronic disease, hypertension, depression, arthritis, asthma, and diabetes are the top five reported conditions in 2006; prevalence rates have significantly increased for hypertension and diabetes since 2003 and all but arthritis have significantly increased since 2000. Mental health problems, other than depression, have increased significantly relative to 1997, but have not significantly changed relative to 2000 and 2003. Higher rates of depression were reported among women, lower income and Hispanic respondents. Significantly higher rates of asthma were reported among Hispanic respondents compared to Black and Non-Hispanic White Hartford respondents. A significantly higher cancer rate was reported by non-Hispanic White respondents.

Regarding behavioral risk factors, smoking rates in Hartford have decreased significantly since 2000. Respondents that never smoked or used to smoke have significantly fewer risk factors (0-2)

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and those that still smoke have a higher number of overall risk factors (3+). Significant and steady improvements were reported for seat belt use since 1997. However, rates of obesity remain higher than national rates and levels of physical exercise remain low. Regarding neighborhood issues, illegal drugs remain the top neighborhood concern. A significant increase was reported in the percentage of respondents concerned about crime and youth violence in 2006 relative to 2003 and 2000.

The City of Hartford's Department of Health and Human Services is introducing a section in the *Hartford Health Survey 2006* on the co-existence of various conditions, or poly-syndromes. Accordingly, high rates of co-existent conditions were found to be associated with hypertension. Of the people who reported a diagnosis of hypertension, 40% were obese (BMI≥ 30), 63% had depression, 47% had arthritis, 25% had asthma, 34% had diabetes, 22% had heart disease, 53% had problems with crime in the community, 26% had unemployment in household and 28% were in poverty.

#### Introduction

According the World Health Organization, "health" is not merely the absence of disease but is rather a state of complete physical, mental, and social well-being. Health is influenced by broad social and economic forces and resources, such as access to a quality health care system, in addition to the presence or absence of disease. This concept emphasizes the important roles played by entities external to the formal medical and public health care systems such as schools, employers and community organizations. It also acknowledges the impact of an individual's behavior within the community. Successful implementation of strategies to improve community health and its assessment require an understanding of these complex interacting forces. This report on the Hartford Health Survey 2006 describes the health of Hartford residents within the context of these broader determinants. This assessment is part of a long term and evolving process of health improvement, which has included partnership development, health assessment, prioritization of issues, implementation of initiatives, evaluation, and reassessment. The reassessment function, in particular, serves to challenge, refocus and energize the process, and acknowledges the contributions that many individuals and groups have made to our community's health. The Hartford & Human Services Department, working with Hartford's Public Health Advisory Council and other partner groups has used the findings from reassessment activities and data from other local, state and national sources, to shape health policy and health strategy development. The present report on the Hartford Health Survey 2006 is intended for use by health & human services professionals, institutions and organizations, public officials, community organizations, and community members.

# **Background to Public Health in Hartford**

In 1993, the Mayor of Hartford issued a formal process, a **Call to Action**, to address the city's health care needs and to examine the city's public health care system. This Call to Action led to the formation of the **Mayor's Blue Ribbon Task Force on Public Health** to analyze the overall form and function of the City of Hartford Public Health Department. This Task Force recommended the development **of public / private collaborations** in health care and such recommendation led to the formation of the Hartford's Community Healthy Partnership, which has been guided by the Public Health Advisory Council. Ever since, the local public health agency has always worked in close partnership with several institutions and agencies and has given great importance to obtaining **community input**.

Ten years after, in July 2003, the city of Hartford merged the Department of Health and the **Department of Human Services into the new Health & Human Services Department (HHS).** Since the merge, the Hartford Community Health partnership was expanded to include a larger list of agencies and partners. The Public Health Advisory Council was also expanded and now includes representatives from Hartford, Saint Francis and Connecticut Children hospital, UCONN Health Center, UCONN's MPH and Center for Public Health programs, Capitol Region Mental Health Center, Capitol Workforce Partners, Urban League of Greater Hartford and other agencies.

In 2005, Mayor Eddie Perez started the **Healthy Communities Initiative**, aimed at providing medical homes to Hartford's uninsured population. Funded through a large federal grant and with contribution from various funding sources, this initiative is led by a group of eight partners, including Hartford, Saint Francis and Connecticut Children Hospitals, Connecticut Health Foundation, Aetna Foundation, Hartford Foundation for Public Giving, Hispanic Health Council, and the Hartford Department of Health & Human Services. Mayor Eddie Perez himself serves as

chair of this committee. Staffed by an executive director and various patient navigators, in its initial four months of operations have already enrolled over 500 new patients.

The Department of Health and Human Services mission reads: "Working towards a healthy, self-sufficiency and enjoyable capital city". This mission is carried using a model of public, private and community partnerships. Currently, HHS is working on more than 20 health and human services initiatives, in close partnership with many groups that include the following Calls to Actions, Task Forces, Committees, Coalitions, Networks and Commissions:

- 1. Public Health Advisory Council
- 2. Mayor's Healthy Communities Committee
- 3. Asthma Call to Action
- 4. Diabetes/Obesity Prevention Task Force
- 5. Behavioral Health Call to Action
- 6. Cancer Task Force
- 7. Lead Task Force
- 8. Flu Prevention Network
- 9. Quality of Life Committee (Environmental health matters)
- 10. Commission on the Environment
- 11. Ryan White Planning Council
- 12. Substance Abuse Commission
- 13. Commission on Aging
- 14. Youth Commission
- 15. Breaking the Cycle Committee on Teen Pregnancy
- 16. Capitol Region Emergency Planning Committee
- 17. Oral Health Initiative Committee
- 18. Metro-Prevention Coalition (For HIV, Hepatitis C and Substance Abuse)
- 19. Multicultural Health Advisory Commission
- 20. Urban Health Task Force
- 21. Grandparents Raising Grandchildren Task Force
- 22. Commission on Homelessness
- 23. Urban Track Steering Committee

The active presence of these groups has allowed HHS to work on an expanded definition of health and further develop and implement the concept of urban health. In environments where social ills abound, environmental, social and emotional determinants of physical health pose a major challenge to public health officials. Fortunately, financial contributions from the City's general fund and a large grant portfolio that allows the department to enlist a good size workforce and several dozens of contractors that are now part of Hartford's public Health infrastructure. The expanded amount of resources now harbored in an integrated HHS department allows the city of Hartford to tackle urban health matters in a comprehensive fashion. For example, while health inspectors issue citations to owners of dilapidated housing units, the department also deploys housing relocation specialists and social workers to assist families with their housing, employment and other social needs. Simultaneously, the ongoing working relationship with federal, state and local agencies helps maximize existing resources. Chances of attaining improvement on health indicators are increased by using this integrated service delivery model. Nevertheless, efforts need to be made to increase health literacy and the capacity for self-efficacy in the community at large.

# Measuring Health in Hartford: The Hartford Health Survey 2006

The *Hartford Health Survey* was first performed in 1997 and repeated in 2000 and 2003. The current report presents the results of the most recent Hartford Health Survey completed in 2006. These surveys are part of the Hartford Health and Human Services Department's and Hartford's Community Health Partnership's commitment to elicit feedback directly from Hartford residents on their health and their community, to be responsive to the concerns of the community, and to assess whether the needs of all segments of the community are being addressed. The *Hartford Health Survey* addresses the broader determinants of health, including access to and satisfaction with health care, neighborhood issues, social conditions, and health risk behaviors, in addition to collecting more traditional health information on chronic disease and health screenings.

