PINELLAS COUNTY
Community Health Assessment

2012

PINELLAS COUNTY
COMMUNITY HEALTH ASSESSMENT REPORT 2012

Sponsors: Pinellas County Health Department
Florida Department of Health

Produced by: Pinellas County Health Department

Report and Supplemental Material Available at www.pinellashealth.com

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 process. This collaborative approach was essential in the development of a quality community health assessment report.

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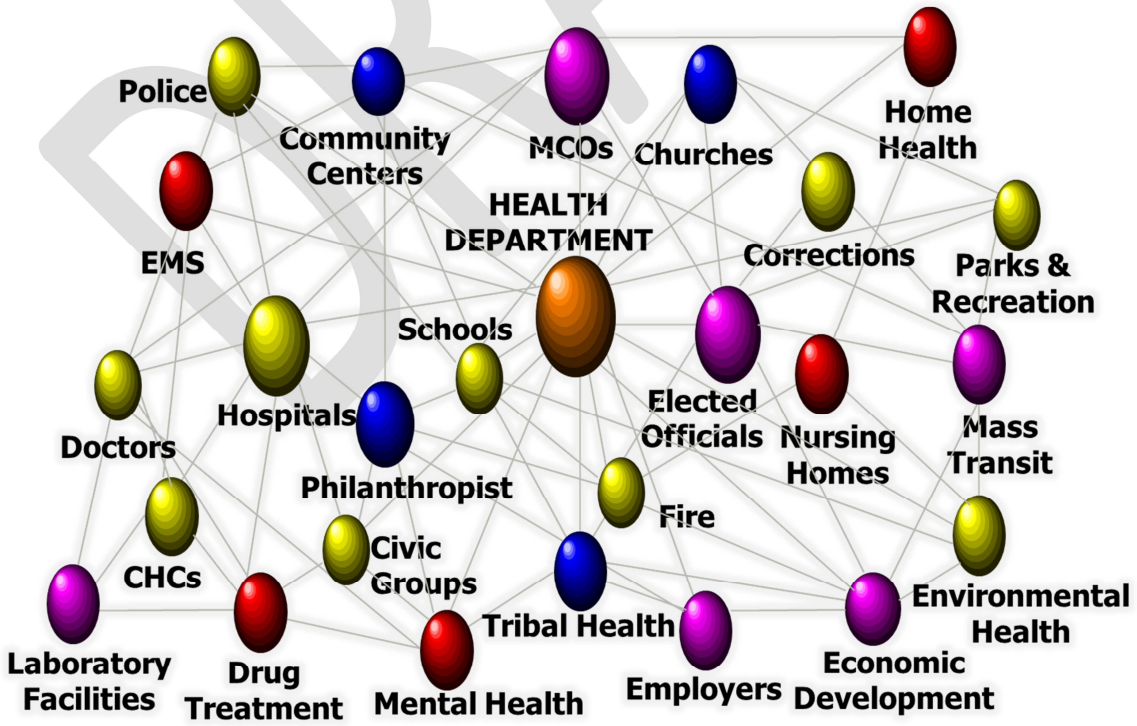
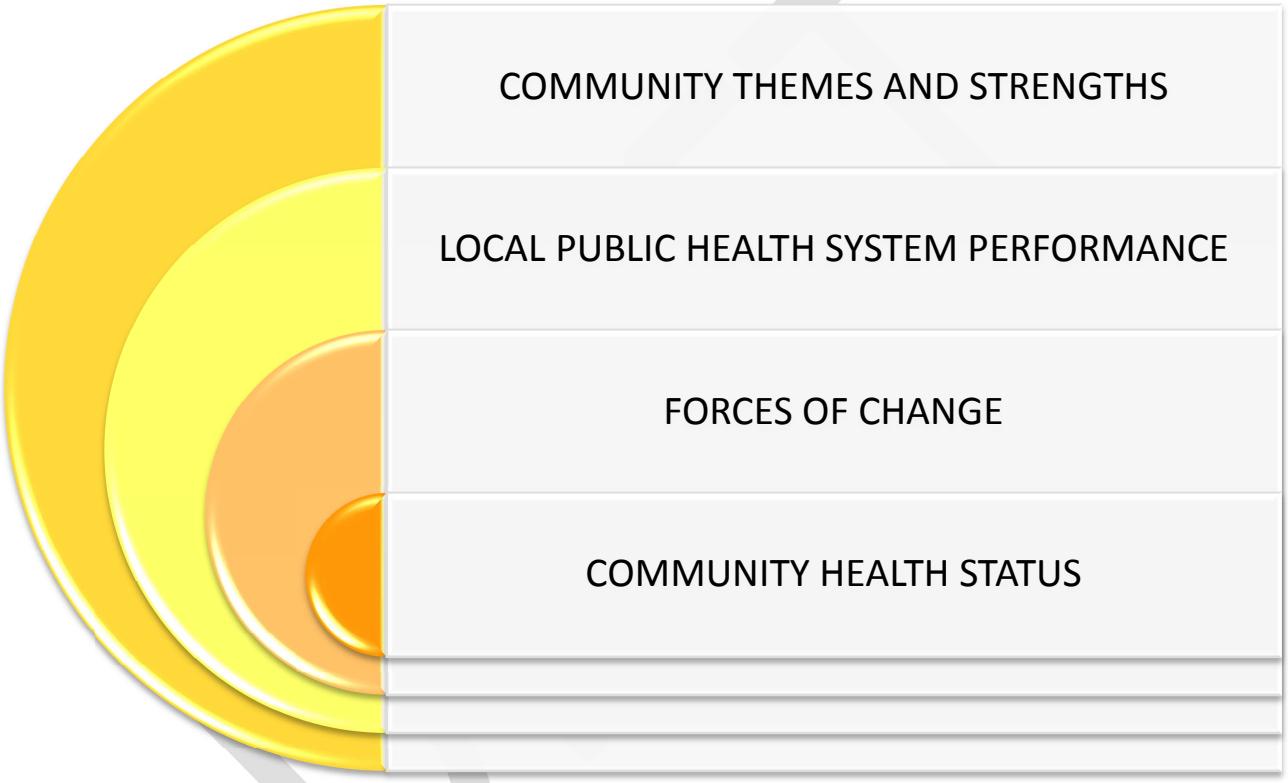
1 INTRODUCTION

Figure 1: Public Health Core Functions

A Community Health Assessment (CHA) 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 as shown in the core functions figure at right. The **Ten Essential Public Health Services (EPHS)** are aligned with the core functions as depicted in the inner wheel. 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 to contribute to the delivery of public health services as depicted below. 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 together to conduct a comprehensive Community Health Assessment in 2011-2012.



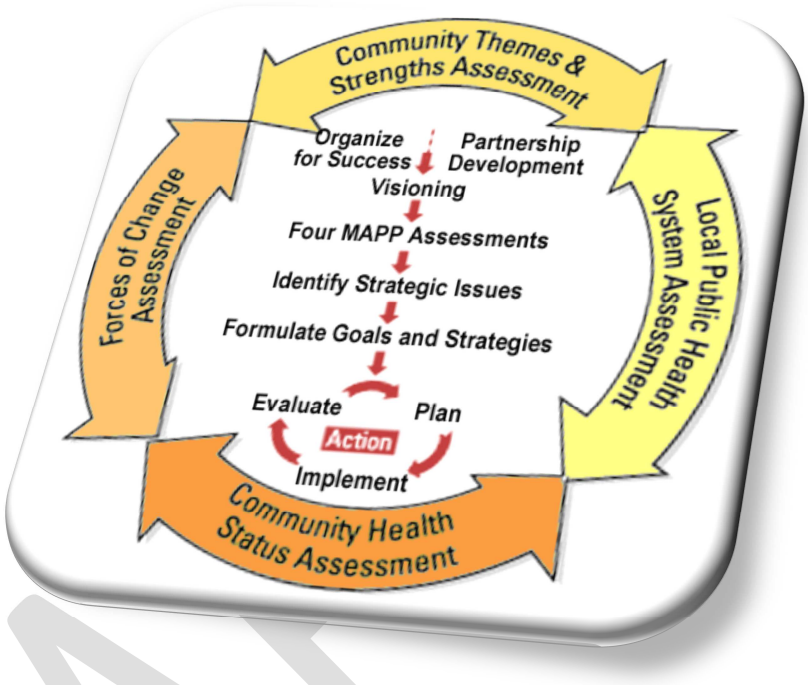
The Pinellas County Community Health Assessment report is the result of more than a year of in-depth assessment of the local public health system in Pinellas County, utilizing the **Mobilizing for Action through Planning and Partnerships (MAPP)** framework. MAPP is a community driven strategic approach 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 the four assessments shown below; 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 that follows is designed to provide an overview of Pinellas County (Section 2) and the results of each of the four MAPP assessments (Sections 3-6). The four MAPP assessments outlined above drive the community health improvement planning process (Figure 2). 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, are affecting our health.

Figure 2: MAPP Model



Just as in most of the nation, residents of Pinellas County are overweight and obese. Youth are getting less physical activity than needed and access to nutritious foods is limited. Although efforts towards policy change and improving the built environment have been made in recent years, there is still much work to be done. Behaviors have influenced the health outcomes of county residents. The need to address behavioral risk factors is prominent throughout the Community Themes and Strengths Assessment, where healthy behaviors was the second most frequently factor needed for a healthy community. Specifically, among the most frequent behaviors of concern were poor nutrition, lack of physical activity, being overweight, and smoking . Similarly, among the top health problems of concern were obesity and chronic diseases.

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 is lung cancer. Not coincidently, the number of active smokers is also high within the county. Deaths due to heart disease have declined in the past decade, however, at a much slower rate in persons who are black than in persons who are white. The trend of racial disparity in deaths due to heart disease is not an isolated outcome. Deaths due to stroke, diabetic complications, and infant mortality are all more prevalent in Pinellas County residents who are black than in those who are white.

Income, neighborhood, gender, and race are impacting access to healthcare and health outcomes within the county.

These concerns were mirrored 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 within the top five most important factors

for a healthy community. These same social determinants of disease are affecting the rates of sexually transmitted diseases within the county.

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

This is true in the rates of chlamydia, syphilis, and gonorrhea. These 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 infections have health implications for both mother and child.

Prescription drug abuse and poor mental health are issues of concern in Pinellas.

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

The community is both prepared and determined for change now, more than ever.

The Local Public Health System Performance Assessment found deficiencies in the system's capacity to inform, educate, and empower people about health issues, as well as to mobilize community partnerships to identify and solve these problems. The identified forces of change within Pinellas County provide insight into the factors that shape community health. Regardless of which of the ten essential public health services was addressed, similar the 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 plan.

Next Steps

This report is only the beginning of the community health improvement planning process for Pinellas County. As can be seen in the MAPP model in figure 2, MAPP is a multi-phase process that goes 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 we continue the MAPP process and develop a Community Health Improvement Plan (CHIP). Once health priority areas are identified, goals and strategies will be formulated to address each area. 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

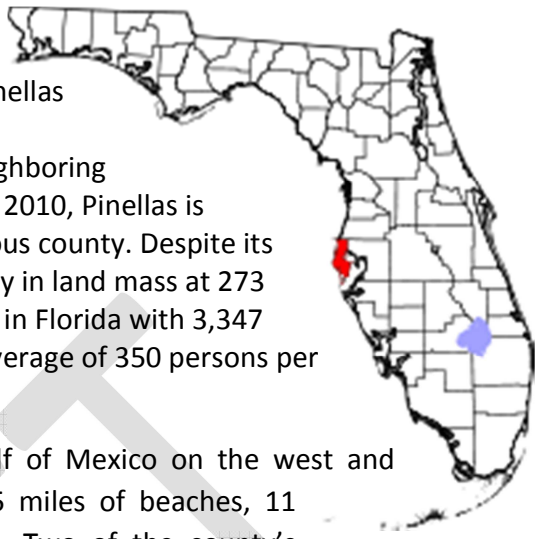
Community ownership is a fundamental component of community health improvement planning and the MAPP process to ensure effective, sustainable solutions. Broad participation is essential given the wide range of organizations and individuals who contribute to the public's health. Pinellas would like to 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
- 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 Center
- 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
- Tampa Bay Healthcare Collaborative
- Tampa Bay Partnership
- University of South Florida
- YMCA

2 PINELLAS COUNTY OVERVIEW

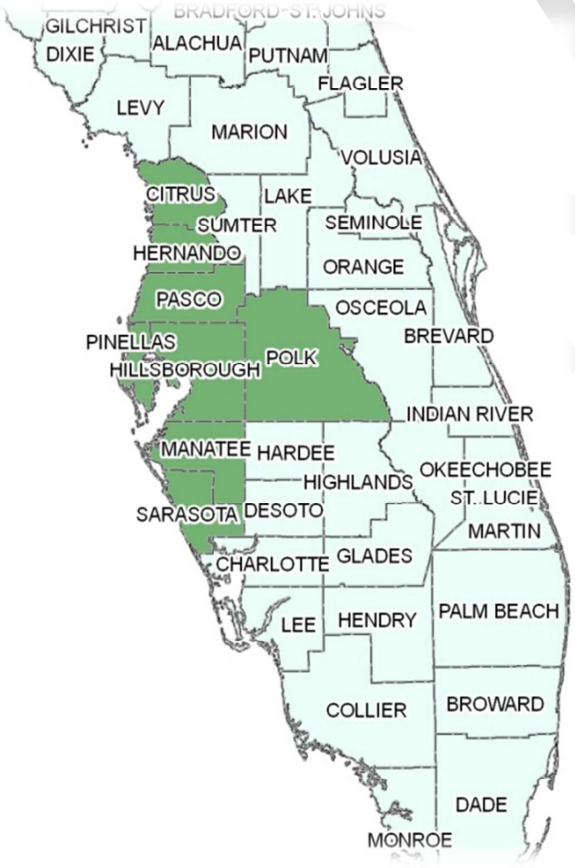
Pinellas County is located on Florida's west-central coast as pictured in red in Figure 3 at right. Pinellas was discovered in 1528, its name derived from the Spanish words Punta Pinal meaning point of pines. Pinellas became Florida's 48th county in 1912 after a local referendum passed calling for its separation from neighboring Hillsborough County. With a population of 916,542 in 2010, Pinellas is Florida's sixth most and the nation's 53rd most populous county. Despite its 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.

Figure 2: Pinellas County, Florida



Pinellas County is a peninsula bounded by the Gulf of Mexico on the west and Tampa Bay on the south and east. 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 4: Tampa Bay Region Map



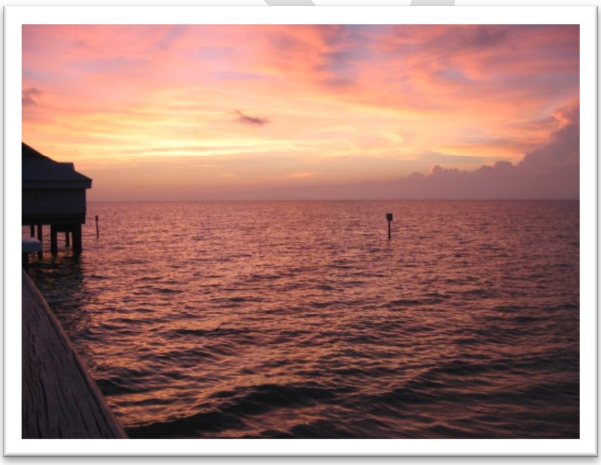
Pinellas County has 15,525 acres of preserves and the Parks and Conservation Resources department maintains 4,242 acres throughout the county. The county is also home to the Pinellas Trail, a unique greenway corridor linking some of Pinellas County's most picturesque parks, scenic coastal areas, and residential neighborhoods spanning from Tarpon Springs to St. Petersburg. Opened in 1990, the Pinellas Trail has an average of 70,000 users each month.

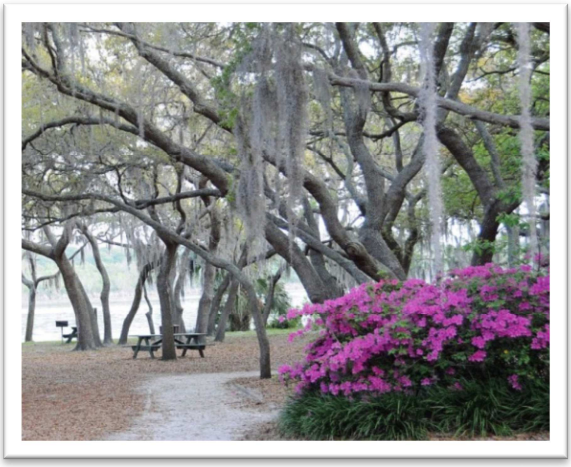
Pinellas is part of the Tampa-St. Petersburg-Clearwater Metropolitan Statistical Area (MSA) along with neighboring Hillsborough, Hernando, and Pasco counties. The Tampa-St. Petersburg-Clearwater MSA is part of the larger Tampa Bay region along with the contiguous Sarasota-Venice and Lakeland-Winter Haven 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 as highlighted in Figure 4 at left.

Pinellas is comprised of nearly 50 zip codes spanning 24 distinct municipalities as outlined in Figure 5. There are 4,521 miles of paved roads crossing 179 bridges. 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. Other major municipalities are depicted at right. There are 234,268 families and 405,649 households with an average household size of 2.16 and average family size of 2.79 in Pinellas County (US Census Bureau, 2010).

Figure 5: Pinellas County Detail Map

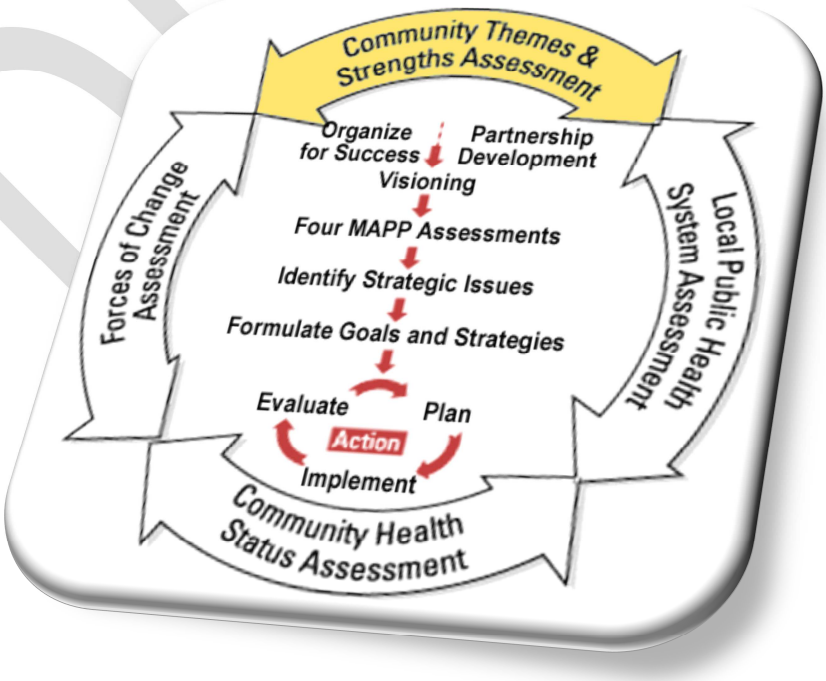
Over 40,000 businesses call Pinellas County home and more than 467,000 people are currently employed in the county, which has a median household income of $41,945. The service industries such as healthcare, business services and education account for more than 200,000 jobs in the Pinellas. Other major sectors include retail, with close to 100,000 employees in jobs such as food service, bars, and retail sales, followed by industries related to finance, insurance and real estate with approximately 44,000 workers. Pinellas County's five largest employers are the Pinellas County School District, Home Shopping Network, Pinellas County Government, Times Publishing Company, and Raymond James Financial.





3 COMMUNITY THEMES & STRENGTHS ASSESSMENT

- 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 a deep 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 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-root agencies, and many others.

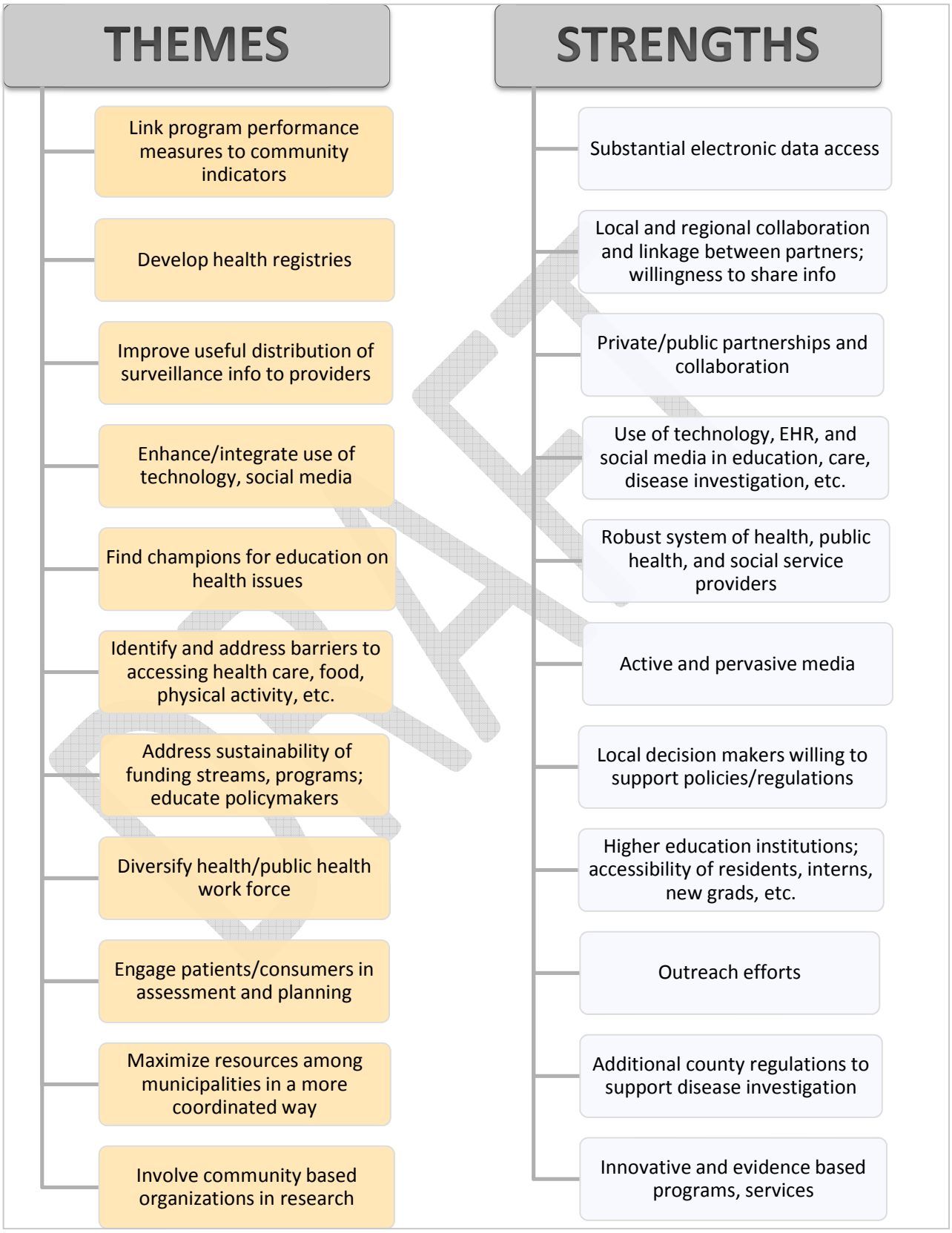
METHODODLOGY

Utilizing the 10 Essential Public Health Services as a framework, participants at the collaborative engagement were asked to work 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 6 below.

