

# PENDER COUNTY



## 2010 COMMUNITY HEALTH ASSESSMENT



*...Building a healthier tomorrow....*

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## ***Acknowledgements***

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We would also like to thank the following organizations and businesses for their help throughout the community health assessment process:

- Pender County Health Department
- Pender Memorial Hospital
- Pender County Schools
- Pender County Smart Start
- Pender County Board of Health
- Pender County Board of Commissioners
- Healthy Carolinians of Pender
- Pender County Department of Social Services
- Black River Health Services
- Pender Adult Services
- Area Churches
- Coastal Horizons
- Planned Parenthood
- Access III Lower Cape Fear
- Children's Home Society
- Carousel Center
- Local Media
- State Regional Dental Hygienist
- Strategic Behavioral Health

## **Pender County Board of Health**

Jimmy Holland, Chair, Engineer  
Kimberly Collins, Vice-Chair, Nurse  
George Brown, County Commissioner  
Jan Dawson, Public Member  
Corine Bellamy, Public Member  
Jack Swann, Public Member  
Dr. Michael Cherubini, Dentist

**“Public health practice embraces all those actions that are directed to the assessment of health and disease problems in the population; the formulation of policies dealing with such problems; and the assurance of environmental, behavioral, and medical services designed to accelerate favorable health trends and reduce the unfavorable.” ~ Afifi, Abdelmonem A. & Breslow, Lester**

**Pender County Health Department  
803 South Walker Street  
Burgaw, NC 28425  
(910) 259-1230**

## ***Executive Summary***

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In January 2010, the Pender County Health Department and Healthy Carolinians of Pender led the effort to begin the health assessment process. The following document represents the results of this effort. Every attempt has been made to provide a wide-range of information in all areas and to represent a broad range of opinions, ideas and secondary data regarding health issues that affect the citizens of Pender County.

### **Community Health Assessment Process**

The health assessment team used the later months of 2009 to develop data collecting instruments such as the community survey. To begin the process in 2010, the steering team began conducting surveys with community members and key informants on strengths, needs, resources, and concerns about Pender County. The purpose was to gather community feedback about the concerns and discuss ideas on how to deal with the issues.

Further primary data was gathered through the distribution of the Community Health Assessment Survey. The paper version was given out at community events, churches, the health department, local hospital, libraries, industry, civic groups, and area health care providers including physicians, dentists and optometrists. Notice of the survey was shared with the community through the local newspaper, radio station, and health department website.

### **Next Steps**

Upon completion, the Community Health Assessment (CHA) will be distributed in the following ways:

- Present copies of the CHA to the County Commissioners
- Distribute copies to focus group participants
- Place the CHA at local libraries
- Distribute copies of the CHA to all County Department Heads
- Present copies of the CHA to Board of Health members.
- Place link to CHA on the Pender County Government web site.
- Place article in local newspapers and provide copies upon request.

## Finalizing Priorities

After examining the results of the survey, focus groups, and community forums, the most frequently named concerns were identified. Listed below are the top ten health concerns and community needs from the 2010 Community Health Assessment. Mental health, dental health, motor vehicle accidents, and lung disease replaced some of the socio-economic factors noted in the prior assessment. However, many of the priorities identified remained unchanged from the 2006 Community Health Assessment as shown below.

#	2010 Community Health Assessment Identified health concerns/issues
1	Obesity/Overweight
2	Aging Problems - Alzheimers, arthritis, hearing or vision loss, etc
3	Diabetes
4	Heart Disease/Heart Attacks
5	Cancer
6	Mental Health – Depression, schizophrenia, suicide, etc
7	Motor Vehicle Accidents
8	Teenage Pregnancy
9	Dental Health
10	Lung Disease

#	2006 Community Health Assessment Identified health concerns/issues
1	Obesity
2	Diabetes
3	Hypertension/Heart Disease
4	Cancer
5	Asthma
6	Drug/Alcohol use
7	Teenage Pregnancy
8	Lack of Health Insurance
9	Poverty
10	Lack of job opportunities

## Chapter 1: Introduction

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The North Carolina Department of Health and Human Services requires all local health departments to conduct a community health assessment every four years. The Pender County Community Health Assessment is an analysis of the health status of the community in context with the community's economic, social and environmental climate. The purpose of the community assessment is to identify factors that affect the health of a population and determine the availability of resources within the community to adequately address these factors. Through collaborative efforts forged among community leaders, public health agencies, businesses and health care, the community can begin to answer key questions such as:

- What are our population's health issues?
- What are the environmental and social factors that contribute to these issues?
- What are strengths within our communities?
- What resources are currently available in our communities?
- What are the future resources that will be required to assist the population?

In a community based assessment, as is promoted in the North Carolina Community Health Assessment, community members take the lead role in forming partnerships, gathering health related data, determining priority health issues, identifying resources, and planning community health programs. In this framework, the assessment process starts with the people who live in the community. The community has the primary responsibility for determining the focus of the assessment activities at every level, including collection and interpretation of data, evaluation of health resources, identification of health problems, and development of strategies for addressing these problems. In this view, the community assessment is done by the community rather than simply an assessment conducted on a community.

Pender County began preparing for the Community Health Assessment in January 2010 by developing a community health assessment team to inform and guide the process, identify primary data collecting tools, and to gather information for the assessment. Our community assessment team consisted of the management team of the Pender County Health Department and the Steering Committee of Healthy Carolinians of Pender. Members were from a variety of service agencies such as Pender County Health Department, Pender County Department of Social Services, Pender Adult Services, Pender Memorial Hospital, Coastal Horizons, Black River Health Services, Access III Lower Cape Fear, Carousel Center, Strategic Behavioral Health, and Pender County Schools. All worked together to collect data and share information with the public.

These groups were chosen because of the broad spectrum of members representing the community as a whole. They also represent key relationships between the Pender County Health Department, Pender County Schools, Pender Memorial Hospital and other county agencies. Community members, public health agencies, community leaders, and churches work collaboratively to gather and analyze data. The information is then shared with the public and used to determine priority areas. The final step is deciding which resources in the community will be used and which are to be developed to address these factors.

The Community Health Assessment team identified the following objectives for the 2010 assessment:

- Identify the important health behavior and disease trends in Pender County.
- Identify community members' perceptions of the health of their communities.
- Develop effective public health programs and policies using the Community Health Assessment data.

## Health Data Collection Process

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Primary and secondary data were collected and analyzed as part of the Community Assessment process. Pender County Health Department and representatives from the Healthy Carolinians of Pender conducted an intercept type survey at area health fairs, local county offices, health classes, and with the general populations. Surveys were also sent out randomly by selecting every 25<sup>th</sup> address on the Pender County tax list.

Over 500 Pender County citizens were surveyed with their answers being an instrumental component of this report. The survey in English and Spanish included questions regarding the basic demographics, health concerns, health topics, and personal health information (Appendix A). The composition of the respondents were as follows; 68.4% female, 31.6% male, 76.8% Caucasian, 22.1% African American, .7% Native American, .4% Asian and 0% other. Those that responded to the question on Hispanic/ Latino origin were 7.9%.

### ***Primary Data Collection***

The health department chose to use the Healthy Carolinians Community Health Opinion Survey after making the changes recommended by the local Health Carolinians Committee.

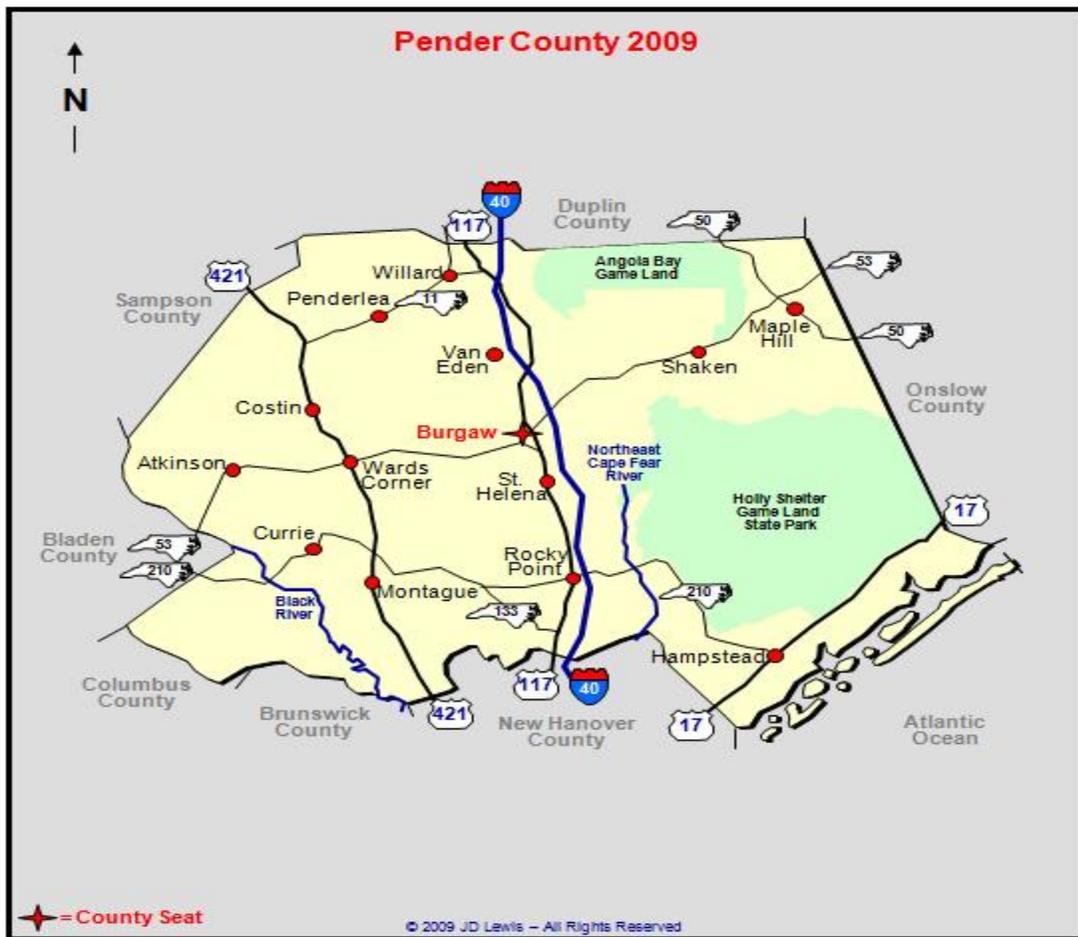
### ***Secondary Data Collection***

Secondary (pre-existing data) was collected and compiled using an array of data sources. The major sources of data used in the Community Assessment are:

- State Center for Health Statistics
- US Census
- Center for Disease Control (CDC)
- North Carolina Central Cancer Registry
- Coastal Carolina Health Alliance
- Behavioral Risk Factor Surveillance Survey(BRFSS)
- Healthy People 2010

## Chapter 2: Community Profile

Pender County is located in the Coastal Plains of the Southeastern portion of North Carolina. The county claims 871 square miles of land and 62 square miles of water. It is the 5<sup>th</sup> largest county for land mass, in the state, with Burgaw as its county seat. Pender County is a fast growing county with a 2010 population of 52,217. The county experienced greater than 25% growth in the population from 2000-2010. Pender County is well positioned for growth and development with strategic priorities related to economic development, expansion of public infrastructure, growth management, quality of life and education.



Interstate 40 is accessible via two exits across Pender County and provides easy connections to I-95, I-85, I-77, and I-26. The County is also traversed by a well-maintained network of US and state highways. Typical drive times are:

Interstate 95	70 minutes
Wilmington	36 minutes
Morehead City	100 minutes
Raleigh/Research Triangle Park	90 minutes

## History of Pender County

The first explorers to see what is now called Pender County coasted on-shore in 1524. They reported on the numerous varieties of game, particularly wild turkeys, found in the area. A century later in 1663, the Barbados commissioners, in attempting to settle the Lower Cape Fear, explored the northeast branch of the Cape Fear River. The Commissioners named the community "Rocky Point", the name which it retains today.

From 1690 to 1720, pirates traveled along the east coast capturing vessels loaded with gold and valuables. According to tradition, Topsail Sound and the entrance to the Cape Fear River served as the main headquarters for these outlaws. Legend has it that the most noted pirate of this time, Blackbeard, found harbor for his pirate fleet at Topsail Inlet. Thus, Topsail Island was named because pirates would sail into the Intracoastal Waterway, leaving only the tops of their sails in view as they waited to attack approaching ships.

The Lower Cape Fear was settled in 1725 and New Hanover County was established in 1728. Still a part of New Hanover after the war, Pender's prosperous plantation system was swept away during the Reconstruction years. Wilmington, overrun with carpetbaggers, was under corrupt rule. By popular vote, despite strong Republican opposition, the county was created with the City of Watha as the first county seat. The county was named for General William Dorsey Pender of the Confederate States Army, who was promoted by President Davis to Brigadier General in the Civil War. During the War Between the States, this area sent nearly 4,000 troops to battle and gave the Confederacy its youngest general, William D. Pender. General Pender died at the Battle of Gettysburg. In 1879, the present county seat of Burgaw, was chartered.



*Major-General William Dorsey Pender*



## History of Public Health in Pender County

Solomon Sampson Satchwell was a physician and head surgeon of the Confederate States Army General Hospital No. 2 in Wilson, NC. Following the war, he established private practices in Rocky Point and subsequently in Burgaw. Satchwell was a pioneer in hygienic therapy and in public health. He emphasized the importance of “commonsense cleanliness” and led efforts to develop a public health program for the state. Satchwell helped to form the State Board of Health in 1879, serving as the first president of the board from 1879-1881.

In 1877, the General Assembly authorized that counties should appoint health boards consisting of practicing physicians, the county commissioner chairman, mayors, and a city or county supervisor. The local health board was to employ a Superintendent of Health although there was no department to carry out the work. In 1886, Dr. William Thomas Ennett became the first Superintendent of Health of Pender County. Superintendents were to vaccinate residents, look after sanitary conditions, and see that health regulations were enforced. Dr. Satchwell became superintendent of health for the county in 1892, the year of his death as a result of typhoid fever.

In January, 1941, the Onslow-Pender District Health Department was formed under the direction of Dr. H.W. Stevens. The health department provided a year-round immunization clinic with free vaccines to the people of the county. School children were given physicals and immunized against smallpox, diphtheria and typhoid fever. Other clinics were held in the county for diseases such as pulmonary tuberculosis. Inspections of all schools, cafes, meat markets, dairies, and abattoirs were performed throughout the county by the local sanitarian.

Source: Bloodworth, M. (1947). *History of Pender County North Carolina By Mattie Bloodworth*. The Dietz Printing Company, VA.

## **History of Public Health in Pender County (cont)**

In 1954, the Onslow-Pender District Health Department divided into single county health departments. Dr. N.C. Wolfe served as the interim health director and a new health department was built next to Pender Memorial Hospital the following year. The health department's annual budget was \$17,443.

*Source: Pender County Board of Health minutes*

## **Geography**

The major land use in Pender County is woodland. About 459,089 acres, or 82 percent of the county, is commercial woodland. The state of North Carolina owns about 62,748 acres, which is protected as a wildlife refuge. About 246,850 acres is privately owned land used as commercial and woodlot woodland. The paper industries own about 149,181 acres of woodland. According to the Census of Agriculture, about 54,200 acres, or 10 percent of the county, is used as cropland. Corn, soybeans, tobacco, and peanuts are the main crops. The remainder of Pender County is made up of small bodies of water, urban areas, recreation areas, and other small, miscellaneous areas.

*Source: US Department of Agriculture*

## **Topography**

The county is a large coastal county in the Cape Fear Region (comprised of Bladen, Brunswick, Columbus, New Hanover, and Pender Counties) of southeastern North Carolina. It is bounded on the north by Duplin County, on the west by Sampson and Bladen Counties, on the south by Columbus, Brunswick and New Hanover Counties, and on the east by Onslow County and the Atlantic Ocean. Approximately fifteen miles of the county fronts the Atlantic Ocean. The topography is level to gently rolling, with dominantly flat upland areas. The coastal corridor is traversed by the Atlantic Intra-coastal Waterway and a coastal habitat playground.

## **Water**

The ground water deposits in Pender County are mostly in unconsolidated surficial sediments. Ground water from these sediments is of good quality but can have a high content of iron. Generally, the sediments vary in thickness throughout the county, ranging from only a few inches in the Rocky Point and Maple Hill area to about 40 feet in places. The sediments increase in thickness toward the southeast. They are a valuable aquifer that furnishes most of the water for rural residences.

In the eastern part of Pender County, the unconsolidated surficial sediments are underlain by a limestone aquifer; in the eastern part is an aquifer of compacted, dark, silt and loam material. In this formation ground water yields are low but of good quality.

## **Physiography, Relief and Drainage**

Pender County is on the lower Coastal Plain and ranges in elevation from sea level to 110 feet. The soils in the county are nearly level and have short slopes along the main drainage ways.

The Cape Fear River, which is in the southwest part of Pender County, drains most of the county. The Black River and Northeast Cape Fears are tributaries of the Cape Fear River. These rivers drain most of the county. A few short streams in the southeastern part of the county drain into the Intra-coastal Waterway. They are wide and shallow near sea level and become narrow inland. The flow of water in streams throughout the county is slow, and small tributaries flow only after heavy rains. The Cape Fear, Northeast Cape Fear, and Black Rivers are affected by tides. Most of the flood plains along these streams are inundated each day at high tide.

A small part of Pender County includes the Outer Banks. They generally are at an elevation of 0 to about 15 feet, but a few sand dunes reach about 40 feet. In most places the sand ridges are 200 to about 500 feet wide. Some ridges and dunes are stabilized by vegetation. The soils on the beach are gently sloping from the barrier ridge to the ocean. The coils on the northwest side of the islands slope gently towards marshes or sounds that border the islands in places. The soils on the northwest side generally are less sloping than those in the middle and on the southeast side of the islands. The sand ridges of the Outer Banks protect the mainland from wave action and impede tidal action against the mainland shoreline.

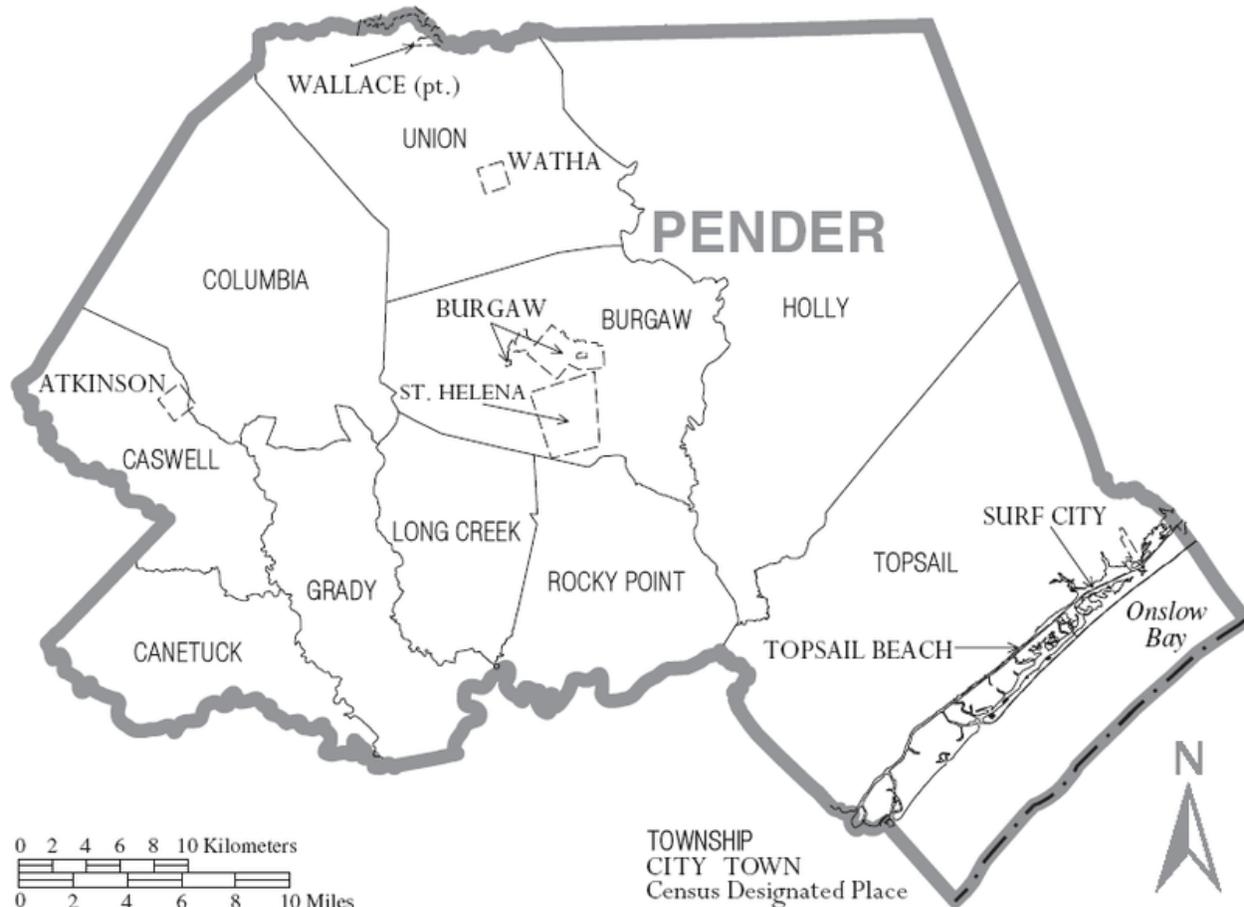
The Outer Banks were formed by the waves, winds, long-shore currents, tides and tidal currents, rivers, creeks that empty into the bays, the sounds, and the ocean. These continue to move sediment and to reshape the barrier islands, causing the islands to migrate or “roll over” toward the west and to move closer to the mainland.

