## The Health of Polk county A Status Report 2006

Prepared for
The Polk Health Care Alliance
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Prepared by
Research, Strategy \& Analytics, LLC

## Community Health Status Report

The Health of Polk County, A Status Report, is the fourth in the series of MAPP assessments. The Status Report was created in order to highlight the major health and social issues affecting the health status and quality of life in Polk County. A secondary goal of this assessment is to provide some areas partner health and social service agencies may wish to consider focusing their strategic efforts on in order to create the Community Health Improvement Plan (CHIP).
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Central Florida Development Council http://www.cfdc.org/home/

Central Florida Health Care
http://www.fachc.org/cfhc chc.htm
Central Florida Physicians Alliance www.cfpAlliance.com

Health Council W. Central FI. www.healthcouncils.org

Congressman Adam Putnam's Office http://adamputnam.house.gov/

First Baptist Church of Winter Haven
FI. Dept of Children and Families
Gessler Clinic
www.gesslerclinic.com/
Healthy Start Coalition
www.healthystarthhp.org
Heart of Florida Regional Medical Center www.heartofflorida.com

Heartland Rural Health Network www.hrhn.org

Lake Wales Hospital www.lakewalesmedicalcenter.com/

Lakeland Regional Medical Center www.Irmc.com/

Lakeland Vision
www.lakelandvision.com
Lakeland Volunteers in Medicine
PEACE

Peace River Center
www.peace-river.com
PHCA Representative for COC
Polk County Board of County Commissioners www.polk-county-office/humanscvs/index.asp

Polk County Health Department www.doh.state.fl.uslchdpolklindex.htm

Polk County Medical Association www.PolkCountyDoctors.org

Polk County Opportunity Council
Polk County Pharmacy Association
The Ledger www.theledger.com

Tri County Human Services www.tchsonline.com/

United Way of Central Florida, Inc. www.uwcf.org

University of South Florida-Lakeland www.lakeland.usf.edu/

Watson Clinic www.watsonclinic.com/

We Care of Polk County
W. Central FI. Area Agency on Aging www.elderlyaffairs.org

Winter Haven Hospital http://www.winterhavenhospital.org/

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## Executive Summary

The Health of Polk County, A Status Report, was created in order to highlight the major health and social issues affecting the health status and quality of life in Polk County. A secondary goal of this report is to provide some areas the Polk Health Care Alliance and partner health and social service agencies may wish to consider focusing their strategic efforts on in order to create a Community Health Improvement Plan (CHIP). A CHIP, by way of targeted health intervention and advocacy, will help health care organizations in Polk County work collaboratively to improve the health of all Polk County residents.

Several steps were taken to determine what information would be included in this report. In March of 2006, key community health care service providers were interviewed to identify what they thought would be important to include in a community health status report. Key informants were identified based upon their leadership roles in the Alliance as well as county policy-makers and leaders within the community-at-large. Each of the interviewees were asked who they felt should also be interviewed. The informants represented two major hospitals, Polk Vision, Lakeland Vision, the Polk Health Care Alliance, Polk Works, the Citizen's Healthcare Oversight Committee (Board of County Commissioners [BoCC]), United Way of Central Florida, The Polk County Health Department, Polk Healthcare Plan (BoCC) and Polk County physicians. In total, eighteen (18) individuals were identified and were interviewed. Categories each of the interviewees were asked to comment on include:

1) Federal, state, local legislation
2) Rapid technological advances
3) Changes in organization of health care services
4) Shifts in economic and employment forces, and
5) Changing family structures and gender roles

This process identified the components for inclusion in the report.
Major findings include:
Population projections for Polk County are high, with increased growth in all major age groups, which will increasingly challenge the health system infrastructure in the future.
Polk County is experiencing phenomenal rates of population growth, particularly in the age 18-64 group, as well as among Hispanics and families at lower socioeconomic levels. As the population begins to age, the rates of both chronic disease, as well as, deaths from all major causes may increase as well. Polk County also has significant rates of poverty within population subgroups. Poverty and lower socio-economic status has been correlated with poor health status. Interventions specifically targeted to disparate groups are necessary to reverse these trends.

> Inadequate data still exists for health planning purposes for special populations, particularly the elderly and children; disparate populations, including different age groups, race or ethnicity, or gender; specific communities within Polk County; and for the field of mental health and substance abuse.
> Additional data is necessary at the community level in order to gauge improvement in specific health outcomes, in particular for disparate populations. It is anticipated as specific diseases and/or consumer health behaviors are identified and targeted in a Community Health Improvement Plan (CHIP), additional data will be gathered and examined at the community level in order to show specific health outcomes improvement within targeted populations.

Polk County is doing poorly in the majority of leading causes of death, including heart disease, cancer, stroke, unintentional injuries, and lung diseases.
Compared to the State of Florida, Polk County residents experience higher rates of death for the top five major causes of death, 1) heart disease, 2) cancer, 3) stroke, 4) unintentional injuries, and 5) COPD/CLRD (chronic lung diseases). Many of these illnesses can be prevented by positive health behavior practices, such as quitting smoking, improving nutritional habits, increasing physical exercise, and monitoring and managing chronic diseases.

Residents of Polk County have high rates of chronic disease and are at increased risk for premature death.
As individuals age and develop chronic diseases, such as diabetes, hypertension, and cardio-vascular disease, their risk of premature death increases. Being screened for such illnesses are paramount to managing and controlling chronic disorders in order to achieve a higher quality of life and perhaps longer life span. Going to a family doctor or primary care physician or health clinic on a yearly basis for screening and health education can assist individuals in diagnosing and caring for these types of disorders which ultimately lead to death in later stages in life.

## A high percent of Polk County residents lead unhealthy lifestyles, and as a

 result, are at increased risk for disease and death.A significant percentage of residents of Polk County reporting having high blood pressure, being overweight or obese, smoking, not eating enough fruits and vegetables, nor getting enough physical exercise. Improved health habits may reduce risk of premature disease and death. Having a healthy lifestyle is the first line of defense in preventing disease and illness and improving quality of life. Research has overwhelmingly shown the benefits of eating nutritious foods in the right portion size, regular exercise, tobacco cessation, and maintaining a healthy weight.

Residents of Polk County are showing an increasing trend in rates of sexually transmitted diseases, hepatitis B, pertussis, and tuberculosis in comparison to the State of Florida average. Some populations are also showing higher rates of HIV/AIDS.
Black residents are at significant risk of HIV/AIDS compared to other races/ethnicities. The rates of vaccine-preventable illnesses such as Hepatitis B and pertussis and the recent upward trend in TB need to be monitored closely.

Women in Polk County have lower rates of obtaining necessary prenatal care early in their pregnancy (first trimester), which increases risk of negative birth outcomes, and sexual activity of the teen population puts them at risk for unintended pregnancies and sexually transmitted diseases. There are significant disparities in health outcomes for non-white women and children. Interventions targeting these disparities will require additional research into specific causes of these disparities, as well as, creation of unique, targeted intervention and health education programs.

The Consumer Health Survey showed significant knowledge gaps in the lower socio-economic groups in knowledge about how to improve their health, including health programs, where to go for health care, and knowledge about how to access mental health and substance abuse services.
Those at the income level of less than $\$ 29,000$ annually had the greatest need for increased health education efforts in all categories. There were nonsignificant differences between race, nor gender for the survey sample regarding knowledge and access.

Throughout this report we will highlight the health challenges facing Polk County residents. This information has been generated through several phases, including secondary health outcomes data collection and analysis, health consumer surveying, and interviewing community partners Analysis of all relevant available secondary data sources aided in identifying which areas of health concern were most relevant to include in this report, based upon significant poor performance in health outcomes for the county, or significant disparities in health outcomes for different races/ethnicities. It is anticipated that this report will help Polk County to create a shared community vision for overall health improvement for Polk County residents.

## Healthy People 2010

Data for this report was reviewed for Polk County, as well as State of Florida, and compared to the Healthy People 2010 (HP 2010) goals and objectives.

Healthy People 2010: Understanding and Improving Health is a set of national leading health goals that focus on key health improvement activities. The box to the right outlines the Healthy People 2010 focus areas included in this report. Healthy People 2010 is about improving health at the person, community, state and national level. These objectives are part of a systematic approach toward overall health improvement and quality of life.

Whether this systematic approach is used to improve health on a national level or to organize community action on a certain health issue, such as a campaign to help people quit smoking, the goals remain the same. The goals provide focus and direction, and serve as a guide for creating a plan for health improvement.

Throughout this report, Healthy People 2010 goals and objectives are provided as a means for comparison. In reality, the year 2010 is just a few short years away. As one reviews the data included in this report, it can be seen that in a few health areas Polk County has already reached the Healthy People 2010 goals. But for the majority of major health concerns, Polk County has a

Healthy People 2010
Focus Areas Included in this Report
Access to Quality Health Services
Cancer
Diabetes
Environmental Health
Heart Disease and Stroke
HIV
Immunization and Infectious Diseases Injury and Violence Prevention
Maternal, Infant, and Child Health
Mental Health and Mental Disorders
Nutrition and Overweight
Oral Health
Physical Activity and Fitness
Respiratory Diseases
Sexually Transmitted Diseases
Substance Abuse
Tobacco Use tremendous road to travel before the Healthy People Goals can be reached.

## Visual Guides

Visual guides were created to help guide understanding of the data. Areas of information that are in red, or appear next to a red flag,
indicate that our community is doing poorly in that particular health area or outcome. Information that is flagged yellow indicates areas that need to be monitored.

Green flags mean that the county has met the goals of Healthy People 2010, or are making positive improvement that should be sustained.

Also throughout this document, Healthy People 2010 Objectives are provided in red text. The objectives represent a specific rate or percentage to aim for in terms of health outcomes improvement. The Healthy People Goals are provided in blue text. These goals are broader statements of the aims in improving health outcomes for individuals and communities.
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## Polk County Resident Demographics

Polk County, Florida, resident demographics are presented, including total population (based upon 2000 U.S. Census data), race/ethnicity and gender. Also included in this section are the county socio-economic profile and population projections.

## Race and Ethnicity of Polk County Residents

Chart 1 presents demographic characteristics of Polk County residents by race and ethnicity. The race categories of Native Hawaiian and Pacific Islander are reported as $0 \%$ due to the small number of residents reporting that race in the U.S. Census counts. Therefore, the "Other" category includes Native Hawaiian, Pacific Islander, Asian, American Indian and Alaska Native, Other Race, and Two or More Races.

Chart 1
Race/Ethnicity Polk County, Florida


Data Source: U.S. Census 2000

## Gender of Polk County Residents

Chart 2 provides demographic breakout by gender. Males and females are approximately the same distribution through age 64 . At age 65 and older, females begin to outnumber male residents.

Chart 2
Gender and Age of Polk County Residents


Data Source: U.S. Census 2000

## Socio-economic Profile

Polk County Residents in Poverty
As of the 2000 U.S. Census, Polk County has nearly $14 \%$ or 65,969 people that live below the poverty level. This is a relatively high rate of poverty and higher than the state average of $12.4 \%$ Poverty status is a barrier to adequate health care resources and improved health outcomes.

Chart 3
Polk County Residents in Poverty


Data Source: U.S. Census
Poverty level becomes significant when broken out by different groups, particularly women and children. Polk County has very high rates of poverty in female households with children under the age of five years. This disparity is highlighted in red in Table 1. Of significance is that $37 \%$ of children in Polk County live at $150 \%$ or less of the Federal Poverty Guidelines. Forty-seven percent (47\%) live at $200 \%$ of the Federal Poverty Level and under. (Source: USF Quality of Life Report, 2003)

Table 1
Families in Poverty in Polk County

| Families - percent below poverty level | $9.4 \%$ |
| :--- | :---: |
| Children under 18 - percent below poverty level | $15.5 \%$ |
| Children under 5 - percent below poverty level | $19.8 \%$ |
| Families with female head of household - percent below <br> poverty level | $28.6 \%$ |
| Children under 18 - percent below poverty level |  |
| Children under 5 - percent below poverty level |  |
| Related children under 18 - percent below poverty level | $37.0 \%$ |
| Related children under 5 to 17 - percent below poverty level | $19.3 \%$ |
| 18 years and over - percent below poverty level | $18.3 \%$ |

Data Source: US Census 2000

Poverty is a key indicator that impacts all areas of quality of life for Polk County residents. Poverty affects an individual's ability to gain meaningful employment, hinders efforts at higher education opportunities, limits resources for adequate housing and reliable transportation and childcare, and limits one's ability to purchase comprehensive health insurance.

