

FACTORS INFLUENCING EARLY DIAGNOSIS AND TREATMENT



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OVERVIEW

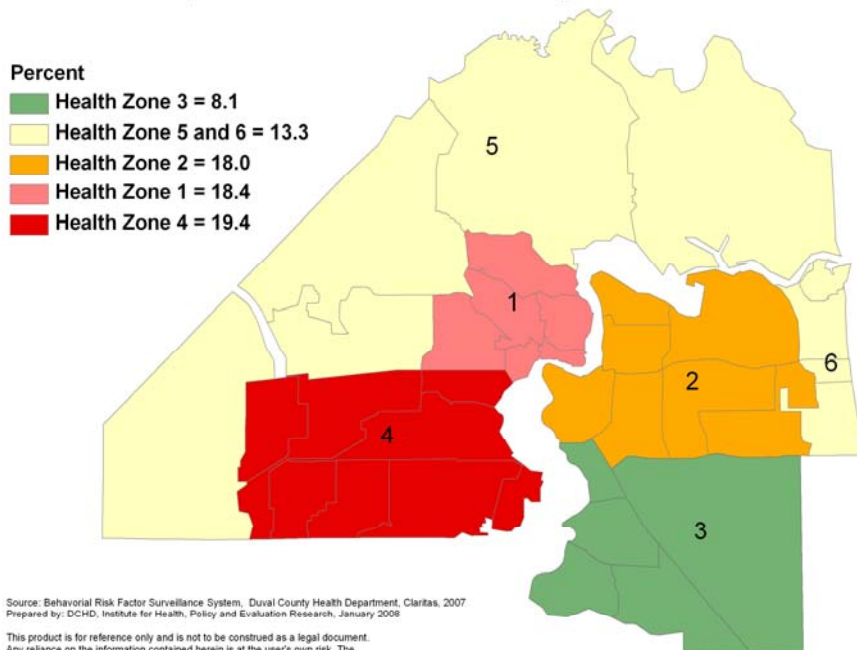
Early diagnosis followed by early treatment of diseases is critical for maintaining good quality of life, reducing premature death, and reducing healthcare costs. Chronic diseases—such as cardiovascular disease (primarily heart disease and stroke), cancer, and diabetes—are among the most prevalent, costly, and preventable of all health problems and account for 7 out of every 10 deaths in the United States.¹ The extended course of illness and disability from such chronic diseases results in extended pain and suffering and decreased quality of life for

millions of Americans. Chronic diseases cause major limitations in daily living for about 1 of every 10 Americans.² Even though chronic diseases are mostly preventable, they can be difficult to cure since the risk factors associated with developing chronic conditions are primarily linked to lifestyle behaviors that can be hard to change. The medical care costs of people with chronic diseases account for more than 75% of the nation's \$2 trillion medical care costs.¹ In fact, prevention, including screening and early diagnosis of disease, accounts for only 2% to 3% of health care expenditures while disease care is the dominant driver of health

spending.³ Some chronic diseases can be prevented. Others can be effectively treated when caught early. In both cases, diagnosing and treating the disease early is critical for controlling the negative effects of chronic disease.

This report summarizes major factors influencing early diagnosis and treatment of chronic diseases in Duval County. Some notable findings include: 31.4% of women 40 years of age and older did not receive a mammogram in the past year, 14.3% of adults in Duval County do not have health insurance coverage, 20% of adults could not see a dentist in the past year due to cost, and just over half of adults less than 65 years have ever been tested for HIV. In addition, the report highlights factors by race, gender and geographic region.

Figure 1 Adults who Could Not See a Doctor At Least Once in the Past Year Due to Cost by Health Zone, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, Duval County Health Department, Claritas, 2007. Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, January 2008

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Sources:

¹National Center for Chronic Disease Prevention and Health Promotion, <http://www.cdc.gov/nccdphp/overview.htm>

²The Burden of Chronic Diseases and Their Risk Factors: National and State Perspectives, Department of Health and Human Services, 2004, http://www.cdc.gov/NCCDPHP/burdenbook2004/pdf/burden_book2004.pdf

³Woolf, S.H. (2009). A closer look at the economic argument for disease prevention, JAMA; 301(5), 536-538



OVERVIEW AND PURPOSE OF THE BRFSS

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based telephone survey administered to adults age 18 and over to assess various aspects of health related behavior including health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury. This is the last of three studies by Duval County Health Department's Center for Health Statistics showcasing data from the 2007 Duval County Behavioral Risk Factor Surveillance System. The first study, chronic disease morbidity, was released in November, 2008. The second study, released in December 2008, highlighted primary

prevention and risk behaviors and this final study emphasizes secondary and tertiary prevention, such as screenings for diseases and management of diseases. People's behaviors can predict health outcomes as well as give insight into the attitudes, knowledge, and skills that play a part in influencing behavior. Behavioral factors have long been acknowledged as principle contributors to health throughout history. The choices people make related to their health play a significant role in premature morbidity and mortality, particularly chronic diseases, and impact the health care system substantially.

The BRFSS was established

by the Centers for Disease Control and Prevention (CDC) in 1984 and is currently administered in all 50 states. In addition, the CDC as well as some state health departments collect county level data. The BRFSS is the primary data source for all adult behaviors related to health. States use BRFSS data primarily to identify emerging health problems, establish and track health objectives, evaluate programs, and develop and evaluate public health policy. The BRFSS includes a set of core questions, modules that rotate between odd and even years, and state and county added questions.

The Florida Department of Health, with technical assistance from the Centers for

Disease Control, collected county level data in 2007, the first since the initial effort in 2002. The 2007 county-level survey was developed in collaboration with state and local representatives and was designed to meet the individual needs of the counties by offering options to increase sample size and to add questions. With input and funding from the Duval County Health Department, in 2007, the Florida Department of Health surveyed a sample of 1,815 in Duval County yielding the largest local sample ever conducted in the state of Florida. Data from Duval County were weighted in order to remove bias in the sample. The data set is specifically weighted by density status, geographic region, number of adults, age, gender, race/ethnicity, and health zone.

REPORTING DATA

Health-related data is reported using various measures, such as percentages, rates per 1,000, rates per 100,000, etc. Common morbidity measures such as sexually transmitted diseases, breast cancer incidence, and HIV incidence, as well as mortality measures such as heart disease death, unintentional injury death, and diabetes deaths are reported using a rate per 100,000 population. In addition, measures around infant mortality and infant related indicators are reported as a rate per 1,000 or a percentage. BRFSS reports percentages of people who respond to a question, typically, those that respond yes or no to a

question. All missing values or those answering

refused or *don't know* are considered missing in the analysis. When observing BRFSS morbidity data presented in this report, it is

important to remember the translation from percentages to rates in making comparisons of disease indicators (see Table 1).

