

UNION COUNTY PUBLIC HEALTH



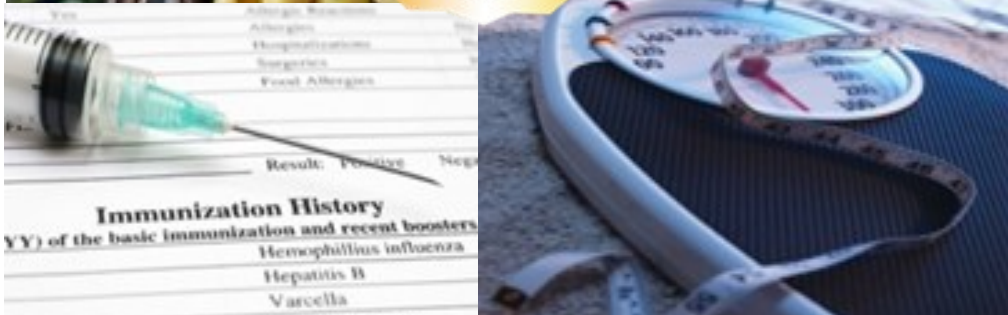
PROMOTE



PREVENT



PROTECT



COMMUNITY HEALTH ASSESSMENT

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Union County Division of Public Health
1224 West Roosevelt Boulevard
Monroe, NC 28110



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Introduction

The state requires all Public Health departments that receive state funding conduct a Community Health Assessment every four years. Union County has completed three assessments since 2008. A kick off meeting and planning session was held in June 2015 at the Health Department. The agenda included defining a Community Health Assessment, development, review, and approval of the 2016 CHA survey plan and tools. The 2012 survey tool provided the base document for discussion. Multiple community partner agencies and organizations were represented at the meeting.

The Community Health Assessment provides Public Health with an opportunity to determine what is impacting the individual health outcomes of county residents. The CHA provides a current assessment of what residents feel is impacting their health, as well as what health and wellness resources are needed, and which ones are having positive effects on their health. The assessment process must be repeated every four years.

Information and data collected directly from residents serves as primary data for the CHA. It is collected randomly, from county Jury Pool participants (done collaboratively with the County Clerk of Court). Convenience sampling is done at community events, in partnership with agencies, businesses, churches, schools and municipal governments.

Secondary data is a required component of the CHA. It is statistical data collected by outside agencies such as the State Center for Health Statistics, North Carolina Department of Commerce, Department of Environment and Natural Resources, etc. Secondary data provides factual information to support primary data, or dispel what residents report as impacting health.

The objective of the assessment is to gain clarity on health issues impacting residents, determine what programs, services and facilities are available, and what gaps exist or require improvement.

Phase one was county survey implementation.

Phase two of the CHA were focus group sessions. Specific niche groups were identified for participation. All groups were asked the same questions, with the premise that overlap in responses should occur within areas that are truly problematic. The niche groups were selected based upon demographics, occupation or elected position. The intent was to drill down into specific areas that are having an impact on the health and wellness of residents, while gaining insight and input from people in the most optimal positions to affect positive change.

Once all survey data was entered into the database, reports were run based upon demographic groupings.

The final phase was a community meeting to present CHA primary data and secondary statistical data, host a facilitated discussion around findings, and select priorities to be considered for action plans.

The Community Health Assessment provides a current assessment of what residents feel is impacting their health, as well as what health and wellness resources are needed, and which ones are having positive effects on their health.

Executive Summary & Conclusion

North Carolina Public Health agencies are state mandated to conduct a Community Health Assessment every four years to sustain departmental accreditation and funding.

The 2016 Community Health Assessment was implemented in fall 2015 and concluded in February 2017. The assessment affords Public Health, county officials, community partners and residents an opportunity to ascertain what is impacting health and wellness in Union County. The process examines primary and secondary evidence to develop a factual reflection of population health resulting from emerging trends and epidemiological statistics.