## Federal Poverty Guidelines

The Federal Poverty Guidelines or thresholds are the original version of the federal poverty measure and represent annual family household income. The guidelines are revised annually by the U.S. Census Bureau based upon the annual change in the Consumer Price Index. In 2006 the following poverty guidelines were in effect and are presented in Table 2.

Table 2
Federal Poverty Guidelines 2006
2006 Federal Poverty Guidelines

| Persons in Family | Poverty Guideline |
| :---: | :---: |
| 1 | $\$ 9,800$ |
| 2 | $\$ 13,200$ |
| 3 | $\$ 16,600$ |
| 4 | $\$ 20,000$ |
| 5 | $\$ 23,400$ |
| 6 | $\$ 26,800$ |
| 7 | $\$ 30,200$ |
| 8 | $\$ 33,600$ |

Data Source: Medical Group Management Associates, 2006
According to Healthy People 2010, research indicates that even after targeted health communication interventions, low-education and low-income groups remain less knowledgeable and less likely to change behavior than higher education and income groups, which creates a knowledge gap and leaves some people chronically uninformed. Because Polk County has such high rates of poverty, especially in young families and the elderly, this barrier will continue to impact the health system exponentially as the population continues to grow in the lower socio-economic levels.

## Polk County Population Growth Projections

The following population projections were generated using 2003 U.S. Census estimates and the 2010 Population Estimates from the Bureau of Economic and Business Research (BEBR), University of Florida. Polk County is growing rapidly, and in 2003-2004, the county experienced in-migration (new people moving in the area) of 29,029 people. The average income for these families was $\$ 22,861$. Slightly more than one-half of these new residents were from out-of-state (Source: Florida Trend, 2006).The projections presented in Chart 4 can be somewhat misleading, as the county is experiencing just below a $2 \%$ rate of growth annually. For example, some population estimates are placing total Polk County population at 565,049 residents for the year 2006 (CFDC 2006), which is the corresponding estimate for year 2008. If this current rate of growth is maintained, it is quite possible that Polk County will well-exceed the 2010 population growth projections. Of most importance is that these population estimates for in-migration are for individuals and families under the federal poverty thresholds, which will have significant impact on the health system infrastructure.

Chart 4
Population Projections for Polk County through the year 2010


Data Source: The University of Florida BEBR
Population Projections by Race to Year 2010
Chart 5 presents Polk County population projections by race to year 2010. The Hispanic population is estimated as the fastest growing ethnic group.

Chart 5
Population Projections by Race to Year 2010


Data Source: Florida Dept. of Health CHARTS

Population Projections by Gender to Year 2010
Chart 6 presents Polk County resident demographics by gender estimated by the year 2010. The projections are non-significant in terms of gender based upon the BEBR estimates.

Chart 6
Population Projections by Gender to Year 2010


Data Source: University of South Florida BEBR
Population Projections by Age to Year 2010
Although gender projections appear non-significant, the age demographics of the Polk County population shifts by year 2010, with the highest rate of projected growth in the age 18-64 population. In 2000, Polk County had a high percentage of residents under the age of $20(27 \%)$. In 2000, the median age of county residents was 38.6. In 2003, the median age of county residents was 39.2. By year 2010, the largest group of residents will be in the 18 to 64 -age range, with the median age of 40.3. Chart 7 illustrates the age projections for Polk County for year 2010.

Chart 7
Population Projections by Age for Polk County


Data Source: University of South Florida BEBR

## Unique Needs of the Population 65 years of Age and Older

According to the Florida Department of Elder Affairs, there are approximately 101,245 adults over the age of 65 residing in Polk County in 2006. This is approximately 19\% of the county's total population. Nearly $11 \%$ of these adults live in poverty - 11,531 individuals. As many as 30,631 elderly residents fall into the Low Income Medically Underserved designation. As the population of our county continues to age, the elderly will require substantial increases in health care services and facilities. In terms of planning for future needs for elder care services, the target population is the 65-69 age range. This population subgroup will require significant health screenings, as well as chronic disease prevention and maintenance. Leading causes of death for this age group include chronic diseases such as hypertension (leading to potential stroke), heart disease, cancer, and diabetes. Chart 8 presents the current 2006 age demographics for Polk County residents age 65 and older.

Chart 8
Population Demographics for Adults Over 65


Data Source: Florida Department of Elder Affairs
Overall gender projections for the county for year 2010 show no difference between males and females. However, according to the Florida Department of Elder Affairs, for the population over the age of 64 there is a demographic shift by gender, with more female residents than males. This can cause additional strain on the health system as elderly females are more likely to live alone, in poverty, with little to no support system. Chart 9 illustrates the projected shift in the older population by gender.

Chart 9
Population of Adults Over 64 by Gender


Data Source: Florida Department of Elder Affairs

## Statistics Concerning Adults Age 65 and Older

The elderly experience unique challenges in maintaining a high quality of life. More than a quarter of 2006 elderly Polk County residents live alone and $23 \%$ in rural areas. Nearly $20 \%$ of elderly residents in Polk County have two or more disabling conditions. Table 3 presents statistics unique to the elderly.

Table 3
Unique Health Care Needs of the Elderly

| Living Alone | $28.0 \%$ |
| :--- | :--- |
| Living in rural areas | $23.4 \%$ |
| With two or more disabilities | $20.3 \%$ |
| Estimated Alzheimer's cases | $14.3 \%$ |
| *Reported cases of abuse annually | $1.59 \%$ |

Data Source: Florida Department of Elder Affairs
*Data Source: Florida Statistical Abstract 2004

Nationally, older adults suffer more from chronic diseases such as osteoporosis, arthritis and Alzheimer's disease. This age group also holds a disproportionately high percentage of persons suffering from depression and suicide tendencies. Leading causes of death for the elderly are cardiovascular disease and cancer that accounts for approximately $60 \%$ of all deaths in this population. Chronic obstructive pulmonary disease or chronic lower respiratory disease (COPD/CLRD), diabetes, and pneumonia and influenza are also major causes of death in this population (PAHO 2006). These trends are no different for the State of Florida or Polk County specifically.

According to Healthy People 2010, mental disorders, in aggregate, are as common later in life as they are at other ages, although rates for specific mental disorders vary depending on age and gender. In any one-year period, the number of cases of major depression in people aged 65 years and older is approximately 1 percent, which is about half the rate among persons aged 45 to 64 years.

Depression rates are much higher, however, among older people who experience a physical health problem-12 percent for persons hospitalized for problems such as hip fractures or heart disease. Depression rates for older persons in nursing homes range from 15 to 25 percent.

The number of cases of dementias, such as Alzheimer's disease and other severe losses of mental abilities, are as high as 12 percent among persons aged 65 years and older. By age 85 years, the rate grows to 25 percent.

As the population in Polk County continues to age, this will put additional strain on medical and assisted living facilities, hospice or end-of-life care, as well as financial resource availability and lack of system capacity. Therefore the needs of the elderly will have to be monitored closely during the next several years.

Major Causes of Death and Premature Death

## Heart Disease

Heart Disease is the leading cause of death in Polk County. Chart 10 indicates that progress has been made in reducing the overall rate of death for those with heart disease. Despite this improvement, Polk County is still well above the Healthy People 2010 goal. The data is presented as an Age Adjusted Death Rate (AADR). An AADR is a death rate that has been adjusted for age distribution within a given population, or community. AADR is used when comparing death rates from different populations in order to minimize the effects of differences in age composition on death rates in the comparison populations (e.g. Polk County versus State of Florida).

| Average annual number of hospitalizations for coronary heart disease: | 4,976 |
| :---: | :---: |
| Polk County Age-Adjusted Rate | 750.7 |
| State Age-Adjusted Rate | 710.4 |
| Average annual number of hospitalizations for congestive heart failure: | 2,290 |
| Polk County Age-Adiusted Rate | 332.6 |
| State Age-Adjusted Rate | 317.6 |

Chart 10
Heart Disease Age-Adjusted Death Rate


Data Source: Florida Department of Health CHARTS
Heart Disease - Healthy People 2010 Objective: 166.0 per 100,000. The goal is to improve cardiovascular health and quality of life through the prevention, detection, and treatment of risk factors; early identification and treatment of heart attacks and strokes; and prevention of recurrent cardiovascular events.

## Cancer

Cancer is the second-leading cause of death in Polk County; however, cancer death rates, like deaths from heart disease, have also shown improvement. This may be attributed to increased efforts in education and access in cancer screening, as well as an increase in the number of cancer treatment facilities in the county. Chart 11 illustrates that Polk County has reduced its rate to that of the State of Florida average.

Chart 11
Cancer Age-Adjusted Death Rate


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Objectives per 100,000 are listed separately in Table 4. The goal is to reduce the number of new cancer cases as well as the illness, disability, and death caused by cancer.

Cancer death rates vary by gender, race, and ethnicity. Differences among the races/ethnicities and genders represent both a challenge to understand the reasons and an opportunity to reduce illness and death and to improve survival rates (HP 2010). For Polk County, the above chart is flagged yellow, despite progress in health outcome improvement. This is because significant disparities still persist in cancer health outcomes by race/ethnicity.

## Gender

Nationally, male cancer death rates peaked in 1990 at 220.8 per 100,000, and female death rates peaked a year later at 142.2 per 100,000. After the peak year, through 1996, male cancer deaths decreased on average by 1 percent per year, and female deaths decreased on average by 0.4 percent per year. There were significant decreases in death for lung, prostate, brain, and other nervous system cancers in males and a significant decrease in breast cancer death for females. Among males, lung cancer death rates have declined since 1990. In contrast, lung cancer death rates have continued to increase among females. Since 1987, more females have died from lung cancer than breast cancer. (HP 2010)

## Race/Ethnicity

Nationally, Blacks are 34 percent more likely to die of cancer than are whites and more than two times more likely to die of cancer than are Asian or Pacific Islanders, American Indians, and Hispanics. Black women are more likely to die of breast and colon cancers than are women of any other racial and ethnic group, and they have approximately the same lung cancer death rates as white women. Black men have the highest death rates of colon and rectum, lung, and prostate cancers. Age-adjusted lung cancer death rates are approximately 40 percent higher among black males than white males. Little difference in age-adjusted lung cancer death rates has been observed between black females and white females. Hispanics have higher rates of cervical, esophageal, gallbladder, and stomach cancers. Certain racial and ethnic groups have lower survival rates than whites for most cancers. (HP 2010)

Cancer disease and death data are also provided by specific type of cancer, as illustrated in Table 4. Polk County still has a significantly higher rate for lung cancer, colorectal cancer, and cervical cancer.

Positive strides have been achieved in meeting the Healthy People 2010 goals for both breast cancer and prostate cancer. Also included in Table 4 are specific health prevention efforts and screenings individuals may do to increase their chances of improved health outcomes for these diseases.

