## PINELLAS COUNTY COMMUNITY HEALTH ASSESSMENT




# PINELLAS COUNTY COMMUNITY HEALTH ASSESSMENT REPORT 2012 

## Produced by: Pinellas County Health Department <br> Report and Supplemental Materials Available at: www.pinellashealth.com

To Provide Feedback or Request Additional Information: contact the Pinellas County Health Department, Office of Performance and Quality Improvement at (727)820-4214

Acknowledgments: The community health improvement planning process has been a collaborative and community driven approach for Pinellas County. Many individuals and organizations participated in and contributed valuable information to the community health assessment. This collaborative approach was essential in the development of a quality community health assessment report.

## TABLE OF CONTENTS

1. Introduction ..... 3
1.1. Acknowledgements ..... 7
2. Pinellas County Overview ..... 8
3. Community Themes \& Strengths Assessment ..... 10
3.1. Collaborative Engagement ..... 11
3.2. Community Survey ..... 18
4. Local Public Health System Performance Assessment ..... 25
5. Forces of Change Assessment. ..... 33
6. Community Health Status Assessment ..... 38
6.1. Demographic and Population Characteristics ..... 39
6.2. Socioeconomic Characteristics ..... 42
6.3. Comparison Counties ..... 46
6.4. Vulnerable Communities ..... 48
6.5. County Health Rankings ..... 49
6.6. Access to Care. ..... 51
6.7. Oral Health ..... 54
6.8. Leading Causes of Death ..... 55
6.9. Chronic Diseases ..... 56
6.10. Communicable Diseases. ..... 71
6.11. Maternal and Child Health ..... 76
6.12. Injury and Violence ..... 80
6.13. Behavioral Health ..... 83
7. Appendix A: Community Health Assessment Survey Tool ..... 88
8. Works Cited ..... 90

## 1 INTRODUCTION

A Community Health Assessment (CHA) assesses the health of the population and identifies areas for health improvement. It is a systematic approach to collecting, analyzing, and using information to educate and mobilize communities, develop priorities, gather resources, and plan actions to impact health. Assessment is one of the three core functions of public health, along with policy development and assurance. The Ten Essential Public Health Services (EPHS) are aligned with the core functions as depicted (figure 1). The EPHS describe the core processes of public health under which all public health services fall. The local public health system (LPHS) includes all public, private, and voluntary entities, as well as individuals and partnerships working together

Figure 1: Public Health Core Functions
 to contribute to the delivery of public health services (figure 2). While no one entity is singularly responsible for providing public health services in the community, county health departments have a responsibility to enable, assure, and enforce the provision of the essential public health services within the LPHS. The Pinellas County Health Department brought together the diverse entities and interests of the Pinellas LPHS to conduct a comprehensive Community Health Assessment in 2011-2012.

Figure 2: Local Public Health System


The Pinellas County Community Health Assessment report that follows is the result of more than a year of in-depth assessment of the local public health system utilizing the Mobilizing for Action through Planning and Partnerships (MAPP) framework. MAPP is a community driven strategic approach to community health improvement planning developed collaboratively by the National Association of County and City Health Officials and Centers for Disease Control and Prevention. MAPP is comprised of four assessments that drive the community health improvement planning process: Community Themes and Strengths, Local Public Health System Performance, Forces of Change, and Community Health Status Assessments (Figure 3). Together, these four assessments provide a complete understanding of the factors that affect our local public health system and, ultimately, the health of Pinellas County. Utilizing the MAPP process allows us to understand not only the physical health of our community, but also the social and personal resources, perceptions of residents, physical capabilities, strengths, and opportunities for improvement. The Community Health Assessment report is designed to provide an overview of Pinellas County (Section 2) and the results of each of the four MAPP assessments as shown below (Sections 3-6).


The MAPP assessments used an array of primary and secondary data sources to provide a comprehensive view of the health and quality of life of Pinellas County residents. A number of key findings emerged:

Behavioral risk factors, including poor nutrition and limited physical activity, affect the health of our community.

Similar to trends nationwide, there are a growing number of Pinellas County residents who are overweight and obese. Adults and youth are getting less physical activity than recommended and access to nutritious foods is limited for some. Although efforts toward policy change and a built environment have been made in recent years, there is still much work to be done. The need to address behavioral risk factors is prominent throughout the Community Themes and Strengths Assessment, where healthy behaviors was cited as the second most important factor for a healthy community. Specific behaviors of concern were poor nutrition, lack of physical activity, being overweight, and smoking. Similarly, obesity and chronic diseases were cited as the top health problems of concern.

The leading causes of death in Pinellas County are chronic diseases, including cancer and heart disease.

In 2011, cancer surpassed heart disease as the leading cause of death in Pinellas County. The most prevalent form of cancer in the county was lung cancer. Likewise, the percentage of active smokers is higher in Pinellas than in Florida. Deaths due to heart disease have declined in the past decade, however, at a much slower rate in Black persons than White persons. This racial disparity in heart disease deaths is not an isolated outcome. Deaths due to stroke, diabetic complications, and infant mortality are all more prevalent in persons who are Black than in those who are White in Pinellas.

Income, neighborhood, gender, and race impact access to health care and health outcomes in the county.

These concerns were voiced by the community in the Community Themes and Strengths Assessment, where access to care was the most frequently cited factor for a healthy community. Additionally, a clean environment and safe neighborhood ranked among the top five most important factors for a healthy community. These same social determinants of health are impacting the rates of sexually transmitted diseases in the county.

Sexually transmitted disease rates are higher in Pinellas than in Florida.
Rates of chlamydia, syphilis, and gonorrhea are all higher in Pinellas County than in Florida. Higher sexually transmitted disease rates are even more pronounced in women ages 15 to 34 years, who are also the women most likely to become pregnant. Unfortunately, sexually transmitted diseases have health implications for both mother and child.

Prescription drugs were the most common drug or toxin related cause of accidental death in Pinellas in 2011. Also, the number of newborns experiencing withdrawal reached triple digits in 2009 and continued to increase well into 2010. Over one-third of Pinellas residents reported not receiving the social and emotional support they needed in 2010. Similarly, large numbers of residents reported feeling nervous, restless, and depressed. Suicide rates in Pinellas County are greater than both the state rate and the Healthy People 2020 goal, particularly among men. Community concern about behavioral health issues was also voiced in the Community Themes and Strength Assessment. Within this assessment, addiction was the most frequently cited health problem of concern and alcohol and drug abuse was the most frequently cited behavior of concern.

## The community needs and is determined for change.

The 2011 Local Public Health System Performance Assessment found a weakened capacity of the Pinellas LPHS to inform, educate, and empower people about health issues, as well as to mobilize community partnerships to identify and solve these problems. The 2012 Forces of Change assessment for Pinellas County provided insight into the factors that shape community health. Regardless of which of the ten essential public health services was addressed, similar forces emerged: economic and budgetary, health reform and the political climate surrounding it, development of technology, and increasing regulations. These forces of change create opportunities for collaboration, accountability, innovation, and access to care - all crucial in a collaborative community health improvement planning process. Since these assessments, community partners have mobilized to form the Community Health Action Team (CHAT) tasked with ongoing community health improvement planning to identify and address health issues in Pinellas County. CHAT has been meeting monthly since September, 2012.

## Next Steps

This report is only the beginning of the community health improvement planning process for Pinellas County. MAPP is a multi-phase process that continues beyond assessment. This report and the results of the four assessments will be used for creating awareness and promoting ongoing strategic planning and action as the Pinellas Community Health Action Team continues the MAPP process and develops a Community Health Improvement Plan (CHIP). Once health priority areas are identified, goals, strategies, and objectives will be formulated to address each of the priority areas. The final phase will be the action cycle during which strategies will be planned, implemented, and evaluated as we work together as a community to improve the health of Pinellas County.

## Acknowledgements

Community ownership is a fundamental component of community health improvement planning and the MAPP process to ensure effective, sustainable solutions. Broad participation is essential given the wide range of organizations and individuals who comprise the LPHS and contribute to the public's health. The Pinellas County Health Department would like to acknowledge the following organizations and the numerous individuals from these organizations who supported the Pinellas County Community Health Assessment:

- AIDS Service Association of Pinellas
- All Children's Hospital
- Allegany Franciscan Ministries
- BayCare Health System
- Bayfront Medical Center
- Bayshore Health and Homemaker Services
- Bon Secours Health System
- City of St. Petersburg
- Community Health Centers of Pinellas
- Directions for Living
- Disability Achievement Center
- Early Learning Coalition
- Florida Covering Kids and Families
- Florida Department of Health
- Health and Human Services Coordinating Council for Pinellas County
- Healthy Start Coalition of Pinellas
- Hispanic Leadership Council
- Intercultural Advocacy Institute
- Juvenile Welfare Board
- Moffitt Cancer Center
- Molina Healthcare
- Neighborhood Family Centers
- Operation PAR
- Personal Enrichment through Mental Health Services
- Pinellas County
- Pinellas County Health and Human Services
- Pinellas County Medical Association
- Pinellas County Schools
- Pinellas County Sheriff's Office
- Pinellas Suncoast Transit Authority
- R’Club
- Sickle Cell Disease Association
- St. Petersburg Free Clinic
- Suncoast Center
- Suncoast Health Council
- Suncoast Hospice
- Tampa Bay Healthcare Collaborative
- Tampa Bay Partnership
- University of South Florida
- YMCA


## 2 PINELLAS COUNTY OVERVIEW

## Figure 4: Pinellas County, Florida

Pinellas County is located on Florida's west-central coast, as pictured in red (figure 4). Pinellas was discovered in 1528, its name derived from the Spanish words punta pinal meaning point of pinesi. Pinellas became Florida's 48th county in 1912 after a local referendum passed calling for its separation from neighboring Hillsborough County. With a population of 916,542 in 2010ii, Pinellas is Florida's sixth most and the nation's $53^{\text {rd }}$ most populous county ${ }^{\text {iii. }}$. Despite its large population, Pinellas is Florida's second smallest county in land mass at 273 square miles. It is the most densely populated county in Florida with 3,347 persons per square mile, nearly ten times the state average of 350 persons per square mile ${ }^{\text {iv }}$.

Pinellas County is a peninsula bounded by the Gulf of Mexico on the west and Tampa Bay on the south and east ${ }^{v}$. Pinellas has 35 miles of beaches, 11 barrier islands, and nearly 600 miles of coastline. Two of the county's beaches have ranked among the top ten in the nation. Residents and visitors also have access to 17 museums, major and minor league sport teams, and four institutions of higher education.

Figure 5: Tampa Bay Region


Pinellas County has 15,525 acres of preserves and the Parks and Conservation Resources Department maintains 4,242 acres throughout the county ${ }^{\text {vi }}$. The county is also home to the Pinellas Trail, a greenway corridor linking some of Pinellas County's most picturesque parks, scenic coastal areas, and residential neighborhoods spanning from Tarpon Springs to St. Petersburg.

Pinellas is part of the Tampa-St. PetersburgClearwater Metropolitan Statistical Area (MSA) along with neighboring Hillsborough, Hernando, and Pasco counties. The Tampa-St. PetersburgClearwater MSA is part of the larger Tampa Bay region along with the contiguous Sarasota-Venice and Lakeland-Winter Haven MSAs and the micropolitan area of Homosassa Springs. This eight county Tampa Bay region includes Pinellas, Hillsborough, Pasco, Citrus, Hernando, Polk, Manatee, and Sarasota counties (figure 5).

Pinellas is comprised of nearly 50 zip codes spanning 24 distinct municipalities (figure 6 ). There are 4,521 miles of paved roads crossing 179 bridges ${ }^{\text {vii }}$. Clearwater in north Pinellas is the County Seat and St.
Petersburg in south Pinellas is the largest city with a population of 248,232 in $2010^{\text {viii }}$. Other major municipalities are depicted at right. There are 405,649 households in Pinellas County, with an average of 2.21 people per household ${ }^{\text {ix }}$. Pinellas is considered an urban county, with $100 \%$ of its residents residing in urban conditions ${ }^{\mathrm{x}}$.

Over 40,000 businesses call Pinellas County home and more than 467,000 people are currently employed in the county ${ }^{\text {xi }}$. In 2010, the median household income in Pinellas was $\$ 45,258$, compared to $\$ 47,661$ in the state of Florida ${ }^{\text {xii }}$. The top industries of employment in 2010 included health care and social assistance ( 66,504 jobs), retail trade ( 48,728 jobs), and accommodation and food services (38,826 jobs). Pinellas County's five largest private employers are the Home Shopping Network, Raymond James Financial, Bright House Networks, Fidelity Information Services, and Nielsen Media Research ${ }^{\text {xiii }}$.

Figure 6: Pinellas County Municipalities



## What is important to our community?

## How is quality of life perceived in our community?

## What are the issues and concerns in our community?

## What assets do we have in our community?



The Community Themes \& Strengths Assessment collects information directly from the community to provide an understanding of the issues residents feel are important. This assessment considers the concerns of residents to help assure a sense of ownership and responsibility for the community health improvement plan outcomes. Understanding the experiences, perceptions, and priorities of residents is a critical part of the MAPP process and offers valuable information when identifying priorities for community health improvement. The Pinellas County Health Department used two approaches to invite community input as part of the Community Themes and Strengths Assessment: a collaborative engagement of partner organizations and a community health survey of Pinellas residents.

## COLLABORATIVE ENGAGEMENT

On May 8, 2012, Pinellas County Health Department sponsored a collaborative engagement using the Collaborative Labs at the St. Petersburg College EpiCenter. The Collaborative Labs are a meeting environment unique in the Southeast United States, designed to foster dynamic interaction and spur creativity among stakeholders through an innovative meeting space and facilitation services. The collaborative engagement was attended by nearly 70 people from more than 30 organizations who came together to develop a shared community vision and assess the 10 Essential Public Health Services including themes, strengths, and forces of change that affect Pinellas County and the local public health system. Participants represented diverse sectors of the local public health system such as emergency medical services, neighborhood centers, community health centers, family and youth service providers, hospice, faith-based, mental health and substance abuse providers, research, education, hospitals, grass-roots groups, and many others.

## METHODOLOGY

Utilizing the 10 Essential Public Health Services as a framework, participants at the collaborative engagement worked with an assigned team to identify themes and strengths related to Pinellas County and the local public health system. Teams were strategically designed so that participants were assessing themes and strengths related to an essential public health service within their area of expertise. Each team was also assigned a partner team whose themes and strengths they assessed after completing their own. Following work within teams, each team shared their top three identified themes and strengths within their assigned essential service area and discussed with the larger group of participants for consensus building.

## RESULTS: COMMON THEMES AND STRENGTHS

The top themes and strengths identified by teams across essential service areas are highlighted in Figure 7 below.

Figure 7: Key Themes and Strengths

## KEY THEMES

- Link program performance measures to community indicators
- Develop health registries
- Improve useful distribution of surveillance information to providers
- Enhance and integrate the use of technology, social media
- Find champions for education on health issues
- Identify and address barriers to accessing health care, food, physical activity, etc.
- Address sustainability of funding streams and programs; educate policymakers on this issue
- Diversify health/public health work force
- Engage patients and consumers in assessment and planning
- Maximize resources among municipalities in a more coordinated way
- Involve community based organizations in research


## KEY STRENGTHS

- Substantial electronic data access
- Local and regional collaboration and linkage between partners; willingness to share information
- Private and public partnerships and collaboration
- Use of technology, electonic health records, and social media in education, care, disease investigation, etc.
- Robust system of health, public health, and social service providers
- Active and pervasive media
- Local decision makers who are willing to support policies and regulations
- Number of higher education institutions; accessibility of residents, interns, new graduates, etc.
- Outreach efforts
- Additional county regulations to support disease investigation
- Innovative and evidence based programs and services

The table that follows is a comprehensive listing of themes and strengths identified for each of the Essential Public Health Services.

Table 1: Themes and Strengths by Essential Service

| Essential Service | Theme | Strength |
| :---: | :---: | :---: |
| 1. Monitor health status to identify community health problems | - Linking program performance measures to indicators <br> - Development of health registries to quantify incidence/prevalence of chronic disease <br> - Improved access to current registry data <br> - Presentation of data in understandable ways | - Substantial electronic data access <br> - Timely data <br> - National, regional, and local collaboration and partnerships for data collection, exchange, and monitoring <br> - Florida SHOTS- good resource, but underutilized |
| 2. Diagnose and investigate health problems and health hazards in the community | - Improve distribution of surveillance results to health care providers; state and federal restrictions need to be addressed so data sharing is effective. <br> - Require treatment compliance measures for behavioral health and other special populations <br> - Continuous tracking of and communication with patients <br> - More accessible lab services to facilitate threat identification and tracking | - Additional county regulations in Pinellas facilitating investigation and oversight <br> - Good processes and collaboration for tracking data/ identifying threats <br> - Behavioral health programs are now starting to connect digitally with client/patient care records. <br> - Social media and mobile resources provide new opportunities and address some access barriers <br> - Centralized electronic data collection for reportable diseases <br> - Very active and pervasive media <br> - Coordinated disaster response <br> - Regulation of child care facilities |
| 3. Inform, educate and empower people about health issues | - Use of social media and technology <br> - Bridging gap between providers and users. Engaging users in their own care/outcomes. <br> - Need culturally sensitive messages/education <br> - Build community capacity to reach various publics <br> - Finding champions who can carry issues across; develop and empower them <br> - Need to reach the hardest-to-reach <br> - We can provide info about screenings, but cost can drive people away if they don't have access to care <br> - Education of providers of available services | - Rich media market with access to major TV and radio <br> - Willingness to share info across areas in region <br> - Broad base agencies and activities doing outreach <br> - Repository of information among providers; highly educated group <br> - Local Health Department is sensitive to these issues <br> - 211, Area Agency on Aging <br> - CPPW grant, Find the Fun <br> - Social media (Facebook), texting (Text4Baby) <br> - Partnerships among providers for health promotion, health fairs <br> - SAMS-Situational Assessment Management System for disaster management |

4. Mobilize community
partnerships to identify
and solve health
problems
5. Develop policies and
plans that support
individual and
community health efforts
6. Enforce laws and
regulations that protect
health and ensure safety

- Identifying and overcoming barriers to access: transportation, nutritious food, financial support for health care, education, lack of personal motivation and responsibility, culturally sensitive workforce, lack of knowledge of available social services, etc.
- Improving our technology for patient access and better coordination for care; integration of health and social services to support wellness.
- Integrated health and social services across lifespan.
- Getting the 24 municipalities in Pinellas County to coordinate as a collective likeminded group, i.e. with city ordinances, zoning, mobile produce vendors
- Maximizing the use of existing resources in a coordinated effort.
- Improved public and private agency coordination, i.e. competition among health care groups, duplication of services
- Getting community buy in/involvement; moving from policy to action
- Disparity of services among cultural/ethnic groups, marginalized communities, etc.
- Education of law makers
- Political climate creates barriers to developing and implementing policies/plans
- Sharing of information
- More local control via ordinances, rulemaking such as smoking
- Legislation based on health priorities as opposed to financial gain (health care debate)
- Preventive health needs to be a higher priority with legislators
- Current environment limiting the role of government in health, welfare and safety of citizens
- Need to enforce current laws, ensure providers know and understand them
- Lack of understanding by the community on current laws and regulations that would affect them
- Declining resources to monitor compliance
- Mandated risk screening at hospitals
- Completed analysis and identification of "food deserts"
- Local technology improvements: electronic health records; close to implementing one e-app (common eligibility system for social services and health care benefits
- Specialized transportation
- Increased outreach initiatives: Peace4Tarpon, Fairmount park, YMCA's, Hispanic Outreach Center
- High school health clinics
- Health services in the home
- Collaborative efforts on policy such as Health and Human Services Coordinating Council (HHSCC) and Communities Putting Prevention to Work (CPPW) grant
- Productive working relationship among local, state and national entities to develop/implement policies/plans
- Opportunities to receive funding to respond to community needs, i.e. CPPW, Preparedness Planning, ASPR funding
- Robust health and medical system that is nationally recognized
- Existence of legal assistance for the community
- (Some) Local decision makers are willing and supportive of creating regulations to affect the health of the community
- Private/public collaboration
- Existing statutes that support enforcement efforts