Primary data collected directly from county residents is compiled through surveys and focus groups. Surveys are drafted in age specific categories: teens 13 —18, adults 19—61 and seniors 62 and older. Random surveys are collected in county jury pools. Convenience sampling occurs in local businesses, churches, non-profits, at county events and health fairs. Spanish surveys are available to Spanish speaking residents. Twelve focus groups were held capturing opinions and discussion of 100 individuals and 50 county agencies and organizations.

Primary data establishes a foundation regarding what county residents are concerned about relating to individual health and population health. Surveys and focus groups open dialogue about health issues, chronic disease, life style, behaviors, disparities, social determinants, and environmental impacts.

Secondary data is Union County, state and peer county data collected by outside sources such as the State Center for Health statistics, Department of Environment and Natural Resources, Department of Commerce, United States Census Bureau, etc. Secondary data evidence can support primary data, or it can dispel primary data as being perception rather than reality.

Once primary and secondary data were compiled, the report was written and results were shared with the community and community partners. A community meeting was held on February 21, 2017. The CHA Report will be presented to the Union County Consolidated Health and Human Services Board in March 2017. The report was posted on the Union County Division of Public Health web site, and provided to the Union County Library for public access at the Reference Desk.

The multifaceted comprehensive approach to data collection, data reporting, data analysis and priority setting is to ensure a collaborative community approach to Public Health planning occurs.

Survey respondents and focus group participants expressed interest in county residents taking responsibility for their own health through behavior change. Considerable comments focused on the high cost of accessing health care, necessary medications, and rising health care premiums and deductibles. Only a few respondents indicated economic status as negatively impacting their health. Numerous written comments mentioned concerns for the working poor (employed yet unable to qualify for assistance, or afford insurance).

Lack of affordable countywide public transportation was declared a major barrier to health. Residents without transportation cannot access basic needs such as groceries, medical appointments, or pharmacies. Prevention services are not typically an option, therefore medical needs wait until a situation becomes acute.

The multifaceted comprehensive approach to data collection, data reporting, data analysis and priority setting is to ensure a collaborative community approach to Public Health planning occurs.

Countywide recreation opportunities, specifically walking trails and bike lanes to create both passive recreation and connectivity were repeatedly requested. Residents in rural Union County have unsafe conditions for walking, running or biking. Cyclists that ride country roads are seen as a major safety hazard.

Environmental concerns focused on water quality and air quality. The sentiment around water quality was more residents need access to county or municipal water due to concern about arsenic in wells. Many survey responses indicated concerns about what is in the well water due to smell or taste. The cost of filtration systems were prohibitive for many residents with known water quality issues in their well. Outdoor air quality has been an on-going challenge. The proximity to Charlotte, and congested country roads were the named causes.

Health care issues reflected in county health data recorded by the State Center for Health were rising STD rates for Gonorrhea, Chlamydia, and Syphilis. The continually rising county Alzheimer's rate (state wide high) remains concerning. Cancer data indicates higher projected cancer cases and deaths than peer counties. A growing statewide issue is the alarming Opiate usage and abuse rates. North Carolina has four cities in the top 25 for abuse rates in the nation, including Wilmington being number one on the list.

A main health disparity within Union County is the infant mortality rate in the African American community for infants less than one year per 1,000 live births was a disturbing 13.9 rate compared to 5.3 for the white non-Hispanic population. Currently, Union County Public Health is partnering with a Maternal Child Health grant with Mecklenburg County Public Health to begin addressing this rate and potential causes.

Access to care for the adult indigent population remains a challenge. Despite the Affordable Care Act efforts, Union County continues to have a segment of uninsured and underinsured adults. Lack of a medical home often translates into use of the CHS Emergency Department for non-emergent medical services. Mental health care, addiction services and counseling are other areas where access is limited. In seeking treatment, care or counseling in these areas, even with a payer source, options are very limited locally, and often are accompanied with a lengthy wait list. Patients must be in crisis, meaning a potential threat to themselves or someone else in order to access emergency mental health intervention services.