Table 4
Cancer Specific Incidence, Deaths, and Risk Factors Polk County

| Lung Cancer |  |
| :---: | :---: |
| Average annual incidence for lung cancer | 532 |
| Polk County Age-Adjusted Rate | 80.4 |
| State Age-Adjusted Rate | 73.9 |
| Adults who currently smoke |  |
| Percent Polk County | 28.8\% |
| Percent State | 22.2\% |
| Healthy People 2010 Objective | 12.0\% |
| Colorectal Cancer |  |
| Average annual incidence for colorectal cancer | 357 |
| Polk County Age-Adjusted Rate | 54.8 |
| State Age-Adjusted Rate | 53.0 |
| Adults 50 and over who have ever had a sigmoidoscopy |  |
| Percent Polk County | 51.1\% |
| Percent State | 52.6\% |
| Healthy People 2010 Objective | 50.0\% |
| Adults $50+$ who have had a blood stool test in the past two years |  |
| Percent Polk County | 28.6\% |
| Percent State | 33.5\% |
| Healthy People 2010 Objective | 50.0\% |
| Breast Cancer |  |
| Average annual incidence for breast cancer | 380 |
| Polk County Age-Adjusted Rate | 118.1 |
| State Age-Adjusted Rate | 122.2 |
| Prostate Cancer |  |
| Average annual incidence for prostate cancer: | 434 |
| Polk County Age-Adjusted Rate | 141.1 |
| State Age-Adjusted Rate | 150.3 |
| Cervical Cancer |  |
| Average annual incidence for cervical cancer | 37 |
| Polk County Age-Adjusted Rate | 14.5 |
| State Age-Adjusted Rate | 10.5 |
| Adults 18+ who have had a Pap test in the past three years |  |
| Percent Polk County | 72.4\% |
| Percent State | 82.2\% |
| Healthy People 2010 Objective | 90.0\% |

## Chronic Obstructive Pulmonary Disease/Chronic Lower Respiratory Disease (COPD/CLRD)

Chronic Obstructive Pulmonary Disease (COPD) is also referred to as Chronic Lower Respiratory Disease (CLRD). COPD is the third-leading cause of death in Polk County. COPD includes chronic bronchitis and emphysema-both of which are characterized by irreversible airflow obstruction and often exist together. Similar to asthma, COPD may be accompanied by airway constriction and excessive fluid production. As indicated in the following charts, COPD is significantly higher for Polk County residents compared to the State of Florida. Chart 12 indicates the age-adjusted death rate for all races/ethnicities within Polk County. The county has a much higher rate than the State of Florida average.

| Average annual number of hospitalizations for CLRD: | 2,984 |
| :---: | :---: |
| Polk County Age-Adjusted Rate | 491.5 |
| State Age-Adjusted Rate | 358.5 |

Chart 12
Age-Adjusted Death Rate from COPD


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Objective: 60 per 100,000. Goal - COPD: to promote respiratory health through better prevention, detection, treatment, and education efforts for all respiratory diseases.

According to Healthy People 2010, most patients with COPD have a history of cigarette smoking. COPD worsens over time with continued exposure to tobacco smoke or sometimes a substance in the workplace or environment. COPD occurs most often in older people. Nationally, as much as 10 percent of the population aged 65 years and older is estimated to have COPD. COPD has a major impact on health care, illness, disability, and death in the older population and the magnitude of the problem is growing. Since 1980, the prevalence and age-adjusted death rate for COPD increased more than 30 percent. Most of the increase occurred in people over age 65 years.

This is significant for Polk County as our largest growing population is estimated between the ages of 18 and 64, many of whom are smokers and will be progressing into the 65 years and older age group. Taking into account the expected aging of the U.S. population over the next 10 to 30 years as well as the improved management of other smoking-related diseases, any decline in the proportion of persons with COPD is unlikely without substantial changes in risk factors, mainly stopping cigarette smoking. Reliable statistics are not available for COPD total cases, illness, disability, or death in Blacks, Hispanics, and other ethnic groups as for whites. (HP 2010)

## Unintentional Injuries

Unintentional Injuries is the fourth leading cause of death in Polk County. Unintentional injuries refer to multiple categories, including but not limited to, Motor Vehicle Accidents, Drowning, Falls, Firearms, and Poisoning. Polk County has experienced a significant increase in Unintentional Injury rates over the course of the past several years. Chart 13 provides the age-adjusted death rate for all unintentional injury categories. Polk County has a much higher rate than the State of Florida average.

2004 annual number of hospitalizations for Unintentional Injuries:
3,583
Chart 13
Age-Adjusted Death Rate of All Unintentional Injuries


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Unintentional Injuries Objective: 17.5 per 100,000. Healthy People 2010 Goal: reduce injuries, disabilities, and deaths due to unintentional injuries and violence.

## Unintentional Injuries (Motor Vehicle Accidents and Drowning)

Because Polk County has experienced an increase in Unintentional Injuries, two areas in this category were examined to see if changes occurred in those rates. Charts 14 and 15 illustrate two areas in which increases have occurred that are reflected in the total unintentional injury figures.

Chart 14
Age-Adjusted Death Rate for All Motor Vehicle Deaths


Data Source: Florida Department of Health CHARTS

As indicated in Chart 15, Polk County has a higher rate than the State of Florida for Accidental Drowning. Accidental Drownings are easily prevented with education about the importance of continuous supervision of infants and children who are unable to swim, along with the use of pool surround equipment such as alarmed fencing and pool surface area alarms.

Chart 15
Age-Adjusted Death Rate for All Drownings


Data Source: Florida Department of Health CHARTS
The top ten causes for unintentional injury deaths for Polk County residents, all ages, in 2002-2004 were:

| 1. | Motor vehicle occupant, traffic accident | $268(25.3 \%)$ |
| ---: | :--- | :--- |
| 2. | Poisoning | $167(15.8 \%)$ |
| 3. | Firearm | $141(13.3 \%)$ |
| 4. | Fall | $135(12.8 \%)$ |
| 5. | Pedestrian (traffic-related) | $52(5 \%)$ |
| 6. | Suffocation | $52(5 \%)$ |
| 7. | Other/unspecified (traffic-related) | $45(4.3 \%)$ |
| 8. | Motorcyclist (traffic-related) | $38(3.6 \%)$ |
| 9. | Drowning | $35(3.3 \%)$ |
| 10. | Fire | $16(1.5 \%)$ |

Date Source: DOH Death Certificate Database
In ages 0 to 14, the top five causes for unintentional injury deaths in Polk County, in 2002-2004 were:

1. Motor vehicle occupant, traffic accident
2. Drowning
3. Suffocation
4. Pedestrian (traffic-related)
5. Air Transport
(Percentages of these deaths were not available as they may be based on 20 or fewer deaths.)
Data Source: DOH Office of Injury Prevention
In 2002, 2003 and 2004, there were a total of 710 hospitalizations for unintentional injuries in the 0-14 age group. The top reasons for hospitalizations include falls, motor vehicle occupant, poisoning, pedal cyclist, struck by/against, pedestrian, hot substance, other transport, bite/sting, and cut/pierce.

Stroke
Stroke is the fifth-leading cause of death in Polk County. Chart 16 indicates that the county has made improvement in reducing the rate of death by stroke and has met the Healthy People 2010 objective.

| Average annual number of hospitalizations for stroke: | 2,238 |
| :--- | :--- |
| Polk County Age-Adjusted Rate | 326.1 |
| State Age-Adjusted Rate | 331.0 |

Chart 16
Age-Adjusted Death Rate from Stoke


Data Source: Florida Department of Health CHARTS

## Disparities - Black Population

According to the U.S. Centers for Disease Control Office of Minority Health, demographic changes that are projected over the coming years magnify the importance of addressing disparities in health status. Groups currently experiencing poorer health status, especially Blacks and Hispanics, are expected to grow as a proportion of the total U.S. population; therefore, the future health of America as a whole will be influenced substantially by our success in improving the health of these groups (CDC 2006). Charts 17, 18 and 19 highlight the significant disparities in health outcomes for the Black population in Polk County in heart disease, cancer and stroke. Blacks have a higher rate of death for heart disease than both the State of Florida average, and the average for Whites.

Chart 17
Blacks Age-Adjusted Death Rate from Heart Disease


Data Source: Florida Department of Health CHARTS

As indicated in Chart 18, improvement in cancer outcomes is still a significant disparity for the Black population. Inadequate data for the Hispanic health outcomes in cancer currently exists. Since our largest population growth projection in race/ethnicity is the Hispanic population, it is imperative that we begin benchmarking and monitoring these health outcomes in the Hispanic population.

Chart 18
Black Age-Adjusted Death Rate from Cancer


Data Source: Florida Department of Health CHARTS
Blacks also have a significantly higher death rate from stroke than Whites, but are closer to the State of Florida average. Inadequate data for the Hispanic population also exists in this category.

Chart 19
Black Age-Adjusted Death Rate from Stroke


Data Source: Florida Department of Health CHARTS

## Risk Factors for Disease and Death

Several individual health practices are related to disease and death prevention, including controlling high blood pressure or hypertension, managing diabetes, preventing obesity (being severely overweight), inactivity or lack of physical exercise, and not receiving proper or medically necessary immunizations.

## Hypertension/High Blood Pressure

Polk County has much higher percentages of hypertension-affected residents than the State of Florida, and well above the Healthy People 2010 goal. Table 5 presents the percentage of Polk County residents who have been diagnosed with hypertension. The largest population group with hypertension is age 45 and above.

Healthy People 2010 - Hypertension/High Blood Pressure Objective: 16\%
Table 5
Percentage of residents affected by Hypertension

| Percentage of adults who have been told by a <br> doctor or other health professional that they <br> have high blood pressure. | Polk <br> County | State |
| :--- | :--- | :--- |
| All Races/Ethnicities | $33.8 \%$ | $27.7 \%$ |
| Age 18-44 | $18.7 \%$ | $*$ |
| Age 45-64 | $39.6 \%$ | * |
| Age 65+ | $56.9 \%$ | * |
| Percentage of adults now taking High Blood <br> Pressure (HBP) medicine (if they have HBP) |  |  |
| All Races/Ethnicities | $74.6 \%$ | $76.0 \%$ |
| Age 18-44 | $47.5 \%$ | * |
| Age 45-64 | $75.6 \%$ | ${ }^{*}$ |
| Age 65+ | $91.0 \%$ | $*$ |

Data Source: Florida Department of Health CHARTS

* State data not available for comparison

Healthy People 2010 notes that the major causes of death, including heart disease and stroke, share several common risk factors, including high blood pressure (Hypertension), cigarette smoking, high blood cholesterol, and being overweight. Physical inactivity and diabetes are additional risk factors for heart disease. According to HP 2010, one of every two males and one of every three females aged 40 years and under will develop heart disease sometime in their life. Primary prevention, specifically through lifestyle interventions that promote heart-healthy behaviors, is a major strategy to reduce the development of heart disease or stroke. (HP 2010, 2006)

Several lifestyle changes can help prevent high blood pressure or hypertension, and reduce blood cholesterol levels. For high blood pressure, these interventions include increasing the level of aerobic physical activity and exercise, maintaining a healthy weight, limiting the consumption of alcohol to moderate levels for those who drink, reducing salt and sodium intake, and eating a reduced-fat diet high in fruits, vegetables, and low-fat dairy food. (HP 2010)

Obesity
Obesity has become an epidemic nationally and in the State of Florida. Polk County is no exception. Polk County residents have a higher rate of obesity (being severely overweight) than the State of Florida average and are well above the ideal Healthy People 2010 Objective, as illustrated in Table 6.

$$
\text { Healthy People } 2010 \text { - Obesity Objective: 15\% }
$$

Table 6
Percentage of residents affected by Obesity

| Percentage of adults who are obese | Polk <br> County | State |
| :--- | :--- | :--- |
| All Races/Ethnicities | $27.0 \%$ | $22.3 \%$ |
| Age 18-44 | $28.2 \%$ | $*$ |
| Age 45 - 64 | $29.9 \%$ | $*$ |
| Age 65+ | $20.8 \%$ | $*$ |
| Percentage of Adults who are overweight |  |  |
| All Races/Ethnicities | $35.6 \%$ | $35.1 \%$ |
| Age 18-44 | $29.9 \%$ | $*$ |
| Age 45 - 64 | $46.9 \%$ | $*$ |
| Age 65+ | $33.8 \%$ | $*$ |
| Percentage of adults who have received advice <br> from a doctor or other health professional about <br> their weight in past 12 months. |  |  |
| All Races/Ethnicities | $18.8 \%$ | $21.1 \%$ |
| Age 18-44 | $17.1 \%$ | $*$ |
| Age 45 - 64 | $20.8 \%$ | $*$ |
| Age 65+ | $20.0 \%$ | $*$ |

Data Source: Florida Department of Health CHARTS
*State data not available for comparison
According to Healthy People 2010, overweight and obesity are growing public health problems, affecting adults, adolescents, and children. Overweight and obesity affect a large proportion of the U.S. population-55 percent of adults. These persons are at increased risk of illness from high blood pressure, high blood cholesterol, diabetes, heart disease, stroke, and other diseases. Efforts to prevent overweight and obesity by promoting heart-healthy behaviors-beginning in childhood-are needed to help reverse the trend. Balancing food consumption with physical activity is critical. A wide range of physical activities are beneficial to health and everyone can benefit from physical activity. Even when physical activity is less than vigorous, it can still produce health benefits, including a decreased risk of heart disease.

