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MADISON DEPARTMENT OF PUBLIC HEALTH

On behalf of Madison Department of Public Health and Dane County Division of Public Health, we are pleased to present our 2005 Chronic Disease Health Status Report.

As part of a joint effort in community health improvement planning, this report analyzes the health status of our community, focusing on chronic diseases and chronic disease risk factors. Chronic diseases, such as cardiovascular disease (primary heart disease and stroke), cancer, and diabetes are among the most prevalent, costly, and preventable of all health problems in the U.S. Seven of every 10 Americans who die each year, or more than 1.7 million people, die of a chronic disease. Chronic, disabling conditions cause major limitations in activity for more than one of every 10 Americans, or 25 million people.

While chronic diseases are among the most common and costly health problems, they are also among the most preventable. Adopting healthy behaviors such as eating nutritious foods, being physically active, and avoiding tobacco use or exposure can prevent or control the devastating effects of these chronic diseases. In addition to encouraging individual behavior change, it is also important to address issues at a community level to enable individuals to make healthy choices, by removing environmental barriers, enacting legislation, eliminating health disparities between population groups and educating the public.

In this Chronic Disease Report, certain data were limited or unavailable, but this fact identifies gaps and provides direction for future data collection. The report can be used to educate our elected officials, business and community members, and health care providers to help decrease rates of disease.

This report can be a baseline for us to move forward on pressing issues in our community. We thank the authors and many others who have contributed to the generation of the report. With their guidance and community support, we hope to decrease chronic diseases and the accompanying risk factors.

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CHRONIC DISEASE HEALTH STATUS REPORT 2005

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**Dane County Division of Public Health
Madison Department of Public Health**

Executive Summary

The 2005 Chronic Disease Health Status Report focuses on chronic diseases and their indicators in Dane County, Wisconsin, and was compiled by the Dane County Division of Public Health and the Madison Department of Public Health. We chose the particular diseases included based on prevalence reports from the U.S. Centers for Disease Control and Prevention, the Wisconsin State Health Plan and other publications, and based on which diseases pose the greatest and most immediate health threats. When appropriate we compared Dane County to the standards of Healthy People 2010 (HP 2010),¹ developed by the Centers for Disease Control and Prevention, or Healthiest Wisconsin 2010 (HW 2010),² created by the State of Wisconsin.

Chronic diseases ranked among the leading causes of death in Dane County in 1999-2003. In fact, five of the top ten causes of death in Dane County during this period were chronic diseases, including diseases of the heart (#1), all cancers (#2), cerebrovascular disease or stroke (#3), chronic lower respiratory diseases like emphysema (#4), and diabetes (#8).

Racial and ethnic minority groups in the United States suffer disproportionately from chronic diseases. While our minority population numbers in Dane County are too small to be statistically significant, statewide data clearly show that these health disparities do exist in Wisconsin. For example, data from the Wisconsin Department of Health and Family Services show that from 1996-2000, African Americans were over five times more likely to be hospitalized for asthma than were Caucasians. Wherever such data were available, we incorporated them into the section introductions for this report.

Findings in this report show that while Dane County meets some of the Healthy People 2010 and Healthiest Wisconsin 2010 goals, several important goals remain unmet. The following lists identify areas where the county is meeting goals for chronic disease reduction, areas where we need improvement, and other points of interest.

GOALS MET

- Diabetes deaths have been reduced to fewer than 20 per 100,000 population, meeting the HP 2010 goal.
- Coronary heart disease deaths in Dane County are below the HP 2010 goal of 166 per 100,000 population.
- Nineteen percent of Dane County residents smoke, meeting the Healthiest Wisconsin 2010 goal but not meeting the national HP 2010 goal; therefore, the percentage of smokers in the county needs to be reduced even further.

NEEDS IMPROVEMENT

- The number of deaths from chronic obstructive pulmonary disease (COPD) was 80 per 100,000 population for adults over 45 years, which does not meet the HP 2010 goal of 60 deaths per 100,000 population.
- The number of deaths from stroke was 60 per 100,000 population for 1999-2003, which does not meet the HP 2010 goal of 48 deaths per 100,000 population.
- Death rates from all kinds of cancer in Dane County (176.9 per 100,000 population) are still too high to meet the HP 2010 goal of 159.9 deaths per 100,000 population.

- Compared to Caucasians, African Americans were 10-30% more likely to die from cardiovascular disease, 15% more likely to die from all kinds of cancer, and 4 times more likely to die from diabetes in 1999-2003.
- Fifty-one percent of adults in Dane County are overweight or obese.
- Only 18% of adults engage in at least 20 minutes of physical activity three days per week.
- Seventeen percent of youth smoke in Dane County, which exceeds the HP 2010 goal of 16%.
- Only 7% of Dane County high school students report eating 5 or more servings of fruits and vegetables a day.

OTHER POINTS OF INTEREST

- Rates of regular or vigorous activity declined in Dane County from 1998-2000.
- The rates for cancer deaths did not change significantly from 1994-2003, indicating no improvement in this category.
- Lung cancer deaths among men are decreasing, whereas deaths among women are increasing.
- Men were 40-70% more likely to die from lung cancer than were women.
- There has been a 75% decrease in coronary heart disease deaths over the past 10 years.
- Children younger than 5 years old had the highest hospitalization rate (23 per 100,000 population) of all age groups for asthma.

This report does have some limitations. Clearly not every possible chronic disease was included; diseases were chosen for the reasons explained above. Also, as discussed above, due to small numbers much of the local data could not be analyzed in relation to race/ethnicity and socioeconomic status to determine health disparities. Further analysis and surveillance are needed to determine the effects of race /ethnicity and socioeconomic factors like education, income, employment, poverty status, and rural/urban location on health.

The final recommendation stemming from this report is that to combat chronic diseases and chronic disease risk factors, concerted efforts need to focus on decreasing obesity and tobacco use and increasing physical activity and healthier diets. To achieve these goals, community partnerships must be established for efficient and effective educational, legislative, and environmental strategies to succeed.

Demographics

	Madison		Dane County		Wisconsin	
Population Size	208,054		426,526		5,363,675	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Age Distribution						
<19 years	49,355	24	113,156	27	1,532,093	29
20-44 years	99,373	48	182,480	43	1,948,982	36
45-64 years	40,142	19	91,021	21	1,190,047	22
65-84 years	16,533	8	34,466	8	606,928	11
85+ years	2,651	1	5,403	1	95,625	2
Race						
White	174,689	84	379,447	89	4,769,857	89
Black or African American	12,155	6	17,069	4	304,460	6
American Indian/Alaska Native	759	<1	1,404	<1	47,228	<1
Asian	12,065	6	14,735	4	88,763	2
Native Hawaiian and Other Pacific Islander	77	<1%	133	<1	1,630	<1
Other	3,474	2	6,118	1	84,842	2
Two or more races	4,835	2	7,620	2	66,895	1
Ethnicity						
Hispanic or Latino	8,512	4	14,387	3	192,921	4
Non-Hispanic	199,542	96	412,139	97	5,170,754	96
Gender						
Male	105,806	51	211,020	49.5	2,649,041	49
Female	102,248	49	215,506	50.5	2,714,634	51
Poverty Level						
Individuals below	31,208	15	38,387	9	482,730	9
Educational Status of Adults						
Less than 9 th Grade	3,685	3	7,932	3	186,125	5
9 th -12 th , no diploma	5,934	5	13,245	5	332,292	10
HS	22,974	18	60,220	22	1,201,813	35
Some college	23,447	18	54,830	20	715,664	21
Associate Degree	9,707	8	24,048	9	260,711	8
Bachelor's Degree	34,603	27	66,944	25	530,268	15
Graduate/Professional	26,454	20	42,779	16	249,005	7
Employment Status^a						
Employed	121,828	70	246,064	72	2,734,925	66
Unemployed	6,104	4	9,774	3	134,311	3
Not in Labor Force	47,219	27	85,242	25	1,284,926	31

Source: US Census Bureau³

Notes: ^a Employment Status Definitions: Employed = all civilians 16 years old and over who did any work during reference week of census or were with a job but not at work during reference week; Unemployed = all civilians 16 years old and over were not at work or did not have a job during reference week and were actively looking for work during the last 4 weeks; Not in Labor Force = all people 16 years old and over who are not members of the labor force, mainly students, housewives, retired workers, seasonal workers and institutionalized people.

Top Ten Leading Causes of Death, All Causes*

	Dane County 1999-2003			Wisconsin 1999-2003		
	Rank	# Deaths	% Deaths	Rank	# Deaths	% Deaths
Diseases of heart	1	3,192	24.4	1	65,734	28.3
Malignant neoplasms (cancer)	2	3,092	23.6	2	53,515	23.0
Cerebrovascular diseases	3	1,050	8.0	3	17,755	7.6
Chronic lower respiratory diseases	4	653	5.0	4	11,557	5.0
Accidents (unintentional injuries)	5	597	4.6	5	10,728	4.6
Influenza and pneumonia	6	449	3.4	8	6,320	2.7
Alzheimer's disease	7	442	3.4	7	6,372	2.7
Diabetes mellitus	8	348	2.7	6	6,601	2.8
Intentional self-harm (suicide)	9	238	1.8	10	3,089	1.3
Chronic liver disease and cirrhosis	10	164	1.3	11	2,144	0.9
Nephritis, nephritic syndrome, and nephrosis	11	154	1.2	9	3,953	1.7

Source: Wisconsin Department of Health and Family Services⁴

Notes: * Ranked in descending order by Dane County.

Select Chronic Disease Causes of Hospitalization*

Age-Adjusted per 10,000^a

	Dane County 2001-2002	Wisconsin 2001-2002	Average Charge ^b
All Cancer	36.6	42.7	\$18,301
Prostate Cancer	8.7	8.1	\$9,683
Breast Cancer ^c	6.2	7.2	\$8,809
Colorectal Cancer	4.7	5.3	\$20,623
Lung Cancer	3.3	4.2	\$26,239
Cerebrovascular (stroke)	26.8	28.6	\$14,115
Congestive Heart Failure	20.3	26.4	\$12,257
Chronic Obstructive Pulmonary Disease	20.1	24.3	\$9,262
Coronary Heart Disease	17.7	26.5	\$25,197
Diabetes	11.6	13.1	\$13,325
Asthma	7.9	10.2	\$5,775

Source: Wisconsin Department of Health and Family Services⁵

Notes: * Ranked in descending order by Dane County. All hospitalizations are primary diagnosis only.

^a Standardized to the 2000 United States population.

^b For Dane County

^c Females only

Select Chronic Disease Causes of Death*

Age-Adjusted per 100,000^a

	Dane County 1999-2003	Wisconsin 1999-2003	Healthy People 2010 Goal
Cancers (total)	176.9 ☹	189.1	159.9
Lung	43.8 ☹	48.5	44.9
Prostate	29.8 ☹	30.1	28.8
Breast ^d	26.6 ☹	25.1	22.3
Colorectal	17.7 ☹	19.6	13.9
Coronary Heart Disease	123.2 ☺	160.2	166
Cerebrovascular (stroke)	59.9 ☹	59.7	48
Chronic Obstructive Pulmonary Disease	38.6	40.1	-- ^b
Congestive Heart Failure	20.0	22.8	--
Diabetes	20.1 ☺	23.0	45
Asthma	1.3	1.3	-- ^b

Source: Wisconsin Department of Health and Family Services⁴

Notes: * Ranked in descending order by Dane County

^a Standardized to the 2000 United States population.

^b Goal is age-specific. Age-specific mortality rates will be presented later in report.

^c Females only.

☹ Dane County has not met HP 2010 Goal

☺ Dane County has met HP 2010 Goal

Asthma and Chronic Obstructive Pulmonary Disease

According to the 2003 National Health Interview Survey (NHIS),⁶ asthma has affected approximately 11.3% of the general population in their lifetime. Certain risk factors are associated with developing childhood asthma: house dust mites and cat dander, air pollution, environmental tobacco smoke, smoking, consuming certain allergic foods, and lower respiratory tract infections.

In Wisconsin, the highest asthma hospital emergency department visit rate is seen in children aged less than 5 years (94 visits per 10,000 population).⁷ This is higher than the Healthy People 2010 goal of 80 per 10,000. In Wisconsin, adults aged 65 years and older experienced the highest mortality rate at 91 deaths per million population from 1990-2001.⁷ This is higher than the Healthy People 2010 goal of 60 deaths per million for those over 65 years old.