Table 1	Indicator	Percentage	Rate Per 100,000
	Adults 50 years of age and older who received a sigmoidoscopy or colonoscopy in the past five years	56.9%	56,900
	Adults with diabetes who self-monitor blood glucose at least once a day on average	70.3%	70,300
	Adults with any type of health care insurance coverage	85.7%	85,700
	Adults in high-risk groups who received a flu shot in the past year	50.6%	50,600
	Adults with hypertension who engage in blood pressure control measures	96.1%	96,100
	Adults less than 65 years of age who have ever been tested for HIV	53.3%	53,300

CANCER SCREENINGS

Cancer is the second leading cause of death in the United States. Over 500,000 individuals succumb to cancer yearly.¹ In 2007, in Duval County, the cancer mortality rate was 174.3 per 100,000. The National Cancer Institute established a set of recommendations for the early detection of cancer for people at average risk of developing it. A person's risk for cancer is determined by genetics, what they consume, whether they smoke and/or exercise, and other varying factors. Since one cannot prevent some forms of cancer, secondary prevention can play a vital role in health outcomes. A "cancer screening" is looking for

Table 2	Duval County	Florida
Indicator		
Percentage of women 40 years of age and older who received a mammogram in the past year	68.6	64.9
Percentage of women 18 years of age and older who had a clinical breast exam in the past year	71.4	65.0
Percentage of women 18 years of age and older who received a Pap test in the past year	73.3	64.8

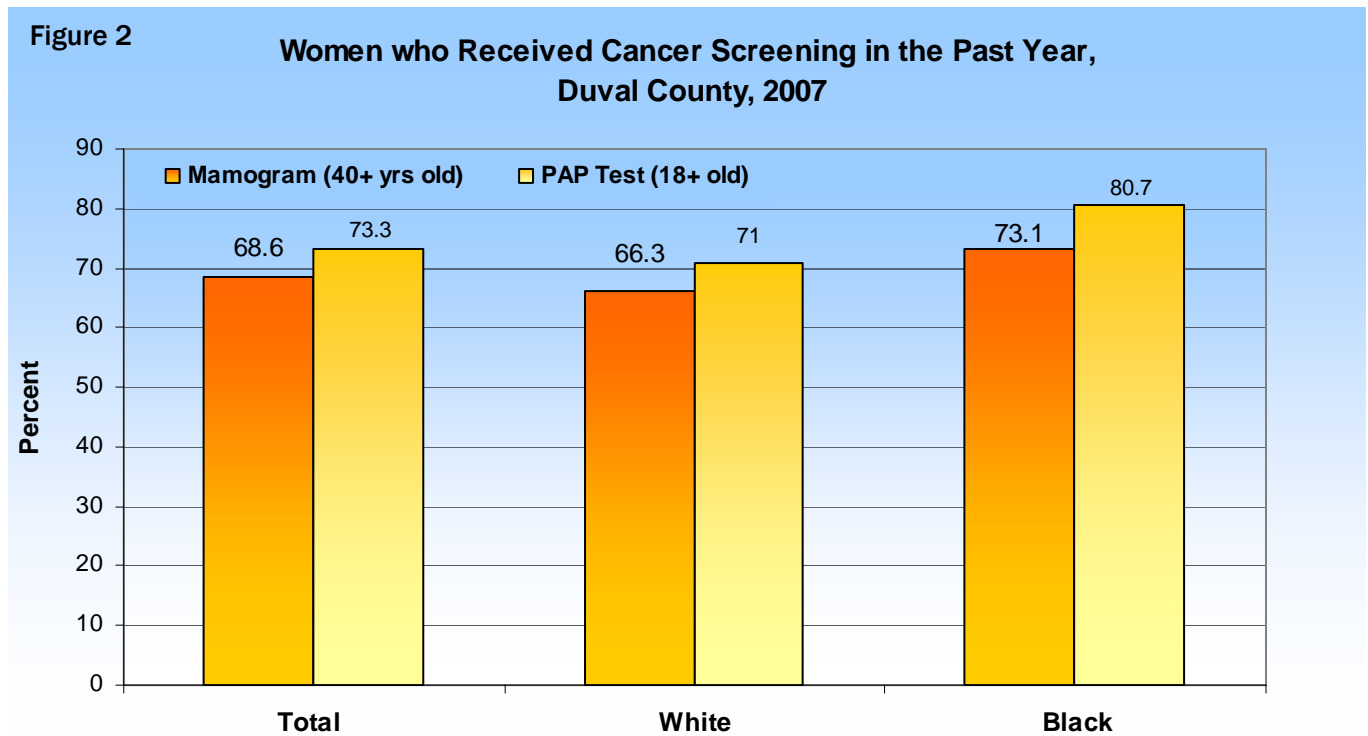
Source: Behavioral Risk Factor Surveillance System, 2007

cancer when a person is asymptomatic. It is beneficial to find cancer at an early stage before it is able to spread because it is easier to treat and outcomes are usually better.²

One type of cancer screening which can assist in improving one's health outcome is a mammogram. A mammogram is an x-ray of a woman's breast that can reveal changes in breast

tissue that may be a sign of the early stages of breast cancer. Breast cancer is an example of a type of cancer that with early diagnosis and treatment one may be

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Source: Behavioral Risk Factor Surveillance System, 2007

CANCER SCREENINGS (CONTINUED FROM PAGE 3)

able to avoid increased morbidity or mortality due specifically to breast cancer.

The National Cancer Institute suggests women have screening mammograms every one to two years starting at the age of 40. As with many screenings, women at an increased risk should communicate with their health care providers about their particular situation. It is suggested 13.2% of women born today will develop breast cancer at some point in their lives.³ In Duval County, over 68% of women at least 40 years of age received a mammogram within a year of taking the BRFSS survey. More Black women had received a mammogram (73.1%) than White women (66.3%) and the screenings in-

creased as the respondent's age increased. Women in Health Zone 5 received the most mammograms with 73.4% reporting having had one. On the other hand, only 64.1% of women at least 40 years of age in Health Zone 2 reported receiving a mammogram in the past year.

Like a mammogram, a clinical breast exam is an exam performed by a health care provider in an effort of early detection of breast cancer. More than 71% of women in Duval County fitting the criteria had one in the past year. Similar to the mammogram, more Black women (73.8%) had a clinical breast exam than White women (71.1%). Women in the 45-64 age group had more exams than women in the 18-44 or 65 and older age groups. Addi-

tionally, nearly 79% of women 18 and older in Health Zone 5 had a clinical breast exam in the previous year followed by those in Health Zones 3, 2, 6, and 4. Women 18 and older in Health Zone 1 had the least exams of all the health zones with 65.4% reportedly having had an exam.

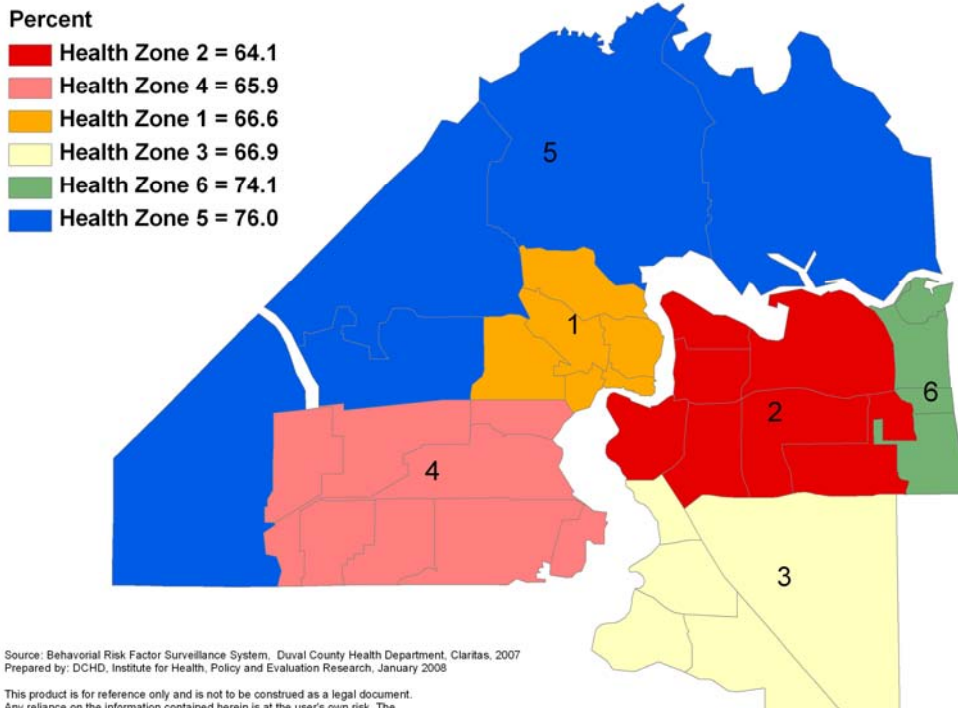
A Pap test is another type of cancer screening. It is used to detect unusual cells in a woman's cervix. Most cervical cancer is due to an infection with human papillomavirus (HPV). Pap tests detect cell changes caused by HPV prior to cell proliferation and subsequently cervical cancer.⁴ Seventy-three percent of women 18 years and older in Duval County received a Pap test in the previous year. Almost 81%



of Black women received a Pap test followed by 77.1% of Hispanic women and 71.0% of White women. Women eighteen and older in Health Zone 5 had the highest percentage (79.2%) of women receiving a Pap followed by Health Zones 6, 4, 1 and 2. Women who were

(continued on page 5)

Figure 3 Women Age 40 Years and Older who Received a Mammogram in the Past Year by Health Zone, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, Duval County Health Department, Claritas, 2007
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, January 2008

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CANCER SCREENINGS (CONTINUED FROM PAGE 4)

at least 18 years of age in Health Zone 3 had the lowest percentage of having received a Pap test.