# Participant recruitment

Recruitment of Hartford residents to participate in the *Hartford Health Survey 2006* was initiated by telephone. Adult Hartford residents, aged 18 years or older, were eligible for recruitment. 4,597 residents, selected by computer generated random digit dialing, were contacted by telephone. 2,772 agreed to participate. These individuals were sent a personalized cover letter, a survey booklet, and a \$2 bill in appreciation of their cooperation, and a postage-paid return envelope. A 27 page, 79-question *Hartford Health Survey 2006* booklet was used for this health assessment. 352 individuals selected to have Spanish-translated surveys mailed to them. No personal identification information, such as name or address, was contained in the survey booklet. The cooperation rate for the telephone recruitment phase was 60.3%, for the mailed phase was 45%(including 12 surveys returned after cut-off- 1,156/2,569 surveys received), yielding an overall response rate of 27.1%. Usable surveys were received from 1,144 individuals. As in 2003, the lower response rate can partly be attributed to the length of the survey; this survey was 3 pages longer than the ones used in 1997 and 2000.

There are some limitations to this recruitment methodology (as described by O'Keefe, Maljanian and McCormack in their report on the *Hartford Health Survey 2000*):

- Requires a telephone and mailing address. Part of this limitation was accounted for through a separate health survey of Hartford's homeless residents, described in a report entitled *Homelessness in Hartford* 2002<sup>1</sup>.
- Requires ability to read above a 6th grade reading level.
- Requires ability to write, and to see well enough to read.
- Residents whose spoken language is other than English or Spanish are not represented.
- Women are more likely to complete a survey of this nature than men resulting in higher female and lower male representation among survey respondents.

There are many strengths of this recruitment methodology. Major strengths are listed below:

- The randomness of household selection reduces the level of respondent bias in the data.
- The recruiting phone calls, monetary incentive, and stamped return envelopes encourage a higher response rate than would be obtained had these methods not been used.
- The information collected is confidential and anonymous.
- Data obtained are at the population—level and are more representative of the population of Hartford than would be data obtained only from patients enrolled in clinics or hospitals.
- Data obtained are specific to Hartford residents.

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<sup>&</sup>lt;sup>1</sup> Homelessness in Hartford 2002. Report on line at www.hchp.org

Given the strengths noted above, the *Hartford Health Survey* is thus a large, broad-based health assessment that reflects the adult population of the City of Hartford. In the following discussion of the results of the *Hartford Health Survey 2006*, the word "significant" is used to describe the results of statistical tests that indicate differences at less than a 5% probability level.

#### HARTFORD HEALTH SURVEY 2006

#### **RESULTS**

#### **Demographic Characteristics**

Demographic characteristics are used to identify who constitutes a population, by age group, gender, race and ethnicity, level of education, and income level. Recognition of the demographics of a population is important for planning appropriate health interventions to address identified health care needs. The demographic characteristics of the individuals sampled in the *Hartford Health Survey 2006* are compared below to the characteristics of those sampled in the previous *Hartford Health Surveys 2003*, *2000* and *1997* and to data provided for the City of Hartford by the U.S. Census. This table demonstrates that there has been a decrease in the median household income of *Hartford Health Survey* respondents from \$24,193 in 2003 to \$23,784 in 2006, although this change was not statistically significant. It is noteworthy that the percentage of respondents who reported being "laid off or unemployed and looking for work" for 2003 and 2006 (9% vs. 8%) was not significant as was the significant increase reported from 2000 to 2003 (6% vs. 9%). There was an unemployment rate of 9% for Hartford residents in 2006.

Regarding poverty levels, the rate of respondents living at the poverty level in 2006 is based upon the 2005 annual poverty guideline update in The Federal Register. The rate of respondents living at the poverty level in 2003 is based upon 2002 federal guidelines. Respondents' incomes from the 2000 survey were based on 1999 federal guidelines and respondents' incomes from the 1997 survey were based on the 1996 federal guidelines. The definition of "low income" was based on 175% of the federal poverty guidelines for each year respectively. In 2000 there was an increase in the percentage of respondents living at the poverty level, from 26% in 1997 to 34% in 2000. Data from 2003 indicated that 28% of respondents lived at the poverty level, a rate that was significantly lower than the 34% reported in 2000. In 2006, the data shows that the rate of those living at the poverty level has significantly risen to 34% and compares to the rate found in 2000. The percentage of respondents living at "above low-income" level has decreased significantly from 52% in 2003 to 45% in 2006, and is still significantly lower than the 60% reported in 1997. It is important to note that, in 2006 as in 2000, the Hartford Health Survey sample was comprised of a significantly higher percentage of African Americans. There was also increases in the percentages of Hispanic and non-Hispanic White respondents relative to 2003 although the difference was not significant. In 2006, a significantly higher percentage of Hispanic (48%), and Black (37%) respondents reported a household income at or below the poverty level, compared to non-Hispanic Whites (17%), which is similar to data obtained in 2000.

Demographic Characteristics	Hartford Health Survey 2006	Hartford Health Survey 2003	Hartford Health Survey 2000	Hartford Health Survey 1997	Hartford Pop. Statistics 2000 U.S. Census
Median Household Income	\$23,784	\$24,193	\$20,349	\$21,632	\$24,820
Black (African American, Caribbean/Virgin Islander)	35%	30%	37%	33%	36%
Hispanic	32%	30%	32%	29%	41%
White (non Hispanic)	32%	31%	24%	34%	18%
Gender (Female) %	70%	69%	69%	67%	52%
% of adult population age 65+ years	18%	14%	17%	16%	10%
Median Age (years) of adult survey respondents	48 years	43 years	43 years	40 years	
High School Completion*	76%	74%	72%	76%	61%
% at or below Federal poverty level**	34%	24%	34%	26%	27 %
Unemployment rate ***	9%	9.3	7%	8%	9%

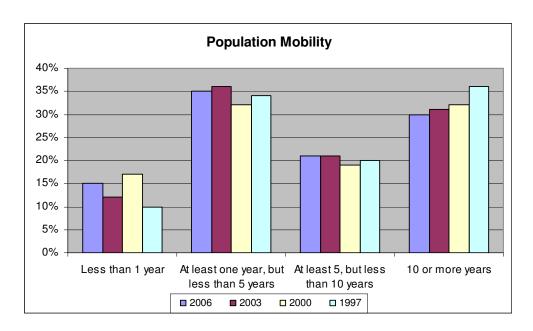
<sup>\*</sup> Hartford Health Survey data, % of population aged 18 years+. Hartford population statistics, % of population aged 25 years+.

#### **Population Mobility**

Population mobility is an important demographic factor with regards to community stability, community health/healthcare, resource management, etc. The 2006 survey showed that 15% percent of respondents have changed their neighborhood in the past year. This data is significantly different from the rate reported in 1997 although it is not a significant change from 2000 or 2003. A significantly higher proportion of 18-34 year-olds (25%) reported maximum mobility, or living in the same neighborhood for less than one year, in comparison to other age groups. Also, a significantly higher proportion of people living at or below poverty level (19%) reported maximum mobility compared to higher income levels. The proportion of Blacks (15%) and Hispanics (16%) reporting maximum mobility was significantly higher than Whites (10%). 35% of respondents have lived in the same neighborhood for at least 1 year, but less than 5 years. A significantly higher percentage of 18-34 year olds (45%) and 35-44 year olds (46%) chose this response for their mobility status compared with older age groups. Also, a significantly higher proportion of Black (38%) and Hispanic (39%) respondents also reported living in the same neighborhood for over 1 but less than 5 years.