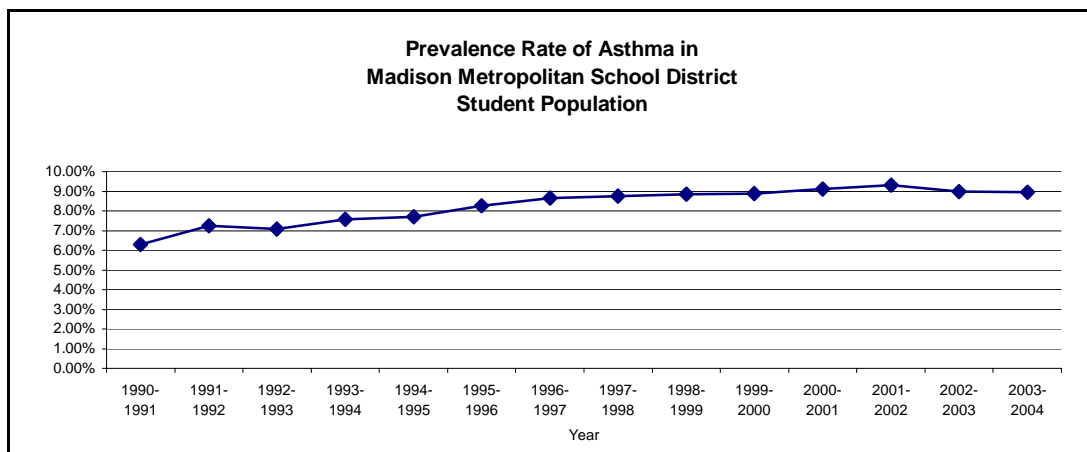
The African American population has much higher asthma hospitalization and mortality rates than other racial groups, both in Wisconsin and the rest of the country. In 1999, the hospitalization rate in Wisconsin was over 6 times higher for African Americans than for Whites.⁸ From 1990-2001, African Americans in Wisconsin had a mortality rate of 62 deaths per million population, compared with the rate of 17 per million seen in the White population.⁷

Chronic Obstructive Pulmonary disease (COPD) is a syndrome that can include such conditions as emphysema, chronic bronchitis and asthma.

ASTHMA

Diagnosis

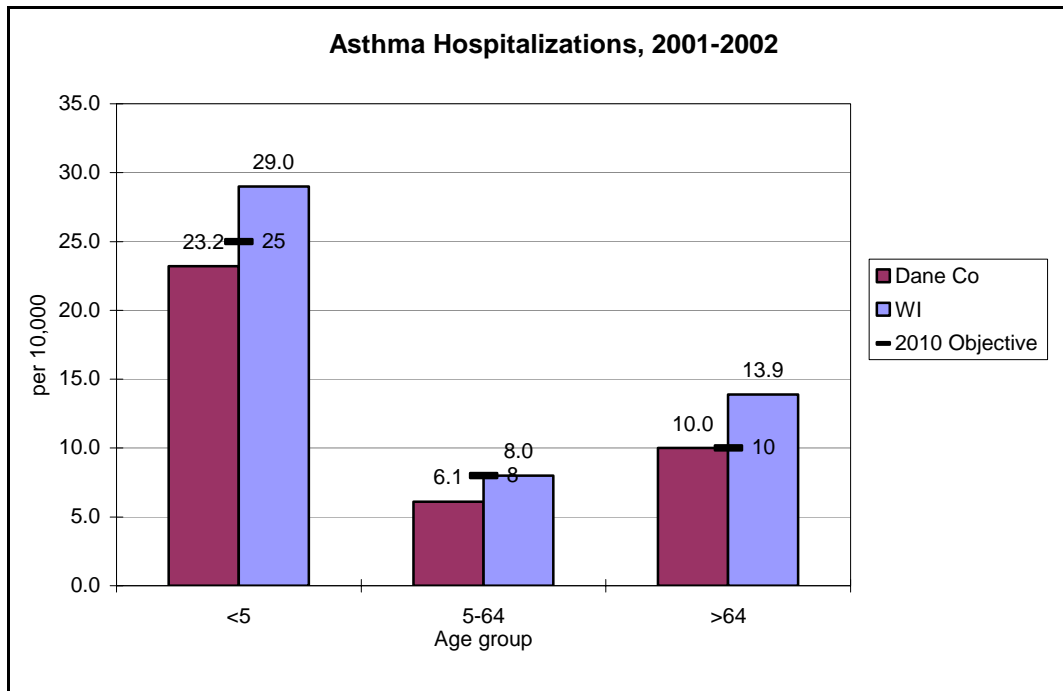
- Combined data from 1998 to 2003 show that 9% of people in Dane County have ever been told by a doctor that they have asthma, compared with 7% for Wisconsin. This amounts to almost 40,000 people in Dane County with asthma.⁹



Source: Adelson¹⁰

- There is a steady increase in asthma rates of children attending Madison Metropolitan School District schools until 2001. From 2001 rates are steady, but remain high.
- Data for other Dane County school districts are not available.

Hospitalization Rates



Source: Wisconsin Department of Health and Family⁴

- Dane County has met the 2010 asthma hospitalization objective for all age groups, although just barely for those over 64 years of age.
- In Dane County and Wisconsin, children under 5 years had the highest hospitalization rates for asthma.
- In 2004, Dane County is ranked 27th highest (out of 72) of all counties in Wisconsin for rate of asthma hospitalization among all ages.⁸

Hospital Emergency Department Visit Data

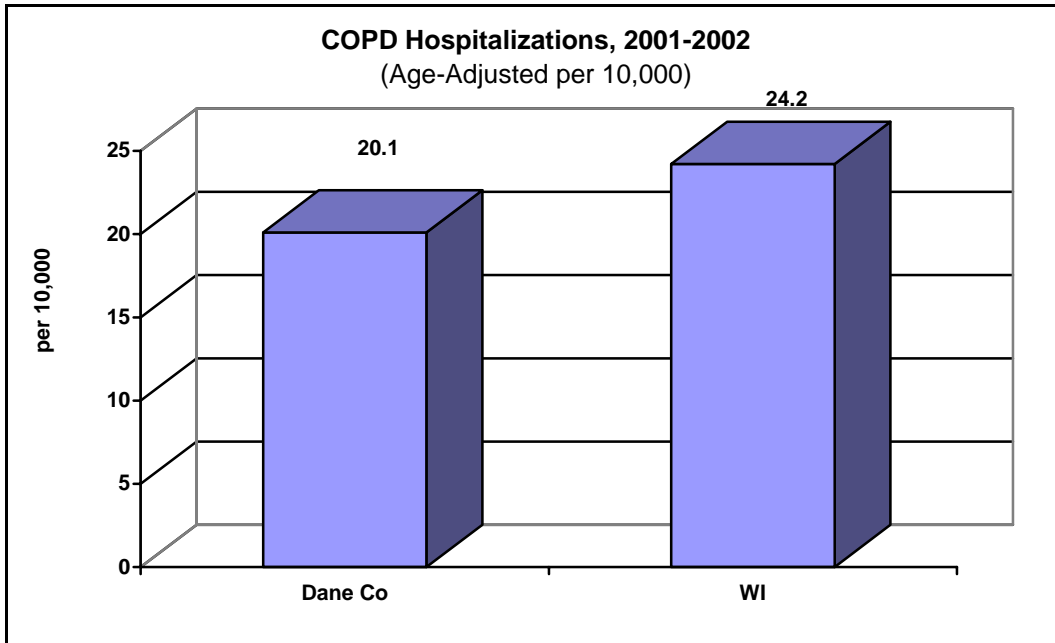
- In 2002, the rate of emergency department visits in Dane County was 23.7 per 10,000 population.⁸

Death Rates

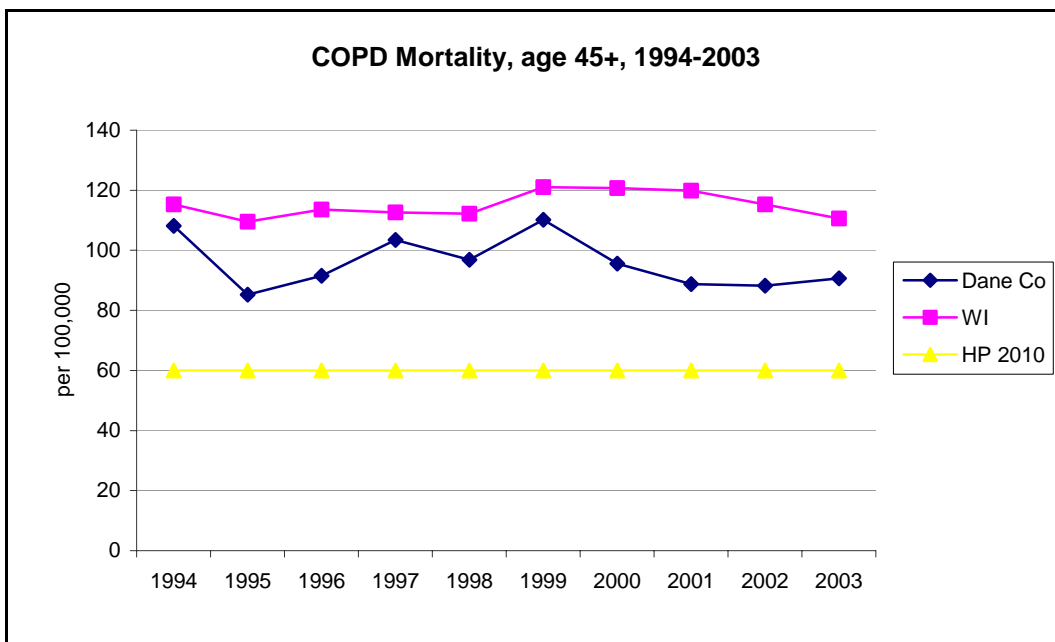
- There were 25 deaths in Dane County due to asthma between 1999 and 2003. This is a rate of 1.3 per 100,000.
- 56% of the asthma deaths were people age 65 and older.⁵

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

Hospitalization Rates



Source: Wisconsin Department of Health and Family Services⁵



Source: Wisconsin Dept. of Health and Family Services⁴

- There has been no statistically significant change in COPD death rates from 1994-2003.
- Dane County has slightly lower rates of COPD deaths than Wisconsin.
- Dane County has not met the HP 2010 goal of reducing COPD deaths among adults ≥ 45 years old below 60/100,000.
- The mortality rate of COPD in Dane County was 41% higher for males vs. females.

Cancer

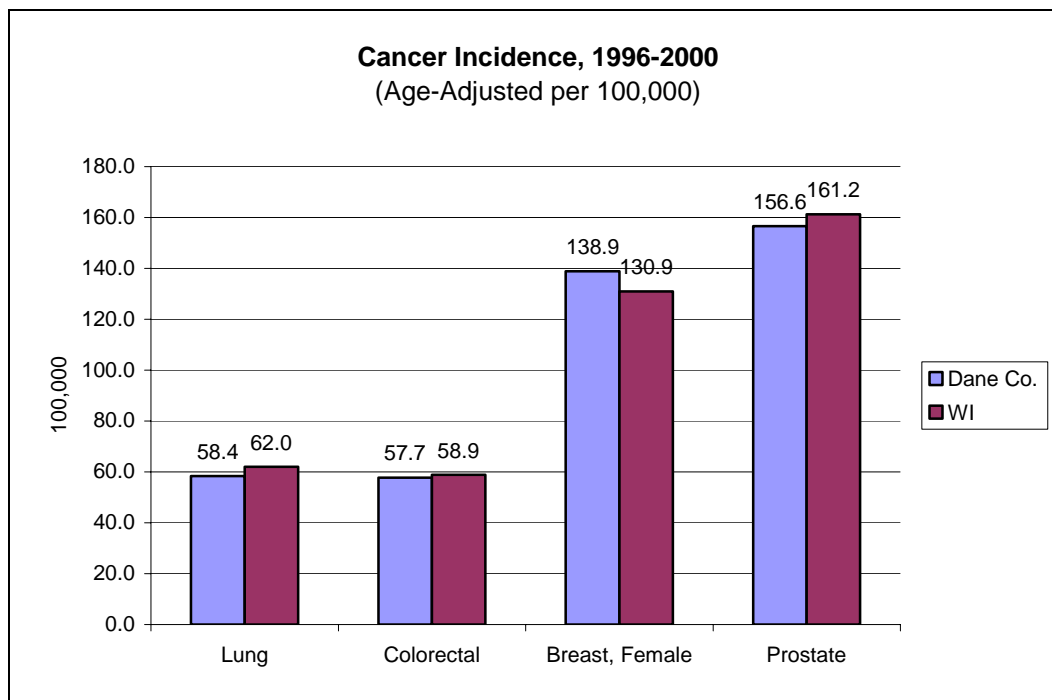
Although the exact cause of cancer is unknown and varies with cancer type, several risk factors may contribute to the development of different types of cancer. This includes high risk behaviors such as cigarette smoking, exposure to “secondhand” tobacco smoke, obesity, unhealthy dietary choices, and physical inactivity. With some types of cancer, screening and early detection can increase treatment options and save lives.

African Americans as a group have a higher risk of developing and dying from cancer than other racial and ethnic groups. In Wisconsin, non-Hispanic African American males had the highest incidence and mortality rates for all cancers combined, as well as for lung and prostate cancers. The death rate for non-Hispanic African American men in Wisconsin from lung and prostate cancer is about twice the rate for non-Hispanic White men.¹¹ In Dane County, disparity data are only available for death rates of all causes of cancer combined.

The Dane County data in this report focus on cancers causing the most hospitalizations and death. These include prostate cancer, female breast cancer, colorectal cancer, and lung cancer.