Figure 6: Key Themes and Strengths



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

Table 1: Themes and Strengths by Essential Service

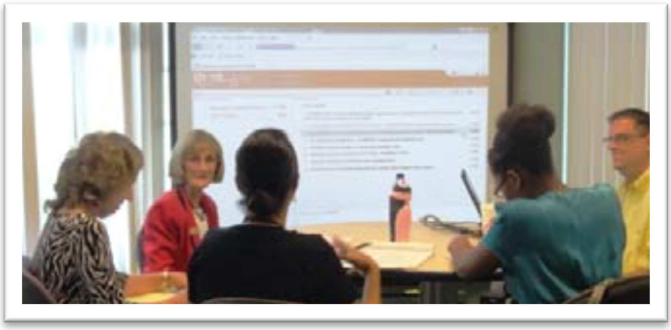
Essential Service	Theme	Strength
1. Monitor health status to identify community health problems	• Linking program performance measures to indicators • Development of health registries to quantify incidence/prevalence of chronic disease • Improved access to current registry data • Presentation of data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

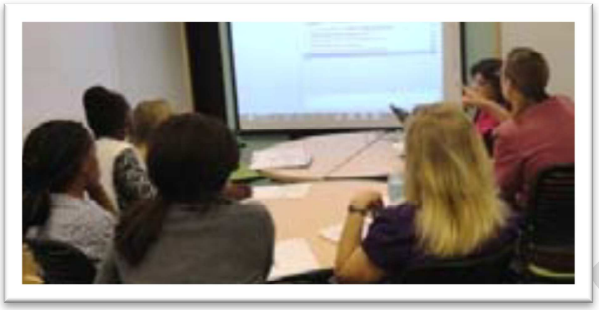
4. Mobilize community partnerships to identify and solve health problems	• Identifying and overcoming barriers to access: transportation, nutritious food, financial support for health care, education, lack of personal motivation and responsibility, culturally sensitive workforce, lack of knowledge of 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.	• 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
5. Develop policies and plans that support individual and community health efforts	• Getting the 24 municipalities in Pinellas County to coordinate as a collective like-minded 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 healthcare 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	• 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
6. Enforce laws and regulations that protect health and ensure safety	• 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	• 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	• 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 user- the 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
8. Assure a competent public healthcare workforce	• Culturally diverse and competent service providers needed • Parity in public vs. private compensation • Baby Boomers a) retiring, moving out of the work force b) Staying in the workforce longer, but resistant to change, not updating their skills • Decreased monetary resource for higher education or continuing education • Increased staff turnover rate • Succession planning • More stressors, more personal responsibility and more mental health issues of the workforce	• 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
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.	• Community and neighborhood standards that stress the health of all communities • Local baseline data – including health disparities • Coordinated, comprehensive approach to data collection, planning and evaluation • Need a full inventory of the services available in this County (funded & unfunded) – captured and maintained • What standards of care – are they similar – do they meet national standards or standards for that "industry" (institutional) • Independent evaluation – utilize existing tools - of all entities for whatever industry • Community Awareness of quality services at different sites (score card/grading systems) • Community input / evaluation of services in County	• 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 healthcare providers in community • Non-profits connected to healthcare 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 • Limited funding mechanism/short life of grants • Sustainability of research, programs, and services • Fostering community dialogue that addresses the need for innovation in research • Alternative funding sources for creating innovation at the community level • Disconnect between academic based entities and CBOs particularly pertaining to research • Identifying and analyzing the root causes of health inequities in relation to health disparities • Having community based organizations involved throughout the research continuum in order to accurately address the needs, resources, etc. of the community • Limited resources for local public health departments to engage in research • Limited human capital to conduct health based research – independent; Moffitt / USF collaboration • Limited categorical funding (i.e. always needing to apply for grants in order to fund projects/programs, etc.) • Lack of sharing data or information gathered from needs assessments, etc. to higher institutions • Engage corporate and private funders to do research in our community • Inventory of existing research in this community related to health problems • Inventory of innovative solutions in practice now	• Strong collaborative partnerships amongst academia, providers, coalitions, task forces, councils, etc. • Number of higher education institutions • Willingness of community-based organizations to be part of innovative research • Strong community advocates • Ability of research institutions to access clientele and population services, local CBOs, etc. • History of innovative research • Juvenile Welfare Board (funding and evaluation of programs) • Operation PAR has its own research facility for substance abuse services • 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 event, 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 get 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:	**n= 794**		
Male	19.3%		
Female	80.7%	**Highest Level of Education:**	**n= 807**
		Less than high school	12.1%
Age:	**n= 813**	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%		
65 or over	5.9%	**Annual Household Income:**	**n= 774**
		Less than $15,000	24.8%
Race/ Ethnicity:	**n= 813**	$15,000-$25,000	17.2%
African American/ Black	21.5%	$25,001-$35,000	13.0%
Asian/ Pacific Islander	1.7%	$35,001-$45,000	11.8%
Caucasian/ White	60.4%	$45,001-$55,000	7.4%
Hispanic/ Latino	15.9%	$55,001 or more	25.8%
Native American	1.1%		
Other	2.2%		

Figure 7 depicts survey respondents by geographic area of residence, based upon 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; roughly 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; roughly 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; roughly 37% of county residents and 37% of survey respondents.

Figure 8 that follows depicts survey respondents by health care coverage. When asked how their healthcare 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[i].

Figure 7: Respondents by Geographic Area of Residence

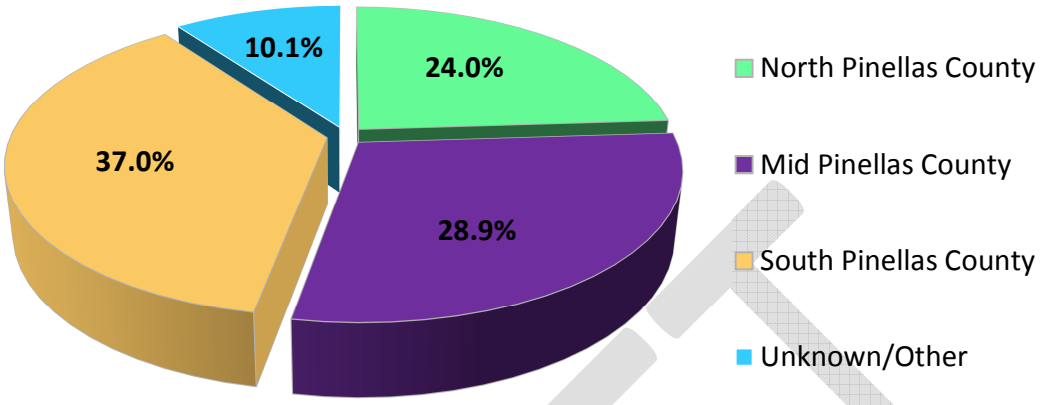
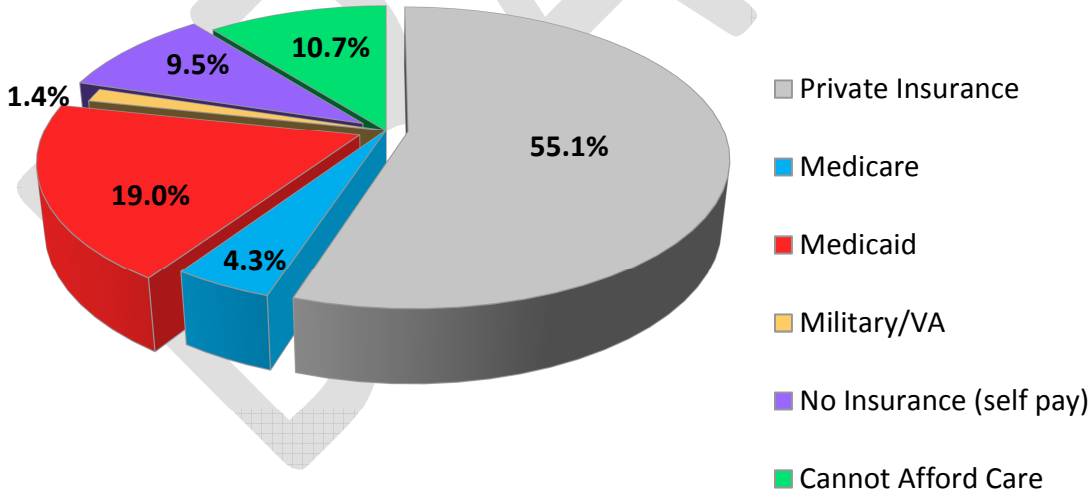


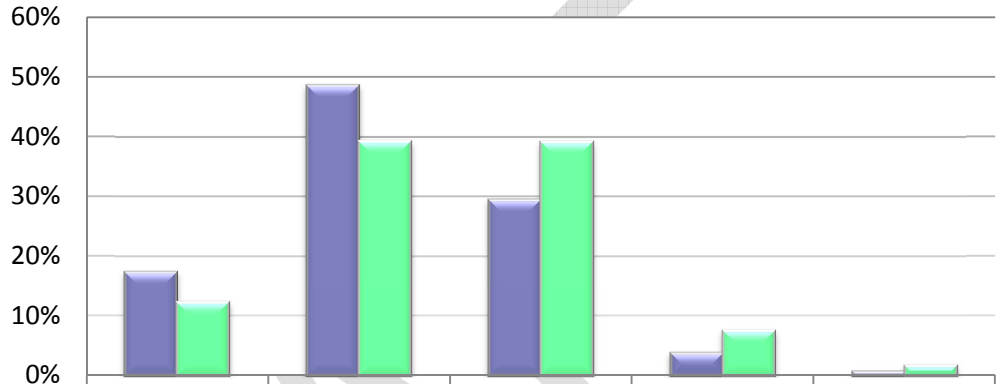
Figure 8: Respondents by Health Care Coverage How is Your Health Care Paid For? (N=798)



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. As can be seen in the figure below, 66% of respondents consider themselves *healthy* or *very healthy*, but only 52% of respondents consider their community *healthy* or *very healthy*.

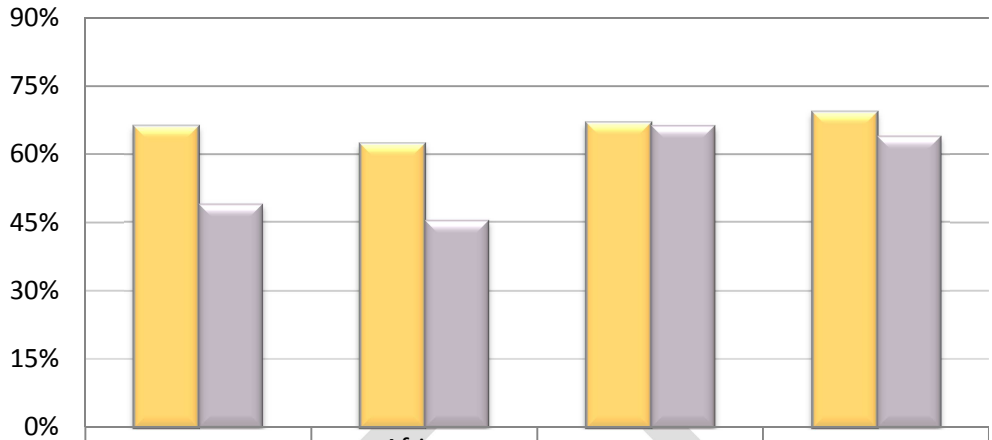
Figure 3: Individual and Community Health Status *How Healthy Are You? How Healthy is Your Community?*



	Very Healthy	Healthy	Somewhat Healthy	Unhealthy	Very Unhealthy
Individual (n =813)	17.4%	48.6%	29.4%	3.8%	0.7%
Community (n =827)	12.2%	39.3%	39.2%	7.5%	1.7%

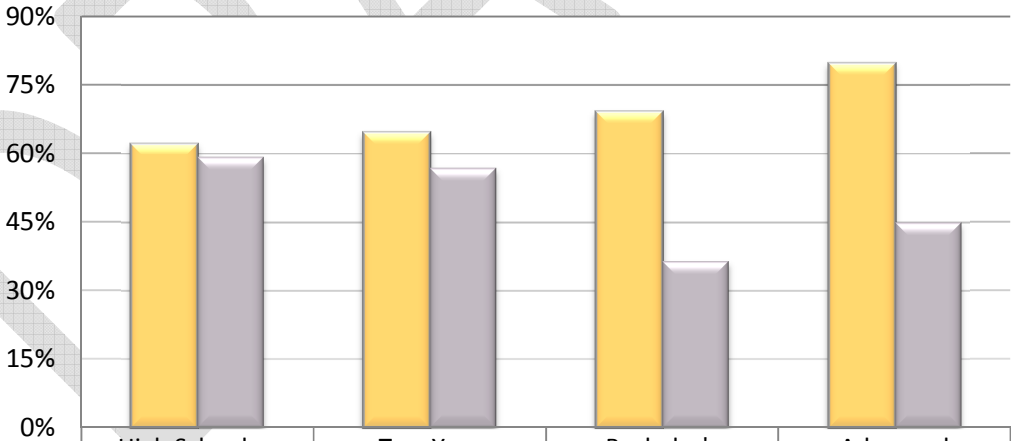
There were disparities in perceived health status by both race/ethnicity and educational attainment, as seen in figures 11 and 12 that follow. Respondents identifying as Hispanic/Latino and "other" race/ethnicity rated both their individual and community health as *healthy* or *very healthy* most frequently (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 4: Respondents who Rated Individual and/or Community Health as Healthy or Very Healthy by Race/Ethnicity



	Caucasian/White	African American/Black	Hispanic/Latino	Other
Individual Health	66.1%	62.3%	66.9%	69.2%
Community Health	49.20%	45.40%	66.40%	64.10%

Figure 5: Respondents Who Rated Individual and/or Community Health as Healthy or Very Healthy by Educational Attainment

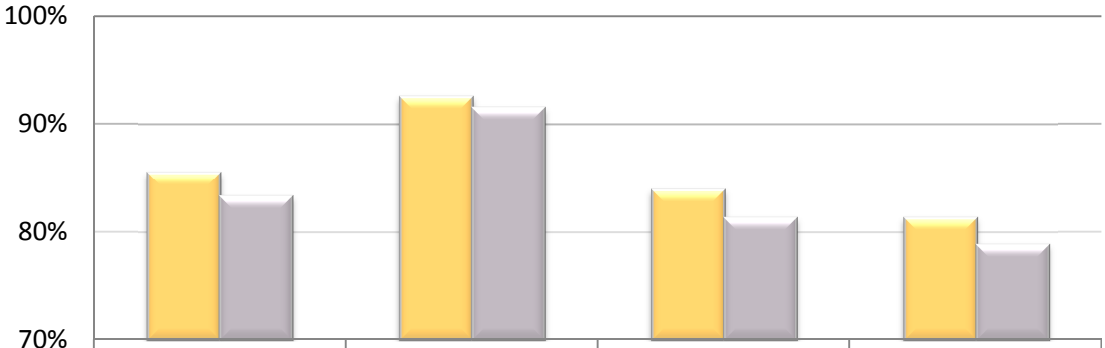


	High School or Less	Two Year Degree	Bachelor's Degree	Advanced Degree
Individual Health	62.2%	64.7%	69.2%	79.7%
Community Health	59.2%	56.8%	36.4%	45.0%

GENERAL COMMUNITY

Survey respondents were asked whether or not the community where they live is safe and/or 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%). As can be seen in the figure that follows, however, 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.

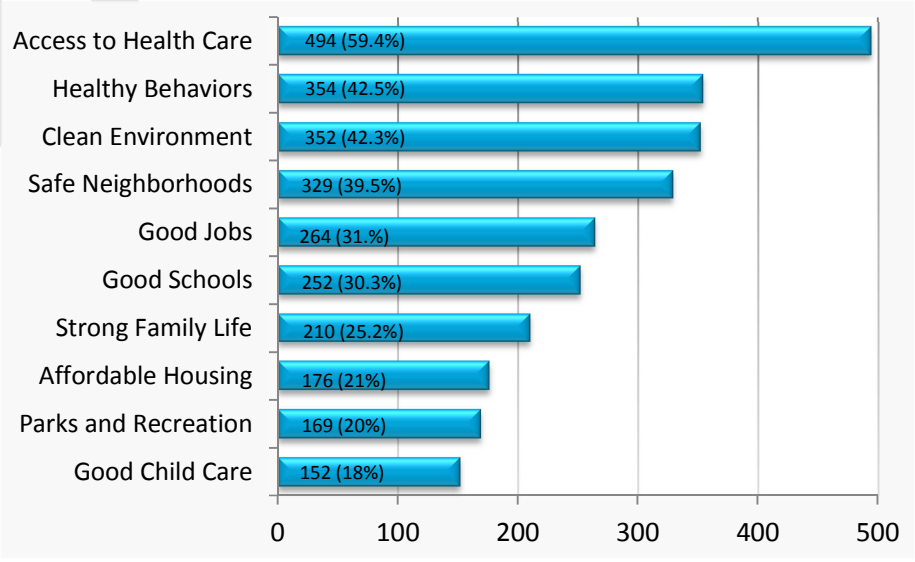
Figure 6: Respondents Who Answered "Yes" Their Community is Safe and a Good Place to Raise Children by Area of Residence



	Pinellas Overall	North Pinellas	Mid Pinellas	South Pinellas
Safe	86%	92.5%	83.9%	81.3%
Raise Children	83.3%	91.5%	81.3%	78.8%

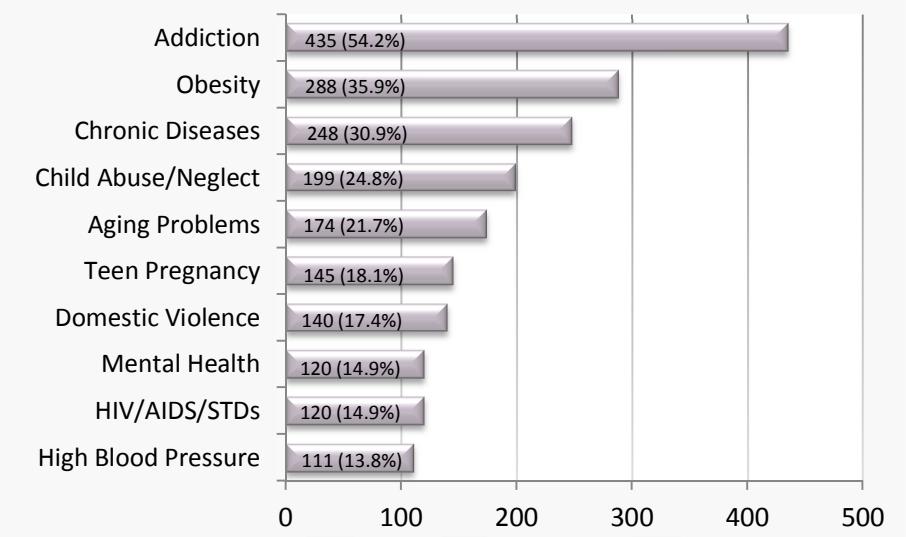
Survey respondents were asked to select the factors they think are most important for a healthy community. Respondents were given a list of 13 factors and asked to select up to three. The top ten responses for factors most important for a healthy community are depicted in figure 14. *Access to care* 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 for factors most important for a healthy community were consistent across respondents of varying demographics and geographic areas of the county.

Figure 7: Top Factors for a Healthy Community (n=832)



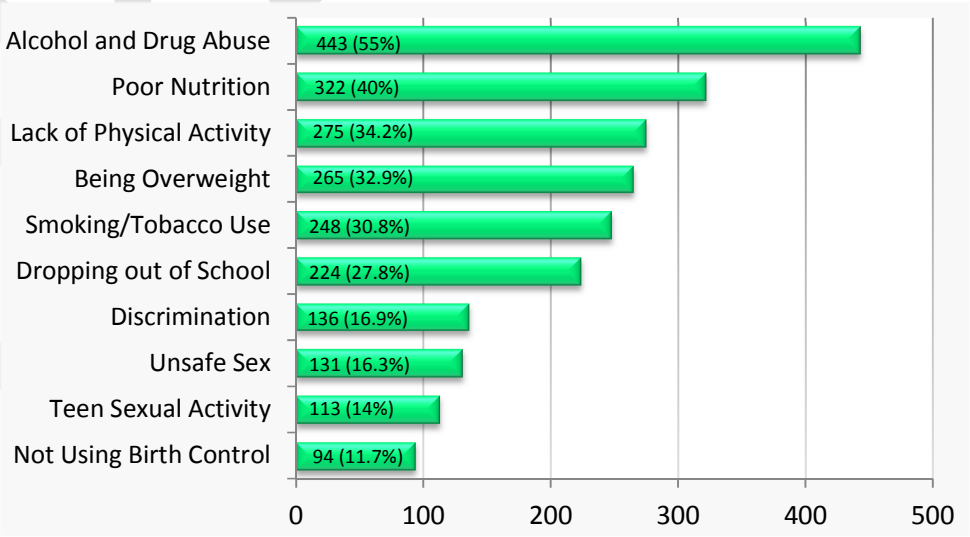
Additional factors that respondents wrote in as "other" were affordable insurance, income, and dental care.

Figure 8: Top Health Problems of Concern (n=803)



Survey respondents were asked to select the health problems 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 responses for health problems of concern were consistent across respondents of varying demographics and geographic areas of the county. Additional health problems of concern that respondents wrote in as "other" were loneliness and lack of social events for seniors, homelessness, and no Medicaid for adults without minor children.

Figure 9: Top Behaviors of Concern (n=805)



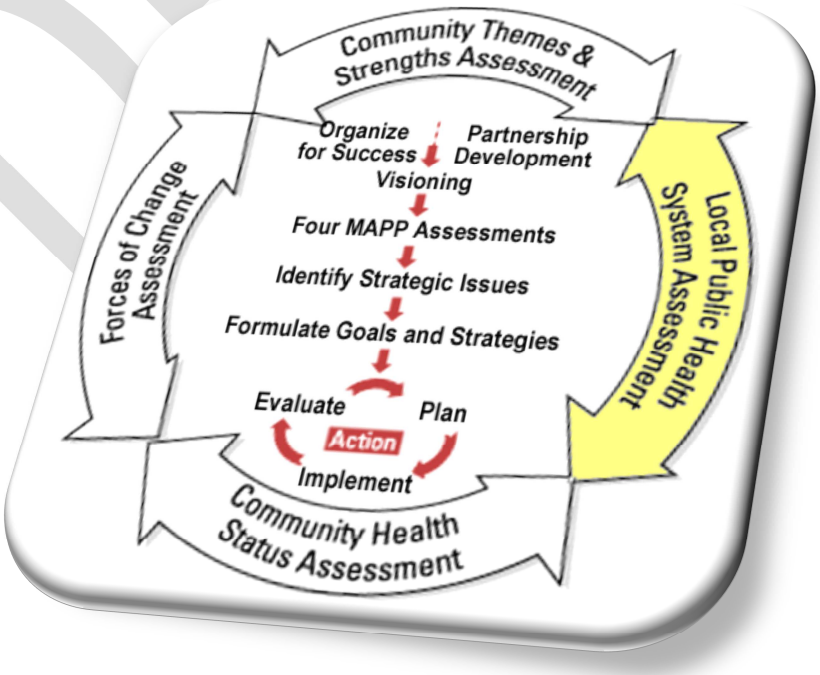
Survey respondents were asked to select the health related behaviors of greatest concern in their community.The top ten responses for health behaviors of concern are depicted in the figure above. *Alcohol and drug abuse* was the top response, selected by 443 respondents (55%), followed by *poor nutrition* and *lack of physical activity*, selected by 322 (40%) and 275 (34%) respondents respectively. The top responses for health behaviors of concern were consistent across respondents of varying demographics and geographic areas of the county. An additional behavior of concern that respondents frequently wrote in as "other" was violence, including gang violence and domestic violence.

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 effort 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

METHODODLOGY

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.

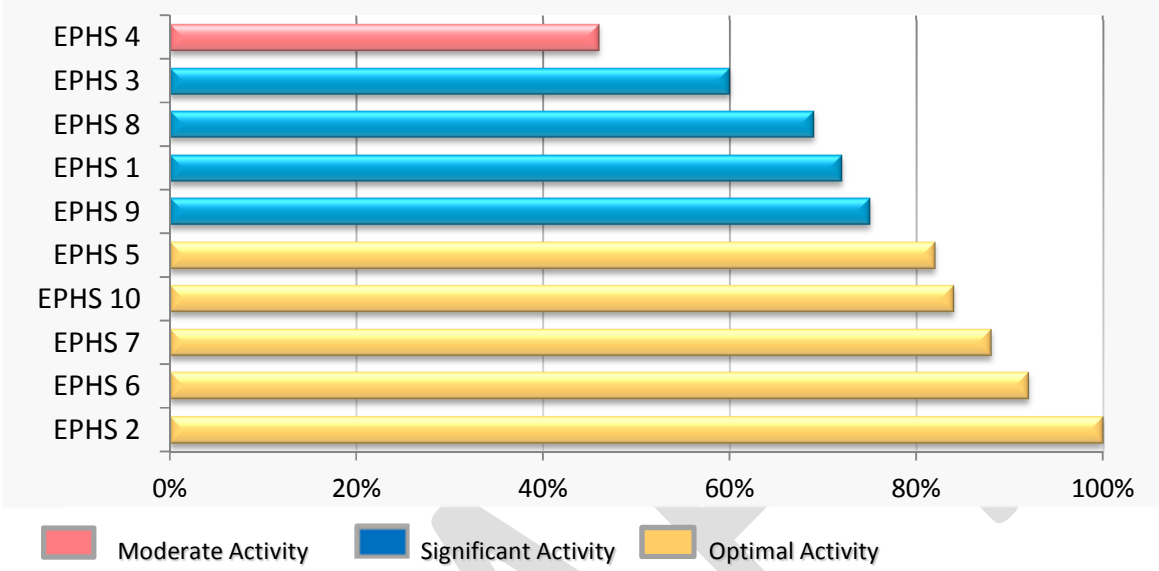
RESULTS

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 10: Rank Ordered Performance Scores by Level of Activity



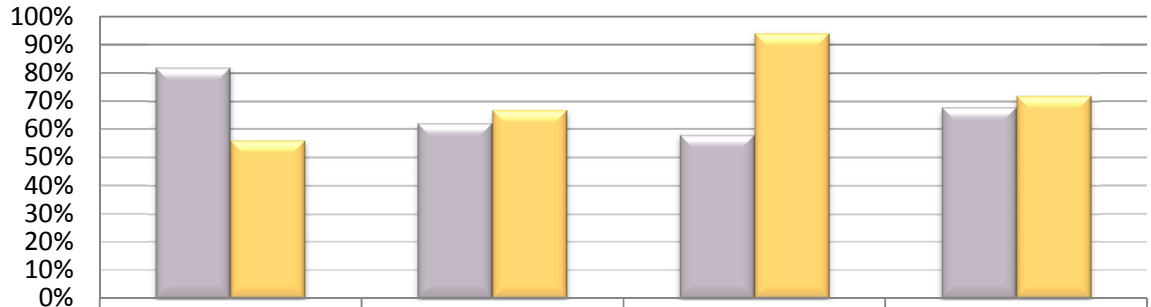
Similarly, Pinellas improved overall and in all essential services except for 3 and 4 (*figure 15*).