<sup>\*\*</sup>Based on US Dept. of Health & Human Services Poverty Guidelines, which takes into account number of persons in household and total annual household income.

<sup>\*\*\*</sup> Rates from *Hartford Health Survey* include both individuals who were "laid off/unemployed and looking for work" as well as those who reported being "laid off/unemployed and not looking for work."

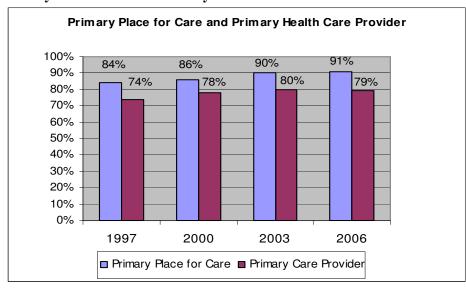


21% of respondents reported living in their current neighborhood for at least 5 years but less than 10 years. A significantly higher percentage of these respondents described themselves as Hispanic (26.7%) relative to Blacks (20%) and non-Hispanic Whites (20%). Lastly, 30% of respondents reported living in their current neighborhood for 10 or more years. This minimum mobility rate is significantly lower than the rate of 36% reported in 1997. In 2006, respondents age 65+ (57%) reported a significantly higher rate of minimum mobility than younger respondents. A significantly higher percentage of those living "above low income" (36%) or at "low income" (31%) levels reported residing in the same neighborhood for 10 or more years compared with those living at or below the poverty level (18%). Non-Hispanic Whites (43%) reported a significantly higher rate of minimal mobility than Blacks (26%) and Hispanics (19%). The percentage of respondents in each mobility category has not changed significantly since 2003.

#### **Health Care and Access to Care**

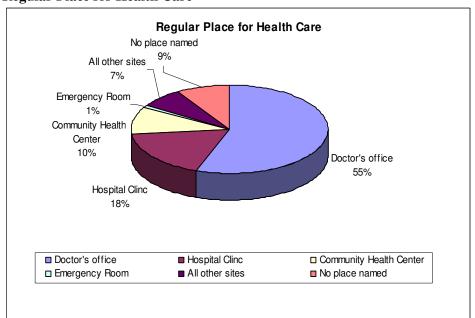
Multiple issues are considered when assessing the healthcare system at the community level: that residents identify a primary place for health care, a primary health care provider, health insurance status, as well as issues around access to and satisfaction with the health care they receive. In 1997, 2000, 2003 and 2006 *Hartford Health Survey* respondents were asked whether they had a primary place for health care, and a primary health care provider (physician or nurse).

## **Primary Place for Care / Primary Care Provider**



Relative to 2000 and 1997, a significant improvement was reported in 2003 and 2006 for the percentage of respondents reporting a primary place of care. A significant improvement was also reported for the percentage reporting a primary care provider since 1997.

#### **Regular Place for Health Care**

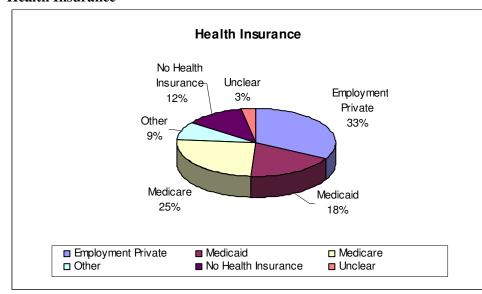


Doctors' offices were the main sites for primary care among survey respondents, although the rate has significantly decreased since 2003 from 63% to 56% in 2006.

\*The 1997 survey allowed multiple responses to this question

The emergency room was identified as the "regular" place for care by 1% of respondents. This may be viewed as a less than optimal site for regular care. This rate has significantly decreased from those reported in the previous years, 2.2% in 2003 and 3.5% in 2000. These rates are not comparable with the rates reported in 1997 (22%) because in 1997 the respondents were allowed to check more than one place for regular health care. In 2000, 2003 and 2006, the respondents were asked to check only one of the places for their regular healthcare. However, the finding about decrease in use of Emergency Room as the regular place of care needs to be interpreted with caution. The sample for this survey is primarily those people who have a phone line and a place of residence. This sample does not include the homeless and those without phone lines.

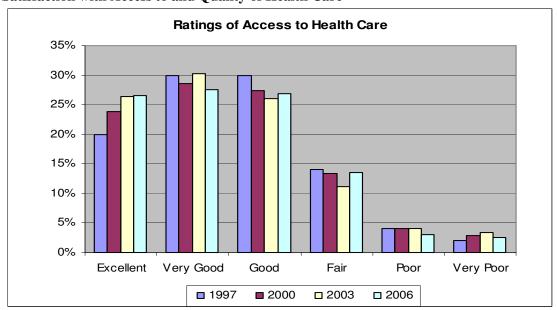
#### **Health Insurance**



The rate of respondents who reported no health insurance (12%) has not changed significantly since 2000. The importance of health insurance lies in its positive impact on access to care.

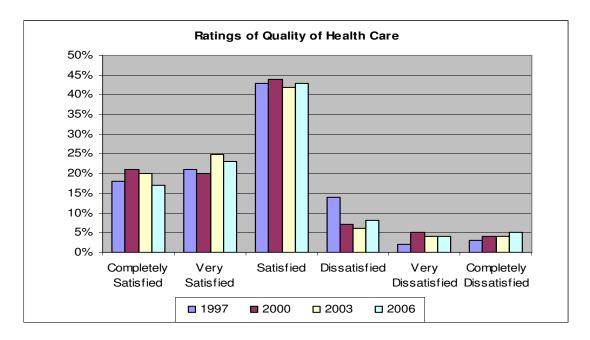
Among survey respondents, those without health insurance were significantly less likely to report having either a primary place for care or a primary care provider. Cost is an important barrier to health care among the uninsured. In 2006, 47% of respondents without health insurance report that they often put off visits to the doctor because of the cost, compared with approximately 9% of respondents who have health insurance; a finding that is similar to that reported in 2000 and 2003.

#### Satisfaction with Access to and Quality of Health Care



Access to health care is an important component in assuring that Hartford's residents receive health care. Survey respondents were asked to rate their access to care on a six-point scale from 'excellent' to 'very poor'. Chi-square analysis indicated that the distribution of responses were not significantly different across the years. Having health insurance was significantly associated with higher ratings on access to health care. Respondents living 'above low income' were

significantly more likely to rate their access to health care as 'excellent' compared to those living at the 'poverty' or 'low income' levels.