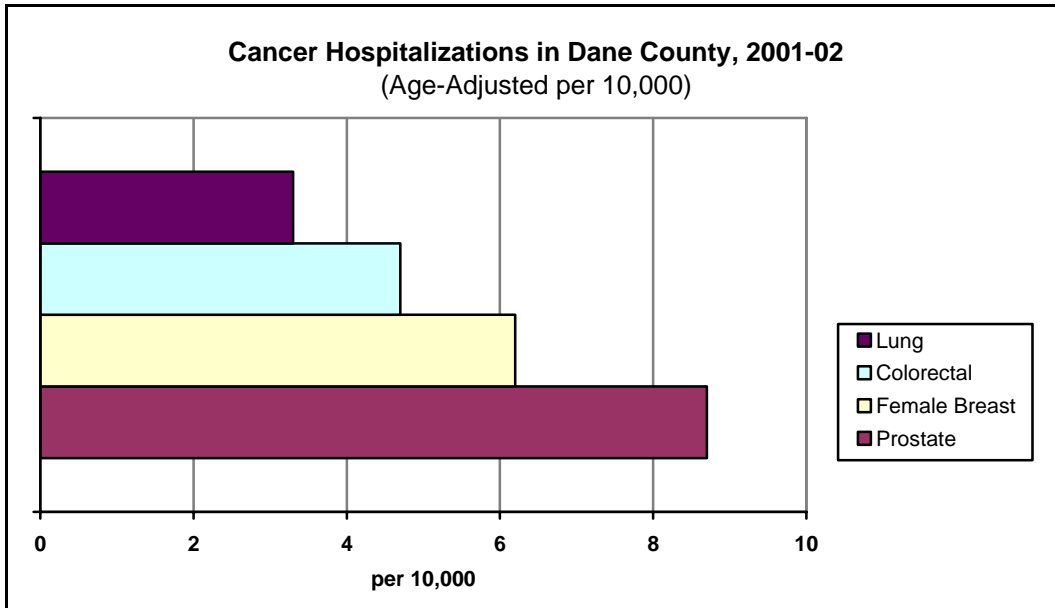
ALL CANCERS

Incidence



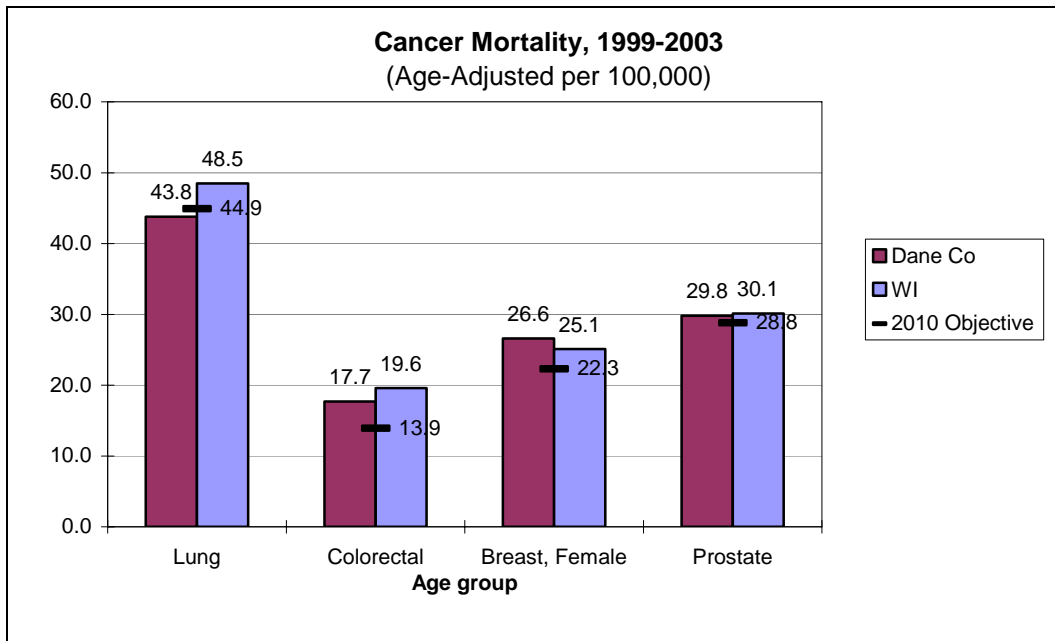
Source: American Cancer Society Midwest Division¹²

Hospitalizations Rates



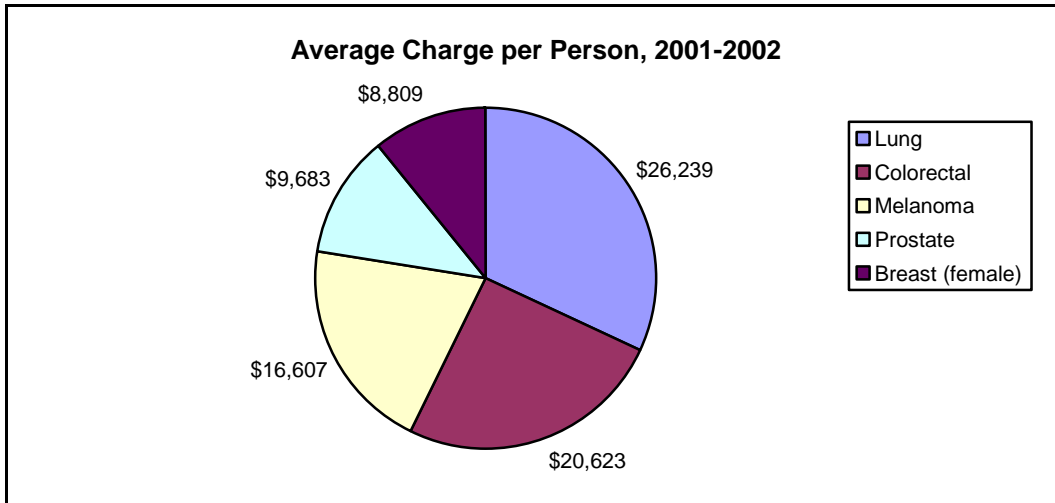
Source: Wisconsin Department of Health and Family Services⁵

Death Rates



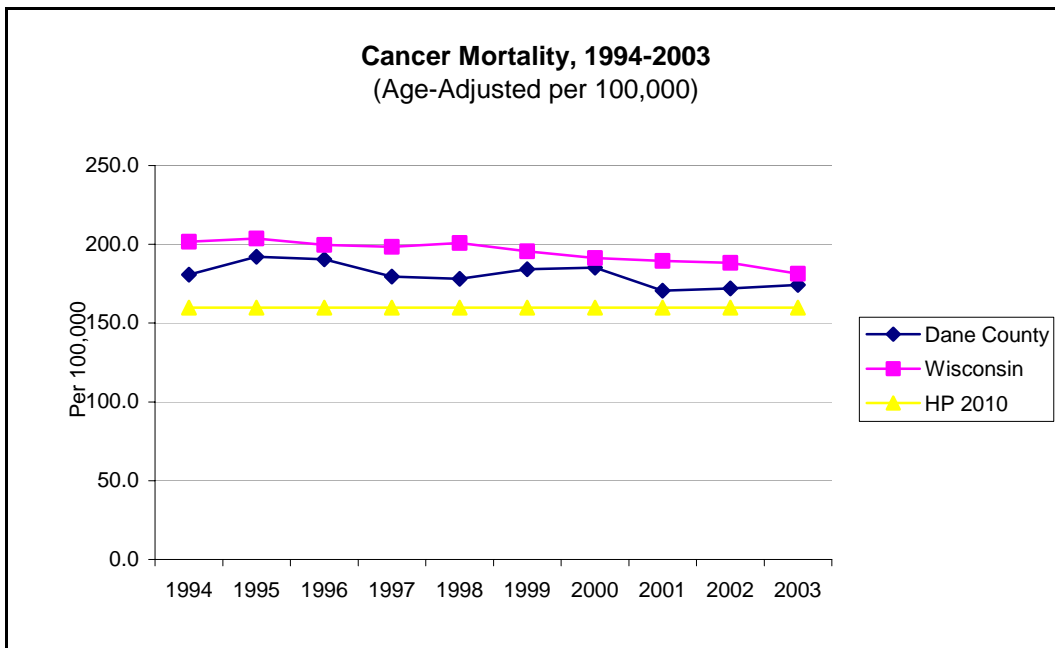
Source: Wisconsin Department of Health and Family Services⁴

Hospitalization Charge



Source: Wisconsin Department of Health and Family Services⁵

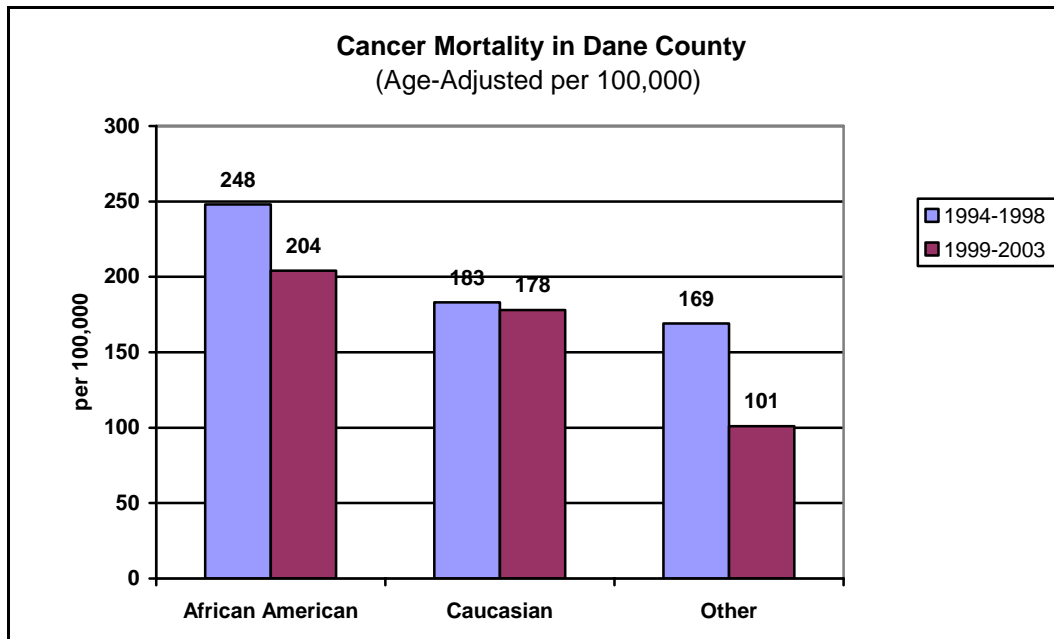
Death Rates



Source: Wisconsin Department of Health and Family Services⁴

- Dane County has not met the HP 2010 goal of reducing overall cancer deaths to below 159.9 per 100,000 population.
- There is no significant decrease in cancer deaths from 1994-2003.
- The mortality rate for cancer was 32% higher for men versus women between 1999 and 2003.

Death Disparity Data

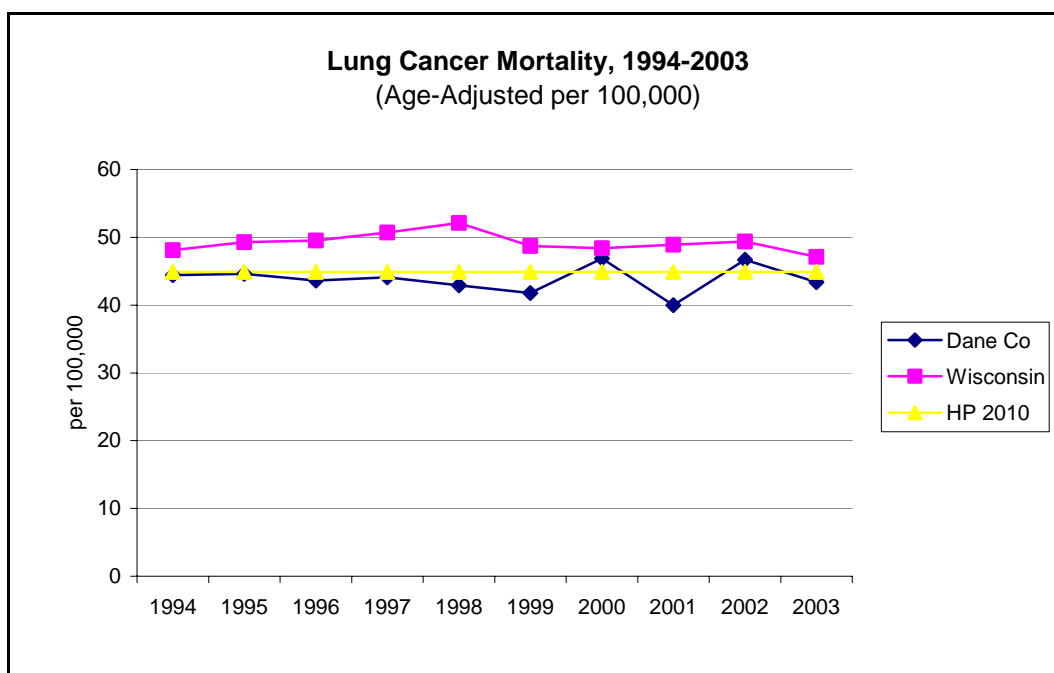


Source: Centers for Disease Control and Prevention¹³

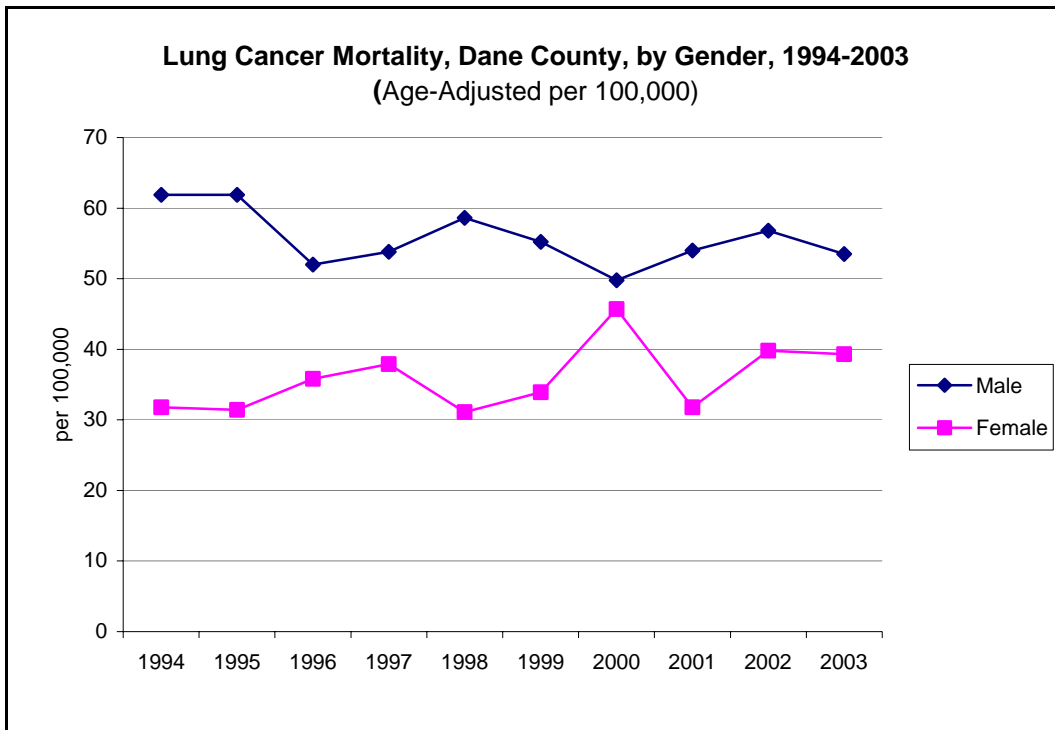
- African Americans are 15% more likely to die from cancer compared to Whites in Dane County and in the State of Wisconsin for years 1999-2003.