A cancer screening specifically for men is the PSA test. The PSA test is a measure of the level of prostate-specific antigen (PSA) found in the blood. PSA is a protein made by cells of the prostate gland which only males have. Prostate cancer and benign conditions can increase PSA levels found in the blood. Although recommendations vary, the FDA suggests screenings for men 50 years of age and older along with a digital rectal exam (DRE).⁵ A DRE is performed by a

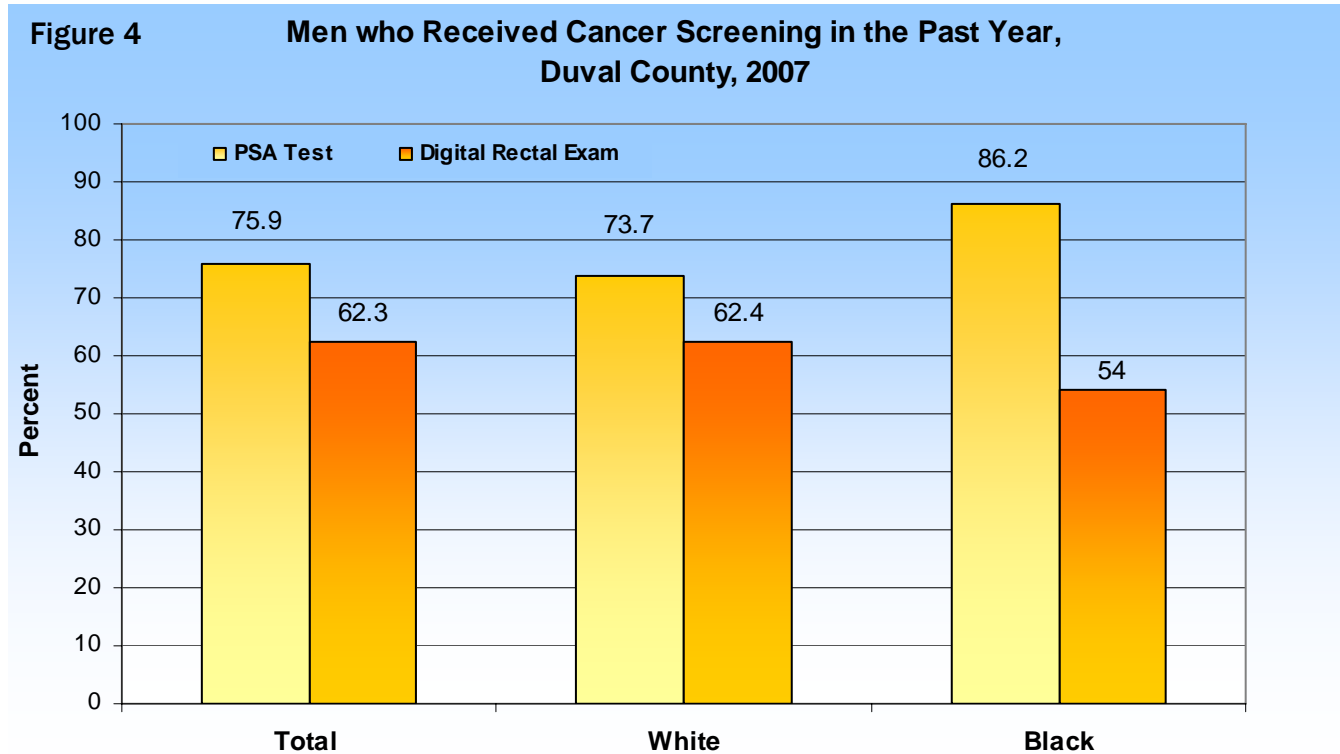
health care provider who palpates the prostate gland through the rectal wall.⁶

Nearly 76% of men over 50 years of age received a PSA test in 2 years prior to the BRFSS. Over 86% of Black men had the test compared to 73.7% of White men. There was not a significant difference between those 45-64 years of age and those 65 and older. However, reasonable differences were seen between health zones. The greatest percentage of men who had the test lived in Health Zone

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Table 3 Indicator	Duval County	Florida
Percentage of men 50 years of age and older who received a PSA test in the past two years	75.9	72.3
Percentage of men 50 years of age and older who received a digital rectal exam in the past year	62.3	56.3
Percentage of adults 50 years of age and older who received a blood stool test in the past year	17.4	21.2
Percentage of adults 50 years of age and older who received a sigmoidoscopy or colonoscopy in the past five years	56.9	53.7

Source: Behavioral Risk Factor Surveillance System, 2007



Source: Behavioral Risk Factor Surveillance System, 2007

Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February 2009

HEALTH ACCESS

Approximately 47 million Americans are currently without health insurance. The number of people without health insurance has increased steadily since 2000. Most Americans obtain health insurance through their employers but with the increasing cost of health insurance, many businesses, especially small businesses, are choosing not to offer insurance or only with premiums too high for the average wage earner to afford. Medicaid, in addition to State Children's Health Insurance Programs, helps to fill the coverage gap for children, those living in poverty or very low income, and pregnant women but there is

still a large number of people who do not meet the requirements of free health care and are not seeking care due to cost.¹

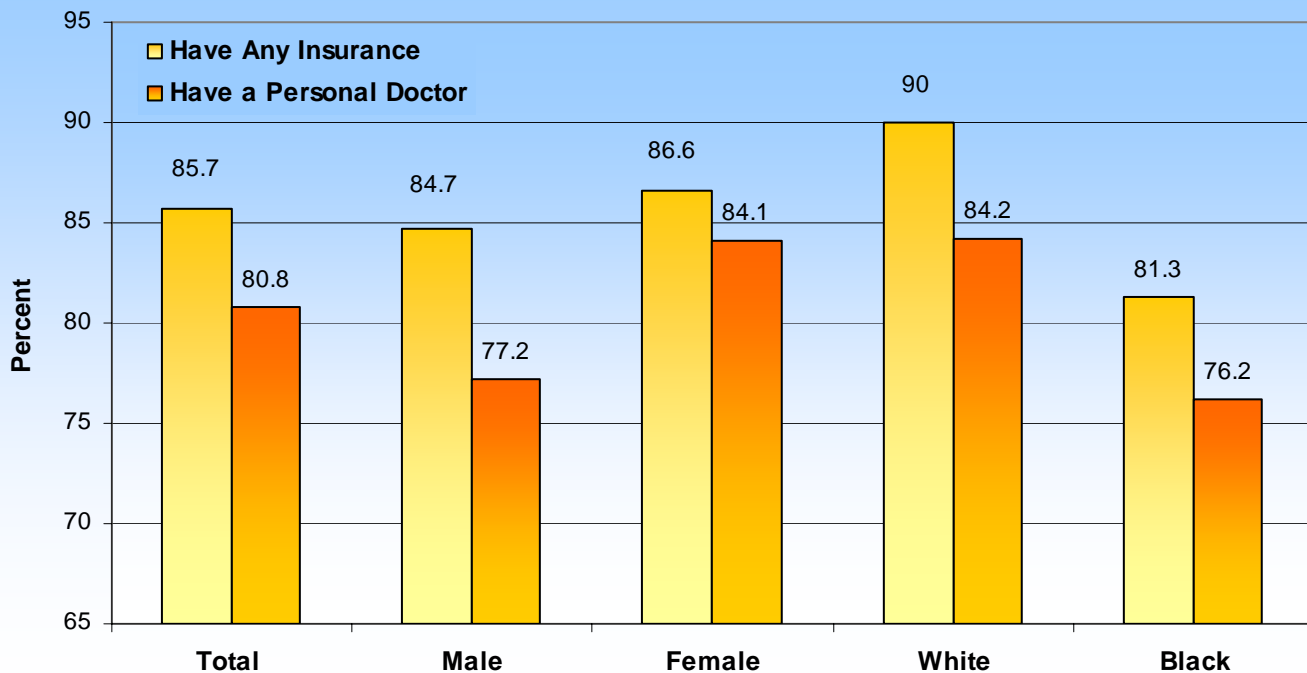
According to the Duval County BRFSS, 14.3% of Duval County adults have no health insurance coverage and 19.2% do not have a personal doctor (see Table 4). People who do not typically have a personal care doctor tend to use the emergency room for basic health care needs that could have been treated by a primary care doctor. In Duval County, slightly more females had health care coverage compared to males and about 7% more women than men