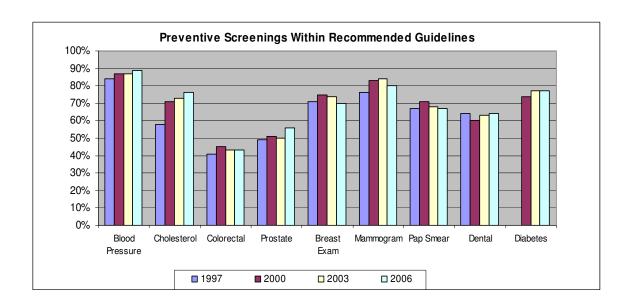


Survey respondents were also asked to rate their satisfaction with the quality of their health care on a six-point scale from 'completely satisfied' to 'completely dissatisfied'. Chi-square analysis indicated that the distribution of responses on this item from 1997, 2000, 2003 and 2006 differed significantly overall from year to year. The percentage of respondents who were "completely satisfied" or "very satisfied" in 2006 has decreased significantly since 2003. The percentage of respondents who report being "dissatisfied" remained significantly lower in 2006, 2003 and in 2000 relative to 1997, although the rate in 2006 did increase significantly from 2003. The factors that related to quality of care ratings were similar to those that relate to access to care ratings. Persons with health insurance, as well as those with an identified primary care provider were more satisfied with the quality of their health care.

#### **Preventative Screenings**

In order to identify and to more effectively treat many chronic conditions, preventative screenings are recommended. These screenings allow early detection and treatment of many health problems. Some screenings are recommended for all adults, other screenings are recommended based on age and gender. Analyses are conducted based upon respondents' receipt of preventative screenings within guidelines set by the United States Preventative Task Force, and /or compared to the established goals of Healthy People 2010. The rates reported in this section reflect the percentage of the population screened for a particular disease. This does not reflect the percentage of persons who report having the disease within the population (see Chronic Diseases).

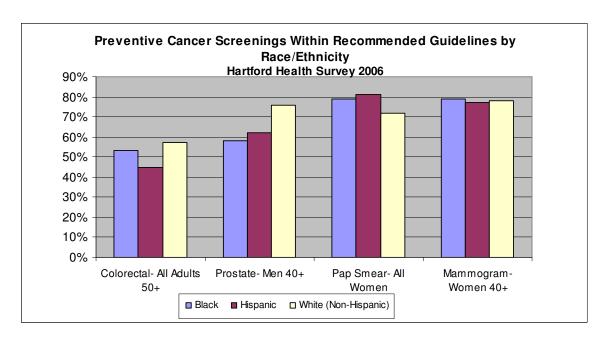
<sup>&</sup>lt;sup>1</sup> Healthy People 2010. http://www.health.gov/healthypeople/



The above graph takes into account the following age and gender specific guidelines:

- Blood Pressure all adults within past 2 years.
- Cholesterol screening by blood test. All adults within the past 2 years.
- Colorectal screening for blood in stool. All adults aged 50 years or older within past year.
- Prostate screening by rectal exam. All men aged 40 years or older within past year.
- Breast Exam screening by clinical breast exam. All adult women (18 years or older) within the past year.
- Mammogram Women, aged 40 years or older, within the past 2 years.
- Pap Smear All adult women (18 years or older) within the past year.
- Dental Exam (dental exam and/or teeth cleaning). All adults within the past year.
- Diabetes screening by blood glucose. Adults aged 45 years or older within the past 2 years.

While in 2006, 80% of women, aged 40 years or older, report having a mammogram in the past 2 years, compared to 84% in 2003, 83% in 2000 and 76% in 1997, the difference in these rates are not statistically significant. Reported cholesterol screening rates in 2006 were improved significantly relative to 1997, but were statistically similar to the rates observed in 2000 and 2003. 76% of adults report a serum cholesterol test within the past two years in 2006, compared with 73% in 2003, 71% in 2000 and 58% in 1997. Rates of blood pressure screening remained significantly higher than in 1997. Rates of Pap smear were similar to the rates in 2003. Having health insurance is significantly associated with reported health screenings. A significantly higher proportion of individuals with health insurance reported getting dental, cholesterol, blood pressure, diabetes, colorectal, testicular, and breast exam screenings than individuals without health insurance.

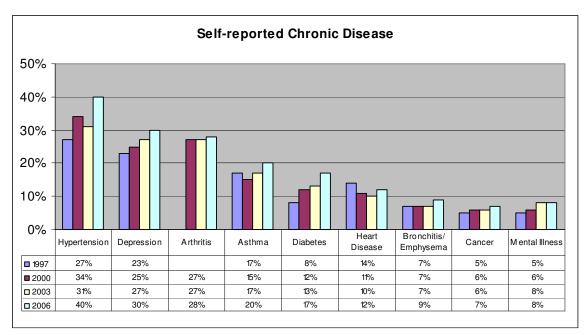


Non-Hispanic White men reported higher rates of prostate cancer screening by rectal exam compared to Black and Hispanic men. Hispanic respondents reported lower rates of colorectal cancer screening relative to Black and Non-Hispanic White respondents.

#### **Chronic Disease**

The level (prevalence) of disease in a community is an important indicator of its overall health. Increase in disease rates may reflect the development of new disease, or the detection of existing, undiagnosed, disease. Public health initiatives, such as screening clinics for diabetes, hypertension or cancer, will typically lead to an initial rise in the reported levels of these diseases within the population. The purpose of such screenings is to identify those individuals with existing, undiagnosed disease, provide treatment, increase the life expectancy, and improve the quality of life of those affected. When comparing levels of disease in a community over time, it is important to take such current health initiatives into account. The *Hartford Health Survey 2006* asked respondents to identify whether they had *ever* been told by a physician, or a nurse, that they had any of several conditions listed.

Hypertension, depression, arthritis, asthma and diabetes were the top five reported conditions in 2006. Prevalence rates have increased significantly for hypertension and diabetes since 2003. Depression and asthma rates have increased significantly relative to 2000 but not significantly relative to 2003.



It is noteworthy, that in 1997, a public health initiative was undertaken to provide free diabetes screening for Hartford residents. Increased screening and detection of diabetes among Hartford residents may be a contributing factor to these increased rates but these rates are consistent with a national trend of increasing rates of diabetes among U.S. adults in the third and fourth decades of life. From 1997 to 2000 there was a decrease in the reported rate of heart disease, as defined by any one of the following: angina, heart failure, or an enlarged heart. This may have reflected the positive impact of early disease detection and treatment, particularly for diabetes and hypertension, and a decrease in their cardiac complications. Rates of heart disease were significantly lower in 2003 and in 2000 relative to the rate reported in 1997. In 2006 the rate of heart disease increased compared with 2003 and 2000, although not significantly. There is no longer a significant difference between the current prevalence of heart disease and the rate reported in 1997.

#### Diabetes in Hartford

The prevalence of diabetes among survey respondents was 17%, highest among Hispanics (18%). This survey asked respondents with diabetes to answer a special set of questions regarding the diabetes-related health care they receive. These questions were based on specific American Diabetes Association guidelines for care of persons with diabetes (doctor visits, eye and foot examinations, and blood tests). The rates at which respondents with diabetes reported receiving each of the diabetes-related health care components were as follows (figures in parentheses indicate number of people providing data on each item):

Health care	% reporting
Reported seeing their physician at least twice in the past year	88 (179)
Had their feet examined at least once in the past year	65 (181)
Received an eye examination within the past year	51 (182)
Had a hemoglobin A1c blood test at least twice in the past year	70 (178)

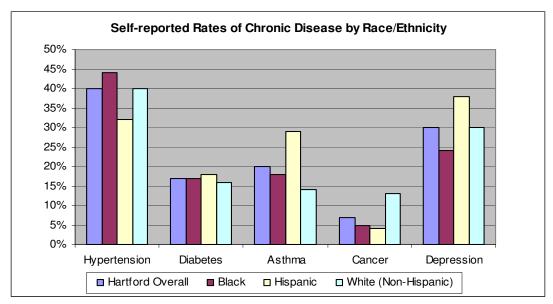
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<sup>&</sup>lt;sup>1</sup> Mokdad AH, Ford ES, et al. Diabetes Trends in the U.S.: 1990-1998. Diabetes Care. 2000; 23(9): 1278-1283.