LUNG CANCER

Death Rates



Source: Wisconsin Department of Health and Family Services⁴



Source: Wisconsin Department of Health and Family Services⁴

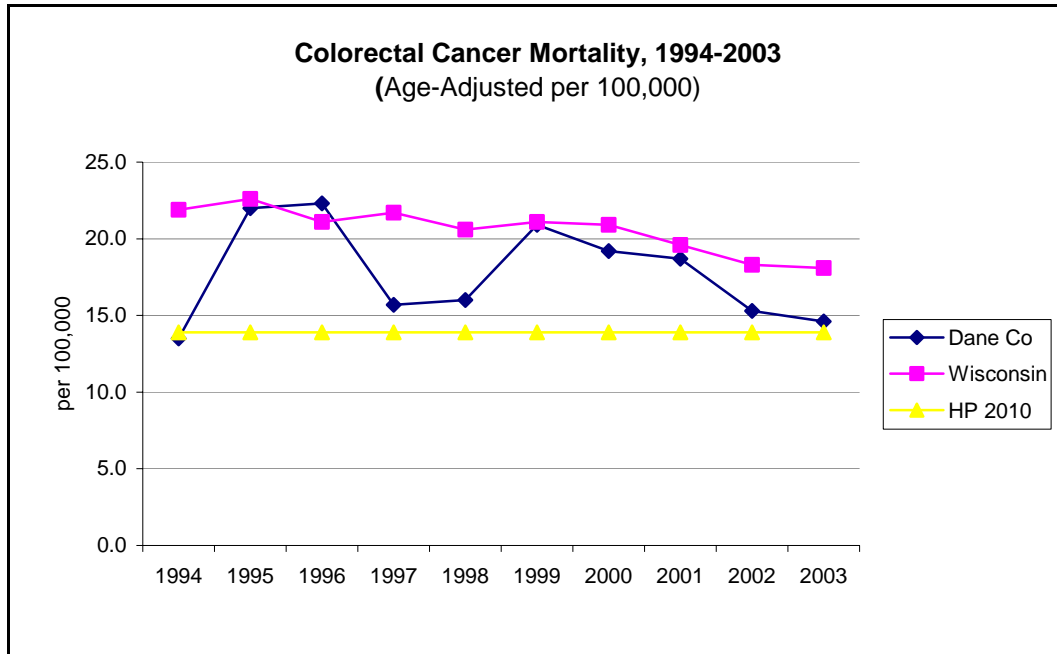
- Dane County has met the HP 2010 goal of reducing lung and bronchus cancer deaths below 44.9 per 100,000 population.
- Men were 40%-70% more likely to die from lung and bronchus cancer than women for during 1994 - 2003.
- The death rate of lung cancer among men is decreasing, whereas the death rate of lung cancer among women is increasing.

COLORECTAL CANCER

Screening

- Combined 2002 and 2004 data show 63% of Dane County adults, aged 50 years or older, have ever had colorectal cancer screening (sigmoidoscopy or colonoscopy), 50% have had screening in the past 5 years.¹⁴
- Dane County meets the HP 2010 goal to have 50% of adults, aged 50 years and older receive colorectal screening.

Death Rates



Source: Wisconsin Department of Health and Family Services⁴

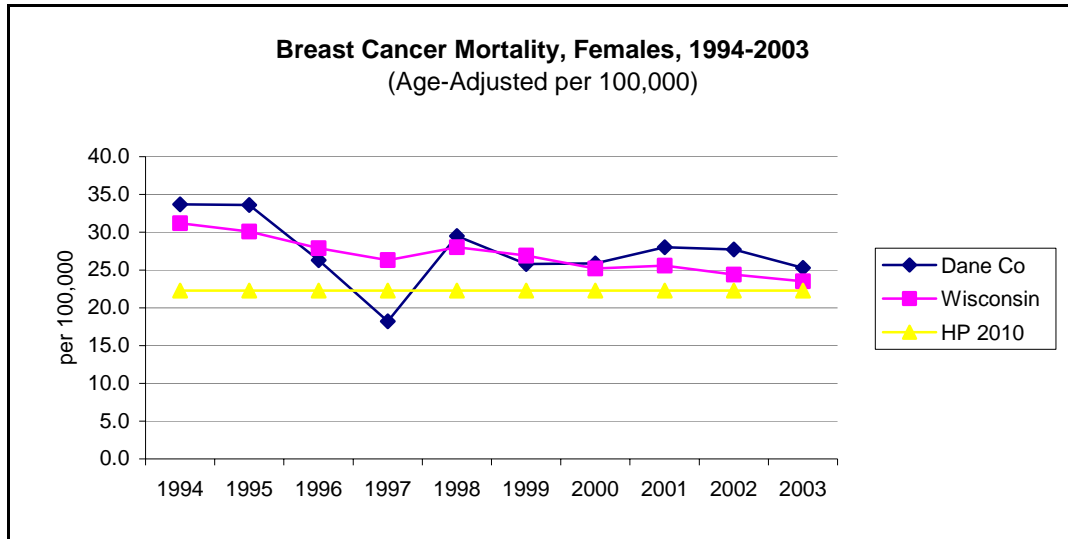
- There has been no statistically significant change in colorectal cancer deaths from 1994-2003 in Dane County.
- Dane County has slightly lower rates of death from colorectal cancer compared to Wisconsin.
- Dane County has not met the HP 2010 goal of reducing colorectal cancer deaths below 13.9 per 100,000 population.

BREAST CANCER

Screening

- Combined 2002 and 2004 data indicate 80% of Dane County women, 40 years or older, have received breast cancer screening (mammogram) in the past 2 years.¹⁴
- Dane County meets the HP2010 goal to have 70% of women, aged 40 years or older, receive a mammogram in the past 2 years.

Death Rates

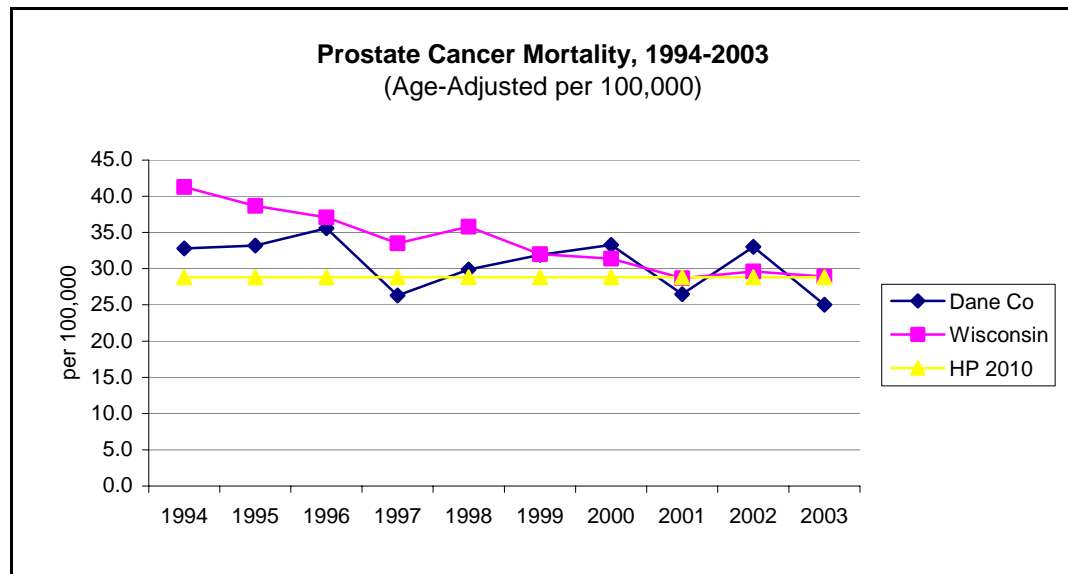


Source: Wisconsin Department of Health and Family Services⁴

- Dane County and Wisconsin have similar rates for breast cancer deaths.
- Dane County has not met the HP 2010 goal of reducing breast cancer deaths below 22.3 per 100,000 females.

PROSTATE CANCER

Death Rates



Source: Wisconsin Department of Health and Family Services⁴

- Dane County and Wisconsin have similar rates for prostate cancer deaths.
- Dane County has not met the HP 2010 goal of reducing prostate cancer deaths below 28.8 deaths per 100,000 males (based on average of mortality rates from 1999-2003).

Cardiovascular Disease

Cardiovascular disease comprises a wide variety of illnesses and events, including the following:

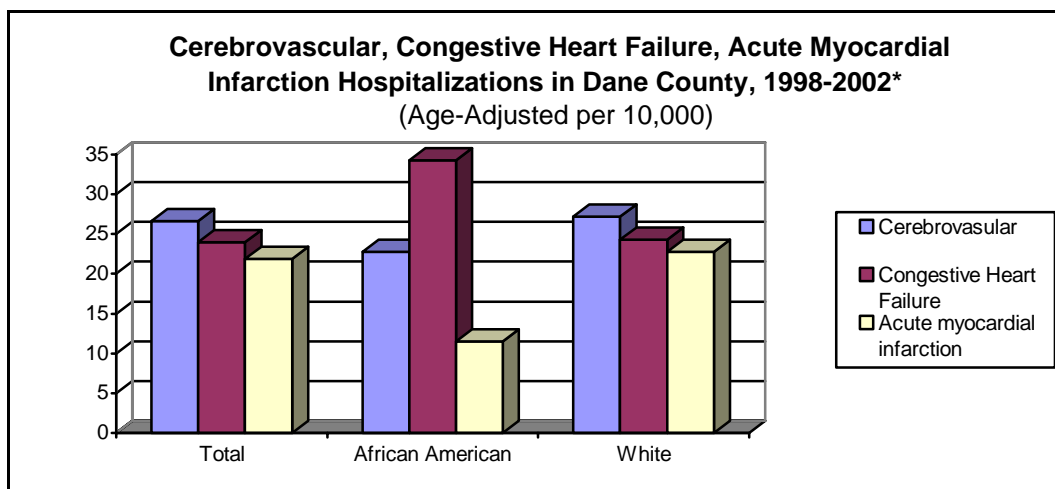
- coronary heart disease, including angina (chest pain) and heart attack (acute myocardial infarction)
- cerebrovascular disease (stroke)
- congestive heart failure (condition in which the heart is unable to pump enough blood to supply the body's needs)
- hypertension (high blood pressure)
- rheumatic fever (inflammatory disease that can develop after a *Streptococcus* infection).

Modifiable risk factors associated with heart disease include behaviors (tobacco use, sedentary lifestyle, and inadequate nutrition) and health status (hypertension, high lipid levels, overweight or diabetes). Refer to the section on chronic disease risk factors for detail.