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Table 4 Indicator	Duval County	Florida
Percentage of adults with any type of health care insurance coverage	85.7	81.4
Percentage of adults who have a personal doctor	80.8	77.1
Percentage of adults who could not see a doctor at least once in the past year due to cost	15.4	15.1
Percentage of adults who could not see a dentist in the past year because of cost	19.8	19.2

Source: Behavioral Risk Factor Surveillance System, 2007

Figure 5 Health Access for Adults in Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, 2007

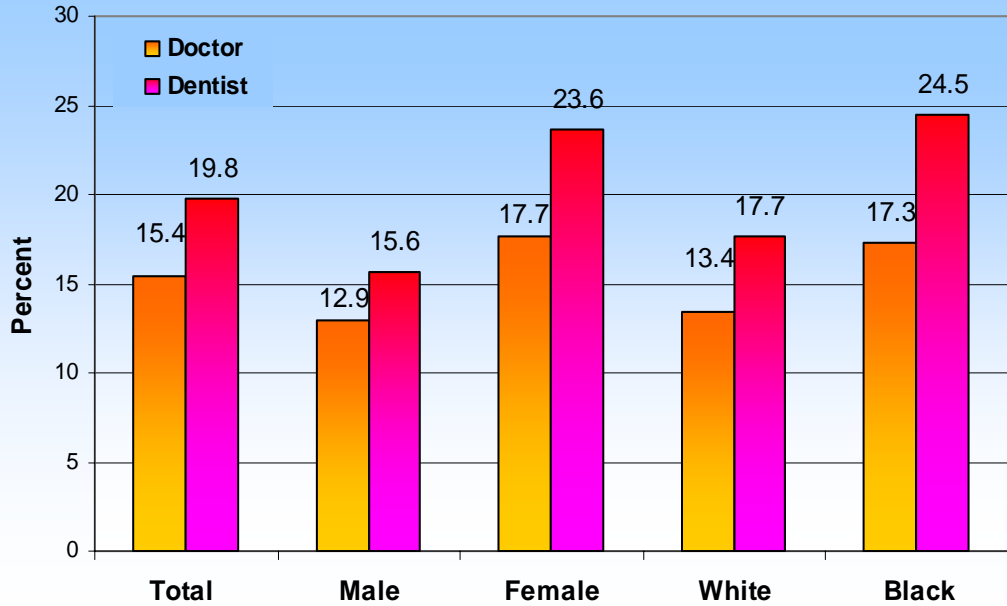
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February 2009

HEALTH ACCESS (CONTINUED FROM PAGE 6)

had a personal care doctor. White adults were also more likely to have health care coverage and a personal care doctor than Black adults (see Figure 5). Disparities are also noted geographically. Adults living in Health Zone 1 are least likely to have health care coverage, with 21.9% without coverage, compared to all other health zones. Only 5.7% of adults living in health zone 6 and 7.6% of adults living in Health Zone 3 do not have health care coverage (see Figure 7).

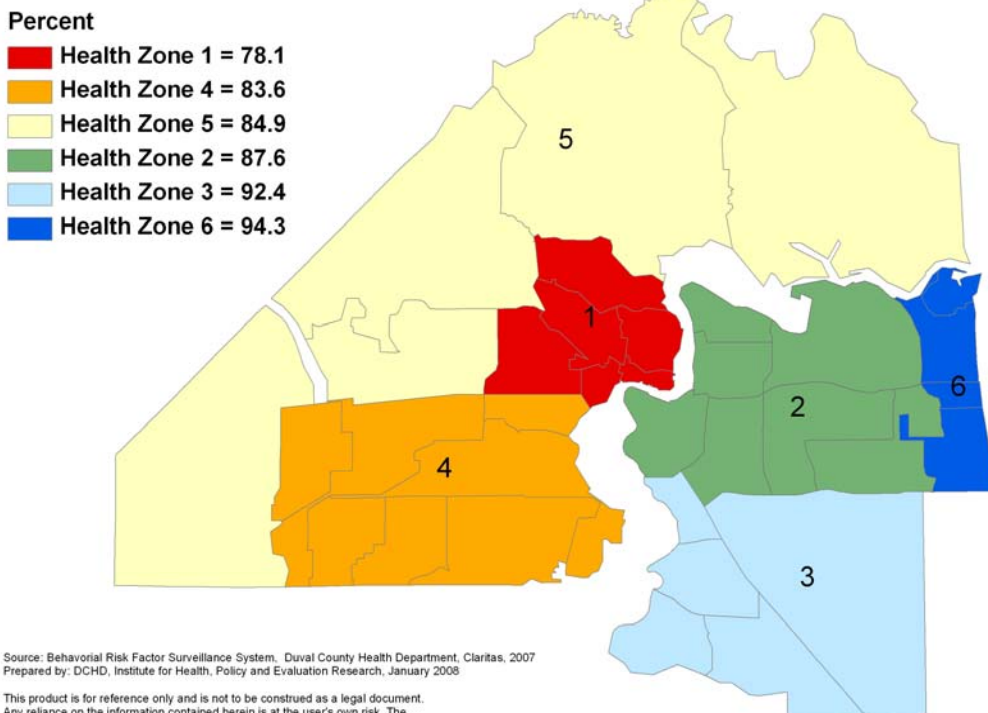
In addition 15.4% of adults did not see a doctor at least once in the past year due to cost and
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Figure 6 Adults who could Not See a Doctor or Dentist Due to Cost in the Past Year, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, 2007
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February 2009

Figure 7 Adults With Any Type of Health Care Insurance Coverage by Health Zone, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, Duval County Health Department, Claritas, 2007
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, January 2008

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DIABETES MANAGEMENT

Approximately 23.6 million residents of the U.S. have diabetes. Over 5 million of those residents are undiagnosed and therefore unable to benefit from secondary prevention available to them.¹ Diabetes is a group of diseases that results when blood glucose in the body is too high.² There are several types of Diabetes Mellitus. Type 1 Diabetes develops when the pancreas does not make insulin and type 2 diabetes is marked by insulin resistance.³ Type 2 Diabetes may account for approximately 90-95% of the diagnosed cases and has a higher chance of developing in those who are overweight and lack physical activity in their life. Another type of diabetes, gestational diabetes, is diagnosed during the late stages of pregnancy. Blood glucose levels are abnormal and must be corrected to protect the baby; this form usually goes away once the baby is born. Other specific types of diabetes can also occur. Regardless of the type of diabetes one has, management is key to prevent complications from occurring.

Glucose control is a significant piece of secondary prevention for diabetes.