It is important to note that significant improvements in hemoglobin A1c blood testing have been reported since 2000. First, the percentage of respondents with diabetes who reported that they had received this test 3-4 times in the past year increased significantly from 18% in 2000 to 35% in 2003. The rate did drop to 30% in 2006 although this change was not significant. Second, the percentage of respondents with diabetes who reported that they *didn't know* how many times this test was performed in the past year significantly decreased from 35% in 2000 to 14% in 2003 and again in 2006.

#### Reported Chronic Disease Rates by Race / Ethnicity

Hispanic respondents reported a significantly higher rate of asthma (29%) in comparison to Black and Caucasian groups. However, data from the 2005 Center for Disease Control's Behavioral Risk Factor Surveillance System (BRFSS) show similar rates of asthma for Hispanics and Blacks. Cancer rates in a population rise with age. The higher cancer rate reported by non-Hispanic White respondents is consistent with the older mean age of these survey respondents compared to other ethnic groups.



As reported in 2000 and 2003, the 2006 data indicate that persons living at the poverty and low-income levels and those who report lower levels of education tend to report these conditions significantly more often than persons with higher incomes or with more years of formal education. These observations highlight the impact of socioeconomic forces on disease patterns within the population.

#### Asthma in Hartford

The prevalence of self-reported asthma among survey respondents in 2006 was approximately 20%, a rate that has increased significantly since 2000. Among those with asthma, 45% of them reported that another member of their household had asthma. Among those without asthma, 20% reported that another member of their household had asthma. Reported asthma rates were significantly higher for Hispanics (29%) than for Blacks (18%) and non-Hispanic Whites (14%). Respondents living at the poverty level were significantly more likely to report having asthma than those living at higher income levels. Cigarette smoking has long been recognized as a trigger

<sup>&</sup>lt;sup>1</sup> Behavioral Risk Factor Surveillance System. http://www.cdc.gov/nccdphp/brfss/index.htm

for asthmatic attacks, suggesting that individuals with asthma can decrease their chances of experiencing asthmatic attacks by avoiding this trigger. Further, environmental tobacco smoke has been associated with the development of asthma in young children. Data from the *Hartford Health Survey 2006* indicated that approximately 31% of individuals who reported having asthma smoke currently, and an additional 26% of them reported smoking in the past. Furthermore, individuals with asthma were *more* likely then those without asthma to report that at least one current cigarette smoker was currently living in the household (28% vs. 21%), although this difference was not significant. Further, the rules around banning cigarette smoking did not differ significantly in the homes of persons with asthma (65%) relative to the homes of those without asthma (66%). This information suggests that, in Hartford, individuals with asthma are exposed to at least as much cigarette smoke in their homes as are those without asthma. These patterns correspond to those reported in 2000 and indicate a need for aggressive public health initiatives to decrease exposure to environmental tobacco smoke among those with asthma.

One new component that was added to the 2003 survey and repeated in the 2006 survey pertained to health education for those with asthma based upon goals described in Healthy People 2010. Respondents with asthma were asked whether or not they had ever taken a course or class on asthma self-management and whether they had ever received any of six health education components. The percentages of respondents reporting that they ever took a class or received any of these components were as follows (figures in parentheses indicate the number of people providing data on each item):

Health education component	% Reporting
Took course or class on asthma self-management	23 (190)
Received written asthma care plan	33 (189)
Received education on how to use inhaler properly	75 (189)
Received education on how to take controller medication	59 (189)
Received education on early symptoms of episodes and what to do if you get them	54 (189)
Received education on asthma self-care at home after any hospital stay due to asthma	48 (189)
Received education on how to identify and avoid environmental triggers	65 (189)

This data indicates that only one third of those with asthma in Hartford reported having ever received a written asthma care plan as part of their asthma care and that only 23% have ever taken a class or course on asthma self-care. The number of people with asthma who have received a written asthma care plan has increased since 2003 when the rate was only 25%, although this is not considered significant. One quarter of those with asthma reported having *never* received education on how to use their inhaler properly. This data suggests that there is a need for continued heath education efforts aimed at asthma self-management in Hartford. There has however, been a significant increase since 2003 (52%) on those reporting that they received education on how to identify and avoid things that may trigger asthma.

#### Behavioral Health in Hartford

The prevalence of self-reported clinical depression among survey respondents was 30%, and another 8% reported some other serious mental health problem. While the rate of depression increased by 3% from that reported in 2003, it was not a significant change. There is a significant increase in depression reported in 2006 when compared with 2000 and 1997 (25% and 23% respectively). The rate of other mental health problems has remained constant since 2003, when

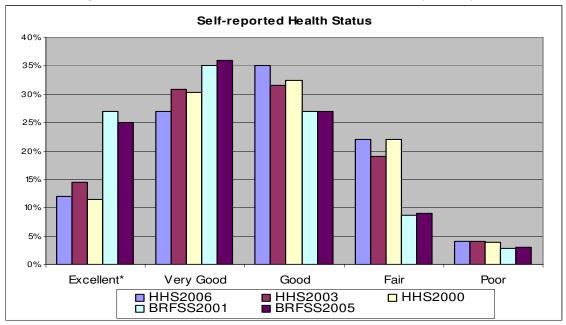
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<sup>&</sup>lt;sup>1</sup> Committee on the Assessment of Asthma and Indoor Air, Institute of Medicine. Clearing the Air: Asthma and Indoor Air Exposures. Washington, DC: National Academy Press; 2000.

a significant increase was seen from the 2000 report. As reported in 2003, depression is second only to hypertension in prevalence. In 2003, depression was significantly more likely to be reported by women (30%) then by men (19%). In 2006, rates of depression for women and men were 33% and 22% respectively. In 2006, Hispanic respondents were significantly more likely than either Black or White respondents to report depression (38% vs. 24% and 30% respectively.) Differences were also reported by household income levels. People living at the 'poverty' level or 'low income' level were significantly more likely to report depression than "above low income' respondents (39% vs. 32% and 21%, respectively). These rates are similar to the rates observed in 2003. The gender, racial/ethnic, and income distribution of diagnosed depression among Hartford residents in 2006 is similar to the patterns reported in 2003, 2000 and in 1997. This 2006 data once again confirms a high prevalence of depression among Hartford respondents, with higher rates among women, lower income and Hispanic respondents. These rates are considerably higher than those found in other community studies which suggest anywhere from 8 to 20% of the population will experience a significant depression at some time. As in 2003 and 2000, the high rate of depression among Hispanic respondents warrants further investigation.

#### **Health Status**

Health status is determined not only by objective scientific data and physical examination, but also by one's subjective perception of one's own health. As part of a community health assessment, it is important to ask people how they feel about their health. This section addresses a single measure of self-reported health status that asks respondents to rate their current health on a five-point scale: "excellent, very good, good, fair, or poor." The responses obtained from Hartford residents are compared below to the state-wide responses obtained from Connecticut residents through the Center for Disease Control's BRFSS, most recently in the year 2005.