Figure 11: Summary of Performance Scores by Essential Service

Essential Public Health Service		Score
1	Monitor health status to identify community health problems	72 ↑
2	Diagnose and investigate health problems/hazards	100 ↑
3	Inform/Educate/Empower people about health issues	60 ↓
4	Mobilize community partnerships to identify/solve health problems	46 ↓
5	Develop policies/plans that support individual & community health	82 ↑
6	Enforce laws and regulations that protect health & ensure safety	92 ↑
7	Link people to needed health services/assure the provision of care	88 ↑
8	Assure a competent public health workforce	69 ↑
9	Evaluate effectiveness/accessibility/quality of health services	75 ↑
10	Research for new insights/innovative solutions to health problems	84 ↑
Overall Performance Score		**77**

The figures that follow provide Pinellas' 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 questions and model standards were added to the Local Public Health System Performance Assessment. Where a model standard was added in 2011, data for 2005 will be unavailable, and not appear in the figure. The essential public health service (EPHS) 1 utilizes three model standards: community profile, utilization of current technology, and maintenance of population health registries. A decline was seen in the community health profile model standard, but increases in utilization of current technology and maintenance of population health registries.

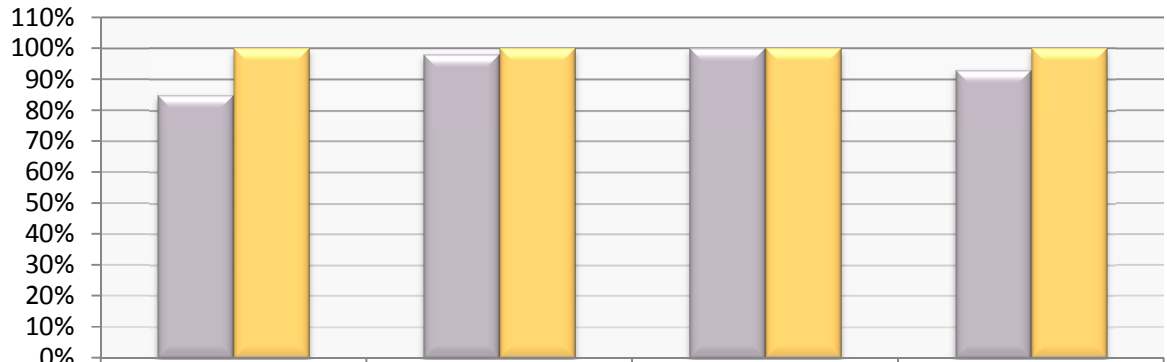
Figure 12: EPHS 1- Monitor Health Status to Identify Community Health Problems



	Community Profile	Current Technology	Registries	Overall
2005	82%	62%	58%	68%
2011	56%	67%	94%	72%

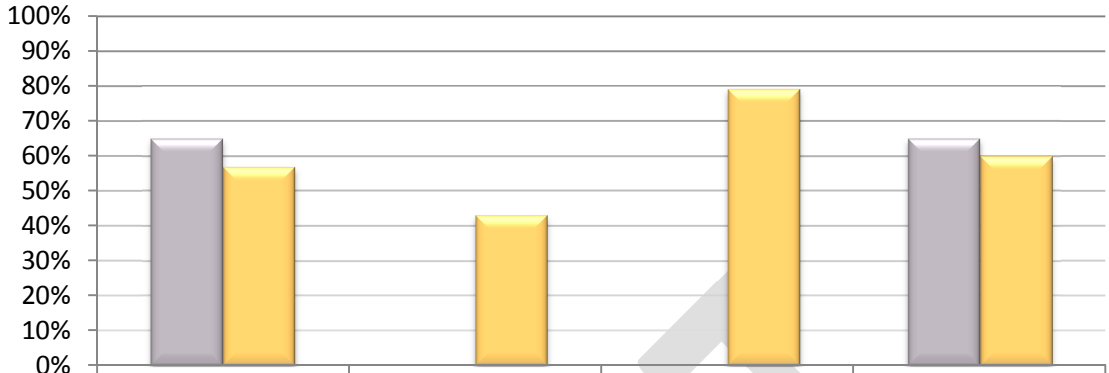
EPHS 2 is composed of three model standards: identification and surveillance of health threats, investigation and response to public health threats and emergencies, and laboratory support for the investigation of health threats. The year 2011 marked the optimal health system performance within each of these model standards (*figure 17*).

Figure 13: EPHS 2- Diagnose and Investigate Health Problems/Hazards



	Surveillance	Emergency Response	Laboratories	Overall
2005	85%	98%	100%	93%
2011	100%	100%	100%	100%

Figure 14: EPHS 3- Inform/Educate/Empower People about Health Issues

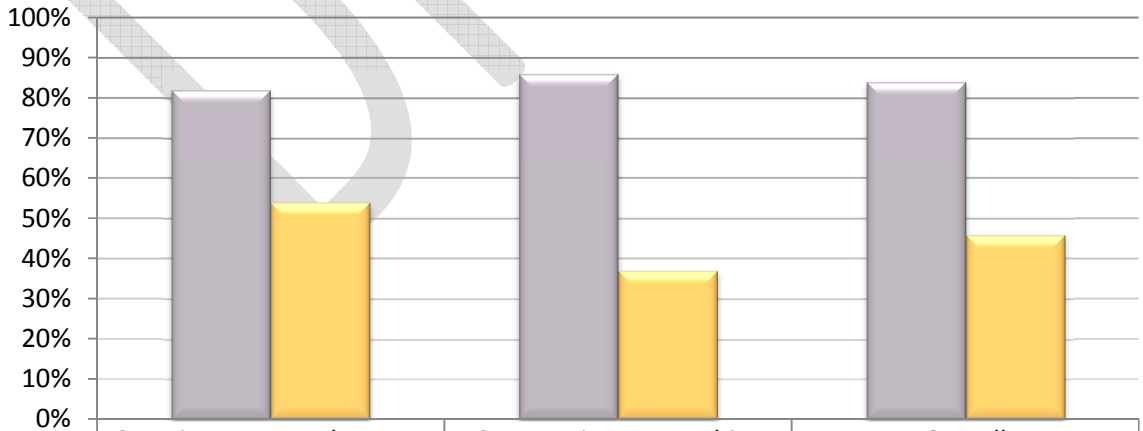


	Health Educ & Promotion	Health Communication	Risk Communication	Overall
2005	65%			65%
2011	57%	43%	79%	60%

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. Two model standards were assessed in 2011, health communication and risk communication (*figure 18*).

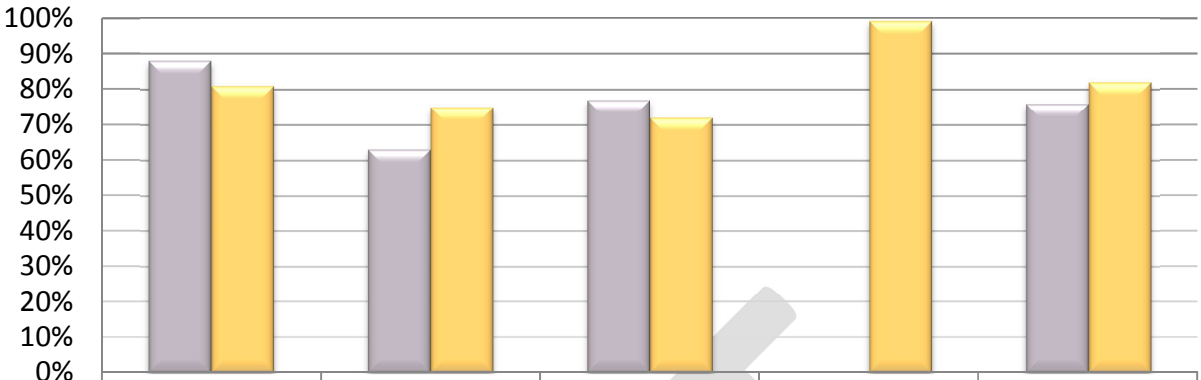
Constituency development and community partnerships are the two model standards within EPHS 4, to *Mobilize Community Partnerships to Identify and Solve Health Problems*. The most significant declines within the public health system performance were found in EPHS 4, with an overall score of 84% in 2005 dropping to 46% in 2011 (*figure 19*).

Figure 15: EPHS 4- Mobilize Community Partnerships to Identify/Solve Health Problems



	Constituency Development	Community Partnerships	Overall
2005	82%	86%	84%
2011	54%	37%	46%

Figure 16: EPHS 5- Develop Policies/Plans that Support Individual & Community Health

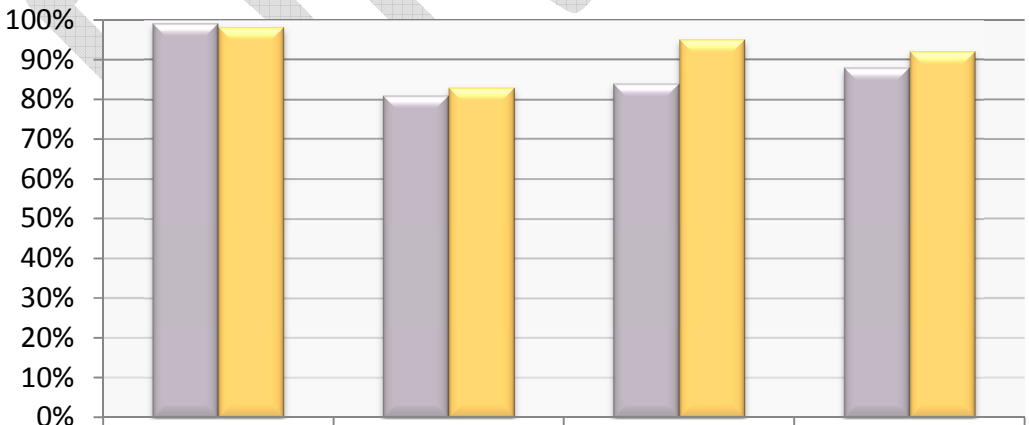


	Gov't Presence	Policy Develop	Strategic Planning	Emerg Planning	Overall
2005	88%	63%	77%		76%
2011	81%	75%	72%	99%	82%

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 (*figure 20*).

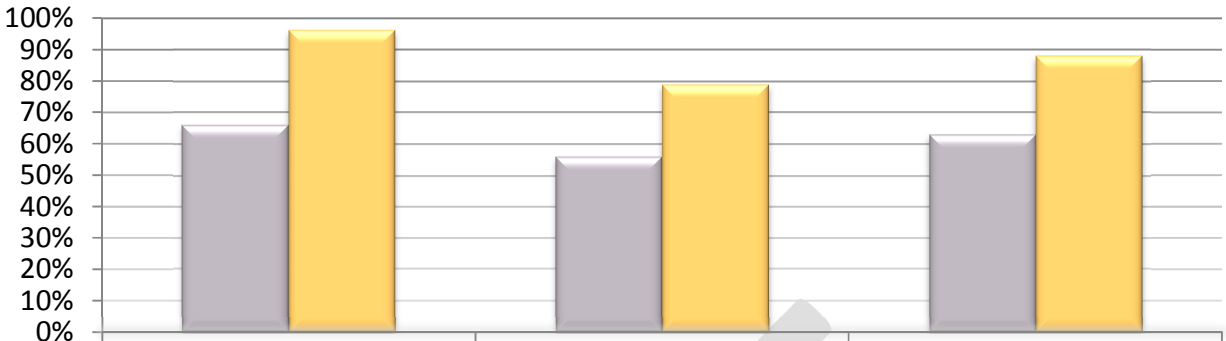
The score of EPHS 6, *to enforce laws and regulations that protect health and ensure safety*, is comprised of the following model standards: review and evaluate laws, regulations, and ordinances; involvement in the improvement of laws, regulations, and ordinances; and enforce laws, regulations, and ordinances (*figure 21*).

Figure 17: EPHS 6- Enforce Laws and Regulations that Protect Health & Ensure Safety



	Review Laws	Improve Laws	Enforce Laws	Overall
2005	99%	81%	84%	88%
2011	98%	83%	95%	92%

Figure 18: EPHS 7- Link People to Needed Health Services/Assure the Provision of Care



	Personal Health Services	Assure Linkage	Overall
2005	66%	56%	63%
2011	96%	79%	88%

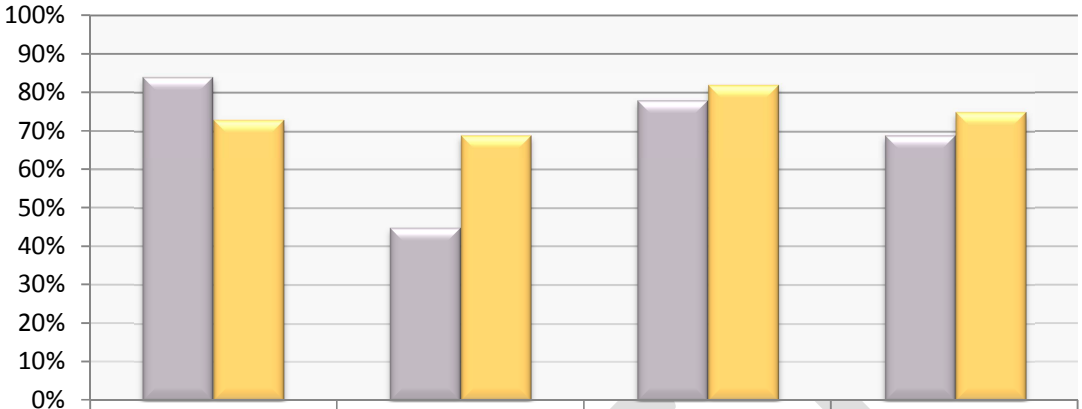
EPHS 7, to *link people to needed personal health services and assure the provision of health care when otherwise unavailable*, increased significantly between 2005 and 2011. The model standards, identification of populations with barriers to personal health services and assuring the linkage of people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

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. Workforce assessment, planning, and development was not assessed in 2005. A decrease was seen in continuing education, training, and mentoring.

Figure 19: EPHS 8- Assure a Competent Public Health Workforce

	Workforce Assess	Workforce Stnds	Continuing Educ	Leadership Devel	Overall
2005		99%	80%	50%	57%
2011	48%	100%	66%	63%	69%

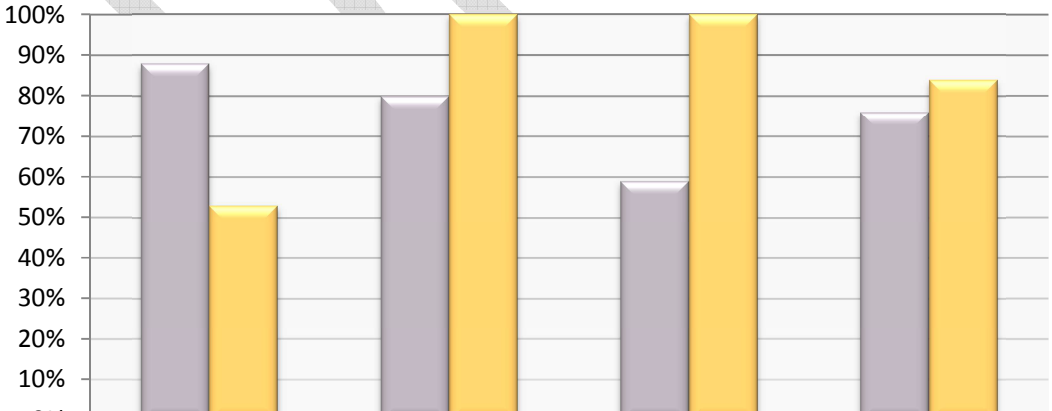
Figure 20: ES 9- Evaluate Effectiveness/Accessibility/Quality of Health Services



	Evaluate Pop Health	Evaluate Personal Health	Evaluate LPHS	Overall
2005	84%	45%	78%	69%
2011	73%	69%	82%	75%

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 24*). Of the three model standards, evaluation of population-based health services declined. 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 25*). 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 21: ES 10- Research for New Insights/Innovative Solutions to Health Problems



	Foster Innovation	Academic Linkages	Research Capacity	Overall
2005	88%	80%	59%	76%
2011	53%	100%	100%	84%

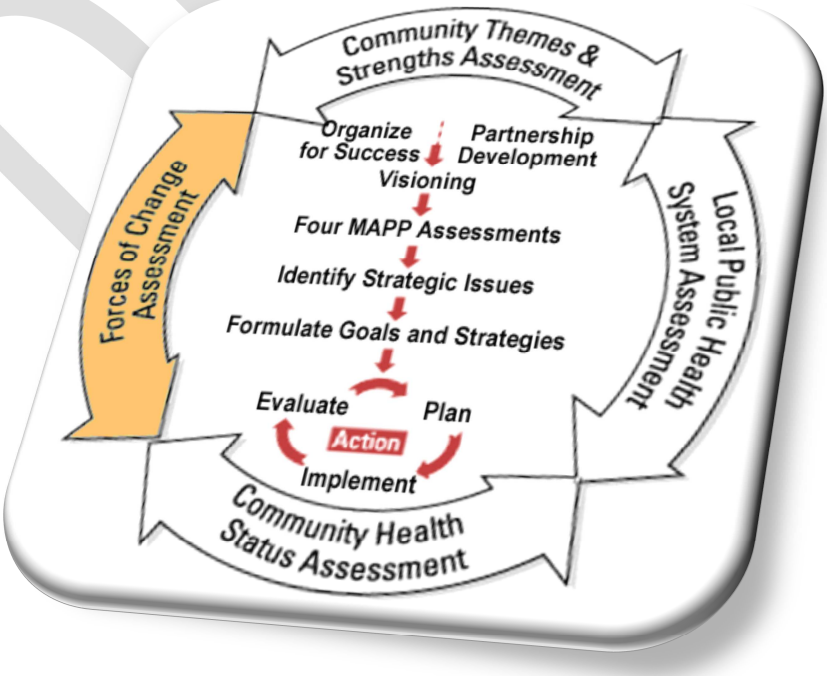
5 FORCES OF CHANGE ASSESSMENT

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.

METHODODLOGY

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

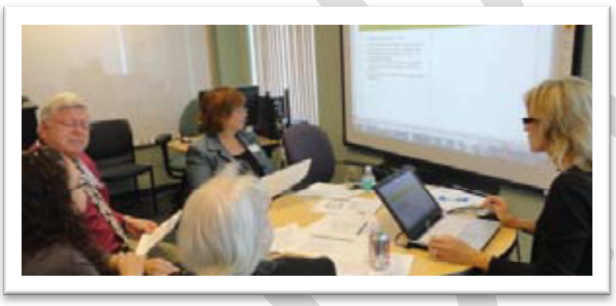
The forces, threats, and opportunities identified by teams are highlighted in *table 3* that follows. The identified forces across all 10 Essential Public Health Services were grouped into five common types of forces: Social, Economic, Political, Technological, and Legal/Ethical as seen below in *table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

Table 3: Forces, Threats and Opportunities

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

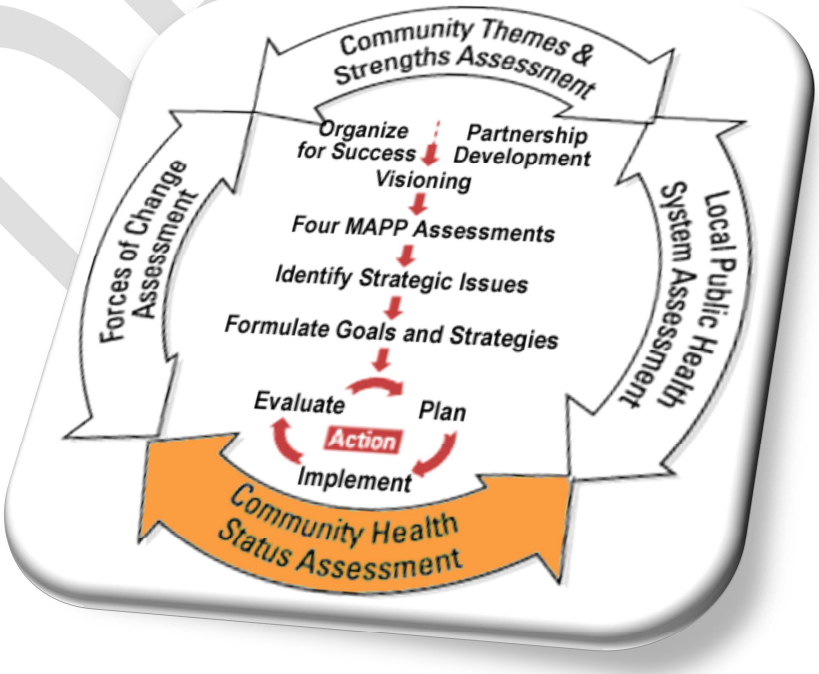
TECHNOLOGICAL: • Electronic Health Records • Social media • Common eligibility systems	• Barriers to sharing data • HIPAA and privacy concerns • Liability concerns • Misinformation due to media bias • Barriers created for those without access to technology	• Increased opportunities for data and information exchange • Increase in provider accountability • Increased community awareness • Empowered patients • Rapid response to public health threats • Quick and uniform dissemination of information • Decrease in duplication • Expanded consumer choice
LEGAL/ETHICAL: • Increasing regulations	• Limits local ordinances, control, and decision making • Hampers effective business practices • Barriers to implementation of programs/services • Barriers to conducting research	• Better regulations • Putting better practices into place • Increased accountability • Increased advocacy

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.



6 COMMUNITY HEALTH STATUS ASSESSMENT

- 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?



METHODODLOGY

The Community Health Status Assessment (CHSA) identifies priority community health and quality of life issues. It provides an understanding of the health of our residents through a synthesized review of county-level data related to health, disease, and quality of life in Pinellas County. The Pinellas Community Health Status Assessment was sponsored by the Pinellas County Health Department.