Source: US Department of Agriculture

## **Climate**

Pender County's climate data is recorded in Willard, North Carolina by the National Climate Data Center. In the winter the average temperature is 46 degrees F. In the summer the average temperature is 78 degrees and the average daily maximum temperature is 88 degrees. Total annual precipitation averages 53 inches. Of this, nearly 32 inches, or about 60 percent, usually falls from April through September. The growing season for most crops occurs within this period.

The average relative humidity in midafternoon is about 55 percent. Humidity is higher at night and at dawn. The prevailing wind is from the south-southwest. Average wind speed is highest, 11 miles per hour, in spring. Every few years, a hurricane crosses the county.



According to the U.S. Census Bureau, the county has a total area of 933 square miles (2,416 km<sup>2</sup>), of which, 871 square miles (2,255 km<sup>2</sup>) of it is land and 62 square miles (160 km<sup>2</sup>) of it (6.64%) is water.

## Townships

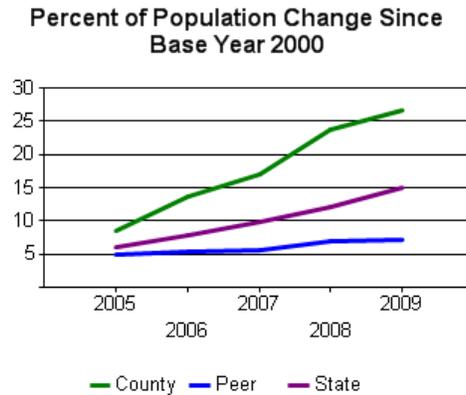
The county is divided into ten townships: Burgaw, Canetuck, Caswell, Columbia, Grady, Holly, Long Creek, Rocky Point, Topsail, and Union.

## Law and Government

The county is governed by the five members of the Pender County Board of Commissioners. They are elected officials who serve for four-year terms. Commissioners must reside within the district they represent, however they are elected to serve all the people of Pender County. A professional county manager serves under the direction of the County Commissioners. Pender County is a member of the regional Cape Fear Council of Governments.

## Demographics

As of the 2010 Census, the population for Pender County was 52,217 people, a 27.1% increase since the 2000 Census. This growth was much greater compared to the population growth for the state as well as counties of similar size to Pender County.

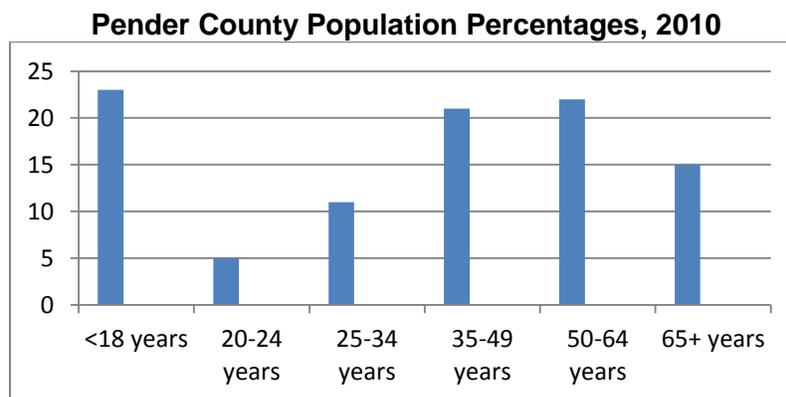


*CATCH-NC Portal: Pender County Health Profile*

The population density was 60 people per square mile (18/km<sup>2</sup>). There are 20,333 occupied households with 28% having residents under the age of 18 years. The average household size is 2.49 and the average family size is 2.90.

Pender County is predominantly Caucasian, 76.1%; 17.8% are Black or African American; 6.1% Hispanic; and smaller percentages of Native American, Asian, or Pacific Islander.

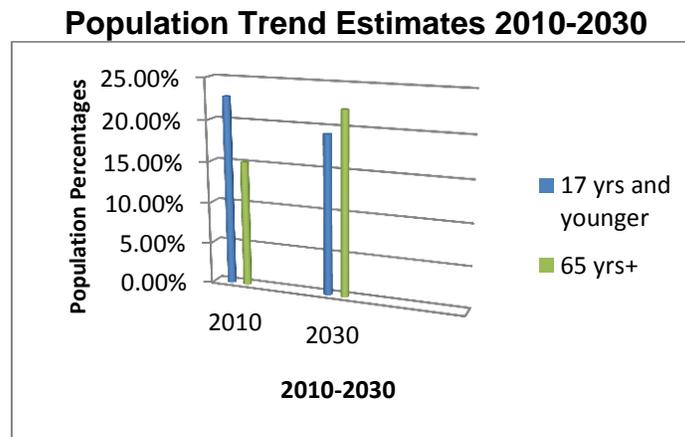
According to the 2010 Census, 23% of the population was under the age of 18. Individuals ages 50-64 comprised 22% of the population and 21% were ages 35-49 years of age. Those adults, 65 years of age and older, made up 15% of the population. The median age for Pender County residents is 38.8 years.



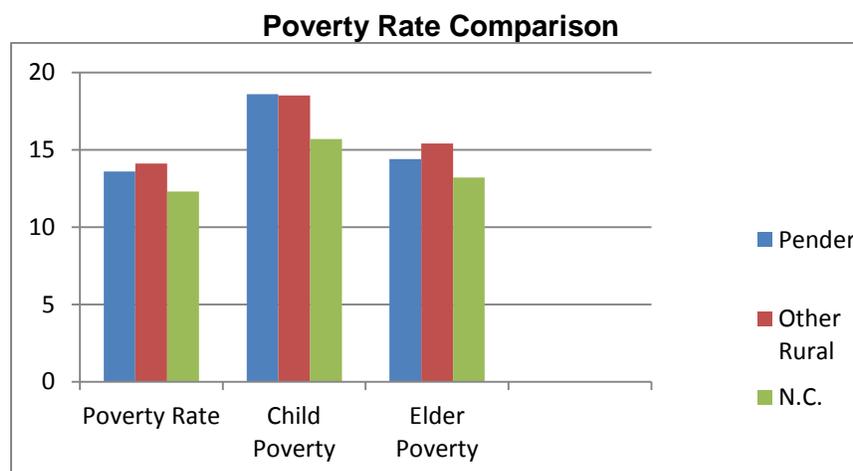
*U.S. Census, 2010*

## Demographics (cont)

According to the North Carolina Division of Aging and Adult Services the fastest growing population over the next 20 years will be those 65 years of age and older. In 2030, this age group will double. Of North Carolina's 100 counties, 71 will have more people over age 60 than under 17 years of age. Pender County will be one of those counties. See the graph below. Of note, aging problems were the second leading issue of concern identified in the community assessment survey.



In 2009, the median income for a household in the county was \$43,261, while the per capita income was \$21,952. Nine percent of the population receives food stamps and 59% of school children receive free or reduced lunches. The poverty rate in 2000 was 13.6% compared to the state rate of 12.3%. The child poverty rate and the elderly poverty rate are higher than the state average as noted in the graph below. Other rural counties have rates slightly higher than Pender County. Poverty is a serious concern as it contributes to many barriers to health care and can negatively impact overall health status.



## Education

Education levels among the residents can play a major role in diagnosing the health status of a community. The Behavioral Risk Factor Surveillance System (BRFSS) indicates that lower educational levels are found among people with sedentary lifestyles, obesity and other health risk behaviors. The Pender County School System is the only public school system located within the county with a student enrollment of 8268 students. There are a total of 16 public schools located within the county: eight elementary schools, four middle schools, three high schools, and one early college program. The average SAT score in 2009 was 1419 compared to the state average of 1486. The dropout rate for the Pender County School system in the 2009-2010 school year was 3.57 compared to the state rate of 3.75. Nearly 34% of residents have a high school education and 14% have a Bachelor's Degree or higher. Twenty-three percent of the population has less than a high school education.

*Source: North Carolina Department of Public Instruction and NC Rural Center*

## Economy

Pender County is a very diverse county which affords a unique opportunity to create a balanced economic base. The Pender Commerce Park on the US 421 corridor in western Pender County is "shovel ready" for new industrial clients, and is located only 15 minutes from the Wilmington International Airport and 15 minutes from the Port of Wilmington.

The County is also partnering with **Wilmington Industrial Development, Inc. (WID)**, Pender Progress Corporation and Four County EMC to develop industrial property in the Pender Progress Industrial Park in Burgaw. This is a new venture for the county, and one that will provide a great stimulus and incentive for industrial client marketing and recruitment county-wide. And as well, there is tremendous opportunity for light industrial and heavy commercial development along the US 17 corridor in eastern Pender County, being proximate to the Jacksonville-Onslow County area and Camp Lejeune. Pender County maintains a progressive and business-friendly approach to assisting companies that invest in the county and its workforce.

It is critical for the county to address effective management of growth and development. Authorization has been given to develop several planning initiatives including: updating the County's land use ordinances into a Unified Development Ordinance, updating the County's comprehensive plan, and developing three local area plans for critical growth areas (Hampstead, US 421 Corridor, and Rocky Point). This allows the county to establish modern, yet business-friendly land use plans and policies as the potential for increased growth occurs. The county is also involved in area transportation planning and an overlay corridor plan has been completed in the last year for the US 17 corridor, and will be incorporated into the new land use ordinance and plans.

## **Economy (cont)**

While Pender County is a regional leader in agriculture, livestock, textiles and manufacturing, the county has a broad, diversified economy and is an excellent choice for many types of enterprises. The county is home to over 955 private industries. The majority of jobs are in private industry followed by retail and wholesale trade. Sixty-one percent of all workers are employed outside Pender County. Nearly 50% of all workers travel more than 30 minutes to work and 80% commute alone to their place of employment.

There are approximately 357 farms in the county and the average farm size is 172 acres. In 2007, Pender County ranked 5<sup>th</sup> in the state for blueberry production and 10<sup>th</sup> for vegetable, fruits and nuts production. In addition, Pender County is the 5<sup>th</sup> leading county for hog production. Total agricultural cash receipts in 2010 were nearly 139 million dollars.

*Source: N.C. Department of Agriculture*

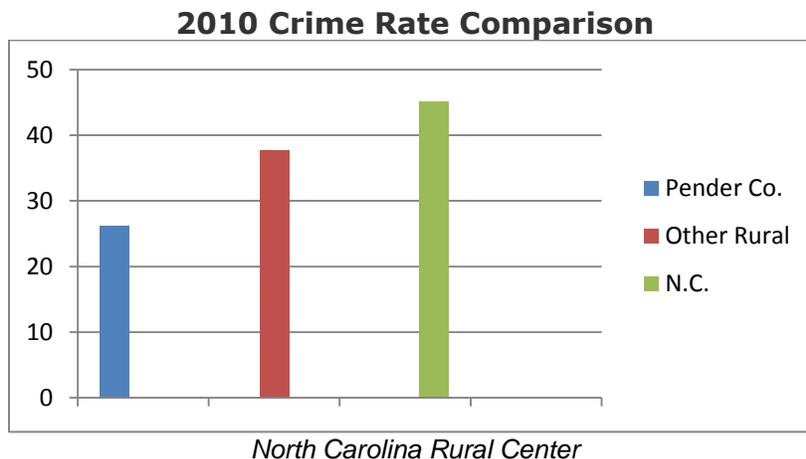
## **Quality of Life**

Enhancing the quality of life is a major objective for everything county government undertakes in Pender County. Nearly everything the county does contributes to quality of life one way or another, whether it be recruiting new business, funding new school buildings, adopting new land use ordinances, or extending infrastructure to serve undeveloped areas of the county.

There are efforts in place to provide a new public access to the intra-coastal waterway in partnership with several State agencies. Planning has begun for a new branch library in Hampstead to meet the increased demand for library services. A tourism director is responsible for collaboration with other tourism partners in developing and implementing strategic plans to increase tourism development county-wide. Special focus has been given to agri-tourism and eco-tourism as well as the county's coastal tourism assets. Major facility expansions at Pender Memorial Park and Hampstead Kiwanis Park are in motion. Capital Improvement Plans are being developed to provide for the reservation and eventual development of additional parks throughout the county.

The beautiful beaches of Surf City and Topsail Beach are a popular destination for visitors. There are several opportunities to enjoy the county's unspoiled rivers, bountiful woodland and friendly communities. The county offers plenty of opportunities to golf, fish, hunt, and camp. The Holly Shelter Game Land is made up of over 75,000 acres managed by the North Carolina Wildlife Resources Commission. It contains some of the most biologically significant land along the U.S. Atlantic Coast and ranks fourth in the state for the total number of rare plants and animal species. It is an important site for butterfly migration and contains such carnivorous plants as the Venus Flytrap. Black bear, deer and alligator are prevalent within this protected game land. As growth and development increase in the county, natural resource management will be a critical factor to consider.

## Quality of Life (cont)



As noted in the above chart, Pender County has a lower crime rate than other rural North Carolina counties and as compared to the state. The crime index rate includes the total number of violent crimes (murder, rape, robbery and aggravated assault) and property crimes (burglary, larceny and motor vehicle theft). While rates remain lower than state rates, in 2009 the violent crime rate doubled from 2008 while property crime decreased.

## Chapter 3: Health Information

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The Pender County Health Department offers health services that include family planning, prenatal care, WIC, immunizations, child health, preventive and acute care services, communicable disease surveillance, migrant health services, health education and community outreach, public health preparedness, case management for at-risk children and pregnant mothers. There are two dental programs, a mobile unit that serves school children and a clinic located at the health department.

The county has one hospital, Pender Memorial, located in the county seat of Burgaw. It is a not-for-profit hospital with 86 beds and accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The hospital is affiliated with New Hanover Regional Medical Center in Wilmington, which is the tertiary referral center for southeastern North Carolina. The county has three facilities that provide nursing home, rehabilitation and assisted living care.

Black River Health Services is a non-profit rural health system with three health centers in the county. Homestead Health Center operates one clinic that provides medical and dental services to the communities of Pender, Duplin, Bladen, and Sampson counties.

Although there are opportunities for residents to select a medical home from the above mentioned or from local private medical providers, the number of primary care physicians per 10,000 population is of serious concern.

### Primary Care Physicians per 10,000 Population

	Pender County	North Carolina
2000	3.2	8.3
2004	2.5	8.6
2008	2.9	9.0

*State Center for Health Statistics*

The number of dentists per 10,000 population is also less than the state ratio (see chart below). The health department offers dental services to school children through a mobile dental clinic as well as providing care through a health department based clinic.

### Number of Dentists per 10,000 Population

	Pender County	North Carolina
2000	2.5	4.0
2004	2.2	4.2
2008	2.7	4.3

*State Center for Health Statistics*

### Health Information (cont)

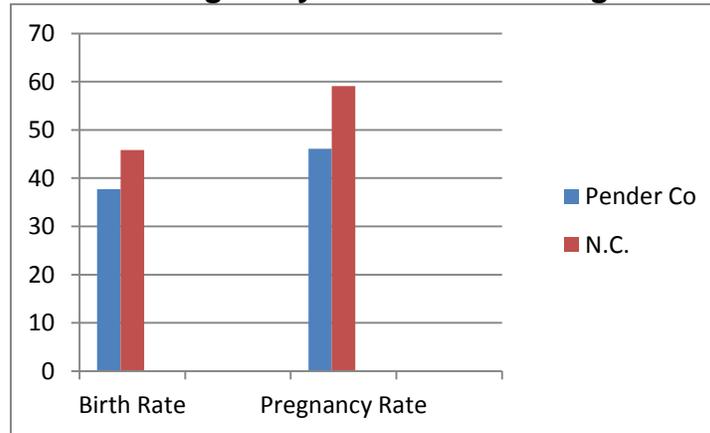
The local mental health entity for Pender County is Coastal Horizons Center, a private, non-profit agency that provides mental health services to those in need of prevention, crisis intervention, criminal justice alternatives, community outreach, substance abuse and mental health treatment. However, there are few support group services available in the county thus requiring residents to travel to adjacent counties for care.

From 2005-2009, Pender County had a total of 2,830 births with a total birth rate of 11.3 compared to the state rate of 14.1 per 1,000 population. Birth rates for white and minority births were also lower than the respective state rates. (See chart below).

Residence	Total Births	Total Rate	White Births	White Rate	Minority Births	Minority Rate
North Carolina	639,115	14.1	458,829	13.6	180,286	15.5
Pender	2,830	11.3	2,334	11.9	496	9.1

For females 15-19 years of age, the pregnancy and birth rates are lower than the state rates for 2007-2009.

**Birth and Pregnancy Rates for Teens ages 15-19**



*N.C. State Center for Health Statistics*

### Health Information (cont)

The Pender County Health Department and one private physician provide prenatal care in the county. Otherwise, residents must travel out of county for care. Pender Memorial Hospital does not offer labor and delivery services, thus the vast majority of deliveries are performed at New Hanover Regional Medical Center. While most of the 2007-2009 pregnancy outcomes for Pender County women are better than the state's statistic. One category of concern is the percentage of all women who receive late or no prenatal care. Without early entry into prenatal care, women and their infants are at risk for unhealthy outcomes such as low birth-weight, developmental disabilities and fetal/infant death.

Health Indicator	North Carolina All Women	Pender County All Women	North Carolina Teens 15-19 yrs	Pender County Teens 15-19 yrs
Percent of Live Births with Late or No Prenatal Care	16.8	22.8	28.4	40.1

*N.C. State Center for Health Statistics*

In North Carolina, a long-standing health concern is the infant mortality rate for minorities. This rate is more than twice the mortality rate for white infants. Fortunately, this is not reflected in Pender County statistics. All rates are lower than the state as noted below. While these rates indicate positive trends, on-going efforts are necessary to assure Pender County mothers have healthy birth outcomes.

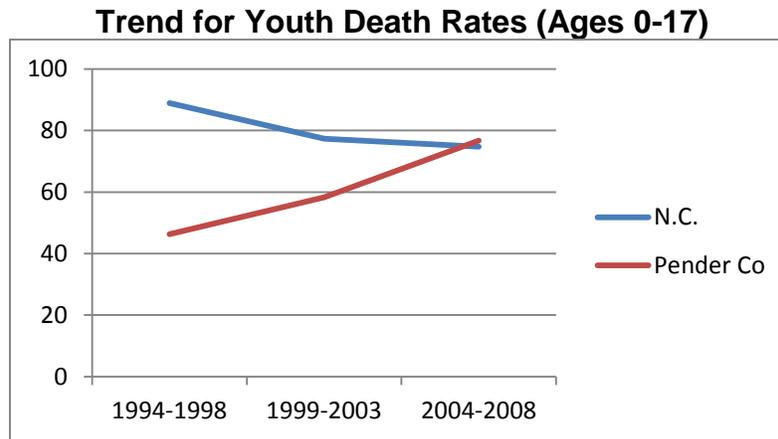
#### Infant Mortality Rates, 2005-2009

Residence	Total Infant Death Rate	White Infant Death Rate	Minority Infant Death Rate
North Carolina	8.3	6.0	14.0
Pender County	5.7	5.6	6.0

*Databook, N.C. State Center for Health Statistics*

### Health Information (cont)

One child health indicator to monitor is the youth death rate. From 2004-2008 there were 40 deaths to children 0 to 17 years of age. Fifteen deaths occurred to children under the age of one year. The main causes of death for these infants were birth defects, SIDS, and illnesses. There were 12 deaths to teens 15 to 17 years of age. Thirty-three percent of all child deaths (12) were related to motor vehicle accidents. The youth death rate has steadily increased since 1994, exceeding the state rate during this five year time span.