7. Link people who need personal health services and assure the provision of health care when otherwise unavailable
8. Assure a competent public health care workforce

- Eliminating egos, "I have the answer and you just need to follow me"
- Limited resources, economic challenges, and competition for funding
- Planning, coordinating, and collaboration must engage the end userthe consumer and others typically not included in the discussion
- Infrastructure of our community - it is not built
- Many health care and service providers, neighborhood centers, community centers, FQHC
- Strong outreach efforts
- Strong existing partnerships
- Access to free bike trails, and parks
- EBT access at produce and farmers' markets
- Private and public wellness coordinates are more common now
- Good Florida weather to motivate the use of outdoor activities
- Health and human services coordinating counsel
- The millage/support of county commissioners
- Number/diversity/collaboration of academic institutions and partnerships
- Multitude of resources in place
- Increased interest in public health
- Supportive county government millage
- CPPW, public policy, media attention
- Grant funding
- Health care providers as a resource
- Diversity is embraced and celebrated
- Desirable/marketable community
- 2-1-1 a good baseline - beginning point
- Infrastructure established by CPPW
- Multiple data sources that provide local data for evaluation
- Multiple coalitions that work together
- Mission driven health care providers in community
- Non-profits connected to health care services and refer people into care -
- Local higher educational institutions that are able to provide evaluation services and student service learning opportunities
- Easy access to independent evaluators

| 10. Research new insights and innovative solutions to health problems | - Community based organizations involvement in research process <br> - Limited funding mechanism/short life of grants <br> - Sustainability of research, programs, and services <br> - Fostering community dialogue that addresses the need for innovation in research <br> - Alternative funding sources for creating innovation at the community level <br> - Disconnect between academic based entities and CBOs particularly pertaining to research <br> - Identifying and analyzing the root causes of health inequities in relation to health disparities <br> - Having community based organizations involved throughout the research continuum in order to accurately address the needs, resources, etc. of the community <br> - Limited resources for local public health departments to engage in research <br> - Limited human capital to conduct health based research - independent; Moffitt / USF collaboration <br> - Limited categorical funding (i.e. always needing to apply for grants in order to fund projects/programs, etc.) <br> - Lack of sharing data or information gathered from needs assessments, etc. to higher institutions <br> - Engage corporate and private funders to do research in our community <br> - Inventory of existing research in this community related to health problems <br> - Inventory of innovative solutions in practice now | - Strong collaborative partnerships amongst academia, providers, coalitions, task forces, councils, etc. <br> - Number of higher education institutions <br> - Willingness of community-based organizations to be part of innovative research <br> - Strong community advocates <br> - Ability of research institutions to access clientele and population services, local CBOs, etc. <br> - History of innovative research <br> - Juvenile Welfare Board (funding and evaluation of programs) <br> - Operation PAR has its own research facility for substance abuse services <br> - National resources of innovative and evidence based programs (i.e. CMS, CDC, HHS) |
| :---: | :---: | :---: |

Several of the teams can be seen working together to identify key themes and strengths at the May 8, 2012 collaborative engagement in the pictures below and at right. Also included below is an illustration of identified themes and strengths as captured by the St. Petersburg College EpiCenter staff during the event.


## COMMUNITY SURVEY

Building on the findings from the collaborative engagement, the Pinellas County Health Department launched a community survey to better understand the experiences, perceptions, and priorities of residents related to community health and quality of life.

## METHODOLOGY

The design and distribution of the community survey was a planned and researched undertaking. In order to create the survey tool, many resources were explored until team members felt a community appropriate measurement tool was created. The survey questions were designed to collect demographic information and assay perceived community health, individual health, and surrounding quality of life issues. The final survey instrument can be seen in Appendix A.

In order to promote a diverse representation of county residents, the survey was distributed in both paper format and electronically. After a short pilot period, survey collection spanned five weeks in June and July 2012, utilizing both paper and electronic surveys collected via the health department clinics, home visiting services, and numerous partner organizations. Additionally, an electronic version of the survey was made available to the community via the Pinellas County Health Department's webpage. Accommodations were also made to translate the survey into Spanish to garner participation from a segment of the county that may have otherwise gone underrepresented.

## DEMOGRAPHICS

The survey reached diverse subpopulations in the community, with respondents from across the county represented in the 841 total surveys collected. Key demographic information such as age, sex, race, ethnicity, income, and educational attainment was collected and demonstrated a similar distribution to that of the county, with a few minor exceptions. Females were more heavily represented than males ( $80 \%$ and $20 \%$ respectively) and respondents 65 and over (5.9\%) were underrepresented compared to county demographics. Complete demographics of respondents can be seen in the table below, including the number of respondents who answered each demographic question. Demographic questions were placed at the end of the survey instrument to maximize responses to the high priority questions regarding health and quality of life and did not require a response to complete the survey.

Table 2: Demographics of Survey Respondents

| Survey Question | Response | Survey Question | Response |
| :--- | ---: | :--- | :--- | ---: |
| Gender: | $\mathbf{n = 7 9 4}$ |  |  |
| Male | $19.3 \%$ |  |  |
| Female | $80.7 \%$ | Highest Level of Education: | $\mathbf{n = \mathbf { 8 0 7 }}$ |
|  |  | Less than high school | $12.1 \%$ |
| Age: | $\mathbf{n = 8 1 3}$ | High school diploma or GED | $34.2 \%$ |
| 18 or less | $6.3 \%$ | Two year degree | $14.7 \%$ |
| $19-25$ | $18.0 \%$ | Bachelor's degree | $19.7 \%$ |
| $26-39$ | $26.8 \%$ | Advanced degree | $14.0 \%$ |
| $40-54$ | $26.3 \%$ | Other | $5.2 \%$ |
| $55-64$ | $16.7 \%$ |  | $\mathbf{n}=774$ |
| 65 or over | $5.9 \%$ | Annual Household Income: | $24.8 \%$ |
|  |  | Less than $\$ 15,000$ | $17.2 \%$ |
| Race/ Ethnicity (all that apply): | $\mathbf{n = 8 1 3}$ | $\$ 15,000-\$ 25,000$ | $13.0 \%$ |
| African American/ Black | $21.5 \%$ | $\$ 25,001-\$ 35,000$ | $11.8 \%$ |
| Asian/ Pacific Islander | $1.7 \%$ | $\$ 35,001-\$ 45,000$ | $7.4 \%$ |
| Caucasian/ White | $60.4 \%$ | $\$ 45,001-\$ 55,000$ | $25.8 \%$ |
| Hispanic/ Latino | $15.9 \%$ | $\$ 55,001$ or more |  |
| Native American | $1.1 \%$ |  |  |
| Other | $2.2 \%$ |  |  |

Figure 8 depicts survey respondents by geographic area of residence based on zip code provided. North Pinellas represents zip codes in the areas of north Clearwater, Dunedin, Safety Harbor, Palm Harbor, Tarpon Springs, Oldsmar, and neighboring beaches; about 31\% of county residents and $24 \%$ of survey respondents. Mid Pinellas represents zip codes in the areas of Pinellas Park, Seminole, Largo, Belleair, Highpoint, and neighboring beaches; about $32 \%$ of county residents and $29 \%$ of survey respondents. South Pinellas represents zip codes in the greater St. Petersburg area including Lealman, Kenneth City,

Gulfport, and neighboring beaches; about 37\% of county residents and $37 \%$ of survey respondents.

Figure 9 that follows depicts survey respondents by health care coverage. When asked how their health care was paid for, the greatest number of respondents reported private insurance (55\%), followed by Medicaid (19\%). Approximately 20\% of respondents reported having no insurance or being unable to access care, similar to Pinellas County overall, where approximately $26 \%$ of adults and $10 \%$ of children are uninsured ${ }^{\text {xiv }}$.

Figure 9: Respondents by Health Care Coverage- How is Your Health Care Paid For? ( $\mathrm{N}=798$ )
10.7\%



## INDIVIDUAL AND COMMUNITY HEALTH

Survey respondents were asked to assess both their individual level of health and the health of the community where they live. The majority of respondents rated both as "Healthy." However, $66 \%$ of respondents consider themselves healthy or very healthy, but only $52 \%$ of respondents consider their community healthy or very healthy (figure 10).

Figure 10: Individual and Community Health Status- How Healthy Are You? How Healthy is Your Community?


There were disparities in perceived health status by both race, ethnicity, and educational attainment, as seen in figures 11 and 12 that follow. Respondents identifying as Hispanic/Latino and "other" race/ethnicity rated both their individual and community health as healthy or very healthy most frequently ( $69 \%$ and $64 \%$ compared to $52 \%$ overall), while respondents identifying as African American/Black did so least often ( $62 \%$ and $45 \%$ compared to $52 \%$ overall). Those with higher edcucational attainment rated their individual health as healthy or very healthy most frequently ( $80 \%$ with advanced degree), but their community as healthy or very healthy least frequently ( $45 \%$ with advanced degree compared to $52 \%$ overall).

Figure 11: Respondents who Rated Individual and/or Community Health Status as Healthy or Very Healthy by Race/Ethnicity


Figure 12: Respondents Who Rated Individual and/or Community Health as Healthy or Very Healthy by Educational Attainment


## GENERAL COMMUNITY

Survey respondents were asked whether or not the community where they live is safe and if their community is a good place to raise children. Of more than 800 respondents, the majority think that their community is safe ( $85.5 \%$ ) and a good place to raise children (83.3\%). However, this response varied based on geographic area of residence within the county. North Pinellas county residents were more likely to rate their community as safe and a good place to raise children and south Pinellas county residents rated their community lowest in both of these categories.

Figure 13: Respondents Who Answered "Yes" Their Community is Safe and a Good Place to Raise Children by Area of Residence


Survey respondents were asked to select the factors they think are most important for a healthy community. Respondents were given a list of 13 factors and asked to select up to three. The top ten factors chosen are shown in figure 14. Access to care was the top response, selected by 494 respondents (59\%), followed by healthy behaviors, and clean environment, selected by 354 (43\%) and 352 (42\%) respondents respectively. The top responses were consistent across respondents of varying demographics and geographic areas of the county. Additional factors notes by respondents as "other" included affordable

Figure 14: Top Factors for a Healthy Community ( $\mathrm{n}=832$ )


Figure 15: Top Health Problems of Concern ( $\mathrm{n}=\mathbf{8 0 3 \text { ) }}$
Survey respondents were asked to select the health problems they think are of greatest concern in their community. Respondents were given a list of 16 health related problems and asked to select up to three. The top ten responses for health problems of concern are depicted in figure 15. Addiction
 was the top response, selected by 435 respondents (54\%), followed by obesity and chronic diseases, selected by 288 (36\%) and 248 (31\%) respondents respectively. The top were consistent across respondents of varying demographics and geographic areas of the county. Additional health problems of concern noted by respondents as "other" were loneliness and lack of social events for seniors, homelessness, and no Medicaid for adults without minor children.

Survey respondents were asked to select the health related behaviors they think are of greatest concern in their community. The top ten responses for health behaviors of concern are depicted in figure 16. Alcohol and drug abuse was the top response, selected by 443 respondents (55\%), followed by poor

Figure 16: Top Behaviors of Concern ( $\mathrm{n}=805$ )


## What are the activities of the LPHS in Pinellas?

## What are the competencies of the LPHS in Pinellas?

## What are the capacities of the LPHS in Pinellas?

> How are the essential public health services being provided in our community?


The Local Public Health System Performance Assessment is a broad assessment involving all of the organizations and entities that contribute to the public's health in the community. The Local Public Health System (LPHS) is assessed using the National Public Health Performance Standards Program (NPHPSP). The NPHPSP is a partnership between seven national partners, including the Centers for Disease Control and Prevention, to improve the practice of public health and the performance of the public health system. The NPHPSP assessment is intended to answer the questions outlined above by evaluating performance against a set of optimal standards to help identify strengths and weaknesses and determine opportunities for improvement in the Local Public Health System. The NPHPSP framework is designed around four concepts:

1. The standards are designed around the 10 Essential Public Health Services (EPHS)
2. The standards focus on the overall public health system, not a single organization
3. The standards describe an optimal level of performance, rather than provide minimum expectations, to ensure continuous quality improvement
4. The standards support a process of quality improvement whereby system partners use the assessment results to make improvements

## METHODOLOGY

The Pinellas assessment was sponsored by the Pinellas County Health Department and facilitated by the Suncoast Health Council, the local health planning council for Pasco and Pinellas counties. Two half day collaborative sessions were held on July 28 and August 11, 2011. The sessions were conducted using a self-assessment of the Local Public Health System based on the National Public Health Performance Standards Program described above. Two sessions were conducted to promote participation by a broad range of system partners as well as to promote repeat attendance by partners engaged in the assessment of multiple service areas. Three work groups were convened at each half-day session, with each work group assessing one or two essential public health services. Each group was assigned a facilitator and note taker to conduct and record the assessment process. Health Council staff collaborated with the Health Department to design work groups that included participants who were able to assess the LPHS within their area of expertise. The first session addressed EPHS 1, 2, 8, and 10. The second session addressed EPHS 3, 4, 5, 6, 7, and 9.

## RESULTS

The NPHPSP instrument was completed using the following response options:

- No Activity: 0\% or absolutely no activity
- Minimal Activity: Greater than 0\%, but no more than $25 \%$ of the activity is met
- Moderate Activity: Greater than $25 \%$, but no more than $50 \%$ of the activity is met
- Significant Activity: Greater than $50 \%$, but no more than $75 \%$ of the activity is met
- Optimal Activity: Greater than $75 \%$ of the activity is met

The figures below provide the level of activity and scores in each of the 10 Essential Public Health Services for the Pinellas LPHS, using the response options outlined above. As can be seen, Pinellas did not score below moderate activity for any essential service.

Figure 17: Rank Ordered Performance Scores by Level of Activity 2011


Similarly, when compared to 2005, Pinellas improved overall and in all essential services except for EPHS 3 and EPHS 4 in 2011 (figure 18).

Figure 18: Summary of Performance Scores by Essential Service 2011/2005 Comparison

| Essential Public Health Service |  | Score |
| :--- | :--- | :--- |
| $\mathbf{1}$ | Monitor health status to identify community health problems | $\mathbf{7 2} \uparrow$ |
| $\mathbf{2}$ | Diagnose and investigate health problems/hazards | $\mathbf{1 0 0} \uparrow$ |
| $\mathbf{3}$ | Inform/Educate/Empower people about health issues | $60 \downarrow$ |
| $\mathbf{4}$ | Mobilize community partnerships to identify/solve health problems | $46 \downarrow$ |
| $\mathbf{5}$ | Develop policies/plans that support individual \& community health | $\mathbf{8 2 \uparrow}$ |
| $\mathbf{6}$ | Enforce laws and regulations that protect health \& ensure safety | $\mathbf{9 2 \uparrow}$ |
| $\mathbf{7}$ | Link people to needed health services/assure the provision of care | $\mathbf{8 8} \uparrow$ |
| $\mathbf{8}$ | Assure a competent public health workforce | $69 \uparrow$ |
| $\mathbf{9}$ | Evaluate effectiveness/accessibility/quality of health services | $\mathbf{7 5} \uparrow$ |
| $\mathbf{1 0}$ | Research for new insights/innovative solutions to health problems | $\mathbf{8 4 \uparrow}$ |
| Overall Performance Score | $\mathbf{7 7}$ |  |

The figures that follow provide Pinellas County's detail scores for each of the essential public health services and comparison to the last performance assessment conducted for Pinellas County in 2005. In 2011, several model standards were added to the Local Public Health System Performance Assessment. Where a model standard was added in 2011, data for 2005 is unavailable and will not appear in the figure. Essential public health service (EPHS) 1 utilizes three model standards: community health profile, utilization of current technology, and maintenance of population health registries. A decline was seen in the community health profile standard, but improvements occurred in utilization of current technology and maintenance of population health registries leading to an improvement overall (figure 19).

Figure 19: EPHS 1- Monitor Health Status to Identify Community Health Problems (2005/2011)


EPHS 2 is composed of three model standards: identification and surveillance of health threats; investigation and response to public health threats and emergencies; and laboratory support for the investigation of health threats. In 2011, each of these model standards reached a score of $100 \%$ (figure 20).

Figure 20: EPHS 2- Diagnose and Investigate Health Problems and Hazards (2005/2011)


EPHS 3, to Inform, Educate, and Empower People about Health Issues, is comprised of three model standards: health education and promotion, health communication, and risk communication. EPHS 3 is one of two EPHS that showed a decline in activity from 2005 to 2011. Two of the three model standards were not assessed in 2005, health communication and risk communication; risk communication scored in the optimal range, but health communication showed only moderate activity. Health education and promotion showed a decline from 2005 to 2011. (figure 21).

Figure 21: EPHS 3- Inform/Educate/Empower People About Health Issues (2005/2011)


Constituency development and community partnerships are the two model standards within EPHS 4, to Mobilize Community Partnerships to Identify and Solve Health Problems. The most significant declines within the public health system performance were found in EPHS 4, with an overall score of $84 \%$ in 2005, dropping to $46 \%$ in 2011. EPHS 4 is also the only EPHS where Pinellas demonstrated only moderate activity overall (figure 22).

Figure 22: EPHS 4- Mobilize Community Partnerships to Identify/Solve Health Problems (2005/2011)


EPHS 5, to develop policies and plans that support individual and community health, includes measurement of government presence at the local level, public health policy development, community health improvement process, and planning for public health emergencies. Planning for public health emergencies was not assessed in 2005, strategic planning activity declined slightly, and other areas demonstrated increased activity from 2005 to 2011 (figure 23).

Figure 23: EPHS 5- Develop Policies/Plans that Support Individual \& Community Health (2005/2011)


EPHS 6, to enforce laws and regulations that protect health and ensure safety, is comprised of the following model standards: review and evaluate laws, regulations, and ordinances; involvement in the improvement of laws, regulations, and ordinances; and enforce laws, regulations, and ordinances which all had optimal activity in 2011 (figure 24).

Figure 24: EPHS 6- Enforce Laws and Regulations that Protect Health \& Ensure Safety (2005/2011)


EPHS 7, link people to needed personal health services and assure the provision of health care when otherwise unavailable, improved significantly between 2005 and 2011. The model standards, identification of populations with barriers to personal health services and assuring the linkage of people to personal health services, increased independently as well (figure 25).