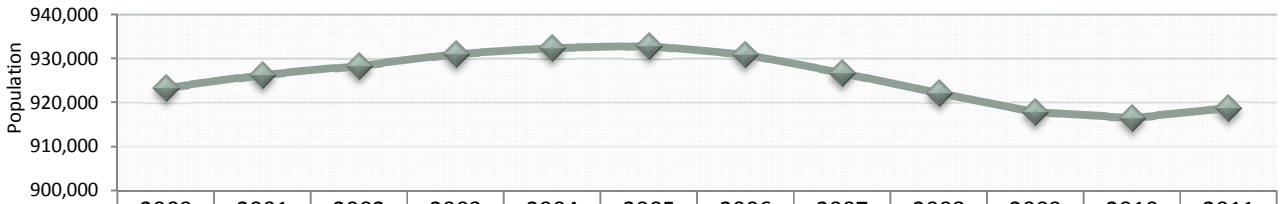
DEMOGRAPHIC & POPULATION CHARACTERISTICS

- The average age of Pinellas County residents is 46.3 years
- Pinellas County consists of a resident population that is approximately 83% white, 11% black, and 8% Hispanic

RESIDENT POPULATION

According to the 2010 United States Census, there were 916,542 people living in Pinellas County in 2010[2]. 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 increase (*figure 29).*

Figure 29: 2000 - 2011 Pinellas County Population Trends



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	923,308	926,342	928,384	931,063	932,419	932,904	930,912	926,761	922,144	917,786	916,501	918,624

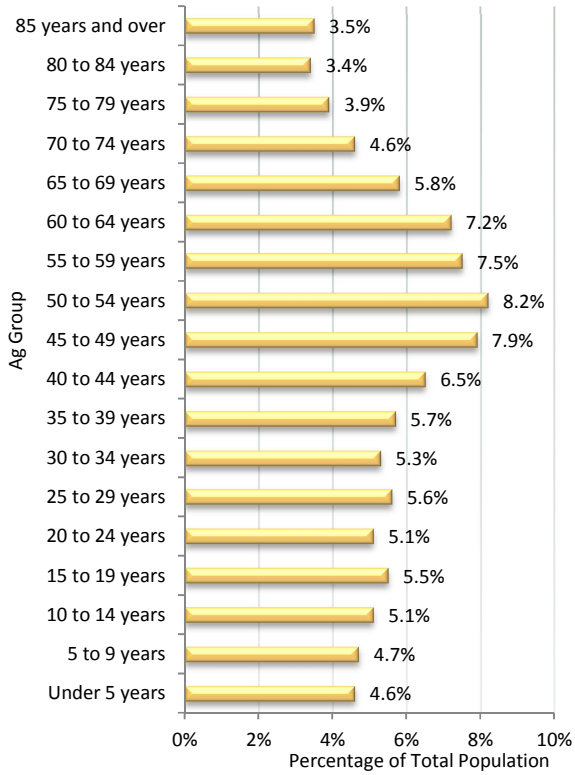
Source:Florida CHARTS

In 2011, there were 9.0 births per 1,000 population within Pinellas County, the lowest birthrate 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[3]. Compared to state demographics, Pinellas County has a lesser proportion of both children under five years of age (4.6% in the county; 5.6% in the state) and youth under 18 years of age (17.5% in the county; 21.0% in the state)[4]. However, the county population for adults older than 65 years of age is greater than the state's average, with 21.4% of Pinellas County residents belonging to this age group, compared to only 17.6% of Florida residents (*figure 30*).

Figure 30: 2010 Pinellas County Population by Age



Source:U.S Census Bureau

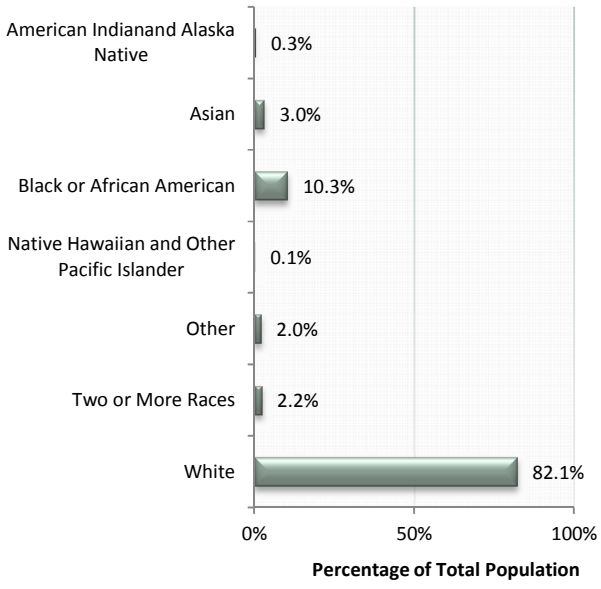
Gender

In 2010, the Pinellas County population was 52% female and 48% male[5].

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[6]. 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 the county vary geographically (*figures 32-34*). Although from the 2000 census, the trends within these neighborhoods have likely not drastically changed[7]. Notable neighborhoods of racial divide include south Saint Petersburg, which includes larger numbers of persons who are Black than any other part of the county (Figure 32).

Figure 31: 2010 Pinellas County Population by Race



Source: U.S. Census Bureau

Figure 32: Percentage of Total Population that is Black

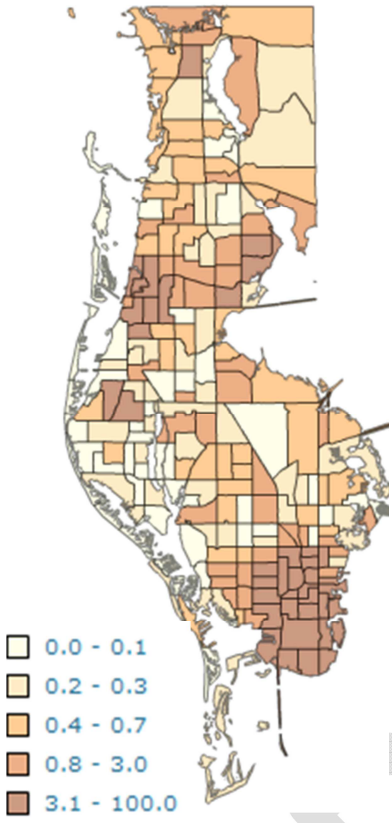


Figure 33: Percentage of Total Population that is Hispanic

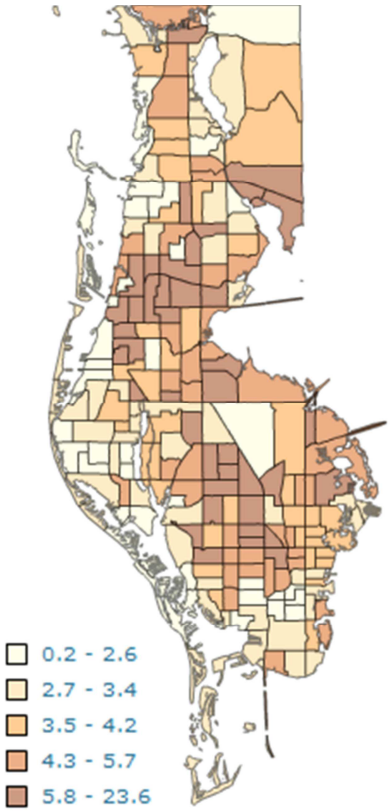
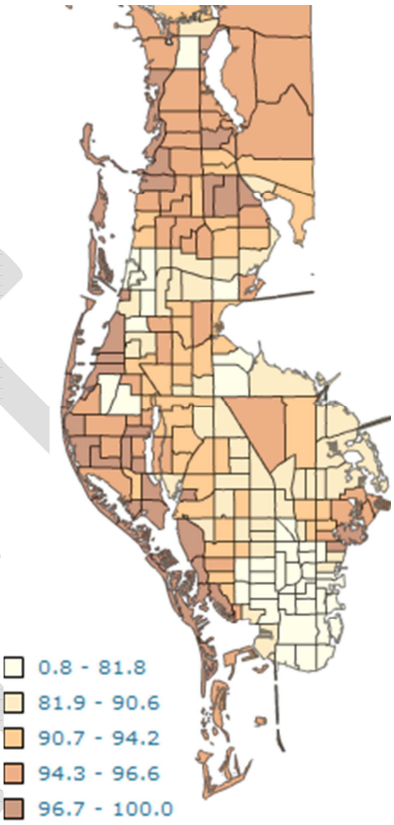


Figure 34: Percentage of Total Population that is White



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 rate (8.3% Pinellas County; 22.9% Florida). This difference is further reflected in socio-economic 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 segregated neighborhoods provide greater need for cultural and linguistically appropriate approaches to healthcare.

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[8]. The tourism industry also employees a significant percentage of the county population; Pinellas is estimated to have 1,981 restaurants, 71 hotels, and 249 motels within its limits[9].

SOCIO-ECONOMIC CHARACTERISTICS

- 12.1% of county residents live below the poverty level
- 27% of county households spend more than 30% of their income on housing
- 16.7% of adults reported that someone within their household had been authorized to receive WIC or Food Stamp benefits within the year

Households and Families

There are 405,649 households in Pinellas County, with an average of 2.21 people per household[10]. Pinellas is considered an urban county, with 100% of its residents residing in urban conditions[11].

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[12] 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[13]. 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 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[14]. A recent 2011 income estimate indicates a drop in median household income, to $43,882[15]. The top industries of employment in 2010 include healthcare and social assistance, retail trade, and accommodation and food services as seen in the table at right.

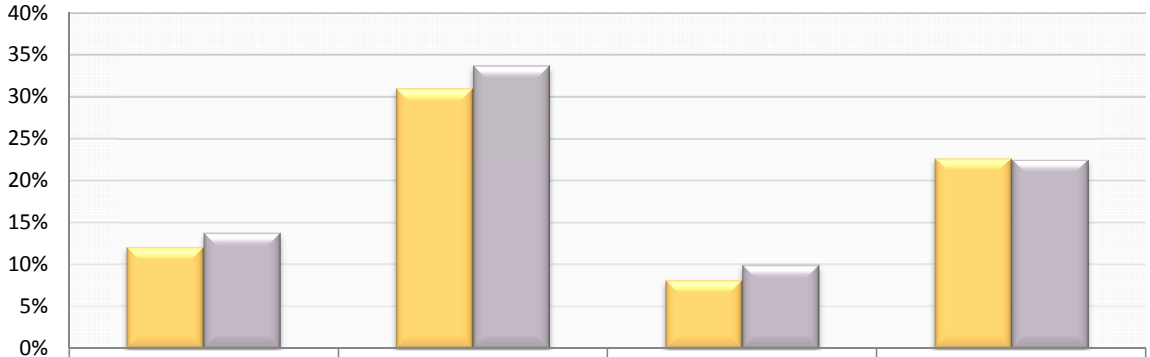
Table 4: 2011 Pinellas Top Industries of Employment

Industry	Average 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	

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%[16], greater than the national unemployment rate of 8.9%[17].

Although the Pinellas unemployment rate is the same as Florida, only 12.1% of county residents are below the poverty level, compared to 13.8% within the state[18]. However, the percentage of people living below the poverty level 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% to 9.9% within the state for 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 a dramatic 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 200% below the 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 healthcare. Selected socio-economic indicators can be seen below in *figure 35.*

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



	Below Povery Level	200% Below Poverty Level	Families Below Poverty Level	Families with Children < 5 Under Poverty Level
Pinellas	12.1%	31.0%	8.1%	22.7%
Florida	13.8%	33.7%	9.9%	22.5%

Source: Florida CHARTS

Additionally, the 2010 Communities Putting Prevention to Work (CPPW) BRFSS report 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[19]. 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[20], 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[21]. Over half, 56.5%, of children in Kindergarten in

Pinellas County are eligible for free or reduced lunch; though this is less than the 59% of children in the state, it still accounts for a large proportion of students. Of the 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.

Homelessness and Affordable Housing

Affordable housing provides stability for residents to rely on. The 2006 – 2010 median gross rent in Pinellas County, $904, was less than that of the state median gross rent, $957[22]. According to HUD Fair Market Rent in 2012, the 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, $1173 for a three-bedroom, and $1417 for a four-bedroom unit[23]. This analysis suggests that no more than 30% of income should be spend on rent or mortgage cost. 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.

The most significant period of homelessness in Pinellas County exists between December and April each year[24]. Estimates from 2011 indicate that approximately 5,887 individuals were homeless in Pinellas County, of which 720 were unsheltered and 148 were unsheltered families[25].

Having access to stable and safe housing can greatly affect a child's development. For every 1,000 infants in the county, 17.4 infants were in foster care in 2009 - 2011; this is compared to only 10.7 infants per 1,000 population in the state[26]. For children ages 1 to 5 years, 8.4 children per 1,000 population in the county and 5.7 children per 1,000 population in the state were in foster care. This same trend exists in older children within the county[27]. The 2011 county rate for children ages 5 to 11 in foster care was 4.9 children per 1,000 population, compared to 3.5 children per 1,000 population within the state. Within the 12 to 17 age group, the difference between county and state rates was even greater, with 6.2 children ages 12 to 17 per 1,000 population in the county and 4.5 per 1,000 population in the state in foster care.

Transportation

Residents of Pinellas County rely on stable access to transportation for access to healthcare, employment, and food. The average travel time for residents to commute to work is 23 minutes[28]. The Pinellas County Transportation Authority is often an alternative transportation resource for those who do not have access to a personal vehicle. The Pinellas County Transportation Authority has over five hundred employees and a 2011 ridership of 13.1 million people[29]. The 2011 fiscal year included 191 transit vehicles, 37 bus routes, and boarded 361,412 bikes on the buses. Although the system functions throughout the county, some neighborhoods still lack access[30]. Poverty is also linked to a lack of access to transportation. The Pinellas County Transportation Authority, 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[31]. However, participant enrollment is based upon availability and an application process.

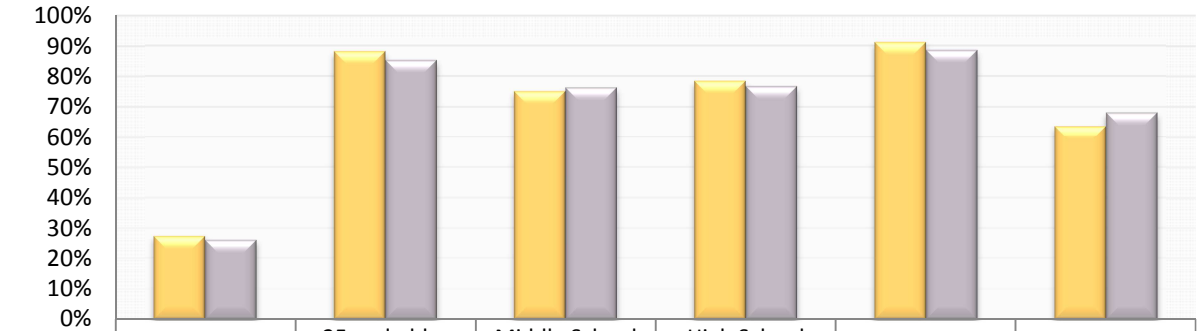
Education Attainment and Opportunity

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[32]. In Pinellas County, the majority of those age 25 or over, 88.1%, had a high school diploma or its equivalent in 2010, slightly greater than the state at 85.3%[33]. However, this number dropped considerably for those who had achieved a bachelor's degree or higher, with only 27.1% of residents in Pinellas County and 25.9% in the state of Florida having attained such a degree.

The success of students in post- secondary education is often reflective of the skills developed earlier in a student's education. In the 2009 – 2010 academic year, the county high school graduation rate was 78.8%, lower than the state rate of 80.7%[34]. 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 (2010) reported that 75.1% of middle school students within Pinellas County (76.3% Florida) and 78.5% of high school students within Pinellas County (76.7% Florida) reported feeling safe at school. The remaining students reported some lack feeling safe at school.

Early learning opportunities may increase school readiness and social skills. According to the Florida CHARTS Pregnancy and Young Child Profile (2010), Pinellas County had double the rate of licensed child care centers and homes compared to the state (6 per 1,000 population and 3 per 1,000 population, respectively). The number of children enrolled in school readiness programs is reflected in this number as well, with an enrollment of 103.4 per 1,000 population within Pinellas County (82.6 per 1,000 population in the state)[35]. Overall, the number of students ready for school at kindergarten entry was high in Pinellas County, at 91.1%[36].

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



	25 and older with Bachelors Degree	25 and older with a High School Diploma or equivalent	Middle School Students who Feel Safe at School	High School students who feel safe at school	Ready for school at Kindergarten	4-year olds in voluntary pre-K
Pinellas	27.1%	88.1%	75.1%	78.5%	91.1%	63.6%
Florida	25.9%	85.3%	76.3%	76.7%	88.5%	68.1%

Source: Florida CHARTS

COMPARISON COUNTIES

Three counties are compared to Pinellas County throughout the Community Health Profile:

1. Hillsborough
2. Orange
3. Palm Beach

Several counties throughout the state have population and socioeconomic characteristics similar to those within Pinellas County. Throughout the discussion of Pinellas County health outcomes and indicators, these counties will be referenced as comparable to Pinellas County (*Table 5*). There is no county that exactly mirrors the demographic structure of Pinellas County. For comparison purposes, Palm Beach County is the most similar in terms of age, gender, and racial makeup; however, its population density and residents claiming Hispanic origin differ largely from that of Pinellas County.

Similarly, the socioeconomic characteristics within these counties are similar in many regards (*Table 6*). Despite diversity in median income levels, the percent of the population 100% below poverty and unemployment rates are similar among these counties. Although, among the counties being compared, Pinellas County has the smallest percentage of its population living at least 100% below poverty and the fewest people over 25 without a high school diploma, it also has the lowest median income. Linguistic isolation varies widely among the comparison counties.

Table 5: 2011 Population Characteristics: Comparable Florida Counties (Source: Florida CHARTS)

	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%	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%

Table 6: Socioeconomic Characteristics Comparable Florida Counties (Source: Florida CHARTS)					
	Florida	**Pinellas**	**Hillsborough**	**Orange**	**Palm Beach**
Median Income (2010)	$47,661	$45,258	$49,536	$50,138	$53,242
Residents Living in Poverty (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 Isolated (2010)	11.8%	3.1%	10.2%	12.8%	7.1%
Population over 25 without a high school diploma or equivalency (2010)	14.7%	11.9%	14.2%	13.1%	14.7%

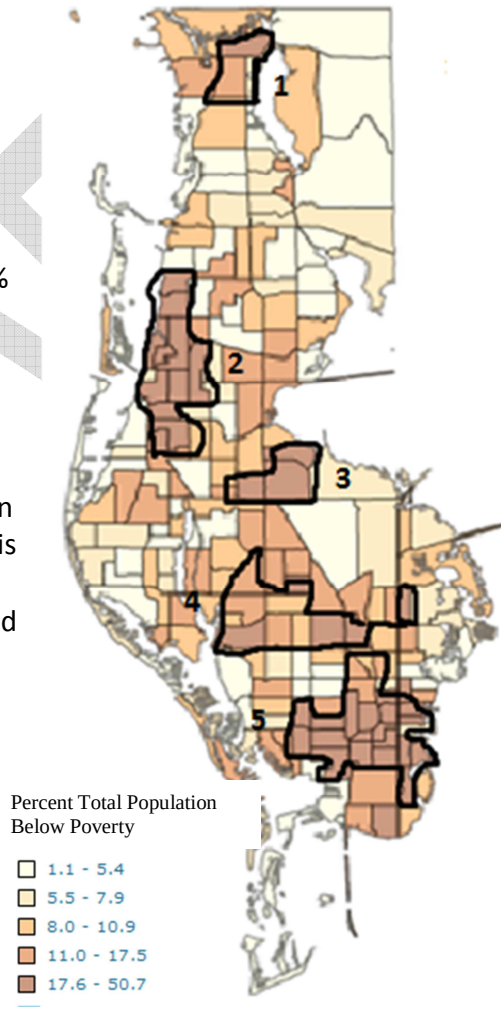
AT RISK COMMUNITIES

In 2012, Pinellas County Health and Human Services identified five at risk communities in Pinellas:

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

In May of 2012, the Pinellas County government and the Pinellas County Board of County Commissioners met to discuss the economic impact of poverty[37]. By analyzing census and zip code level data, five at-risk communities were identified in Pinellas: East Tarpon Springs (1), North Greenwood (2), Highpoint (3), Lealman Corridor (4), and South St. Petersburg (5), as pictured at right. Each of these communities has at least 16% of its residents living in poverty. The county census tracts with the highest percentages of people living at or below 100% of the federal poverty level also fall with two of these zones: census tract 262 (North Greenwood; 51% living in poverty) and census tract 216 (South St. Petersburg; 48% living in poverty).

Figure 37: 2005 – 2009 Pinellas At Risk Communities by Census Tract



Source: Pinellas Indicators

Although healthcare, nutritional foods, and transportation may often appear readily accessible within the county, it is often these areas that lack both health equity and essential social services. The aforementioned report found several key trends within these at risk communities:

- Almost double the county rate of verifiable child abuse
- Double 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

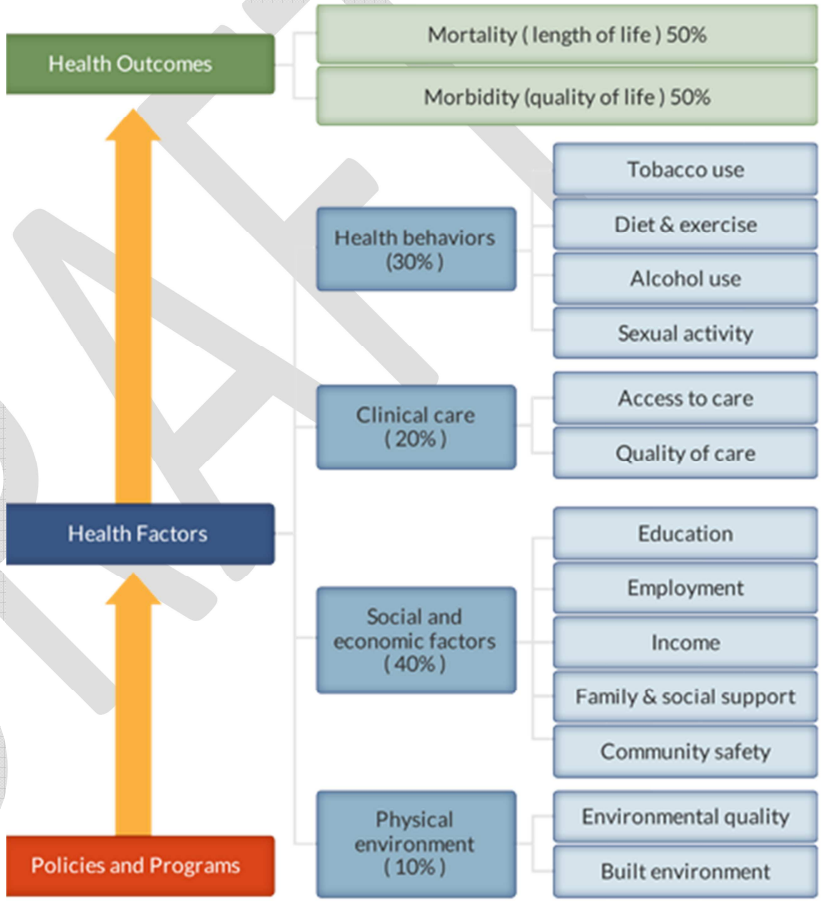
These socio-economic indicators often perpetuate the cycle of poverty and greatly affect our community's mental and physical health.

COUNTY HEALTH RANKINGS

- Among Florida's 67 counties, Pinellas ranks:
  - 31st in Health Outcomes
  - 15th 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 future[38]. Selected indicators are investigated through a model that explores health policies and programs; health factors; and health outcomes. Of the 67 counties within the state of Florida, Pinellas County had a 2012 ranking of 31 in **health outcomes**, divided between mortality, also with a rank of 31, and morbidity, ranking 29th. Indicators considered under mortality included premature death. Indicators under morbidity included: poor or fair health; poor physical health days; poor mental health days; and low birth weight.

Figure 38: County Health Rankings Model



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

Pinellas County ranked 15th out of 67 counties in **Health Factors**, consisting of health behaviors, clinical care, social and economic factors, and physical environment. The poorest ranking of these was social and economic factors, where Pinellas County held a ranking of 28. As indicated in *figure 38*, social and economic factors account for 40% of the county health factors score. Within the health behavior indicators, Pinellas County ranked 16th; within clinical care, 10th; and within physical environment indicators, 11th.

Although the factors influencing health have improved since the County Health Rankings began in 2010, the county has not yet seen improvements in the county Health Outcomes. Such improvements will likely take time and continued improvement in the county Health Factors. Overall rankings from 2010-2012 can be seen in the table below.

Table 7: 2010 – 2012 Pinellas County Health Rankings

	2010	2011	2012
Health Outcomes	**29**	**28**	**31**
Morbidity	28	26	29
Mortality	26	30	31
Health Factors	**24**	**20**	**15**
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

- 16.1% of adults were not able to access a health care provider in the past year due to cost
- 74% of adults report having health insurance coverage
- 90% of children have health insurance coverage

Access to quality and affordable healthcare is crucial for a healthy population. Such access may include preventative care, treatment, and health education. Access to healthcare 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[39].

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 within the county than the state[40]. However, the number of licensed dentist is lower than the state rate, 61.3 per 100,000 in Pinellas County and 63.0 per 100,000 in Florida. Additionally, in 2010, only 88.7% of residents reported having a personal doctor[41].

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[42]. Health Professional Shortage Areas have a shortage of primary medical care, dental, or mental health providers. In Pinellas County there are 12 populations groups and 6 comprehensive health centers that classify as experiencing a health professional shortage (*figure 39*). These shortages exist for all areas of healthcare, excluding mental health. The Population Groups include low-income communities in Clearwater, St. Petersburg, Pinellas Park, Tarpon Springs, and the Bayview service area. Pinellas County also has 5 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. Healthcare services are also provided to homeless individuals by Health and Human Services, at locations throughout the county.