*N.C. State Center for Health Statistics*

**Leading Causes of Death for Pender County  
2005-2009 Age-Adjusted Rates**

<b>Leading Causes</b>	<b>Pender County Rate</b>	<b>N.C. Rate</b>
Diseases of Heart	170.3	191.7
---Acute Myocardial Infarction	21.0	41.2
---Other Ischemic Heart Disease	68.6	81.5
Cerebrovascular Disease	42.9	50.5
<b>Cancer</b>	<b>190.5</b>	<b>185.6</b>
---Colon, Rectum, and Anus	12.2	16.5
---Pancreas	10.3	10.8
---Trachea, Bronchus, and Lung	60.7	57.0
---Breast	13.6	13.4
---Prostate	11.6	9.6
<b>Diabetes Mellitus</b>	<b>29.7</b>	<b>23.6</b>
Pneumonia and Influenza	11.3	19.4
Chronic Lower Respiratory Disease	40.5	47.0
<b>Chronic Liver Disease and Cirrhosis</b>	<b>9.4</b>	<b>9.1</b>
Septicemia	10.9	13.8
<b>Nephritis, Nephrotic Syndrome, and Nephrosis</b>	<b>20.1</b>	<b>18.7</b>
<b>Unintentional Motor Vehicle Injuries</b>	<b>28.2</b>	<b>17.6</b>
All Other Unintentional Injuries	26.2	28.6
<b>Suicide</b>	<b>14.8</b>	<b>12.0</b>
Homicide	N/A	7.0
Alzheimer's Disease	14.5	28.3
Acquired Immune Deficiency Syndrome	N/A	4.2
All Causes	786.4	832.7

## Health Information (cont)

The ten leading causes of death for Pender County residents from 2005-2009 are:

1	Cancer- All Sites
2	Diseases of the Heart
3	Cerebrovascular Disease
4	Chronic Lower Respiratory Diseases
5	Diabetes Mellitus
6	Motor Vehicle Injuries
7	Other Unintentional Injuries
8	Nephritis, Nephrotic Syndrome, and Nephrosis
9	Suicide
10	Alzheimer's Disease

*Databook, N.C. State Center for Health Statistics*

The five major sites for all cancer deaths from 2005-2009 were:

Rank	Cancer Site	Pender County Rate	N.C. Rate
1	Lung/Bronchus	60.7	57.0
2	Female Breast	13.6	13.4
3	Colon/Rectum	12.2	16.5
4	Prostate	11.6	9.6
5	Pancreas	10.3	10.8

*N.C. State Center for Health Statistics*

The cancer sites listed above indicate the importance of early detection through preventive health screenings. Some deaths may have been prevented with early screening and lifestyle changes such as smoking cessation. The health department has a great opportunity through their health promotion program to conduct community education and awareness campaigns related to these findings. Unfortunately, access to care for preventative health care visits can be difficult with limited health care providers in the county.

## Health Information (cont)

Overweight and obesity can lead to serious health issues for children and adults. Poor eating habits and lack of physical activity are major contributors to this epidemic. Heart disease, high blood pressure, stroke, diabetes, and certain types of cancer can be attributed to overweight/obese conditions. In 2007, 64.6% of all North Carolina adults were overweight or obese. In addition, North Carolina had the 5<sup>th</sup> highest rate in the U.S. for obese children. Obesity in children is associated with an increased risk of high cholesterol, type II diabetes, high blood pressure, asthma, sleep apnea, and orthopedic problems.

In 2006, 57%-61% of Pender County adults were overweight or obese. According to the community assessment survey 43% of respondents said they did not exercise. Over 50% of respondents spent 2-3 hours a day of screen time (watching television, playing video games or using the computer. Another 20% reported they spent 4-5 hours per day in screen time activities. This epidemic presents a challenge to all communities as we attempt to identify and implement successful evidence based practices and to collaborate with various community agencies to address this problem.

Childhood obesity may be contributing to the decrease in child life expectancy. Nationally, more than one-third of children and youth are overweight and more than 17% are obese. Overweight and sedentary children are more likely to become overweight adults. Since habits are developed early in life that can persist into adulthood, interventions must target children and adults early on.

**Child Overweight and Obesity Prevalence, 2008 and 2009**

	<b>Pender County Overweight Children</b>	<b>N.C. Overweight Children</b>	<b>Pender County Obese Children</b>	<b>N.C. Obese Children</b>
2008	19.3%	16.4%	26.3%	17.5%
2009	19.2%	16.2%	28.4%	18.0%

*NC Nutrition and Physical Activity Surveillance System*

## **Chapter 4: Community Health Concerns/Priorities**

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After reviewing county data and responses to the Community Health Assessment survey, concerns were placed in six categories. Listed below is a summary of the community concerns/priorities with some important data to consider as Community Health Action Plans are developed.

### **Access to Care Concerns**

- ✓ In 2008, there were 2.9 physicians per 10,000 population compared to the state ratio of 9.0 physicians per 10,000 people.
- ✓ In 2008, there were 2.7 dentists per 10,000 population compared to the state ratio of 4.3 dentists per 10,000 people.
- ✓ Nearly 23% of all live births in Pender County from 2007-2009 were to women who received late or no prenatal care. (State 16.8%).
- ✓ From 2007-2009, over 40% of pregnant teens received late or no prenatal care compared to the state (28.4%).
- ✓ Twenty-five percent of survey respondents stated they could not get dental care when needed due to lack of insurance or inability to afford care.
- ✓ Twenty-one percent of individuals 0-64 years of age were uninsured in 2009 compared to the state (19.7%).

### **Chronic Disease**

- ✓ The top five causes of death for all ages (2005-2009) are: cancer, diseases of the heart, cerebrovascular disease, chronic lower respiratory diseases, and diabetes mellitus.
- ✓ Forty-three percent of survey respondents reported they did not exercise.
- ✓ The rate for lung cancer deaths in Pender County is higher than the state rate.
- ✓ In 2006, 57%-61% of Pender County adults were overweight or obese.
- ✓ In 2009, over 28% of Pender County children were obese and 19.2% were overweight.

## **Community Health Concerns/Priorities (cont)**

### **Overweight/Obesity Concerns**

- ✓ In 2006, 57%-61% of Pender County adults were overweight or obese.
- ✓ In 2009, 19% of Pender County children were overweight.
- ✓ Over 28% of Pender County children were obese in 2009.
- ✓ Forty-three percent of survey respondents stated they did not exercise.
- ✓ Over 50% of survey respondents spent 2-3 hours per day watching television, playing video games, or using the computer (screen time) and another 20% of respondents spent 4-5 hours per day of screen time.

### **Mental Health**

- ✓ Nearly 60% of survey respondents stated that in the last 30 days, they felt sad or worried, keeping them from doing their normal business.
- ✓ The sixth leading health concern/issue from the Community Health Assessment was mental health-depression, schizophrenia, suicide, etc.
- ✓ From 2005-2009, the 9<sup>th</sup> leading cause of death in Pender County was suicide.
- ✓ Alcohol and drug abuse were identified as some of the main concerns regarding unhealthy behaviors in the community as per survey respondents.

## **Community Health Concerns/Priorities (cont)**

### **Health Behavior Concerns**

- ✓ From 2004-2008, 33% of all child deaths ages 0-17 years were caused by motor vehicle accidents. Twelve deaths were teens, ages 15-17 years old.
- ✓ Alcohol and drug abuse were identified as some of the main concerns regarding unhealthy behaviors in the community as per survey respondents.
- ✓ Forty-three percent of survey respondents stated they did not exercise.
- ✓ In 2006, 57%-61% of Pender County adults were overweight or obese.
- ✓ In 2009, 19% of Pender County children were overweight.
- ✓ Over 28% of Pender County children were obese in 2009.
- ✓ Nearly 60% of survey respondents identified poor eating habits as an unhealthy behavior in the community.

### **Changing Demographics**

- ✓ In the 2010 Census, 23% of residents were under the age of 18 years and 15% of the population was 65 years and older.
- ✓ Population trend estimates for the year 2030 reflect that there will be more people over the age of 60 years than the number under the age of 17 years.
- ✓ The five-year birth rate from 2005-2009 is 11.3 compared to the state rate of 14.1.
- ✓ The median age for Pender County residents is 38.8 years compared to the state median age of 35.8 years.

## ***Chapter 5: Community Health Action Plans***

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The Pender County Health Department staff will focus on reviewing the findings of this assessment. Community health action plans will be developed to address some of the identified health priorities.

# Appendix A

## **2009 Community Health Opinion Survey Tool for Pender County**



## **2009 Community Health Opinion Survey**

*Pender County Health Department along with Healthy Carolinians of Pender is asking you to participate in a health opinion survey for our county. Your participation is very important to our County. The purpose of this survey is to learn more about the health and quality of life in Pender County, North Carolina. The Pender County Health Department and Healthy Carolinians of Pender County will use the results of this survey to help them to develop plans for addressing the major health and community issues in Pender County. All the information you give us will be completely confidential and will not be linked to you in any way.*

*The survey is completely voluntary. You should participate only if you are a resident of Pender County. It should take no longer than 20 minutes to complete. This survey should be completed by an adult ages 18 and up.*

*Thank you,*

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## Pender County Community Health Survey

### PART 1: Quality of Life Statements

The first questions are about how you see certain parts of Pender County life. Please tell us whether you “strongly disagree”, “disagree”, “agree” or “strongly agree” with each of the next 6 statements.

Statements	Choose a number for each statement below.			
	Strongly Disagree	Disagree	Agree	Strongly Agree
<p><b>1. How do you feel about this statement, “There is a good healthcare system in Pender County”?</b></p> <p>Consider the cost and quality, number of options, and availability of healthcare in <b>Pender</b> County.</p>	1	2	3	4
<p><b>2. How do you feel about this statement, “Pender County is a good place to raise children”?</b></p> <p>Consider the quality and safety of schools and child care programs, after school programs, and places to play in this county.</p>	1	2	3	4
<p><b>3. How do you feel about this statement, “Pender County is a good place to grow old”?</b></p> <p>Consider our county’s elder-friendly housing, transportation to medical services, recreation, and services for the elderly.</p>	1	2	3	4
<p><b>4. How do you feel about this statement, “There is plenty of economic opportunity in Pender County”?</b> Consider the number and quality of jobs, job training/higher education opportunities, and availability of affordable housing in <b>Pender</b> County.</p>	1	2	3	4
<p><b>5. How do you feel about this statement, “Pender County is a safe place to live”?</b></p> <p>Consider how safe you feel at home, in the workplace, in schools, at playgrounds, parks, and shopping centers in Pender County.</p>	1	2	3	4

<p><b>6. How do you feel about this statement, “There is plenty of help for individuals and families during times of need in Pender County”?</b></p>	<p><b>1      2      3      4</b></p>
<p>Consider social support in Pender County: neighbors, support groups, faith community outreach, community organizations, and emergency monetary assistance.</p>	

*PART 2: Community Problems and Issues*

*Health Problems*

**7. These next questions are about health problems that have the largest impact on the community as a whole. Please look at this list of health problems. I would like for you to pick the most important health problems in Pender County. You can choose up to 5. Remember this is your opinion and your choices will not be linked to you in any way. If you do not see a health problem you consider one of the most important, please add in what you consider most important.**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Aging problems<br>(Alzheimer’s, arthritis,<br>hearing or vision loss, etc.) | <input type="checkbox"/> Infant death  | <input type="checkbox"/> Other injuries (drowning,<br>choking, home or work<br>related) |
| <input type="checkbox"/> Asthma  | <input type="checkbox"/> Infectious/Contagious<br>diseases (TB, salmonella,<br>pneumonia, flu, etc.)   | <input type="checkbox"/> Obesity/overweight   |
| <input type="checkbox"/> Birth defects   | <input type="checkbox"/> Kidney disease  | <input type="checkbox"/> Lung disease<br>(emphysema, etc.)                              |
| <input type="checkbox"/> Cancer<br>What kind? _____  | <input type="checkbox"/> Liver disease   | <input type="checkbox"/> Sexually transmitted<br>diseases (STDs)                        |
| <input type="checkbox"/> Dental health   | <input type="checkbox"/> Mental health (depression,<br>schizophrenia, suicide etc.)                    | <input type="checkbox"/> HIV/AIDS   |
| <input type="checkbox"/> Diabetes  | <input type="checkbox"/> Motor vehicle accidents   | <input type="checkbox"/> Stroke   |
| <input type="checkbox"/> Gun-related injuries  | <input type="checkbox"/> Neurological disorders<br>(Multiple Sclerosis, muscular<br>dystrophy, A.L.S.) | <input type="checkbox"/> Teenage pregnancy  |
| <input type="checkbox"/> Heart disease/heart attacks   |  | <input type="checkbox"/> Other _____  |
| <input type="checkbox"/> Autism  |  |   |

**Unhealthy Behaviors**

8. These next questions are about unhealthy behaviors that some individuals do that have the largest impact on the community as a whole. Please look at this list of unhealthy behaviors. **Pick top unhealthy behaviors in Pender County. Please choose up to 5.** Remember this is your opinion and your choices will not be linked to you in any way. If you do not see an unhealthy behavior that you consider one of the most important, please add it in.

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Alcohol abuse  | <input type="checkbox"/> Not using seat belts  | <input type="checkbox"/> Poor eating habits     |
| <input type="checkbox"/> Drug abuse   | <input type="checkbox"/> Not going to a dentist for preventive check-ups / care      | <input type="checkbox"/> Reckless/drunk driving |
| <input type="checkbox"/> Having unsafe sex                                      | <input type="checkbox"/> Not going to the doctor for yearly check-ups and screenings | <input type="checkbox"/> Smoking/tobacco use    |
| <input type="checkbox"/> Lack of exercise                                       | <input type="checkbox"/> Not getting prenatal (pregnancy) care.                      | <input type="checkbox"/> Suicide                |
| <input type="checkbox"/> Not getting immunizations (“shots”) to prevent disease |  | <input type="checkbox"/> Violent behavior       |
| <input type="checkbox"/> Not using child safety seats                           |  | <input type="checkbox"/> Other: _____           |

**Community Issues**

9. These next questions are about community-wide issues that have the largest impact on the overall quality of life in Pender County. Please look at this list of community issues. **Pick the community issues that have the greatest effect on quality of life in Pender County. Please choose up to 5.** Remember this is your opinion and your choices will not be linked to you in any way. If you do not see a community problem you consider one of the most important, please add it in. I can also read these out loud as you think about them.

- |   |  |
|---|--|
| <input type="checkbox"/> Animal control issues  | <input type="checkbox"/> Availability of healthy family activities |
| <input type="checkbox"/> Availability of child care   | <input type="checkbox"/> Availability of positive teen activities  |
| <input type="checkbox"/> Affordability of health services   | <input type="checkbox"/> Neglect and abuse (Specify type)          |
| <input type="checkbox"/> Availability of healthy food choices                                     | <input type="checkbox"/> Elder abuse                               |
| <input type="checkbox"/> Bioterrorism   | <input type="checkbox"/> Child abuse                               |
| <input type="checkbox"/> Dropping out of school   | <input type="checkbox"/> Pollution (air, water, land)              |
| <input type="checkbox"/> Homelessness   | <input type="checkbox"/> Low income/poverty                        |
| <input type="checkbox"/> Inadequate/unaffordable housing  | <input type="checkbox"/> Racism                                    |
| <input type="checkbox"/> Lack of/inadequate health insurance                                      | <input type="checkbox"/> Lack of transportation options            |
| <input type="checkbox"/> Lack of culturally appropriate health services.                          | <input type="checkbox"/> Unemployment                              |
| <input type="checkbox"/> Lack of health care providers  | <input type="checkbox"/> Unsafe, un-maintained roads               |
| What kind? _____  | <input type="checkbox"/> Violent crime (murder, assault, etc.)     |
| <input type="checkbox"/> Lack of recreational facilities (parks, trails, community centers, etc.) | <input type="checkbox"/> Rape/sexual assault                       |
|   | <input type="checkbox"/> Domestic Violence                         |
|   | <input type="checkbox"/> Other: _____                              |

### PART 3: Personal Health

Questions about your own personal health, the answers you give for this survey will not be linked to you in any way.

10. How would you rate YOUR own health? Please choose only one of the following:

- |   |   |
|---|---|
| <input type="checkbox"/> Very healthy     | <input type="checkbox"/> Unhealthy      |
| <input type="checkbox"/> Healthy          | <input type="checkbox"/> Very unhealthy |
| <input type="checkbox"/> Somewhat healthy |   |

11. Where do you get most of your health-related information? Please choose only one.

- |  |  |                                 |
|--|--|---------------------------------|
| <input type="checkbox"/> Friends and family      | <input type="checkbox"/> Hospital        | <input type="checkbox"/> School |
| <input type="checkbox"/> Doctor/nurse/pharmacist | <input type="checkbox"/> Help lines      | <input type="checkbox"/> Church |
| <input type="checkbox"/> Internet                | <input type="checkbox"/> Books/magazines | <input type="checkbox"/> Other  |

12. Where do you go most often when you are sick or need advice about your health? (Choose the one that you usually go to.)

- |  |   |
|--|---|
| <input type="checkbox"/> Doctor's office   | <input type="checkbox"/> Medical Clinic     |
| <input type="checkbox"/> Health department | <input type="checkbox"/> Urgent Care Center |
| <input type="checkbox"/> Hospital          | <input type="checkbox"/> Other: _____       |

13. In the past 12 months, did you ever have a problem getting the health care you needed from any type of health care provider or facility?

- Yes       No (*now skip to question #15*)

**14. Since you said “yes”, which of these problems did you have? You can choose as many of these as you need to. If there was a problem you had that we do not have here, please write it in.**

- a.  I didn't have health insurance.
- b.  My insurance didn't cover what I needed.
- c.  My share of the cost (deductible/co-pay) was too high.
- d.  Doctor would not take my insurance or Medicaid.
- e.  Hospital would not take my insurance.
- f.  I didn't have a way to get there.
- g.  I didn't know where to go.
- h.  I couldn't get an appointment.
- i.  Other: \_\_\_\_\_

**15. In the past 12 months, did you have a problem filling a medically necessary prescription?**

Yes                       No (*now skip to question #17*)

**16. Since you said “yes”, which of these problems did you have? You can choose as many of these as you need to. If there was a problem you had that we do not have here, please write it in.**

- a.  I didn't have health insurance.
- b.  My insurance didn't cover what I needed.
- c.  My share of the cost (deductible/co-pay) was too high.
- d.  Pharmacy would not take my insurance or Medicaid.
- e.  I didn't have a way to get there.
- f.  I didn't know where to go.
- g.  Other: \_\_\_\_\_

**17. Was there a time during the past 12 months when you needed to get dental care, but could not?**

Yes     No (*now skip to question #19*)

**18. Since you said “yes”, why could you not get dental care? You can choose as many of these as you need to. If there was a problem you had that we do not have here, please write it in.**

- a.  I didn't have dental insurance.
- b.  My insurance didn't cover what I needed.
- c.  I couldn't afford the cost.
- d.  Dentist would not take my insurance or Medicaid.
- e.  My share of the cost (deductible/co-pay) was too high.
- f.  I didn't have a way to get there.
- g.  I didn't know where to go.
- h.  I couldn't get an appointment.
- i.  Other: \_\_\_\_\_

**19. If a friend or family member needed counseling for a mental health or a drug/alcohol abuse problem, who would you tell them to call or talk to? Here are some possibilities. You can choose as many as you want..**

- a.  Private counselor or therapist
- b.  Support group (e.g., AA, Al-Anon)
- c.  School counselor
- d.  Don't know
- e.  Doctor
- f.  Minister/religious official
- g.  Other: \_\_\_\_\_

**20. In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?**

Yes     No

**21. During a normal week, other than in your regular job, do you engage in any exercise activity that lasts at least a half an hour?**

\_\_\_ Yes                      \_\_\_ No (*now skip to question #24*)

**22. Since you said yes, how many times would you say you engage in this activity during a normal week? \_\_\_\_\_**

**23. Where do you go to exercise or engage in physical activity? Check all that apply.**

- |                                 |                     |
|---------------------------------|---------------------|
| a. ___ ABC Family YMCA          | d. ___ Private gym  |
| b. ___ Park                     | e. ___ Home         |
| c. ___ Public Recreation Center | f. ___ Other: _____ |

**24. Since you said “no”, what are the reasons you do not exercise for at least a half hour during a normal week? You can give as many of these reasons as**

- |  |   |
|--|---|
| a. ___ My job is physical or hard labor  | g. ___ I don't like to exercise.                                      |
| b. ___ Exercise is not important to me.  | h. ___ It costs too much to exercise<br>(equipment, shoes, gym costs) |
| c. ___ I don't have access to a facility that has<br>the things I need, like a pool, golf course,<br>or a track. | i. ___ There is no safe place to<br>exercise.                         |
| d. ___ I don't have enough time to exercise.   | j. ___ I'm too tired to exercise.                                     |
| e. ___ I would need child care and I don't have it.  | k. ___ I'm physically disabled.                                       |
| f. ___ I don't know how to find exercise partners<br>or teams.   | l. ___ I don't know   |
|  | m. ___ Other _____  |

**25. How many hours per day do you watch TV, play video games, or use the computer for recreation?**

\_\_\_\_ 0-1 hour      \_\_\_\_ 2-3 hours      \_\_\_\_ 4-5 hours      \_\_\_\_ 6+ hours

**26. During the past 30 days, have you had any physical pain or health problems that made it hard for you to do your usual activities such as driving, working around the house, or going to work?**

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

**27. Not counting juice, lettuce salad, or potato products, think about how often you eat fruits and vegetables in an average week.**

**How many cups per week of fruits and vegetables would you say you eat?**

**One apple or 12 baby carrots equal one cup.**

a. Number of cups of fruit \_\_\_\_\_

c. Never eat fruit \_\_\_\_\_

b. Number of cups of vegetables \_\_\_\_\_

d. Never eat vegetables \_\_\_\_\_

**Lettuce salad is the typical "house salad" with iceberg lettuce, or the salad mixes you get at the store or fast food type restaurants, even if they have meat on top.**

**Potato products are French fries, baked potatoes, hash browns, mashed potatoes... anything made from white potatoes.**

**For the purposes of this study, ketchup is not considered a vegetable.**

**28. Are you exposed to secondhand smoke in any of the following places?**

- a.  Home
- b.  Workplace
- c.  Hospitals
- d.  Restaurants
- e.  School
- f.  Other: \_\_\_\_\_
- g.  I am not exposed to secondhand smoke.