## Chronic Diseases

## Diabetes

Chronic diseases such as diabetes can have a significant impact on the quality of life for Polk County residents. The changing demographic patterns are expected to increase the number of people who are at risk for diabetes and who eventually develop the disease. (HP 2010)

Diabetes is a chronic disease of which there are two major types: type 1, mainly occurring in children and adolescents 18 years and younger, in which the body does not produce insulin and thus insulin administration is required to sustain life; or type 2, occurring usually in adults over 30 years of age, in which the body's tissues become unable to use its own limited amount of insulin effectively. While all persons with diabetes require self-management training, treatment for type 2 diabetes usually consists of a combination of physical activity, proper nutrition, oral tablets, and insulin. Previously, type 1 diabetes has been referred to as juvenile or insulin-dependent diabetes and type 2 diabetes as adult-onset or non-insulin dependent diabetes (HP2010).

According to Healthy People 2010, the incidence of people diagnosed with diabetes is expected to worsen before it improves, especially in vulnerable, high-risk populations - including Blacks, Hispanics, American Indians or Alaska Natives, Asians or other Pacific Islanders, elderly persons, and economically disadvantaged persons. Several factors account for this increase, including poor health habits, (poor nutrition; lack of physical activity; and obesity); demographic changes (aging, increased growth of at-risk populations); and improved health screening and reporting systems that more completely capture the actual rate of diabetes within the population.

Despite improvements in screening efforts and data collection, the data for the incidence of diabetes in Polk County and elsewhere can be misleading. For example, Polk County is lower than the state average in the percentage of adults who have been told by a doctor or other health professional that they have diabetes. This may not indicate that the incidence of diabetes is lower, but rather, many residents may be going undiagnosed and untreated for the disease. Polk County has significantly higher rates of obesity, and obesity has been highly correlated to development of diabetes, indicating that rather than lower rates of disease, Polk County may be under-screening and under-diagnosing the disease. Table 7 illustrates the percentage of adults who have been diagnosed with the disease by age group.

Table 7
Percentage of adults affected by Diabetes

| Percentage of adults who have been told by a <br> doctor or other health professional that they have <br> diabetes. | Polk <br> County | State |
| :--- | :--- | :--- |
| All Races/Ethnicities | $7.3 \%$ | $8.2 \%$ |
| Age 18-44 | $3.9 \%$ | ${ }^{*}$ |
| Age $45-64$ | $10.7 \%$ | ${ }^{*}$ |
| Age 65+ | $9.5 \%$ | ${ }^{*}$ |

Data Source: Florida Department of Health CHARTS

* State data not available for comparison

Healthy People 2010 - Diabetes - Objective: 15\%: Through prevention programs, reduce the disease and economic burden of diabetes, and improve the quality of life for all persons who have or are at risk for diabetes.

Asthma
Asthma is a chronic respiratory disease characterized by episodes or attacks of inflammation and narrowing of small airways in response to asthma "triggers." Asthma attacks can vary from mild to life-threatening and involve shortness of breath, coughing, wheezing, chest pain or tightness, or a combination of these symptoms. Many factors can trigger an asthma attack, including allergens, infections, exercise, abrupt changes in the weather, or exposure to airway irritants, such as tobacco smoke. (NCHS, 2006)

Compared to the state of Florida, Polk County has significantly higher rates of asthma. Although asthma cannot be cured, if treated and well-managed with appropriate lifestyle changes as well as the use of maintenance/preventive medications, individuals with asthma may experience a higher quality of life. Well-managing asthma also has the potential to reduce hospitalizations from asthma attacks.

Average annual number of hospitalizations for asthma: 4,737

Table 8 provides the percent of Polk County residents who have been diagnosed with asthma, as well as those populations who are sensitive to poor air quality and who may be more affected by asthma symptoms.

Table 8
Polk County residents affected by Asthma

| Percentage of adults who have been told by a doctor or other health professional that they have asthma. | Polk County | State |
| :---: | :---: | :---: |
| All Races/Ethnicities | 13.2\% | 10.7\% |
| Age 18-44 | 15.4\% |  |
| Age 45-64 | 11.3\% | * |
| Age 65+ | 11.3\% | * |
| Percentage of adults who still have asthma (of those who have ever had asthma). |  |  |
| All Races/Ethnicities | 75.5\% | 60.4\% |
| Data Source: Florida Department of Health CHARTS <br> * State data not available for comparison |  |  |
| Sensitive populations affected by poor air quality (actual numbers) |  |  |
| Population under the age of 14 | 103,976 | * |
| Population 65 and over | 88,722 | * |
| Children with asthma | 10,932 | * |
| Adults with asthma | 24,139 | * |
| Individuals with Chronic Bronchitis or Emphysema | 24,032 | * |
| Data Source: American Lung Association (2004) |  |  |

## Substance Abuse, Alcohol, Tobacco and Illegal Substances

## Alcohol Consumption

Alcohol use and abuse by adults appears to have decreased. However, rates for alcohol abuse in minor children under the age of 18 have increased. Youth incidence data are provided in the following section. Implications for alcohol abuse, specifically but not limited to, motor vehicle accidents and deaths from alcohol-related crashes, are significant. Table 9 presents the percent of adults in Polk County who reported "binge-drinking" - consuming five or more drinks in a row.

Table 9
Adults who engage in binge drinking

| Adults who engage in heavy or binge drinking. | Polk <br> County | State |
| :--- | :--- | :--- |
| All Races/Ethnicities | $11.1 \%$ | $14.1 \%$ |

Data Source: Florida Department of Health CHARTS
Charts 20 and 21 illustrate the incidence of motor vehicle accidents and injuries related to alcohol consumption. Chart 20 indicates that the rates of alcohol-related motor vehicle crashes for Polk County have declined, and are lower than the State of Florida average.

Chart 20
Alcohol-related Motor Vehicle Crashes


Data Source: Florida Department of Health CHARTS

Chart 21 shows that Polk County also has declining rates of alcohol-related motor vehicle crash injuries than the State of Florida average.

Chart 21
Alcohol-related Motor Vehicle Crash Injuries


Data Source Florida Department of Health CHARTS
Despite declines in alcohol-related crashes and injury data, death rates for alcohol-related crashes have increased. Chart 22 provides data on motor vehicle crash deaths related to alcohol consumption. Polk County has a higher rate of alcohol-related motor vehicle deaths that the State of Florida and the trend appears to be increasing.

Chart 22
Alcohol-related Motor Vehicle Crash Deaths


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Goal - Substance Abuse: Reduce substance abuse to protect the health, safety, and quality of life for all, especially children.

## Tobacco Use

Because tobacco use is linked with numerous adverse health outcomes, reducing tobacco use will reduce illness, disability, and death across many conditions, including heart disease, cancer, and chronic lung disease. Polk County has significantly higher rates of tobacco use than the State of Florida average. Tobacco use has been highly correlated to the following major causes of disease and death, including but not limited to: heart disease, cancer, COPD, and stroke. Cigarette smoking also contributes to cancer of the pancreas, kidney, and cervix. Smoking during pregnancy causes spontaneous abortions, low birth weight, and sudden infant death syndrome (HP 2010) Table 10 presents the percentage of adults in Polk County who currently smoke, compared to the State of Florida average. Polk County has higher rates of those who reported they smoke, and lower rates of those who reported quitting smoking.

Table 10
-
Adults who Smoke

| Percentage of Adults who currently smoke. | Polk <br> County | State |
| :--- | :--- | :--- |
| All Races/Ethnicities | $28.8 \%$ | $22.2 \%$ |
| Adults who have ever quit smoking in the last 12 <br> months. |  |  |
| All Races/Ethnicities | $54.6 \%$ | $55.3 \%$ |

Data Source: Florida Department of Health CHARTS
Healthy People 2010 Objective: 75\% for Smoking Cessation. Healthy People 2010 Goal - Smoking Cessation: reduce illness, disability, and death related to tobacco use and exposure to secondhand smoke.

## Illegal Substances

Drugs and narcotics offenses for the county, as reported in the Uniform Crime reports of the Polk County Sheriff's Office, are as follows. Offenses include drugs/narcotics arrests, as well as arrests for drugs/equipment. State comparisons are currently not available.

Chart 23
Polk County Drug Arrests


[^0]
#### Abstract

Youth and Substance Abuse According to the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, results from the 2001 National Household Survey on Drug Abuse show that rates and patterns of drug use vary greatly by age. In the national survey, 3.8 percent of youths aged 12 or 13 reported current illicit drug use. Illicit drug use also tended to increase with age among young persons.


Major findings of the survey include:

- Among youths aged 12 to 17, 10.8 percent were current illicit drug users. This was higher than the rate observed in 2000 ( 9.7 percent).
- Among youths aged 12 or 13 , the rate of past month illicit drug use increased from 3.0 percent in 2000 to 3.8 percent in 2001, which was similar to the rate observed in 1999 (3.9 percent).
- There were no changes between 2000 and 2001 in rates of past month use for any of the illicit drug categories for youths aged 14 or 15.
- The rate of current drug use among youths aged 16 or 17 did not differ between 2000 and 2001. However, there were declines of current LSD (1.1 to 0.7 percent) and methamphetamine use ( 0.6 to 0.3 percent) between these 2 years.

Source: U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. (2002, September 4).

According to the Florida Youth Substance Abuse Survey (FYSAS, 2004), a survey of Polk County students grades 6 through 12:

- Marijuana use declined from $30.6 \%$ (2000) to $20.5 \%$. Overall past-30-day marijuana use dropped from $17.6 \%$ to $8.8 \%$.
- Cigarette use also dropped from $23.3 \%$ in 20002 to $12.8 \%$.
- Past-30-day rates for illicit drug use, including LSD and methamphetamine, were reported at $1 \%$ or less.
- Few students said they would be seen as "cool" by their friends if they drank alcohol regularly (10.9\%), smoked cigarettes (7.3) or smoked marijuana (10.1\%).

Despite the decline in reported cigarette and drug use, according to the FYSAS 2004 study, alcohol is the most commonly used drug among Polk County students, with rates of $51.4 \%$ for lifetime use, and $26 \%$ for past-30-day use.

The highest reported prevalence above tobacco use, marijuana and illicit drugs, was Binge Drinking. Binge Drinking is defined as consuming five or more drinks in a row within the last two weeks

Despite the physical, mental and emotional harm related to alcohol, tobacco and drug use, fewer Polk County students reported the perception that daily use of alcohol is harmful. The percentage of students who reported having one or more drinks nearly every day poses a "great risk" of harm decreased from $42.8 \%$ in 2000 to $39.1 \%$ in 2004. (FYSAS 2004). In addition, $13.1 \%$ of Polk County students surveyed reported "Being Drunk or High at School".

## Infectious Diseases

## HIV/AIDS Deaths

Polk County has made progress toward reducing deaths by HIV/AIDS. This is an area that will continue to be monitored by the Florida Department of Health, as well as local agencies dedicated to education and disease/death prevention in HIV/AIDS. Despite these lower rates, significant differences between disease incidence between Whites, Blacks, and Hispanics exist. According to Silence is Death, a special report published by the Florida Department of Health Bureau of HIV/AIDS, Florida's Black communities have the highest rates of HIV infection and death compared to all other races/ethnicities. In Polk County, when all races/ethnicities are combined, Polk County has a lower death rate than the state.

Chart 24 illustrates the five-year age-adjusted death rate for Polk County residents compared to the State of Florida rate. Polk County has a lower combined death rate than the state.

Chart 24
Age-Adjusted Death Rate for HIV/AIDS


Data Source: Florida Department of Health CHARTS
Disparities - HIV/AIDS
Despite overall lower rates of infection and death for all races/ethnicities than the State of Florida, when this information is broken out by race/ethnicity, Blacks and Hispanics residing in Polk County compared to the State of Florida average, have overall higher rates than whites for both HIV infection as well as deaths caused by the disease.

In Polk County, among Persons Living with HIV/AIDS (PLWHA):
Whites $=1$ in 803
Blacks = 1 in 117
Hispanics $=1$ in 524
Data Source: Florida Department of Health (2006)
According to the State Department of Health, Polk County is listed in the top 20 counties in Florida with higher rates of disparities for persons living with HIV/AIDS. Factors that contribute to these disparities include but are not limited to: 1) late diagnosis, 2) access to care, 3) stigma and denial, and 4) poverty and unemployment.