Table 5	Duval County	Florida
Percentage of adults with diabetes who self-monitor blood glucose at least once a day on average	70.3	65.7
Percentage of adults with diabetes who had two A1C tests in the past year	70.6	71.2
Percentage of adults with diabetes who had an annual foot exam	77.8	75.6
Percentage of adults with diabetes who had an annual eye exam	81.0	77.4
Percentage of adults with diabetes who ever had diabetes self-management education	60.4	51.4

Source: Behavioral Risk Factor Surveillance System, 2007

According to the Centers for Disease Control, each 1% reduction in A1C blood tests (average glucose level tests) results in a 40% reduction in the risk of developing microvascular complications due to diabetes. Similarly, severe vision loss can be reduced by 50-60% if one gets routine eye exams. Foot exams can also reduce amputation rates by 45-85%.²

Slightly more than 9% of adults in Duval County have been diagnosed with diabetes. Only 70.3% self-monitor their blood glucose at least once a day on average. More men than women self-monitor their levels (74.0 vs. 66.6%). Over 73% of blacks self-monitor their blood glucose compared to 68.1% of whites. When comparing education level, diabetics

with less than a high school education are more likely to self-monitor their blood glucose than diabetics with 4 or more years of college. Furthermore, a higher percentage of diabetics who made less than \$25,000 a year self-monitored blood glucose than did diabetics who made at least \$50,000 a year.

Similar to those who self-monitor blood glucose, only 70.6% of diagnosed diabetics in Duval County had two A1C tests in the past year. Yet, the National Diabetes Education Program recommends 2 A1C tests each year for all diabetics.³ Seventy-four percent of diabetic women had the tests compared to 67.5% of diabetic men. Seventy-five percent of white diabetics had the exams as compared to 74.3% of black diabetics.

With regard to adults with diabetes in each health zone, Health Zones 4 and 5 had the highest percentage of those who had A1C tests at least twice in one year at 93.4% and 92.2%, respectively. Only 68.5% of adults with diabetes in Health Zone 6 had two A1C tests in the past year.

It is also recommended that diabetics get yearly foot and eye exams.³ Nearly 78% of adults in Duval County with diagnosed diabetes had an annual foot exam. Of adults with diabetes, 83.1% of men had an annual foot exam compared to 72.1% of women. More black adults who had diabetes (82.3%) had received an annual foot exam compared to white adults (74.6%). Like a foot exam, an annual eye exam is of great importance

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DIABETES MANAGEMENT

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for diabetics. Eighty-one percent of adults with diabetes had an annual eye exam. Similar to the foot exam, more men than women received the eye exam. Almost 80% of white adults with diabetes had the exam; slightly more than 73.1% of black adults with diabetes did. Although it is an integral part of secondary prevention for diabetes, only 60.4% of all adults with diabetes ever had diabetes self-management education. In Duval County, more black adults with diabetes had self-management education than white adults; slightly more women than men received education. The most adults with diabetes who received self-management education lived in Health Zone 6 fol-

lowed by Health Zone 5 and then Health Zone 1. Health Zone 2 had the least adult residents with diabetes who had ever had self-management education.

Sources:

¹National Diabetes Information Clearing House. Diabetes Overview. <http://diabetes.niddk.nih.gov/dm/pubs/overview/index.htm>

²National Center for Chronic Disease Prevention and Health Promotion. National Diabetes Fact Sheet. <http://www.cdc.gov/diabetes/pubs/general.htm#what>

³National Diabetes Education Program. 4 Steps to Control Your Diabetes for Life. <http://ndep.nih.gov/diabetes/control/4Steps.htm>

HEALTH ACCESS

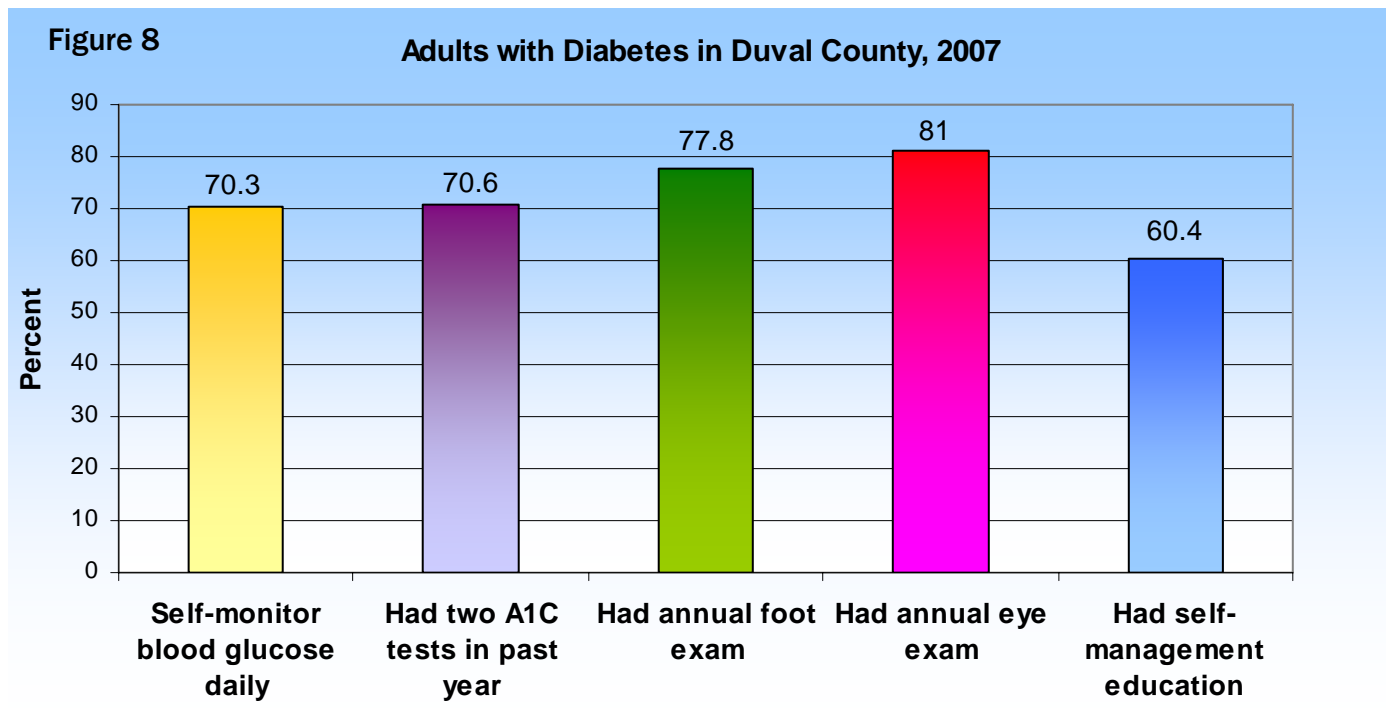
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19.8% did not see a dentist due to cost (see Figure 6). The Surgeon General's recent report states that oral health is essential to the general health and well being of Americans. The report states that the main types of dental disease are tooth decay and periodontal disease.² While the oral health of Americans has improved in recent years, many gaps in dental care still remain. Over the period of 1977-1996, the gap between low income people and those with high incomes increased notably.³ The number of preventive visits is below recommended levels and is particularly problematic for minorities, elderly, children on Medicaid and other low

income children. BRFSS data indicates that females are less likely to see a doctor or dentist due to medical cost than males and blacks are less likely to see a doctor or dentist due to medical cost than whites (see Figure 6).

In addition, adults living in Health Zones 4 and 1 were least likely to see a doctor due to medical cost with rates of 19.4% and 18.4%, respectively. Only 8.1% of adults living in Health Zone 3 did not see a doctor in the past year due to cost (see Figure 1).