African Americans have higher mortality rates for all cardiovascular disease in Dane County and Wisconsin. Race and ethnicity data are unreliable for individual types of cardiovascular disease at county level. In Wisconsin, deaths from coronary heart disease are disproportionately higher among American Indians (302 deaths per 100,000) and non-Hispanic African Americans (297 per 100,000) compared to non-Hispanic Whites (252 per 100,000). In Wisconsin, stroke death rate was highest among non-Hispanic African Americans. Their rate of 96 deaths per 100,000 was almost 1.5 times greater than non-Hispanic Whites (66 per 100,000).¹¹

CARDIOVASCULAR

Hospitalization Disparity Data

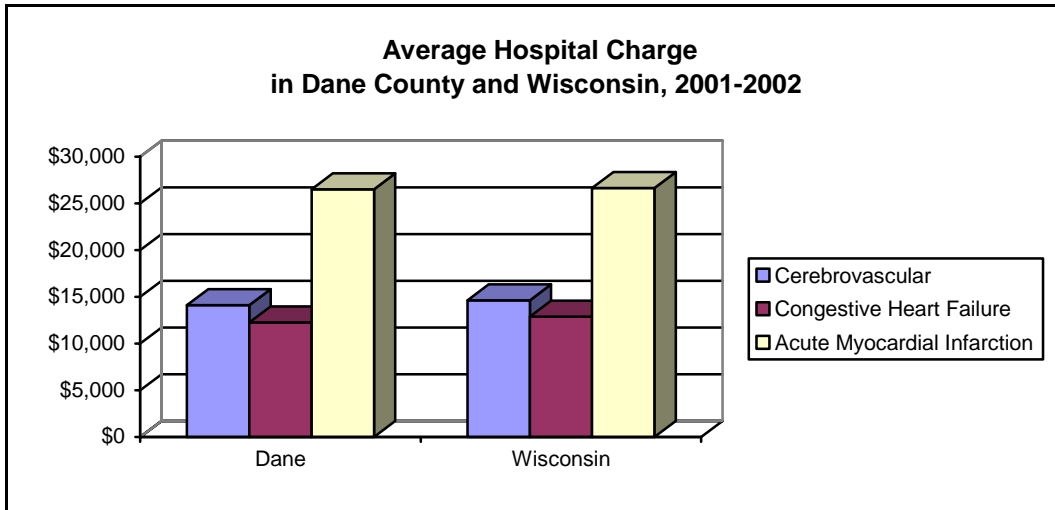


Source: Wisconsin Department of Health and Family Services⁵

Notes: *Includes data for adults age 25 and older.

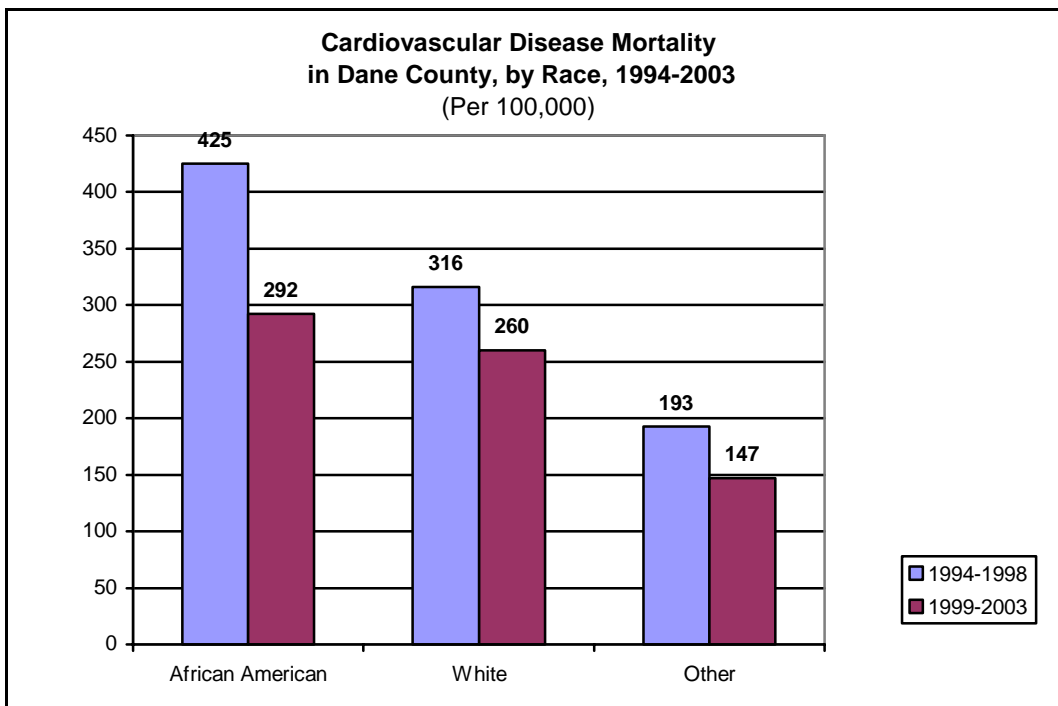
- African Americans were 1.1 times more likely to be hospitalized for congestive heart failure than Whites.

Hospitalization Charge



Source: Wisconsin Department of Health and Family Services⁴

Death Disparity Data



Source: Wisconsin Department of Health and Family⁴

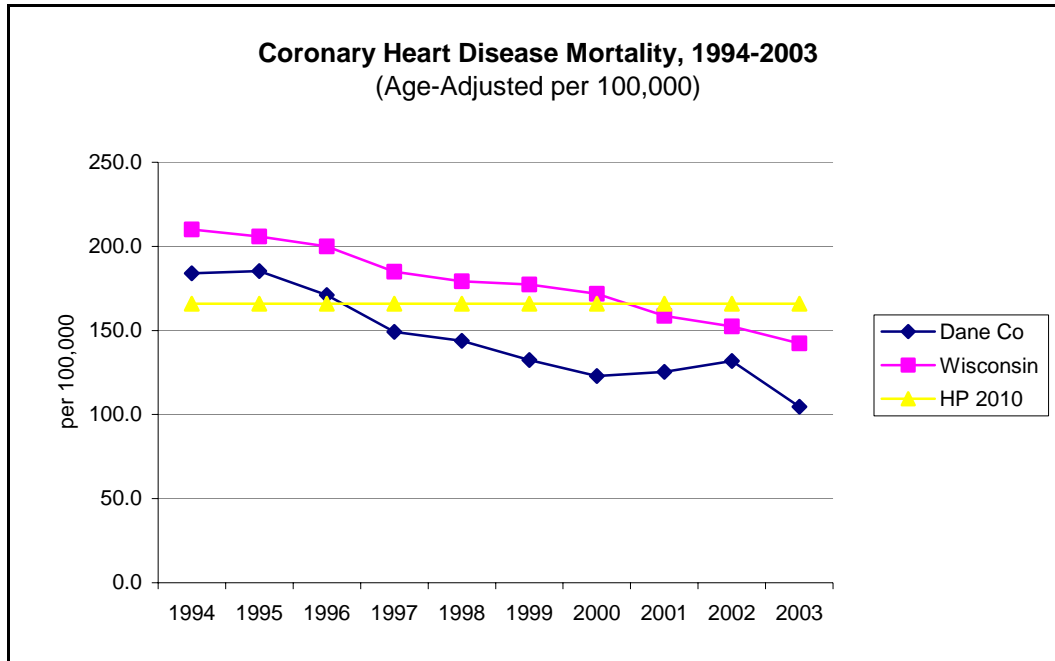
- African Americans were 10 - 30% more likely to die from cardiovascular disease compared to Whites.
- Men were about 40-50% more likely to die from any type of cardiovascular disease compared to women during 1994-1998 and 1999-2003.

CORONARY HEART DISEASE

Diagnosis

- Combined data from 1998-2003 show that 4% of Dane County residents reported that they have ever been told by a doctor that they have coronary heart disease, which is the same for Wisconsin residents.⁹

Death Rates



Source: Wisconsin Department of Health and Family Services⁴

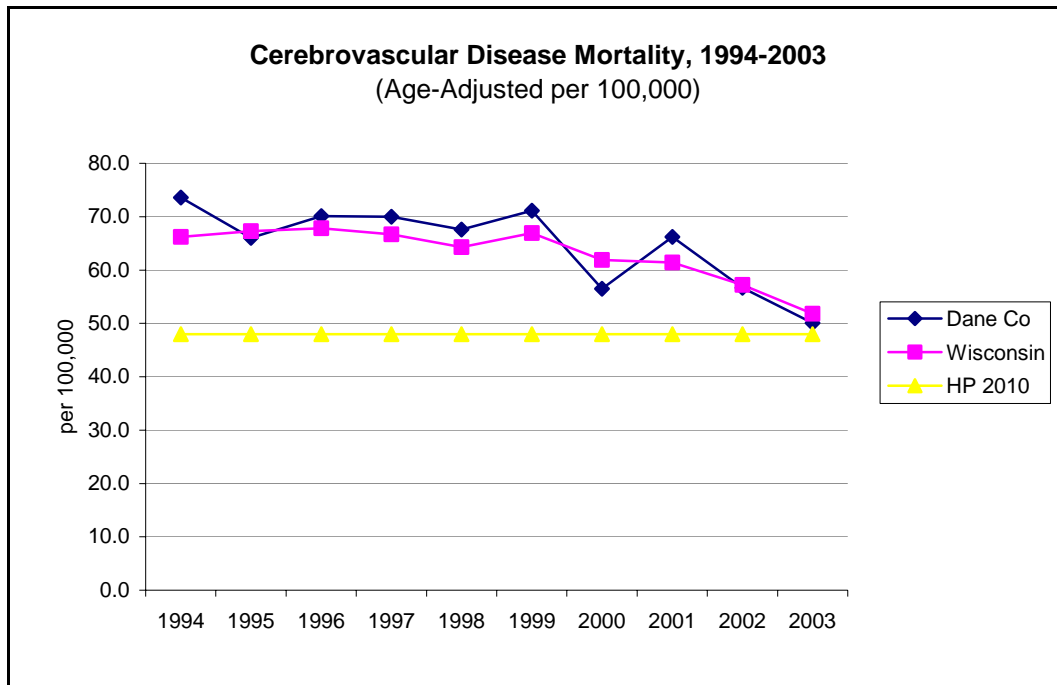
- There has been a 75% decrease in coronary heart disease deaths in Dane County from 1994 - 2003.
- Dane County has met the HP 2010 goal of reducing coronary heart disease deaths below 166 per 100,000 population.
- Men were 70%-90% more likely to die from coronary heart disease compared to women for years 1994-1998 and 1999-2003.
- Race data for coronary heart disease are unreliable at county level.

CEREBROVASCULAR DISEASE (STROKE)

Diagnosis

- Combined data from 1998 to 2003 show only 1% of Dane County residents reported that they have been told by a doctor that they have had a stroke, which is the same percent for Wisconsin residents.⁹

Death Rates

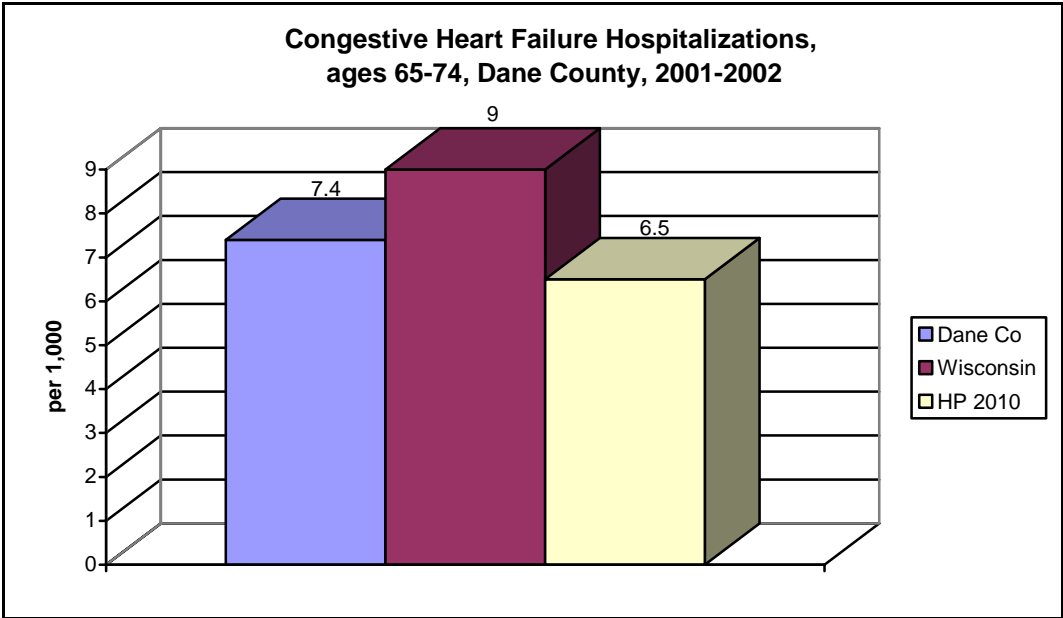


Source: Wisconsin Department of Health and Family Services⁴

- Deaths from cerebrovascular disease have declined slightly from 1994-2003, but change is not significant.
- Dane County has not met the HP 2010 goal of reducing rates of cerebrovascular deaths below 48 per 100,000 population.
- Race data for cerebrovascular disease are unreliable at the county level.
- There is no disparity between men and women.