Figure 25: EPHS 7- Link People to Needed Health Services/Assure the Provision of Care (2005/2011)


ESPH 8, to assure a competent public health workforce, is assessed through the model standards of workforce assessment, planning, and development; public health workforce standards; life-long learning through continuing education, training, and mentoring; and public health leadership development. Of these standards, workforce assessment was not assessed in 2005, training and mentoring, and the others showed increased activity in 2011 (figure 26).

Figure 26: EPHS 8- Assure a Competent Public Health Workforce (2005/2011)


Improvements were seen in EPHS 9 and EPHS 10. Within EPHS 9 (evaluate effectiveness/accessibility/quality of health services) the model standards evaluation of population-based health services, evaluation of personal health care services, and evaluation of the local public health system were assessed (figure 27). Of the three model standards, evaluation of population-based health services declined.

Figure 27: EPHS 9- Evaluate Effectiveness/Accessibility/Quality of Health Services (2005/2011)


EPHS 10, research for new insights and innovative solutions to health problems, is comprised of three model standards: fostering innovation, linkage with institutions of higher learning and/or research, and capacity to initiate or participate in research (figure 28). The overall score for EPHS 10 improved between 2005 and 2011, but the model standard of fostering innovation fell significantly between the two years.

Figure 28: EPHS 10- Research for New Insights/Innovative Solutions to Health Problems (2005/2011)


## What is occurring that affects the health of our community?

## What might occur that affects the health of our community?

## What specific threats are generated by these occurences?

## What specific opportunities are generated by these occurences?



The Forces of Change Assessment focuses on identifying forces such as trends, factors, events, and other impending changes that affect the context in which our community and local public health system operate. Forces are often social, economic, political, technological, environmental, scientific, legal, or ethical. Forces influence the health and quality of life of our community and local public health system.

## METHODOLOGY

The Pinellas Forces of Change Assessment was sponsored by the Pinellas County Health Department and conducted as part of the May 8, 2012 collaborative engagement described in detail in section 3 . The collaborative engagement was attended by nearly 70 people from more than 30 organizations who came together to assess forces of change that affect Pinellas County and the local public health system in each of the 10 Essential Public Health Services. Participants represented diverse sectors of the local public health system such as emergency medical services, neighborhood centers, community health centers, family and youth service providers, hospice, faith-based, mental health and substance abuse providers, research, education, hospitals, grass-root agencies, and many others.

Utilizing the 10 Essential Public Health Services as a framework, participants at the collaborative engagement were asked to work on teams to identify forces of change and threats and/or opportunities generated by these occurrences. Teams were strategically designed so that participants were assessing forces related to an essential public health service within their area of expertise. Each team was also assigned a partner team whose forces, threats, and opportunities they reviewed after completing their own. Following work within teams, each team shared their top three identified forces and related threat and opportunities within their assigned essential service area and discussed with the larger group of participants.

## RESULTS: COMMON FORCES

The forces, threats, and opportunities identified by teams are highlighted in table 3. The identified forces across all 10 Essential Public Health Services were grouped into five common types of forces: Social, Economic, Political, Technological, and Legal/Ethical.

Table 3: Forces, Threats, and Opportunities

| Forces | Threats Generated | Opportunities Created |
| :---: | :---: | :---: |
| SOCIAL: <br> - Aging Population <br> - Rise in chronic diseases <br> - Increase in addiction <br> - Increase in Hispanic population | - Aging workforce <br> - Increase in patients <br> - Insufficient providers to meet demand <br> - Rise in health care/insurance costs <br> - Language and health literacy barriers | - Diversify workforce <br> - Better collaboration with school system and local colleges/universities <br> - Enhanced employee wellness programs <br> - Training and education |
| ECONOMIC: <br> - Decreasing budgets <br> - Declining reimbursement <br> - Outcomes driven funding | - Sustainability of programs and services <br> - Defunding of community programs <br> - Larger un- and underinsured population <br> - Stigma of accessing services through public health systems <br> - Use of emergency rooms for primary care <br> - Increasing health care/insurance costs <br> - Decreased capacity to respond to emergencies <br> - Disproportionate impact on disadvantaged populations | - Impetus for collaboration and grassroots activism <br> - Shift to prevention focused care <br> - Fostering innovation <br> - More public-private partnership <br> - Integration of health and social services <br> - Increase in provider accountability <br> - Decreased duplication |
| POLITICAL: <br> - Pending elections <br> - Health Care Reform <br> - Medicaid Reform | - Misinformation among elected officials <br> - Cost of implementing reform <br> - Difficult to plan for changes and understand ramifications of reform <br> - Insufficient resources to meet increased demand <br> - Loss of public health funding <br> - Loss of personal choice in health care decisions | - Community engagement in health, including patients and local municipalities <br> - Increased advocacy <br> - Opportunity to educate elected officials and refocus priorities <br> - Increase in access to coverage <br> - Increase in access to care <br> - Increase in personal accountability <br> - Community needs assessment requirement for hospitals <br> - Incentive for data collection |

$\left.\begin{array}{l|ll} & & \begin{array}{c}\text { - Increased opportunities for } \\ \text { data and information exchange }\end{array} \\ \text { - Increase in provider }\end{array}\right)$

Several of the essential public health service teams can be seen working together to identify forces of change at the May 8, 2012 collaborative engagement in the pictures below.


How healthy are our residents?

What are the leading causes of death and illness?

How do the lifestyles and behaviors of our residents contribute to the community's health status?

How does the health of our community compare to that of year's past, other communities, and the state and nation?


## METHODOLOGY

The Community Health Status Assessment identifies priority community health and quality of life issues. The Pinellas Community Health Status Assessment was sponsored by the Pinellas County Health Department using a synthesized review of county-level data related to health, disease, and quality of life in Pinellas County. When appropriate, 3-year age-adjusted rolling rates were used to report health outcomes to provide greater accuracy.

## DEMOGRAPHIC \& POPULATION CHARACTERISTICS



* Population of 916,542 in 2010
* 8,289 births in 2011
* Average age of 46.3 in 2010
* Population is 82\% White, 10\% Black,and 8\% other races (2010)
* Population is $8 \%$ Hispanic (2010)


## RESIDENT POPULATION

According to the 2010 United States Census, there were 916,542 people living in Pinellas County in $2010^{\mathrm{xv}}$. This number is estimated to have reached 918,624 in 2011. Although the population of Florida has increased in the past decade, the county has experienced a minute drop in its number of residents - increasing steadily from 2000 until 2005, and experiencing a slight decline until 2011 when the population is projected to have increased (figure 29).

Figure 29: 2000-2011 Pinellas County Population Trends


Source:Florida CHARTS
In 2011, there were 8,289 births, or 9.0 births per 1,000 population within Pinellas County, the lowest birth rate for the county in the past decade. The county birth rate has decreased steadily in the past decade, from 10.2 births per 1,000 residents in 2006. The average life expectancy of Pinellas County residents is 77.5 years (2008-2010).

## Age

The average age of Pinellas County residents is 46.3 years ${ }^{\mathrm{xvi}}$. Compared to the state, Pinellas has a smaller proportion of both children under five years of age (4.6\% Pinellas; 5.6\% Florida) and youth under 18 years of age (17.5\% Pinellas; 21.0\% Florida) ${ }^{\text {xvii. }}$ However, the county's population of adults older than 65 years of age is greater than the state's, with $21.4 \%$ of Pinellas County residents belonging to this age group, compared to $17.6 \%$ of Florida residents (figure 30).

## Gender

In 2010, the Pinellas County population was 51.1\% female and $48.9 \%$ male Florida ${ }^{\text {xviii. }}$

## Race

The racial demographics of Pinellas County differ from those of the state. In 2010, Pinellas County had a greater percentage of White persons (82.1\% Pinellas; 78.5\% Florida) and a smaller percentage of Black persons (10.7\% Pinellas; 16.5\% Florida) compared to state figures ${ }^{\text {xix }}$. The county has a comparable percentage of American Indian or Native Alaskan persons ( $0.3 \%$ Pinellas; 0.5\% Florida), Asian persons (3.0\% Pinellas; 2.6\% Florida), Native Hawaiian and Other Pacific Islander persons ( $0.1 \%$ Pinellas and Florida), and persons reporting two or more races (2.2\% Pinellas and Florida) (figure 31). The racial demographics of Pinellas vary based on geography within the county (figures 32-34). Although from the 2000 census, the trends within these neighborhoods have likely not radically changed ${ }^{\text {xx }}$. Notable neighborhoods of racial divide include south Saint Petersburg, east Tarpon Springs, and north Greenwood; all have larger percentages of persons who are Black than other parts of the county (figure 32).

Figure 30: 2010 Pinellas County Population by Age


Source: U.S Census Bureau

Figure 31: 2010 Pinellas County Population by Race


Source: U.S. Census Bureau

Figure 32: Percentage of Total Population that is Black


Figure 33: Percentage of Total Population that is Hispanic

Figure 34: Percentage of Total Population that is White


Source, Figures 32 - 34: Pinellas Indicators, 2000 Census

## Ethnicity

The percentage of persons who identify as Hispanic or Latino in Pinellas County is lower than the state ( $8.3 \%$ Pinellas County; $22.9 \%$ Florida). This difference is further reflected in socioeconomic indicators, such as language ability and linguistic isolation. Although the number of people identifying as Hispanic or Latino in Pinellas County is low, the rate of Hispanic residents in particular neighborhoods and census tracks is high (figure 33). Such ethnically isolated neighborhoods provide greater need for cultural and linguistically appropriate approaches to health care.

## TOURISM AND VISITOR POPULATION

Tourism provides both an economic boost and an increase in the visitor population of the county. The climate of Pinellas County lends itself to year-round visitation. The St. Petersburg/Clearwater Area Convention and Visitors Bureau estimated 5,041,200 people visited Pinellas County in 2010, up from the 2009 figure of $4,991,410$. The expenditures by tourists in 2010 were estimated to be $\$ 3,189,281,900^{\times x i}$. The tourism industry also employs a significant percentage of the county population. Pinellas is estimated to have 1,981 restaurants, 71 hotels, and 249 motels within its limits ${ }^{\text {xxii }}$.


* $22.7 \%$ of families with children under 5 live below the poverty level
* $27 \%$ of households spend $>30 \%$ of their income on housing
* $16.7 \%$ of adults reported that their household had been authorized to receive WIC or Food Stamp benefits
* 88.1\% have a high school diploma and 27.1\% have a bachelor's degree or higher


## HOUSEHOLDS AND FAMILIES

There are 405,649 households in Pinellas County, with an average of 2.21 people per household ${ }^{\text {xxiii. }}$. Pinellas is considered an urban county, with $100 \%$ of its residents residing in urban conditions ${ }^{\text {xxiv }}$.

## NATIVITY AND LANGUAGE

While dual language ability provides a wealth of opportunity, linguistic isolation may lead to more difficult access to health care, social services, and employment. In 2010, approximately $11 \%$ of those living in Pinellas County were born in another country ${ }^{x \times v}$ and $12.8 \%$ of residents had a language other than English spoken at home. Additionally, in 2010, 3.1\% of Pinellas County residents (7.2\% Florida) were linguistically isolated, or had little to no English spoken by any household residents over the age of $14^{\times x v i}$. Although this percentage is lower than Florida's, it still places Pinellas County in the third quartile of linguistically isolated counties within the state. Similarly, linguistic isolation has increased in Pinellas since 2000, when such households consisted only $2.6 \%$ of the population (5.9\% Florida).

## INCOME AND EMPLOYMENT

In 2010, the median household income in Pinellas County was $\$ 45,258$, compared to $\$ 47,661$ within the state of Florida ${ }^{\text {xxvii }}$. The top industries of employment in 2010 included health care and social assistance, retail trade, and accommodation and food services (table 4). Unemployment has become an increasing concern for Pinellas in recent years. In 2011, the Pinellas County unemployment rate was the same as that of the state at $10.5 \%{ }^{\text {xxviii }}$, greater

Table 4: Top Industries of Employment

| Industry | Average <br> Employment |
| :--- | :---: |
| Health Care and Social Assistance | 66,504 |
| Retail Trade | 48,728 |
| Accommodation and Food Services | 36,826 |
| Manufacturing | 30,413 |
| Administrative and Waste Services | 29,718 |
| Source: Pinellas County 2011 Economic Development Report |  | than the national unemployment rate of $8.9 \%^{x x i x}$.

Although the Pinellas unemployment rate is the same as Florida, $12.1 \%$ of county residents are living below the Federal Poverty Level, compared to $13.8 \%$ within the state ${ }^{x x x}$. However, the percentage of people living in poverty has been on the rise in Pinellas, increasing from $10.1 \%$ in 2000 to $12.1 \%$ in 2010. These rising poverty trends can be seen in both individuals under 18 years and individuals over 65 years. The percentage of Pinellas families living in poverty has also grown from $6.7 \%$ in 2000 to $8.1 \%$ in 2010, compared to an increase from $9.0 \%$ to $9.9 \%$ within the state during the same time period. When considering families with children under five years of age, these statistics become even more staggering; in 2010, the percentage of Pinellas County families with children under five living in poverty (22.7\%) rose above state figures ( $22.5 \%$ ) for the first time. This occurred after an increase from $14.5 \%$ of families in 2000 to $22.7 \%$ in 2010 ( $17.4 \%$ to $22.5 \%$ Florida). Also of concern is the rising number of individuals who are low-income, or living at or below 200\% of the Federal Poverty Level, constituting 31\% of the Pinellas County population in 2010 ( $33.7 \%$ Florida). Similar to those living in poverty, these individuals often experience economic hardship - affecting both quality of life and access to health care. Selected socio-economic indicators can be seen below in figure 35.

Figure 35: 2010 Pinellas/Florida Selected Socio-Economic Indicators


Source: Florida CHARTS
Additionally, the 2010 Communities Putting Prevention to Work (CPPW) BRFSS survey found that $16.7 \%$ of adults reported that someone within their household had been authorized to receive WIC or Food Stamp benefits within the year preceding the survey ${ }^{x x x}$. The Florida CHARTS School-aged Child and Adolescent Profile reported that during the 2009-2010 academic year, $56.5 \%$ of students in elementary school and $49.6 \%$ of students in middle school were eligible for free or reduced lunch ${ }^{\times x x i i}$, slightly less than state rates ( $59 \%$ elementary and $54.4 \%$ middle). Eligibility for free or reduced lunch is also high for Kindergarten children and children in school readiness programs ${ }^{x x x i i i}$. Over half of children in Kindergarten in Pinellas County are eligible for free or reduced lunch (56.5\%); though this is less than the 59\% of children in the state, it still accounts for a large proportion of students. Of children in school readiness programs, $36.2 \%$ of children in the county and $57.8 \%$ of children in the state were eligible for free or reduced lunch.

## AFFORDABLE HOUSING AND HOMELESSNESS

Affordable housing provides stability for residents to rely on. According to the US Department of Housing and Urban Development (HUD), affordability is defined as paying no more than 30 percent of annual income on housing. Families who pay more than 30 percent are considered cost burdened and may have difficulty affording necessities such as food, clothing, transportation, and health care. The 2012 fair market rent for housing in the greater Pinellas area was $\$ 690$ for a studio apartment, $\$ 766$ for a one-bedroom, $\$ 926$ for a two-bedroom, $\$ 1,173$ for a three-bedroom, and $\$ 1,417$ for a four-bedroom unit ${ }^{x x x i v}$. The 2006-2010 median gross rent in Pinellas County was $\$ 904$, less than the state median gross rent of $\$ 957^{x \times x v}$.
However, a 2009 analysis indicated that $27 \%$ of households paid more than $30 \%$ of their income for housing and $11 \%$ paid more than $50 \%$ of their income for housing in Pinellas.

Having access to stable and safe housing can greatly affect a child's development. For every 1,000 infants in Pinellas, 17.4 were in foster care in $2009-2011$ ( 10.7 per 1,000 Florida) ${ }^{x x v i}$. Among children ages 1 to 5 years, 8.4 per 1,000 in Pinellas were in foster care ( 5.7 per 1,000 Florida). This same trend exists in older children within the countyxxvii. The 2011 rate of children ages 5 to 11 in foster care was 4.9 per 1,000 in Pinellas ( 3.5 per 1,000 Florida). The difference between county and state rates was even greater in the 12-17 age group, with 6.2 per 1,000 in Pinellas and 4.5 per 1,000 in Florida in foster care.

The most significant period of homelessness in Pinellas County exists between December and April each year ${ }^{x x v i i i i}$. Estimates from 2011 indicate that approximately 5,887 individuals were homeless in Pinellas County, of which 720 were unsheltered and 148 were unsheltered families. There were 2,110 children identified as homeless by the Pinellas County School System, the highest percentage from St. Petersburg (42.6\%). Among sheltered homeless, the majority were male (71.3\%), White (66.8\%) or Black (28.9\%), and non-Hispanic (93.5\%). Of unsheltered homeless, the majority were also male (78.6\%), White (66.4\%) or Black (26.0\%), and nonHispanic ( $95.8 \%$ ). The majority of unsheltered homeless reported staying in St. Petersburg (51.3\%) and Clearwater (22.7\%). Loss of a job, financial problems, or not enough income was the most frequently cited reason for loss of permanent housing (70.9\%). Similarly, no job or income ( $67.1 \%$ ) and inability to afford rent (49.3\%) were the most commonly reported reasons keeping individuals from getting permanent housing. Many reported chronic health problems (25.1\%), drug or alcohol abuse (29.8\%), mental illness (23.1\%), depression (32.8\%), and physical disability ( $31.7 \%$ ). Also, $28.0 \%$ reported needing medical care and being unable to receive it and $43.6 \%$ reported the hospital emergency room as their usual source of medical care ${ }^{\text {xxix }}$.

## TRANSPORTATION

Residents of Pinellas County rely on access to transportation for access to health care, employment, and food. The average travel time for residents to commute to work is 23 minutes in Pinellas ( 25.7 minutes Florida) ${ }^{\times 1}$. The Pinellas Suncoast Transit Authority (PSTA) provides transportation resources for those who do not have access to a personal vehicle. PSTA has over five hundred employees, 191 transit vehicles, 37 bus routes, and a 2011 ridership of
13.1 million people and 361,412 bikes boarded ${ }^{\mathrm{xli}}$. Although the system functions throughout the county, some neighborhoods still lack access ${ }^{\text {xlii. Poverty }}$ is also linked to a lack of access to transportation. PSTA, in conjunction with the Metropolitan Planning Organization, hosts a Transportation Disadvantaged Services program providing reduced cost fairs for the elderly, those who are disabled, and those who are low-income ${ }^{\text {xiii }}$. However, participant enrollment is based upon availability and an application process.