BRFSS stands for Behavioral Risk Factor Surveillance System

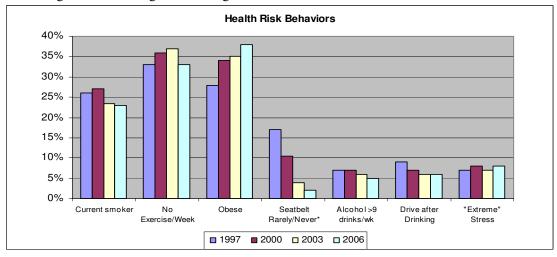
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<sup>&</sup>lt;sup>1</sup> Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M. Lifetime and 12-month prevalence of DSM-IIIR psychiatric disorders in the United States: Results from the National Co-morbidity Survey. Arch. Gen. Psychiatry 51:8, 1994.

In 2006, an increasing trend is seen in the percentage of respondents that described their health status as "good." The rate increased from 32% in 2003 to 35% in 2006, which is the same rate that was seen in 1997, but this increase is not statistically significant. A chi-square test for trend indicated that the distribution of responses from Hartford respondents in 2006 differed significantly from that observed from Hartford respondents in 2003. Specifically, the percentage of survey respondents in 2006 who rated their health status as 'very good' has decreased significantly since 2003. A number of factors, such as aging and income, are known to impact self-reported health status. Aging is associated with a fall in reported health status and lower income is associated with higher "fair" to "poor" health ratings and lower "excellent" health ratings. In 2006, respondents who were age 18-34 were significantly more likely to rate their health as "excellent" relative to those 35 years of age or older. The same is seen for those respondents that rate their health as "very good." People living at the poverty level were significantly more likely than those with higher incomes to report "fair" health status. Those living at the poverty level or on "low" income were significantly more likely than those reporting "above low" income to report their health status as "poor". It is relevant to this discussion to note that those living at the poverty level were also significantly more likely than those at other income levels to report asthma, stroke and a drug or alcohol abuse problem. Concerning race/ethnicity, Hispanic respondents were significantly more likely than Black or White respondents to rate their health status as "fair". We used regression analysis to predict respondents' health status on the basis of age, income, gender and presence of at least one chronic disease and racial/ethnic category. The results indicated that, for these participants, age, household income and presence of chronic disease all contributed significantly to reported health status. Ethnicity and gender did not contribute significantly to health status when analyzed in the presence of age, income and chronic disease.

#### **Health Risk Behaviors**

Over the past 20 years, research has demonstrated that personal behaviors play a major role in the development of disease, and in premature mortality. Particularly evident is the negative impact of cigarette smoking on health. Respondents to the *Hartford Health Survey 2006* were asked to identify their behavior patterns related to a series of known health risk behaviors including cigarette smoking, alcohol consumption, drinking and driving, exercise habits, and automobile seat belt use. Respondents were also asked to report their height and weight, from which the body mass index (BMI) was calculated. Body mass index is used to determine weight categories: underweight, normal weight, overweight, and obese.



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<sup>&</sup>lt;sup>1</sup> Behavioral Risk Factor Surveillance System. http://www.cdcgov/nccdphp/bfrss/index.htm

The 2006 data indicate that the percentage of respondents who reported being current smokers decreased significantly from 2000 to 2003 but has remained the same since 2003. The rate of current smoking in Hartford in 2006 is comparable to the most recent data from the BRFSS (2005), which indicated a nation-wide smoking rate of 22%. The percentage that reported rarely or never using their seatbelts decreased significantly from 1997 to 2000 and from 2000 to 2003. From 2003 to 2006 this percentage decreased again but it is not seen as significant. In 2000 a significant rise was reported in the percentage of respondents who were obese, from 28% in 1997 to 34% in 2000. In 2003, the rate of obesity (35%) among respondents remained elevated but was not significantly different from that reported in 2000. In 2006 the rate of obesity again increased significantly among respondents to a high of 38%. This data is consistent with national trends in obesity. They also indicate that rates of obesity in Hartford are higher than national rates, based upon the most recent data from the Behavioral Risk Factor Surveillance System (24% in 2005). Obesity is a predisposing factor for a number of diseases, particularly diabetes. Diabetes rates among Hartford respondents are noted in the chronic disease section of this report. Consistent with high rates of obesity, 33% of respondents reported that they do not exercise; a rate that has significantly decreased since the reported 37% in 2003.

The number of respondents in 2006 that said they consumed no alcoholic drinks per week has significantly increased with respect to 1997 (64% vs. 59%). New to the *Hartford Health Survey 2006* was a question regarding the number of days per week where the respondents typically consumed more than 5 drinks per day. According to the respondents, 92% said they did not drink more than 5 drinks on any day of the week. Approximately 2% responded that they drank 5 or more drinks 3 or more days per week. Also new to the *Hartford Health Survey 2006* was a question regarding the consequences suffered by drinking. According to the respondents, 3% have been arrested for DUI, 9% report waking up and not remembering what happened, 5% have gotten into a fight, and 2% have gotten in trouble at work.

Some positive trends were noted when data were analyzed according to the net number of risk factors per respondent. The percentage of respondents reporting zero or one lifestyle risk factor, as opposed to two or more, increased significantly from 2003 to 2006 (50% vs. 54%). The percentage of those reporting three or more risk factors remained similar from 2003 to 2006 (24% vs. 23%) with both years being significantly lower than either 2000 or 1997 (both 37%). Almost 17% of *Hartford Health Survey 2006* respondents who reported three or more health risk behaviors indicated that they "definitely plan to make lifestyle changes within the next six months," a percentage that was significantly greater than for those reporting two or fewer health risk behaviors.

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<sup>&</sup>lt;sup>1</sup> Behavioral Risk Factor Surveillance System. http://www.cdcgov/nccdphp/bfrss/index.htm

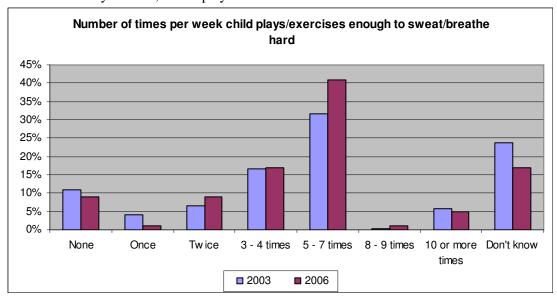
<sup>&</sup>lt;sup>2</sup> National Center for Health Statistics. Prevalence of Overweight and Obesity among adults, United States 2003-2004.

http://www.cdc.gov/nchs/products/pubs/pubd/hestats/obese03 04/overwght adult 03.htm#Table%201 AND

Ogden CL, Carroll MD, Curtin LR, McDowell MA, Tabak CJ, Flegal KM. Prevalence of overweight and obesity in the United States, 1999-2004. JAMA 295:1549-1555. 2006.