CONGESTIVE HEART FAILURE

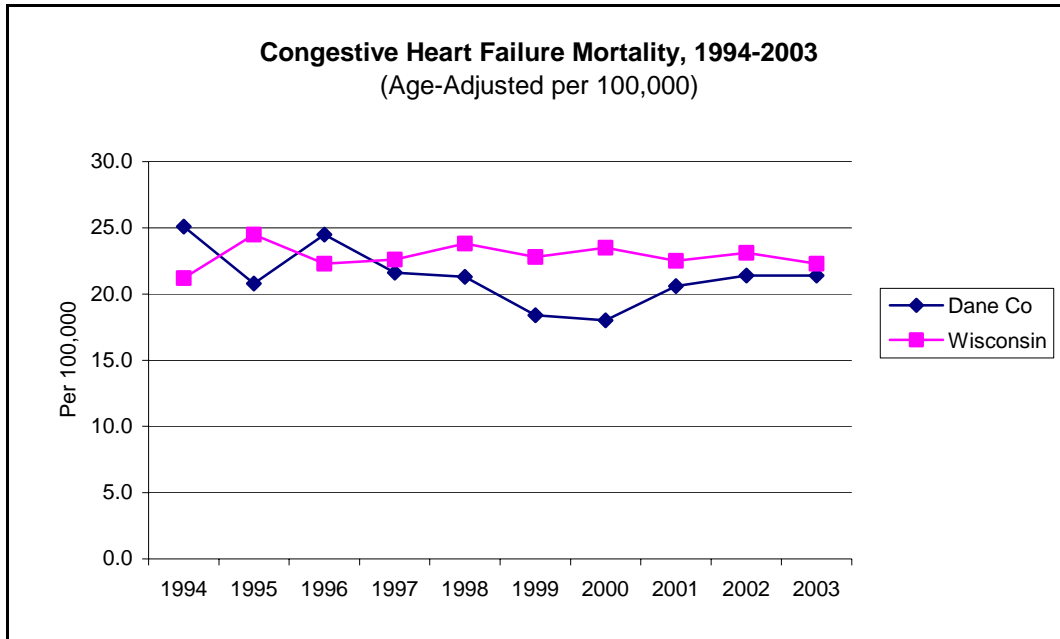
Hospitalization Rates



Source: Wisconsin Department of Health and Family Services⁵

- Dane County has not met the HP 2010 goal of reducing congestive heart failure hospitalizations for adults ages 65-74 to 6.5 per 1,000.

Death Rates



Source: Wisconsin Department of Health and Family Services⁴

- Deaths from congestive heart failure have declined slightly from 1994-2003, but change is not significant.
- Race data for congestive heart failure are unreliable at the county level.
- There is no disparity between men and women.

HYPERTENSION

Diagnosis:

- Combined data from 1998 to 2003 show 12% of people in Dane reported to have ever been told by a doctor that they have high blood pressure, compared with 13% for Wisconsin. This amounts to 38,000 people in Dane County with hypertension.⁹
- Another study in 2003 indicated that 19% of adults in Dane County have ever been told that their blood pressure is high.¹⁴

Diabetes

Diabetes mellitus, a chronic disease characterized by elevated blood sugar levels, is a significant contributor to morbidity and mortality in Wisconsin and Dane County. Diabetes can cause debilitating and costly complications such as blindness, kidney failure, lower extremity amputations, and cardiovascular disease. Much of the health and economic burden of diabetes can be averted through known prevention measures. Modifiable risk factors associated with diabetes are obesity/overweight, sedentary lifestyle, and inappropriate nutrition.

Certain racial or ethnic groups have higher rates of being hospitalized with a principal diagnosis of diabetes. Non-Hispanic African Americans have the highest hospitalization rate in Dane County. In Wisconsin, during 1996-2000, the non-Hispanic African American hospitalization rate (426 per 100,000) was four times higher, American Indian rate (292 per 100,000) was three times higher and Hispanic/Latino rate (209 per 100,000) was twice the rate in comparison to the rate among non-Hispanic Whites (107 per 100,000).¹¹

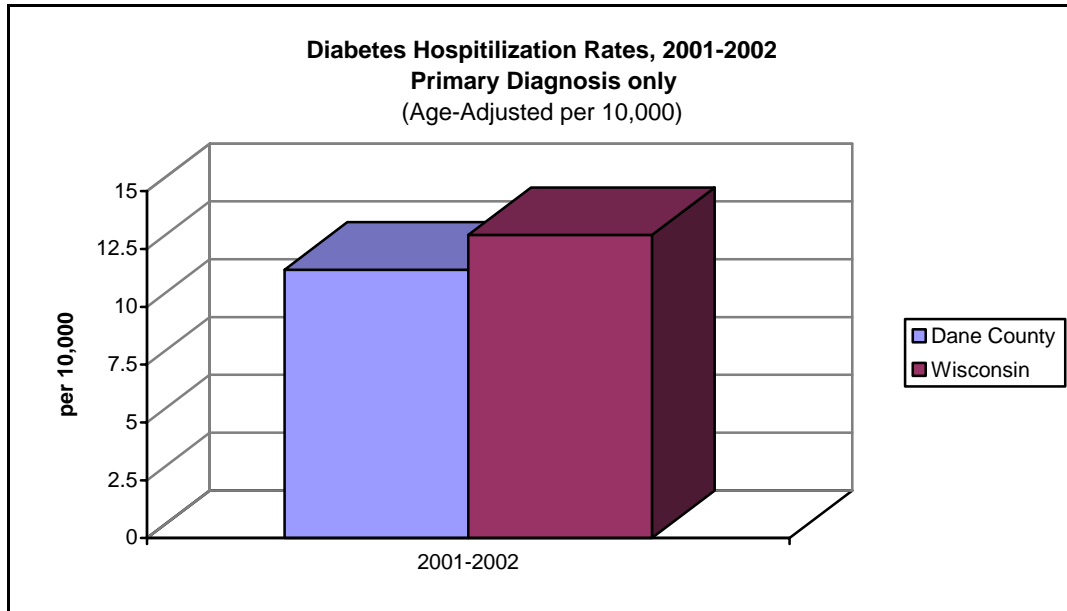
Large racial disparities exist for diabetes deaths in Dane County and Wisconsin. In Wisconsin, during 1996-2000, the rate of death from diabetes among American Indians was four times higher (91 per 100,000) and non-Hispanic African Americans was two times higher (53 per 100,000) compared to the non-Hispanic White population (22 per 100,000).¹¹

In Wisconsin, men were more likely to die from diabetes in American Indian, Hispanic/Latino and non-Hispanic White populations. In contrast, non-Hispanic African American and Asian women have higher death rates from diabetes than their male counterparts.¹¹

Diagnosis

- Combined data from 1998 to 2003 show 3%, or 13,522 individuals, of Dane County residents have ever been told by a doctor (diagnosed) that they have diabetes, compared with 4% of Wisconsin residents.⁹
- Dane County does not meet the HP2010 objective of 2.5% of the population diagnosed with diabetes.

Hospitalization Rates



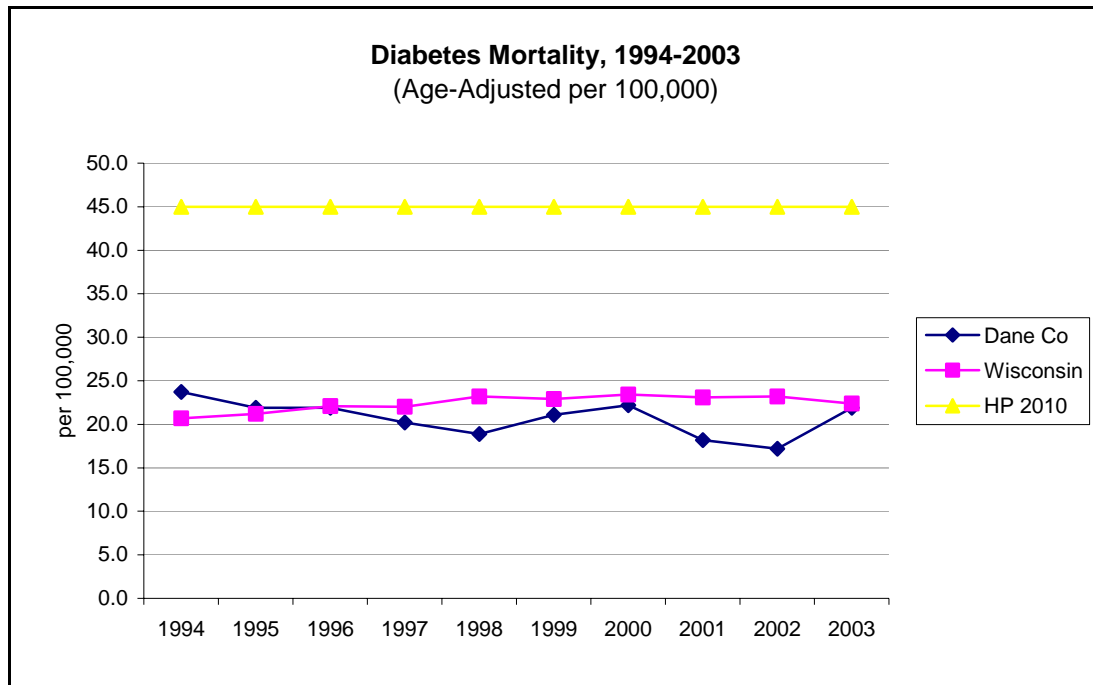
Source: Wisconsin Department of Health and Family Services⁵

- From 2001-2002, 8,311 Dane County adults, ages 25 and older were hospitalized for diabetes or a diabetes-related complication. The hospitalization rate among adults ages 25 and over is 154 hospitalizations per 10,000.

Hospitalization Disparity Data

- African Americans were 1.5 times more likely to be hospitalized with diabetes or a diabetes-related complication compared to whites.⁵

Death Rates



Source: Wisconsin Department of Health and Family Services⁴

- The age-adjusted mortality rate for 1999-2003 among African-Americans was 4.1 times higher than the mortality rate among Whites (76.1 vs 19.2).
- Males have a slightly higher mortality rate than females (24.6 vs. 17.2 for 1999-2003.)
- Dane County has met the HP 2010 goal of reducing diabetes deaths to 45 per 100,000.
- Diabetes was the 8th leading cause of death from 1999-2003 in Dane County. Diabetes claimed 348 lives with an age-adjusted rate of 20.1 deaths per 100,000 population between 1999-2003.
- There has been no significant change in diabetes deaths from years 1994-2003.

Chronic Disease Risk Factors

Factors that influence the risk of chronic diseases, such as age, gender or family history cannot be modified. Certain medical conditions can increase the risk of certain chronic diseases, such as obesity and high cholesterol, but are modifiable. Behavioral lifestyle factors that influence chronic disease risk, such as tobacco use, nutrition or dietary and physical activity level, are also modifiable. These modifiable risk factors of chronic disease are focused in this report.

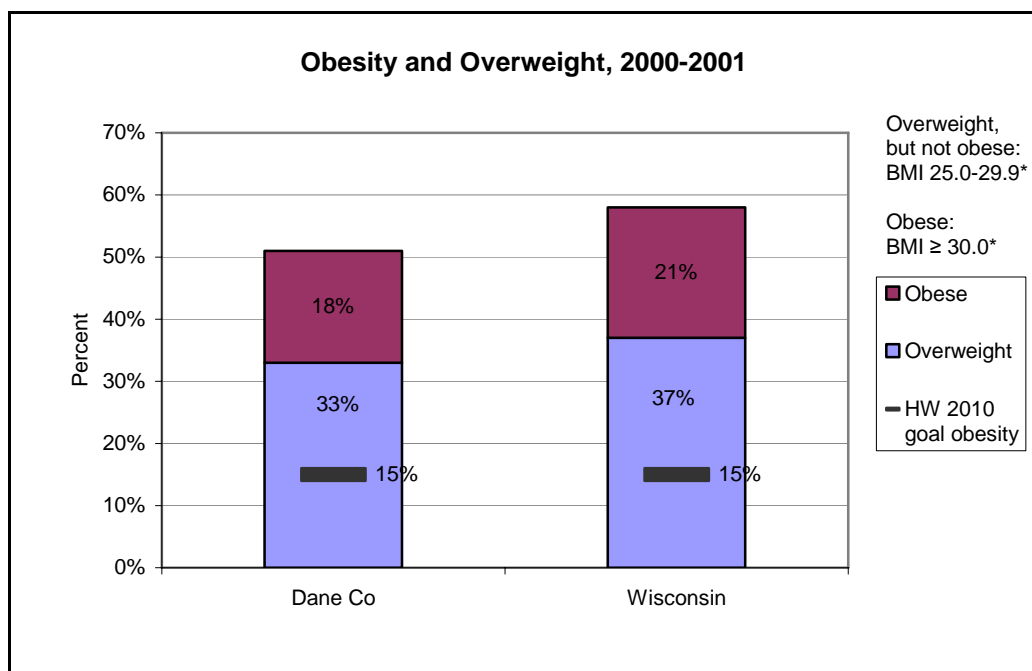
OVERWEIGHT/OBESITY

Being overweight substantially increases the risk of developing multiple chronic diseases, including coronary heart disease, stroke, hypertension, diabetes and certain cancers. Overweight and obesity have also been identified as important and independent risk factors for congestive heart failure (CHF) in a number of studies.

The Healthiest Wisconsin 2010 objective is to reduce the proportion of Wisconsin adults (18 years and older) who are obese to 15%. The Healthiest Wisconsin 2010 objective for youth is to reduce the proportion of Wisconsin adolescents (aged 12-19) who are overweight to 8%.

All racial/ethnic groups in Wisconsin (1996-2000), except Asians, reported more than half of adults (18 or older) as obese or overweight; the highest proportion reported by African Americans (65%).¹¹

Adult Rates



Source: Wisconsin Department of Health and Family Services¹⁴

Notes: * BMI = Body Mass Index = weight (kg) divided by height (m).

- Dane County adults have not achieved the Healthiest Wisconsin 2010 goal for rates of obesity at 15%.
- 51% of Dane County adults are either obese or overweight.