Figure 39: Pinellas County Health Professional Shortage Areas

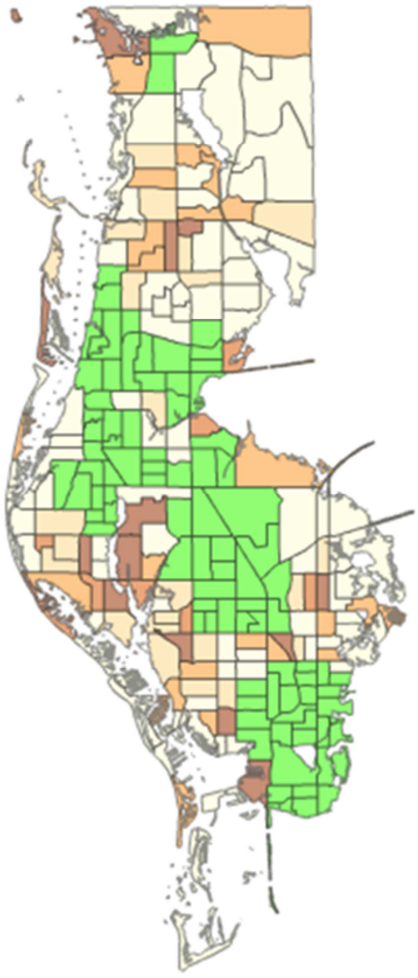
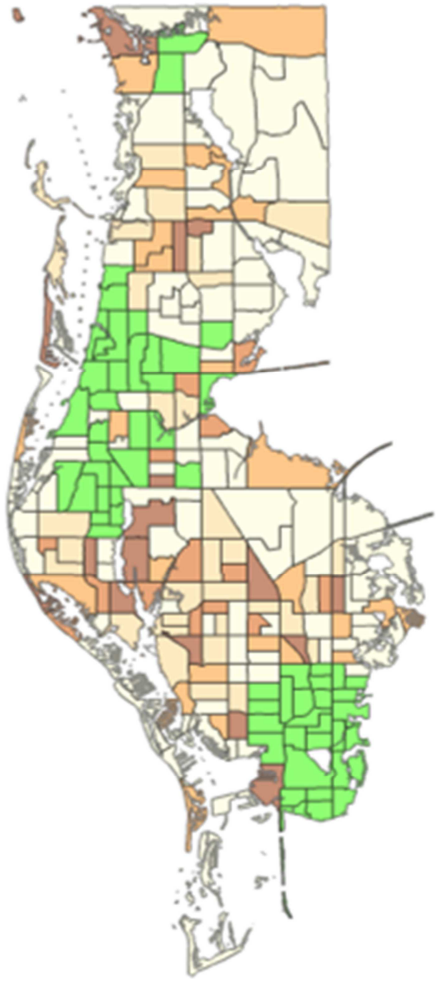


Figure 40: Pinellas County Medically Underserved Populations



Source (Figures 39-40): HRSA, Pinellas Indicators

HEALTH INSURANCE COVERAGE

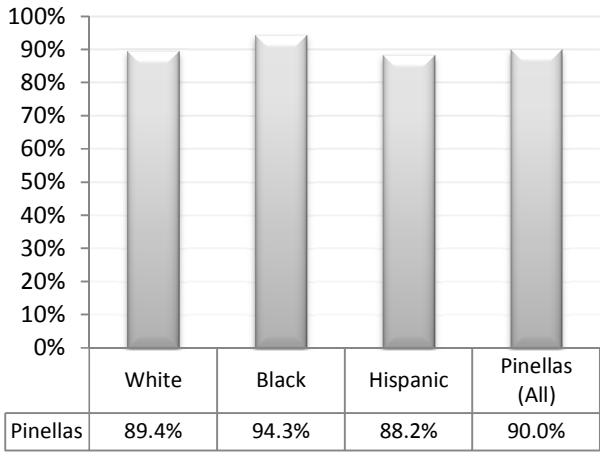
Health insurance coverage aids in providing reasonably priced healthcare to children and adults throughout the county. According to the American Community Survey, in 2010, 10% of children in Pinellas County were uninsured (*figure 41*)[43]. Children who were black were more likely to have health insurance coverage (94%) than children who were white (89.4%). These high 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 1st, 2012, Florida KidCare enrollment reached 8,961 in Pinellas County[44]. This included in the 6,838 Healthy Kids Program, 1,156 in the MediKids program, and 967 in Children's Medical Services.

In 2010, American Community Survey found that only 74% of adults within Pinellas County had health insurance. Adults who were white were more likely than those who were black to have health insurance (*figure 42*). However, only half of adults who identified as being Hispanic had health insurance. Children were more likely to be insured than adults, likely due to social programs provided to assist with healthcare in children (*figure 41*). Dental care was not as well covered, causing 17.3% of adults in 2007 to report not being able to see a dentist due to the cost. Similarly, the 2010 CPPW BRFSS Data Report reported that 16.1% of adults needed to see a health care provider, but did not because of associated costs in the previous year.

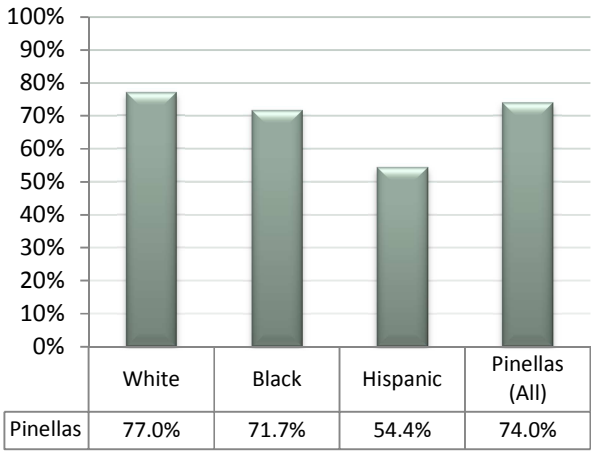
Figure 41: 2010 Pinellas County Children with Health Insurance by Race/Ethncity



	White	Black	Hispanic	Pinellas (All)
Pinellas	89.4%	94.3%	88.2%	90.0%

Source: American Community Survey

Figure 42: 2010 Pinellas County Adults with Health Insurance by Race/Ethnicity



	White	Black	Hispanic	Pinellas (All)
Pinellas	77.0%	71.7%	54.4%	74.0%

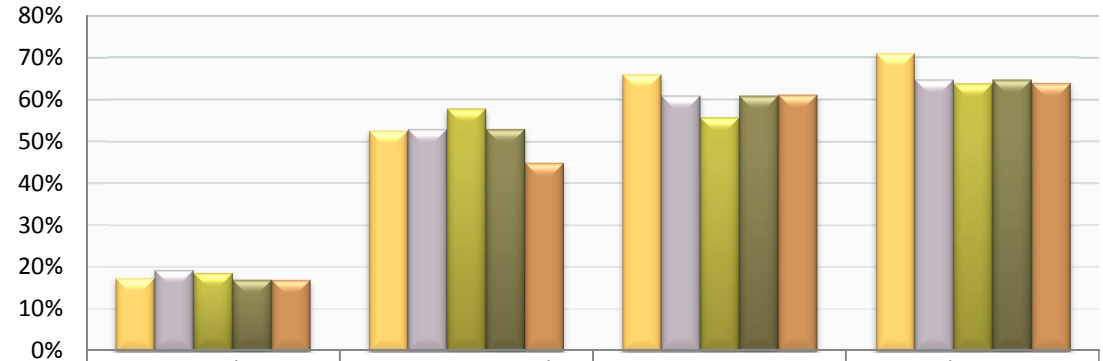
Source: American Community Survey

ORAL HEALTH

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

Associated costs, knowledge, and difficulty to access providers may affect a population's oral health. The 2007 BRFSS found that 17.3% of adults could not see a dentist due to costs in the year preceding the survey[xliv]. This figure was less than adults within the state who could not see a dentist, 19.2%. It was also similar to comparison counties, including: Hillsborough (18.5%) and Orange (16.9%) counties. The 2010 BRFSS 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 average, 52.6% and 53%, respectively. Despite these statistics, Pinellas County had more adults who had their teeth cleaned in the past year and more adults who had visited a dental clinic in the past year than the state and each of the selected demographically similar counties (*figure 43*).

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



	No Dental Care Due to Costs	Permanent Tooth Removed	Teeth Cleaning	Visited Dentist or Dental Clinic
Pinellas	17.3%	52.6%	65.9%	70.9%
Florida	19.2%	53.0%	60.9%	64.7%
Hillsborough	18.5%	57.8%	55.7%	63.8%
Palm Beach	16.9%	53.0%	60.9%	64.7%
Orange	16.9%	44.8%	61.1%	63.9%

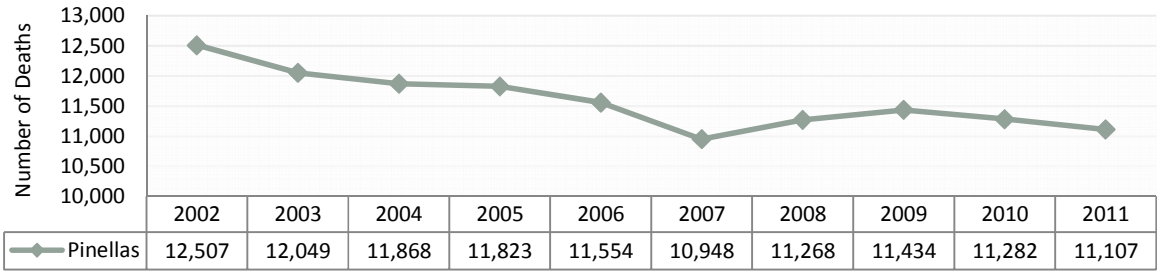
Source: BRFSS (2007; 2010)

LEADING CAUSES OF DEATH

- In 2011, the leading causes of death were chronic diseaes including cancer and heart diseasen
- Heart disease accounts for over one-fifth of all deaths

In 2011, 11,107 people died in Pinellas County[xlvi], consistent with deaths in recent years, and decreasing only slightly from 2010 (*figure 44).*

Figure 44: 2002 - 2011 Pinellas County Deaths



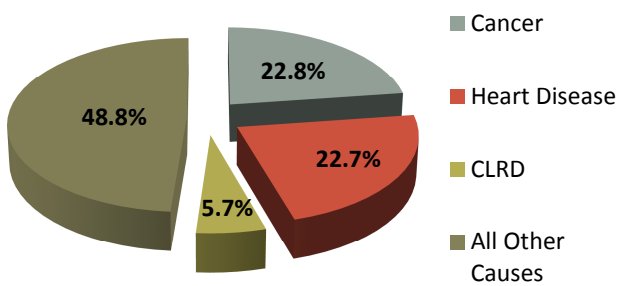
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Pinellas	12,507	12,049	11,868	11,823	11,554	10,948	11,268	11,434	11,282	11,107

Source: Florida CHARTS

Cancer and heart disease were the largest contributers to death in the county, considered the cause of death for 22.8% and 22.7% of those who died in 2011 (*figure 45*). In 2011,the top ten major causes of death included:

1. Cancer (22.8%)
2. Heart Disease (22.7%)
3. Chronic lower respiratory disease (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



Source: Florida CHARTS

- Nutrition, exercise, and a strategically designed environment may all play an important role in chronic disease prevention
- Although deaths due to many chronic diseases are declining, disparities exist between races and ethnicities

Communities Putting Prevention to Work and STEPS

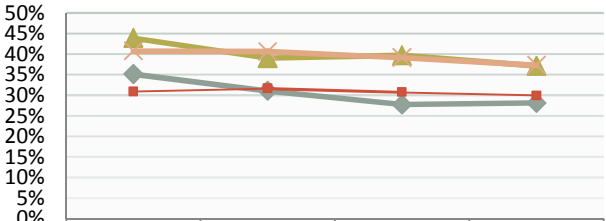
Communities are increasingly making an effort to provide residents with an environment and policies that enable them to make healthier choices more easily. This may include increasing access to grocery stores or farmers markets, creating worksite wellness policies, or providing access to safe places for physical activity. From 2003 to 2008, the Steps to Healthier Florida, Pinellas grant targeted obesity, asthma, and diabetes through addressing physical activity, nutrition, and tobacco cessation in Pinellas County[xlvii]. 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, Access to Nutrition, and Built Environment

The 2010 CPPW BRFSS collected data specific to adult activity levels in the month preceding the survey[xlviii]. 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[xlix]. 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 within the county and the state, had greater physical activity levels than high school students[l]. Of the 2012 middle school students in Pinellas County, 28.1% did not receive sufficient vigorous physical activity; 29.9% of middle school students in the state were without sufficient vigorous physical activity[li]. In 2012 high school students, 37.1% of students in the county and 37.3% of students in the state were without sufficient vigorous physical activity (*figure 46*).

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

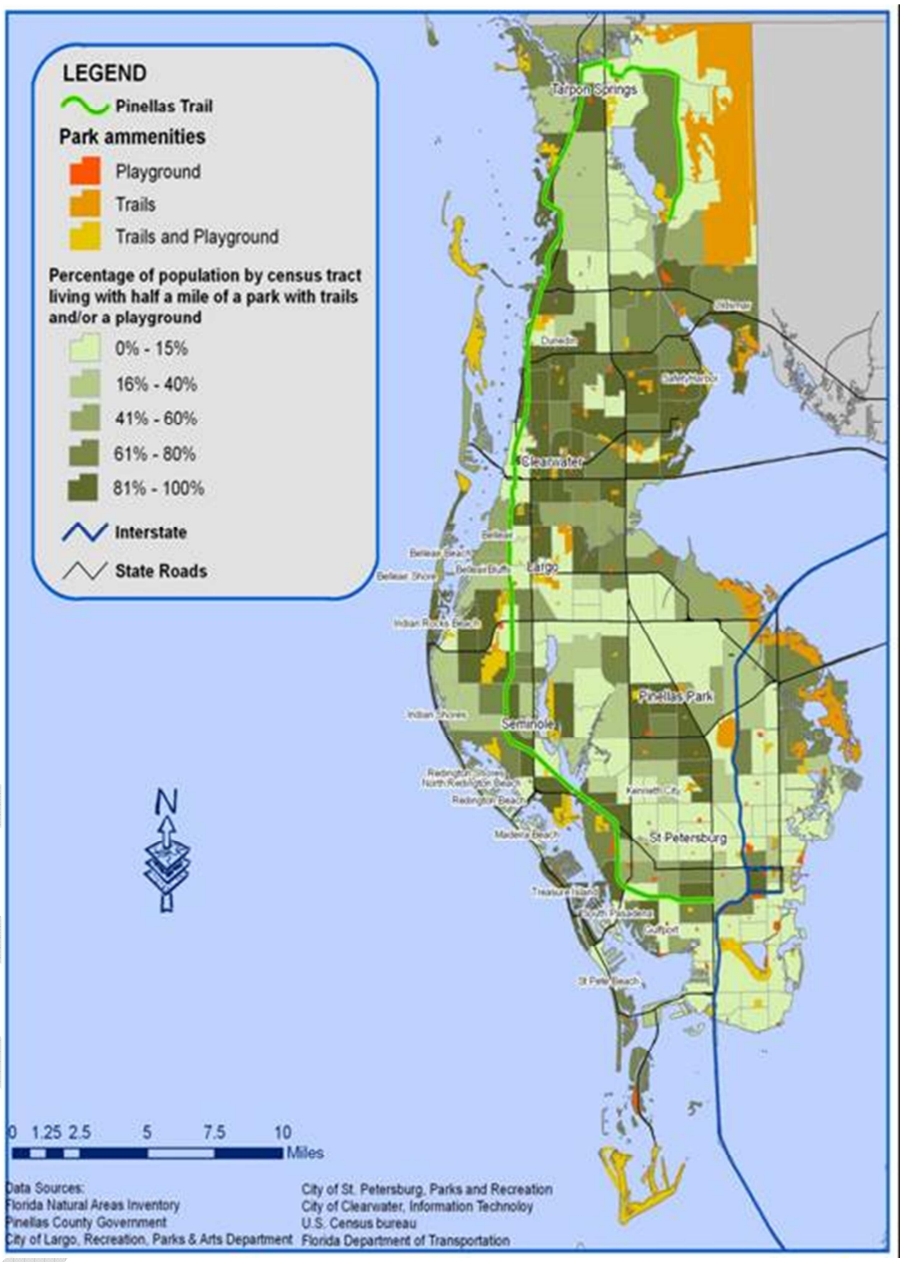


	2006	2008	2010	2012
Pin Middle	35.1%	31.0%	27.7%	28.1%
FL Middle	30.9%	31.6%	30.7%	29.9%
Pin High	43.9%	39.0%	39.7%	37.1%
FL High	40.7%	40.6%	39.1%	37.3%

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 - with 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 reporting 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 residents live within 0.5 miles of a park with either a trail or a playground; those areas that have more difficult access to these facilities often correspond to the same areas identified as at-risk (*figure 47*). This data is corroborated by 2010 Department of Health data that found over half (50.62%) of the population lived within 0.5 miles of park and approximately one-fifth (20.36%) lived within 0.5 miles of an off street trail system[lii].

Figure 47: 2010 Pinellas County Residents Living Within 0.5 miles of a Park with a Trail or Playground, by Census Tract

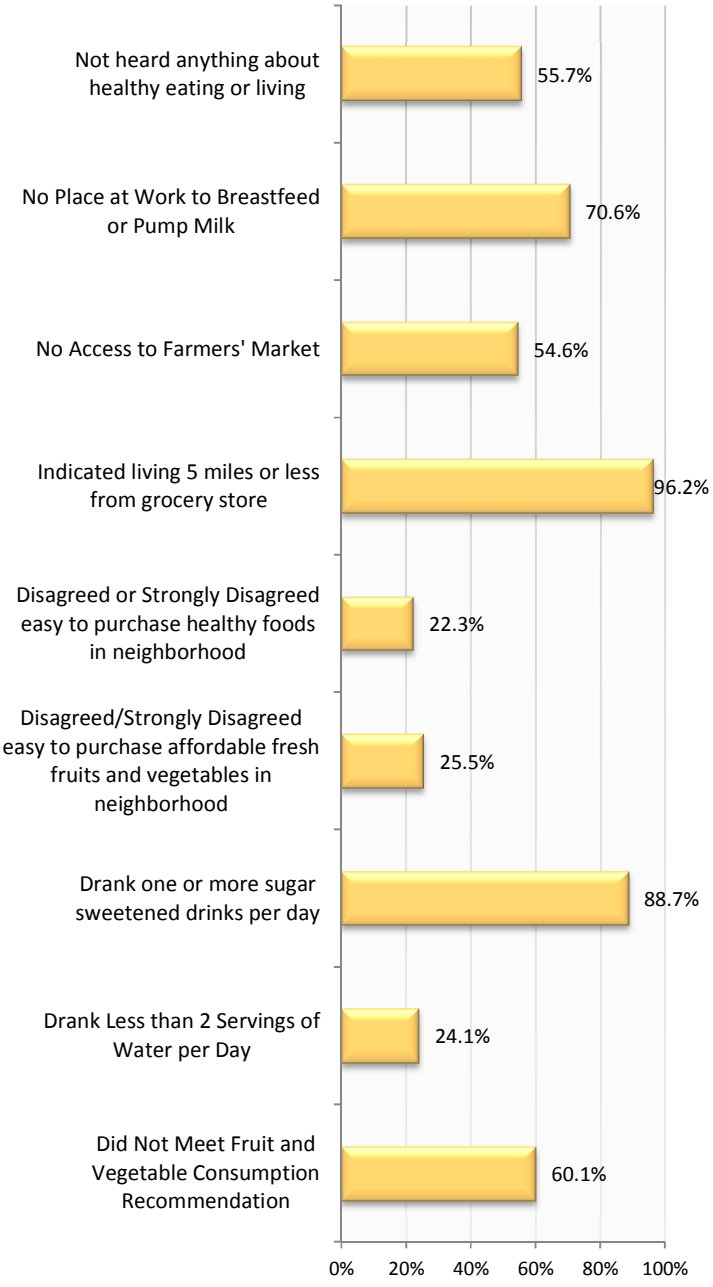


Access to such facilities may influence activities related to physical health, such as walking, running, or visiting a recreational facility. In Pinellas County, 21.3% of adults reported that their neighborhood was not safe from crime[liii]. Persons who were black are more likely than persons who were white to experience many of the negative consequences of an unsafe community. For example, 2009 – 2011 hospitalizations for non-fatal firearm injuries 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 in Pinellas County is over five times that of persons who are white (16.6 per 100,000 and 3.4 per 100,000, respectively).

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[liv]. 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 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

Figure 48: 2010 Pinellas County CPPW BRFSS Selected Nutrition Indicators



Source: CPPW BRFSS

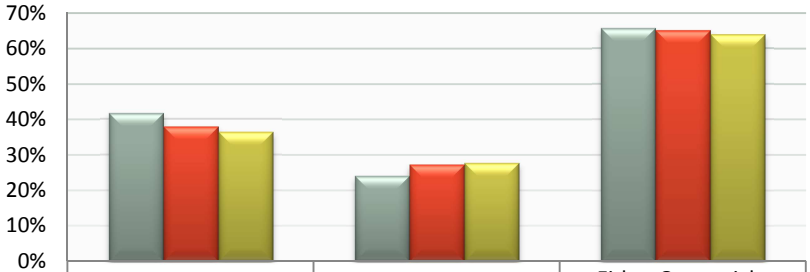
quality). Similarly, 41.02% of Pinellas County residents live within 0.5 miles of a fast food restaurant and 43.23% live within 0.5 miles of a healthy food source (*figure 48*).

Similarly, only approximately one-quarter of residents ate at least five servings of fruits of vegetables a day (26.3% Pinellas County; 26.2% Florida)[lv]. The CPPW BRFSS 2010 survey, although having no state comparison data, can also provide insight into the nutritional status of Pinellas County residents[lvi]. This survey 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. 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 sugar-sweetened drinks per day in the 30 days preceding the survey[lvii].

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 pump 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[lviii]. These findings are further corroborated by the CPPW BRFSS survey, 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[lix]. In Florida 37.8% of people were overweight, and 27.2% obese[lx]. Comparatively, United States statistics show that 36.3% of adults were overweight and 27.6% were obese[lxi]. 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*). The Florida CHARTS, School-aged Child and Adolescent Profile reports the percent of students reporting their BMI to be at or above the 95th percentile, where 13% of middle school students in the county and 11.7% in the state fall into this category in 2010[lxii]. This number dropped considerably in 2012, where 6.9% of middle school students in the county and 11.1% in the state were at or above the 95th percentile BMI.

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



	Overweight	Obese	Either Overweight or Obese
Pinellas	41.6%	24.0%	65.6%
Florida	37.8%	27.2%	65.0%
United States	36.3%	27.6%	63.9%

Source: 2010 BRFSS

In high school students, 10.2% in the county, and 11.5% in the state have a BMI at or above the 95th percentile in 2010. In 2012, these rates were 10.3% within the county and 14.3% within the state.

Physical Environment

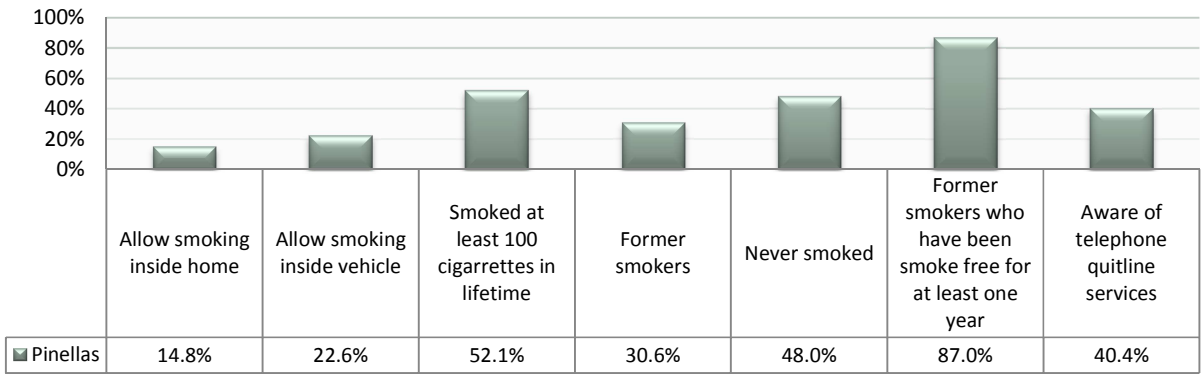
An unclean or unsafe physical environment may affect a person's ability to participate in outdoor activities and exercise. The 2007 BRFSS collected data on adults who had changed or reduced their outdoor activity due to poor air quality[lxiii]. Throughout the state, 19.2% of adults indicated that they had changed or reduced outdoor activity due to poor air quality; however, in Pinellas County this number reached 25.1%. The percentage of adults in Pinellas County who changed their behavior due to air quality was also higher in Pinellas County than in comparable counties within the state of Florida, 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[lxiv]. Measurable indicators include: CO 1-hr 2nd Max, CO 8-hr 2nd Max, NO2 98th percentile, O3 1-hr 2nd Max, O3 8-hr 4th Max, SO2 99th percentile, SO2 24-hr 2nd Max, PM2.5 98th percentile, PM2.5 Wtd. Mean, and PM10 24-hr 2nd 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 beach, Sand Key, Indian Rocks beach, Madeira beach, Treasure Island beach, Pass-A-Grille beach, 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. A point in time observation for the October 15, 2012 sampling period indicated no advisory warnings.