## Sexually Transmitted Diseases

Sexually transmitted disease data are significantly negative for Polk County, with increasingly negative trends. Polk County has higher rates of STD's than the State of Florida average. Prevention efforts, early screening and detection are key to identifying and treating sexually transmitted diseases. Unfortunately for many types of these diseases, the affected individual may go "symptom free" for a long period of time, therefore infecting others unknowingly. The following data is tracked and reported for the female population because these diseases may go undetected within this population and can lead to permanent infertility. Chart 25 shows that for Polk County, the rates of Chlamydia infection for females age 15-19 had a brief downward trend, but is climbing and remains higher than the State of Florida average.

Chart 25
Females 15-19 Age-Adjusted Rate for Chlamydia


Data Source: Florida Department of Health CHARTS
Chart 26 illustrates the rate of Gonorrhea infection in the same population; however, a recent upward trend is shown in the rates of infection. The data presents STDs in teens because these diseases may go undetected as noted previously, as well as assist health planners in gauging sexual activity and risky behaviors (such as not using condoms) within this age group.

Chart 26
Females 15-19 Age-Adjusted Rate for Gonorrhea


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Goal - Sexually Transmitted Diseases: promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent sexually transmitted diseases and their complications

## Vaccine Preventable IIInesses

Although there are many vaccine preventable diseases, including but not limited to, measles, mumps, rubella, pneumonia and flu, data is being presented on those of most significance in Polk County as far as data trends reflect.

Hepatitis B
Hepatitis $B(\operatorname{Hep} B)$ is a disease caused by a virus which attacks the liver. The virus can cause lifelong infection, liver cancer, liver failure and cirrhosis of the liver. The hepatitis B virus spreads by way of body fluids, including blood, semen, and vaginal fluids. Hepatitis B can be prevented by vaccination. Chart 27 shows Polk County experienced an increase in the number of Hep B cases from 2000 to 2003, and has experienced a slight decrease from 2004-2005; however, Polk County's rate still is higher than the State of Florida average.

Chart 27
Three Year Rolling Average of Hepatitis B Cases


Data Source: Florida Department of Health CHARTS

## Pertussis

Pertussis (also commonly known as whooping cough) is highly contagious.
Infants and children can be protected against pertussis by receiving the pertussis, diphtheria and tetanus immunizations. Pertussis is preventable and is monitored closely by health officials because if left untreated Pertussis can be deadly, and the illness is easily spread through the air by persons who are infected.

Nationally, the incidence of pertussis has been gradually increasing since the early 1980's, with most of the cases being in infants less than a year old. In recent years, however, adolescents and adults have accounted for an increasing proportion of cases. Because the vaccine provides protection for only 5-10 years, adolescents and adults vaccinated as children may become infected and develop no symptoms, mild symptoms, or classic pertussis. Because of this, adolescents and adults are often the source of infection for children who are un-immunized or under-immunized. (CDC, 2006) To reduce the number of pertussis cases among adults and reduce the transmission of pertussis to infants and in health-care settings, the national Advisory Committee on Immunization Practices (ACIP) now recommends that adults get a pertussis booster as part of their tetanus/diphtheria vaccine. (MMWR, 2006)

Chart 28 illustrates a significant increase in Pertussis cases in Polk County in 2004-2005.

Chart 28
Three Year Rolling Average of Pertussis Cases

| Pertussis Cases <br> 3-Year Rolling Average Per 100,000 All Races/Ethnicities |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} 1.2 \\ 1 \\ 0.8 \\ 0.6 \\ 0.4 \\ 0.2 \\ 0 \end{array}$ |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | $\square-\mathrm{CH}$ |  |  |  |
|  | 2000-2002 | 2001-2003 | 2002-2004 | 2003-2005 |
| $\longrightarrow$-Polk | 0.5 | 0.3 | 0.4 | 1.1 |
| --State | 0.3 | 0.3 | 0.4 | 0.5 |

Data Source: Florida Department of Health CHARTS

Tuberculosis (TB)
Tuberculosis, or TB, is an airborne disease that spreads from an infectious person predominantly through coughing and sneezing. The bacteria infect people who have frequent and prolonged contact with a person who currently has TB and is contagious. TB is preventable and is monitored closely by health officials as it can be deadly if left untreated. Polk County has experienced an increase in the number of TB cases as illustrated in Chart 29.

Chart 29
Three Year Age-Adjusted Rate for Tuberculosis


Data Source: Florida Department of Health CHARTS
Healthy People 2010 Goal - Immunization and Infectious Diseases: Prevent disease, disability, and death from infectious diseases, including vaccine-preventable diseases.

## Maternal and Child Health

Maternal and child health indicators are extremely important in gauging the overall health of a community. In Polk County, several challenges exist in improving and maintaining positive change in health outcomes in this area. The following charts demonstrate the high need for continued funding, health education and prevention efforts in this area.

## Births to Unwed Mothers

Chart 30 illustrates a moderate increase in the rate of Births to Unwed Mothers in Polk County over the course of the past three years. The rate not only increased, but is higher than the State of Florida rate.

Chart 30
Births to Unwed Mothers


Data Source: Florida Department of Health CHARTS

## Teen Births

A similar increase has also occurred in teen births between 2003 and 2004 as illustrated in Chart 31.

Chart 31
Births to Teens Ages 10-14


Data Source: Florida Department of Health CHARTS

Chart 32 provides the rate per 1000 births to mothers ages 15 to 19. This rate has decreased slightly for Polk County from 2002 to 2004, yet remains consistently higher than the 2004 State rate.

Chart 32
Births to Teens Ages 15-19


Data Source: Florida Department of Health CHARTS
Repeat births to teens increased from years 2002 to 2004, and are higher in Polk Country than the State of Florida 2004 average, as shown in Chart 33.

Chart 33
Repeat Births to Teens 15-19


Data Source: Florida Department of Health CHARTS

Fetal and Infant Deaths
As illustrated in Chart 34, the Polk County rate for overall total fetal and infant deaths fluctuated slightly from years 2002 to 2004, but remains similar to the State of Florida 2004 rate of 7.7.

Chart 34
Fetal and Infant Death Rates


Data Source: Florida Department of Health CHARTS
With regards to infant deaths, infant death rates (children birth to 364 days) declined slightly but remain higher than the State of Florida average for 2004, as shown in Chart 35. In Polk County, the leading causes of resident infant deaths in 2005 were Perinatal Period Conditions, Congenital Anomalies, Unintentional Injuries (Accidents), and Sudden Infant Death Syndrome. These causes accounted for 79.0 percent of all resident infant deaths.

Chart 35
Infant Deaths (0-364 Days)


Data Source: Florida Department of Health CHARTS

Significant disparities also exist in infant/child health outcomes data by race/ethnicity. Black mothers have increased risk of infant deaths compared to other races/ethnicities, as shown in Table 11. As can be seen from this table, black infants are almost three times as likely as white infants to die during their first year.

Table 11
Infant Deaths 0-364 Days by Race/Ethnicity Polk County

| Race/Ethnicity | Polk <br> County | State |
| :--- | :---: | :---: |
| Black Mothers | 19.4 | ${ }^{*}$ |
| Hispanic Mothers | 4.9 | ${ }^{*}$ |
| White Mothers | 6.6 | ${ }^{*}$ |

Data Source: Florida Department of Health CHARTS

* State data not available for comparison


## Birth Weight

The incidence of low birth weight for Polk County increased from 2003 to 2004. Low birth weight is defined as an infant born weighing less than $5 \mathrm{lbs}, 8.2 \mathrm{oz}$ ( 2500 grams ). Low birth weight can be partially attributed to negative health behaviors of the mother, including smoking and alcohol consumption, as well as lower socio-economic status and inadequate medical/prenatal care early in the pregnancy. Chart 36 illustrates the increase in low birth weight births for all races/ethnicities.

Chart 36
Low Birth Weight


Data Source: Florida Department of Health CHARTS
Chart 37 presents the percent of mothers (all races/ethnicities) in Polk County who gave birth to very low birth weight infants. Very low birth weight is defined as an infant born weighing less than 3 lbs, 5 oz. ( 1500 grams). Chart 37 shows Polk County has seen slight improvement in reducing the number of very low birth weight infants born.

Chart 37
Very Low Birth Weight


Data Source: Florida Department of Health CHARTS

## Birth Weight Disparities

Both tables 12 and 13 show that in Polk County, Black mothers are at greater risk of giving birth to low birth weight babies as well as very low birth weight babies compared to other race/ethnicities.

Table 12
2004 Low Birth Weight rates (per 1000 live births) by Race/Ethnicity

| Race/Ethnicity | Polk <br> County | State |
| :--- | :---: | :---: |
| Black Mothers | 13.7 | ${ }^{*}$ |
| Hispanic Mothers | 7.5 | ${ }^{*}$ |
| White Mothers | 7.8 | ${ }^{*}$ |

Data Source: Healthy Start Coalition of Hardee, Highlands, and Polk Counties, Inc.

* State data not available for comparison

Table 13
2004 Very Low Birth Weight rates (per 1000 live births) by Race/Ethnicity

| Race/Ethnicity | Polk <br> County | State |
| :--- | :---: | :---: |
| Black Mothers | 2.7 | ${ }^{*}$ |
| Hispanic Mothers | 1.4 | ${ }^{*}$ |
| White Mothers | 1.2 | ${ }^{*}$ |

Data Source: Healthy Start Coalition of Hardee, Highlands, and Polk Counties, Inc.

* State data not available for comparison


## Prenatal Care Disparities

Access to early prenatal care (within the first trimester) increases a mother's chance of giving birth to a healthier child. Table 14 presents access to early prenatal care by race/ethnicity in Polk County. Polk County is consistently lower than the State of Florida average for mothers accessing early prenatal care in all race/ethnic groups.

Table 14
2004 Percent Entry to Prenatal Care by Race/Ethnicity

| Entry into Prenatal Care During First <br> Trimester | Polk <br> County | State |
| :--- | :---: | :---: |
| Percent of All Mothers | $65.6 \%$ | $81.0 \%$ |
| Black Mothers | $53.3 \%$ | $72.8 \%$ |
| Hispanic Mothers | $54.1 \%$ | $79.4 \%$ |
| White Mothers | $68.5 \%$ | $83.4 \%$ |

Data Source: Healthy Start Coalition of Hardee, Highlands, and Polk Counties, Inc.
Table 15 illustrates that in each of the race/ethnic categories, Polk County has higher rates of women who either receive no prenatal care, or enter prenatal care later in their pregnancies.

Table 15
2004 Percent Late or No Prenatal Care by Race/Ethnicity

| Late or No Prenatal Care | Polk <br> County | State* |
| :--- | :--- | :--- |
| Percent of All Mothers | $7.5 \%$ | $4.3 \%$ |
| Black Mothers | $10.8 \%$ | $6.6 \%$ |
| Hispanic Mothers | $10.0 \%$ | $4.6 \%$ |
| White Mothers | $7.4 \%$ | $3.6 \%$ |

Data Source: Healthy Start Coalition of Hardee, Highlands, and Polk Counties, Inc.

* Only 2004 data available due to change at the State level data points

Healthy People 2010 Goal - Maternal and Child Health: improve the health and well-being of women, infants, children and families.

Social and Mental Health

## Suicide

Suicide rates are a unique indicator of the mental health status of the community. Chart 38 indicates there has been a slight decrease in the number of suicides in Polk County during the last several years.

Chart 38
Age-Adjusted Rate for Suicide


Data Source: CHARTS from Florida Department of Health

## Mental Health

Data specific to Polk County by The Florida Council for Community Mental Health can be utilized to improve health outcomes in this area.

- 40,000 adults and children in the tri-county region of Polk, Highlands and Hardee, have some form of mental illness.
- 11,000 adults have serious emotional disturbances
- 12,000 children in the three counties have serious emotional disturbances
- It is estimated that 10,664 adults and 4,992 children receive mental-health assistance in those counties through Florida Department of Children and Families or Medicaid dollars.
- It is estimated that an additional 5,000 area residents would obtain mental-health treatment if they could.
- In Polk, \$1,153 a year is spent per adult to treat severe mental illness. The DCF recommended $\$ 1,225$ per person seven years ago for the county.
- Polk treatment programs report that 50 percent or more of their mentally ill clients are also substance abusers. This type of co-occurring disorder is more difficult to treat and there is a shortage of mental health professionals in the field specially trained to treat these disorders.

> Data Source: Florida Council for Community Mental Heath

Healthy People 2010 Goal - Mental Health and Mental IIIness: Improve mental health and ensure access to appropriate, quality mental health services.