## EDUCATIONAL ATTAINMENT AND OPPORTUNITY

Access to education provides opportunity for professional and personal success. Pinellas County has a number of academic institutions, including four post-secondary institutions and 141 public elementary, middle, high, and specialty schools ${ }^{\text {xliv }}$. The Pinellas high school graduation rate was $81.1 \%$ in 2010 , slightly lower than the state rate of $81.2 \%$, but a significant increase from recent years ( $66.4 \%$ in 2001) ${ }^{\text {xiv }}$. In Pinellas, $88.1 \%$ of those ages 25 and older had a high school diploma or equivalent in 2010, slightly greater than the Florida rate of $85.3 \%{ }^{\mathrm{xlvi}}$. The percentage of those ages 25 and older who have achieved a bachelor's degree or higher is $27.1 \%$ in Pinellas, also slightly higher than the Florida rate of $25.9 \%$. One factor contributing to the learning environment within these schools is how safe students feel. The 2010 Florida CHARTS School-aged Child and Adolescent Profile reported that $75.1 \%$ of middle school students in Pinellas ( $76.3 \%$ Florida) and $78.5 \%$ of high school students in Pinellas ( $76.7 \%$ Florida) feel safe at school. Early learning opportunities may increase school readiness and social skills. According to the 2010 Florida CHARTS Pregnancy and Young Child Profile, Pinellas had double the rate of licensed child care centers and homes compared to the state ( 6 per 1,000 and 3 per 1,000 population respectively). The number of children in school readiness programs is higher as well, with an enrollment of 103.4 per 1,000 population in Pinellas Country and 82.6 per 1,000 population in Florida ${ }^{\text {xlvii }}$. Overall, the number of students ready for school at kindergarten entry was high in Pinellas County, at $91.1 \%^{\text {xviii }}$ (figure 36).

Figure 36: 2010 Pinellas/Florida Educational Attainment and Opportunity Indicators


Source: Florida CHARTS

## COMPARISON COUNTIES



Pinellas County is compared to three Florida counties throughout the Community Health Status Assessment:

1. Hillsborough
2. Orange
3. Palm Beach

Several counties throughout Florida have population and socioeconomic characteristics similar to those of Pinellas County, including Hillsborough, Orange, and Palm Beach. Throughout the discussion of Pinellas County health outcomes and indicators, these counties will be referenced as comparable to Pinellas (Table 5). While there is no county that exactly mirrors the demographics of Pinellas County, for comparison purposes, Palm Beach County is the most similar. Palm Beach is similar to Pinellas in terms of age, gender, and racial makeup, however, its population density and residents claiming Hispanic origin differ.

Table 5: 2011 Population Characteristics: Comparable Florida Counties

|  | Florida | Pinellas | Hillsborough | Orange | Palm Beach |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2011 Estimate | 19,057,542 | 917,398 | 1,267,775 | 1,169,107 | 1,335,187 |
| Persons per square mile | 350.6 | 3,347.5 | 1,204.9 | 1,268.5 | 670.2 |
| Under 5 years | 5.6\% | 4.6\% | 6.4\% | 6.4\% | 5.3\% |
| Under 18 years | 21.0\% | 17.5\% | 23.3\% | 23.4\% | 20.3\% |
| 65 years and older | 17.6\% | 21.4\% | 11.9\% | 9.9\% | 21.8\% |
| Female | 51.1\% | 52.0\% | 51.1\% | 50.7\% | 51.6\% |
| White | 78.5\% | 83.8\% | 75.8\% | 70.0\% | 77.4\% |
| Black | 16.5\% | 10.7\% | 17.6\% | 21.7\% | 17.8\% |
| American Indian or Alaskan Native | 0.5\% | 0.4\% | 0.5\% | 0.5\% | 0.6\% |
| Asian | 2.6\% | 3.1\% | 3.6\% | 5.2\% | 2.5\% |
| Native Hawaiian and Other Pacific Islander | 0.1\% | 0.1\% | 0.1\% | 0.2\% | 0.1\% |
| Two or More Races | 1.8\% | 1.8\% | 2.3\% | 2.3\% | 1.5\% |
| Hispanic or Latino origin | 22.9\% | 8.3\% | 25.1\% | 27.5\% | 19.6\% |

The socioeconomic characteristics in Pinellas, Hillsborough, Orange, and Palm Beach Counties are also similar in many regards (Table 6). Despite diversity in median income levels, both the percent of the population living in poverty and unemployment rates are similar among these counties. Among the counties being compared, Pinellas County has the smallest percentage of its population living in poverty and the fewest people over 25 without a high school diploma, but it has the lowest median income.

Table 6: Socioeconomic Characteristics Comparable Florida Counties

|  | Florida | Pinellas | Hillsborough | Orange | Palm Beach |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Median Income (2010) | $\$ 47,661$ | $\$ 45,258$ | $\$ 49,536$ | $\$ 50,138$ | $\$ 53,242$ |
| Residents Living in Poverty <br> (2010) | $13.8 \%$ | $12.1 \%$ | $14.2 \%$ | $13.4 \%$ | $12.2 \%$ |
| Unemployment Rate (2011) | $10.5 \%$ | $10.5 \%$ | $10.5 \%$ | $10.3 \%$ | $10.8 \%$ |
| Residents Linguistically <br> Isolated (2010) | $11.8 \%$ | $3.1 \%$ | $10.2 \%$ | $12.8 \%$ | $7.1 \%$ |
| Population over 25 without <br> a high school diploma or <br> equivalency (2010) | $14.7 \%$ | $11.9 \%$ | $14.2 \%$ | $13.1 \%$ | $14.7 \%$ |

Source: Florida CHARTS

## VULNERABLE COMMUNITIES



In 2012, Pinellas County identified five vulnerable communities in Pinellas whose populations are at risk for health disparities:

1. East Tarpon Springs
2. Lealman Corridor
3. North Greenwood
4. South St. Petersburg
5. Highpoint

While people have a personal responsibility for their health, there are often factors beyond their control that impact health such as where they live. In 2012, Pinellas County government identified five vulnerable communities in Pinellas whose populations are at risk for health disparities: East Tarpon Springs (1), North Greenwood (2), Highpoint (3), Lealman Corridor (4), and South St. Petersburg (5), as pictured (figure 37). Each of these communities has 16\% or more of its residents living in poverty, compared to $12.1 \%$ in Pinellas overall. The census tracts with the highest percentages of people living in poverty in Pinellas also fall within two of these zones: census tract 262 (North Greenwood; $51 \%$ living in poverty) and census tract 216 (South St. Petersburg; $48 \%$ living in poverty).

The Pinellas County Economic Impact of Poverty report found several key trends in these communities ${ }^{\text {xlix }}$ :

- Nearly double the county rate of verifiable child abuse
- Twice the average number of births to teenage mothers
- A $30 \%$ non-graduation rate for high school students
- Higher unemployment rates
- Higher likelihood to live in a low-access food area

Figure 37: Pinellas At Risk Communities by Census Tract


Source: Pinellas Indicators

These socio-economic disparities often perpetuate the cycle of poverty and greatly affect our community's physical and mental health.

## COUNTY HEALTH RANKINGS



Among Florida's 67 counties, Pinellas ranked as follows in 2012:

* $31^{\text {st }}$ in Health Outcomes
* $15^{\text {th }}$ in Health Factors

The County Health Rankings model uses selected indicators to rank how healthy a county is compared to other counties within the state it resides. These rankings may also predict how healthy a county may be in the futurel. Selected indicators are investigated through a model that explores health policies and programs; health factors; and health outcomes (figure 38).

Figure 38: County Health Rankings Model


Source: University of Wisconsin Population Health Institute. County Health
Rankings 2012. Accessible at www.countyhealthrankings.org

Of the 67 counties within the state of Florida, Pinellas County had a ranking of 31 in Health Outcomes in 2012. Health Outcomes is weighted equally for mortality and morbidity. Pinellas ranked 31 in mortality which includes a premature death indicator. Pinellas ranked 29 in morbidity which includes indicators for poor or fair health, poor physical health days, poor mental health days, and low birth weight.

Pinellas County ranked 15 out of 67 counties in Health Factors in 2012, comprised of indicators for health behaviors, clinical care, social and economic factors, and physical environment. Pinellas County's lowest ranking of these indicators was social and economic factors (28), which is weighted highest among the health factors at $40 \%$. Pinellas County ranked 16 in health behaviors (weighted 30\%), 10 in clinical care (weighted $20 \%$ ), and 11 in physical environment indicators (weighted 10\%).

Although the factors influencing health have improved since the County Health Rankings began in 2010, the county has not yet seen improvements in Health Outcomes (Table 7). Such improvements will likely take time and continued improvement in the county's Health Factors rankings.

Table 7: 2010-2012 Pinellas County Health Rankings

|  | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ |  |
| ---: | :---: | :---: | :---: | :---: |
| Health Outcomes | $\mathbf{2 9}$ | $\mathbf{2 8}$ | $\mathbf{3 1}$ |  |
| Morbidity | 28 | 26 | 29 |  |
| Mortality | 26 | 30 | 31 |  |
| Health Factors | $\mathbf{2 4}$ | $\mathbf{2 0}$ | $\mathbf{1 5}$ |  |
| Health Behaviors | 23 | 20 | 16 |  |
| Clinical Care | 13 | 3 | 10 |  |
| Social and Economic Factors | 40 | 35 | 28 |  |
| Physical Environment | 19 | 9 | 11 |  |
| *There are 67 Florida counties | Source: County Health Rankings |  |  |  |

## ACCESS TO CARE



## In 2010:

* $16.1 \%$ of adults were unable to access a health care provider in the past year due to cost
* 74\% of adults reported having health insurance coverage
* $90 \%$ of children had health insurance coverage

Access to quality and affordable health care is essential for a healthy population. Such access may include health education, preventative care, and treatment. Access to health care may also affect an individual's perceived health status. The 2010 BRFSS found that $16.3 \%$ of Pinellas County adults rated their health status as either fair or poor, compared to $17.1 \%$ of adults within the state ${ }^{\text {li }}$.

## AVAILABILITY OF HEALTH CARE PROVIDERS AND RESOURCES

The rate of both licensed physicians (Table 8) and hospital beds (27.9 per 100,000 population) is significantly greater In Pinellas than the state overallii. However, the number of licensed dentists is lower than the state rate, 61.3 per 100,000 in Pinellas and 63.0 per 100,000 in Florida. Additionally, in 2010, only $88.7 \%$ of residents reported having a personal doctor ${ }^{\text {liii }}$.

Table 8: Licensed Physicians per 100,000 Population

| Type of Physician | National Median | Pinellas |
| :--- | :---: | :---: |
| Primary Care | 54.6 | 101.8 |
| General/Family Practice | 33.8 | 46.5 |
| Internal Medicine | 11.1 | 36.1 |
| Pediatricians | 4.3 | 19.2 |
| Obstetricians/Gynecologists | 3.4 | 10.1 |
| General Surgeons | 4.9 | 8.2 |
| Psychiatrists | 0.0 | 7.7 |
| Specialists | 31.7 | 183.2 |
|  |  | Source: HRSA |

Although it may appear that Pinellas County has adequate health care provider coverage, health professional shortage areas and medically underserved populations do exist throughout the county ${ }^{\text {liv }}$. Health Professional Shortage Areas have a shortage of primary medical care, dental, and/or mental health providers. In Pinellas
County there are 12 populations groups that classify as experiencing a health professional shortage in both primary care and dental providers (figure 39). The population groups include low-income communities in Clearwater, St. Petersburg, Pinellas Park, Tarpon Springs, and the Bayview service area.

Pinellas County also has five medically underserved populations, or groups of people who face economic, cultural, or linguistic barriers to health care (figure 40). These medically underserved populations mirror those that have a shortage of health care professionals and include: St. Petersburg service area, central Clearwater, Tarpon Springs, Bayview, and the Largo Service area. These areas also mirror the five at risk communities identified by Pinellas County Health and Human Services.

Figure 39: 2011 Pinellas County Health Professional Shortage Areas


Figure 40: 2010 Pinellas County Medically Underserved Populations


Source (Figures 39-40): HRSA (Data Warehouse)

## HEALTH INSURANCE COVERAGE

Health insurance coverage aids in providing reasonably priced health care to children and adults throughout the county. According to the American Community Survey, in 2010, 10\% of children in Pinellas County were uninsured (figure 41) ${ }^{\text {lv }}$. In 2010, children who are Black were more likely to have health insurance coverage (94\%) than children who are White (89.4\%). These numbers of uninsured children are true despite a number of income-based insurance options for children within Florida. Health insurance services available to low-income children in Florida, based upon age and family income, include:

- MediKids is available for children ages 1 through 4
- Healthy Kids is available for ages 5 through 18
- Children's Medical Services Network is available birth through 18 to children who have special health care needs
- Medicaid, which is available birth through age 18

As of February $1^{\text {st }}, 2012$, Florida KidCare enrollment reached 8,961 in Pinellas County ${ }^{\text {lvi }}$. This included 6,838 in the Healthy Kids Program, 1,156 in the MediKids program, and 967 in Children's Medical Services.

The 2010 American Community Survey found that $74.0 \%$ of adults within Pinellas Country had health insurance. Adults who are White were more likely than those who are Black to have health insurance (figure 41). Further, only half of adults who identified as being Hispanic had health insurance. Children are more likely to be insured than adults, likely due to social assistance programs provided to assist with health care in children (figure 42). The 2010 CPPW BRFSS survey found that $16.1 \%$ of adults needed to see a health care provider in the previous year, but did not because of associated costs ${ }^{\text {lvii }}$.

Figure 41: 2010 Pinellas County Adults with Health Insurance by Race/Ethnicity


Source: American Community Survey

Figure 42: 2010 Pinellas County Children with Health Insurance by Race/Ethncity


Source: American Community Survey


* While the number of doctors in Pinellas County exceeds the state rate, the number of dentists is lower
* Pinellas County adults were more likely to have their teeth cleaned in the past year than residents of comparable counties

Cost, knowledge, and access to providers may affect a population's oral health. The 2007 BRFSS survey found that $17.3 \%$ of Pinellas adults could not see a dentist in the year preceding the survey due to costs ${ }^{\text {lviii. }}$. This figure is less than adults within the state (19.2\%) and similar to comparison counties, including Hillsborough (18.5\%), Orange, and Palm Beach (16.9\%). The 2010 BRFSS survey addressed more specific dental concerns. The percentage of Pinellas County adults who had a permanent tooth removed due to gum disease or tooth decay was similar to the state rate, $52.6 \%$ and $53.0 \%$, respectively. Pinellas County had more adults who had their teeth cleaned in the past year and more adults who visited a dental clinic in the past year than the state and each of the selected comparison counties (figure 43).

Figure 43: 2007 or 2010 County/State Comparison for Adult Oral Health


Source: BRFSS (2007; 2010)

## LEADING CAUSES OF DEATH



* In 2011, the leading causes of death were chronic diseaes
* Cancer and heart disease accounted for nearly half of all deaths in 2011

In 2011, 11,107 people died in Pinellas County ${ }^{\text {lix }}$, consistent with deaths in recent years, and decreasing only slightly from 2010 (figure 44).

Figure 44: 2002-2011 Pinellas County Death Counts


Source: Florida CHARTS

Cancer and heart disease are the leading causes of death in the county, considered the cause of death for $22.8 \%$ and $22.7 \%$ of those who died in 2011 (figure $45^{1 \times}$ ). In 2011, the top ten causes of death included:

1. Cancer (22.8\%)
2. Heart disease (22.7\%)
3. Chronic lower respiratory disease (CLRD) (5.7\%)
4. Unintentional injuries (5.1\%)
5. Stroke (3.7\%)
6. Diabetes mellitus (3\%)
7. Alzheimer's disease (2.5\%)
8. Chronic liver disease (1.6\%)
9. Suicide (1.5\%)
10. Pneumonia/influenza (1.3\%)

Figure 45: 2011 Pinellas County Leading Causes of Death


## CHRONIC DISEASES



* Nutrition, exercise, and a strategically designed environment play an important role in chronic disease prevention
* Although deaths due to many chronic diseases have been declining, disparities in death rates still exist between races and ethnicities


## COMMUNITIES PUTTING PREVENTION TO WORK AND STEPS

Communities, including Pinellas County, are increasingly making an effort to provide residents with an environment and policies that enable them to make healthier choices. From 2003 to 2008, the Steps to Healthier Florida, Pinellas grant targeted obesity, asthma, and diabetes by addressing physical activity, nutrition, and tobacco cessation in Pinellas County ${ }^{\text {lxi }}$. More recently, the Pinellas Communities Putting Prevention to Work (CPPW) grant focused on policy development and environmental change to influence healthy behaviors, such as access to nutrition and physical activity. The 2010 CPPW BRFSS addressed many of these behavioral health indicators in detail.

## OBESITY, NUTRITION, AND BUILT ENVIRONMENT

The 2010 CPPW BRFSS collected data specific to adult activity levels in the month preceding the survey ${ }^{\text {kxii }}$. This survey found that, in the 30 days prior to the survey, $25.5 \%$ of adults were sedentary - participating in no leisure time physical activity ${ }^{\text {lxiii. }}$. Additionally, only $32.7 \%$ of adults were highly active in the 30 days preceding the survey, $20.8 \%$ active, and $19.2 \%$ insufficiently active.

Middle school students, both in the county and the state, had greater physical activity levels than high school students ${ }^{\text {lxiv }}$. In 2012, 28.1\% of Pinellas middle school students did not receive sufficient vigorous physical activity ( $29.9 \%$ in FL) ${ }^{1 \times V}$. Among high school students, $37.1 \%$ in Pinellas and $37.3 \%$ in Florida were without sufficient vigorous physical activity (figure 46).

Figure 46: 2012 Pinellas/Florida Students Not Receiving Sufficient Vigorous Physical Activity

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| $45 \%$ | 5 |  |  |  |
| 40\% |  |  |  |  |
| 35\% |  |  |  |  |
| 25\% $\longrightarrow$ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 20\% |  |  |  |  |
| 15\% |  |  |  |  |
| 10\% |  |  |  |  |
| $\begin{array}{r} 10 \% \\ 5 \% \end{array}$ |  |  |  |  |
|  | 2006 | 2008 | 2010 | 2012 |
| $\simeq$ Pin Middle | 35.1\% | 31.0\% | 27.7\% | 28.1\% |
| - FL Middle | 30.9\% | 31.6\% | 30.7\% | 29.9\% |
| $\simeq$ Pin High | 43.9\% | 39.0\% | 39.7\% | 37.1\% |
| $\sim$ FL High | 40.7\% | 40.6\% | 39.1\% | 37.3\% |

Source: Florida CHARTS

Opportunity for physical activity can influence a community's health. In 2010, over half (52.4\%) of adults did not use a local path or trail for walking, running, or biking in the previous year and $57.5 \%$ did not use a local park, community center, or recreational facility in the week preceding the survey. Moreover, many felt that they could not access such facilities at all There were $32.7 \%$ of adults without access to public recreation facilities, 74\% residing in neighborhoods that did not have schools open for public recreation, and 2.6\% who reported that the public recreation facilities within their community were not safe. However, a recent analysis from the Communities Putting Prevention to Work grant found that the majority of Pinellas residents live within 0.5 miles of a park with either a trail or a playground. Areas of Pinellas with more limited access to parks correspond to the areas identified as vulnerable communities (figure 47). This data is corroborated by 2010 Department of Health data that shows over half ( $50.6 \%$ ) of the population lives within 0.5 miles of park and $20.4 \%$ lives within 0.5 miles of an off street trail system ${ }^{\text {lxvi }}$.