Youth Rates

- In 2003, 10.4% of Wisconsin adolescents, aged 12-19 years were overweight.¹⁵
- There are no Dane County data available on youth rates of overweight/obesity at this time.

CHOLESTEROL

High blood cholesterol is a major risk factor for coronary heart disease and also increases the risk of stroke. Approximately 30% - 40% of coronary heart disease and 10% - 20% of strokes in the U.S. are due to high cholesterol levels.¹⁶

Early detection can function as the first step toward lifestyle modifications that can reduce high cholesterol.

Screening

- In 2003, 80% of adults in Dane County have ever had their blood cholesterol levels tested, 76% of adults have been tested in Dane County in the past 5 years.¹⁴
- Dane County just meets the HP 2010 goal of 80% adults who have their blood cholesterol checked within the past 5 years.

Diagnosis

- In 2003, 28% percent of adults, 18 years or older, (almost 88,000 people) in Dane County have ever been told that they have high cholesterol, compared to 33% of Wisconsin residents.¹⁴

TOBACCO USE

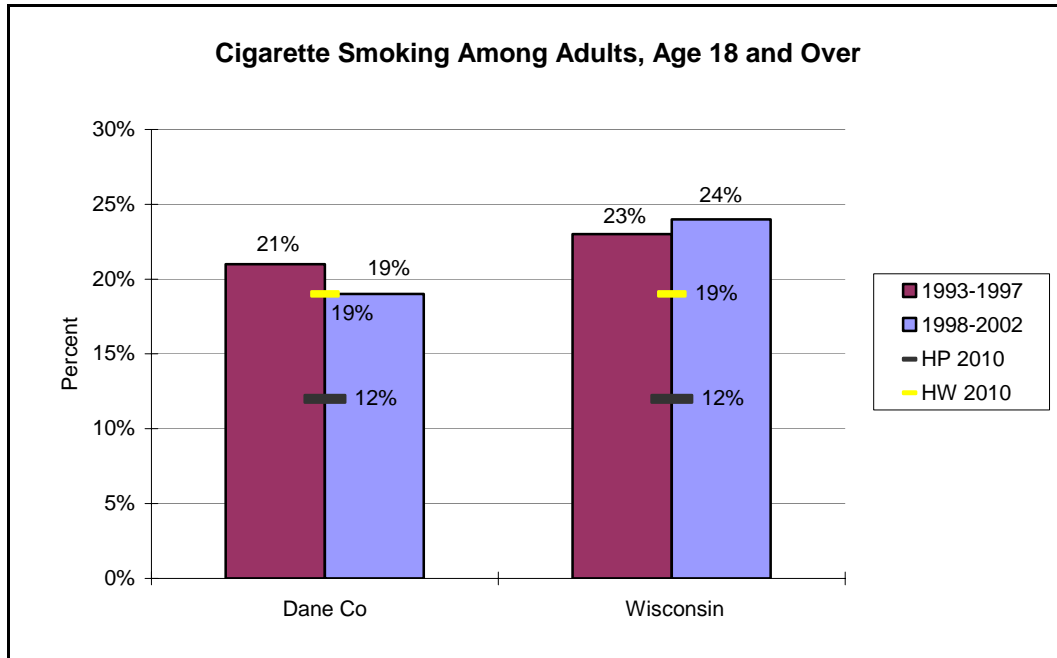
Tobacco use, particularly cigarette smoking, is the leading cause of many preventable illnesses and premature death in the United States. Smoking is responsible for an estimated 1/3 of all cancer deaths and is an important risk factor for coronary heart disease, stroke and respiratory diseases such as asthma.

The Healthiest Wisconsin 2010 objective is to reduce cigarette smoking among Wisconsin adults (18 years and older) to 19%. The national Healthy People 2010 objective is to reduce cigarette smoking in adults to 12%. The national Healthy People 2010 objective for youth is to reduce cigarette smoking by adolescents (grades 9 -12) to 16%.

The Healthiest Wisconsin 2010 objective for secondhand smoke for adults is to decrease the number of adults who report that they or someone in their home smokes (in past 30 days) to 21%. The Healthiest Wisconsin 2010 objective for youth is to reduce the number of youth (middle and high school age) who report that they live with someone who smokes to 33%.

American Indian adults have the highest cigarette smoking rate (51%) of all racial/ethnic groups in Wisconsin: 27% of non-Hispanic African Americans, 25 % of Hispanics, 23% of non-Hispanic Whites and 22% of Asians smoke. The highest rates among Wisconsin middle school students (grades 6-8) were reported by Hispanics/Latinos (19%) and American Indians (17%)¹¹.

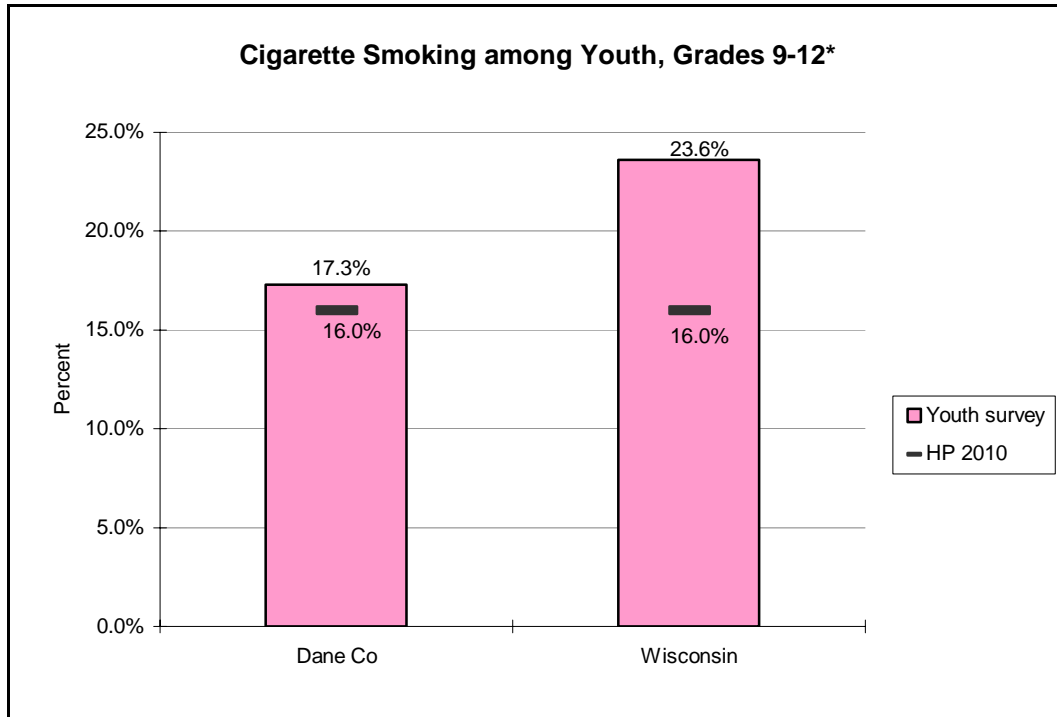
Adult Rates



Source: Wisconsin Department of Health and Family Services¹⁴

- The percent of adults who smoke in Dane County has decreased between 1993-97 and 1998-2002.
- Between 1998 and 2002, Dane County has reached the Healthiest Wisconsin 2010 objective of 19% of adults who report smoking but has not met the national Healthy People 2010 objective of 12% adults who report smoking.
- Those employed full-time had the lowest percentage of smoking.

Youth Rates



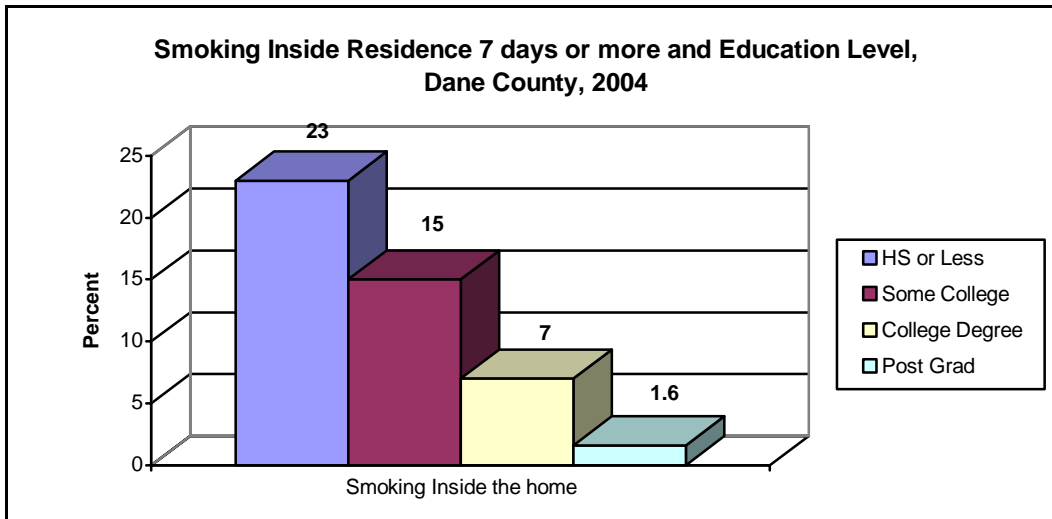
Source: For Dane County data, Koenig et al.¹⁷ For Wisconsin data, Wisconsin Department of Public Instruction¹⁵
Notes: * Dane County data is from 2005 and Wisconsin data is from 2003

- Dane County has not reached the 2010 goal of 16% of youth smoking.

SECONDHAND SMOKE

Adult Rates

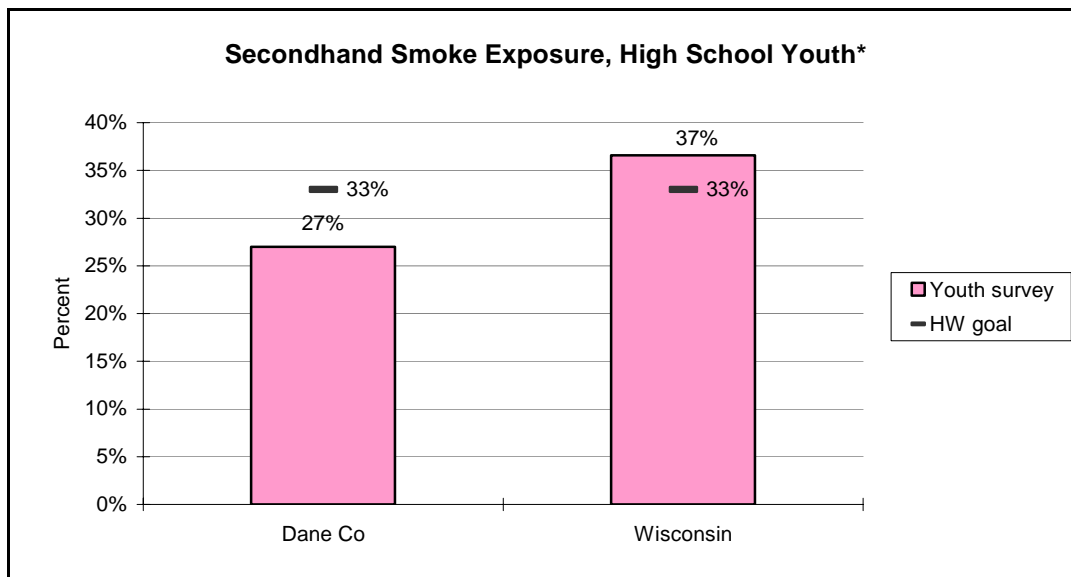
- In 2004, 13% of Dane County adults ages 18 and over are exposed to tobacco smoke inside their residence.¹⁸
- Dane County has met the Healthiest Wisconsin 2010 objective of 21% of adults who report that they or someone in their home smokes (in past 30 days).



Source: Gene Kroupa & Associates¹⁸

- Age groups 35-44 and 45-54 were more likely to smoke inside the residence compared to other age groups.
- In 2004, 83% of those who report smoking indoors do so 7 days a week. Of those 83% who report smoking indoors 7 days per week, the greatest percentage is those in East Madison, followed by East Dane County.¹⁸
- Dane County does not meet the HP 2010 goal of 100% smoke-free workplaces. In 2004, 10% of residents reported exposure to tobacco smoke at work or school.¹⁸

Youth Rates



Source: For Dane County data, Koenig et al.¹⁷ For Wisconsin data, Wisconsin Department of Public Instruction¹⁵

Notes: * Dane County data is from 2005 and Wisconsin data is from 2003. HW (Healthiest Wisconsin) goal pertains to middle and high school; Dane County and Wisconsin data only include high school.

- Dane County has met the secondhand smoke exposure Healthiest Wisconsin 2010 objective for youth.