Tobacco Use

Tobacco use is largely correlated with increased chronic disease prevalence and death. In Pinellas County, nearly 20% of the adult population (19.3%) smoked tobacco in 2010, higher than the state rate of 17.1%. Moreover, this is much higher than the Healthy People 2020 goal of only 12% of adults smoking tobacco by 2020. The CPPW BRFSS also investigated the behaviors of smokers, including: smoking frequency, smoking locations, and knowledge of Quitline services[lxv]. 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 over half (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[lxvi]. 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



	Allow smoking inside home	Allow smoking inside vehicle	Smoked at least 100 cigarettes in lifetime	Former smokers	Never smoked	Former smokers who have been smoke free for at least one year	Aware of telephone quitline services
Pinellas	14.8%	22.6%	52.1%	30.6%	48.0%	87.0%	40.4%

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[lxvii]. This was higher than within the state, where the diagnosed hypertension rate was 34.3%. Similarly, 47.9% of Pinellas County 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 also 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 be at least partially responsible for the higher rates of identified high cholesterol within the county. Personal knowledge of cholesterol and blood pressure can help influence important behavior changes for those at risk of heart disease and stroke.

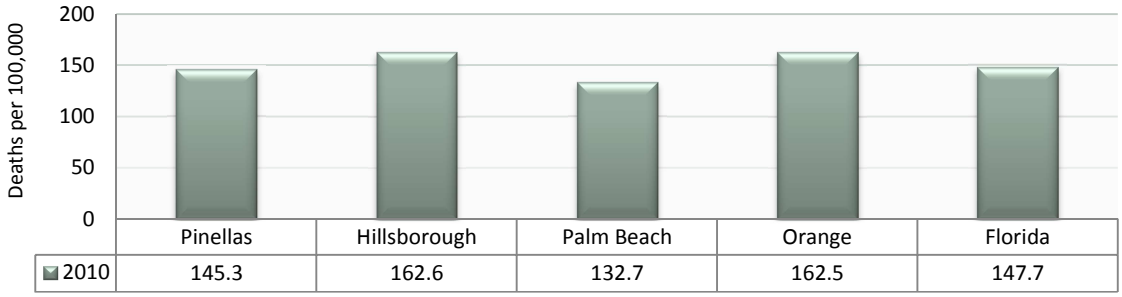
Table 9: 2010 Pinellas County BRFSS Adult Screening Indicators Related to Heart Disease

	Pinellas	State
Self-Reported Hypertension Diagnosis	36.6%	34.3%
Self-Reported High Blood Cholesterol Diagnosis	47.9%	38.6%
Have had Cholesterol Checked	79.5%	73.3%

Source: 2010 BRFSS

The 2010 Pinellas County age-adjusted heart disease death rate (145.3 per 100,000) was similar to that of the state, and less than both Hillsborough and Orange counties (*figure 51*). The overall age-adjusted rate of deaths due to heart disease in Pinellas County has declined in the past decade; however, at a much slower rate in persons who are black compared to both persons who are white and state rates for age-adjusted heart disease deaths. This racial disparity is narrowing, there was still an overwhelming difference of 150 deaths per 100,000 persons who were white in Pinellas County compared to 221 deaths per 100,000 persons who were black in Pinellas County (*figure 52*). Age-adjusted death rates for heart disease by ethnicity were collected beginning in 2004. In Pinellas County, age-adjusted deaths due to heart disease were lower in persons identifying as Hispanic than in either racial stratification.

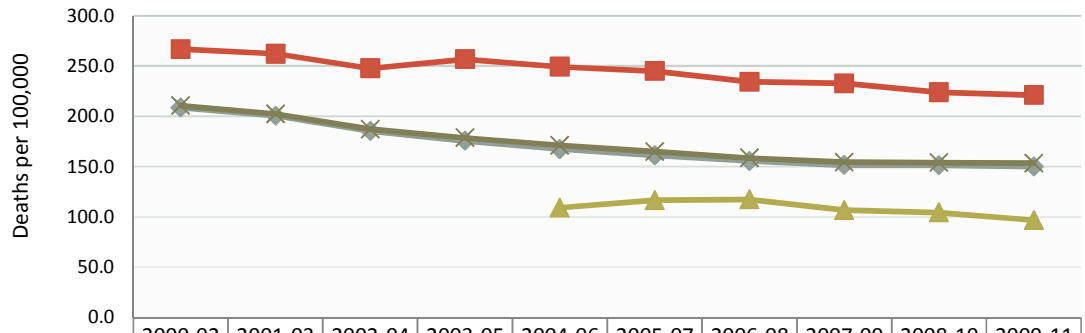
Figure 51: 2010 County Comparison Heart Disease Age-Adjusted Death Rate



	Pinellas	Hillsborough	Palm Beach	Orange	Florida
2010	145.3	162.6	132.7	162.5	147.7

Source: Florida CHARTS

Figure 52: 2000 - 2011 Pinellas Heart Disease Death Trends by Race/Ethnicity

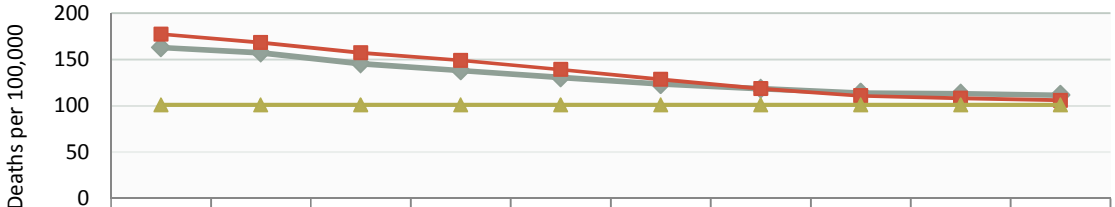


	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	208.5	200.5	185.3	175.5	167.3	161.2	155.6	151.4	151.2	150.0
Black	266.7	262.1	247.7	256.7	249.3	244.9	234.2	232.6	223.8	221.0
Hispanic					109.2	116.6	117.3	106.7	104.4	96.8
Pinellas (All)	210.6	202.3	187.2	178.6	171.0	164.8	158.6	154.4	153.9	153.4

Source: Florida CHARTS

In 2009 - 2011, 340.9 people in Pinellas County, per 100,000, were hospitalized for coronary heart disease[lxviii]. In the state, this number has reached 375.3 per 100,000 residents. 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 county 2009-2011 coronary heart disease age-adjusted death rate was 111.4 per 100,000 residents. The state rate was only 105.8 per 100,000 residents. This is true despite the available levels of healthcare providers within the county. The Healthy People 2020 goal for coronary heart disease death rates is 100.8 per 100,000 people. Although still high, the age-adjusted death rates for coronary heart disease have declined since 2000 (*figure 53).* Congestive heart failure age-adjusted rates of hospitalization and death were lower in Pinellas County than the state. The 2009 - 2011 congested heart failure age-adjusted hospitalization rate for the county was 86.4 per 100,000 residents; in the state, this number is 131.5 per 100,000 residents. The 2009 – 2011 county heart failure age-adjusted death rate was also lower than the state (Pinellas County, 4.6; Florida, 8.4 per 100,000).

Figure 53: 2000 - 2010 Pinellas/Florida/HP 2020 Coronary Heart Disease Age-Adjusted Death Rate



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	162.9	157.1	145.3	138	130.4	123.4	118.3	113.8	112.9	111.4
Florida	177.1	168.3	157.2	148.9	139	128.4	118.5	110.7	108.1	105.8
HP2020	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8	100.8

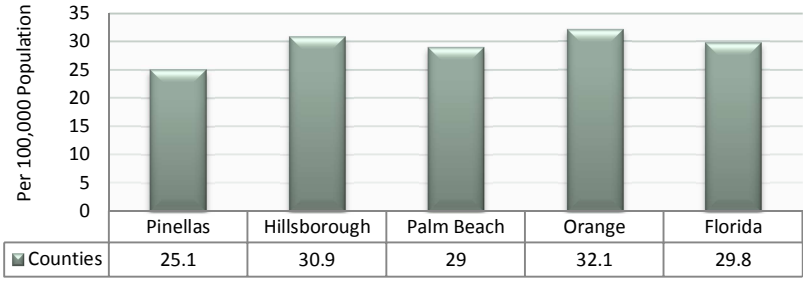
Source: Florida CHARTS

Stroke

A stroke is caused when blood supply is blocked to the brain[lxix]. 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*)[lxx]. The 2009 – 2011 age-adjusted 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*).

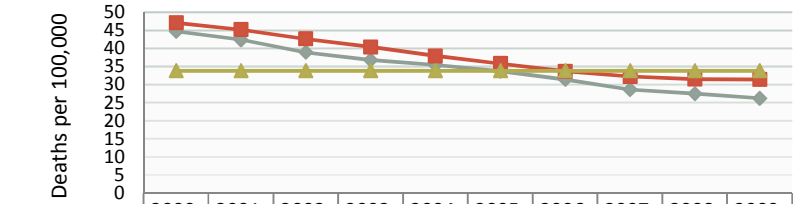
Figure 54: 2010 Stroke Age-Adjusted Death Rate County Comparison



	Pinellas	Hillsborough	Palm Beach	Orange	Florida
Counties	25.1	30.9	29	32.1	29.8

Source: Florida CHARTS

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

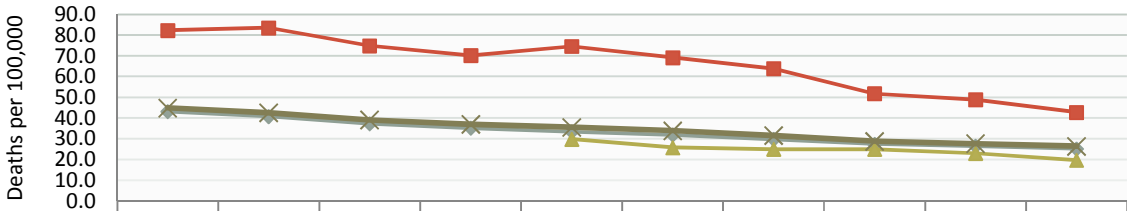


	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	44.7	42.4	38.9	36.8	35.4	33.7	31.4	28.6	27.5	26.2
Florida	47.1	45.2	42.6	40.4	37.9	35.8	33.7	32.2	31.5	31.4
HP2020	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8

Source: Florida CHARTS

Although the overall rate of deaths due to stroke is low within Pinellas County, the racial disparities existing within stroke deaths are large (*figure 56*). In 2010, the rate of persons who were black dying of stroke was almost double of that of persons who were white (42.6 per 100,000 and 25.0 per 100,000 population, respectively). Stroke deaths in persons who are Hispanic were less frequent than in persons who were white and persons who were black.

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



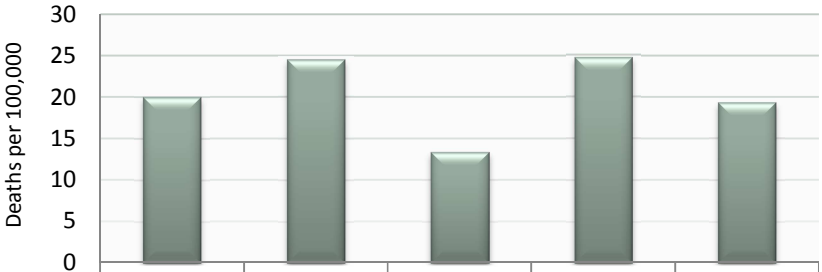
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	43.0	40.6	37.1	35.0	33.2	31.7	29.6	27.3	26.3	25.0
Black	82.1	83.3	74.7	70.0	74.4	69.0	63.7	51.5	48.7	42.6
Hispanic					29.7	25.6	24.8	24.8	22.8	19.5
Pinellas (All)	44.7	42.4	38.9	36.8	35.4	33.7	31.4	28.6	27.5	26.2

Source: Florida CHARTS

Diabetes

In 2010, diabetes affected 8.3% of the national population. Complications due to untreated diabetes can include blindness, amputation, and kidney disease[lxxi]. The 2009 - 2011 age-adjusted hospitalization rates for diabetic related complications were 1,973.7 per 100,000 within Pinellas County and 2,260.3 per 100,000 within the state.

Figure 57: 2010 County Comparison Diabetes Age-Adjusted Death Rate



	Pinellas	Hillsborough	Palm Beach	Orange	Florida
2010	20	24.5	13.3	24.7	19.3

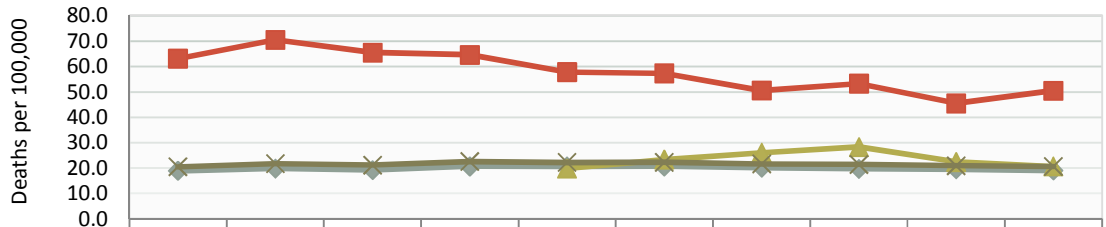
Source: Florida CHARTS

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 in the county; 123.5 cases per 100,000 in the state) compared to children 5 – 11 years (37.5 cases per 100,000 in the county; 45.2 per 100,000 in the state)[lxxii].

The Healthy People 2020 goal for deaths due to diabetes complications is 65.8 per 100,000 population[lxxiii]. In 2009 - 2011, both the county and the state far achieve this age-adjusted death rate 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, again, a very apparent racial disparity exist between persons who were black

and all other persons within the county; where, in 2009-2011, there were 18.9 deaths per 100,000 persons who were white and 50.4 deaths per 100,000 in persons who were black (*figure 58*). Residents who were black also experienced an increase in age-adjusted diabetic death rates in 2009-2011.

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



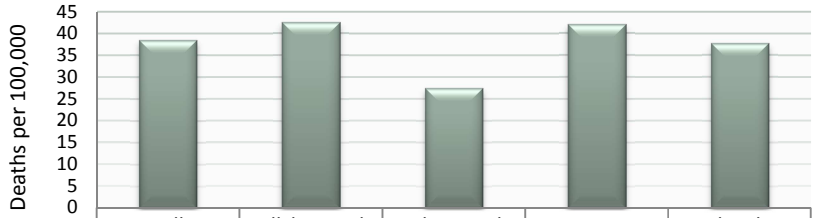
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	18.8	19.7	19.1	20.6	20.5	20.6	20.0	19.6	19.4	18.9
Black	63.0	70.4	65.4	64.5	57.7	57.2	50.5	53.2	45.4	50.4
Hispanic					19.7	23.2	25.9	28.2	22.3	20.5
Pinellas (All)	20.4	21.6	21.1	22.5	22.1	22.2	21.5	21.3	20.8	20.5

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 ranks neither higher nor lower for chronic lower respiratory disease age-adjusted deaths (*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[lxxiv]. 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 residents.

Figure 59: 2010 County Comparison Chronic Lower Respiratory Disease Age-Adjusted Death Rate



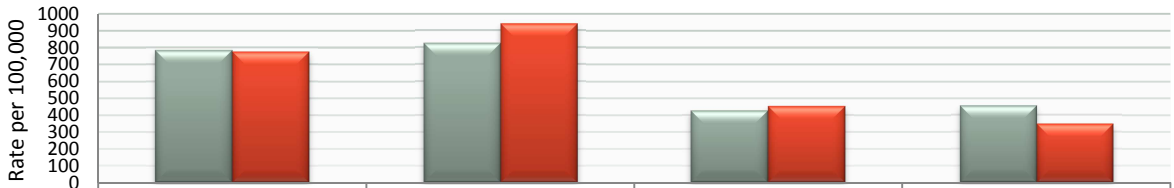
	Pinellas	Hillsborough	Palm Beach	Orange	Florida
2010	38.4	42.5	27.4	42	37.6

Source: Florida Charts

Asthma is difficulty in breathing caused by a swollen airway[lxxv]. 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[lxxvi]. 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)[lxxvii]. In children 5 to 11, this rate was found to be 425 per 100,000 population (Florida, 451.4 per 100,000)[lxxviii]. In

children 12 to 18, this rate was found to be 453.8 per 100,000 (Florida, 345.7). The 2009-2011 general rates for asthma and asthma-related hospitalization were also higher in Pinellas County, reaching 783.9 hospitalizations per 100,000 population within the county and 775.1 hospitalizations per 100,000 population within the state[lxxix]. In 2010, the adult asthma rate for the county was 9.3%, while only 8.3% of the state population had asthma[lxxx] (*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



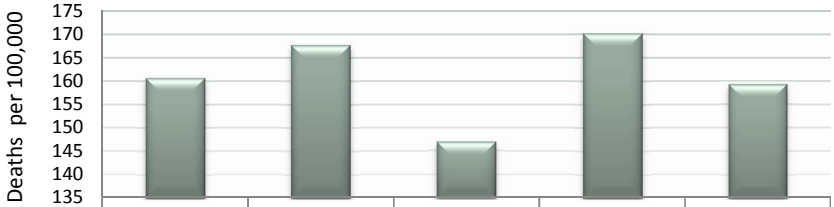
	Asthma Hospitilizations	Asthma Hospitilizations Children 1 - 5	Asthma Hospitilizations Children 5 - 11	Asthma Hospitilizations Children 12 - 18
Pinellas	783.9	824.9	425	453.8
Florida	775.1	940.3	451.4	345.7

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*). The racial disparity between the age-adjusted death rates for all cancers in persons who are white compared to persons who are black, however, is alarming (*figure 62*). 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. The greatest trends between race, age, and geographical area, can often be seen in the age-adjusted death rate of each cancer type – as, often, death reflects a lack of access to treatment, early preventative care, and cancer screenings.

Figure 61: 2010 Cancer (All Types) Age-Adjusted Death Rates

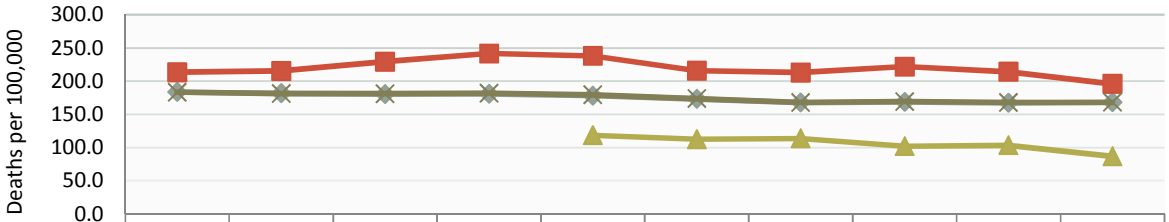


	Pinellas	Hillsborough	Palm Beach	Orange	Florida
2010	160.6	167.7	146.9	170.2	159.2

Source: Florida CHARTS

Lung cancer causes the greatest number of cancer deaths in Pinellas County, followed by breast cancer and prostate cancer (*figure 63*). While the 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, only recently, lung cancer.

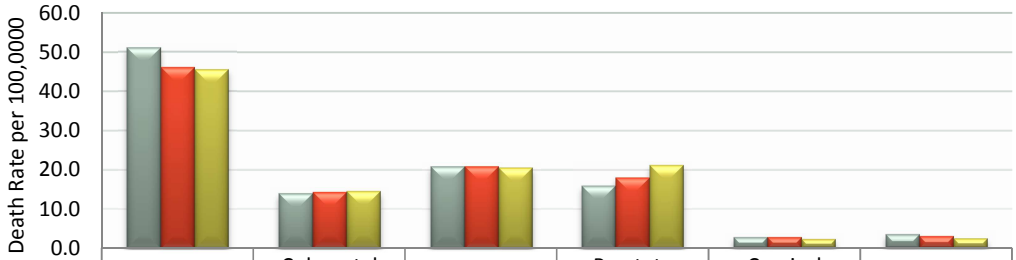
Figure 62: 2000 - 2011 Pinellas County Cancer (All Types) Age Adjusted 3-Year Rolling Death



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
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
Hispanic					118.2	112.3	113.6	101.9	103.3	86.7
Pinellas (All)	183.1	181.0	180.7	181.7	179.1	173.4	167.7	169.0	167.6	167.8

Source: Florida CHARTS

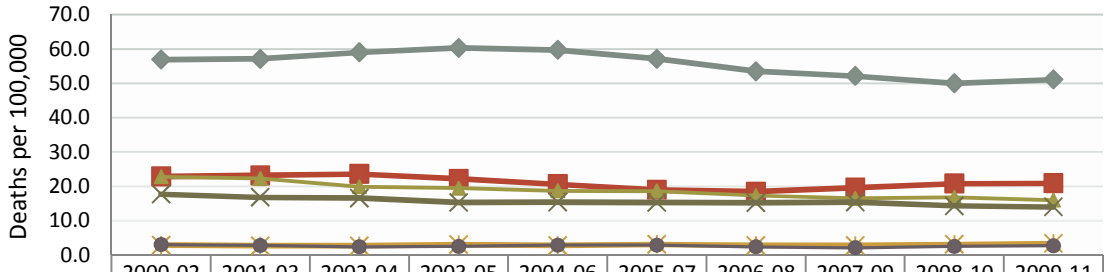
Figure 63: 2009 - 2011 Pinellas/Florida/HP 2020 Cancer Age-Adjusted Death Rates



	Lung Cancer	Colorectal Cancer	Breast Cancer	Prostate Cancer	Cervical Cancer	Melanoma
Pinellas County	51.1	14.0	20.9	16.0	2.7	3.4
Florida	46.1	14.3	20.9	18.0	2.7	2.9
Healthy People 2020 Goal	45.5	14.5	20.6	21.2	2.2	2.4

Source: Florida CHARTS

Figure 64: 2000 - 2011 Pinellas County Age-Adjusted Cancer Death Rates



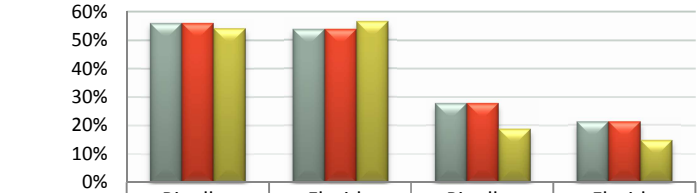
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Lung Cancer	56.9	57.1	59.0	60.3	59.7	57.1	53.5	52.1	50.0	51.1
Breast Cancer	22.9	23.2	23.6	22.2	20.6	19.0	18.5	19.6	20.8	20.9
Prostate Cancer	22.8	22.3	19.9	19.5	18.7	18.6	17.3	16.5	16.8	16.0
Colorectal Cancer	17.7	16.8	16.6	15.3	15.4	15.3	15.2	15.4	14.3	14.0
Melenoma	2.9	2.7	2.7	3.0	2.8	3.1	2.8	2.8	3.1	3.4
Cervical Cancer	3.0	2.8	2.4	2.5	2.9	2.9	2.4	2.1	2.5	2.7

Source: Florida CHARTS

Colorectal cancer

The 2007-2009 county incidence rate for colorectal cancer (39.1 per 100,000 population) was less than the state rate (41.3 per 100,000 population)[lxxxi]. The county age-adjusted death rate for colorectal cancer was 14.0 deaths per 100,000, compared to 14.3 deaths per 100,000 in the state. Both the county and state rates have met the Healthy People 2020 goal of 14.5 per 100,000 deaths. Preventative and early detection measures for colorectal cancer include blood stool tests, sigmoidoscopy, and colonoscopy. In 2008 - 10, 54.1% of Pinellas County adults age 50 or older had received a sigmoidoscopy or colonoscopy in the five years preceding (Florida, 56.4%)[lxxxii]. Additionally, 18.8% of Pinellas County adults age 50 or older had received a yearly blood stool test (Florida, 14.7%) (*figure 65*).