(Sources continued on page 15)



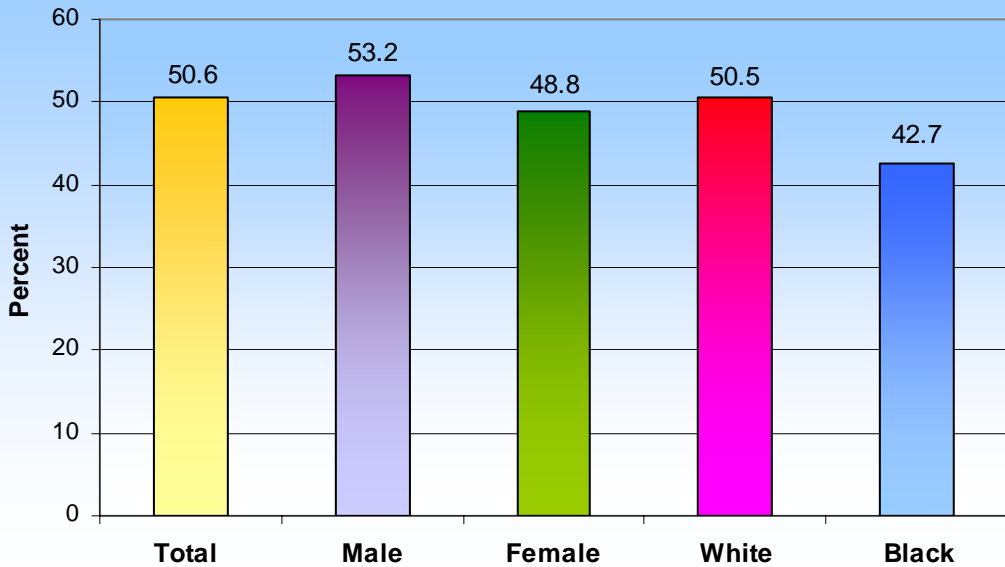
Source: Behavioral Risk Factor Surveillance System, 2007
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, December 2008

IMMUNIZATIONS

The seasonal flu shot is administered to people who want to protect themselves from contracting the flu. Although some people may still contract it, in most cases their symptoms and complications can be minimized. People at high risk for serious flu complications should be vaccinated yearly. High risk people are: children six months to nineteen years of age, pregnant women, those with chronic medical conditions, people who live in nursing homes and other long-term care facilities, and people who live with those at high risk for complications from flu, including health care workers, household contacts of persons at high risk for complications, household contacts and out of home caregivers of children younger than six months of age.¹

Thirty-five percent of Du-

Figure 9 Adults in High-Risk Groups who Received a Flu Shot in the Past Year, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, 2007

Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February 2009

val County residents received a flu shot in the past year. There was not a big difference between gender, race, or health zones for the percentage of adults who received shots.

Adults in the high risk group received a flu shot with a 50.6% reporting rate. More men in the high risk group received a flu shot than women in the high risk group and more whites did so than blacks. Nearly sixty-four percent of adults at least 65 years of age received a flu shot in the past year. Almost 67% of whites in the specific age group received the shot whereas 50.6% of blacks 65 years and older did. Men once again had a higher percentage of reported flu shots in the 65+ age group. Eighty-three percent of adults in the 65+ age group in Health Zone 6 received a flu immunization which was the highest of all health zones. Only 53.2% of residents in the same age group in Health Zone 1 received it.

Another immunization re-

ported in BRFSS data is the pneumococcal vaccine. The pneumococcal vaccine protects against 23 types of bacteria which can cause illness and potentially death. It is recommended for all children younger than five, adults 65 years of age and older, people older than two who have long-term health problems like heart disease or lung disease, people over two who have a disease or condition that lowers the body's resistance to infection like Hodgkin's disease or lymphoma, and people over two who are taking a drug that lowers the body's

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Table 6 Indicator	Duval County	Florida
Percentage of adults in high-risk groups who received a flu shot in the past year	50.6	44.6
Percentage of adults in high-risk groups who have ever received a pneumonia vaccination	40.9	37.0
Percentage of adults who were at risk and who have received a hepatitis B vaccination	48.9	43.8

Source: Behavioral Risk Factor Surveillance System, 2007

CARDIOVASCULAR AND INFECTIOUS DISEASE

The Duval County BRFSS addresses other screenings and treatment indicators such as cholesterol, hypertension and HIV/AIDS. Data indicates almost 80% of Duval County residents surveyed have had their cholesterol checked in the past five years. High cholesterol is among the main risk factors for heart disease and stroke. Like high blood pressure, high cholesterol often goes unnoticed although it is easily diagnosed.¹ To assess cholesterol, a doctor or other health care provider usually performs a simple blood test called a lipoprotein profile. It is recommended that all adults over the age of 18 have

their cholesterol monitored at least once every five years. Local BRFSS data shows that women are more likely to have their cholesterol checked than men, 81% versus 77%, and whites were more likely to have their cholesterol checked compared to the black population, 81.6% vs. 76.0%.

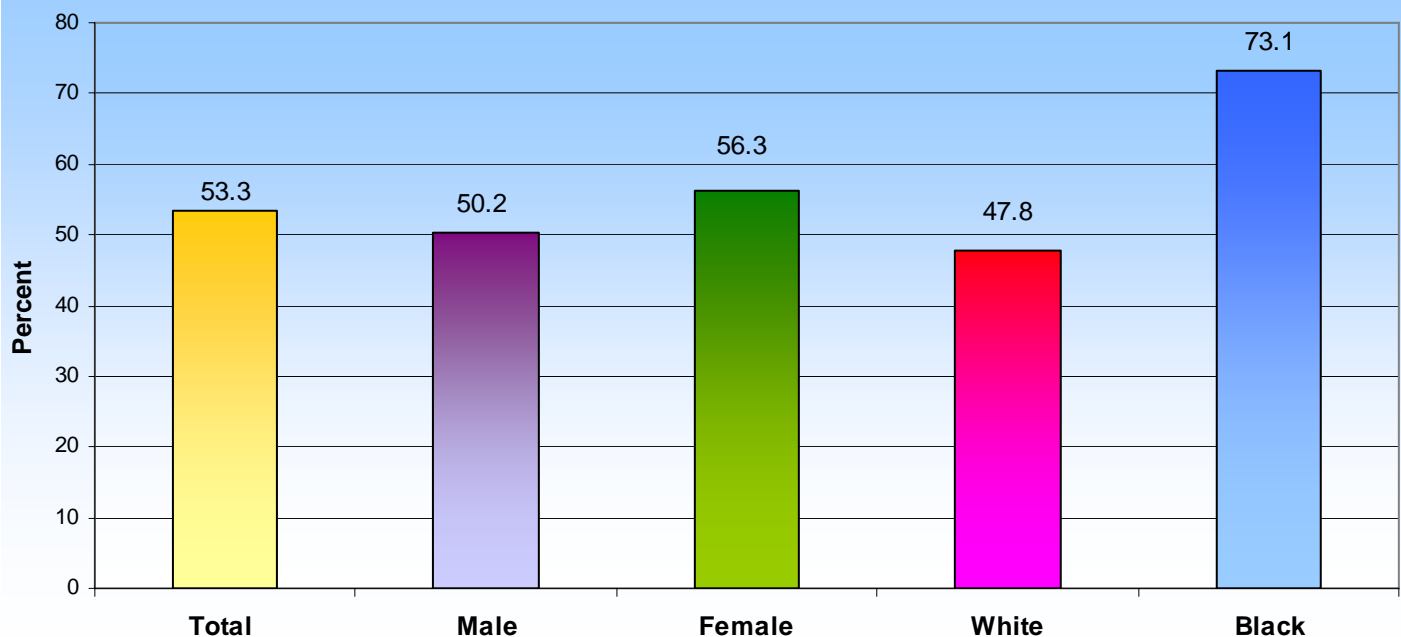
High blood pressure, also called hypertension, significantly increases a person's chance of developing heart disease, stroke, and other serious conditions.² Fortunately, hypertension is easily detectable and usually able to be controlled through life style changes such as increasing physical

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Table 7 Indicator	Duval County	Florida
Percentage of adults who had their cholesterol checked in the past five years	79.1	78.5
Percentage of adults with hypertension who engage in blood pressure control measures	96.1	96.4
Percentage of adults with hypertension who were advised by a health care provider to engage in control measures	94.7	95.5
Percentage of adults less than 65 years of age who have ever been tested for HIV	53.3	49.1