## Domestic Violence

Domestic violence impacts the entire family unit. Polk County has significantly higher rates of domestic violence compared to the State of Florida but the trend is decreasing, as illustrated in Chart 39.

Chart 39
Domestic Violence Total Offenses


Data Source: Florida Department of Health CHARTS
Child Abuse and Neglect
The child abuse rates for Polk County as presented in Chart 40 are significantly higher than the State of Florida average, but appear to be declining. Limited secondary data is available for abuse and neglect, therefore this is an area that will need to be monitored.

Chart 40
Child Abuse Reports for Polk County


Data Source: Florida Statistical Abstracts

* Data for this year was unavailable

Maintaining a Healthy Lifestyle
A healthier lifestyle may lead to better health outcomes. This section provides the percent of Polk County residents who follow recommended lifestyle changes to improve overall health, including nutrition, physical exercise and oral health.

## Nutrition

As illustrated in Table 16, the majority of Polk County residents do not consume the recommended daily amount of at least five fruits or vegetables each day. A healthier diet can lead to improved health outcomes in terms of reducing the risk of chronic diseases as well as illnesses that can lead to the major causes of death, such as cardiovascular disease and stroke.

Table 16
Healthy Nutrition Practice of Polk County Residents 2002

| All Races/Ethnicities | Polk <br> County | State |
| :--- | :--- | :--- |
| Percentage of Adults who consumer less <br> than 5 fruits and vegetables a day. | $77.7 \%$ | $74.3 \%$ |
| Adults who have been advised by a doctor, <br> nurse, or other health professional to eat <br> fewer high fat or high cholesterol foods. | $23.3 \%$ | $21.0 \%$ |
| Adults who have been advised by a doctor, <br> nurse, or other health professional to eat <br> more fruits and vegetables | $30.4 \%$ | $27.9 \%$ |

Data Source: Florida Department of Health CHARTS

Healthy People 2010 Goal - Nutrition and Overweight: promote health and reduce chronic disease associated with diet and weight.

Physical Activity
Polk County residents are also less likely to get enough physical exercise, compared to the State of Florida average, as shown in Table 17.

Table 17
Healthy Physical Activity Practice of Polk County Residents 2002

| All Races/Ethnicities | Polk <br> County | State |
| :--- | :---: | :---: |
| Adults who have been advised by a doctor, <br> nurse, or other health professional to be <br> more physically active | $29 \%$ | $28 \%$ |
| Adults with no leisure time physical activity | $31.5 \%$ | $26.4 \%$ |
| Adults with no regular moderate physical <br> activity | $54.5 \%$ | $55.1 \%$ |
| Adults with no regular vigorous physical <br> activity | $75.1 \%$ | $75.6 \%$ |
| Adults mostly sitting/standing at job | $57.3 \%$ | $62.8 \%$ |
| Adults with health status "Fair" or "Poor" | $21.7 \%$ | $16.7 \%$ |

Data Source: Florida Department of Health CHARTS
Healthy People 2010 Goal - Physical Fitness and Activity: Improve health, fitness and quality of life through daily physical activity.

Oral Health
Table 18 illustrates that Polk County residents are also less likely to receive routine preventive dental care, compared to the average for the State of Florida.

Table 18
Healthy Oral Health Practice of Polk County Residents 2002

| All Races/Ethnicities | Polk <br> County | State |
| :--- | :---: | :---: |
| Adults who have had their teeth cleaned in <br> the past year | $64.8 \%$ | $70.5 \%$ |
| Adults who visited a dentist within the past <br> year | $65.9 \%$ | $70.2 \%$ |
| Adults with no teeth removed | $40.3 \%$ | $46.7 \%$ |

Data Source: Florida Department of Health CHARTS
Healthy People 2010 Goal - Oral Health: prevent and control oral and craniofacial diseases, conditions and injuries and improve access to related services.

Healthy Communities by Design
As Polk County continues to grow, developers and growth planners can cooperatively design communities with health outcomes in mind. If communities were designed to promote physical activity into our daily lives, we would see improvements in the daily activity levels recommended for health living.

Some examples are:

- A new neighborhood can ensure that sidewalks are continuous throughout the development, which might encourage residents to adopt the healthy practice of walking each day.
- Neighborhoods can be located closer to county infrastructure and resources, such as transportation routes, grocery stores and medical facilities.
- Developers can discuss with the county and the local health department about connecting their water systems to local water systems within municipalities or county, which will provide fluoridation (which prevents oral cavities), rather than developing neighborhoods dependent upon wells for water.
- Communities can make sure that adequate "green space", parks and outdoor activity areas, are abundant and available for use by all local residents, to encourage a healthier, more physically active lifestyle.
- Communities can ensure that the local transportation system provides an adequate means of transportation for residents to ensure access to medical facilities.

Healthy People 2010 Goal - Environmental Health: promote health for all through a healthy environment.

## Consumer Health Survey

As part of the Mobilization for Action through Planning and Partnerships project, the Polk Health Care Alliance coordinated a county-wide Citizen's Community Health Survey. The purpose of this survey was to (1) assess community needs, (2) gauge perceptions of health consumers, (3) gather suggestions and ideas for improvement, and (4) to plan for both short- and long-term improvement in health outcomes for Polk County residents.

The goal of the survey was to help community partners within the local health system to better anticipate and manage change in the environment in order to incorporate these findings into the Polk County Community Health Improvement Plan (CHIP).

Two sources of data were obtained for this survey. First, a sample of Polk County residents from difference socioeconomic and racial backgrounds through a paper/pencil survey instrument. This survey was distributed in three languages, English, Spanish, and Haitian-Creole. Second, the same survey instrument was placed on the web using a commercial electronic survey service (SurveyMonkey©). Research, Strategy \& Analytics, LLC, conducted the survey and the analyses presented in this report. Limitations unique to this survey include:

1) The information collected was based on self-reported information.
2) Sample size was too small to make accurate comparisons between race/ethnicity for Asian, Pacific Islander, and Native American residents.
3) The results cannot be generalized to other communities nor counties as results are unique to the sample population and are subject to sampling error.

## Results

A total of 1,106 health consumers participated in the survey. Of those responding, $38.5 \%$ were male, $61.4 \%$ were female. Of these, $55.8 \%$ were under the age of 40 , while $44.2 \%$ were above the age of 40 . Consumers reporting they were employed were $63.6 \%$. Approximately $52 \%$ of the consumers reported their household income as less than $\$ 29,000$, whereas $47.5 \%$ reported their income was higher than $\$ 30,000$ annually. Consumers were also asked to provide their zip code of residence. There were 84 different zip codes reported, scattered throughout Polk County. The most frequently reported zip codes include 33880, 33881, 33884, 33898, 33868, 33860, 33853, $33844,33841,33843,33838,33837,33830,33823,33815,33813,33812,33811,33810,33809$, 33805,33803 , and 33801. Zip code level analysis will be conducted during the next phase of MAPP (2007) in order to better direct resources and efforts.

Table 19 provides basic demographic information for the survey sample.

| Table 19 <br> Demographic Information for Health Consumer <br> Survey Respondents |  |
| :--- | :--- |
| Gender |  |
| Male | $38.5 \%$ |
| Female | $61.4 \%$ |
| Status |  |
| Employed | $63.6 \%$ |
| Self-employed | $2.6 \%$ |
| Out of work more than 1 year | $6.5 \%$ |
| Homemaker | $10.4 \%$ |
| Student | $3.5 \%$ |
| Retired | $1.4 \%$ |
| Unable to work | $7.0 \%$ |
| Other | $5.1 \%$ |
| Race |  |
| White | $52.9 \%$ |
| Black | $20.1 \%$ |
| Asian | $.9 \%$ |


| Native Hawaiian, Pacific Islander | $.2 \%$ |
| :--- | :--- |
| American Indian | $.5 \%$ |
| Hispanic | $22.0 \%$ |
| Other | $3.1 \%$ |
| Income | $35.5 \%$ |
| $0-\$ 20,000$ | $17.1 \%$ |
| $\$ 20,000-\$ 29,000$ | $12.9 \%$ |
| $\$ 30,000,-\$ 39,000$ | $8.6 \%$ |
| $\$ 40,000-\$ 49,000$ | $26.0 \%$ |
| $\$ 50,000$ and above |  |
| Age | $7.4 \%$ |
| Under 20 years of age | $48.4 \%$ |
| $20-40$ years of age | $42.4 \%$ |
| $41-64$ years of age | $1.8 \%$ |
| 65 and above |  |

## Responses by Majority

The majority of survey respondents indicated that they have one primary doctor or clinic, that they have received their annual exams, and that they have transportation to get to the doctor's office or clinic easily. Respondents also indicated they have one primary dentist and have received a dental exam during the past year. Approximately one-half of the respondents indicated that they have health insurance, and that coverage was made available to them through their employer. Despite coverage, respondents indicated that it was still difficult for them to afford the medical care and medications they or their family needed. Between one-third and one-half of the respondents indicated that they had knowledge of how to become healthier, about programs to improve health, where to go for substance abuse treatment, mental health services or Hospice care. Slightly more than one-third indicated they were satisfied with the quality of health care in their community. Table 20 provides overall survey results per each survey question.

Table 20
Percent response to questions regarding Access, Barriers to Health Care, and Patient Adherence

| Survey Question | Strongly Agree | Somewhat <br> Agree | Neither | Somewhat <br> Disagree | Strongly <br> Disagree |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I have one doctor or <br> clinic that I go to for my <br> routine health care. | $69 \%$ | $18 \%$ | $5 \%$ | $3 \%$ | $5 \%$ |
| I have had a regular <br> physical exam during the <br> past year. | $64 \%$ | $15 \%$ | $5 \%$ | $5 \%$ | $1 \%$ |
| My doctor's office or <br> clinic is close to my <br> home. | $55 \%$ | $23 \%$ | $7 \%$ | $7 \%$ | $8 \%$ |
| I have a car or other <br> transportation to easily <br> get to the doctor's office <br> or clinic. | $78 \%$ | $10 \%$ | $4 \%$ | $3 \%$ | $5 \%$ |
| A family member or I <br> were unable to get health <br> care during the past <br> year. | $18 \%$ | $11 \%$ | $11 \%$ | $10 \%$ | $50 \%$ |
| I have one dentist that I <br> go to for my dental care. | $45 \%$ | $13 \%$ | $13 \%$ | $7 \%$ | $23 \%$ |
| I have had a dental exam <br> or cleaning in the past <br> year. | $41 \%$ | $10 \%$ | $9 \%$ | $8 \%$ | $33 \%$ |
| My dentist's office is <br> close to my home. | $31 \%$ | $17 \%$ | $15 \%$ | $9 \%$ | $28 \%$ |


| Table 20 <br> Percent response to questions regarding Access, Barriers to Health Care, and Patient Adherence |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Survey Question | Strongly Agree | Somewhat Agree | Neither | Somewhat Disagree | Strongly Disagree |
| A family member or I received dental care during the past year. | 49\% | 13\% | 8\% | 6\% | 24\% |
| A family member or I were unable to get dental care we needed during the past year. | 19\% | 10\% | 13\% | 9\% | 49\% |
| I have health insurance that covers my health care needs. | 53\% | 17\% | 6\% | 7\% | 17\% |
| All of my family's health care needs are covered by health insurance. | 39\% | 19\% | 8\% | 11\% | 23\% |
| Health insurance is available through my job. | 50\% | 8\% | 9\% | 6\% | 28\% |
| I can afford to buy health insurance through my job. | 43\% | 16\% | 11\% | 10\% | 32\% |
| I do not have health insurance. | 15\% | 5\% | 8\% | 6\% | 66\% |
| I do not want health insurance. | 9\% | 3\% | 9\% | 6\% | 74\% |
| I have tried to get health insurance for my family or myself and could not get it. | 12\% | 8\% | 15\% | 7\% | 59\% |
| A family member or I had an illness that was not treated because we had no insurance. | 13\% | 7\% | 12\% | 8\% | 60\% |
| I know where I can go for health care even if I don't have insurance. | 36\% | 9\% | 12\% | 7\% | 25\% |
| I can afford to buy the medicine my doctor tells me a family member or I need to take. | 26\% | 23\% | 14\% | 11\% | 26\% |
| I can afford the health care I believe my family or I need. | 25\% | 22\% | 13\% | 13\% | 27\% |
| My doctor or clinic helps me get medicine my family or I need that we cannot afford. | 18\% | 15\% | 25\% | 12\% | 30\% |
| I have used someone else's medicine because I could not buy my own. | 7\% | 6\% | 12\% | 9\% | 66\% |
| In general I am in good health. | 41\% | 33\% | 10\% | 8\% | 8\% |
| My doctor has told me that I have a long-term or chronic illness. | 17\% | 9\% | 11\% | 7\% | 58\% |


| Table 20 <br> Percent response to questions regarding Access, Barriers to Health Care, and Patient Adherence |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Survey Question | Strongly Agree | Somewhat Agree | Neither | Somewhat Disagree | Strongly Disagree |
| I take the medicine my doctor tells me to take to control my chronic illness. | 21\% | 8\% | 11\% | 6\% | 54\% |
| I know where to go to get information on health care and staying healthy. | 47\% | 16\% | 16\% | 4\% | 17\% |
| I know about programs in my community that can help me become healthier. | 45\% | 22\% | 13\% | 6\% | 14\% |
| I know where to go for mental health services in my community. | 39\% | 21\% | 15\% | 8\% | 19\% |
| I know where to go for substance abuse services in my community. | 39\% | 20\% | 15\% | 8\% | 18\% |
| I know how to get end-oflife care or hospice care in my community. | 34\% | 19\% | 17\% | 8\% | 22\% |
| I am satisfied with the level of health care available in my community. | 36\% | 24\% | 16\% | 8\% | 17\% |
| I believe language is a barrier to my family's or my ability to get health care. | 23\% | 15\% | 13\% | 10\% | 38\% |