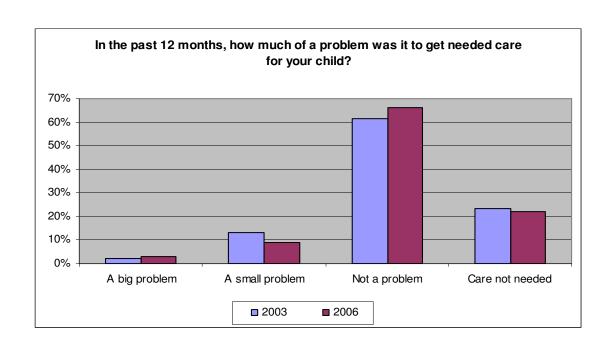
#### **Childhood Health**

The *Hartford Health Survey 2003* included, for the first time, a section of items addressing childhood health issues. These items were adapted from existing surveys including the National Health and Nutrition Examination Survey, the Health Plan Employee Data Information Set, the Consumer Access to Health Plans study and the National Health Interview Survey. Respondents with children between ages 2 and 8 were asked about the child whose birthday is closest to theirs. In 2006, 211 respondents had at least one child within this age range. Data obtained from these items illustrate that among the children whose health was surveyed; approximately 22% do not have a regular dentist or dental clinic. This rate was significantly lower than 2003 when approximately one-third of respondents said their children did not have a regular dentist or dental clinic. 13% of the adults surveyed would describe the conditions of the child's teeth as fair or poor. 8% of adults responding indicated that their child has some sort of health problem that limits their ability to walk, run or play.



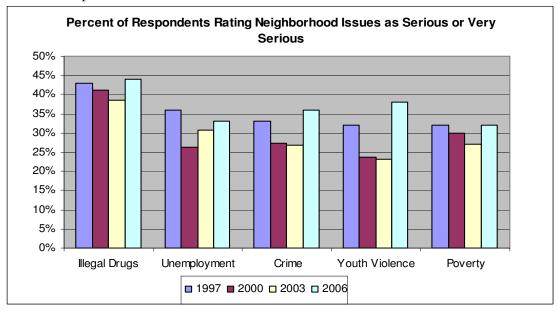
Regarding obesity, 86% of the respondents believed that the child that they were reporting on was about the right weight, 8% reported that he or she was overweight and 6% reported that he or she was underweight. This data has not changed much since the 2003 survey. 20% of parents reported that the child spent about 2 hours per day in sedentary activities and 12% reported that the child spent 5 or more hours a day in sedentary activities. The graph above illustrates that 41% of respondents reported that their child plays/exercises enough to sweat or breath hard 5-7 times per week. This is a significant increase since 2003, where only 31% of respondents reported this same statistic.

Regarding access to care for their child, 22% reported that care was not needed in the past 12 months. Out of those seeking care for their child in the past 12 months, 9% reported that getting the recommended care was "a small problem" while 3% reported that it was a "big problem". Among those reporting medical visits for their child in the past 12 months, 12% reported that health care providers never or only sometimes explained things in a way they could understand. 4% reported that their child had gone hungry in the last 6 months because they could not afford to buy food.



#### **Neighborhood Issues**

Neighborhood issues such as crime and illegal drugs influence the quality of life for both adults and children in a community. The *Hartford Health Survey 2006* included items that allow us to quantify the neighborhood issues that are of most concern to Hartford residents. Respondents were asked to rate the seriousness of certain issues in their neighborhood on a 5-point scale, from 'not a problem' to a 'very serious problem'. The following figure displays the five neighborhood issues reported as being the most serious in the *Hartford Health Survey 2006*. The responses from 2006 are compared to those from 2003, 2000 and 1997.



In 2000, significant decreases in concern were noted for crime, and youth violence relative to 1997. Rates of concern about these problems did not change significantly from 2000 to 2003. In 2006 however, both of these rates increased significantly. Respondents who said that crime was a 'serious' or 'very serious' problem went from 27% in 2003 to 36% in 2006. Regarding youth violence, 23% said it was a 'serious' or 'very serious' problem in 2003 while 38% responded the same in 2006. Illegal drugs remain the primary neighborhood concern, with the percentage of respondents voicing concern increasing significantly to 44%. The top five neighborhood issues in 2006 were largely similar to those in 2003, although youth violence did replace litter on the streets and the order of concerns changed. The top five neighborhood issues included illegal drugs, youth violence (such as gangs), crime, unemployment and poverty. Unfortunately, relative to 2003, there are no decreases in any of the neighborhood issues, significant or otherwise. The issues that had significant increase in concern in 2006 relative to 2003 include illegal drug use, youth violence, crime, poverty, lack of recreational and cultural activities, homelessness, tenant or landlord problems, poor neighborhood health services, air pollution, neighborhood safety and domestic violence or child abuse. With a significant increase in 11 out of the 20 categories surveyed regarding neighborhood issues, a closer look into the issues is warranted.

Respondents were also asked to identify "things in your neighborhood that make it a good place to live". Few significant changes were reported since 2003 when over 50% of respondents indicated that "convenient public transportation", "convenience to stores", "family/neighbors/friends" and "churches" made their neighborhoods good places to live and 46% indicated that schools made their neighborhoods good places to live. One significant change reported since 2003 was that, in 2006, 11% indicated that there were "other" factors that made their neighborhoods good places to live, down from 15% in 2003. For this 11%, it is encouraging to note that reasonably affordable rent, proximity to things such as health care, work, school, parks and highways, cultural diversity and issues associated with community cohesion were recurring themes in the written comments of these Hartford residents.

#### **Poly-syndromes OR Co-Existence of Multiple Conditions**

Efforts to improve the health of Hartford residents, including the reduction of health risk behaviors, would be more effective if they were informed by an understanding of how these "poly-syndromes" exist in the target population. The ultimate goal is to design interventions that address the multiple behavioral, environmental and psychosocial factors that could complicate the prevention and treatment of chronic disease. Thus, data on "poly-syndromes" or constellations of factors was gathered in Hartford Health Survey 2006 and the results are presented in the table below. The 8 most prevalent conditions in this sample were hypertension, obesity, depression, arthritis, asthma, diabetes mellitus, heart disease, and sexually transmitted diseases. Percentages of people who had each of these conditions and also had a host of other related conditions or factors are presented below. Of the people who reported a diagnosis of hypertension, 40% were obese (BMI> 30), 63% had depression, 47% had arthritis, 25% had asthma, 34% had diabetes, 22% had heart disease, 53% had problems with crime in the community, 26% had unemployment in household and 28% were in poverty. Overall, crime in the community, rodents in the household, unemployment in the household and poverty were all salient environmental or socioeconomic factors for all of the top 8 health conditions examined in the table. The major health conditions, hypertension, obesity, depression, arthritis, asthma, diabetes, and heart disease were all clustered together, meaning a considerable proportion of individuals who had one condition also had the other. Approximately 60% of the total sample had at least one of the major chronic conditions; i.e. hypertension, heart disease, diabetes, arthritis, or asthma, and about 31% of the sample were obese (BMI  $\geq$  30). Obesity, hypertension and arthritis co-existed in the same individuals in 8.5% of the total sample. Obesity, hypertension, and diabetes co-existed in 7.1%

of the sample. Obesity, hypertension, and depression coexisted in the same individuals in 6% of the total sample.

Furthermore, 71.5% of the people who were obese (BMI  $\geq 30$ ) had at least one of the following chronic conditions: hypertension, heart disease, diabetes, arthritis, or asthma. 58.5% of those who were in poverty had at least one of the same chronic conditions mentioned above. Of those who were obese and in poverty, 67.5% of them had at least one of the chronic conditions mentioned above.

A total of 7% of the sample reported having some form of cancer, 8.2% reported having chronic bronchitis or emphysema, 7.7% had some kind of mental health problem other than depression, 2% reported having HIV/AIDS virus, 3.5% reported having had a stroke, 4.1% reported having an alcohol abuse problem, and 4.2% reported having a drug problem other than alcohol.