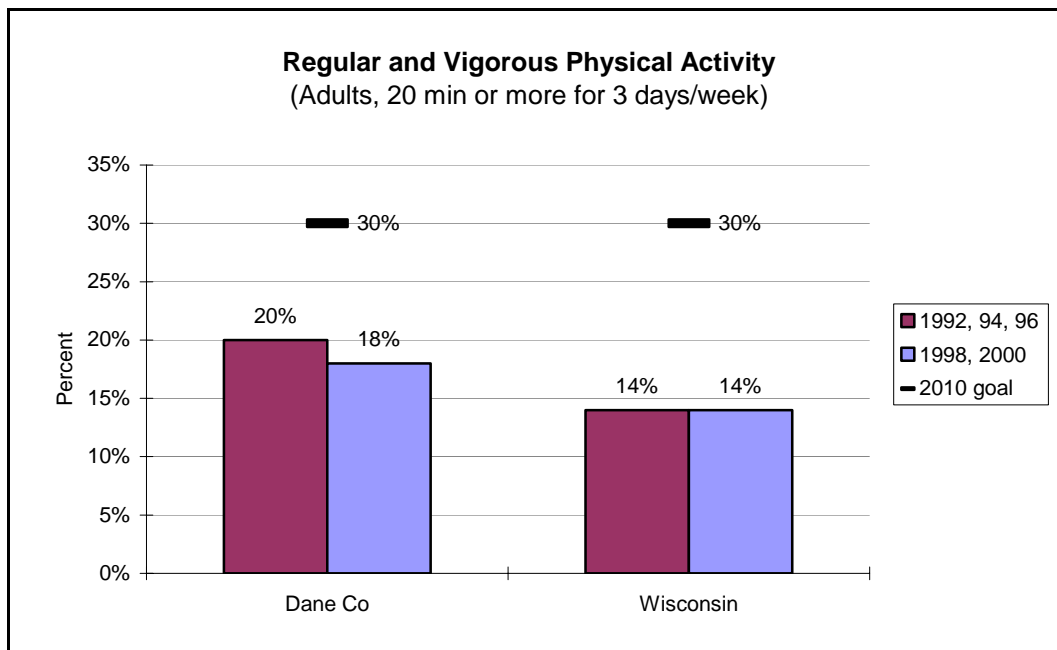
PHYSICAL ACTIVITY

Regular physical activity substantially reduces the risk of dying from coronary heart disease and decreases the risk for colon cancer, diabetes and high blood pressure. Physical activity also helps control weight.

The Healthiest Wisconsin 2010 objective is to increase the proportion of Wisconsin adults who engage in moderate physical activity for 30 minutes or more per day on most days (preferably daily) of the week to 30%. Healthiest Wisconsin 2010 objective for youth is to increase the proportion of Wisconsin adolescents (grades 9-12) who engage in moderate physical activity for at least 30 minutes per day on five or more days of the week to 37%.

Statewide and for all racial/ethnic groups, more than 50 % of Wisconsin adults indicated no regular participation in physical activities. About 65% of non-Hispanic African Americans indicated no regular physical activity compared with 55% Hispanics/Latinos and 52 % non-Hispanic Whites.¹¹

Adult Rates

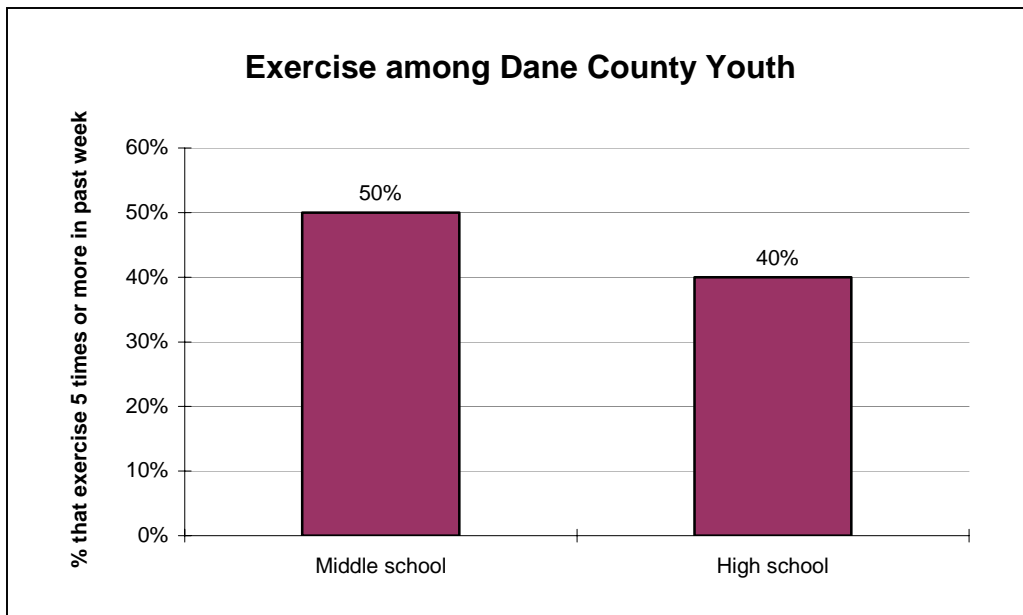


Source: Wisconsin Department of Health and Family Services¹⁴

- Dane County has not met the Healthy People 2010 goal for physical activity.

Youth Rates

- 40% of Dane County adolescents (grades 9 to 12) engaged in moderate or vigorous physical activity for 30 minutes or more on 5 or more occasions per week.¹⁷

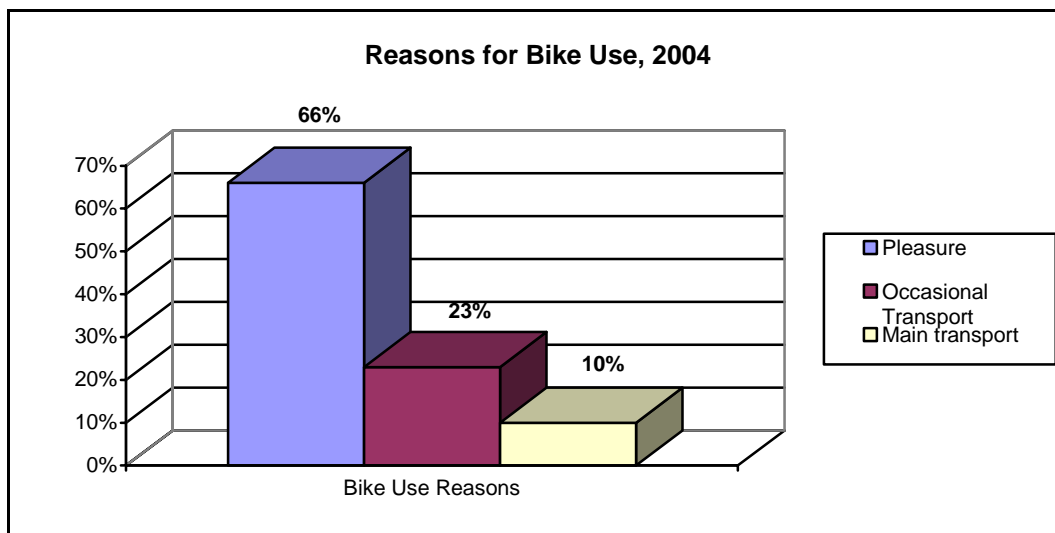


Source: For Dane County data, Koenig et al.¹⁷

- In 2003, 28% of Wisconsin adolescents (grades 9 to 12) engaged in moderate physical activity for 30 minutes or more on 5 or more days per week.¹⁵

Adult Bicycle Use

- Although the City of Madison is making a commitment to support bicycle use, 50% of Madison residents did not ride a bicycle at all during the summer of 2004. This amounts to a 6% decrease in any bike use since 2002.¹⁸
- In 2004, 33% of Madison residents reported using their bikes for errands or commuting to work. This amounts to a 54% decrease in the use of bicycles as an alternate form of transportation since 2002.¹⁸



Source: Gene Kroupa & Associates¹⁸

NUTRITION - FRUIT AND VEGETABLE CONSUMPTION

A healthy diet has many components, but one important aspect is a regular intake of fruits and vegetables. Diets containing fruits and vegetables are associated with a reduced risk of cancer, coronary heart disease and stroke. Consistent fruit and vegetable intake also assists in a healthy weight.

The 2000 Dietary Guidelines recommended 5 or more servings of fruit and vegetables every day for individuals over the age of two. The national Healthy People 2010 objective reflected this by starting to increase the proportion of persons over two to consume at least 2 servings of fruit and at least 3 servings of vegetables to 40%. The Healthiest Wisconsin 2010 goal for youth is for 40% of Wisconsin high school students to eat 5 or more servings of fruits and vegetables per day. The recently released 2005 Dietary Guidelines to Americans recommends getting at least 2 cups of fruit per day and 2-1/2 cups of vegetables per day.

All races report a similar percentage of fewer than 5 servings of fruits and vegetables.

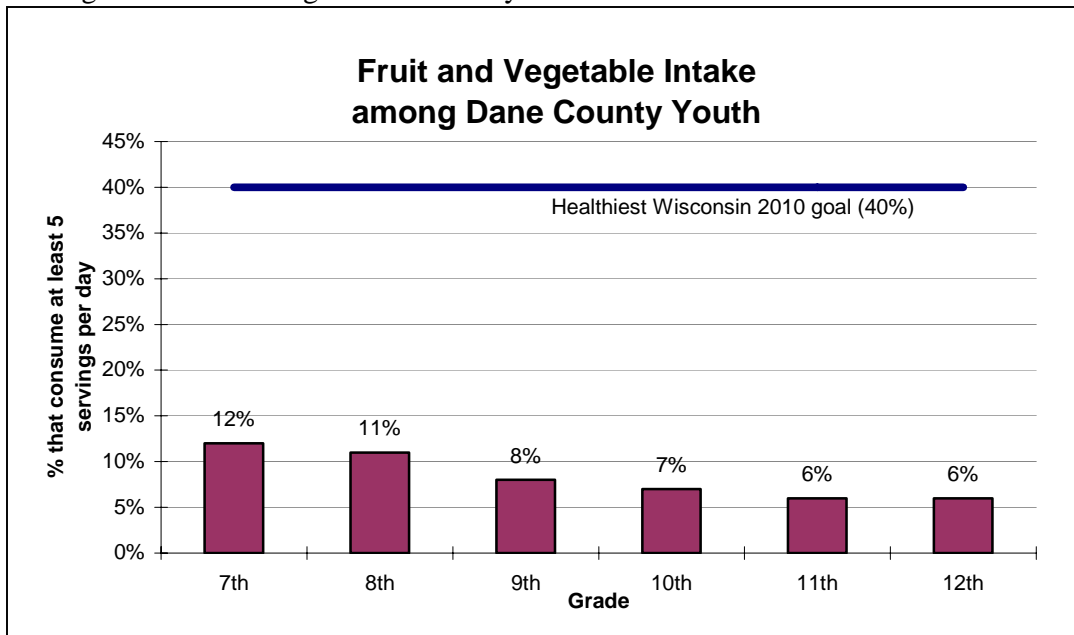
A majority of adults in Wisconsin (79%) eat an inadequate amount of fruits and vegetables each day.¹⁹

Adult Rates

Data for fruit and vegetable consumption for adults are not available for Dane County.

Youth Rates

- In 2005, only 6.8% of Dane County high school students (grades 9-12) report eating 5 or more servings of fruits and vegetables each day.¹⁷



Source: For Dane County data, Koenig et al.¹⁷

Methods

- A. Data were collected from the following sources:
1. **U.S. Census Bureau, Census 2000.** Provides general demographic characteristics and estimates of social and economic characteristics. Source of state and county population denominators for rate calculations.
 2. **Wisconsin Interactive Statistics on Health (WISH).** Internet-based data query system from Wisconsin Division of Public Health, Bureau of Health Information and Policy. Source for mortality data.
 3. **Wisconsin Inquiry Tool for Healthcare Information (WITHIN)-** Internet-based data query system from Wisconsin Division of Public Health, Bureau of Health Information and Policy. Source for hospitalization data.
 4. **Wisconsin Family Health Survey.** Annual survey from Wisconsin Division of Public Health, Bureau of Health Information and Policy that assesses health status of Wisconsin residents.
 5. **Madison Metropolitan School District (MMSD).** Tracks data on health conditions, including asthma, on students attending MMSD schools.
 6. **Burden of Asthma in Wisconsin, 2004.** Surveillance report from Wisconsin Division of Public Health, Bureau of Environmental Health.
 7. **CDC Wonder.** Internet-based data query system from Centers for Disease Control and Prevention. Source for race-specific cancer mortality data.
 8. **Wisconsin Behavioral Risk Factor Survey (BRFS).** Ongoing survey from Wisconsin Division of Public Health, Bureau of Health Information and Policy that assesses health behaviors and attitudes.
 9. **Wisconsin Youth Risk Behavior Survey.** Biennial survey from Wisconsin Department of Public Instruction that assesses risk behaviors of Wisconsin youth.
 10. **Dane County Youth Assessment.** Survey conducted every five years by Dane County Youth Commission to assess risk behaviors of Dane County youth.
 11. **Dane Trak Survey 2004.** Telephone survey conducted by Gene Kroupa and Associates in Dane County.
- B. All mortality and hospitalization rates were age-adjusted using the direct method to the 2000 United States standard population.
- C. The trends in mortality rates of each disease over the 10-year period of 1994-2003 were assessed. Statistical significance of the difference between 5-yr average rates for 1994-1998 vs. 1999-2003 was determined using Student's t-test.
- D. Dane County and Wisconsin data were compared to benchmarks from either Healthy People 2010 or Healthiest Wisconsin 2010 when possible.
- E. Mortality or hospitalization rates were only presented for diseases with ≥ 20 events.

Limitations

- Race-specific data were not available for all diseases of interest.
- Race-specific mortality rates for races other than African American or Caucasian were not reliable for any disease.
- No data were available to assess socio-economic status characteristics in relation to health outcomes.

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Acknowledgements

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