**29. Do you currently smoke?  Yes  No (skip to question #31)**

**30. If yes, where would you go for help if you wanted to quit?**

***Mark all that apply.***

- a.  Quit Now NC
- b.  Doctor
- c.  Church
- d.  Pharmacy
- e.  Private counselor/therapist
- f.  Health Department
- g.  I don't know
- h.  Other: \_\_\_\_\_
- i.  Not applicable; I don't want to quit

**31. Have you ever been told by a doctor, nurse, or other health professional that you have any of the conditions I am about to read?**

- |                                    |         |        |
|------------------------------------|---------|--------|
| a. Asthma                          | ___ Yes | ___ No |
| b. Depression or anxiety disorder  | ___ Yes | ___ No |
| c. High blood pressure             | ___ Yes | ___ No |
| d. High cholesterol                | ___ Yes | ___ No |
| e. Diabetes (not during pregnancy) | ___ Yes | ___ No |
| f. Osteoporosis                    | ___ Yes | ___ No |
| g. Overweight/Obesity              | ___ Yes | ___ No |

**32. Do you have children between the ages of 9 and 19?**

\_\_\_ Yes (*now go to question #33*)      \_\_\_ No (*now skip to question #36*)

**33. Do you think your child is engaging in any of the following high risk behaviors I am about to read? *Read the list and check all that apply***

- |   |                           |                                  |
|---|---------------------------|----------------------------------|
| a. ___ Alcohol Use  | c. ___ Eating Disorders   | e. ___ Drug Abuse                |
| b. ___ Tobacco Use  | d. ___ Sexual intercourse | f. ___ Reckless driving/speeding |
| g. ___ I don't think my child is engaging in any high risk behaviors. |                           |                                  |

**34. Are you comfortable talking to your child about the risky behaviors we just asked about?**

\_\_\_ Yes      \_\_\_ No

**35. Do you think your child or children need more information about the following problems:  
Check all that apply**

- a. \_\_\_ Alcohol
- b. \_\_\_ Tobacco
- c. \_\_\_ HIV
- d. \_\_\_ Other \_\_\_\_\_
- e. \_\_\_ Eating Disorders
- f. \_\_\_ Sexual intercourse
- g. \_\_\_ STDs
- h. \_\_\_ Drug Abuse
- i. \_\_\_ Reckless driving/speeding
- j. \_\_\_ Mental health issues

#### **Part 4. Emergency Preparedness**

**36. Does your household have working smoke and carbon monoxide detectors? (Mark only one.)**

- Yes, smoke detectors only \_\_\_
- Yes, carbon monoxide detectors only \_\_\_
- Yes, both \_\_\_
- No \_\_\_

**37. Does your household have a Family Emergency Plan?**

- \_\_\_\_\_ Yes
- \_\_\_\_\_ No

**38. Does your family have a basic emergency supply kit? If yes, how many days do you have supplies for?**

No     3 days     1 week     2 weeks     More than 2 weeks

---

### Part 5. Demographic Questions

The next set of questions are general questions about you, which will only be reported as a summary of all answers given by survey participants. Your answers will remain anonymous.

**39. How old are you? (Mark age category.)**

20 – 24     25 – 34     45 - 54     65 -74  
 35 - 44     55 – 64     75 or older

**40. Are you Male or Female?**

Male     Female

**41. Are you of Hispanic origin?**

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

**42. What is your race?**

**Please check one and choose "other" if you do not identify with only one of the categories.**

\_\_\_\_\_ Black or African American                      \_\_\_\_\_ American Indian or Alaskan Native  
\_\_\_\_\_ Asian or Pacific Islander                      \_\_\_\_\_ White  
\_\_\_\_\_ Other: \_\_\_\_\_

**43. A. Do you speak a language other than English at home? (If no, skip to #44.)**

\_\_\_\_\_ Yes                      \_\_\_\_\_ No

**B. If yes, what language do you speak at home? \_\_\_\_\_**

**44. What is your marital status?**

\_\_\_\_\_ Never Married/Single                      \_\_\_\_\_ Divorced                      \_\_\_\_\_ Separated  
\_\_\_\_\_ Married                      \_\_\_\_\_ Widowed                      \_\_\_\_\_ Other

**45. What is the highest level of school, college or vocational training that you have finished? *Mark only one***

- Some high school, no diploma
- High school diploma or GED
- Associate's Degree or Vocational Training
- Some college (no degree)
- Bachelor's degree
- Graduate or professional degree
- Other: \_\_\_\_\_

**46. What was your total household income last year, before taxes? I will read out 5 categories. Let me know which you fall into. (*Mark only one*)**

- |   |   |
|---|---|
| <input type="checkbox"/> Less than \$14,999   | <input type="checkbox"/> \$35,000 to \$49,999 |
| <input type="checkbox"/> \$15,000 to \$24,999 | <input type="checkbox"/> \$50,000 to \$74,999 |
| <input type="checkbox"/> \$25,000 to \$34,999 | <input type="checkbox"/> Over \$75,000        |

**47. How many people does this income support? \_\_\_\_\_**

**If you are paying child support but your child is not living with you, this still counts as someone living on your income.)**

**48. What is your employment status? Let me know which ones apply to you.**

***Check all that apply***

a. \_\_\_\_\_ Employed full-time

f. \_\_\_\_\_ Disabled

b. \_\_\_\_\_ Employed part-time

g. \_\_\_\_\_ Student

c. \_\_\_\_\_ Retired

h. \_\_\_\_\_ Homemaker

d. \_\_\_\_\_ Military

i. \_\_\_\_\_ Self-employed

e. \_\_\_\_\_ Unemployed

**49. Do you have access to the Internet? \_\_\_\_\_ Yes \_\_\_\_\_ No**

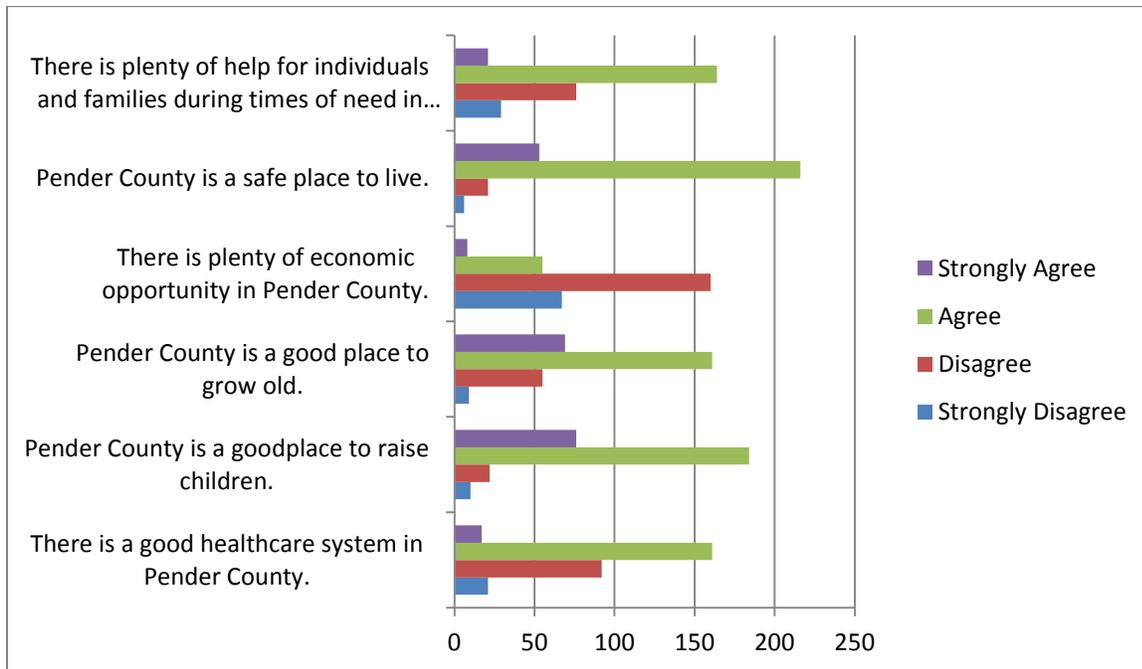
**50. What is your zip code? (Write only the first 5 digits.) \_\_\_\_\_**

# Appendix B

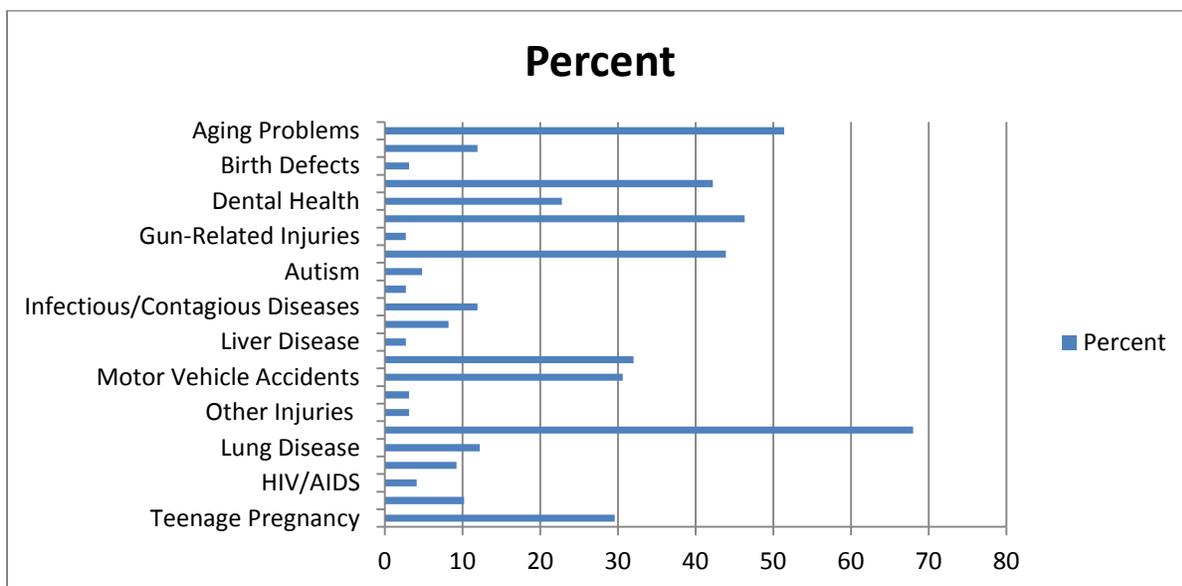
## **2009 Community Health Opinion Survey Responses for Pender County**

## Part 1: Quality of Life Statements

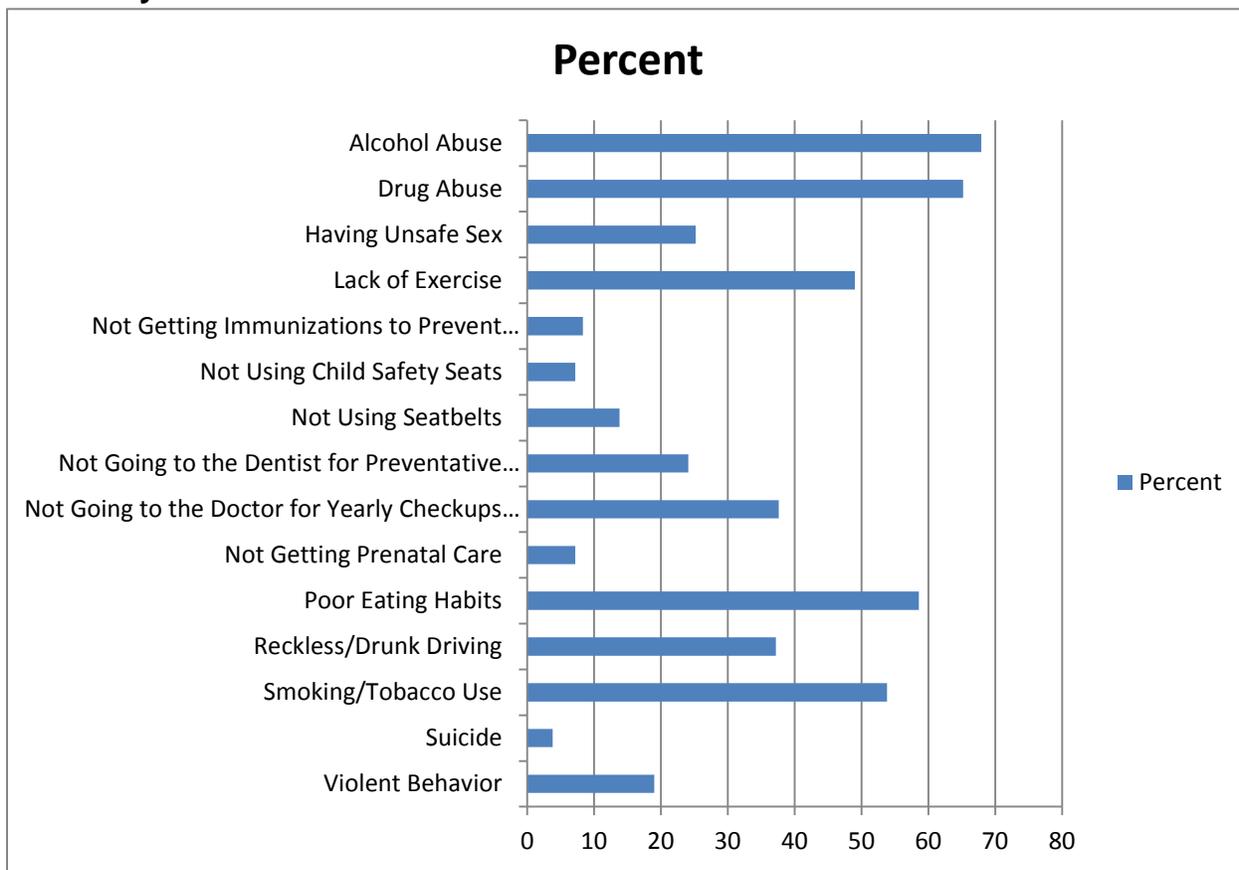
The first questions are about how the residents of Pender County see certain parts of Pender County life.



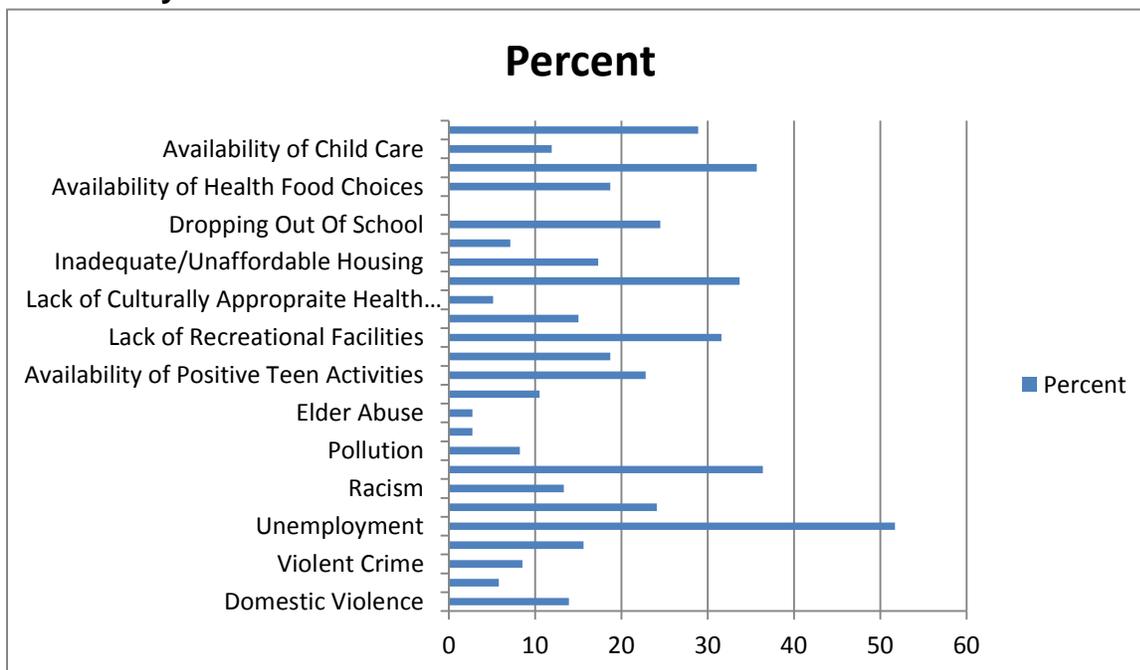
## Part 2: Community Problems and Issues