In summation, the 2016 CHA data indicates residents would like the County to consider infrastructure improvements to the built environment for sustainable improvements to population health. More parks with passive recreation located in multiple areas of the county to encourage increased physical activity. Sidewalks for community connectivity, making the county more pedestrian friendly. Expanding access to county water would reduce the number of residents reliant on well water that they are uncertain of the presence of potentially harmful contaminants.

CHA participant consensus was that individuals need to be encouraged to take ownership for their own health. Health education to provide information and awareness of local resources and services was seen as the vehicle to move in the right direction. Many residents have sedentary lifestyles and unhealthy eating habits which can lead to expensive chronic conditions that reduce quality of life. Prevention based services, with education emphasizing the need for a medical home and routine screenings would provide a foundation for individuals to take active steps toward being responsible for their own health.

Recurring themes were categorized for discussion and planning purposes into the following headings:

Built Environment

Parks / Greenspace
Pedestrian Connectivity (sidewalks, walking trails)
Access Union County Public Schools Facilities
Bike Lanes

Infrastructure

Water Lines (planned with Public Health Environmental Health)
Public Transportation Countywide
Recruit Health Conscience Retail (Whole Foods, Fresh Market, Earth Fare)
Family / Children Counseling & Therapy Services

Environmental

Well Water Education
Outdoor Air Quality
Vector Control (mosquito born viruses)
Indoor Air Quality Education (mold, lead, allergens, carbon monoxide, etc)

Behaviors / Health Education

Increase physical activity
Healthy Eating
STD Education
Chronic Disease prevention
Opiate issues

At-Risk Populations

Drug Users (opiates / heroin)
Elderly
Sexually Active Adults practicing Unprotected Sex
Elderly Caregivers
Indigent Adults

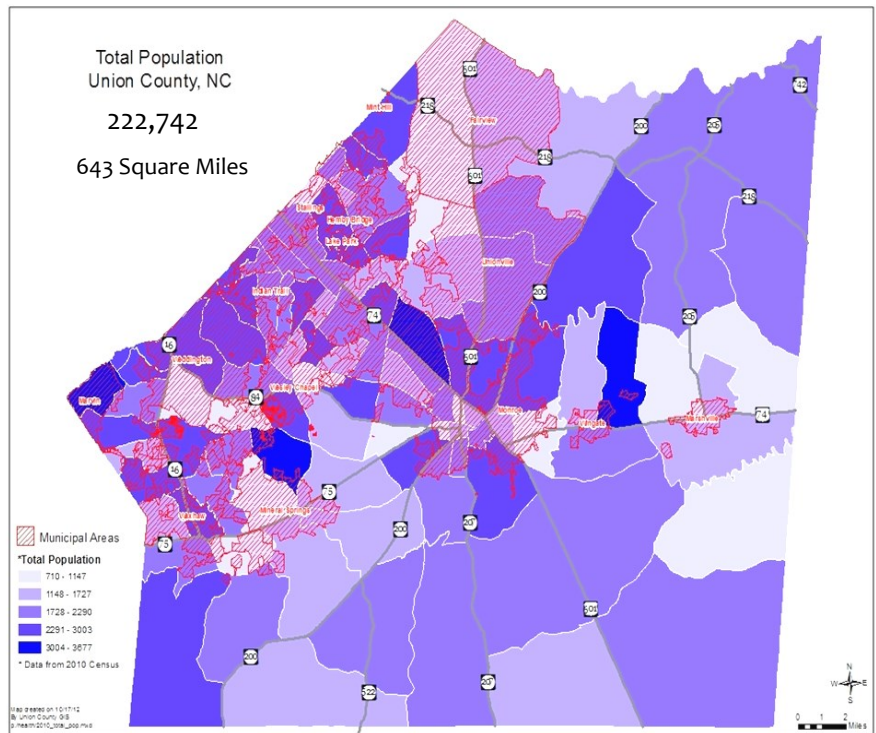
Union County Profile

Union County 2016

Union County was established in 1842 and is located southeast of Charlotte within the Charlotte Metropolitan Statistical Area. The county is 643 square miles, with 14 municipalities. Monroe is the county seat. The county is governed by a Board of Commissioner / Manager form of Government, with a five member Commissioner Board elected countywide and an appointed county manager.