The perceived ease at which one can purchase healthy foods may influence a person's efforts to obtain them. In the 2010 CPPW BRFSS, over one-quarter of adults (25.5\%) disagreed or strongly disagreed that it was easy to purchase affordable fresh fruits and vegetables in their neighborhood ${ }^{\text {lviii }}$. Similarly, 22.3\% disagreed or strongly disagreed that is was easy to purchase healthy foods in their neighborhood, including whole grain, low fat options, fruits, and vegetables. However, 79.3\% noticed an increase in accessibility to more affordable healthy foods near their home and $81.9 \%$ noticed increased accessibility to good quality healthy foods near their home in the past year. The majority of adults within the county, $96.2 \%$, indicated living within five miles or less from the grocery store where they did most of their family's grocery shopping; and, only $7.3 \%$ indicated the location where they usually shopped for groceries did not have all of the fresh produce, dairy, or meat they desired. Alternative sources for grocery shopping, especially farmers markets, are less available in Pinellas County. Over half, $54.6 \%$, of adults did not have access to a farmers market within

Figure 48: 2010 Pinellas County CPPW BRFSS Selected Nutrition Indicators
 their neighborhood; yet 93.9\% of those who did not have access indicated that they would purchase fresh produce at a farmers market. Department of Health data corroborates these findings, indicating that $96.2 \%$ of adults in Pinellas County live five miles or less from the grocery store where they did most of their families shopping (regardless of food quality). Similarly, 41.0\% of Pinellas County residents live within a half mile of a fast food restaurant and $43.23 \%$ live within a half mile of a healthy food source (figure 48).

Approximately one-quarter of residents ate at least five servings of fruits of vegetables a day ( $26.3 \%$ Pinellas County; $26.2 \%$ Florida) ${ }^{\text {Ixviii }}$. The 2010 CPPW BRFSS found that $60.1 \%$ of adults did not meet the daily recommendations for fruit or vegetable consumption in the 30 days prior to the survey ${ }^{\text {Ixix }}$. Similarly, $24.1 \%$ of adults drank less than two eight-ounce servings of water per day in the week preceding the survey; yet, $88.7 \%$ drank one or more servings of sugarsweetened drinks per day in the 30 days preceding the survey ${ }^{1 \times x}$.

Community wellness and workplace wellness activities may also influence a community's health. In Pinellas County, $55.7 \%$ of adults indicated that they had not heard or seen anything related to healthy eating or active living; yet at least $92 \%$ of adults rated having access to healthy eating, community programs to prevent obesity, and community programs to create places to be active as important ( $94.9 \%, 92.6 \%$, and $96.3 \%$ respectively). Additionally, $70.6 \%$ of women did not have a room where they could breastfeed or express milk for their baby in the workplace, despite national laws requiring moderately sized and large employers to provide one.

2010 BRFSS data indicates that $41.6 \%$ of adults in the county were overweight and $24 \%$ were obese ${ }^{\operatorname{lxx} \text {. These findings are further corroborated by the CPPW BRFSS, which found similar }}$ results $-36.5 \%$ of adults being overweight and $24.6 \%$ being obese. Together, $65.6 \%$ of adults were either overweight or obese in the county ${ }^{\text {Ixxii }}$. In Florida $37.8 \%$ of people were overweight and $27.2 \%$ obese ${ }^{\text {Ixxiii }}$.

Comparatively, United States statistics show that $36.3 \%$ of adults were overweight and $27.6 \%$ were obese ${ }^{\text {Ixxiv }}$. Although Pinellas County has fewer obese adults than the nation and the state, the combined number of adults who were either obese or overweight was higher than both the nation and the state (figure 49).

Figure 49: 2010 Pinellas/Florida/U.S. Obese and Overweight Adults


The percentage of students with a BMI at or above the $95^{\text {th }}$ percentile was $13 \%$ of middle school students in the county and $11.7 \%$ in the state in $2010^{1 \times x v}$. This number dropped considerably in 2012, when $6.9 \%$ of middle school students in the county and $11.1 \%$ in the state were at or above the $95^{\text {th }}$ percentile BMI. Among high school students, $10.2 \%$ in the county and $11.5 \%$ in the state had a BMI at or above the $95^{\text {th }}$ percentile in 2010. In 2012, these rates were $10.3 \%$ within the county and $14.3 \%$ within the state.

## PHYSICAL ENVIRONMENT

An unclean or unsafe physical environment may affect a person's ability to participate in outdoor activities and exercise. The 2007 BRFSS survey collected data on adults who had changed or reduced their outdoor activity due to poor air quality ${ }^{1 \times x v i}$. Throughout the state, $19.2 \%$ of adults indicated that they had changed or reduced outdoor activity due to poor air quality; in Pinellas County this number reached $25.1 \%$. This percentage is higher in Pinellas County than comparable counties within the state, including Hillsborough (24.7\%) and Orange (20.2\%). The Pinellas County 2011 Air Quality Statistics Report indicated that none of the air quality indicators were above the air quality standard for $2011^{1 \times x v i i}$. Measurable indicators include: CO 1-hr $2^{\text {nd }}$ Max, CO 8-hr $2^{\text {nd }}$ Max, NO2 $98^{\text {th }}$ percentile, O3 1-hr $2^{\text {nd }}$ Max, O3 8-hr $4^{\text {th }}$ Max, SO2 $99^{\text {th }}$ percentile, SO2 24-hr $2^{\text {nd }}$ Max, PM2.5 $98^{\text {th }}$ percentile, PM2.5 Wtd. Mean, and PM10 24-hr $2^{\text {nd }}$ Max.

The coastal counties in the state monitor the quality of the state beaches. In Pinellas County, sampling locations exist throughout the county, including: Honeymoon Island, Sand Key, Indian Rocks Beach, Madeira Beach, Treasure Island, Pass-A-Grille, Fort DeSoto North Beach, Courtney Campbell Causeway, Redington Shores, and Sunset Beach. These tests measure the fecal coliform and enterococcus in the water, which may have adverse health effects on the population. The results are posted each sampling period and, if an advisory warning is issued, the results are shared with the media.

## TOBACCO USE

Tobacco use is strongly correlated with increased chronic disease prevalence and death. In Pinellas County, 19.3 \% of the adult population smoked tobacco in 2010, higher than the state rate of $17.1 \%{ }^{\text {lxxviii }}$. Moreover, this is much higher than the Healthy People 2020 goal of not more than $12 \%$ of adults smoking tobacco by 2020. The CPPW BRFSS survey also investigated the behaviors of smokers, including: smoking frequency, smoking locations, and knowledge of Quitline services ${ }^{\text {Ixxix }}$. According to this survey, $14.8 \%$ of adults allowed smoking inside of their home, and $22.6 \%$ allowed smoking inside of their vehicle. This survey also found that $52.1 \%$ of Pinellas County adults had smoked at least 100 cigarettes in their lifetime, $30.6 \%$ were former smokers, and $48 \%$ had never smoked. A total of $87 \%$ of those who indicated they were former smokers had been smoke free for one or more years. Quitline is a state service providing smoking cessation services to Florida residents. The Pinellas County CPPW BRFSS found that only $40.4 \%$ of adults were aware of any telephone Quitline services available to aid in smoking cessation ${ }^{\mathrm{lxxx}}$. Selected tobacco indicators can be seen in figure 50 that follows. Additional information regarding tobacco use in youth can be found under Behavioral and Mental Health.

Figure 50: 2010 Pinellas County CPPW BRFSS Selected Smoking Indicators


Source: 2010 CPPW BRFSS

## HEART DISEASE

Heart disease is among the leading causes of death, both nationally and within Pinellas County. Several factors may influence an individual's risk for heart disease, including blood pressure and cholesterol. In 2010, 36.6\% of Pinellas County adults were diagnosed with hypertension ${ }^{I \times x \times i}$. This rate is higher than in Florida, where 34.3\% of adults have diagnosed hypertension. Similarly, $47.9 \%$ of Pinellas County

Table 9: 2010 Pinellas County BRFSS Adult Screening Indicators Related to Heart Disease

|  | Pinellas | Florida |
| :--- | :---: | :---: |
| Self-Reported Hypertension Diagnosis | $36.6 \%$ | $34.3 \%$ |
| Self-Reported High Blood Cholesterol <br> Diagnosis | $47.9 \%$ | $38.6 \%$ |
| Have Had Cholesterol Checked | $79.5 \%$ | $73.3 \%$ |
| Source: 2010 BRFSS |  |  | adults reported having been diagnosed with high blood cholesterol, compared to $38.6 \%$ in the state. The Healthy People 2020 goal is for only $13.5 \%$ of the population to have a diagnosis of high blood cholesterol. The 2010 BRFSS found that, within the past five years, $79.5 \%$ of adults within the county, and $73.3 \%$ of adults within the state had their cholesterol checked. This higher rate of cholesterol screening may account for higher rates of identified high cholesterol in Pinellas. Personal knowledge of cholesterol and blood pressure can help influence important behavior changes for those at risk of heart disease and stroke.

The 2009-2011 age-adjusted heart disease death rate in Pinellas County (153.4 per 100,000 population) was similar to that of the state, and less than both Hillsborough and Orange counties (figure 51). This rate has declined in Pinellas in the past decade, however, at a much slower rate in persons who are Black compared to both persons who are White and the state rate for age-adjusted heart disease deaths. While this racial disparity is narrowing, the rate is still highest in persons who are Black in Pinellas County (figure 52). Age-adjusted death rates for heart disease have been collected by ethnicity since 2004. In Pinellas County, age-adjusted deaths due to heart disease were lower in persons identifying as Hispanic than in either racial stratification (figure 52).

Figure 51: 2009-2011 County Comparison for Heart Disease Age-Adjusted Death Rates


Source: Florida CHARTS
Figure 52: 2000-2011 Pinellas Age-Adjusted Heart Disease Death Rates by Race/Ethnicity

*Hispanic death rates unavailable 2000-2003
Source: Florida CHARTS

In 2009-2011, 340.9 people per 100,000 population in Pinellas County were hospitalized for coronary heart disease ${ }^{\mathrm{Ixxxii}}$. In the state, this number is greater at 375.3 per 100,000 population. Although the county rate of hospitalizations due to coronary heart disease is lower than the state rate, the same is not true for age-adjusted death rates. The Pinellas 2009-2011 age-adjusted coronary heart disease death rate was 111.4 per 100,000 population (105.8 per 100,000 population Florida). The Healthy People 2020 goal for coronary heart disease death rates is not more than 100.8 per 100,000 population. Although still higher than the Healthy People 2020 goal, the age-adjusted death rates for coronary heart disease have declined since 2000 (figure 53). Age-adjusted congestive heart failure hospitalization and death rates were lower in Pinellas County than the state. The 2009-2011 age-adjusted congested heart failure hospitalization rate was 86.4 per 100,000 population in Pinellas ( 131.5 per 100,000 population Florida). The 2009-2011 age-adjusted heart failure death rate was 4.6 per 100,000 in Pinellas (8.4 per 100,000 population Florida).

Figure 53: 2000-2010 Pinellas/Florida/HP 2020 Coronary Heart Disease AgeAdjusted Death Rates


Source: Florida CHARTS

## Stroke

A stroke is caused when blood supply is blocked to the brain ${ }^{1 \times x x i i i}$. Pinellas County's stroke age-adjusted death rate is lower than the rate in the state, Healthy People 2020 goal, and comparable counties within the state (figure 54; figure 55).

Both the state and county rates for age-adjusted deaths due to stroke meet the Healthy People 2020 indicator, 33.8 per 100,000 population (figure 54) ${ }^{\text {Ixxxiv }}$. The 2009-2011 ageadjusted death rate for stroke in Pinellas County was 26.2 per 100,000 population, and in the state 31.4 per 100,000 population. Hospitalization for the same condition was at a rate of 248.8 per 100,000 county population and 266.6 per 100,000 state population. Similarly, the age-adjusted death rates for stroke have decreased since 2000 (figure 55).

Figure 54: 2009-2011 County Comparison Stroke AgeAdjusted Death Rates


Source: Florida CHARTS

Figure 55: 2000-2011 Pinellas/Florida/HP 2020 Stroke Age-Adjusted Death Rates


Source: Florida CHARTS

The overall rate of deaths due to stroke is low within Pinellas County; however, In 2010, the death rate of persons who are Black was almost double of that of persons who are White (42.6 per and 25.0 per 100,000 population, respectively) (figure 56). Stroke deaths in persons who are Hispanic were less frequent than in persons who are White and persons who are Black.

Figure 56: 2000-2011 Pinellas Stroke Age-Adjusted Death Rates by Race/Ethnicity

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{ll} 8 & 80 \\ \hline & 70 \end{array}$ |  |  | - | $\square$ | - | - |  |  |  |  |
| $\begin{array}{ll} 0 . & 10 \\ 0-1 \end{array}$ |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} \text { İ } & 50 \\ \text { むे } & 40 \end{array}$ |  |  |  |  |  |  |  | - |  | $\checkmark$ |
| $\stackrel{30}{+}$ |  |  |  |  | 2 | - |  | $\cdots$ | $\cdots$ |  |
| $\begin{array}{ll} \circledast & 20 \\ \square & 10 \end{array}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 |
| -White | 43.0 | 40.6 | 37.1 | 35.0 | 33.2 | 31.7 | 29.6 | 27.3 | 26.3 | 25.0 |
| --Black | 82.1 | 83.3 | 74.7 | 70.0 | 74.4 | 69.0 | 63.7 | 51.5 | 48.7 | 42.6 |
| - Hispanic* |  |  |  |  | 29.7 | 25.6 | 24.8 | 24.8 | 22.8 | 19.5 |
| $\cdots$ Pinellas (All) | 44.7 | 42.4 | 38.9 | 36.8 | 35.4 | 33.7 | 31.4 | 28.6 | 27.5 | 26.2 |

*Hispanic death rates unavailable 2000-2003
Source: Florida CHARTS

## DIABETES

Complications due to untreated diabetes can include blindness, amputation, and kidney disease ${ }^{\mathrm{lxxxv}}$. The 20092011 age-adjusted hospitalization rates for diabetic related complications were 1,973.7 per 100,000 population within Pinellas County and 2,260.3 per 100,000 population within the state.

Figure 57: 2009-2011 County Comparison Diabetes Age-Adjusted Death Rates


Source: Florida CHARTS

That same report estimated that, in 2010, 12.4\% of adults within the county and $10.4 \%$ of adults within the state were diagnosed diabetics. The 2009-2011 rate of childhood diabetic related hospitalizations was higher in children 12 - 18 years (116.6 cases per 100,000 population Pinellas; 123.5 cases per 100,000 population Florida) compared to children 5 - 11 years ( 37.5 cases per 100,000 population Pinellas; 45.2 per 100,000 population Florida) ${ }^{1 \times x \times v i}$.

The Healthy People 2020 goal for deaths due to diabetes complications is 65.8 per 100,000 population ${ }^{\text {Ixxxvii }}$. In 2009-2011, both the county and the state meet this goal, with 20.5 and 19.5 cases per 100,000 population. Pinellas County falls within the median range for diabetes
age-adjusted death rates compared to similar counties (figure 57). However, a racial disparity exists in diabetic related deaths; in 2009-2011, there were 18.9 deaths per 100,000 persons who are White and 50.4 deaths per 100,000 in persons who are Black (figure 58). Black residents also experienced an increase in age-adjusted diabetic death rates in 2009-2011.

Figure 58: 2000-2011 Pinellas County Age-Adjusted Diabetes Death Rates by Race/Ethnicity


* Hispanic death rates unavailable for 2000-2003

Source: Florida CHARTS

## CHRONIC LOWER RESPIRATORY DISEASES

Chronic lower respiratory disease (CLRD) is classified as chronic bronchitis, emphysema, asthma, and other chronic lower respiratory diseases. Compared to demographically similar counties, Pinellas County's rate is similar for chronic lower respiratory disease age-adjusted deaths

Figure 59: 2009-2011 County Comparison Chronic Lower Respiratory Disease Age-Adjusted Death Rates


Source: Florida CHARTS
(figure 59). In 2009-2011, the CLRD age-adjusted hospitalization rate for the county was 367.3 per 100,000 population; this rate reached 370.8 per 100,000 population within the state ${ }^{\text {Ixxxviii. }}$. The 2009-2011 CLRD age-adjusted death rate within the county was 40.0 per 100,000 population. Within Florida, there were 38.6 deaths per 100,000 population.

Asthma is difficulty in breathing caused by a swollen airway ${ }^{1 \times x x i x}$. Common symptoms include shortness of breath, wheezing, and coughing. Asthma can be triggered by allergens, exercise, tobacco, or a number of other environmental factors. Pinellas County's asthma rates stayed below those of the state for children ages 5 to 11, but began to supersede the state rates in the 12 to 18 age group ${ }^{x c}$. In children ages 1 to 5 , there were 824.9 asthma hospitalizations per 100,000 population within Pinellas County (Florida, 940.3 per 100,000 population) ${ }^{x c i}$. In
children 5 to 11, this rate was 425 per 100,000 population (Florida, 451.4 per 100,000 population) ${ }^{\text {xcii }}$. In children 12 to 18 , this rate was 453.8 per 100,000 population (Florida, 345.7 per 100,000 population). The 2009-2011 overall rates for asthma and asthma-related hospitalization were also higher in Pinellas County, reaching 783.9 hospitalizations per 100,000 population in the county compared to 775.1 hospitalizations per 100,000 population in the
 population had asthma ${ }^{\text {xciv }}$ (figure 60). Asthma hospitalizations, regardless of age, increased in both the county and state from 2006 to 2011.

Figure 60: 2009-2011 Pinellas County Asthma Hospitalization Rates


Source: Florida CHARTS

## CANCER

In 2010, Pinellas County had a greater age-adjusted cancer death rate per 100,000 population than the state, but a similar death rate compared to demographically similar counties (figure 61). However, as with many chronic diseases, a racial disparity exists in cancerrelated deaths (figure 62).

Figure 61: 2009-2011 County Comparison Cancer (All Types) Age-Adjusted Death Rates


Source: Florida CHARTS Although the gap has narrowed, persons who are Black are still more likely than their White counterparts to die of cancer. Such racial disparities can be seen throughout various types of cancer, described in further detail below, which may reflect a lack of access to treatment, early preventative care, and cancer screenings.

Lung cancer causes the greatest number of cancer deaths in Pinellas County, followed by breast cancer and prostate cancer (figure 63) ${ }^{\mathrm{xcv}}$. While rates of several cancers types have not varied considerably since 2000, others have experienced noticeable trends in the age-adjusted death rate associated with the disease. Figure 64 displays the 2000-2011 trends in these associated age-adjusted death rates. Several cancers noticed an increase in death rates, including: breast cancer, melanoma, cervical cancer and, recently, lung cancer.