## Respondents by Income

Despite the differences in the frequency in responses as indicated in the above tables, Income Level was the greatest predictor of how an individual would respond, particularly in the $\$ 0$ to $\$ 20,000$ income group. Residents in this income group indicated they had greater difficulty in affording health insurance provided by their employers and that they tried to get health insurance but were unsuccessful. They also indicated with greater frequency that they knew where to go for health care even if they did not have health insurance. This income level also indicated that they did not have the same level of patient adherence to medical care in terms of taking medication they were told to take by their physician. They also reported with less frequency that they had one primary care physician or clinic that they go to for routine care. This income group also indicated with greater frequency that the other income levels, that they were not generally in good health. This group also had the lowest responses for knowledge about programs to improve health, where to go for substance abuse treatment, mental health services or Hospice care. The income group $\$ 20,000$ to $\$ 29,000$ also indicated they had decreased levels of knowledge about these health care services.

## Optional Mental Health Questions

Five optional questions regarding mental health and mental health care were made available to the SurveyMonkey© respondents. Respondents were given the opportunity to by-pass these questions. Table 21 provides some of the respondents' verbatim comments as well as frequencies of themes.

| Table 21 Frequency of responses to survey questions regarding Mental Health Care, and Service. |  |  |
| :---: | :---: | :---: |
| Survey Question | Response |  |
|  | Yes | No |
| Have you or a family member experienced a mental illness in the past year? | 22.6\% | 77.7\% |
| Did you or your family member seek mental health services when needed? | 32.2\% | 67.1\% |
| Were you or your family member able to access the mental health services when needed? | 48.9\% | 51.5\% |
| Were you successful in getting the help that you or your family member needed? | 56.8\% | 43.7\% |
| If you were not successful in finding and receiving treatment or care, please tell us why? | Frequency of Responses |  |
| Theme: Access and Quality of Care | 39\% |  |
| "The physician was not helpful - answer was medication - never offered therapy or dealing with problems - only psychiatrist available at the time." |  |  |
| "I was able to get mental health care for two of my foster children one time a month they could both use services more frequently but the closest facility is 45 minutes away and the facility is usually so booked that getting them in more than one time a month is difficult." |  |  |
| "The problem with mental health issues is no insurance, little availability to good help. All they want to do is prescribe pills, no one ever wants to find out why...they don't want to talk just hand out antidepressants." |  |  |
| "To get a mental health appt. you must make an appt., then wait one to three months, do intake, then make an appointment for one to three months to see a therapist or doctor. You are treated rude or ignored most of the time." |  |  |
| "The low cost and free mental health care services my $X X X X$ was able to access were not productive in any way. The individuals who assisted her were not of the same standard as in the private sector. They did not come across as being well educated, experienced, or even concerned enough to truly help her." |  |  |
| "No response to voicemails left at $X X X X$." |  |  |
| "Dr.'s were not able to provide the help that I wanted for him, and also it takes a long time." |  |  |
|  | Frequency of Responses |  |
| Theme: Cost | 26\% |  |
| "I'm afraid of the bill...sometimes its difficult to buy a bottle of aspirin (generic) for a headache." |  |  |
| "Insurance and money" |  |  |
| "Not being insured and the cash price was too much." |  |  |
| "In some cases you have to be low income and qualified for other government help, so if you are a hard working person but at the same time can't afford to pay for insurance you have to choose to put food on the table." |  |  |
| "I was unable to find services that met my needs. I am sure they are available but was not able to afford." | nly ser | find, I |

## Qualitative Responses Maternal Child Health

Open-ended questions specific to Maternal Child Health were also added to the web-version of the survey. Questions were designed to illicit information and ideas for improving access to maternal and child health care. Responses were gathered via SurveyMonkey®, and analyzed for recurring themes. Table 22 presents some of the respondents' verbatim responses as well as frequencies of themes.

| Table 22 Frequency of responses to survey questions regarding Maternal Health Care. |  |
| :---: | :---: |
| Survey Question | Response |
| What do you believe is the largest barrier to pregnant women starting maternity care early in their pregnancy? | Frequency of Responses |
| Theme: Inadequate or no insurance and cost | 43\% |
| "Cost - so many of the tests are not covered fully by insurance." |  |
| "Cost - during my last pregnancy, we had crappy insurance and I even waited until about three months along to go in and be monitored because my deductible was so high." |  |
| "Financial concerns - even women who have insurance may not be able to afford the co-payment or to take time off from work. Women who have no insurance may also lack transportation and if working, may not be able to take paid leave time from work." |  |
| "Most of the clients that I see have a hard time getting in to see a doctor because they are trying to get on Medicaid. Sometimes it takes while for the Medicaid to get approved." |  |
| "Getting an appointment in a reasonable amount of time while waiting for Medicaid to kick in." |  |
| "That Medicaid is only guaranteed for 45 days some women wait till later in the pregnancy to apply to ensure that [the] hospital bill will be payed." |  |
|  | Frequency of Responses |
| Theme: Access (Lack of physicians) | 26\% |
| "Lack of qualified ObGyn's close to my home - the distance to a hospital where a qualified ObGyn works at [is too far] I have a vehicle but for women I have known who do not have transportation as there are no buses in our area." |  |
| "It's hard to get an appointment early on because the physicians have so many patients." |  |
| "Having health care in a convenient location. Having transportation to reach the location." |  |
| "Back-logged doctors." |  |
| "Getting an appointment with a physician. There are usually long wait times for an appointment with a physician, especially if you are a new patient. Also there can be barriers if you have no insurance." |  |
| "Difficulty accessing early care. Early appointments not available." |  |
| "Lack of appointments in the public and private sector. The private sector is about 4-5 weeks wait." |  |
|  | Frequency of Responses |
| Theme: Education | 16\% |
| "Lack of education regarding the importance of prenatal care." |  |
| "Knowledge about assistance." |  |
| "Not knowing how to go about it." |  |
| "Not realizing the necessity of being under the care of a doctor and what it can mean to her and her baby." |  |
| "Knowing where to go to get good quality care and affordable." |  |
|  |  |
| What do you believe is the largest barrier to teens accessing maternity health care? | Frequency of Responses |
| Theme: Fear | 53\% |
| "Most likely they are afraid of telling their parents." |  |
| "Hiding the truth of the pregnancy" |  |


| Table 22 Frequency of responses to survey questions regarding Maternal Health Care. |  |
| :---: | :---: |
| Survey Question | Response |
| "Fear of pregnancy being discovered." |  |
| Barrier to teens accessing maternity health care, cont. |  |
| "I bet the largest barrier is fear - afraid to get help or ask for help and HAVE NO CLUE how to access help." | Frequency of Responses |
| Theme: Lack of Knowledge | 34\% |
| "Not knowing what to do and where to go to get help and the importance of care." |  |
| "Lack of understanding of its importance." |  |
| "Maybe there should be more education and resources available. Many teens tend to hide their pregnancies for a time and don't seek health care right away." |  |
| "Denial and lack of awareness about resources available to them, and the need to utilize them early." |  |
| "Not having a lot of education as far as pregnancy, prevention. XXXX had an excellent program for teens until the age of eighteen, until the governor took that away. Where is the prevention?" |  |
| Name one key idea for preventing teen pregnancy in Polk County. |  |
| Theme: Education (Both abstinence as well as birth control methods) | 66\% |
| "Being able to get them the proper birth control and safe sex methods and education at home and at the schools. Parents are in denial about their children and their sexual activity." |  |
| "Awareness. Sex Education classes need to be taught in the high schools. They need to bring in someone who is in that position (pregnant \& a teen) and show them the consequences and how it has affected their life. The ups \& downs. I don't believe teens these days realize how much responsibility is involved and exactly what the consequences of having sex, not to mention all the STD's, etc....out there. The kids need real human beings to share their personal story with them." |  |
| "Education. Not a new idea, but maybe starting in elementary school." |  |
| "Protection!! They won't let you talk about protection in school and teens don't know where to get protection if they want it or what is available to them. Yes waiting to have sex is ideal in the "perfect world" but teens having sex now are not going to stop. They need basic education - that is not provided to them in school." |  |
| "Educate, educate, educate - sex education from $3^{\text {td }}$ grade and above with a parent present for instructional activities - perhaps presented after school." |  |
| "I believe in abstinence but I also believe that we need to get our heads out of the clouds, and be realistic about what today's teens are really doing. There needs to be more education on what is available regarding birth control and how to get it." |  |
| Theme: Distribute birth control (via schools and programs) | 17\% |
| "Providing information and providing protection." |  |
| "Comprehensive sex education in the schools with the focus on contraception not just abstinence." |  |
| "I believe that teens should not only be introduced to abstinence, but they should be provided with contraceptive devices. The reality is, teens are sexually active, and we can prevent these teens from becoming pregnant by providing them with condoms, birth control, etc." |  |
| "More accurate birth control information given in the school system." |  |
| "ACCURATE abstinence info followed by low cost, accessible, and effective contraception." |  |
| "Birth control education in school (school health)." |  |
| "Give school nurses the authority to give birth control in school..." |  |


| Table 22 <br> Frequency of responses to survey questions regarding Maternal Health Care. <br>  <br>  |  |
| :--- | :---: |
| Survey Question | Response |
| "Increase sex education and birth control methods in high school." |  |
| Theme: Increase programs and activities |  |
| "Activities that they can afford financially and time wise." |  |
| "Have more activities to keep them occupied so they don't have time to waste..." |  |
| "Programs with more one-on-one interaction" |  |
| "Provide challenging activities for high risk youth, mentored by a positive role model." |  |
| "Programs and seminars with young females." |  |
| "Esteem building programs and mentoring with other older women who will listen and <br> provide a safe place for young women.." |  |

## Summary Findings

The results of this survey illustrate the importance of health education efforts for all Polk County residents. Lack of knowledge about how to become healthier as well as accessing programs to help them become healthier, stood out as the most important need for all groups, including gender, race/ethnicity, and income level. Those with higher income levels reported higher knowledge levels in all categories. This is not necessarily attributed to the residents' annual income, but rather, is perhaps more reflective of the educational attainment level of those individuals. Those at the income level of less than $\$ 29,000$ annually had the greatest need for increased health education efforts in all categories.

## Implications

The Health of Polk County, A Status Report, was created in order to highlight the major health and social issues affecting the health status and quality of life in Polk County. A secondary goal of this report is to provide some areas the Polk Health Care Alliance and partner health and social service agencies may wish to consider focusing their strategic efforts on in order to create a Community Health Improvement Plan (CHIP). A CHIP, by way of targeted health intervention and advocacy, will help health care organizations in Polk County work collaboratively to improve the health of all Polk County residents. Members of the Polk Health Care Alliance and of the community-at-large are encouraged to review the findings within this report and identify areas that their specific organization might be able to improve outreach and access to, in order to have improved health outcomes for Polk County residents.