The median age is 36, with the majority of households being married couples with children. These demographics have created the 6th largest school system in the state, with an enrollment of 41,510 students in 53 schools, employing 5,276 people.

A population mainly consisting of young families requires: schools, healthcare, law enforcement, fire departments, parks, childcares, and employment opportunities.



The county continues to have an unbalanced tax base, 88% residential, 12% industrial / commercial. A lopsided tax base can be problematic in provision of infrastructure to meet and sustain residential demand. Union County relies heavily on ad valorem taxes (taxes collected on physical and personal property) to fund county services. The second largest revenue source is the Local Option Sales Tax.

Union County Government provides services within the following areas: Central Administration, Community Services, Human Services, Emergency Services, Growth Management, Public Works, Administrative Services, Human Resources and Tax Administration. Union County Government employs 1,161.

Total Population (2015)	222,742	Source: <i>census.gov</i>
Population change from 2010	10.6%	Source: <i>census.gov</i>
Households	69,464	Source: <i>census.gov</i>
Persons per household	2.98	Source: <i>census.gov</i>
Median Age 2015	36.8	Source: <i>census.gov</i>
Civilian Labor Force (2014)	104,127	Source: <i>CharlotteUSA</i>
\$ Median Household Income	\$65,893	Source: <i>census.gov</i>
\$ Average Weekly Wage (2014)	\$730	Source: <i>CharlotteUSA</i>
Unemployment Rate (September 2016)	4.1%	<i>Homefacts.org</i>
Persons in Poverty	10.8%	Source: <i>census.gov</i>
Tax Base	88% Residential 12% Industrial /Commercial	Source: <i>Union County Finance</i>
FY 2015-2016 Property Tax Rate per \$100 Value	.7765 per	<i>Union County Tax Administration</i>
Public Schools	53	Source: <i>CharlotteUSA</i>
Union County Public Schools Total Enrollment	41,510	Source: <i>ucps.k12.nc.us</i>