Source: Behavioral Risk Factor Surveillance System, 2007

Figure 10 Adults Less than 65 Years of Age who Have Ever Been Tested for HIV, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System, 2007

Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, February 2009

CARDIOVASCULAR AND INFECTIOUS DISEASES

(CONTINUED FROM PAGE 11)

activity.³ Out of the 27.3% of adults diagnosed with hypertension, 94.7% of adults surveyed indicated they were advised by a health care provider to engage in blood pressure control measures, while 96.1% of adults actually did engage in blood pressure control measures, whether they were told by their health care provider or not. There were no notable differences in gender with adults who engage in blood pressure control measures and only a slight difference in race; the percent of whites engaging in blood pressure control measures was 4% higher than for blacks. HIV/AIDS incidence and

mortality is a significant problem in Duval County. HIV/AIDS deaths in Duval County was 43.9% higher than for Florida. The number of new case of HIV in Duval County in 2007 was 30.7% higher than for Florida and had increased in Duval County by 16% from 2006 to 2007. Screening for HIV/AIDS in Duval County has been extensive, concentrating especially on areas of high incidence. Data indicates that females are more likely to have been tested for HIV than males and the percentage of blacks tested was 25.3% higher than for whites (see Figure 11). Adults living in Health Zone

1 were most likely to have been tested for HIV, with almost 70% compared to 43.1% living in Health Zone 3. Health Zone 1 is also the area with the highest HIV mortality and HIV incidence (see Figure 12).

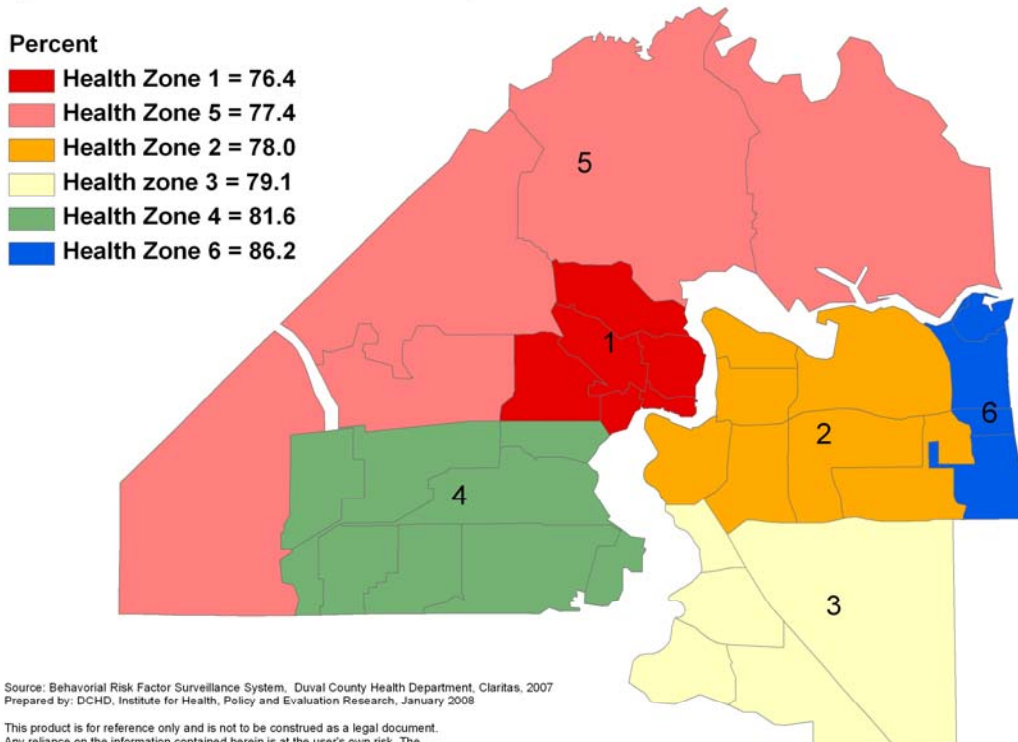


Sources:

¹Division for Heart Disease and Stroke Prevention, National Center for Chronic Disease Prevention and Health Promotion, <http://www.cdc.gov/cholesterol/>
²Division for Heart Disease and Stroke Prevention, National Center for Chronic Disease Preven-

tion and Health Promotion, <http://www.cdc.gov/bloodpressure/index.htm>
³Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, http://www.cdc.gov/dhdsp/library/pdfs/fs_hbp.pdf

Figure 11
Adults who had Their Cholesterol Checked in the Past 5 Years by Health Zone, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System. Duval County Health Department, Claritas, 2007
 Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, January 2008

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SOCIOECONOMIC STATUS

Table 8

Income and Education Level by Selected Prevention Indicators, Duval County, 2007

	Annual Income less than \$25,000	Annual Income \$50,000 or more		Education less than high school	4 or more years of college
Women 40 years of age and older who received a mammogram in the past year	65.2	72.4		63.3	69.3
Women 18 years of age and older who had a clinical breast exam in the past year	65.4*	79.9*		52.9*	76.3*
Women 18 years of age and older who received a PAP test in the past year	66.7	79.7		70	75.7
Adults with any type of health care insurance coverage	75.3*	96.8*		63.5*	92*
Adults who have a personal doctor	72.4*	86*		70.8*	84.4*
Adults who could not see a doctor at least once in the past year due to cost	31.2*	4.1*		37.6*	10*
Adults who could not see a dentist at least once in the past year due to cost	38.9*	6.2*		38.8*	14.2*
Adults who had cholesterol checked in past five years	75.9	84.1		64.1*	83.5*
Adults less than 65 years of age who have ever been tested for HIV	53.1	51.5		58.7	51.9

*Indicates a statistically significant difference

Source: Behavioral Risk Factor Surveillance System, 2007

The government's report, *Opportunity for All: Tackling Poverty and Social Exclusion*, identified poor health as one of the major problems associated with low income.¹ Income allows for meeting health related needs and enables health-

ier choices. Income also allows people to purchase goods and services, such as health care, healthy housing, or a car to drive to work.² Lack of money prevents people from getting regular health screenings, exercising and eating nutri-

tiously. Often low socioeconomic status (SES) does not allow for savings to cover expenses related to an emergency or catastrophic illness. Without financial reserves people with low incomes find themselves in more

stressed situations leading to more health problems. This kind of instability can also lead to homelessness.² In addition, better educated people have fewer health problems, tend to live longer and

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SOCIOECONOMIC STATUS

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have less disease than those with lower education levels.² The mechanisms by which education influences health are complex and are likely to include (but are not limited to) interrelationships between demographic and family background indicators, effects of poor health in childhood, greater resources associated with higher levels of education, a learned appreciation for the importance of good health behaviors, and one's social networks.²

Measures in this report were analyzed by 2 socioeconomic factors – annual income and education level. Specifically, confidence intervals were used to determine statistical significance among those with an annual income less than \$25,000 and those with an income over \$50,000. In addition, education was analyzed for those with less than a high school education and those with 4 or more years of college. Levels at 95% confidence provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data from year to year.

Data from the 2007 BRFSS reveals a significant difference in both income and education for women 18 years of age and older who had a clinical breast exam in the past year. Women with an annual income of less than \$25,000 and with less than a high

school education are significantly less likely to have received a clinical breast exam in the past year than women whose income is greater than \$50,000 and women with 4 or more years of college. This also holds true for adults who have a personal care doctor, adults who could not see a doctor at least once in the past year due to cost and adults who could not see a dentist at least once in the past year due to cost. Those with an annual income of less than \$25,000 were over 6 times more likely than those with an annual income of \$50,000 or more to be unable to see a doctor due to medical costs. In addition, those with less than a high school education were almost 3 times more likely than those with 4 or more years of college to be unable to see a doctor because of costs. There was a significant difference between education levels for adults who had cholesterol checked in the past five years. Specifically, adults with 4 or more years of college were more likely to have had their cholesterol checked than those with less than a high school education. There were no significant differences between all other indicators analyzed.