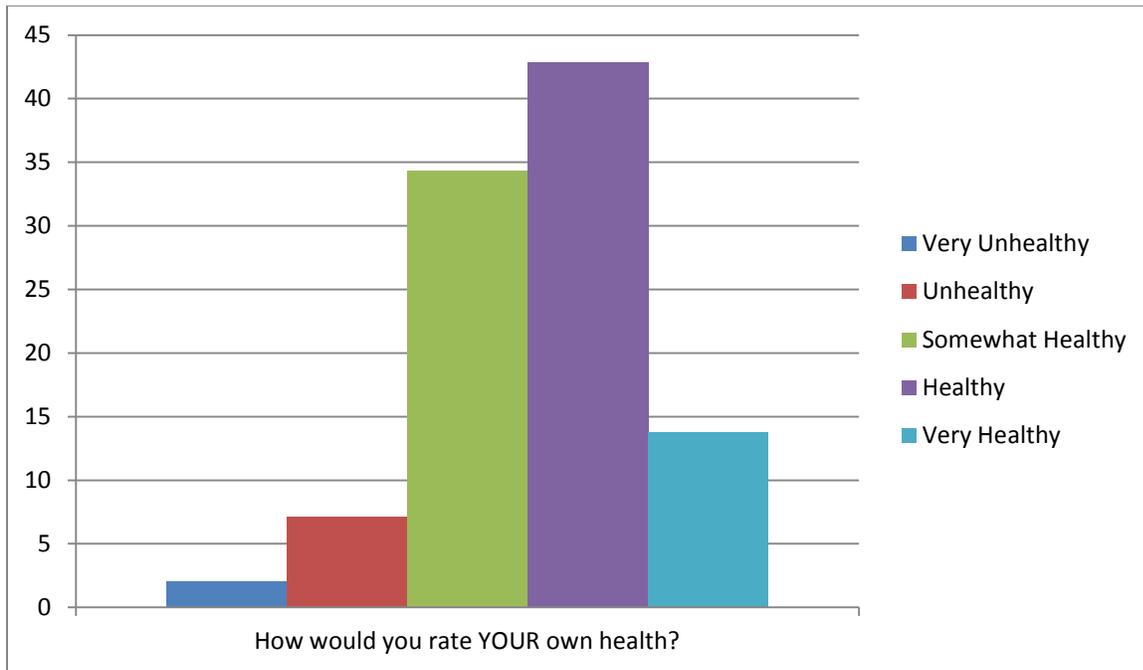
### Unhealthy Behaviors



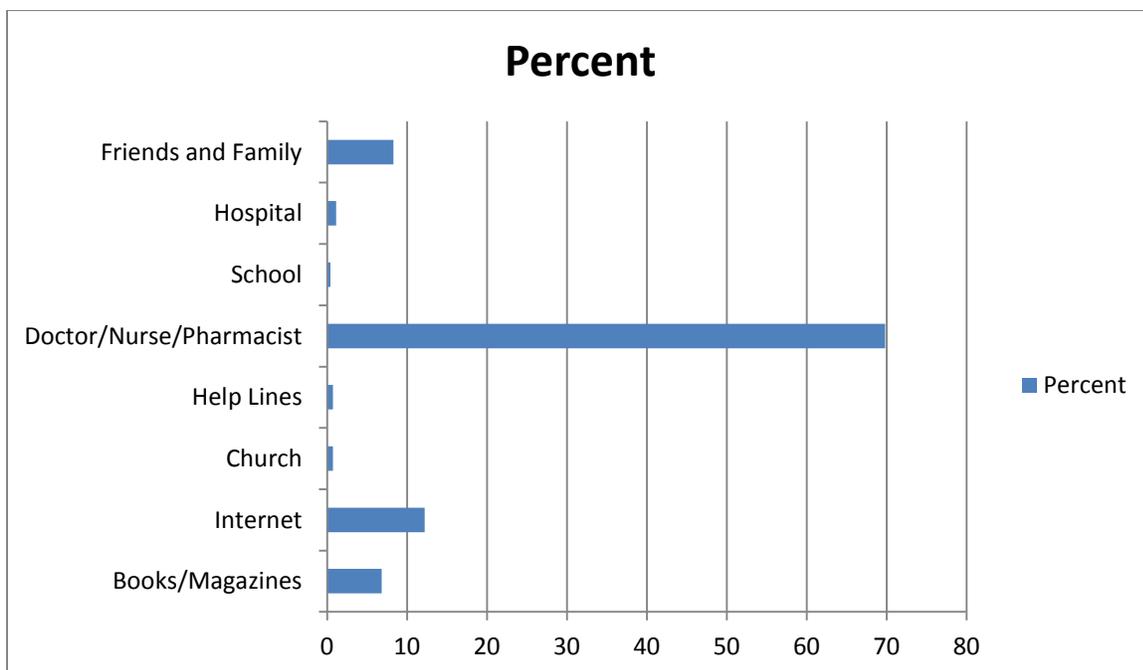
### Community Issues



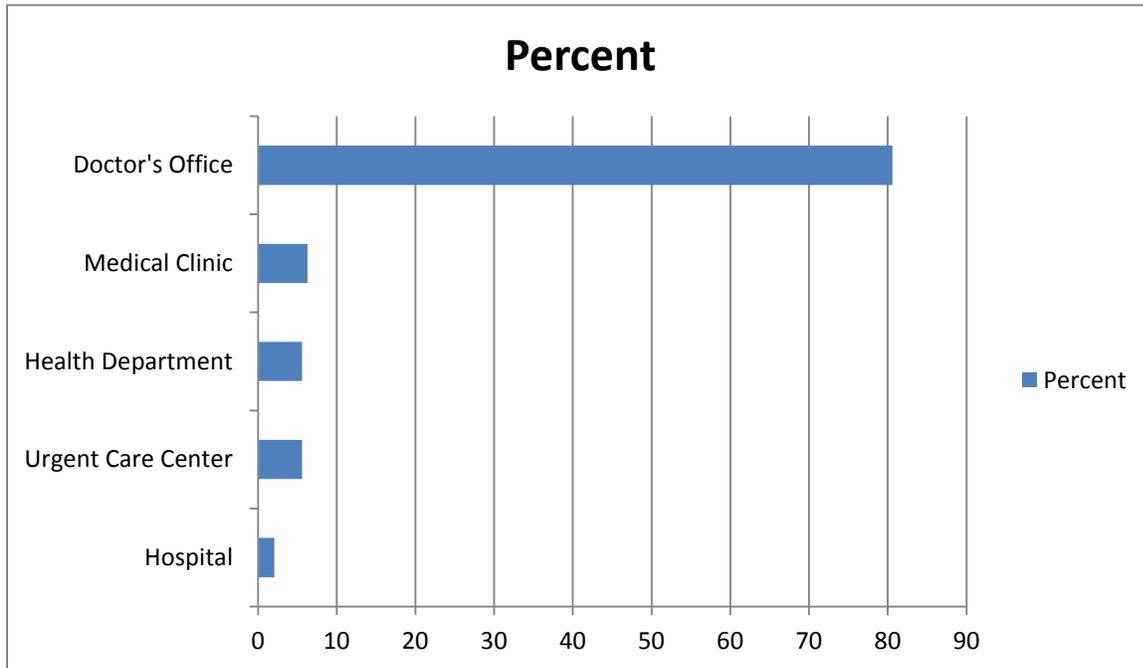
### Personal Health



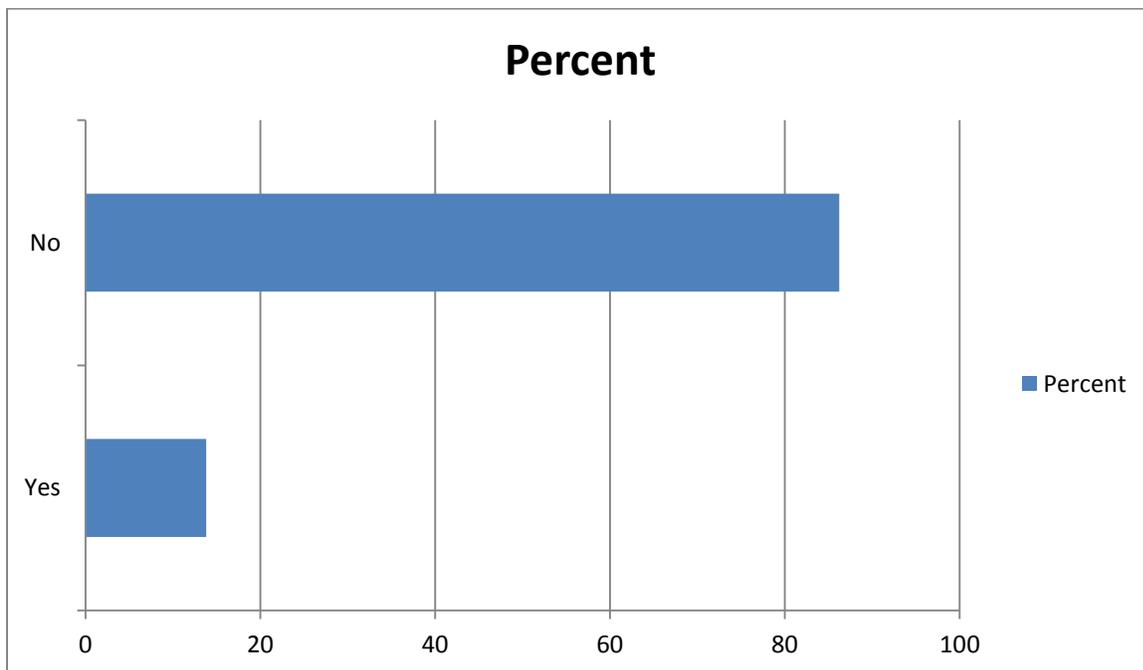
### Where do you get most of your health related information? Choose one.



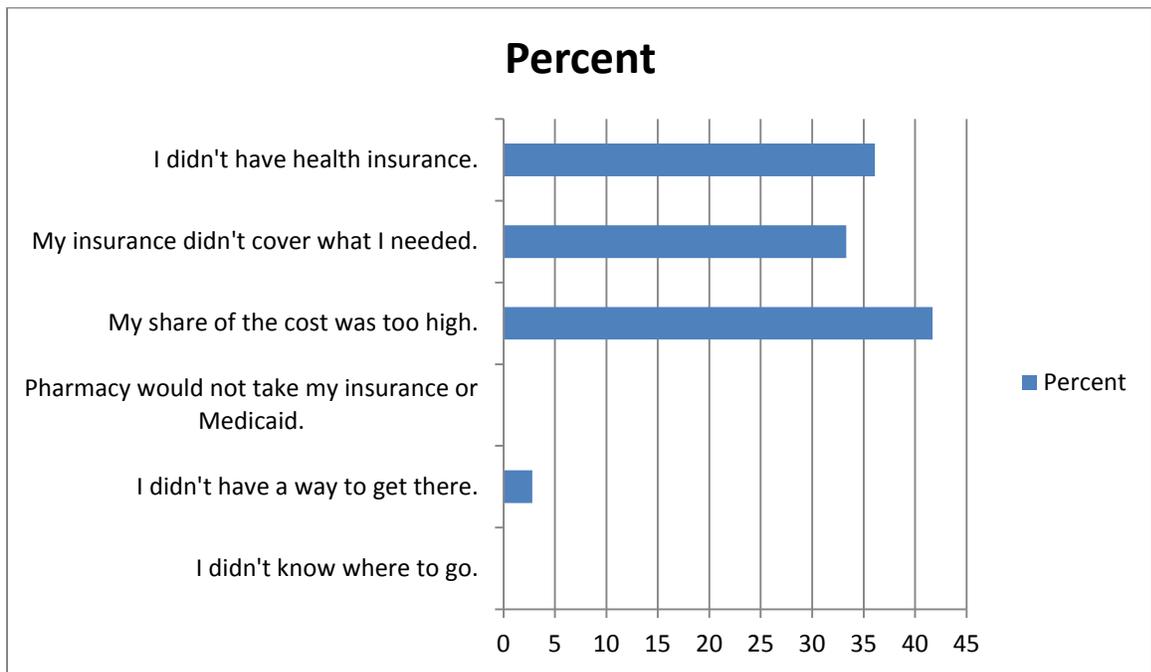
**Where do you go most often when you are sick or need advice about your health?  
Choose One.**



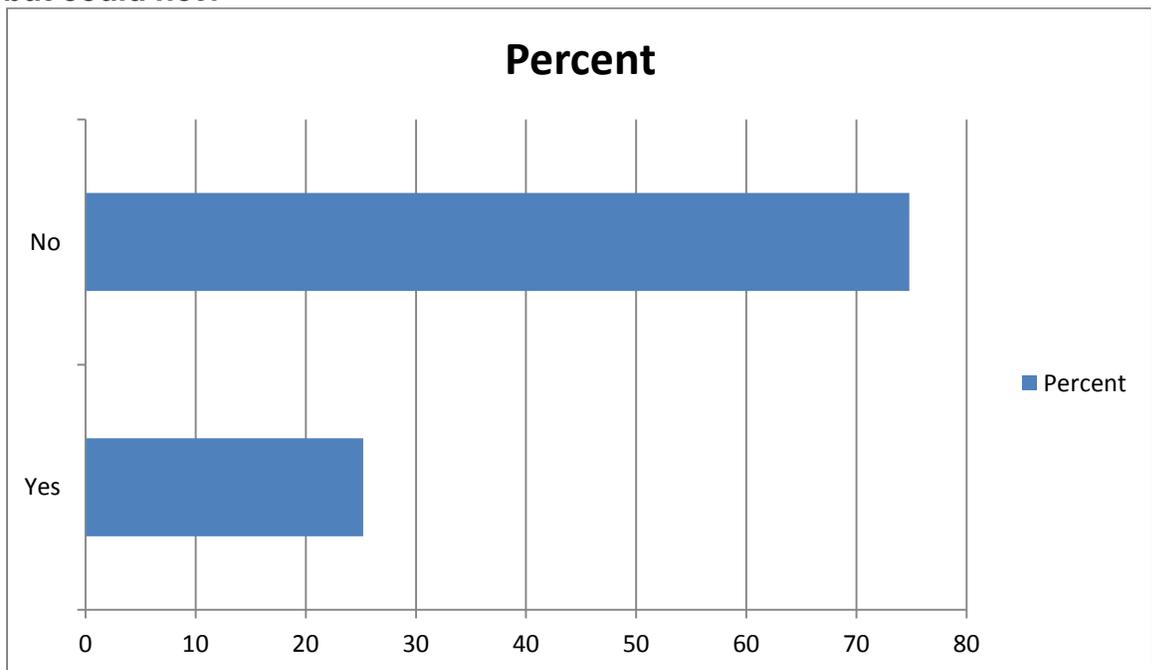
**In the past 12 months, did you ever have a problem getting the health care you needed from any type of health care provider or facility?**



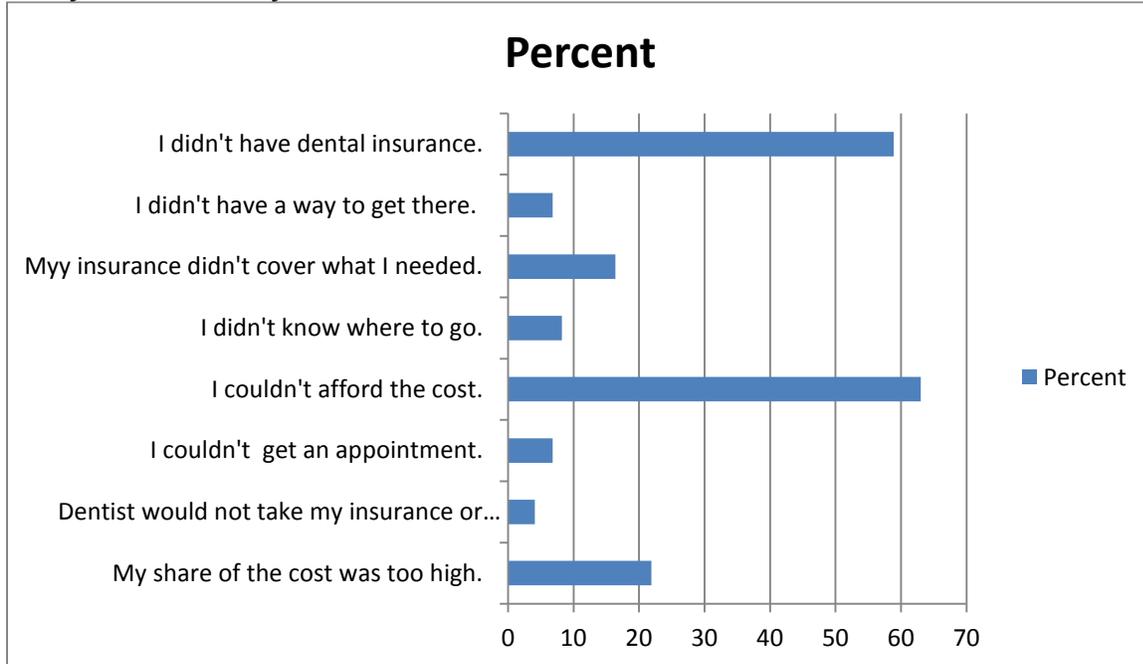
Since you said YES, which of these problems did you have? You can choose as many of these as you need to.



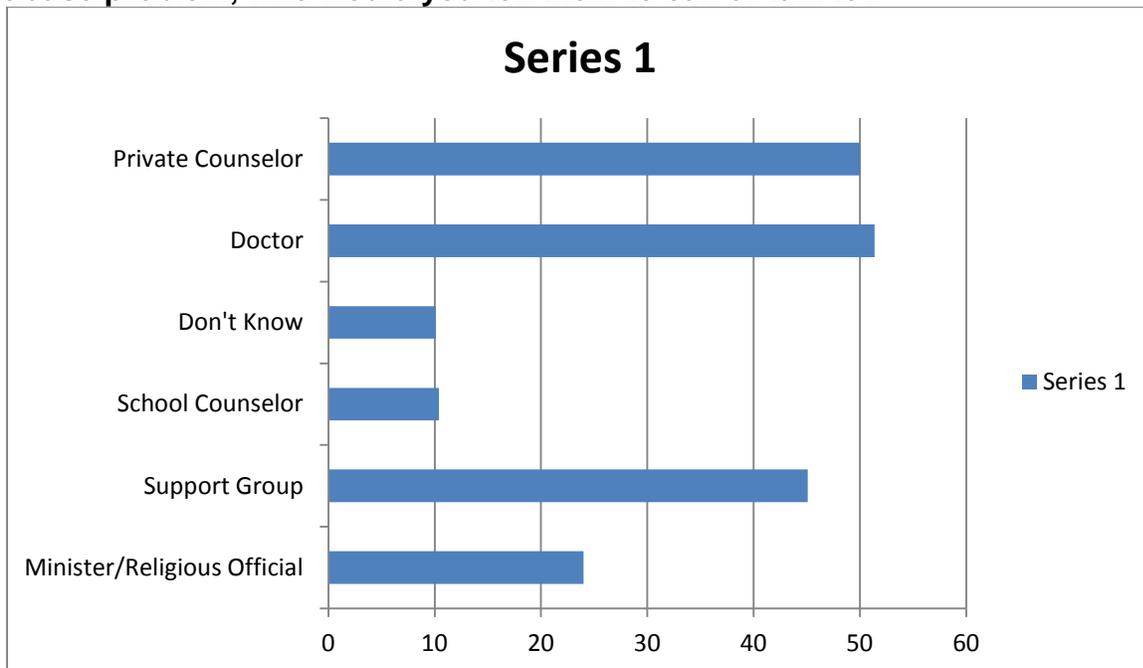
Was there a time during the past 12 months when you needed to get dental care, but could not?



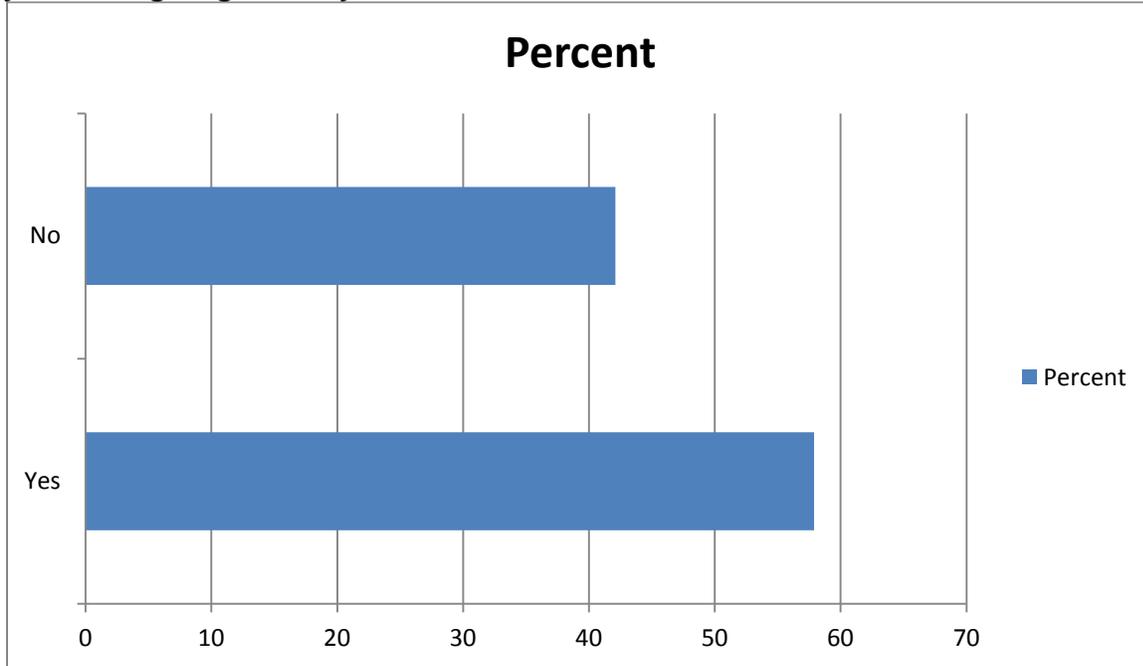
**Since you said YES, why could you not get dental care? You can choose as many of these as you need to.**



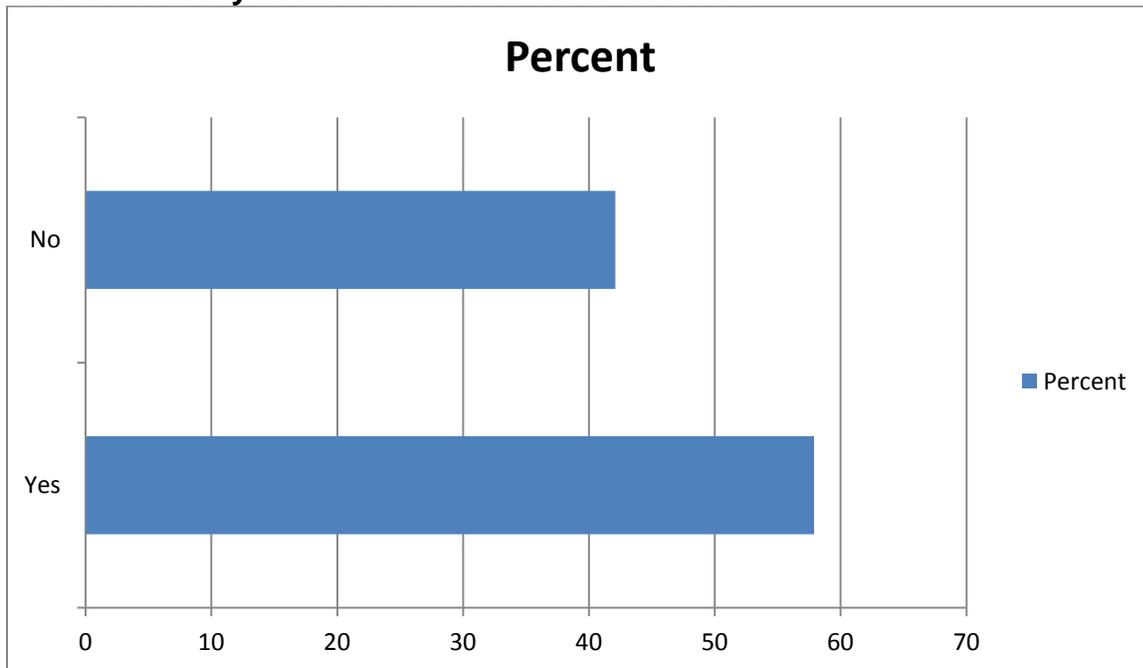
**If a friend or family member needed counseling for mental health or a drug/alcohol abuse problem, who would you tell them to call or talk to?**