Economic Impacts

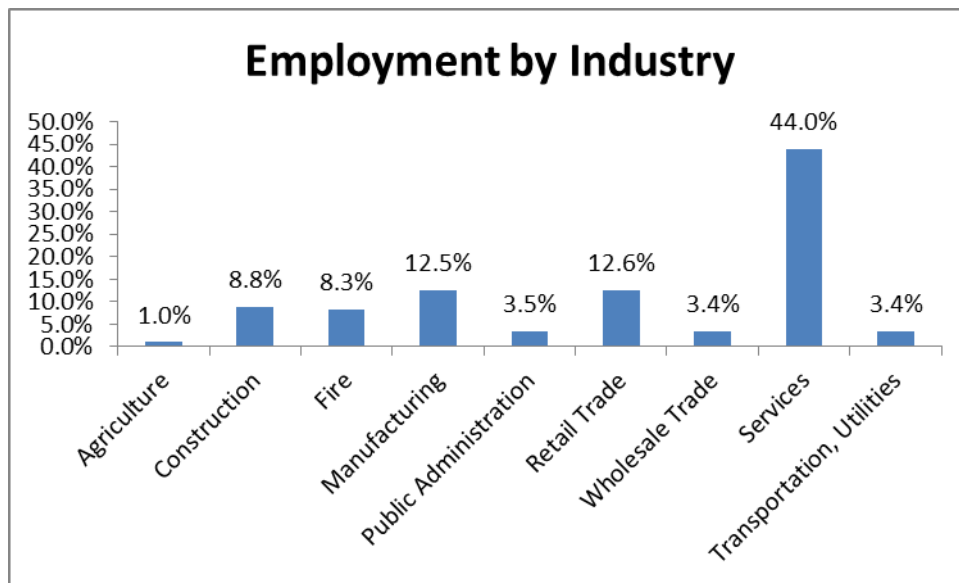
Economic Development

A new inter-local agreement between Union County Government and the City of Monroe for the continued partnership in the Monroe-Union County Economic Development was approved for a new three year term. The partnership has been successful in attracting \$355 million dollars in new capital investment, locating 42 projects within the county and creating over 1,000 new jobs.

A recent expansion success came from Tyson Foods in Monroe, with the announcement of a \$5 million equipment investment that has the potential to create additional jobs. The facility currently employs around 1,500 people with an approximate annual payroll of about \$50 million. Tyson Foods has operated the facility in Monroe since acquiring it from Holly Farms in 1989.

The aerospace cluster is a significant presence in Union County, with 7 aerospace industries operating within a 7 mile radius.

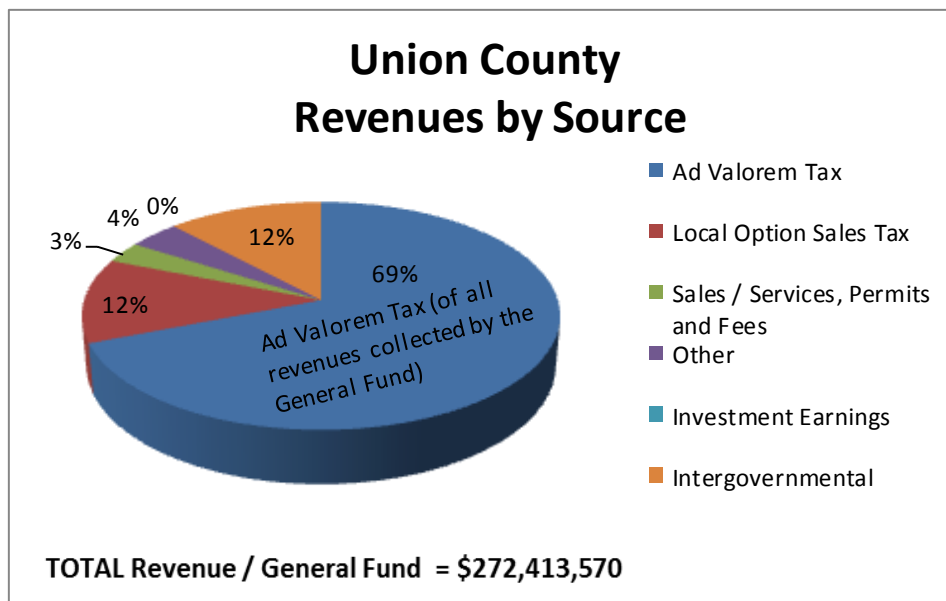
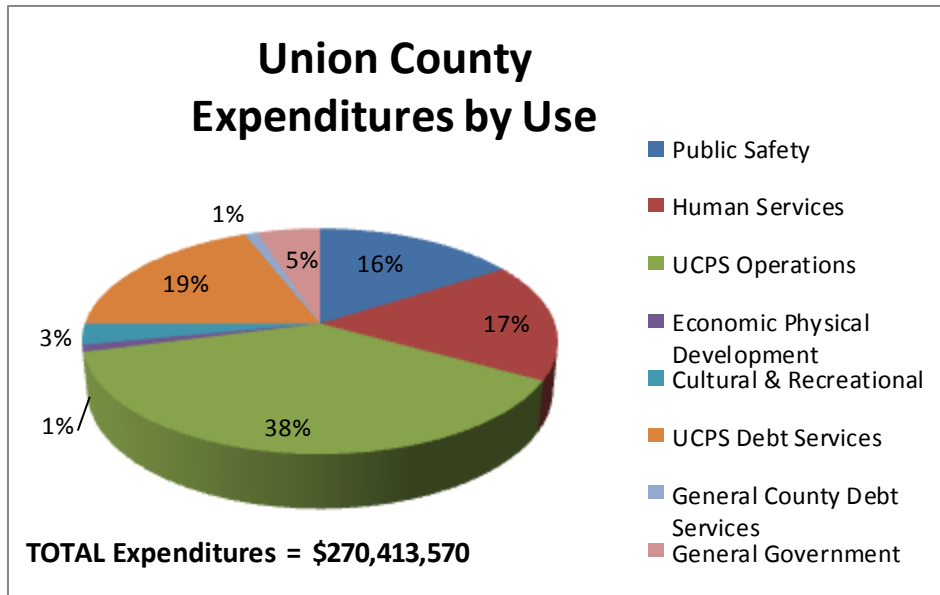
The county employer base includes: Aerospace / Aviation, Automotive, Medical, Specialty Metals / Super Alloys, Life Safety, Plastics and Food Processing. The industries offer a broad range of employment opportunities from entry level, skilled to unskilled, business executives to engineers.