Sources:

¹*Opportunity for All: Tackling Poverty and Social Exclusion*, Department of Social Security, 1999.

²Bell and V. Rubin, *Why Place Matters: Building a Movement for Healthy Communities*, Policylink.org

David M. Cutler, Policy Brief #9: Education and Health, National Poverty Center, 2007

CANCER SCREENINGS

(CONTINUED FROM PAGE 5)

5, with over 93% reporting having the test. A higher percentage of Health Zone 6 residents, 88.5%, also had the PSA test. Over 77% of Health Zone 1 and Health Zone 2 residents received a PSA whereas Health Zone 3 and 4 had the least amount with 74.5% and 65.0%, respectively. Only 62.3% of men 50 and older in Duval County received a DRE in the past year. Over 62% of white men received the exam compared to 54.0% of black men. More residents in Health Zone 6 received exams followed by those in Health Zone 3 and Health Zone 5. Lastly, Health Zone 2 had the lowest percentage of residents who received a DRE in the past year.

Outcomes for colorectal cancer can be improved by early diagnosis and treatment. Colorectal cancer is second to lung cancer in the amount of deaths it causes.⁶ Colorectal cancer affects either the colon or rectum and occurs when malignant cells develop in the tissue of either area. Two screening tools for colorectal cancer are colonoscopy and sigmoidoscopy. Nearly 57% of adults 50 years of age and older received a sigmoidoscopy or colonoscopy in the past 5 years. A higher percentage of men (59.5%) than women (54.7%) received either test in the 5 previous years in. There was not a significant difference seen between the races/ethnicities.

It is important for all individuals to be proactive in primary and secondary prevention measures in order to decrease morbidity and mortality related to many cancers.

Sources:

¹ National Center for Health Statistics. Deaths-Leading Causes. <http://www.cdc.gov/nchs/FASTATS/lcod.htm>

² National Cancer Institute. Breast Cancer Screening, Patient Version. <http://www.cancer.gov/cancertopics/pdq/screening/breast/patient>

³ National Cancer Institute. Screening Mammograms: Questions and Answers. <http://www.cancer.gov/cancertopics/factsheet/detection/screening-mammograms>

⁴ National Cancer Institute. Pap Tests: Things to Know. <http://www.cancer.gov/cancertopics/pap-tests-things-to-know>

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⁶ American Cancer Society. Detailed Guide: Colon and Rectum Cancer. What are the Key Statistics for Colorectal Cancer. http://www.cancer.org/docroot/cric/content/cric_2_4_1x_what_are_the_key_statistics_for_colon_and_rectum_cancer.asp

HEALTH ACCESS

(CONTINUED
FROM PAGE 9)

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¹National Conference of State Legislators, Access to Health Care and the Uninsured, <http://www.ncsl.org/programs/health/h-primary.htm>

²Department of Health and Human Services [U.S.], Oral health in America: a report of the Surgeon General. Rockville (MD): National Institute of Dental and Craniofacial Research, National Institutes of Health; 2000

³Manski RJ, Moeller JF, Maas WR. Dental services: an analysis of utilization over 20 years. *J Am Dental Assoc* 2001;132:655-64

IMMUNIZATIONS

(CONTINUED FROM PAGE 10)

resistance to infection.² In Duval County, 26.3% of adults have ever received the vaccination. More whites received it compared to blacks and more women received it compared to men. Those in Health Zone 6 had the highest percentage of vaccination reported compared to those in the lowest area, Health Zone 2. Out of the adults considered to be "high risk" almost 41% received the vaccination. More men (48.6%) reported having received the immunizations than women (35.7%); more whites (41.4%) received it than blacks (35.0%). Additionally, sixty-four percent of adults 65 years of age or older received the vaccination. More women in that age

group received it than men as did more whites than blacks.

Another type of vaccination reported in BRFSS data is the hepatitis B vaccine. The hepatitis B virus (HBV) causes one to get hepatitis B, a liver disease. Complications from contracting hepatitis B can vary from mild illness to chronic disease. Transmission occurs through contact with infected body fluids, such as blood or semen. It is recommended infants, older children and adolescents receive the vaccination if they have not previously done so. Also, adults who are at risk of being infected should be vaccinated. Locally, almost 49% of adults

who were at risk received a hepatitis B vaccination. Although not statistically significant, over 55% of men who were at risk received the vaccine compared to 38.7% of women.

Sources:

¹Centers for Disease Control and Prevention. Seasonal Flu Shot Questions and Answers. <http://www.cdc.gov/flu/about/qa/flushot.htm>

²Centers for Disease Control and Prevention. Pneumococcal Polysaccharid Vaccine What You Need to Know. <http://www.cdc.gov/vaccines/pubs/vis/downloads/vis-ppv.pdf>

³Centers for Disease Control and Prevention. Viral Hepatitis. <http://www.cdc.gov/hepatitis/>

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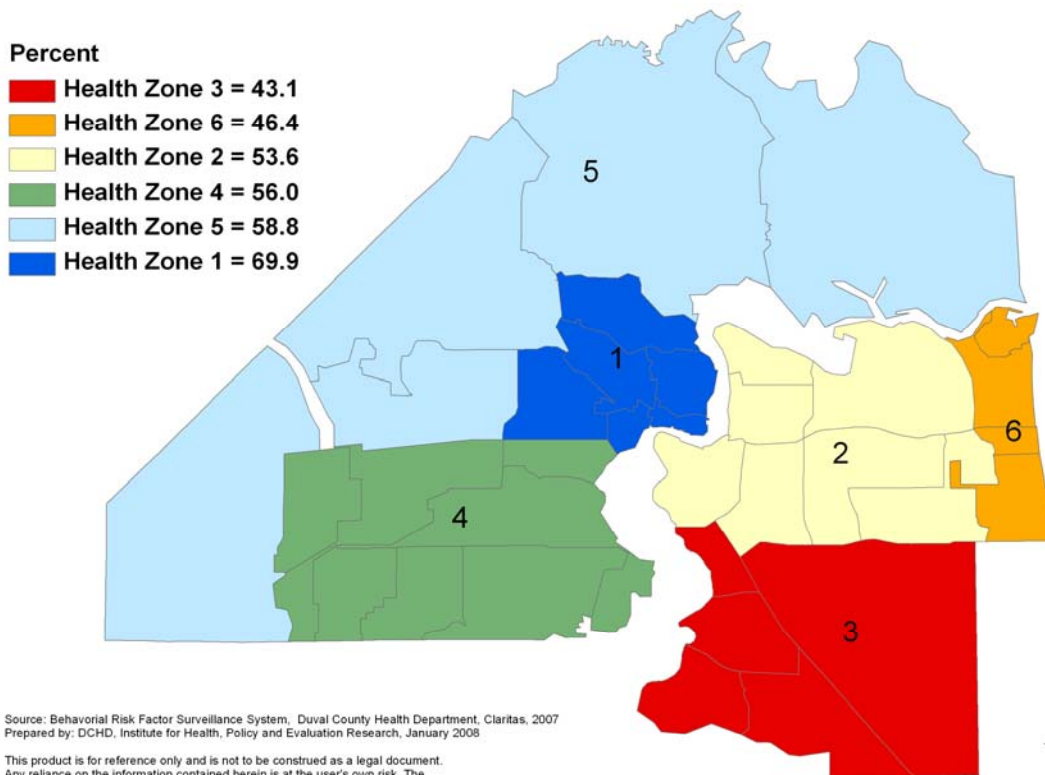
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Figure 12

Adults Tested for HIV by Health Zone, Duval County, 2007



Source: Behavioral Risk Factor Surveillance System. Duval County Health Department, Claritas, 2007
Prepared by: DCHD, Institute for Health, Policy and Evaluation Research, January 2008

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