**In the past 30 days, have there been any days when feeling sad or worried kept you from going about your normal business?**



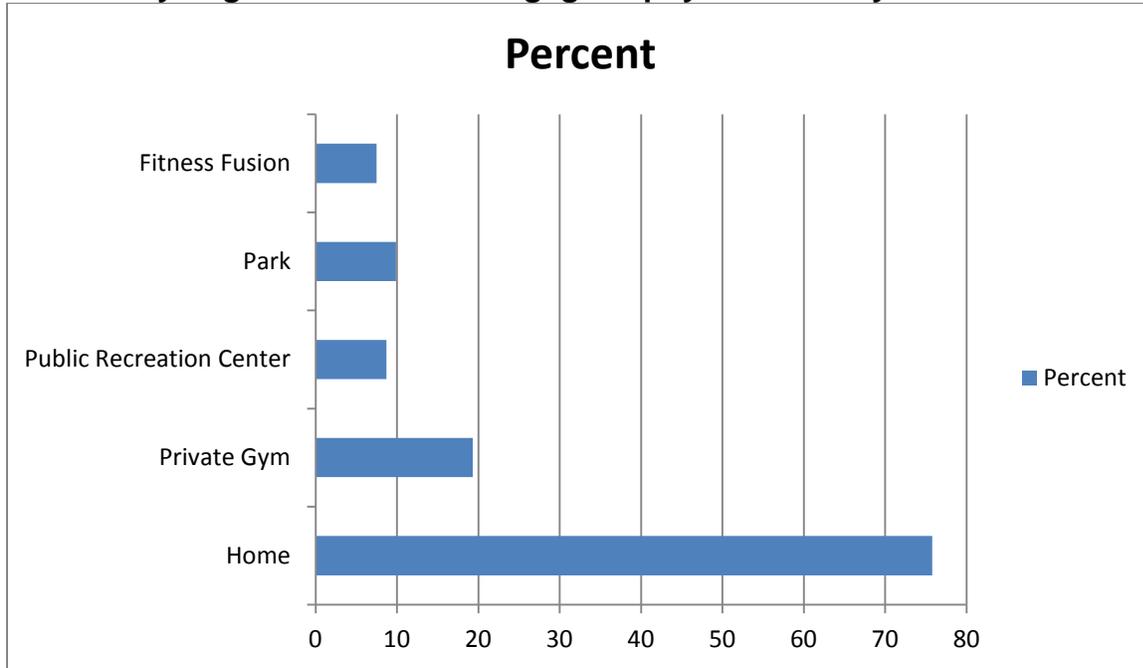
**During a normal week, other than in your regular job, do you engage in any exercise activity that lasts at least a half an hour?**



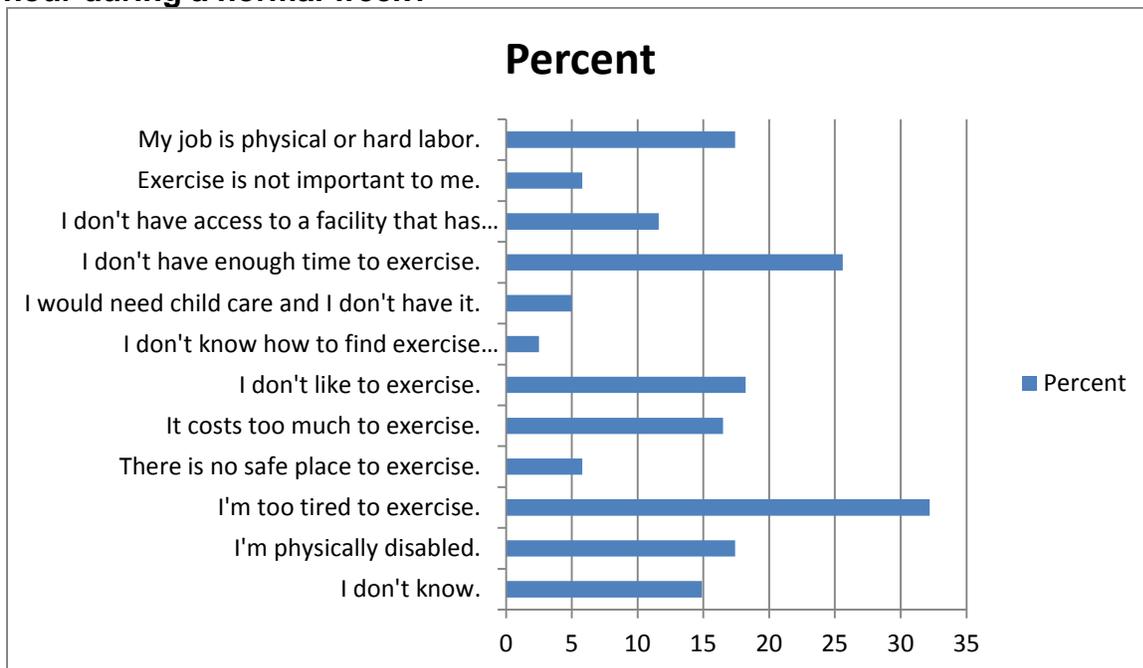
**Since you have said YES, how many times would you say you engage in this activity during a normal week?**

3.67 times in a normal week

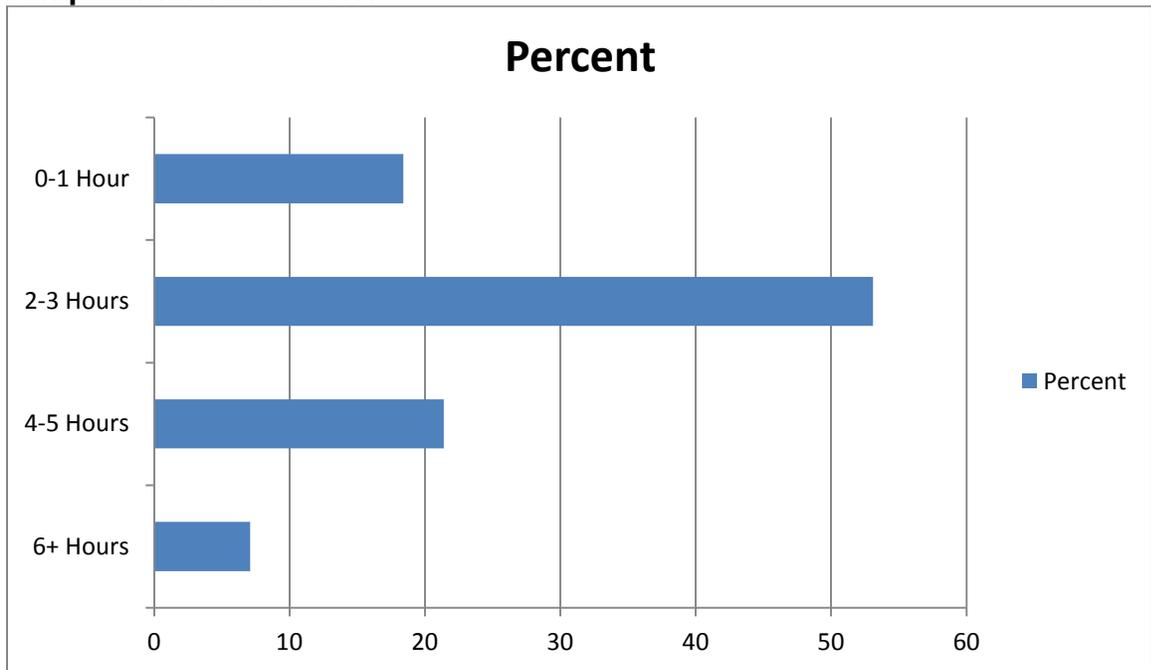
**Where do you go to exercise or engage in physical activity? Check all that apply.**



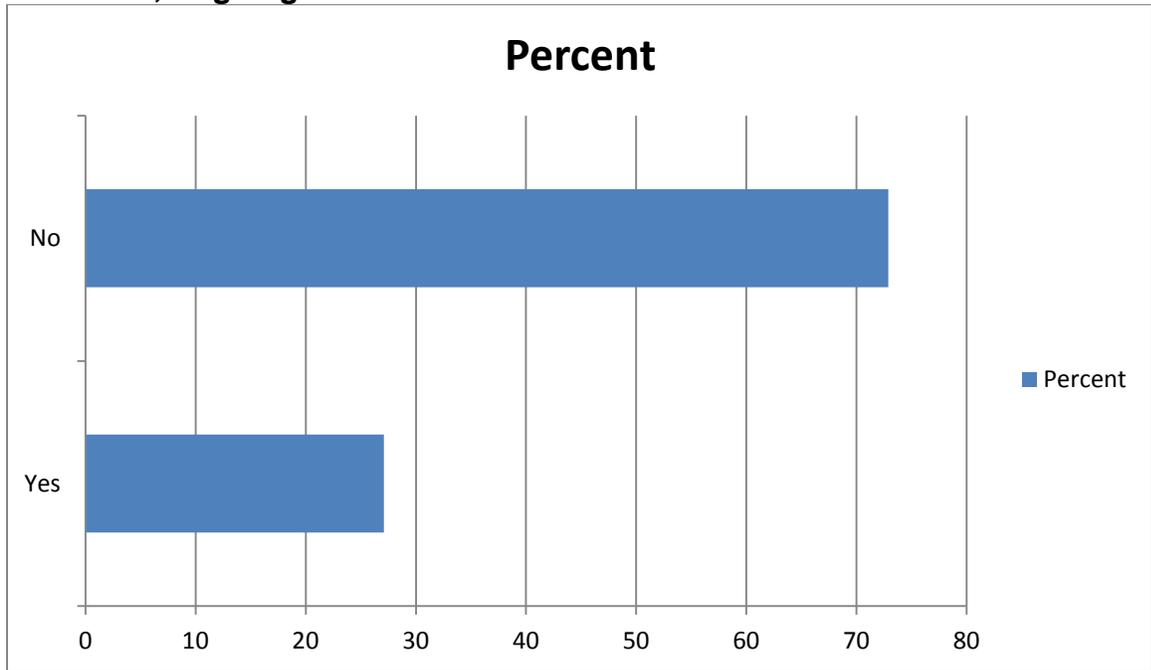
**Since you said NO, what are the reasons you do not exercise for at least a half hour during a normal week?**



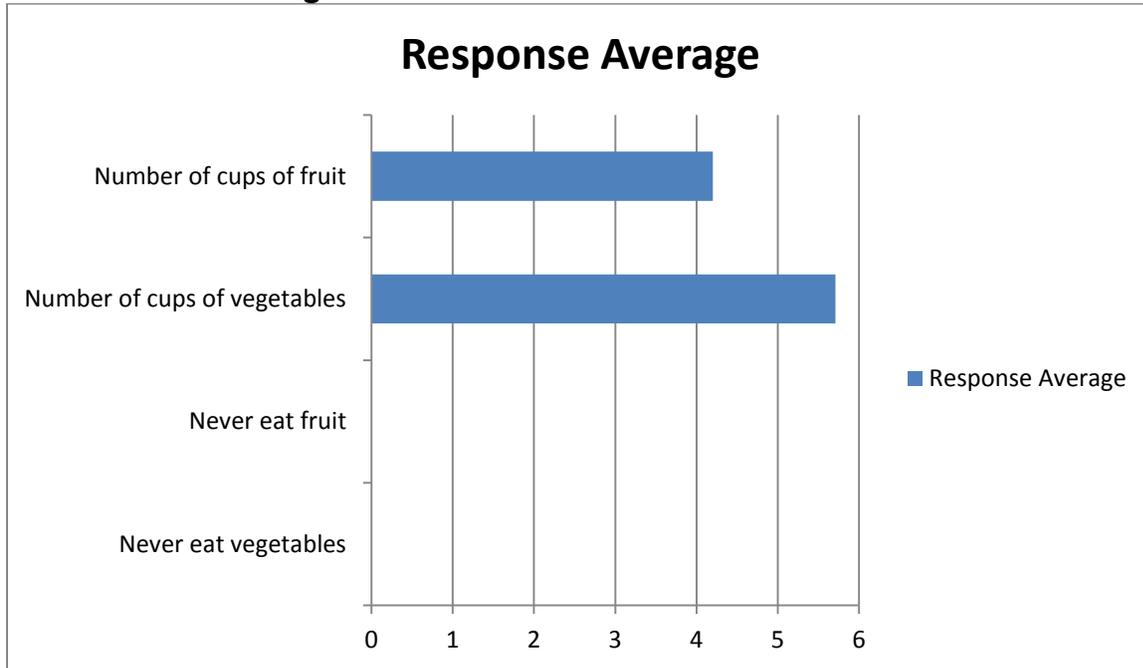
**How many hours per day do you watch TV, play video games, or use the computer for recreation?**



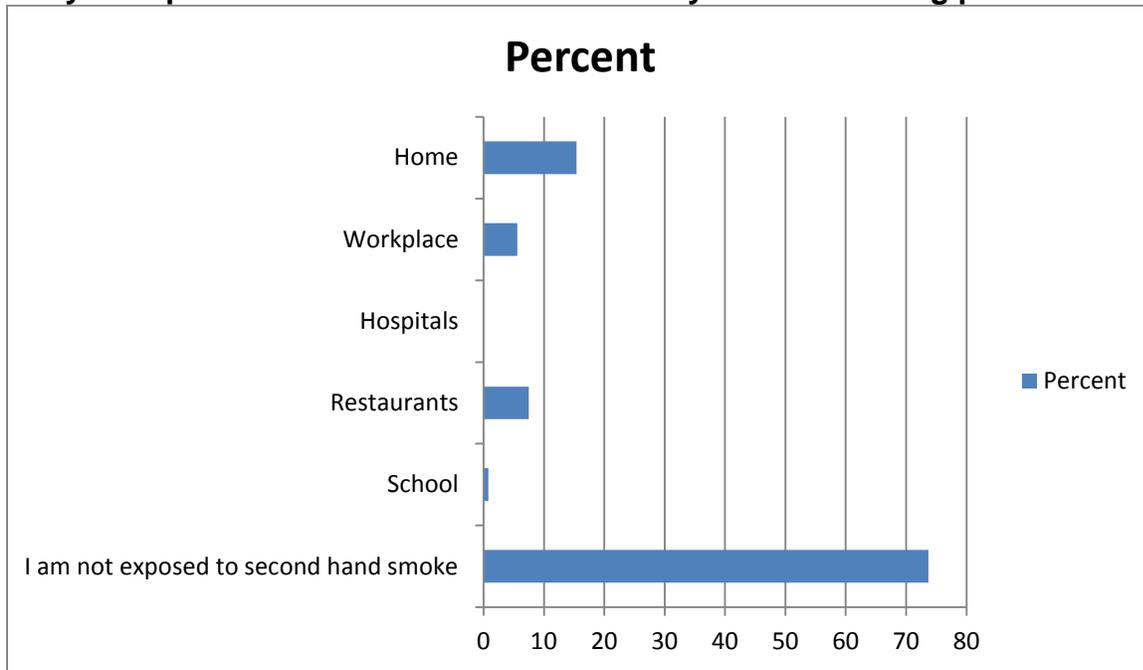
**During the past 30 days, have you had any physical pain or health problem that made it hard for you to do your usual activities such as driving, working around the house, or going to work?**



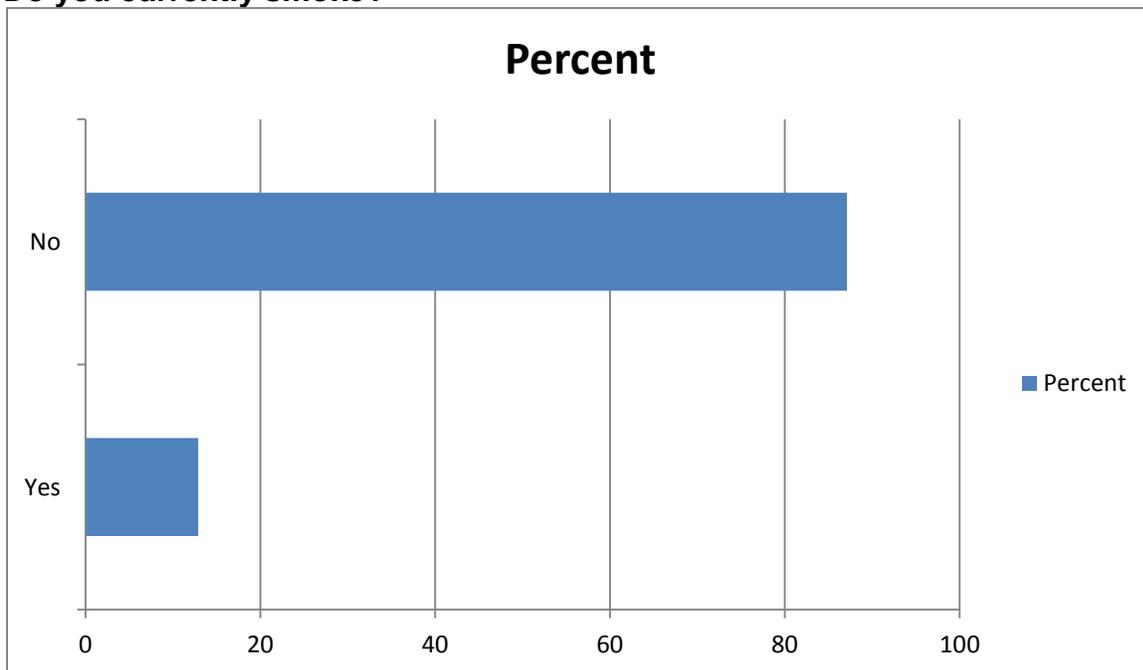
Not counting juice, lettuce salad, or potato products, think about how often you eat fruits and vegetables in an average week. How many cups per week of fruits and vegetables would you say you eat? One apple or 12 baby carrots equal one cup. Lettuce salad is the typical “house salad” with iceberg, or the salad mixes you get at the store or fast food restaurants, even if they have meat on top. Potato products are French fries, baked potatoes, hash browns, mashed potatoes ... anything made from white potatoes. For the purposes of this study, catsup is not considered a vegetable.



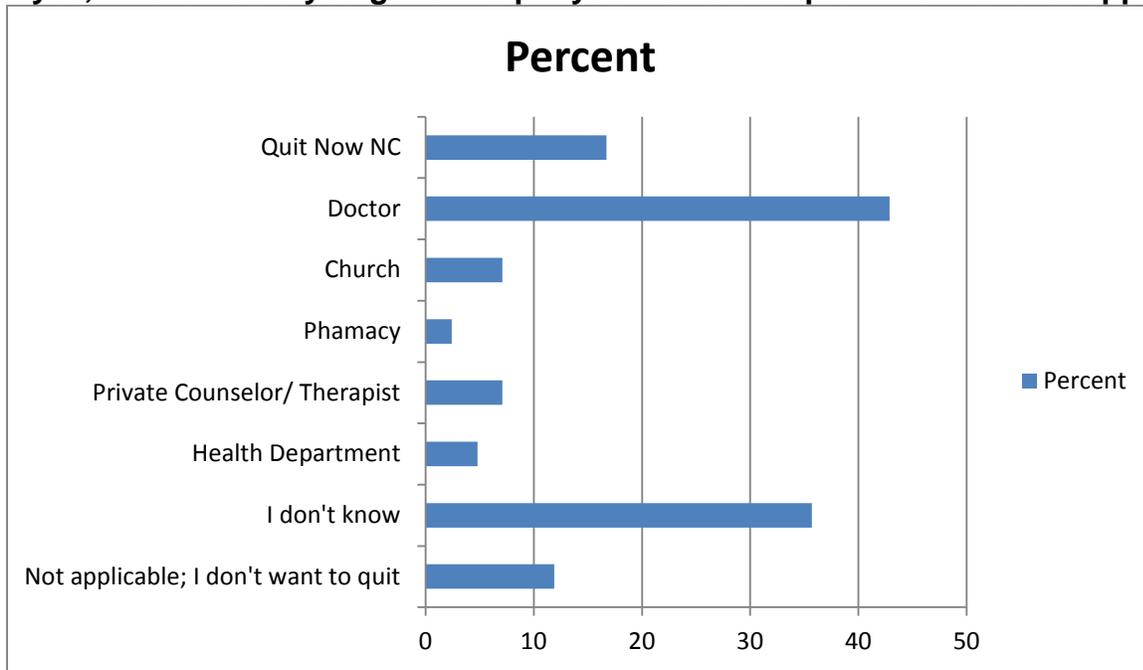
### Are you exposed to secondhand smoke in any of the following places?