Figure 62: 2000-2011 Pinellas County Cancer Age-Adjusted Death Rates by Race/Ethnicity

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| 8250 |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} 8 & 250 \\ 8 & 200 \end{array}$ |  |  | - |  |  |  |  |  |  |  |
|  |  | $\cdots$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \tilde{y} \\ & \hline \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 |
| $\sim$ White | 183.4 | 181.5 | 180.4 | 180.5 | 177.9 | 173.1 | 167.4 | 168.4 | 166.9 | 168.0 |
| --Black | 213.0 | 215.1 | 229.0 | 241.2 | 237.8 | 215.5 | 212.6 | 221.6 | 213.9 | 195.6 |
| $\ldots$ Hispanic* |  |  |  |  | 118.2 | 112.3 | 113.6 | 101.9 | 103.3 | 86.7 |
| $\ldots$ Pinellas (All) | 183.1 | 181.0 | 180.7 | 181.7 | 179.1 | 173.4 | 167.7 | 169.0 | 167.6 | 167.8 |

* Hispanic death rates unavailable for 2000-2003

Source: Florida CHARTS

Figure 63: 2009-2011 Pinellas/Florida/HP 2020 Cancer Age-Adjusted Death Rates by Type


Source: Florida CHARTS
Figure 64: 2000-2011 Pinellas County Age-Adjusted Cancer Death Rates by Type


## Colorectal Cancer

The 2007-2009 Pinellas rate of colorectal cancer ( 39.1 per 100,000 population) was less than the state rate ( 41.3 per 100,000 population $)^{x c v i}$. The county ageadjusted death rate for colorectal cancer, 14.0 deaths per 100,000 population, was also less than the state rate, 14.3 deaths per 100,000 population. Both the county and state rates have met the Healthy People 2020 goal of not more than 14.5 deaths per 100,000 population. Preventative and early

Figure 65: 2010 Pinellas/Florida Colorectal Cancer Screening


Source: Florida CHARTS detection measures for colorectal cancer include blood stool tests, sigmoidoscopy, and colonoscopy. The 2010 BRFSS survey reported $54.1 \%$ of Pinellas adults age 50 or older had received a sigmoidoscopy or colonoscopy in the past five years (Florida, $56.4 \%)^{\text {xcvii }}$. Additionally, $18.8 \%$ of Pinellas County adults age 50 or older had received a yearly blood stool test (Florida, 14.7\%) (figure 65).

## Breast Cancer

In Pinellas County, the 2007-2009 age-adjusted incidence rate for breast cancer was 124.4 cases per 100,000 population (113.9 per 100,000 Florida). The age-adjusted death rate was 20.9 deaths per 100,000 population in $2009-2011$ ( 20.9 per 100,000 Florida) ${ }^{\text {xcviii. The Healthy }}$ People 2020 goal is only 20.6 deaths per 100,000 population. Just as with many types of cancer, racial disparities are prevalent in breast cancer death rates (figure 66).

Figure 66: 2000-2011 Pinellas County Age-Adjusted Breast Cancer Death Rates by Race/Ethnicity


* Hispanic death rates unavailable for 2000-2003

Source: Florida CHARTS

Early detection methods for breast cancer include self or clinical breast exams and mammograms. In Pinellas County, $61.5 \%$ of women age 40 or older received a mammogram in 2010, very similar to the rate of women within the state ( $61.9 \%)^{\text {xcix. }}$. Similarly, a higher percentage of women 18 and older received a clinical breast exam in the last year in Pinellas (64.6\%) than in Florida (61.5\%) (figure 67).

## Cervical Cancer

The Healthy People 2020 goal for cervical cancer ageadjusted death rates is 2.2 per 100,000 population ${ }^{\text {c }}$. In Pinellas County, the 20092011 rate was 2.7 per 100,000; and, in the state, also 2.7 per 100,000 population. In Pinellas County, 7.1 women per 100,000 population were diagnosed with cervical cancer (20072009), compared to 9.0 per 100,000 population in the

Figure 67: 2010 Pinellas/Florida Breast Cancer Screening Rates


Source: Florida CHARTS

Figure 68: 2010 Pinellas/Florida/HP2020 Women 18 and Older who Received a Pap Test in the Past Year


Source: Florida CHARTS state. In 2010, 52.4\% of adult females 18 and older within the county received a pap test in the past year, less than the state rate of $57.1 \%$. The Healthy People 2020 goal for Pap test completion is $93.0 \%$. Since 2006 - 2008, the rate of pap tests has decreased; however, the changes in screening recommendations could be a factor.

## Prostate Cancer

In Pinellas County, the 2007 - 2009 age-adjusted prostate cancer incidence rate was 110.2 per 100,000 men. Within the state, the incidence is greater, reaching 130.1 per 100,000 population (2007-2009). The 2009-2011 age-adjusted death rates for prostate cancer were lower in Pinellas County ( 16.0 per 100,000 population) and the state ( 18.0 per 100,000 population), than the goal set by Healthy People 2020 ( 21.2 per 100,000 population) ${ }^{\text {ci }}$.

## Melanoma

Both the incidence and age-adjusted death rates for melanoma are higher within Pinellas County than the state ${ }^{\text {cii }}$. In Pinellas County, there were 18.8 cases of melanoma per 100,000 population (2007-2009) and 3.4 deaths due to melanoma per 100,000 population (2009 2011). The Healthy People 2020 goal for melanoma is 2.4 deaths per 100,000 population. The state incident rate was 18.3 cases per 100,000 population and the death rate was 2.9 deaths per 100,000 population.

## Lung Cancer

The lung cancer age-adjusted incidence rate for Pinellas County (2007-2009) was 69.9 cases per 100,000 population and, in Florida, 66.1 cases per 100,000 population ${ }^{\text {ciii. }}$. In Pinellas County there were 51.1 deaths per 100,000 population; while, in Florida, there were 47.2 deaths per 100,000 population. The Healthy People 2020 goal is 46.1 deaths per 100,000 population. The rate of deaths in persons who are Hispanic was lower than the rate in persons who are White and persons who are Black within the county. In 2009 - 2011, the rate of persons who are White dying from lung cancer rose from the previous reporting period, while the rates in persons who are Black or Hispanic continued to decline.

Figure 69: 2000-2011 Pinellas County Age-Adjusted Lung Cancer Death Rates by Race/Ethncity

| 80 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 70 |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} 8 & 10 \\ 0 \end{array}$ |  |  |  |  |  |  | - |  |  |  |
|  |  |  |  |  |  |  |  |  | , |  |
| $40$ |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} \curvearrowleft & 30 \\ \end{array}$ |  |  |  |  |  |  |  |  |  |  |
| $20$ |  |  |  |  |  | - | - | - |  |  |
| $\begin{array}{ll} 0 \\ 0 & 10 \end{array}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 |
| $\sim$ White | 57.2 | 57.2 | 59.3 | 60.8 | 60.4 | 57.9 | 53.8 | 52.4 | 50.6 | 52.2 |
| -Black | 62.4 | 66.7 | 65.1 | 65.7 | 63.8 | 58 | 63.1 | 61.2 | 54.6 | 45.6 |
| - Hispanic* |  |  |  |  | 28 | 24.8 | 24.9 | 22.6 | 19.7 | 13.2 |
| $\simeq$ Pinellas (All) | 56.9 | 57.1 | 59 | 60.3 | 59.7 | 57.1 | 53.5 | 52.1 | 50 | 51.1 |

*Hispanic death rates unavailable for 2000-2003
Source: Florida CHARTS

## COMMUNICABLE DISEASES



Sexually transmitted disease rates are higher in Pinellas County than in Florida

* The tuberculosis case rate is lower in Pinellas County than the state, but exceeds the goal set by Healthy People 2020
* In 2009 - 2011, Pinellas County fell within the fourth quartile of Florida counties for Kindergarteners fully immunized

Communicable diseases are diseases that are transmitted from person-to-person contact. The symptoms of illness are often visible, but sometimes the illness may remain dormant, or in a latency period for some time after infection.

## VACCINE-PREVENTABLE DISEASES

Vaccine preventable diseases are illnesses that could have been prevented by use of a vaccine. Based on the disease, vaccines are recommended for the general population, set age groups, or risk groups. In 2009-2011, Pinellas County's rate of vaccinepreventable diseases was

Figure 70: 2009-2011 County Comparison Pneumonia/Influenza Age-Adjusted Death Rates


Source: Florida CHARTS 2.6 per 100,000 population, compared to 3.7 per 100,000 population in Florida ${ }^{\text {civ }}$. However, Pinellas County faired worse in pneumonia and influenza age-adjusted deaths compared to both the state and most demographically similar counties in 2010 (figure 70).

Pneumonia and flu vaccinations are highly recommended for those at risk and those over 65 years of age. The pneumonia vaccination rate is higher in Pinellas County than the state for the adult population ( 18 years and older) at $33.0 \%$ and for those 65 years or older at $71.6 \%{ }^{\mathrm{cV}}$. Similarly, Pinellas County had higher rates of adults who received a flu shot in the year preceding the survey than the state and demographically similar counties. Over $40 \%$ of adults 18 or older in Pinellas received a flu vaccination in the year preceding the survey, compared to $36.5 \%$ in the state. In adults 65 years or older, $68.1 \%$ in the county received a flu shot, but only $65.3 \%$ of seniors within the state. In 2007, vaccinations among high-risk groups were also considered; $34 \%$ of adults in high-risk groups had ever received a pneumonia vaccination, less
than the state, at $37 \%$. Similarly, only $36.4 \%$ of high-risk adults in the county received a flu shot in the year preceding the survey, compared to $44.6 \%$ in the state (figure 71 ).

Some vaccinations are required for children to start school, to both protect the child and the other children who may be exposed to the child. In 2011, $84.6 \%$ of two year olds were fully immunized in Pinellas County, up from $82.4 \%$ in 2010. Within the state, $86.1 \%$ of two year olds were fully immunized in 2011, up from $81.1 \%$ in $2010^{\text {cvi }}$. In 2009-2011, Pinellas County fell within the fourth quartile of Florida counties for Kindergarteners fully immunized; 89.9\% of Kindergarteners in the county and $91.7 \%$ of Kindergarteners in the state were fully immunized during that time ${ }^{\text {cvii }}$.

Figure 71: 2009-2011 Pinellas County Selected Vaccination Indicators


Source: Florida CHARTS

## ENTERIC DISEASES

Enteric diseases affect both adults and children with symptoms such as pain, diarrhea, and irritability. For all enteric diseases, Pinellas County averaged 46.1 cases per 100,000 population
 the state of Florida. In both the state and county, there has been an increase in children under six years with enteric diseases ${ }^{\text {cix }}$. In 2006 - 2008, there were 176.1 cases per 100,000 population in the county and 275.4 per 100,000 population in the state who contracted an enteric disease; by 2009 - 2011, these numbers rose to 271.6 in the county and 324.8 in the state (per 100,000 population).

## HEPATITIS

Hepatitis is a viral infection affecting the liver and is the most common cause of liver failure ${ }^{c x}$. The most common types of hepatitis are $A, B$, and $C$. Hepatitis can be spread a number of ways dependent upon type: fecal-oral transmission (hepatitis $A$ ), sexual contact (hepatitis $B, C$ ), direct contact with blood through medical procedures or needles (hepatitis B, C). Hepatitis D and $E$ are less common within the United States. Vaccinations are available for hepatitis A and
hepatitis B. Between 2009 and 2011, the Pinellas rate for all acute hepatitis cases was 3.2 per 100,000 population, higher than the state rate of 2.9 per 100,000 population ${ }^{\text {cxi }}$.

## TUBERCULOSIS

Tuberculosis is spread from person-to-person through the air. The Mantoux tuberculin skin test is the most common way to screen for tuberculosis in the United States. Although the 2009 2011 tuberculosis case rate was lower in Pinellas ( 2.8 per 100,000 population) than the state (4.3 per 100,000 population), it still exceeded the Healthy People goal of 1.0 cases per 100,000 population by $2020^{\text {cxii }}$.

## SEXUALLY TRANSMITTED DISEASES

A number of diseases can be transmitted through sexual contact. Among the reportable diseases are chlamydia, gonorrhea, and syphilis. The rate of these sexually transmitted diseases is notably high in Pinellas County, especially among women ages 15 to $34{ }^{\text {cxiii }}$ (figure 72). The disparity between the county and state rates is large, with a rate of 2,603 per 100,000 population in the state and 3,327 per 100,000 population in the county. This may be reflective of increased access to care or STD testing campaigns that have aided in the effective tracing of sexual contacts. Sexually transmitted diseases may cause an increased risk of labor and pregnancy complications for the mother ${ }^{\text {cxiv }}$. They may also negatively affect the child, increasing the likelihood of stillborn births, low birth weight, and health complications.

Figure 72: 2000-2011 Pinellas/Florida Bacterial STD Rates in Women Ages 15-34


Source: Florida CHARTS

Figure 73: 2000-2011 Pinellas/Florida Chlamydia Infection Rates


Source: Florida CHARTS

The high rate of sexually transmitted diseases is true collectively, as well as within several reportable sexually transmitted diseases, including: chlamydia, gonorrhea, and infectious syphilis ${ }^{\text {cxv }}$ (figure 73; figure 74; figure 75). The number of chlamydia cases reported in the county (2009-11) was 424.3 per 100,000 population, less than the state rate of 396.0 per 100,000 population. Gonorrhea rates were also higher in the county than the state, with 140.7 per 100,000 population in the county and 107.6 per 100,000 population in the state. Infectious syphilis cases reached 6.9 per 100,000 in the county, slightly higher than the state rate of 6.2 per 100,000 population. The 2009-2011 sexually transmitted disease cases in young adults ages $15-19$ was also higher in the county than the state, $3,493.7$ cases per 100,000 and 2,473.9 per 100,000 population, respectively ${ }^{\text {cxvi }}$.

Figure 74: 2000-2011 Pinellas/Florida Syphilis Infection Rates


Source: Florida CHARTS

Figure 75: 2000-2011 Pinellas County Gonorrhea Infection Rates


Source: Florida CHARTS

## HIV/AIDS

Although sexually transmitted infections have remained consistently higher in the county compared to the state, the rate of HIV and AIDS cases have remained lower than those in the state ${ }^{\text {cxvii. The }}$ 2009-2011 rate of HIV cases within the county was 22.2 per 100,000 population, compared to 29.5 per 100,000 population within the state.

Figure 76: 2009-2011 County Comparison HIV/AIDS Age-Adjusted Death Rates


The 2009 - 2011 rate of AIDS cases was 14.5 per 100,000 population in the county and 18.9 per 100,000 population within the state ${ }^{\text {cxviii. }}$ In 2009-2011, the rate for HIV/AIDS deaths within the county was 4.9 per 100,000 population, compared to 5.6 for the state (figure 77). However, the Health People 2020 national goal is only 3.7 per 100,000 population. The HIV/AIDS ageadjusted death rate in Pinellas County is lower than both the state rate and demographically similar counties (figure 76). Persons who are Black in Pinellas County are four times more likely to die of an HIV/AIDs related cause than the overall county rate. Persons who are Black are also seven times more likely than persons who are White to die of an HIV/AIDS related cause (figure 78).

Figure 77: 2000-2011 Pinellas/Florida HIV/AIDS Age-Adjusted Death Rates


Source: Florida CHARTS

Figure 78: 2000-2011 Pinellas HIV/AIDS Age-Adjusted Death Rates by Race/Ethnicity

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | $\cdots$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 |
| $\square$ White | 5.8 | 5.2 | 5.2 | 5 | 4.8 | 4.3 | 4.2 | 3.7 | 3.3 | 2.9 |
| --Black | 33.4 | 28.2 | 28.5 | 29 | 31.4 | 26.3 | 26.2 | 24.3 | 24.3 | 21.9 |
| - Hispanic* |  |  |  |  | 4.7 | 6.3 | 5.7 | 6.9 |  |  |
| $\ldots$ Pinellas (All) | 8.2 | 7.2 | 7.3 | 7.1 | 7.2 | 6.3 | 6.3 | 5.8 | 5.5 | 4.9 |
| *Hispanic death | ates unav | vailable fo | 2000-2 |  |  |  |  | Source | Florida | HARTS |

## MATERNAL \& CHILD HEALTH



* The rates of premature births and births to women over 35 years are lower in Pinellas County than in Florida
* The rate of access to prenatal care is higher among White woman than Hispanic and Black women in Pinellas
- Black infants in Pinellas were three times more likely than White infants to die within the first year of life (2009-2011)


## BIRTH RATES

In 2011, the birth rate in Pinellas County was 9.0 per 1,000 population. Premature births, or those occurring with less than 37 weeks gestation, can lead to complications for the mother and child. Healthy People 2020 has set a goal of not more than $11.4 \%$ of births being premature by 2020 ${ }^{\text {cxix }}$. The 2009-2011 rate of premature births in Pinellas was $12.9 \%$, compared to $13.7 \%$ in Florida. Multiple births occurred at a rate of $3.2 \%$, both in the county and state. In 2009-2011, Pinellas County had fewer births to mothers over 35 years ( 3.2 per 1,000 females) than the state ( 4.6 per 1,000 females over 35) and fewer births to adult females without a high school education ( $13.6 \%$ Pinellas; $17.3 \%$ Florida) ${ }^{c x x}$.

Births to teenage mothers often have greater complications than births to adult women. In 2009 - 2011, there were 32.5 births per 1,000 females ages 15 to 19 in Pinellas ( 32.9 births per 1,000 Florida) ${ }^{\text {cxxi }}$. The greatest number of births in this age group occurs in those 18 and 19 years old. In Pinellas County, there were 15.5 births per 1,000 females ages 15 to 17, compared to Florida with 15.4 births per 1,000 females ages 15 to 17 . However, there were 59.0 births per 1,000 females 18 and 19 years old in the county, higher than Florida with 59.3 births per 1,000 females 18 and 19 years old. The percentage of repeat births to teenage mothers 15 to 19 was $17.0 \%$ within the county and $18.1 \%$ within the state. The likelihood of a repeat birth to a teenage mother is more likely in women 18 or 19 years of age. In Pinellas County (2009 2011), $7.9 \%$ of mothers 15 to 17 have repeat births, compared to $8.9 \%$ in the state. In those 18 and 19 years of age, $20.8 \%$ of mothers have repeat births in the county and $21.6 \%$ have repeat births in the state. The rate of births to women ages 15 to 19 is higher in young Black women than in any other ethnic or racial group (figure 79). While the state births mirror this pattern, the gap between Black and White mothers within Pinellas County is much larger than ethnic and racial gaps within the state.

Figure 79: 2000-2011 Pinellas County Birth Rates to Mothers Ages 15-19 by Race/ Ethnicity

*Hispanic birth rates unavailable for 2000-2003
Source: Florida CHARTS

## PRENATAL CARE

The Healthy People 2020 goal for early prenatal care, beginning in the $1^{\text {st }}$ trimester, is $77.9 \%^{\text {cxxii }}$. In 2009-2011, Pinellas County met this expectation, with $78.0 \%$ of mothers receiving prenatal care beginning in the $1^{\text {st }}$ trimester ( $79.3 \%$ Florida). Of births with a known prenatal care status, 4.5\% of births in Pinellas had late or no prenatal care (4.7\% Florida). Adequate prenatal care, as determined by the Kotelchuck index, was received by $75.2 \%$ of mothers in Pinellas and $70.6 \%$ of mothers in the state. While first trimester prenatal care among Pinellas mothers meets the Healthy People 2020 goal overall, there is a disparity in prenatal care access based on race and ethnicity. Among Black mothers, $66.2 \%$ received first trimester prenatal care compared to $74.8 \%$ of Hispanic mothers and $81.0 \%$ of White mothers in Pinellas (figure 80).