Figure 65: 2006 - 2010 Pinellas County Colorectal Cancer Screening Trends



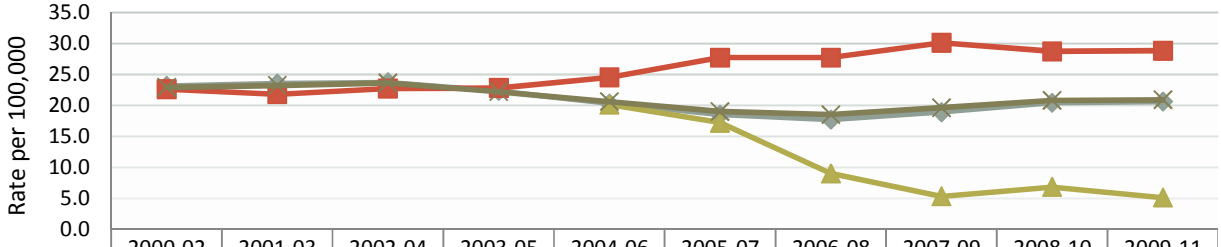
	Adults 50 or older who received a sigmoidoscopy or colonoscopy in the past 5 years		Adults 50 or older who received a blood stool test in the past year	
	Pinellas	Florida	Pinellas	Florida
2006 - 08	56.0%	53.70%	27.70%	21.20%
2007 - 09	56.0%	53.70%	27.70%	21.20%
2008 - 10	54.10%	56.40%	18.80%	14.70%

Source: Florida CHARTS

Breast Cancer

In Pinellas County, the 2007 - 2009 age-adjusted incidence rate for breast cancer was 124.4 cases per 100,000 population and the 2009 – 2011 age-adjusted death rate was 20.9 deaths per 100,000[lxxxiii]. The Healthy People 2020 goal is only 20.6 deaths per 100,000. In the state of Florida, 113.9 per 100,000 population were diagnosed with breast cancer and 20.9 per 100,000 population died of the cancer. Just as in many cancers, racial disparities are prevalent (*figure 66*). Early detection methods include self or clinical breast exams and mammograms. In Pinellas County, 61.5 per 100,000 women age 40 or older received a mammogram in 2010, very similar to the rate of women within the state (61.9 per 100,000)[lxxxiv] (*figure 67*).

Figure 66: 2000 - 2011 Pinellas County Breast Cancer Deaths by Race/Ethnicity



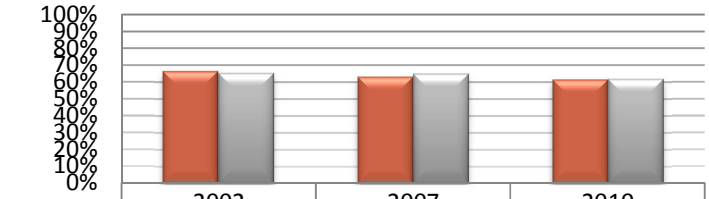
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	23.1	23.5	23.7	22.3	20.3	18.5	17.7	18.9	20.4	20.6
Black	22.6	21.8	22.7	22.8	24.5	27.7	27.7	30.1	28.7	28.8
Hispanic					20.1	17.2	9.0	5.3	6.8	5.1
Pinellas (All)	22.9	23.2	23.6	22.2	20.6	19.0	18.5	19.6	20.8	20.9

Source: Florida CHARTS

Cervical Cancer

The Healthy People 2020 goal for cervical cancer age-adjusted death rates is 2.2 per 100,000 population[lxxxv]. In Pinellas County, the 2009-2011 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 (2007-2009), compared to 9.0 per 100,000 population in the state. In 2010, of the adult females within the county, 52.4% had received a pap test in the past year, compared to a state average of 57.1%. The Healthy People 2020 goal for Pap test completion is 93%. Since 2006 – 08, the rate of receiving a pap test has decreased, likely due to a change in screening recommendations.

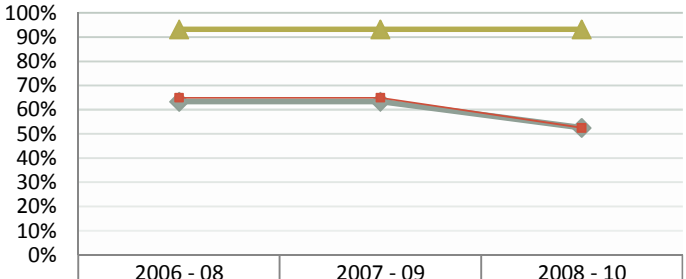
Figure 67: 2002 - 2010 Pinellas/Florida Women age 40 or Older Receiving Mammogram



	2002	2007	2010
Pinellas	66.4%	63.0%	61.5%
Florida	65.3%	64.9%	61.9%

Source: Florida CHARTS

Figure 68: 2006 - 2010 Pinellas/Florida/HP2020 Women 18 or Older who Received a Pap Test in the Past Year



	2006 - 08	2007 - 09	2008 - 10
Pinellas	63.2%	63.2%	52.4%
Florida	64.8%	64.8%	52.4%
HP 2020	93.0%	93.0%	93.0%

Source: Florida CHARTS

Prostate Cancer

In Pinellas County, 110.2 per 100,000 men were diagnosed with prostate cancer (2007 – 09). With the state this number was much greater, reaching 130.1 per 100,000 population. The 2009 – 2011 age-adjusted death rates for prostate cancer were lower in Pinellas County (16.0 per 100,000) and the state (18.0 per 100,000), than the goal set by Healthy People 2020 (21.2 per 100,000)[lxxxvi].

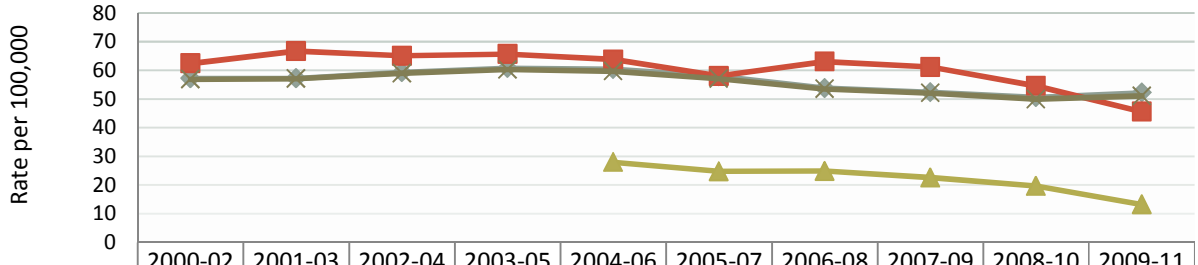
Melanoma

Both the incidence and death rates for melanoma were higher within Pinellas County than the state[lxxxvii]. Within 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 death rate, 2.9 deaths per 100,000.

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 residents[lxxxviii]. 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 within persons who were Hispanic was lower than both persons who were white and persons who were black within the county. In 2009 – 11, the rate of persons who were white dying from lung cancer rose from the previous reporting period, while the rate in persons who were black or Hispanic continued to decline.

Figure 69: 2000 - 2011 Pinellas County Lung Cancer Death Trends by Race/Ethncity



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
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
Pinellas (All)	56.9	57.1	59	60.3	59.7	57.1	53.5	52.1	50	51.1

Source: Florida CHARTS

COMMUNICABLE DISEASES

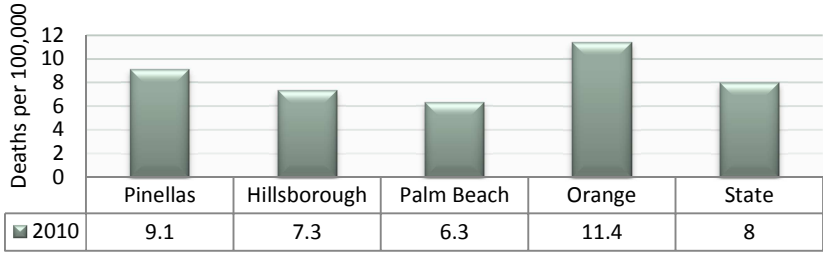
- Bacterial sexually transmitted diseases are higher in Pinellas County than in the rest of Florida
- The tuberculosis case rate is lower in Pinellas County than the state, but exceeds the goal set by Healthy People 2020

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 those illness that could have been prevented by use of a vaccine. Dependent upon the disease, vaccines are recommended for the general population, set age groups, or risk groups. In 2009 - 2011, Pinellas County's rate for vaccine-preventable diseases was 2.6 per 100,000, while the rate was 3.7 per 100,000 population[lxxxix]. However, despite a lower vaccine preventable disease rate than the state, in 2010 Pinellas County ranked poorly in pneumonia and influenza age-adjusted deaths compared to both the state and many demographically similar counties (*figure 70*).

Figure 70: 2010 County Comparison
Pneumonia/Influenza Age-Adjusted Death Rates

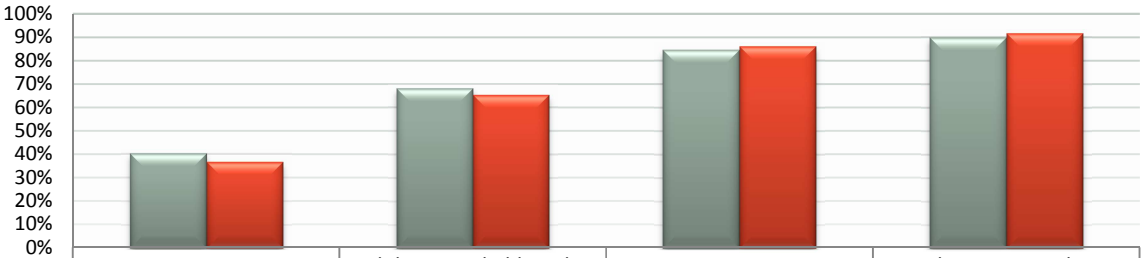


	Pinellas	Hillsborough	Palm Beach	Orange	State
2010	9.1	7.3	6.3	11.4	8

Source: Florida CHARTS

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) and for those 65 years or older. Within the county, 71.6% of adults age 65 or older and 33% of all adults had ever received a pneumonia vaccination[xc]. Similarly, Pinellas County had higher rates of adults age 65 and older and all adults who received a flu shot in the year preceding the survey than the state and demographically similar counties. Over 40% of adults in Pinellas County 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; where, only 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 had received a flu shot in the year preceding the survey, compared to 44.6% in the state (*figure 71*).

Figure 71: 2009-2011 Pinellas County Selected Vaccination Indicators



	Adults received flu shot previous year (2010)	Adults 65 and older who received a flu shot in previous year (2010)	Two year olds fully immunized (2011)	Kindergarten students fully immunized (2009 - 2011)
Pinellas	40.2%	68.1%	84.6%	89.9%
Florida	36.5%	65.3%	86.1%	91.7%

Source: Florida CHARTS

Some vaccinations are required for children to start school, to both protect the child and the other children that may be exposed to the child. In 2011, 84.6% of two year were olds 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[xci]. In 2009 – 2011, Pinellas County fell within the fourth quartile ranking of completing immunizations by Kindergarten, with 89.9% of Kindergarteners in the county and 91.7% of Kindergarteners children in the state being fully immunized[xcii].

Enteric Disease

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 (2009 – 2011)[xciii]. For this same time period, 62.6 cases per 100,000 population occurred within the state of Florida. In both the state and county, there has been an increase in children under six years with enteric diseases[xciv]. 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).

Hepatitis

Hepatitis is a viral infection affecting the liver and is the most common cause of liver failure[xcv]. The most common type 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 rare within the United States. Vaccinations are available for hepatitis A and hepatitis B. Between 2009 and 2011, the local rate for all acute hepatitis cases was 3.2 per 100,000 residents, higher than the state rate of 2.9 per 100,000 residents[xcvi].

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 the county (2.8 per 100,000 population) than the state

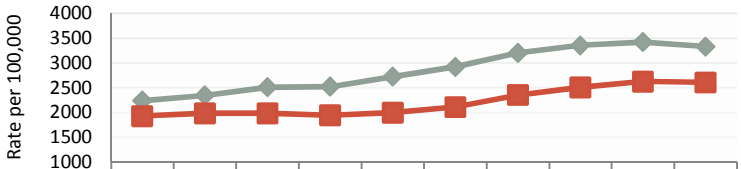
(4.3 per 100,000 population), it still exceeded the Healthy People goal of 1.0 cases per 100,000 population by 2020[xcvii].

Sexually Transmitted Diseases

A number of infections can be transmitted through sexual contact. Among the reportable infections are chlamydia, gonorrhea, and syphilis. The rate of the bacterial sexually transmitted infections is notably high in Pinellas County, especially among women of childbearing age[xcviii] (*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 100,00 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 infections may cause an increased risk of labor and pregnancy complications for the mother[xcix]. They may also negatively affect the child, increasing the likelihood of stillborn births, low birth weight, and health complications.

The high rates of sexually transmitted infections is true both collectively, as well as within several reportable sexually transmitted infections, including: chlamydia, gonorrhea, and infectious syphilis[c] (*figure 73; figure 74; figure 75*). The number of chlamydia cases reported in the county (2009-11) was 424.3 per 100,000 population, but in the state only 396.0 per 100,000 population. Gonorrhea cases were also higher in the county than the state, with 140.7 per 100,000 in the county and 107.6 per 100,000 in the state. Infectious syphilis cases reached 6.9 in the county and only 6.2 per 100,000 population in the state.

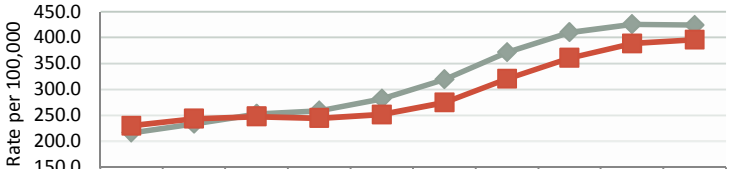
Figure 72: 2000 - 2011 Pinellas/Florida Bacterial STD Rates in Women Ages 15 - 34



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	2234	2340	2505	2517	2718	2918	3199	3350	3417	3327
Florida	1923	1979	1979	1939	1992	2106	2347	2502	2620	2603

Source: Florida CHARTS

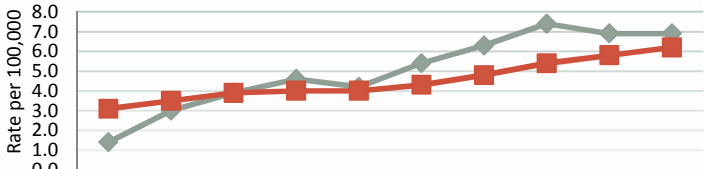
Figure 73: 2000 - 2011 Pinellas/Florida Chlamydia Infections Rates



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	216.4	233.4	252.3	259.1	281.8	319.2	371.5	410.0	425.6	424.3
Florida	229.9	243.3	247.7	244.7	251.6	274.7	320.3	360.6	388.8	396.0

Source: Florida CHARTS

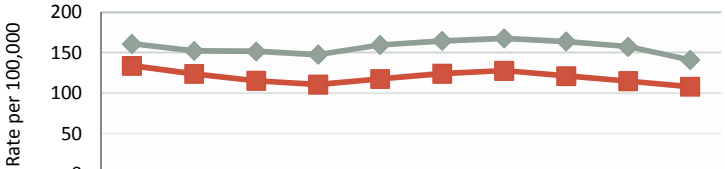
Figure 74: 2000 - 2011 Pinellas/Florida Syphilis Infection Rates



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	1.4	3.0	3.9	4.6	4.2	5.4	6.3	7.4	6.9	6.9
Florida	3.1	3.5	3.9	4.0	4.0	4.3	4.8	5.4	5.8	6.2

Source: Florida CHARTS

Figure 75: 2000 - 2011 Pinellas County Gonorrhea Infection Rates



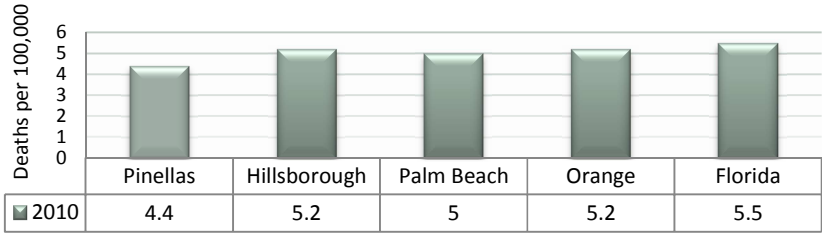
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	160.5	151.8	151.2	147.2	159.1	164.2	167.3	163.3	157.1	140.7
Florida	133.5	123.3	114.9	110.2	117.1	123.7	127.4	120.8	114.4	107.6

Source: Florida CHARTS

The reported 2009 – 2011 sexually transmitted infection cases in young adults ages 15 – 19 was also higher in the county than within the state, 3,493.7 cases per 100,000 and 2473.9 per 100,000, respectively[ci].

HIV/AIDS

Figure 76: 2010 HIV/AIDS Age-Adjusted Death Rate County Comparison

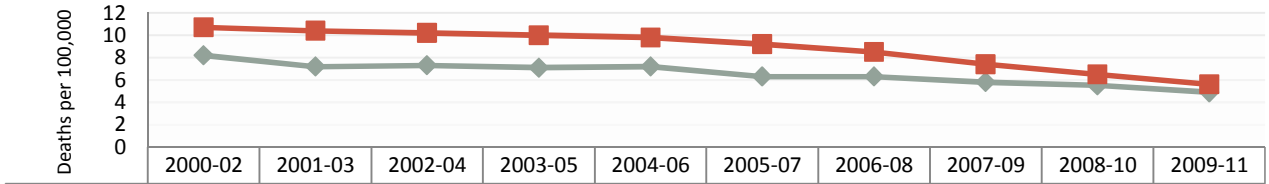


	Pinellas	Hillsborough	Palm Beach	Orange	Florida
2010	4.4	5.2	5	5.2	5.5

Source: Florida CHARTS

Although bacterial sexually transmitted infections have remained consistently higher in the county compared to the state, the number of HIV and AIDS cases have remained lower than those in the state[cii]. 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. 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[ciii]. In 2009 – 2011, the rate for HIV/AIDS deaths within the county was 4.9 per 100,000, compared to 5.6 for the state. However, the Health People 2020 national goal is only 3.7 per 100,000. The HIV/AIDS age-adjusted 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.

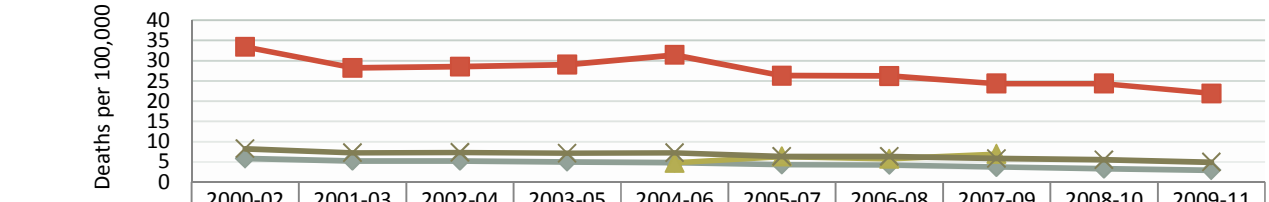
Figure 77: 2000 - 2011 Pinellas/Florida HIV/AIDS Age-Adjusted Death Rates



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	8.2	7.2	7.3	7.1	7.2	6.3	6.3	5.8	5.5	4.9
Florida	10.7	10.4	10.2	10	9.8	9.2	8.5	7.4	6.5	5.6

Source: Florida CHARTS

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



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
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		
Pinellas (All)	8.2	7.2	7.3	7.1	7.2	6.3	6.3	5.8	5.5	4.9

Source: Florida CHARTS

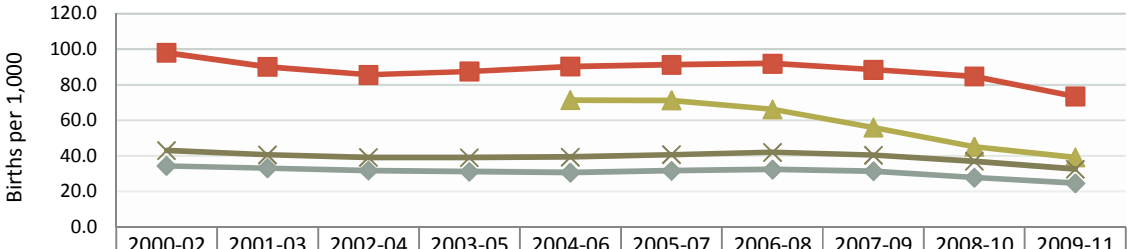
- The rates of premature births and births to women over 35 years are lower in Pinellas County than in Florida
- The rate of access to prenatal care is higher in white woman than Hispanic and Black women in the county

Birth Rates

In 2011, the birthrate in Pinellas County was 9.0 per 1,000 total 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 only 11.4% of births being premature by 2020[civ]. The 2009 - 2011 rate of premature births in Pinellas County was 12.9%, compared to 13.7% in the state of Florida. Multiple births (twins, etc.) occurred at a rate of 3.2%, both in the county and state. In 2009 – 2011, Pinellas County also has fewer births to mothers over 35 years (3.2 per 1,000 females over 35 in the county; 4.6 per 1,000 females over 35 in the state) and far fewer births to adult females without a high school education (13.6% in the county; 17.3% in the state) [cv].

Births to teenage mothers often have greater complications than births to adult women. In 2009 – 2011, per every 1,000 population, 32.5 births in the county and 32.9 births in the state were to young women ages 15 to 19 (3-year rate) [cvi]. 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, while in the state 15.4 births per 1,000 population in this same age range. However, there were 59.0 births per 1,000 females 18 and 19 years old in the county and 59.3 births per 1,000 population in the state. 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 give repeat births in the county and

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



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	34.3	33.1	31.7	31.1	30.5	31.6	32.3	31.3	27.7	24.6
Black	97.8	90.0	85.5	87.3	90.1	91.1	91.8	88.3	84.5	73.3
Hispanic					71.2	71.1	66.1	55.8	45.1	39.0
Pinellas (All)	43.0	40.5	39.0	38.9	39.3	40.6	41.9	40.3	36.9	32.5

Source: Florida CHARTS

21.6% give repeat births within the state. The rate of early pregnancies is much 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 in within the state.

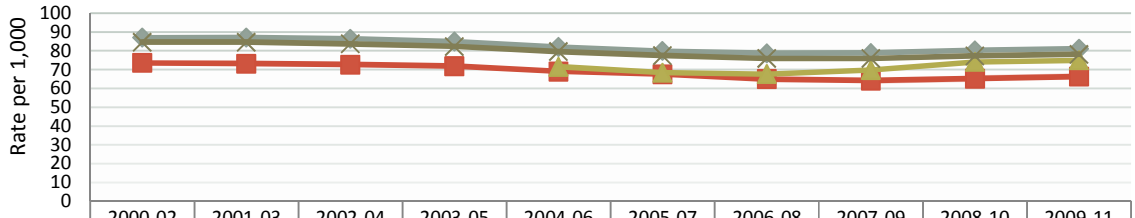
Prenatal Care

The Healthy People 2020 goal for early prenatal care, beginning in the 1st trimester, is 77.9%[cvii]. In 2009 – 2011, Pinellas County has met this expectation, with 78.0% of mothers getting prenatal care beginning in the 1st trimester. The state also exceeded this goal, with 79.3% of mothers receiving early prenatal care. Of the births with a known prenatal care status, 4.5% of births in the county had late or no prenatal care; 4.7% of births in the state had late or no prenatal care. Adequate prenatal care, as determined by the Kotelchuck index, was received by 75.2% of mothers in the county and 70.6% of mothers in the state. While access to prenatal care was received by more mothers in the county, compared to the state, this again varies dependent upon race (*figure 80*).