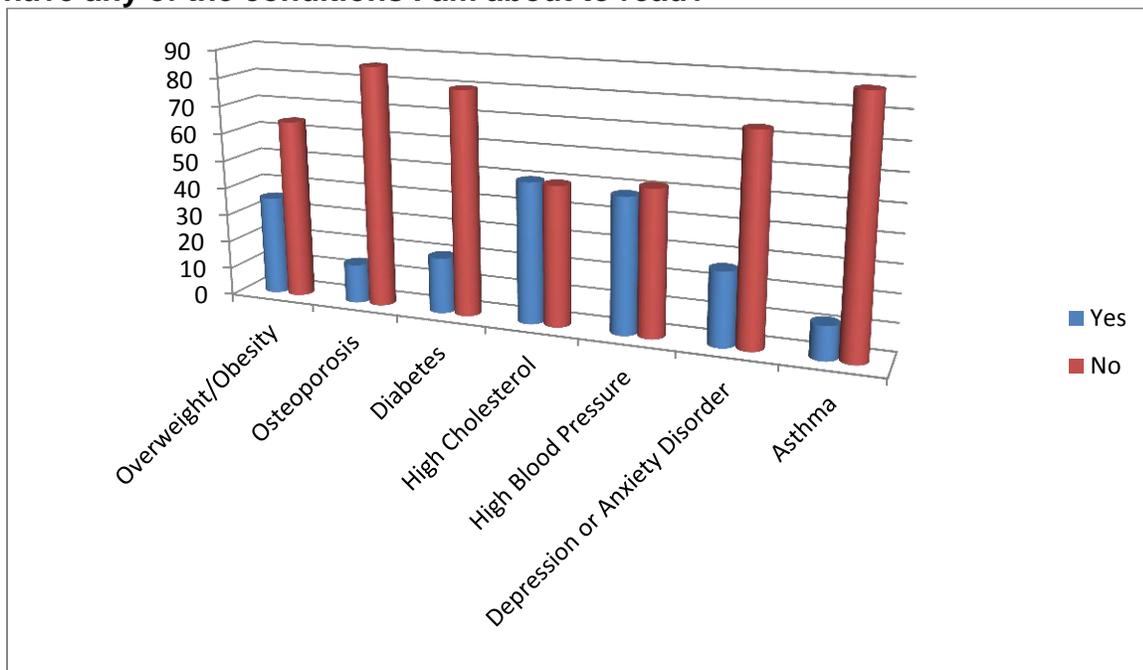
### Do you currently smoke?



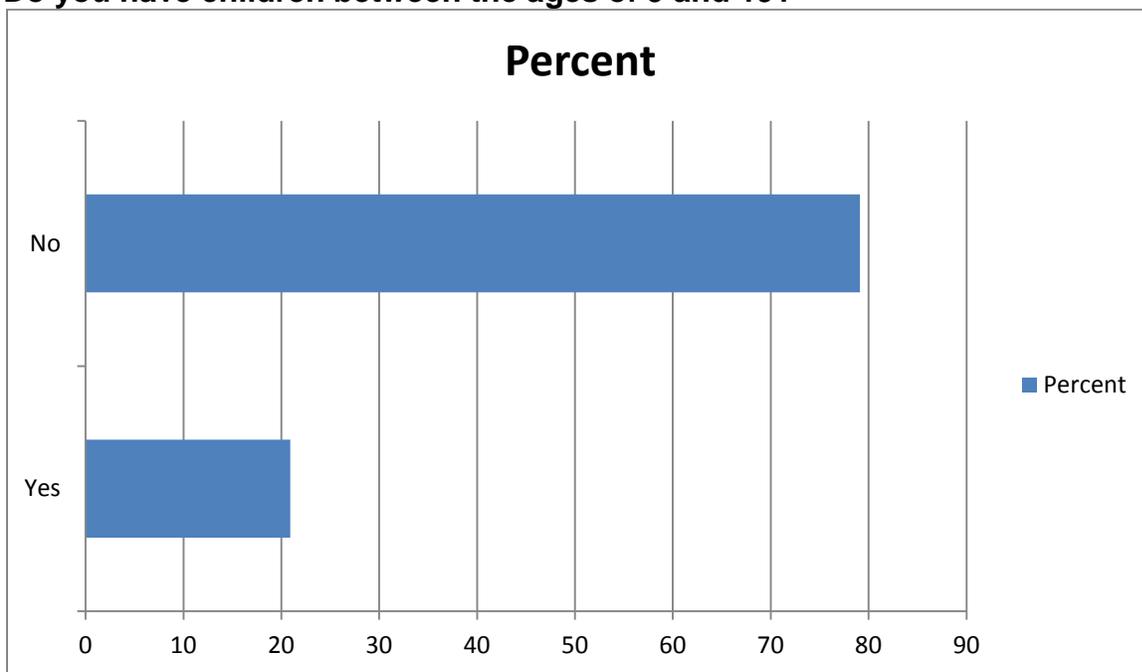
If yes, where would you go for help if you wanted to quit? Mark all that apply.



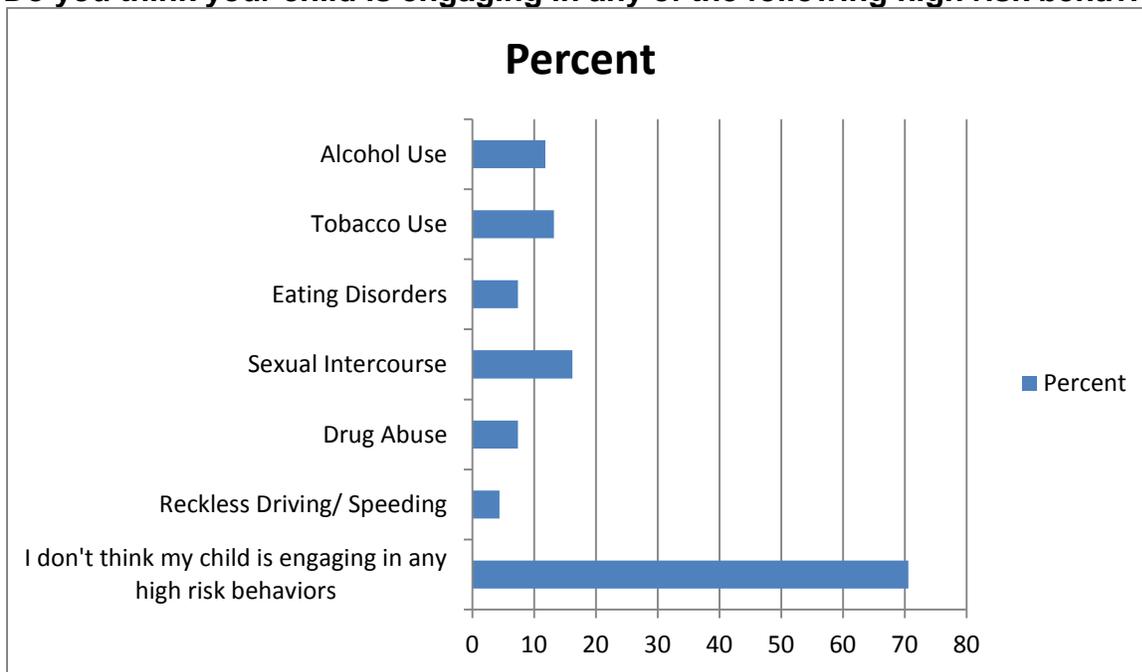
Have you ever been told by a doctor, nurse, or other health professional that you have any of the conditions I am about to read?



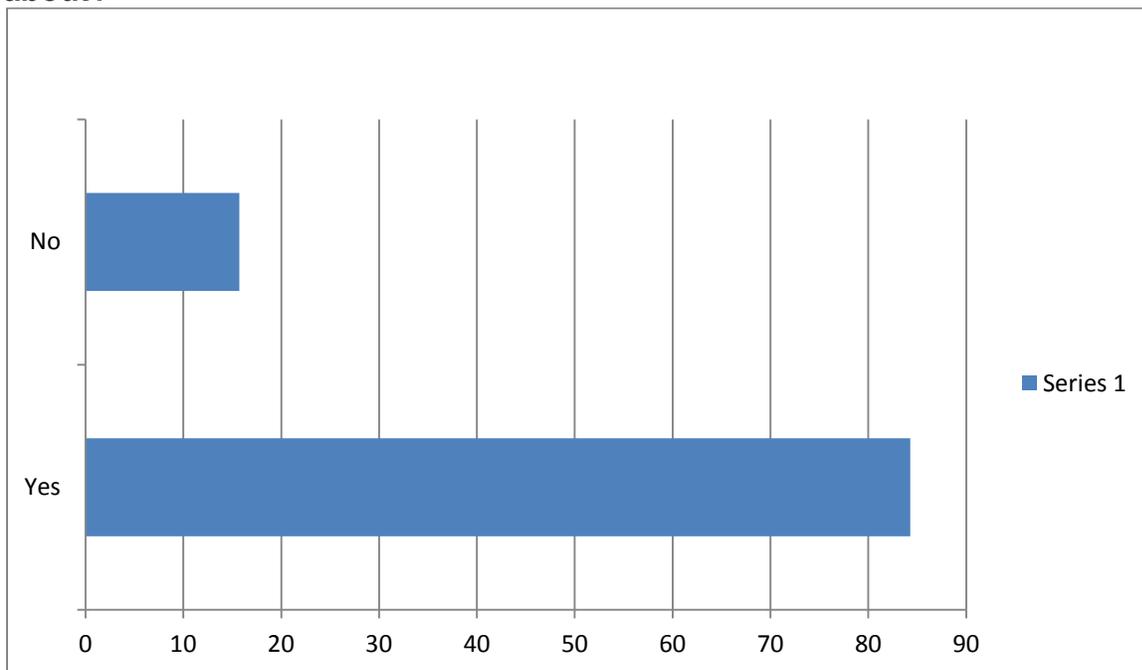
### Do you have children between the ages of 9 and 19?



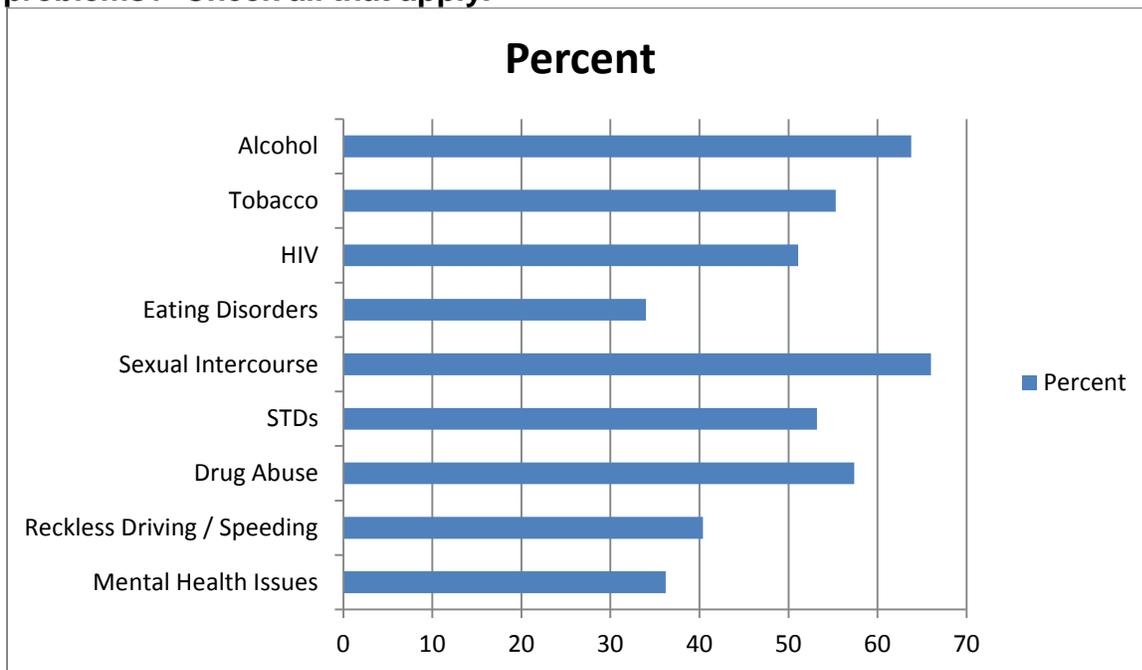
### Do you think your child is engaging in any of the following high risk behaviors?



**Are you comfortable talking to your child about the risky behaviors we just asked about?**

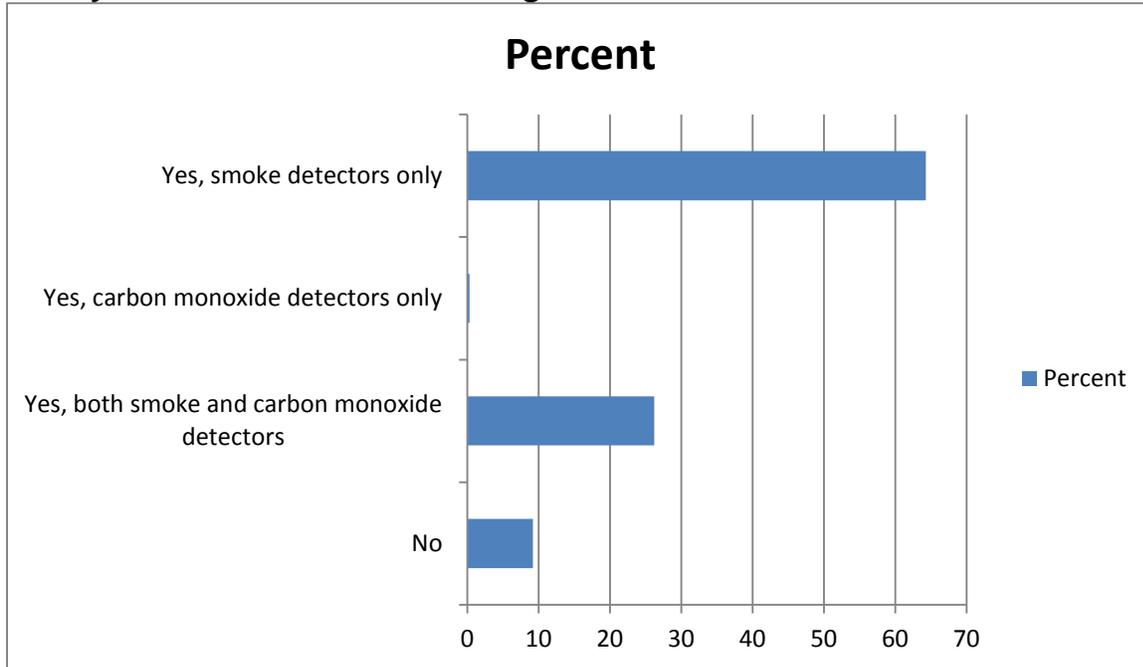


**Do you think your child or children need more information about the following problems? Check all that apply.**

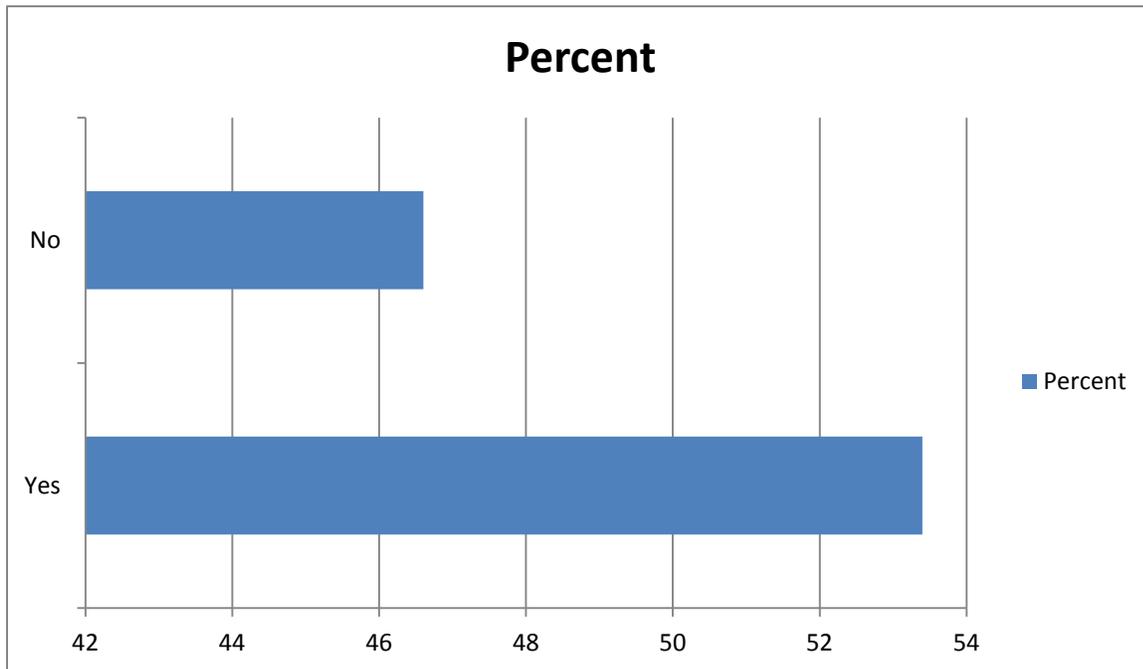


### Emergency Preparedness

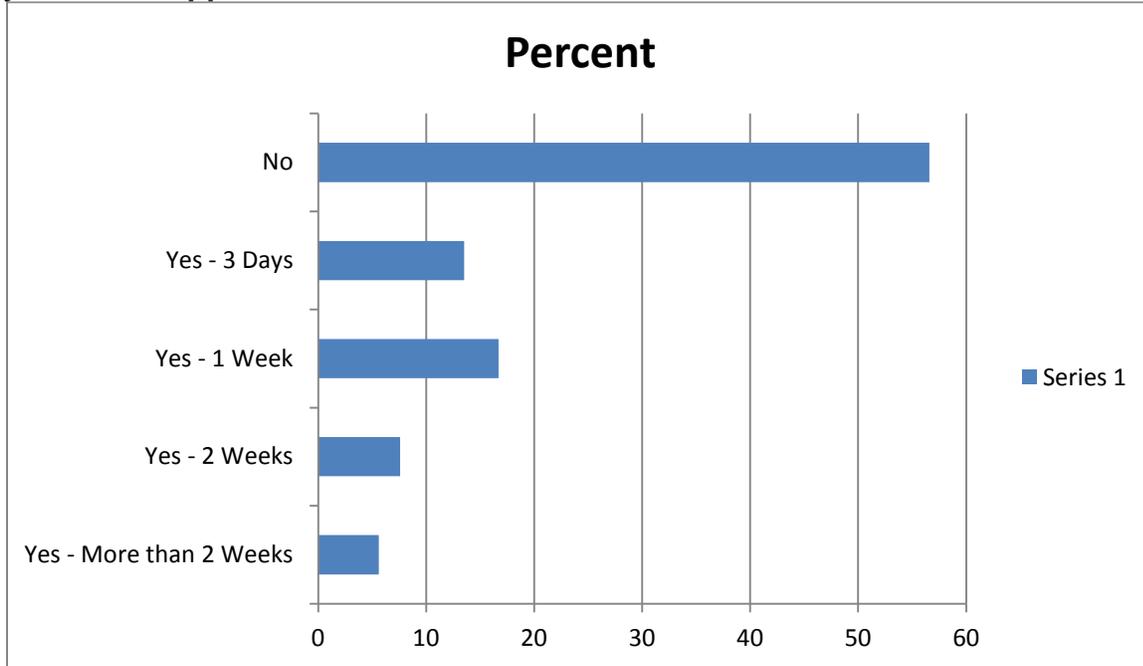
Does your household have working smoke and carbon monoxide detectors?



Does your household have a Family Emergency Plan?