Figure 80: 2000-2011 Pinellas \% of Births to Mothers with First Trimester Prenatal Care by Race/Ethnicity

*Hispanic prenatal care rates unavailable for 2000-2003

## INFANT MORTALITY

The 2009-2011 infant death rate for children under one year was higher in Pinellas County (7.9 per 1,000 live births) than both the state rate ( 6.6 per 1,000 live births) and the national objective ( 6.0 per 1,000 live births) ${ }^{\text {cxiii. }}$. In Pinellas County (2009-2011), the neonatal death rate, or death in infants less than 28 days old, was 5.3 per 1,000 live births, compared to the state rate of 4.4 per 1,000 live births. The Healthy People 2020 goal for neonatal deaths is not more than 4.1 deaths per 1,000 live births. The post neonatal death rate, death occurring between 28 and 364 days, in the county is closer to that of the state, 2.5 and 2.2 deaths per 1,000 live births, respectively. The Healthy People 2020 goal is a rate of not more than 2.0 post neonatal deaths per 1,000 live births. In Pinellas County, the death rate from sudden unexpected infant death, per 100,000 live births, was 125.3 in the county and 94.3 in the state $(2009-2011)^{\text {cxiv }}$. Within this same timeframe, Black infants in the county were three times more likely than White infants to die within the first year of life (figure 81).

Figure 81: 2000-2011 Pinellas County Infant Mortality Rates by Race/Ethnicity

|  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 |
| $\square$ White | 5.5 | 5.7 | 5.1 | 5.6 | 5.5 | 5.5 | 5.8 | 5.8 | 6.2 | 5.7 |
|  | 15.7 | 18.2 | 15.4 | 17.6 | 18.1 | 20.2 | 18.6 | 18.5 | 18.9 | 17.3 |
| $\simeq$ Hispanic | 4.2 | 4.3 | 4.5 | 5.7 | 6.9 | 7.7 | 8.2 | 8.6 | 10.3 | 10.1 |
| $\square$ Pinellas (All) | 7.1 | 7.6 | 6.7 | 7.4 | 7.7 | 8.1 | 8.4 | 8.3 | 8.8 | 7.9 |

Source: Florida CHARTS

Pinellas County also had a greater number of structural and genetic birth defects and congenital heart defects (2006-2008). Per 10,000 births, Pinellas County had a rate of 256.8 cases, compared to the state with 228.6 cases, of structural or genetic birth defects. Such a disparity exists between the state and county in congenital heart defects as well, with 90.5 cases per 10,000 live births in the county and 73.0 cases per 10,000 live births in the state.

## LOW BIRTH WEIGHT

In Pinellas County, $8.6 \%$ of births were less than 2,500 grams compared to $8.7 \%$ of births in Florida in 2009-2011 ${ }^{\mathrm{cxxv}}$. The rate of low birth weight infants to women who are Black was $15.0 \%$ of live births, significantly higher than the rate to women who are White ( $7.1 \%$ of live births) and women who are Hispanic ( $6.8 \%$ of live births) (figure 82).

Figure 82: 2000-2011 Pinellas County Low Birth Weight Rates by Race/Ethnicity

*Hispanic low birth weight rates unavailable for 2000-2003
Source: Florida CHARTS

## RISK FACTORS ASSOCIATED WITH POOR BIRTH OUTCOMES AND POOR INFANT HEALTH

There are a number of socio-economical, environmental, and behavioral factors that may predict poor birth outcomes ${ }^{\text {cxvvi }}$. Heavy drinking or binge drinking may affect a mother's pregnancy. Of females older than 17, $8.2 \%$ in Pinellas and $10.5 \%$ in Florida engaged in heavy or binge drinking in $2010^{\text {cxxvii }}$. Additionally, in 2009-2011, 10.6\% of Pinellas mothers reported smoking during pregnancy, much higher than the state rate of $6.8 \%$.

The weight of the mother can also affect pregnancy outcomes. When pregnancy occurred, $13.9 \%$ of women in Pinellas and $11.7 \%$ of women in Florida were underweight (2009 2011) ${ }^{\text {cxxviii }}$. An even greater number of women were overweight during pregnancy, $22.9 \%$ in the county and $23.5 \%$ in Florida. Births to mothers who were obese at conception totaled $19.4 \%$ in the county and 19.9\% in Florida.

Access to care and the health of childbearing aged women may also affect maternal and child health. Women ages 15 to 34 are the most likely to give birth, yet also have the highest sexually transmitted disease rate in the county with $3,326.8$ per 100,000 population 15 to 34 compared to $2,603.3$ per 100,000 in the state ${ }^{\text {cxxix }}$. A total of $87.9 \%$ of women over age 17 in the county had a personal doctor in 2010 ( $84.5 \%$ in Florida), but only $52.4 \%$ received a yearly pap test ( $57.1 \%$ in Florida). Births to mothers without health insurance constituted $6.9 \%$ of the births in Pinellas in 2009-2011 (8.9\% in Florida). In Pinellas County, 73.8\% of mothers initiated breastfeeding in 2009-2011; much lower than in Florida where 79.5\% of women initiated breastfeeding ${ }^{\text {cxxx }}$.


* Accidents caused by drugs are the most common non-motor vehicle related accident in Pinellas County
* In Pinellas County, accidental injuries increased from 2000 until 20082010, when they began to decrease


## UNINTENTIONAL INJURY

Unintentional injuries include motor vehicle accidents, drowning, and other accidental injuries. Healthy People 2020 has set an age-adjusted unintentional injury death rate goal of not more than 36 deaths per 100,000 population. The 2009-2011 rate of deaths due to unintentional injury in Pinellas County was 55.3 deaths per 100,000 population compared to 41.6 per 100,000 population in Florida ${ }^{\text {cxxxi }}$. The age-adjusted motor vehicle crash death rate was 11.5 deaths per 100,000 population in the county and 12.9 deaths per 100,000 population in the state. The Healthy People 2020 goal for this indicator is not more than 12.4 deaths per 100,000 population.

Figure 83: 2000-2011 Pinellas/Florida Unintentional Injury Age-Adjusted Death Rates


Source: Florida CHARTS

District 6 is comprised of neighboring Pinellas and Pasco counties. The District 62011 Medical Examiners Annual Report provides insight into the accidental deaths caused by motor vehicle accidents and non-motor vehicle accidents in Pinellas County ${ }^{\text {cxxxii }}$. In motor vehicle accident related deaths, pedestrians were the most likely to be killed, followed by the driver of the vehicle, motorcyclists, cyclists, and then the passenger. The most frequent locations of motor vehicle accident related deaths were US 19 (13 deaths), Alternate 10 (10), and $49^{\text {th }}$ Street in Saint Petersburg (5).

The District 6 Medical Examiners Annual Report also gives greater insight into a number of nonmotor vehicle related accidental deaths. Non-motor vehicle accidents include: drugs, blunt force, drowning, asphyxia, carbon monoxide, electrical, and other accidents. In 2010, drug ingestion was the most common non-motor vehicle related accident in Pinellas County, followed by blunt force and drowning (figure 84).

Figure 84: 2011 District 6 Selected Non-Motor Vehicle Related Accidents


Source: Medical Examiners 2011 Annual Report

Drowning is of particular concern in Florida and Pinellas, where the numerous water sources provide opportunity for deaths by drowning. In District 6, there were 48 accidental deaths due to drowning, three suicides due to drowning, and four deaths with undetermined cases due to drowning. Consistently, the greatest number of deaths due to drowning occurr in adults ages 31 or older. In 2011, eight children ages 0 to 10, three people ages $11-30,15$ people ages 31 50,15 people ages $51-70$, and 14 people older than 70 died from drowning. This may be reflective of the greater number of older residents that reside within the district limits. Infants and young children, ages 0 to 5 , were more likely to die by drowning in a pool than any other location. This was also true of all drowning death incidents, where 22 people died from drowning in a pool, 15 in the Gulf waters, and 11 by drowning in other locations. In Pinellas County specifically, the deaths from accidental drowning have increased since 2000, and were greater than the state for the first time in 2009-11 (Figure 85) ${ }^{\text {cxxxiii }}$.

Figure 85: 2000-2011 Pinellas/Florida Accidental Drowning Death Rates


Source: Florida CHARTS

## VIOLENCE

Violence can affect both the health and social wellbeing of a community. The 2009-2011 criminal homicide rate in Pinellas was 5.1 per 100,000 population ( 6.3 per 100,000 population in Florida) ${ }^{\text {cxxxiv }}$. In Pinellas, $21.3 \%$ of adults reported that their neighborhood was not safe from crime ${ }^{c x x x v}$. Persons who are Black were more likely than persons who are White to experience many of the negative consequences of an unsafe community. For example, 2009-2011 hospitalizations for non-fatal firearm injuries are nearly nine times more prominent in persons who are Black compared to persons who are White. Similarly, in 2009-2011, the age-adjusted homicide rate for persons who are Black ( 16.6 per 100,000) was over five times that of persons who are White ( 3.4 per 100,000 population).

In 2009-2011, the rate of children ages 5 to 11 experiencing child abuse was 1,876.1 per 100,000 population in Pinellas and 1,145.4 per 100,000 population in Florida ${ }^{\text {cxxvvi }}$. Children within this same age group experiencing sexual violence was lower in Pinellas (47.0 per 100,000 ) than Florida ( 60.7 per 100,000). While the gap has been narrowing, domestic violence offenses in Pinellas still exceed state rates. In 2009 - 2011, Pinellas had a domestic violence rate of 772.8 per 100,000 population compared to 605.0 per 100,000 population in Floridacxxxvii (figure 86).

Figure 86: 2000-2011 Pinellas/Florida Domestic Violence Rates


Source: Florida CHARTS

## BEHAVIORAL HEALTH



* The number of newborn withdrawal cases has increased from 22 in 2005 to 153 in 2010
* One-third of residents reported not receiving the social and emotional support they needed in 2010
* Suicide rates exceed both the state rate and national Healthy People 2020 goal


## ALCOHOL AND SUBSTANCE ABUSE

Alcohol and substance abuse affect the community, environment, and individual. Although alcohol remains the most commonly abused substance within the county, numerous illicit drugs are also abused.

Since 2005, there has been a steep increase in the number of newborns experiencing withdrawal as a result of being born to addicted mothers. Not including alcohol withdrawal, there were 153 cases of newborn withdrawal in 2010, up from only 22 cases in 2005 (figure 87). Between September 2010 and February 2012, 1,253 children were removed from their homes in Pinellas County ${ }^{\text {cxxxuiii }}$. Approximately one-third, or 422 children, were removed due to prescription drug abuse.

Figure 87: Newborn Withdrawal Cases 2005-2010


Source: Profile of Alcohol and Other Drug Indicators, Pinellas County Florida

The Profile of Alcohol and Other Drug Indicators in Pinellas County Florida Report ${ }^{\text {cxxxix }}$ indicated that the most common source of alcohol for high school students was being given the alcohol by another person. The second most frequent method youth used to obtain alcohol was someone else buying it for them. The most common place that high school students consumed alcohol was at another person's home. The second most common place was at their own home. Data regarding students' use of alcohol and marijuana in the 30 days preceding the survey is also available. Both middle and high school students in the county are more likely
than those in the state to have used alcohol. An estimated 17.9\% of middle school students in the county and $16.8 \%$ in the state used alcohol in the 30 days preceding the survey; increasing to $39.6 \%$ of high school students in the county and $38 \%$ of high school students in the state ${ }^{\text {cx| }}$. The percentage of middle school students who binge drinking was $6.5 \%$ in Pinellas, compared to $6.9 \%$ in Florida. Among high school students, the percentage reporting binge drinking was 20\%, in Pinellas compared 19.6\% in Florida. Of middle school students, $7.4 \%$ in the county and $5.7 \%$ in the state had used marijuana in the 30 days preceding the survey. Of high school students, $20.9 \%$ in the county and $18.6 \%$ in the state had used marijuana in the 30 days preceding the survey. Of youth brought to the Department of Juvenile Justice, the majority of drug related charges (67.6\%) were marijuana related. The next most frequent drug offense was prescription drug related (11\%) ${ }^{\text {cxi }}$. However, in 2012, the percentage of youth who had used prescription pain relievers was lower for both middle and high school students in Pinellas (2.3\%; $5.7 \%$ ) than middle and high school students in the state ( $3.6 \%$; 8.5\%) ${ }^{\text {cxlii. }}$. The Alcohol and Other Drugs Profile for Pinellas County, established by Operation PAR, also reported an existing gap of treatment facilities for all income levels (including those in need of public assistance) ${ }^{\text {cxiii }}$.

In 2010, adults in Pinellas County were more likely to have had at least one drink of alcohol in the past 30 days compared to those in the state and less likely to be heavy drinkers. Adults in the county, however, were more likely to binge drink and to smoke than their statewide counterparts (table 10). Among adults, those ages 40 to 49 were most likely to have an emergency department primary diagnosis that was alcohol related (figure 88). Availability of alcohol may increase a person's likelihood to purchase or consume these products. The number of alcohol licenses in Pinellas Country has decreased from 3,123 in 2006 to 2,459 in $2010^{\text {cxliv }}$. This was true for both sales licenses and on-premise drinking licenses.

Table 10: 2007-2010 Pinellas County Adult Substance Abuse

|  | Pinellas County |  |  |  | Florida |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indicator | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ |
| Adults who have had at least one drink <br> of alcohol in the past 30 days | $56.3 \%$ | $61.2 \%$ | $56 \%$ | $60 \%$ | $54.4 \%$ | $51.3 \%$ | $51.3 \%$ | $55.3 \%$ |
| Heavy drinkers (men at least 2 per day, <br> women more than one daily) | $6.1 \%$ | $5.8 \%$ | $8.8 \%$ | $4.9 \%$ | $6.2 \%$ | $5.2 \%$ | $5.1 \%$ | $5.2 \%$ |
| Binge drinkers (5 or more drinks on one <br> occasion) within past 30 days | $10.1 \%$ | $12.3 \%$ | $19.4 \%$ | $16.9 \%$ | $14.2 \%$ | $13 \%$ | $13.3 \%$ | $13.7 \%$ |
| Current Smoking (adults reporting <br> having smoked 100 cigarettes in their <br> lifetime and currently smoke) | $17.7 \%$ | $22.6 \%$ | $22.2 \%$ | $20.3 \%$ | $19.3 \%$ | $17.5 \%$ | $17.1 \%$ | $17.1 \%$ |

Source: BRFSS/ Profile of Alcohol and Other Drug Use in Pinellas County

Figure 88：2005－2008 Pinellas Adult Alcohol Related Emergency Department Primary Diagnosis by Year／Age Group

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  | 凹ّ 400 |  |  |  | ＊ |
|  | Ј 350 | ＊ |  |  |  |
|  | 4 300 |  |  |  |  |
|  | ※ 250 |  |  |  |  |
|  | है 200 |  |  |  |  |
|  | 之 150 |  |  |  |  |
|  | 100 |  |  |  |  |
|  | 50 |  |  |  |  |
|  | 0 |  |  |  |  |
|  |  | 2005 | 2006 | 2007 | 2008 |
|  | $\square 18-20$ | 44 | 43 | 44 | 33 |
|  | －－21－24 | 66 | 82 | 76 | 91 |
| $\stackrel{\square}{3}$ | －25－29 | 69 | 108 | 106 | 101 |
| － | －30－39 | 172 | 194 | 173 | 180 |
| 品 | ＊40－49 | 334 | 365 | 338 | 381 |
|  | －－50－59 | 204 | 253 | 289 | 269 |
|  | － 60 ＞ | 228 | 259 | 231 | 281 |

Source：Profile of Alcohol and Other Drug Indicators Pinellas County

In deaths where toxicology was performed by the District 6 medical examiner，an accidental drug or toxin related cause of death was documented for 243 people in Pinellas in $2011^{\text {cxlv }}$ ．The most common drug or toxin related cause of accidental death was prescription drugs， followed by illicit drugs，and a combination of each（figure 89）．Although 2011 trends are shown below，similar findings occurred in 2009 and 2010.

Figure 89： 2011 Pinellas County Drug and Toxin Accidental Deaths


Source：Profle of Alcohol and Other Drug Indicators Pinellas County

## MENTAL HEALTH

The CPPW BRFSS evaluated a number of mental health indicators related to depression and hopelessness. According to the CPPW BRFSS report, $32.7 \%$ of Pinellas County adults do not receive the social or emotional support they need. Additionally, in the 30 days preceding the survey, $25.2 \%$ reported feeling nervous, $10.9 \%$ reported feeling hopeless, $28 \%$ reported feeling restless or fidgety, $8.7 \%$ reported feeling depressed, $26.9 \%$ reported feeling that everything required effort, and $9.2 \%$ reported feeling worthless ${ }^{\text {cxlvi }}$ (figure 90).

Figure 90: 2010 Pinellas County CPPW BRFSS Mental Health Indicators


Source: CPPW BRFSS

The mental health of children in Pinellas County is also an area of concern. In 2009-2011, 11.1 per 100,000 population ages 1 to 5 in the county received mental health treatment services, compared to 11.0 per 100,000 in Florida ${ }^{\text {cxlvii }}$. Non-fatal hospitalization rates for self-inflicted injuries are higher in Pinellas children than in Florida children ${ }^{\text {cxviii. }}$. In 2008-2010, the rate of such hospitalizations was 72.9 per 100,000 children 12 to 18 in the county, but 46.0 per 100,000 in the state. This trend continues in young adults, with a county rate of 133.5 hospitalizations per 100,000 population 19 to 21 years old and a state rate of 81.8 hospitalizations per 100,000. In Pinellas County, non-fatal hospitalizations for eating disorders are lower than the state average in children 12 to 18, but higher in young adults ages 19 to 21 . For such hospitalizations, the county rate is 6.3 per 100,000 population 12 to 18 years ( 9.0 per 100,000 Florida). However, in young adults, the county rate increases to 15.1 per 100,000 population ages 19 to 21 compared to 6.9 per 100,000 in Florida. Pinellas also had a higher percentage of emotionally handicapped children in grades K-12 in the 2010-2011 school year (1.5\% Pinellas and 0.9\% Florida). Referrals to the Department of Juvenile Justice in 2009 2011, for children ages 10 to 17, were 739.3 per 100,000 population in the county and only 588.7 per 100,000 population in the state.

## Suicide

In Pinellas County, the 20092011 age-adjusted suicide death rate was 17.7 per 100,000 population. Suicide rates in Pinellas exceed both the 2009 2011 state rate of 13.8 per 100,000 population and the Healthy People 2020 goal of not more than 10.2 deaths per 100,000 population ${ }^{\text {cxlix. }}$. Pinellas County has consistently had a higher suicide rate than the state for several decades. Within Pinellas County, suicides

Figure 91: 2009-2011 Pinellas County Suicide Deaths by Age Group
 most frequently occurred among adults ages 45 to 60 (figure 91). Pinellas County males were more likely than females to commit suicide; however, both genders were more likely than their state counterparts to commit suicide (figure 92). Additionally, in 2009-2011, persons in Pinellas County who are White were more likely than persons who are black to die by suicide, a rate of 22.4 per 100,000 White residents compared to 6.5 per 100,000 Black residents.

Figure 92: 2000-2011 Pinellas Suicide Age-Adjusted Death Rates by Gender


Source: Florida CHARTS

Please answer the following questions about your Community:

1. How healthy is the community where you live? Choose one (1).
$\square$ Very Healthy $\quad \square$ Healthy $\square$ Somewhat Healthy $\quad \square$ Unhealthy $\square$ Very Unhealthy
2. What do you think is most important for a healthy community? Choose up to three (3).
$\square$ Access to healthcare (doctors, hospitals)
$\square$ Access to public transportation
$\square$ Affordable housing options
$\square$ Churches or other spiritual practices
$\square$ Clean environment
$\square$ Diversity (racial, ethnic, culture/arts)
$\square$ Good jobs
$\square$ Good childcare
$\square$ Good schools
$\square$ Healthy behaviors and lifestyles
$\square$ Low crime, safe neighborhoods
$\square$ Parks and recreational activities
$\square$ Strong family life
$\square$ Other $\qquad$
3. Do you think the community where you live is safe?
$\square$ Yes
$\square$ No
4. Do you think the community where you live is a good place to raise children?