Percentage of total number of people (rounded to nearest whole number) who had the 8 most prevalent conditions and also had various other health related conditions are listed below. Each row includes only those with a diagnosis of the condition mentioned in the first cell of each row.

neutri returne conditions are instead below. Each row includes only those with a diagnosis of the condition included in the first cent of each row.																				
Diagno	HT	Obes	Depr	Arth	Ast	D	He	ST	Sm	No	Crim	Illit	Dila	Rod	Asb	Poor	Unem	Unempl	Dom	Pov
sis	N*	ity	essio	ritis	hma	M	art	$D^*$	oki	Healt	e in	era	pida	ents	estos	sanit	ployed	oyment	estic	erty
	%	%	n	%	%	*	Dis	%	ng	h	Com	cy	ted	%	*	ation	%	in	viole	%
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HTN	10	40	63	47	25	34	22	8	19	8	53	12	12	21	6	6	7	26	2	28
n= 444	0																			
Obesity	51	100	35	38	28	30	14	11	23	9	56	7	16	24	6	8	9	30	3	34
=BMI≥																				
30																				
n=358																				
Depres	49	36	100	40	33	21	21	16	26	9	60	10	16	26	9	9	8	31	4	37
sion																				
n= 330																				
Arthriti	67	42	44	100	29	36	25	9	21	6	53	13	15	18	6	7	5	23	2	29
S																				
n=307																				
Asthma	49	45	50	41	100	23	18	15	30	11	59	10	19	26	7	10	7	32	3	40
n=216																				
DM	23	52	64	56	26	10	25	5	17	4	50	16	14	19	6	8	5	23	3	25
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Heart	75	37	52	58	30	38	100	10	18	5	46	14	13	27	9	6	5	23	5	36
Disease																				ĺ
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STD	29	31	42	22	26	7	10	100	26	7	65	6	21	26	6	13	12	30	6	38
n=125																				į l
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<sup>\*</sup>HTN= Hypertension, DM= Diabetes Mellitus, STD= Sexually transmitted disease, Asbestos=Asbestos being a problem in the house

#### SUMMARY: HARTFORD HEALTH SURVEY 2006

The definition of health used in this report embraces a multifaceted concept of wellbeing that extends beyond the absence of disease. This health assessment is a crucial step in a long-term and evolving process toward the goal of improved health for all Hartford residents. The findings in this report were compared with the results of *The Hartford Health Survey 2003, 2000 and 1997*, and targets taken from the national goals of Healthy People 2010. It is important to consider that there have been some changes in the demographic profile of participants in the survey with more Black and more American Indian or Alaska Native respondents than in 2003.

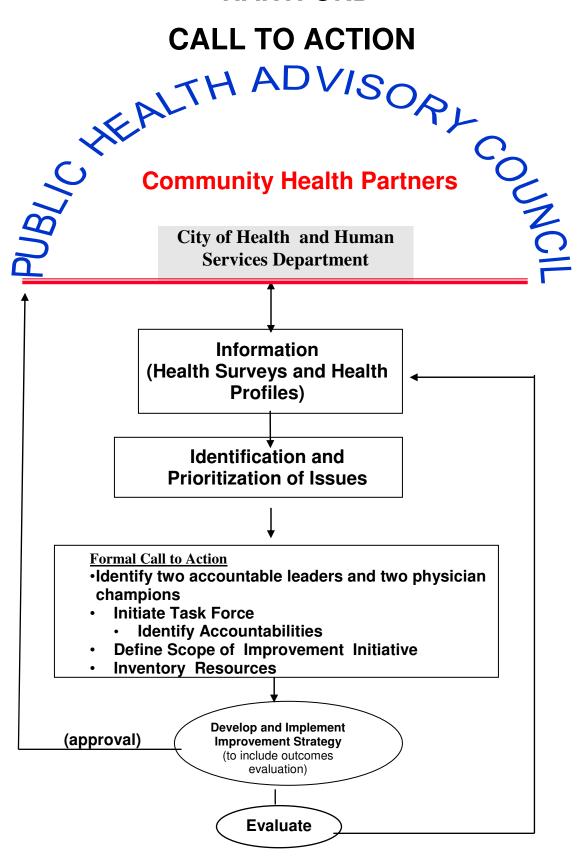
There have been some positive trends in health among Hartford respondents. Ratings of access to health care have remained elevated relative to 1997. The percentage of respondents who identify a primary place for health care has increased significantly since 1997. There has been no change in the rate of Hartford respondents without health insurance since 1997. Some preventative screenings also demonstrate positive trends with significant increases since 1997 being reported for cholesterol and blood pressure screening. Pap smear screenings and breast exams were the only screenings demonstrating a significant decline since 2000. There are several important factors that may have influenced reported health screening rates in 2006. Factors such as increased visits to doctors, population mobility, a higher population age, higher poverty rates and an increase in minority are all possible reasons for the changes seen in the 2006 health screening rates. Reported rates for health screenings were significantly related to having health insurance. In 2006, a significantly higher percentage of respondents with health insurance reported having dental, cholesterol, blood pressure, diabetes, colorectal, testicular, and breast exam screenings than respondents without health insurance. This finding demonstrates an important concern for the 12% of respondents that do not have health insurance. The 2003 and 2006 survey reports reveal that some positive changes have also occurred in regard to health risk behaviors. Smoking rates in Hartford have decreased significantly since 2000. The percentage of respondents reporting three or more risk factors has also decreased significantly. The percentage of those respondents who report rarely or never wearing their seat belt has decreased dramatically since 1997. However, rates of obesity remain high and levels of physical exercise remain low and are still of concern. In addition, co-existence of multiple health conditions in the same individuals raises the issue about a more comprehensive approach to health care delivery.

This report also highlights challenges to the public health system in Hartford. Hispanic and African American respondents reported lower rates of participation in prostate screenings than non-Hispanic White respondents. Hypertension, depression, arthritis, asthma and diabetes remain the top five reported chronic disease conditions among Hartford respondents. Rates of hypertension, diabetes, depression and asthma remain significantly higher than they were in 2000 and rates of hypertension and diabetes have increased significantly since 2003. Rates of mental health problems other than depression have remained similar to 2003, before which there was significant increase. Asthma and depression remain higher in 2006 among Hispanic respondents, and cancer rates remain higher among non-Hispanic White respondents. The Hartford community reports a higher than national rate of obesity. However, respondents' attitudes toward behavioral change offer reasons to be hopeful. These data suggest that there are important opportunities for continued interventions aimed at decreasing health risk among Hartford residents, a goal that is crucial to improving health and health status in the City of Hartford. Poly-syndromes, a new category in the Hartford Health Survey 2006, are an important aspect to consider when talking about the health and well-being of the people of Hartford. The data shows that respondents' health situations are not necessarily extraordinary or unique, but rather, may show a trend that could be far-reaching on many levels.

# **APPENDIX A**

# PROCESS FOR CALL TO ACTION IN **HARTFORD**

# **CALL TO ACTION**



# **APPENDIX B**

# Hartford Health Survey 2006 Released September 2006

The Research Program at Hartford Hospital prepared this report for the Hartford Department of Health and Human Services. We thank the Scientific Advisory Committee and the Public Health Advisory Council for their contributions to the *Hartford Health Survey* 2006.

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We wish to thank Felix, Burdine & Associates, Inc. for permission to use a modified version of *The Hartford Health Survey* booklet, first developed in 1997.

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