Population projections for Polk County are high, with increased growth in all major age groups, which will increasingly challenge the health system infrastructure in the future. Polk County is experiencing phenomenal rates of population growth, particularly in the age 18-64 group, as well as among Hispanics and families at lower socio-economic levels. As the population begins to age, the rates of both chronic disease, as well as, deaths from all major causes may increase as well. Polk County also has significant rates of poverty within population subgroups. Poverty and lower socio-economic status has been correlated with poor health status. Interventions specifically targeted to disparate groups are necessary to reverse these trends.

Inadequate data still exists for health planning purposes for special populations, particularly the elderly and children; disparate populations, including different age groups, race or ethnicity, or gender; specific communities within Polk County; and for the field of mental health and substance abuse.
Additional data is necessary at the community level in order to gauge improvement in specific health outcomes, in particular for disparate populations. It is anticipated as specific diseases and/or consumer health behaviors are identified and targeted in a Community Health Improvement Plan (CHIP), additional data will be gathered and examined at the community level in order to show specific health outcomes improvement within targeted populations.

## Polk County is doing poorly in the majority of leading causes of death, including heart disease, cancer, stroke, unintentional injuries, and lung diseases.

Compared to the State of Florida, Polk County residents experience higher rates of death for the top five major causes of death, 1) heart disease, 2) cancer, 3) stroke, 4) unintentional injuries, and 5) COPD/CLRD (chronic lung diseases). Many of these illnesses can be prevented by positive health behavior practices, such as quitting smoking, improving nutritional habits, increasing physical exercise, and monitoring and managing chronic diseases.

## Residents of Polk County have high rates of chronic disease and are at increased risk for

 premature death.As individuals age and develop chronic diseases, such as diabetes, hypertension, and cardiovascular disease, their risk of premature death increases. Being screened for such illnesses are paramount to managing and controlling chronic disorders in order to achieve a higher quality of life and perhaps longer life span. Going to a family doctor or primary care physician or health clinic on a yearly basis for screening and health education can assist individuals in diagnosing and caring for these types of disorders which ultimately lead to death in later stages in life.

[^1]Residents of Polk County are showing an increasing trend in rates of sexually transmitted diseases, hepatitis B, pertussis, and tuberculosis in comparison to the State of Florida average. Some populations are also showing higher rates of HIV/AIDS.
Black residents are at significant risk of HIV/AIDS compared to other races/ethnicities. The rates of vaccine-preventable illnesses such as Hepatitis $B$ and pertussis and the recent upward trend in TB need to be monitored closely.

Women in Polk County have lower rates of obtaining necessary prenatal care early in their pregnancy (first trimester), which increases risk of negative birth outcomes, and sexual activity of the teen population puts them at risk for unintended pregnancies and sexually transmitted diseases.
There are significant disparities in health outcomes for non-white women and children. Interventions targeting these disparities will require additional research into specific causes of these disparities, as well as, creation of unique, targeted intervention and health education programs.

The Consumer Health Survey showed significant knowledge gaps in the lower socioeconomic groups in knowledge about how to improve their health, including health programs, where to go for health care, and knowledge about how to access mental health and substance abuse services.
Those at the income level of less than \$29,000 annually had the greatest need for increased health education efforts in all categories. There were non-significant differences between race, nor gender for the survey sample regarding knowledge and access.

## Recommendations

## Address Health Disparities

As indicated throughout this report, several populations do not have the same level of health outcome improvement as other populations. Currently available data is inadequate to track several major illnesses in the Hispanic population; however, data is readily available to track health disparities in the Black population. As Polk County will continue to see growth in the Hispanic population it is of utmost importance that the major causes of death data are provided for this population.

Specific causes for these disparities are not known, but it is believed there may be relationships between:

- Lifestyle habits, (such as diet, exercise)
- Beliefs about the health care system and its use
- Inadequate access to health care services

Health disparities must be addressed if health outcomes improvement is to be realized in Polk County. This includes analyzing secondary health outcomes data by race/ethnicity for all major causes of disease and death, and designing culturally competent health education interventions to target disparate groups.

## Promote Healthy Lifestyles and Environments

Healthy People 2010 Goal - Educational and Community-Based Programs: Increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and improve health and quality of life.

It is also demonstrated in this report that access to medical care, specifically health education as well as medical health screenings, are key to early detection, which may lead to an increased chance of improved quality of life and perhaps even survival of a major medical illness.

Dedication to a healthier lifestyle requires the commitment of the individual and the community. Information provided in this report regarding healthy lifestyle choices is intended to provide steps an individual or family can take to aim for a healthier quality of life. This includes:

- Eating a healthier diet
- Quitting smoking
- Maintaining a healthy weight
- Obtaining routine medical and preventive health care
- Being physically active
- Taking maintenance or preventative medications as prescribed.
- Advocating for development of healthier communities by design, including more outdoor "green space" for residents to encourage physical activity.

Research has shown that increased efforts in this area will improve health outcomes longer term and may actually prevent serious illnesses leading to disability or death.

## Improve Access to Health Care

Healthy People 2010 Goal - Access to Quality Health Services: Improve access to
comprehensive, high-quality health care services.
Healthcare Access can be hindered by multiple barriers, including but not limited to:

- Fear of medical procedures
- Beliefs that medical care is only needed when an individual is sick
- Lack of adequate health insurance
- Lack of financial resources to pay for health care services
- Lack of adequate, affordable transportation to and from health facilities
- Lack of knowledge about which doctors to choose, and where to go for health care

According to a recent study conducted by the Florida Agency for Health Care Administration, it is estimated that in 2004, 74,347 Polk County residents (age 0 to 64) are uninsured and have limited access to adequate health care resources. This encompasses the largest growing population group for Polk County.

Researchers at The University of South Florida-Lakeland state that health in Polk County is needy. The USF study conducted in 2003 estimated that $50 \%$ of the county's population qualifies and receives care through the governmental health care programs of Medicaid and/or Medicare. This study also estimated that twenty-five percent of Polk County residents are without health care insurance or are inadequately insured (underinsured). In addition, the study estimated that $28 \%$ of the population residing in Polk County is paying for private health insurance out-of-pocket or sliding fee-scale.

Access may be improved in the community many ways. Possible ways to impact access may include, but are not limited to:

- Continuing education media campaigns to educate residents about available health care resources
- Advocating for expansion of the county infrastructure, specifically public transportation availability to remote areas of the county
- Educating individuals about how to have a healthier lifestyle
- Educating the public on use of a primary care physician and the importance of early detection and screening for major illnesses
- Advocating for additional green space within existing communities
- Advocating for "Healthier Communities by Design" for planning entities and developers as Polk County continues to grow

Throughout this report we have highlighted the health challenges facing Polk County residents. This information has been generated through several phases, including data analysis, surveying health consumers, and interviewing community partners and health care providers. This has helped us to create a shared community vision for overall health improvement in Polk County. With that come significant challenges, as well as opportunities to continue to collaborate and work together for a better quality of life for all Polk County residents.

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## Glossary of Terms

Age-adjusted Death Rates (AADR)
An AADR is a death rate that has been adjusted for age distribution within a given population, or community.

## 3-year Rates

3-year rates are calculated by taking the average number of events and average total population.

## Birth Rate

The number of births per 1,000 resident population.

## Chronic Disease

An illness, such as heart disease, asthma, or diabetes, that is ongoing or recurring but is not caused by infection and is not passed on by contact.

Chronic Obstructive Pulmonary Disease (COPD/CLRD)
A progressive lung disease process characterized by difficulty breathing, wheezing, and a chronic cough. Complications include bronchitis, pneumonia, and lung cancer.

Community Health Improvement Plan (CHIP)
A community-wide strategic plan for systematic health improvement at the individual and community levels. This plan is build through collaborative analysis and partnership, and is adopted by the community-at-large.

## Demographics

The statistical characteristics of human populations and households (such as age or income.)

## Diabetes

A chronic health condition where the body is unable to produce insulin and properly break down sugar (glucose) in the blood. Symptoms include hunger, thirst, excessive urination, dehydration and weight loss. The treatment of diabetes requires daily insulin injections, proper nutrition and regular exercise.

## Disparities

Socioeconomic or health inequality or difference relative to the local community or wider society to which an individual, family or group belongs.

Healthy People 2010
A set of national leading health improvement goals.

## Hepatitis

Inflammation of the liver. May be caused by bacterial or viral infection, parasitic infestation, alcohol, drugs, toxins, or transfusion of incompatible blood. Although many cases of hepatitis are not a serious health threat, the disease can become chronic and sometimes lead to liver failure and death.

## Hypertension/High Blood Pressure

A condition of elevated blood pressure that can lead to kidney disease, heart disease and stroke.
Infant Death (Mortality) Rate
The number of deaths to individuals less than one year of age per 1,000 live births.

## Low Birth Weight

Infants born who weighed less than 2500 grams ( $5 \mathrm{lbs} ., 8.2 \mathrm{oz}$ ) at birth.

## Pertussis

A bacterial infection of the respiratory tract characterized by short, convulsive coughs that end in a whoop sound when breath is inhaled (commonly called whooping cough); mainly affects children.

## Very Low Birth Weight

Infants born who weighed less than 1500 grams ( $3 \mathrm{lbs} ., 5 \mathrm{oz}$ ) at birth.

## Teen Birth Rate

The number of births to teenage females per 1,000.

## Resources

Agency for Health Care Administration (ACHA) http://ahca.myflorida.com/

American Lung Association 2004
http://lungaction.org/reports/sota04 county.html?fcc=12105
Census 2000, U.S. Department of Commerce, Washington, D.C. www.census.gov.

Central Florida Development Council Economic Barometer http://www.cfdc.org/content/archives/atlas/1228200610344.doc

County Health Profile 2006. Health Council of West Central Florida.
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Federal Register, Vol. 67, No. 31, February 14, 2002, pp. 6931-6933.
Florida Department of Law Enforcement (April 2003). 2001 Crime in Florida. http://www.fdle.state.fl.us/FSAC/Crime Trends/2001 map/53.htm

Florida Resiliency Mapping Project: District 14 2005-2009 Abuse Prevention Plan http://www.dcf.state.fl.us/childabuseprevention/downloads/Plan/14.pdf

Florida Statistical Abstract 2004. Bureau of Economic and Business Research. Warrington College of Business Administration. University of Florida.

Healthy People 2010: Understanding and Improving Health, Leading Health Indicators.
http://www.healthypeople.gov/
Healthy Start of Hardee, Highlands, and Polk Counties, Inc.
www.healthystart.org
Morbidity and Mortality Weekly Report, December15, 2006, 55(RR17); 1-33
Pan American Health Organization (2006)
http://www.paho.org/
Polk County Quickfacts 2000, Census 2000, U.S. Department of Commerce, Washington, D.C. www.quickfacts.census.gov

Silence is Death: The Crisis of HIV/AIDS in Florida's Black Communities. Technical Report. Florida Department of Health Bureau of HIV/AIDS. 2006.

State of Florida Department of Health. CHARTS. http://www.doh.state.fl.us/
U.S. Department of Health and Human Services. Substance Abuse and Mental Health Services Administration. (2002, September 4). Results from the 2001 National Household Survey on Drug Abuse: Volume I. Summary of National Findings (Office of Applied Studies, NHSDA Series H-17 ed.) ( BKD461, SMA 02-3758)Washington, DC: U.S. Government Printing Office. Retrieved October 03, 2002 from the World Wide http://www.oas.samhsa.gov/nhsda/2k1nhsda/vol1/chapter2.htm\#2.age
U.S. Centers for Disease Control and Prevention http://www.cdc.gov/nip/diseases/pertussis/default.htm

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[^0]:    Data Source: Florida Department of Health CHARTS

[^1]:    A high percent of Polk County residents lead unhealthy lifestyles, and as a result, are at increased risk for disease and death.
    A significant percentage of residents of Polk County reporting having high blood pressure, being overweight or obese, smoking, not eating enough fruits and vegetables, nor getting enough physical exercise. Improved health habits may reduce risk of premature disease and death. Having a healthy lifestyle is the first line of defense in preventing disease and illness and improving quality of life. Research has overwhelmingly shown the benefits of eating nutritious foods in the right portion size, regular exercise, tobacco cessation, and maintaining a healthy weight.