Yes No
5. What health problems are you worried about in your community? Choose up to three (3).
$\square$ Addiction (alcohol or drug)
$\square$ Aging problems (arthritis, hearing, vision, end of life care)
$\square$ Child abuse/neglect
$\square$ Chronic diseases (cancer, diabetes, heart disease, COPD)
$\square$ Contagious diseases (flu, pneumonia)
$\square$ Dental problems
$\square$ Disabilities
$\square$ Domestic violence
$\square$ High blood pressure
6. What behaviors are you worried about in your community? Choose up to three (3).
$\square$ Alcohol and/or drug abuse
$\square$ Being overweight
$\square$ Discrimination
$\square$ Dropping out of school
$\square$ Not getting exercise/physical activity
$\square$ Not using Birth Control

HIV/AIDS/STDs
Infant death/premature birth
Injuries (drowning, poison, fire, car crashes)
Mental Health Problems/Suicide
Obesity
Rape/Sexual assault
Teen pregnancy
$\square$ Other: $\qquad$


## Please answer the following questions about yourself:

7. How healthy are you? Choose one (1).

Very Healthy $\quad$ Healthy $\quad \square$ Somewhat Healthy $\square$ Unhealthy $\square$ Very Unhealthy
8. How is your health care paid for?
Private health insurance (from job)
Medicaid
Military/Veteran's Administration
Medicare

No insurance (pay cash)
$\square$ Cannot afford health care
9. Zip code where you live: $\qquad$
10. Age

18 or less
19-25
26-39

40-54
55-64
65 or over
11. Sex
$\square$ Male $\quad \square$ Female
12. Race/ethnicity (Choose all that apply)

African American/ Black
Asian/ Pacific Islander
Caucasian/ White
13. Education

Less than high school
High school diploma or GED
$\square$ Two year degree
14. Household income per year

Less than \$ 15,000
\$15,000-25,000
\$25,001-35,000

Four year degree
$\square$ Advanced degree
Other: $\qquad$
Hispanic/ Latino
Native American
Other: $\qquad$
\$35,001-45,000
\$45,001-55,000
\$55,001 or more
${ }^{i}$ Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
${ }^{i i}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
iii Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
${ }^{\text {iv }}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {v }}$ Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
${ }^{\text {vi }}$ Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
vii Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
viii U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {ix }} 3$-Year estimates; U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{x}$ Florida CHARTS. Accessed 10/25/2012 [http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{x i}$ Pinellas County Government. About Pinellas. Accessed 2/19/2013
[http://www.pinellascounty.org/about_pinellas.htm](http://www.pinellascounty.org/about_pinellas.htm).
xii 3 -year estimate; U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
xiii Pinellas County Economic Development. Accessed 2/20/2013
[http://www.pced.org/demographics_data/subpage.asp?TopEmployers](http://www.pced.org/demographics_data/subpage.asp?TopEmployers)
${ }^{\text {xiv }}$ Healthy Tampa Bay from American Community Survey. Accessed 10/17/2012 <healthytampabay.com>
${ }^{x v}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012 [http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xvi }}$ United States Census Bureau: 2010 Census. Accessed 10/16/2012 < http://www.census.gov/>
xvii U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
xviii U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xix }}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xx }}$ Pinellas Indicators Accessed 10/31/2012 < http://www.pinellasindicators.org/IAS>
${ }^{x x i}$ Pinellas County Economic Development 2011 Report. Accessed 10/25/2012
[http://www.pced.org/download/document/20120830_140703_24181.pdf](http://www.pced.org/download/document/20120830_140703_24181.pdf)
xxii Pinellas County Economic Development 2011 Report Accessed 10/25/2012
[http://www.pced.org/download/document/20120830_140703_24181.pdf](http://www.pced.org/download/document/20120830_140703_24181.pdf)
xxiii 3 -Year estimates; U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
xxiv Florida CHARTS. Accessed 10/25/2012 [http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{\text {xxv }}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xxvi }}$ Florida CHARTS Pregnancy and Young Child Profile Accessed 10/25/2012 [http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
xxvii 3 -year estimate; U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
xxviii U.S Census Bureau: State and County Quick Facts. Accessed 10/08/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{x x i x}$ Bureau of Labor Statistics. Accessed 10/08/2012 [http://www.bls.gov/cps/prev_yrs.htm](http://www.bls.gov/cps/prev_yrs.htm).
${ }^{\text {xxx }}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/08/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xxxi }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
xxxii Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
xxxiii Florida Charts, Pregnancy and Young Child Profile, Accessed 10/03/2012
[http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010).
${ }^{\text {xxxiv }}$ Florida Housing Data, Pinellas County Florida from U.S. Department of Housing and Urban Development, 2012 Fair Market Rents. Accessed 10/10/2012 <www.flhousingdata.shimberg.ufl.edu>
${ }^{\text {xxxv }}$ Florida Housing Data, Pinellas County Florida. Accessed 10/10/2012 <www.flhousingdata.shimberg.ufl.edu>
xxxvi Florida Charts, Pregnancy and Young Child Profile, Accessed 10/03/2012
[http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
xxxvii Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
xxxviii Pinellas Hope Accessed 10/05/2012 <www.pinellashope.org>
${ }^{\text {xxxix }}$ Pinellas County Government. 2011 Point in Time (PIT) County of Homeless Individuals in Pinellas County
10/05/2011. Accessed 10/11/2012 <www.pinellascounty.org/humanservices/pdf/homeless-2011.pdf>
${ }^{\mathrm{xl}}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xli }}$ Pinellas Suncoast Transit Authority. Accessed 10/11/2012 <www.psta.net/history.php>
${ }^{\text {xlii }}$ Pinellas County Health and Human Services. Economic Impact of Poverty Report. Accessed 10/17/2012. [http://www.co.pinellas.fl.us/bcc/humanservices/pdf/Economic-Impact-Report.pdf](http://www.co.pinellas.fl.us/bcc/humanservices/pdf/Economic-Impact-Report.pdf).
xliii Pinellas Suncoast Transit Authority. Accessed 10/11/2012 [http://www.psta.net/tdprogram.php](http://www.psta.net/tdprogram.php)
${ }^{\text {xliv }}$ Pinellas County Government: Schools. Accessed 10/12/2012 [http://www.pinellascounty.org/school.htm](http://www.pinellascounty.org/school.htm)
${ }^{\text {xlv }}$ Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{\text {xlvi }}$ U.S Census Bureau: State and County Quick Facts. Accessed 10/05/2012
[http://quickfacts.census.gov/qfd/states/12/12103.html](http://quickfacts.census.gov/qfd/states/12/12103.html).
${ }^{\text {xlvii }}$ Florida Charts, Pregnancy and Young Child Profile, Accessed 10/03/2012
[http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
${ }^{\text {xlviii }}$ Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{\text {xlix }}$ Pinellas County Health and Human Services. Economic Impact of Poverty Report. Accessed 10/17/2012.
[http://www.co.pinellas.fl.us/bcc/humanservices/pdf/Economic-Impact-Report.pdf](http://www.co.pinellas.fl.us/bcc/humanservices/pdf/Economic-Impact-Report.pdf).
${ }^{1}$ County Health Rankings. Accessed 10/17/2012 < http://www.countyhealthrankings.org/\#app/>
${ }^{1 i}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx)
${ }^{\text {lii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx)
${ }^{\text {liii }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {liv }}$ HRSA. Shortage Designation: Health Professional Shortage Areas \& Medically Underserved Areas/Populations. Accessed 10/23/2012 < http://www.hrsa.gov/index.html>.
${ }^{1 v}$ Healthy Tampa Bay from American Community Survey. Accessed 10/17/2012 <healthytampabay.com>
${ }^{\text {lvi }}$ Florida KidCare: Enrollment. Accessed 10/16/2012 < http://www.doh.state.fl.us/alternatesites/kidcare/council/8-3-11/5_KidCareEnrollment-July2011.pdf>
${ }^{\text {lvii }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {lviii }}$ Centers for Disease Control. Behavioral Risk Surveillance System. Accessed 10/28/2012.
[http://www.cdc.gov/brfss/](http://www.cdc.gov/brfss/)
${ }^{\text {lix }}$ Florida CHARTS: Major Causes of Death for 2011. Accessed 10/02/2012
[http:www.floridacharts.com/charts/viewrpt.aspx?ID=7226\&prompt0=52\&Prompt1=2011](http:www.floridacharts.com/charts/viewrpt.aspx?ID=7226%5C&prompt0=52%5C&Prompt1=2011).
${ }^{1 x}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
${ }^{\text {lxi }}$ Florida Department of Health. Steps to a Healthier Florida [http://www.pinellashealth.com/steps/index.asp](http://www.pinellashealth.com/steps/index.asp)
${ }^{\text {lxii }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{1 x i i i}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {lxiv }}$ Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{\text {1xv }}$ Florida CHARTS School-aged Child and Adolescent Profile Accessed 10/05/2012
[http://www.floridacharts.com/charts/default.aspx](http://www.floridacharts.com/charts/default.aspx).
${ }^{\text {lxvi }}$ Florida CHARTS Accessed 11/2/2012 <floridacharts.com>
${ }^{\text {lxvii }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {Ixviii }}$ Florida Charts, Pinellas County Florida County Health Status Summary
${ }^{\text {lxix }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{1 \mathrm{kx}}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{1 \times x i}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
Ixxii Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {Ixxiii }}$ Florida CHARTS. Florida-US Health Status Comparison. Accessed 10/16/2012 <www.floridacharts.com>
${ }^{\text {Ixxiv }}$ Florida CHARTS. Florida-US Health Status Comparison. Accessed 10/16/2012 <www.floridacharts.com
${ }^{\text {lxxv }}$ Florida CHARTS: School-aged Child and Adolescent Profile. Accessed 10/21/2012 <www.floridacharts.com>
${ }^{\text {Ixxvi }}$ Behavioral Risk Factor Surveillance System. Accessed 10/21/2012 < http://www.cdc.gov/brfss/>
Ixxvii Pinellas County 2011 Air Quality Statistics Report. Accessed 10/21/2012.
[http://www.pinellascounty.org/environment/airquality/default.htm](http://www.pinellascounty.org/environment/airquality/default.htm)
${ }^{1 \times x v i i i}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {Ixxix }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctrl/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{1 \times x x}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012
[http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
${ }^{\text {Ixxxi }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {lxxxii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {lxxxiii }}$ http://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_stroke.htm
${ }^{\text {lxxxiv }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }_{1 \times x \times v}$ Centers for Disease Control. Diabetes Fact Sheet. Accessed 10/29/2012
[http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf](http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2011.pdf)
${ }^{\text {lxxxvi }}$ Florida CHARTS, School-aged Child and Adolescent Profile. Accessed 10/15/2012 <www.floridacharts.com>
${ }^{\text {lxxxvii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {Ixxxviii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {Ixxxix }}$ National Institute of Health. Accessed 10/16/2012
[http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001196/](http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001196/)
${ }^{\text {xc }}$ Florida CHARTS. School-aged Child and Adolescent Profile. Accessed 10/29/2012 <www.floridacharts.com>
${ }^{x c i}$ Florida CHARTS, Pregnancy and Young Child Profile. Accessed 10/29/2012 <www.floridacharts.com>
xcii Florida CHARTS. School-aged Child and Adolescent Profile. Accessed 10/29/2012 <www.floridacharts.com>
xciii Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
<www.floridacharts.com>
${ }^{\text {xciv }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
${ }^{\text {xcv }}$ Florida CHARTS. Accessed 10/25/2012.
[http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby554\&ReportType=1](http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby554%5C&ReportType=1)

[^0][^1]
[^0]:    ${ }^{\text {xcvi }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    xcvii Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{x c v i i i}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {xcix }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{c}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {ci }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {cii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {ciii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {civ }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{\text {cv }}$ Behavioral Risk Factor Surveillance System. Accessed 10/21/2012 < http://www.cdc.gov/brfss/>
    ${ }^{\text {cvi }}$ Florida CHARTS. Pregnancy and Young Child Profile. Accessed 10/03/2012 [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cvii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012. <www.floridacharts.com>
    ${ }^{\text {cviii }}$ Florida CHARTS. Accessed 10/25/2012.
    [http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby554\&ReportType=1](http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby554%5C&ReportType=1)
    ${ }^{\text {cix }}$ Florida CHARTS. Accessed 10/25/2012.
    [http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby551\&ReportType=1](http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=auepm145dd2ke555y1jpby551%5C&ReportType=1)
    ${ }^{c x}$ Centers for Disease Control. Hepatitis Fact Sheet. Accessed 10/25/2012 [http://www.cdc.gov/hepatitis/](http://www.cdc.gov/hepatitis/)
    ${ }^{\text {cxi }}$ Florida CHARTS. Accessed 10/29/2-2012
    [http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=rhjb052vaeplpo45simpot454\&ReportType=1](http://www.floridacharts.com/charts/DisPlayHTML.aspx?Sid=rhjb052vaeplpo45simpot454%5C&ReportType=1)
    ${ }^{\text {cxii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/16/2012.
    <www.floridacharts.com>
    cxiii Florida CHARTS. Accessed 10/16/2012 <www.floridacharts.com>/
    ${ }^{\text {cxiv }}$ Centers for Disease Control. Pregnancy and Sexually Transmitted Diseases Fact Sheet. Accessed 10/17/2012 [http://www.cdc.gov/std/pregnancy/stdfact-pregnancy.htm](http://www.cdc.gov/std/pregnancy/stdfact-pregnancy.htm)
    ${ }^{\text {cxv }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012. <www.floridacharts.com>
    ${ }^{\text {cxvi }}$ Florida CHARTS School-aged Child and Adolescent Profile
    ${ }^{c x v i i}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012. <www.floridacharts.com>
    ${ }^{\text {cxviii }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012. <www.floridacharts.com>
    ${ }^{\text {cxix }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012. <www.floridacharts.com>
    ${ }^{c x x}$ Florida CHARTS, Pregnancy and Young Child Profile, Accessed 10/03/2012
    [http://www.floridacharts.com/charts/MICprofile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICprofile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cxxi }}$ Florida CHARTS. School-aged Child and Adolescent Profile. Accessed 10/4/2012
    [http:www.floridacharts.com/charts/adolprofile.aspx?county=52\&profileyear=2010](http:www.floridacharts.com/charts/adolprofile.aspx?county=52%5C&profileyear=2010)
    cxxii Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)
    cxxiii Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012.
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)
    ${ }^{\text {cxxiv }}$ Florida CHARTS. Pregnancy and Young Child Profile. Accessed 10/04/2012
    [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cxxv }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012 http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52.

[^1]:    ${ }^{\text {cxxvi }}$ Florida CHARTS. Pregnancy and Young Child Profile. Accessed 2012.10.04. [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010) cxxvii Florida CHARTS. Pregnancy and Young Child Profile. Accessed 10/04/2012 [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cxxviii }}$ Florida CHARTS. Pregnancy and Young Child Profile. Accessed 10/04/2012
    [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cxxix }}$ Florida Charts. Pregnancy and Young Child Profile, Accessed 1/07/2013
    ${ }^{\text {cxxx }}$ Florida Charts. Pregnancy and Young Child Profile, Accessed 10/03/2012
    [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    ${ }^{\text {cxxxi }}$ Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)
    cxxxii District 6. 2011 Medical Examiner Report [http://www.pinellascounty.org/forensics/pdfs/2011ARfinal.pdf](http://www.pinellascounty.org/forensics/pdfs/2011ARfinal.pdf)
    cxxxiii Florida CHARTS. Drowning Indicator. Accessed 11/01/2012/ <www.floridacharts.com>
    cxxxiv Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012.
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)
    ${ }^{c x x x v}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012 [http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
    ${ }^{\text {cxxxvi }}$ Florida CHARTS. School-aged Child and Adolescent Profile. Accessed 10/18/2012 <www.floridacharts.com>
    cxxvii Florida CHARTS. Pinellas County. Florida: County Health Status Summary. Accessed 10/03/2012
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)
    cxxxvii Pinellas Coalition. Profile of Alcohol and Other Drug Indicators in Pinellas County, Florida. Accessed 11/05/2012. [http://www.pinellascoalition.com/](http://www.pinellascoalition.com/)
    ${ }^{c x x x i x}$ Pinellas Coalition. Profile of Alcohol and Other Drug Indicators in Pinellas County, Florida. Accessed 11/05/2012. [http://www.pinellascoalition.com/](http://www.pinellascoalition.com/)
    ${ }^{\text {cxl }}$ Florida Charts, School-age Child and Adolescent Profile. Accessed 10/16/2012. <www.floridacharts.com>
    ${ }^{c x l i}$ Pinellas Coalition. Profile of Alcohol and Other Drug Indicators in Pinellas County, Florida. Accessed 11/05/2012. [http://www.pinellascoalition.com/](http://www.pinellascoalition.com/)
    cxlii Florida Department of Children and Families. 2012 Florida Youth Substance Abuse Survey. Accessed 2/05/2012 [http://www.dcf.state.fl.us/programs/samh/publications/fysas/12Survey/Pinellas\ County.pdf](http://www.dcf.state.fl.us/programs/samh/publications/fysas/12Survey/Pinellas%5C%20County.pdf) ${ }^{\text {cxiiii }}$ Pinellas Coalition. Profile of Alcohol and Other Drug Indicators in Pinellas County, Florida. Accessed 11/05/2012. [http://www.pinellascoalition.com/](http://www.pinellascoalition.com/)
    ${ }^{\text {cxliv }}$ Pinellas Coalition. Profile of Alcohol and Other Drug Indicators in Pinellas County, Florida. Accessed 11/05/2012. [http://www.pinellascoalition.com/](http://www.pinellascoalition.com/)
    ${ }^{\text {cxlv }}$ District 6. 2011 Medical Examiner Report [http://www.pinellascounty.org/forensics/pdfs/2011ARfinal.pdf](http://www.pinellascounty.org/forensics/pdfs/2011ARfinal.pdf)
    ${ }^{\text {cxlvi }}$ Communities Putting Prevention to Work, Behavioral Risk Factor Surveillance System. Accessed 10/16/2012
    [http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm](http://www.doh.state.fl.us/disease_ctr1/epi/chronic_disease/CPPW/Pinellas_CPPW.htm).
    ${ }^{\text {cxlvii }}$ Florida Charts. Pregnancy and Young Child Profile. Accessed 10/03/2012
    [http://www.floridacharts.com/charts/MICProfile.aspx?county=52\&profileyear=2010](http://www.floridacharts.com/charts/MICProfile.aspx?county=52%5C&profileyear=2010)
    cxvviii Florida CHARTS. School-aged Child and Adolescent Profile. Accessed 10/15/2012
    <www.floridacharts.com>/
    cxlix Florida CHARTS. Pinellas County, Florida: County Health Status Summary. Accessed 10/03/2012
    [http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341\&county=52](http:www.floridacharts.com/charts/displayhtml.aspz?Reporttype=1341%5C&county=52)