Major Employers (non-government / retail)

Tyson Farms Inc.	Food Processing	1550
ATI Allvac	Metal Refining	1200
Scott Technologies	Manufacturing	500
Charlotte Pipe and Foundry	Pipes /Fittings	450
Employee Leasing Solutions Inc.	Business Services	250 -499

Union County



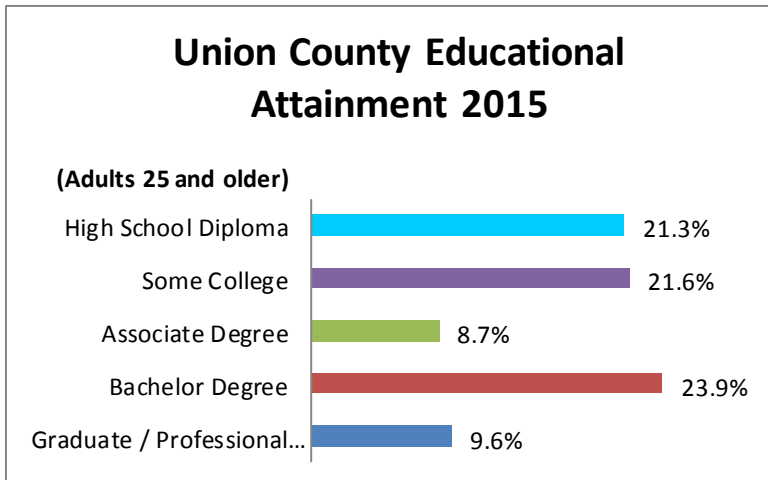
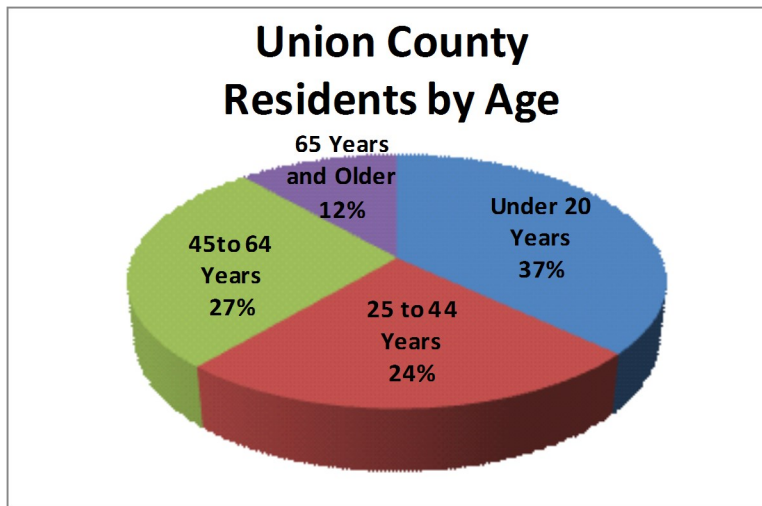
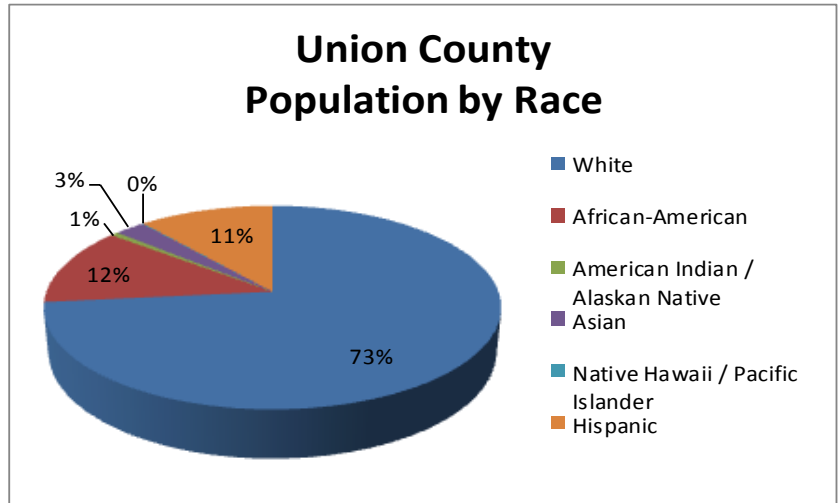
Faces in the Crowd