Infant Mortality

The 2009 - 2011 infant death rate, for children under one year, was much higher in Pinellas County (7.9 per 1,000 live births) than both the state (6.6 per 1,000 live births) and the national objective (6.0 per 1,000 live births) [cviii]. In Pinellas County (2009 – 2011), the neonatal death

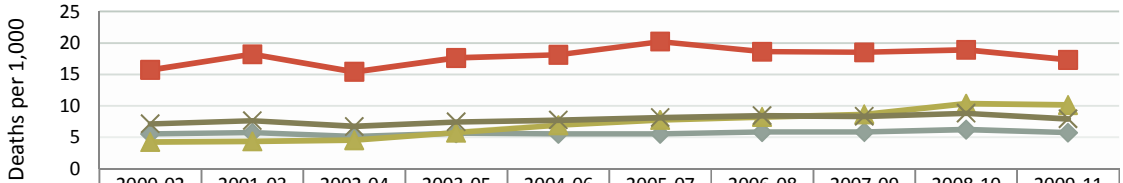
Figure 80: 2000 - 2011 Pinellas Mothers with First Trimester Prenatal Care by Race/Ethnicity



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	86.9	87.0	86.3	84.7	81.9	79.8	78.5	78.7	80.2	81.0
Black	73.5	73.1	72.6	71.7	68.9	67.4	64.9	64.1	65.1	66.2
Hispanic					71.4	68.3	67.5	69.7	74.0	74.8
Pinellas (All)	84.5	84.5	83.6	82.2	79.4	77.4	75.8	75.8	77.2	78.0

Source: Florida CHARTS

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



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	5.5	5.7	5.1	5.6	5.5	5.5	5.8	5.8	6.2	5.7
Black	15.7	18.2	15.4	17.6	18.1	20.2	18.6	18.5	18.9	17.3
Hispanic	4.2	4.3	4.5	5.7	6.9	7.7	8.2	8.6	10.3	10.1
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

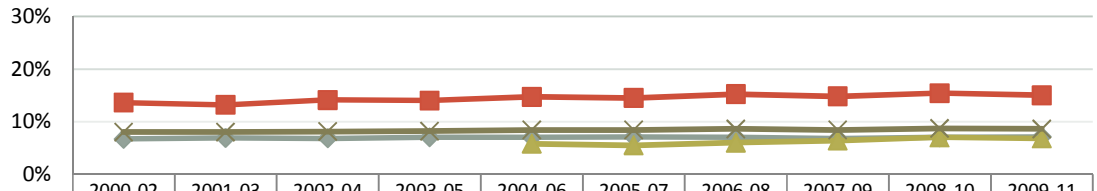
rate, or death in infants less than 28 days old, was 5.3 per 1,000 live births, compared to the state rate of 4.4 per 1,000 live births. The Healthy People 2020 goal for neonatal death is only 4.1 deaths per 1,000 live births. The post neonatal death rate, death occurring between 28 and 364 days, in 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 only 2.0 post neonatal deaths per 1,000 live births. In Pinellas County, the deaths from sudden unexpected infant death, per 100,000 live births, was 125.3 in the county and 94.3 in the state (2009 – 2011)[cix]. Within this same timeframe, black infants in the county were three times as likely than white infants to die within the first year of life (*figure 81*).

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 has 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 (2009 – 2011), 8.6% of births were less than 2,500 grams. In the state of Florida, 8.7% of births were less than 2,500 grams[cx]. The rate of low birth weights among women who are black was 15.0% of live births, while this same rate was significantly lower in 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 by Race/Ethnicity



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
White	6.7%	6.9%	6.8%	7.0%	7.0%	7.1%	7.0%	6.8%	7.0%	7.1%
Black	13.6%	13.2%	14.1%	14.0%	14.7%	14.5%	15.2%	14.8%	15.4%	15.0%
Hispanic					5.8%	5.5%	6.0%	6.4%	7.0%	6.8%
Pinellas (All)	8.0%	8.0%	8.1%	8.2%	8.4%	8.4%	8.6%	8.4%	8.7%	8.6%

Source: Florida CHARTS

Risk Factors Associated with Poor Birth Outcomes and Poor Infant Health

Although not all maternal and child risks can be foreseen, there are a number of socio-economical, environmental, and behavioral factors that may predict poor birth outcomes[cxi]. Heavy drinking or binge drinking may affect a mother's pregnancy. Of females older than 17, 8.2% in the county and 10.5% in the state engaged in heavy or binge drinking in 2010[cxii]. Additionally, 22.1% of women over 17 were smokers, compared to only 16.0% in the state. Substance use during pregnancy has even more direct effects on a child's health. In 2009 - 2011, 10.6% of mothers reported smoking during pregnancy, much higher than the 6.8% of mothers who reported smoking during pregnancy in the state of Florida.

The weight of the mother and duration between pregnancies can also affect pregnancy outcomes. When pregnancy occurred, 13.9% of women and the county and 11.7% of women in the state were underweight (2009 – 2011)[cxiii]. An even greater number of women were overweight at the time pregnancy occurred, 22.9% of births in the county and 23.5% of births in the state. Births to mothers who were obese at conception totaled 19.4% in the county and 19.9% in the state. A large percentage of births, 39.0% in the county and 37.0% in the state, came from mothers with less than 18 months between pregnancies.

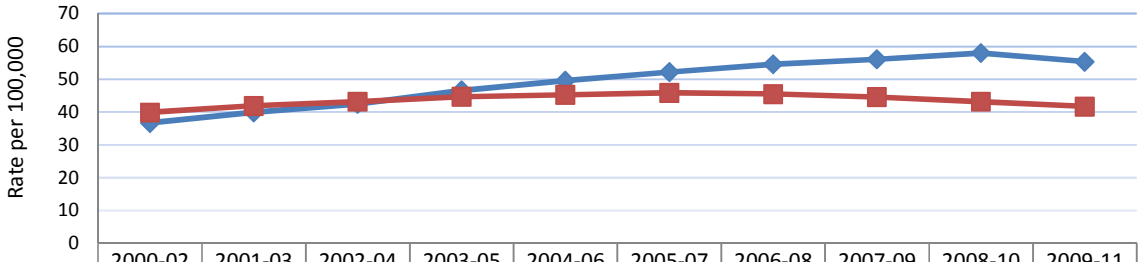
Access to care and the health of childbearing aged women may also affect maternal and child health. Women ages 15 to 34 are the most likely to give birth, yet also have the highest sexually transmitted infection rate in the county. In Pinellas County, 3,326.8 per 100,000 population had a reported STD, compared to 2,603.3 in the state[cxiv]. A total of 87.9% of women over age 17 in the county, and 84.5% in the state, had a personal doctor in 2010; yet, only 52.4% of women in the county and 57.1 % of women in the state received a yearly pap test. Within this same age group in 2010, females older than 17, 86.4% in the county and 84.2% in the state have any type of health insurance coverage. Women who chose to "self-pay" childbirth costs are assumed uninsured. Such women constituted 6.9% of the births in the county and 8.9% of the births in the state in 2009 - 2011. In Pinellas County, between 2009 and 2011, 73.8% of women initiate breast-feeding; much lower than in the state, where 79.5% of women initiate breast-feeding[cxv].

- ❖ Accidents caused by drugs are the most common non-motor vehicle related accident in Pinellas County
- ❖ In Pinellas County, accidental injury increased from 2000 until 2008-2010, when it began to decreased

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 36 deaths per 100,000 population. The 2009-2011 rate for deaths due to unintentional injury in Pinellas County was 55.3 deaths per 100,000 population (Florida 41.6 per 100,000 population)[cxvi]. The motor vehicle crash age-adjusted death rate was 11.5 deaths per 100,000 in the county and 12.9 deaths per 100,000 population in the state. The Healthy People 2020 goal for this indicator is 12.4 deaths per 100,000 population.

Figure 83: 2000 - 2011 Pinellas/Florida Deaths Caused by Unintentional Injury



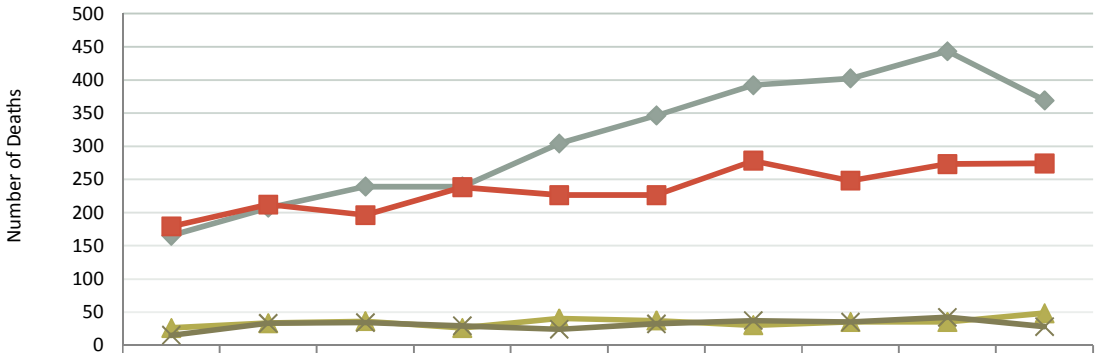
	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	36.6	39.8	42.4	46.5	49.5	52.1	54.5	56	57.9	55.3
Florida	39.8	41.8	43.1	44.6	45.2	45.8	45.4	44.5	43.1	41.6

Source: Florida CHARTS

District 6 is comprised of both Pinellas and Pasco counties. The District 6 2011 Medical Examiners Annual Report provides insight into the accidental deaths caused by motor vehicle accidents and non-motor vehicle accidents in Pinellas County[cxvii]. Of the motor vehicle deaths, pedestrians were the most likely to be killed, followed by the driver of the vehicle, a motorcyclist, cyclists, and then the passenger. The most frequent locations of these deaths were US 19 (13 deaths), Alternate 10 (10), 49th St Saint Petersburg (5).

The District 6 Medical Examiners Annual Report also gives greater insight into a number of the cause specific non-motor 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

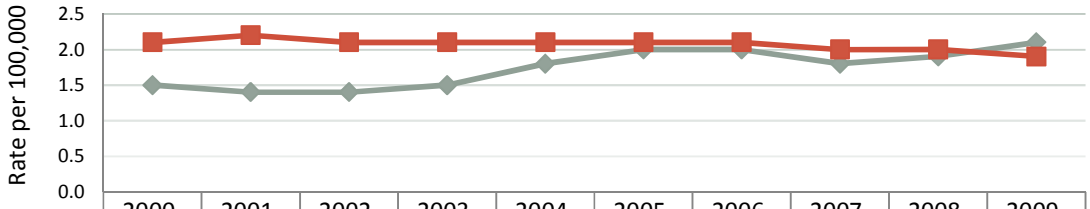


	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Drugs	165	207	239	239	304	346	392	402	443	369
Blunt Force	179	212	196	238	226	226	278	248	273	274
Drowning	26	33	36	26	40	37	30	35	35	48
Asphyxia-Accident	15	33	34	29	24	32	37	35	42	28

Source: Medical Examiners 2011 Annual Report

Drowning is of particular concern in Florida, where the numerous water sources provide opportunity for deaths by drowning. In District 6, there were 48 accidental deaths due to drowning, 3 suicides due to drowning, and 4 deaths with undetermined cases due to drowning. Consistently, the greatest number of deaths due to drowning has occurred in adults age 31 or older. In 2011, 8 children ages 0 to 10, 3 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*)[cxviii].

Figure 85: 2000 - 2011 Pinellas/Florida Accidental Drowning Deaths



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pinellas	1.5	1.4	1.4	1.5	1.8	2.0	2.0	1.8	1.9	2.1
Florida	2.1	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.0	1.9

Source: Florida CHARTS

Violence

Violence can affect both the health and social wellbeing of a community. The 2009 – 2011 criminal homicide rate in the county was 5.1 per 100,000 population, compared to the state with 6.3 per 100,000 population[cxix]. The rate of children experiencing child abuse, 2009 – 2011, was 1876.1 per 100,000 population ages 5 to 11 in the county and 1,145.4 per 100,000 population of children ages 5 to 11 in Florida[cxx]. Children within this same age group experiencing sexual violence was much lower, 47.0 per 100,000 population in the county and 60.7 per 100,000 population in the state. The number of domestic violence offenses in the county far exceeded that of the state, reaching a rate of 772.8 per 100,000 in the county in 2009 - 2011, compared to 605.0 in the state[cxxi].

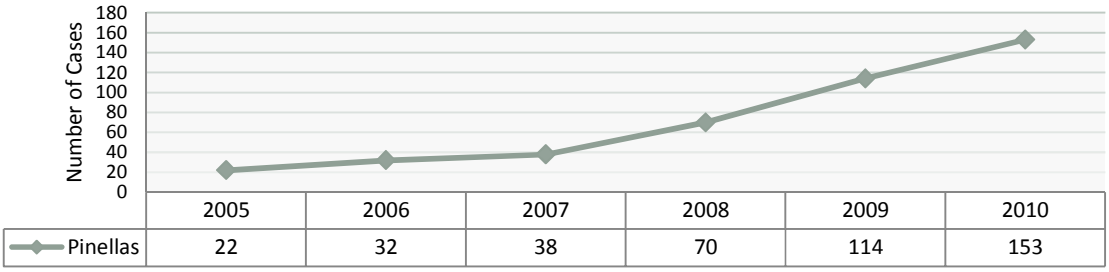
- The number of newborn withdrawal cases has increased from only 22 in 2005 to 153 in 2010
- One-third of Pinellas County residents reported not receiving the social and emotional support they needed
- Suicide rates in Pinellas County exceed both the state rate and national Healthy People 2020 goal

Alcohol and Substance Abuse

Alcohol and substance abuse affects the community, environment, and individual. Although alcohol use remains the most common substance of choice within the county, numerous illicit drugs are also abused.

Since 2005, there has been a steep increase in the number of newborns going through withdrawal as a result of being born to addicted mothers. Not including alcohol withdrawal, there were 153 cases of newborn withdrawal patients in 2010, up from only 22 cases in 2005 (*figure 86)*. Between September 2010 and February 2012, 1253 children were removed from their homes in Pinellas County[cxxii]. Approximately one-third, or 422 children, were removed due to prescription drug abuse.

Figure 86: Newborn Withdrawal 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[cxxiii], indicated that the most common source of alcohol for high school students was a student being given the alcohol by another person and 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. This was followed by 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; compared to 39.6% of high school students in the county and 38% of high school students in the state[cxxiv]. The percentage of middle school students binge drinking in the county was 6.5%, compared to the state at

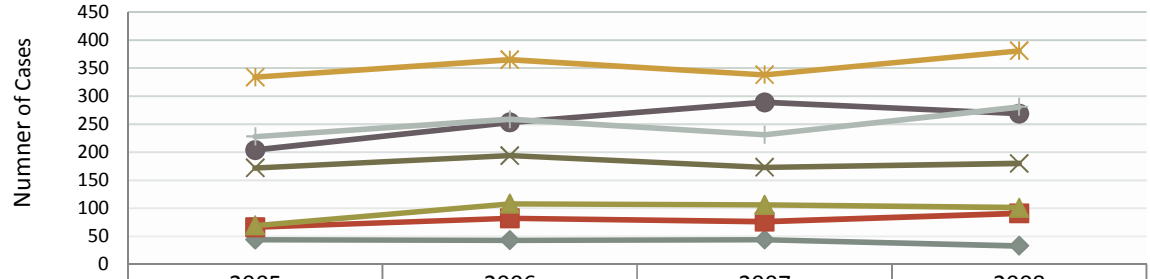
6.9%. For high school students, the county percentage of those who reported binge drinking was 20%, compared to the state at 19.6%. Of middle school students, 7.4% in the county and 5.7% in the state had used marijuana in the 30 days preceding the survey. Of high school students, 20.9% in the county 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%)[cxxv]. 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) [cxxvi].

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, in 2010, 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*). In adults, those ages 40 to 49 were most likely to have an emergency department primary diagnosis that was alcohol related (*figure 87*). Availability of alcohol may increase a person's likelihood to purchase or consume these products. The number of alcohol licenses in Pinellas County has decreased from 3,123 in 2006 to 2,459 in 2010[cxxvii]. This was true for both sales licenses and on-premise drinking licenses.

Table 10: 2007 – 2010 Pinellas County Adult BRFSS Data (BRFSS/ Profile of Alcohol and Other Drug Use in Pinellas County)

	Pinellas County				Florida			
Indicator	**2007**	**2008**	**2009**	**2010**	**2007**	**2008**	**2009**	**2010**
Adults who have had at least one drink 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, 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 occasion) within past 30 days	10.1%	12.3%	19.4%	16.9%	14.2%	13%	13.3%	13.7%
Current Smoking (adults reporting having smoked 100 cigarettes in their lifetime and currently smoke)	17.7%	22.6%	22.2%	20.3%	19.3%	17.5%	17.1%	17.1%

Figure 87: 2005 - 2008 Pinellas Adult Alcohol Related Emergency Department Primary Diagnosis by Year/Age Group

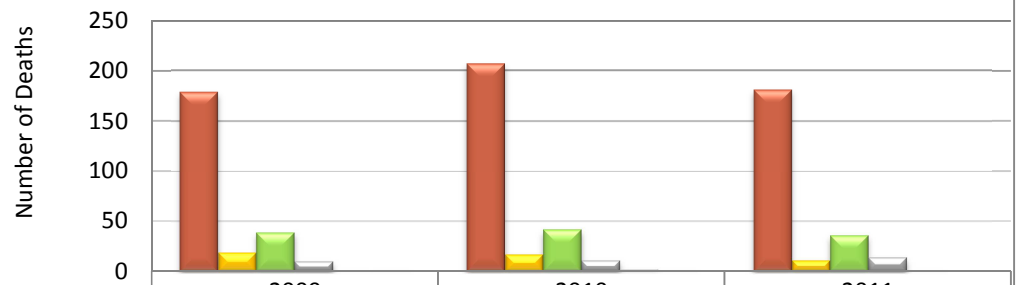


Ages	2005	2006	2007	2008
18 – 20	44	43	44	33
21 - 24	66	82	76	91
25 - 29	69	108	106	101
30 – 39	172	194	173	180
40 - 49	334	365	338	381
50 – 59	204	253	289	269
60 >	228	259	231	281

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

Within 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 2011[cxxviii]. The most common drug or toxin related cause of accidental death was prescription drugs, followed by illicit drugs, and a combination of each (*figure 88*).

Figure 88: 2009 - 2011 Pinellas County Drug and Toxin Accidental Deaths



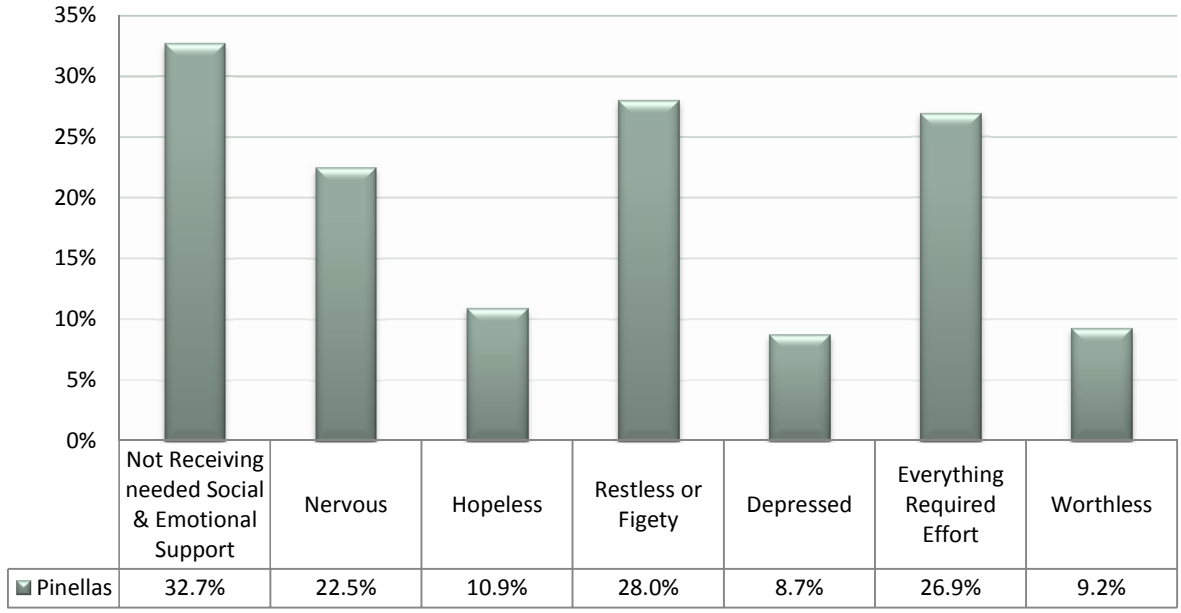
	2009	2010	2011
Presription Drugs	179	207	181
Illicit Drugs	19	17	11
Combined (Prescription & Illicit)	39	42	36
Alcohol	10	11	14
Inhalant	1	2	1
Chemicals/Poisons	1	1	0

Source: Profle of Alcohol and Other Drug Indicators Pinellas County Florida

Mental Health

The CPPW BRFSS evaluated a number of mental health indicators related to depression and hopelessness. According to this report, 32.7% of Pinellas County adults do not receive the social of 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[cxxix] (*figure 89*).

Figure 89: Pinellas County CPPW BRFSS Mental Health Indicators, 2010



	Not Receiving needed Social & Emotional Support	Nervous	Hopeless	Restless or Figety	Depressed	Everything Required Effort	Worthless
Pinellas	32.7%	22.5%	10.9%	28.0%	8.7%	26.9%	9.2%

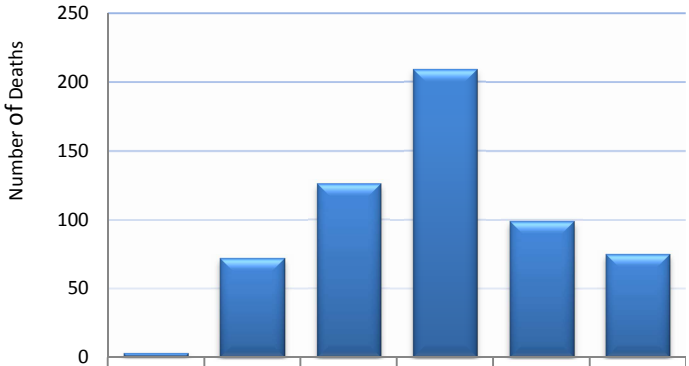
Source: CPPW BRFSS

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 population in the state of Florida[cxxx]. Non-fatal hospitalizations for self-inflicted injuries is high in both the 12 to 18 age group and the 19 to 21 age group[cxxxi]. In 2008 – 2010, the rate of such hospitalizations in children 12 to 18 was 72.9 per 100,000 in the county, but only 46.0 per 100,000 population in the state. This trend continues in the 19 to 21 age group, with a county rate of 133.5 per 100,000 and a state rate of 81.8 per 100,000 population. In Pinellas County, non-fatal hospitalizations for eating disorders are lower than the state average in children 12 to 18, but much higher in young adults ages 19 to 21. For such hospitalizations, the county rate for those 12 to 18 years is 6.3 per 100,000 population (Florida,9 per 100,000). However, in young adults ages 19 to 21, the county rate skyrockets to 15.1 per 100,000, compared to only 6.9 per 100,000 in the state. The county also has a higher percentage of emotionally handicapped children in school grades K – 12 (1.5% in the 2010 – 2011 school year), compared to the state (0.9% in the 2010 – 2011 school year). Referrals to the Department of Juvenile Justice in 2009 – 2011, for children ages 10 to 17, were 739.3 per 10,000 in the county and only 588.7 per 10,000 in the state.

Suicide

Suicide rates in Pinellas County exceed both the 2009- 2011 state rate of 13.8 per 100,000 population and the Healthy People 2020 goal of 10.2 cases per 100,000 population[cxxxii]. In Pinellas County, the 2009- 2011 age-adjusted suicide death rate was 17.7 per 100,000 population. In fact, Pinellas County has consistently had a higher suicide rate than the state for several decades. Within Pinellas County, suicides most frequently occurred within adults ages 45 to 60.

Figure 90: 2009-2011 Pinellas County Suicide Deaths by Age Group

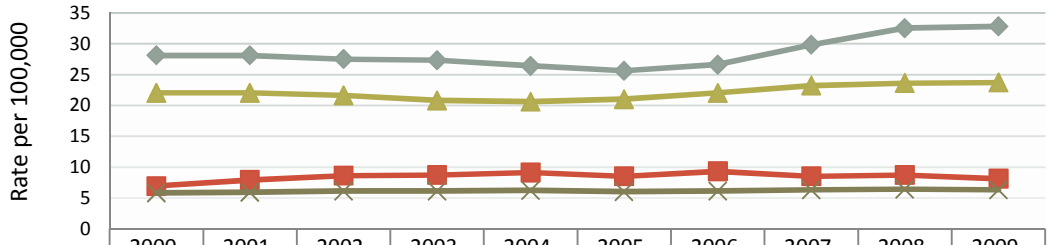


	0-15	15-30	30-45	45-60	60-75	75>
Number of Suicides	3	72	126	209	99	75

Source: Florida CHARTS

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 91*). Additionally, in 2009-11, persons in Pinellas County who were white were more likely than persons who were black to die by suicide, a rate of 22.4 per 100,000 residents within persons who were white and only 6.5 per 100,000 in persons who were black.

Figure 91: 2000 - 2011 Pinellas Suicide Deaths by Gender



	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11
Pin Male	28.1	28.1	27.5	27.3	26.4	25.6	26.6	29.8	32.5	32.8
Pin Female	6.9	7.9	8.6	8.7	9.1	8.5	9.3	8.5	8.7	8.1
FL Male	22	22	21.6	20.8	20.6	21	22	23.2	23.6	23.7
FL Female	5.8	5.9	6.1	6.1	6.2	6	6.1	6.3	6.4	6.3

Source: Florida CHARTS

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