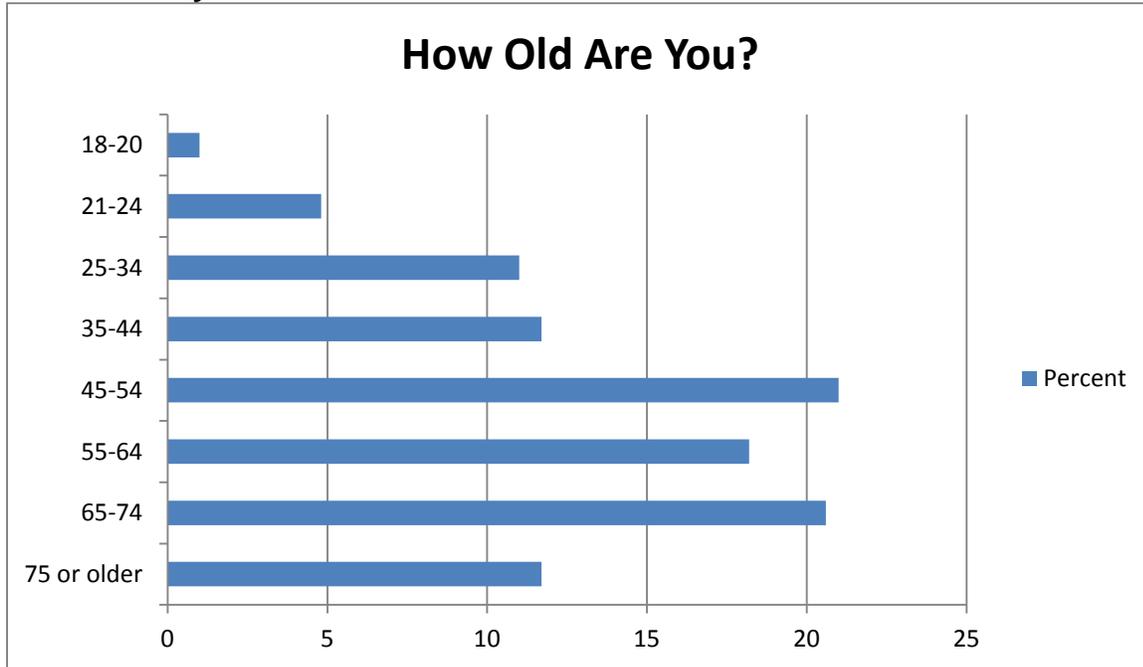


**Does your family have a basic emergency supply kit? If yes, how many days do you have supplies for?**

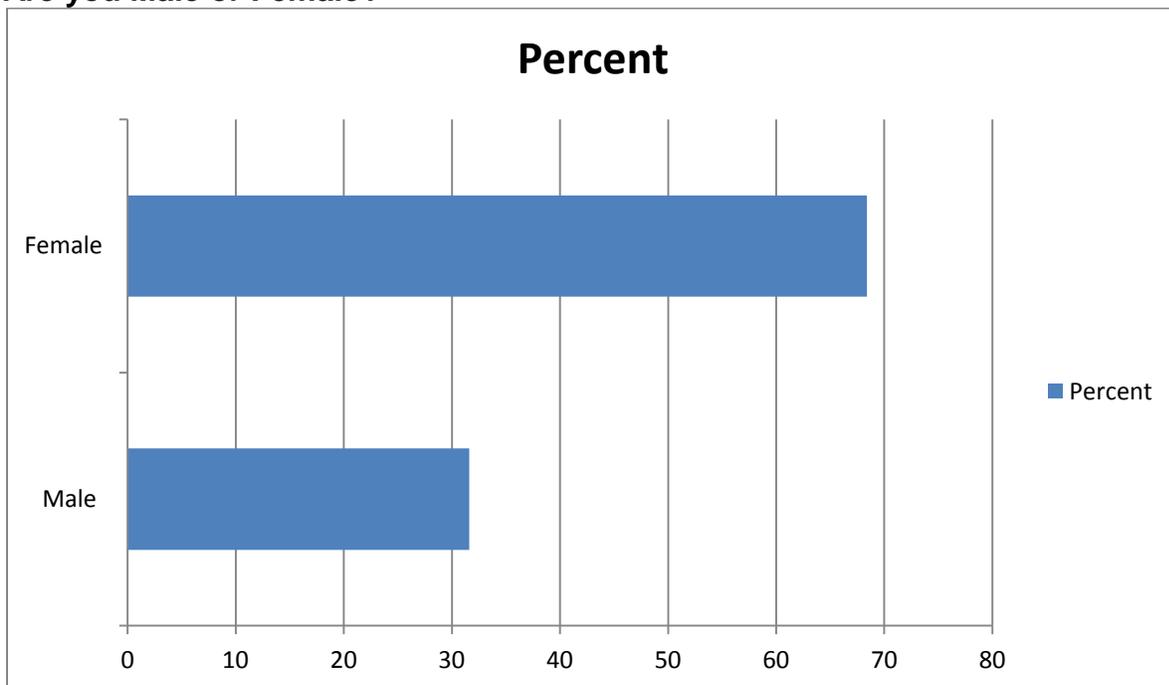


## Demographic Questions

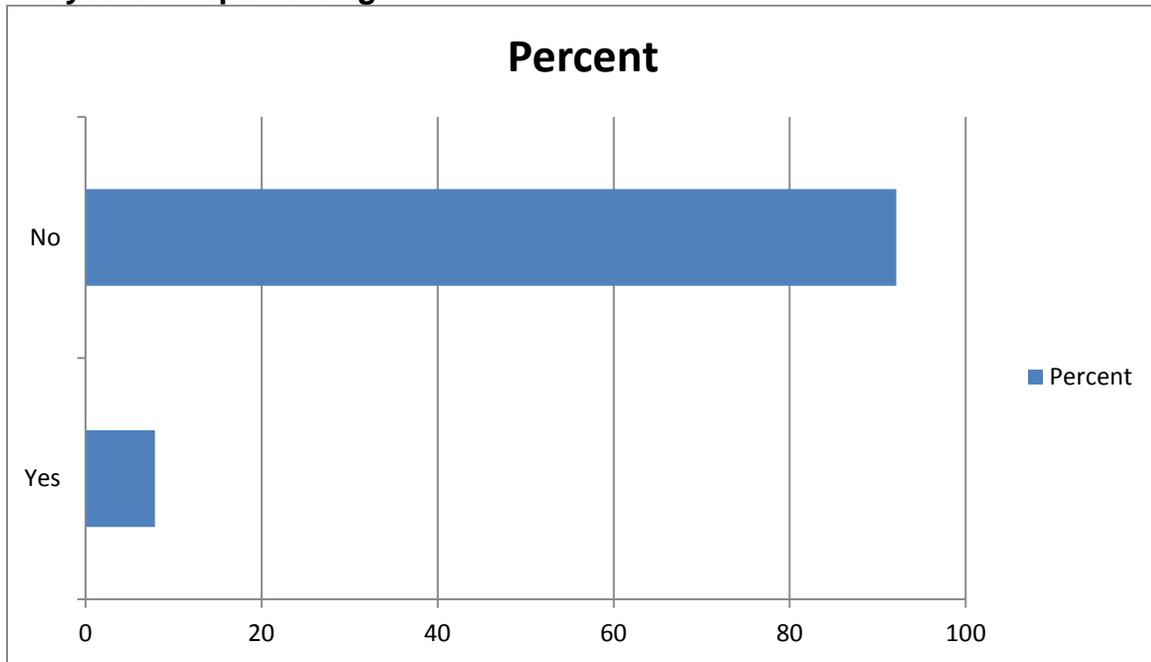
### How old are you?



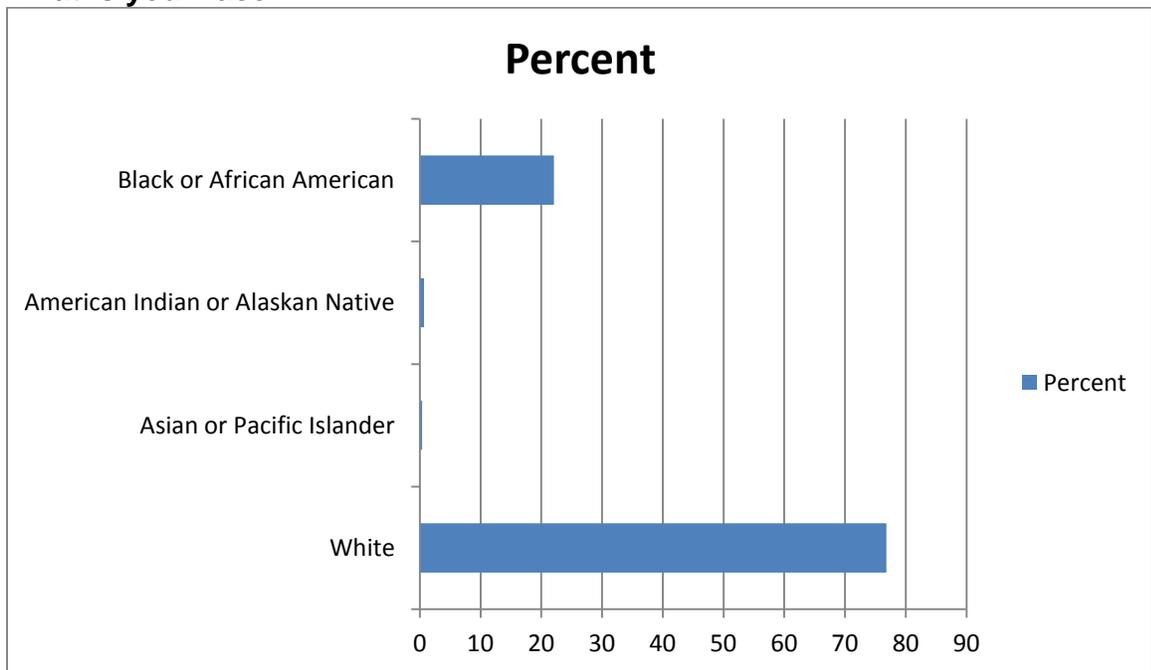
### Are you Male or Female?



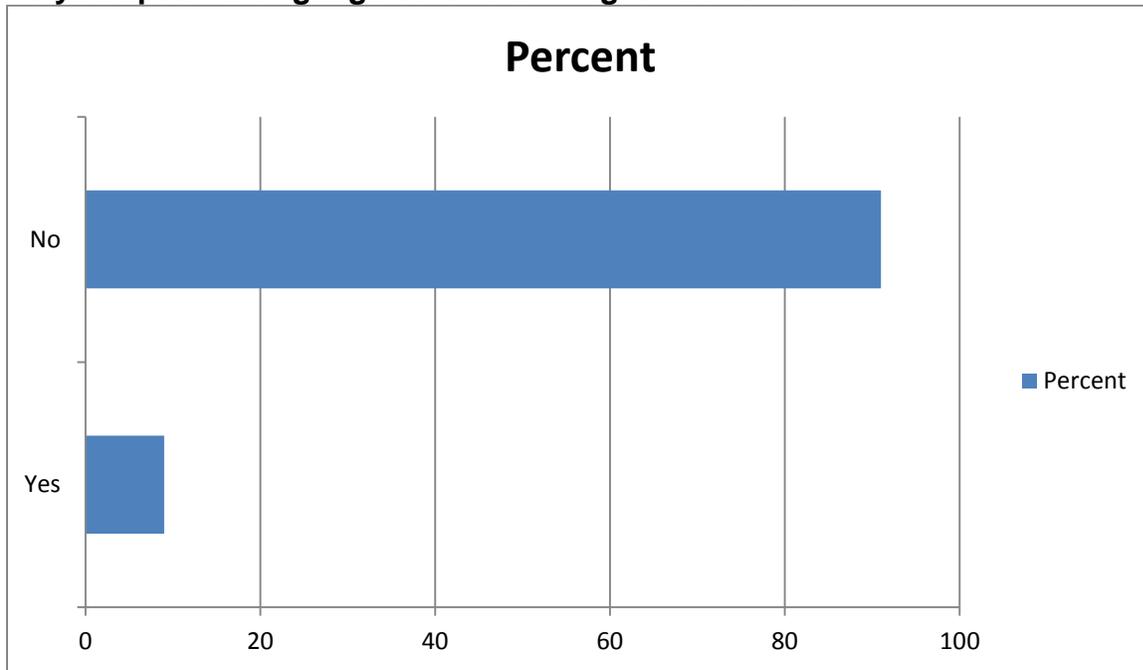
### Are you of Hispanic Origin?



### What is your race?

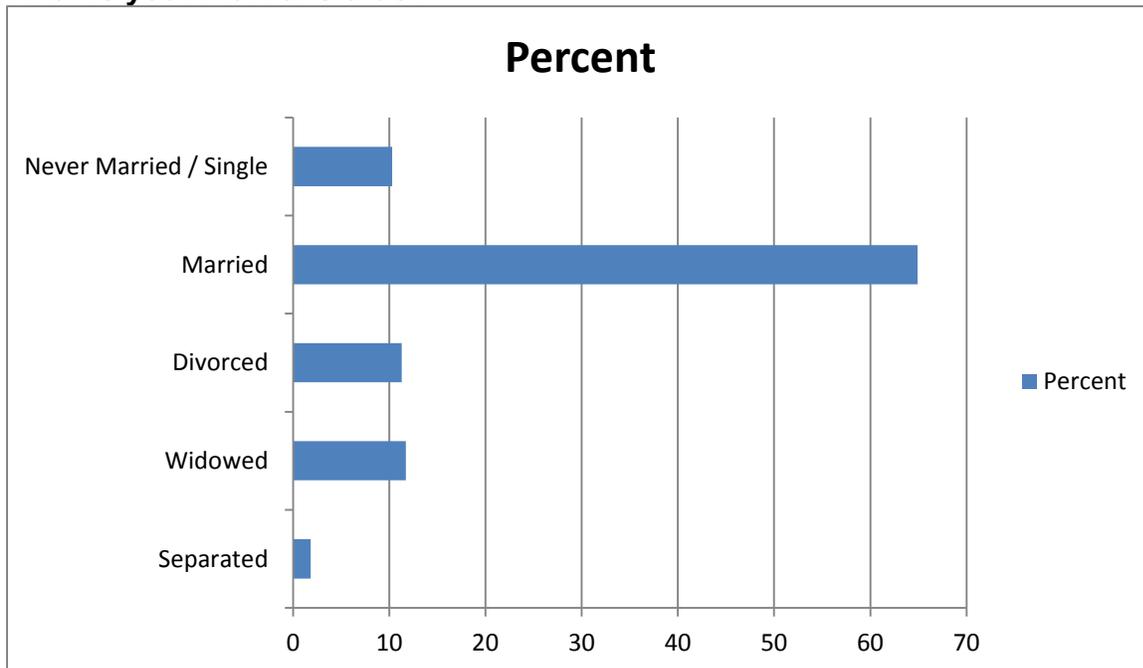


**Do you speak a language other than English at home?**

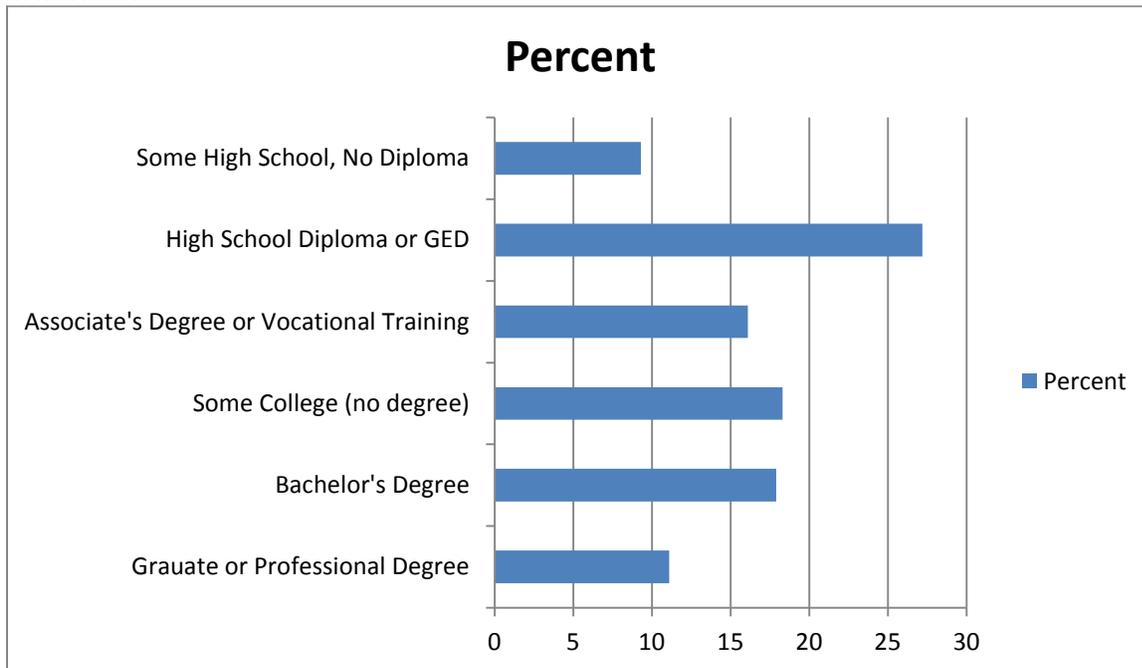


**If YES, what language do you speak at home? Spanish**

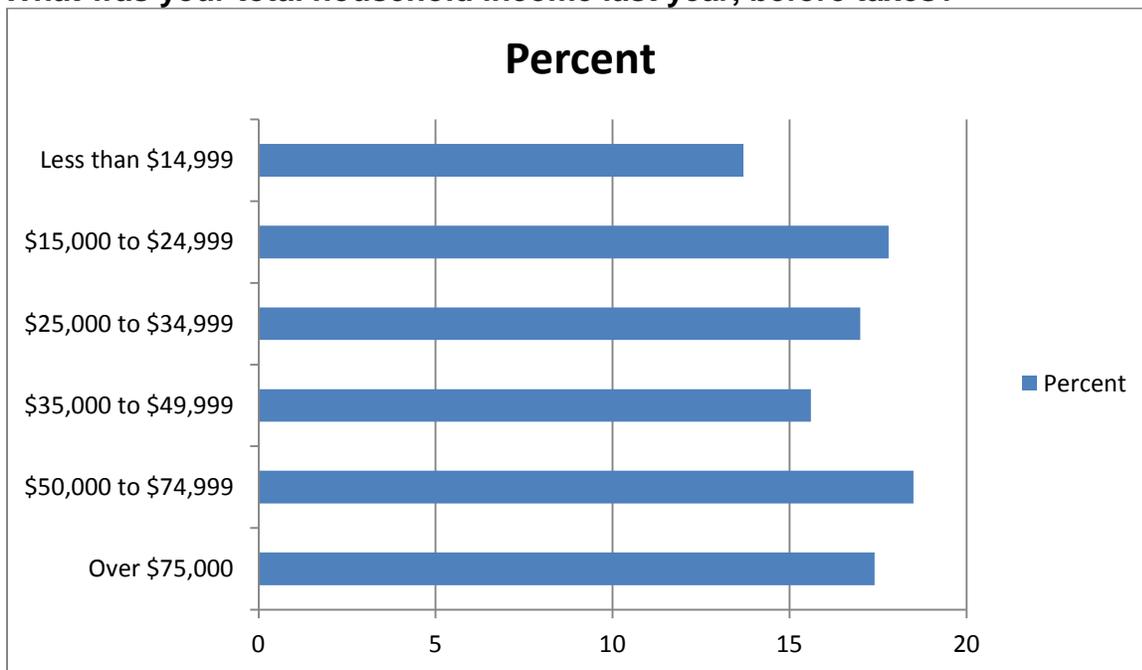
**What is your marital status?**



**What is the highest level of school, college or vocational training that you have finished?**

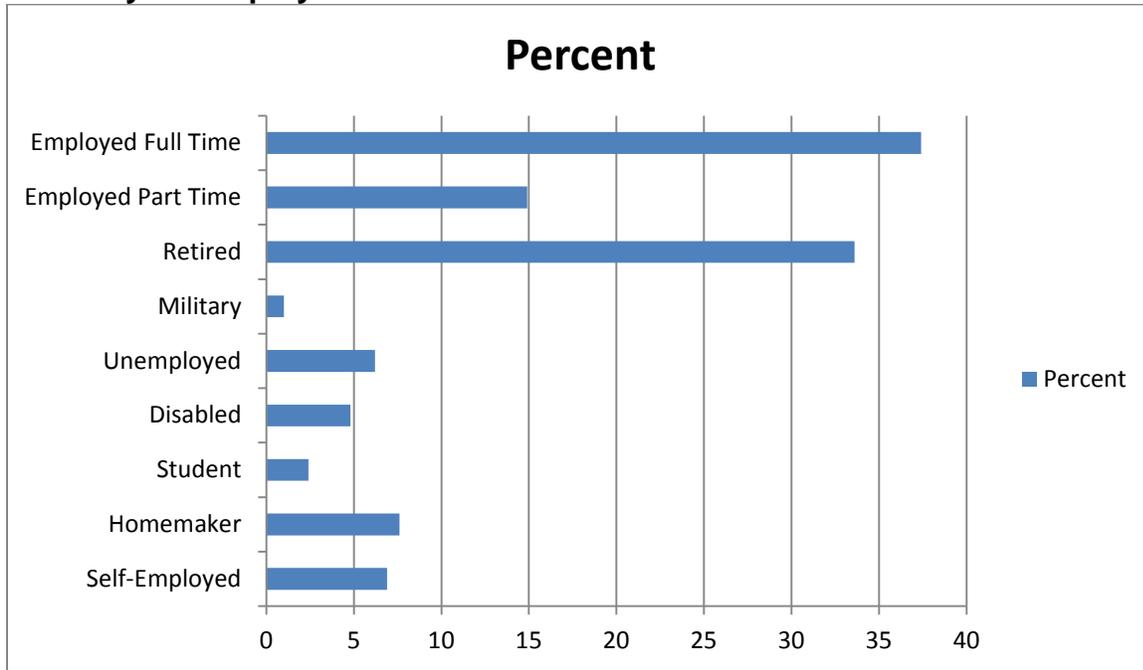


**What was your total household income last year, before taxes?**



**How many people does this income support?** The average response is 2.43

**What is your employment status?**



**Do you have access to the internet?**