Union County Population 2015

Source: *census.gov*

The county continues to grow, as demonstrated by a 10.6% change in total population since the 2010 Census. The gender split in Union County remains balanced.

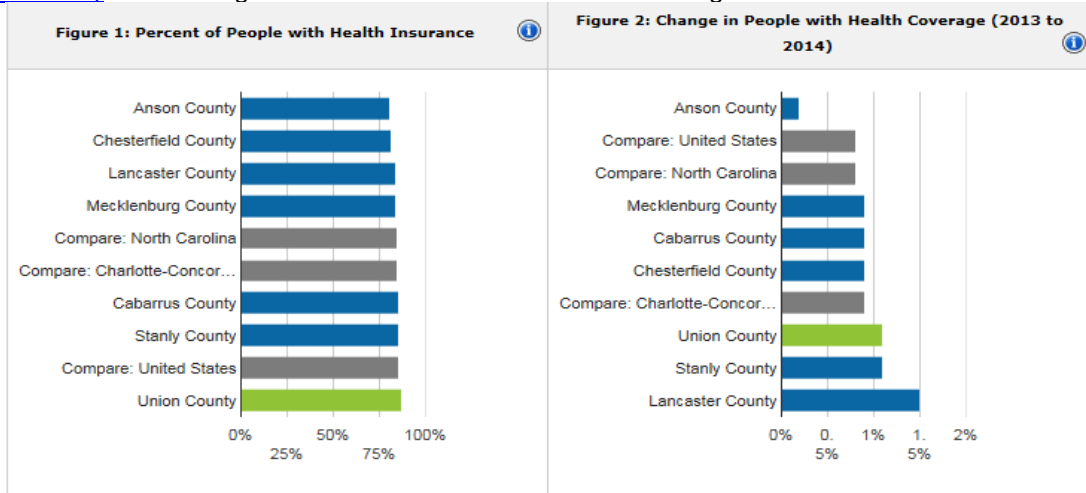
The preponderance of residents are 20 years and under, which is in line with the young families making up the largest majority of households in the county. Race / ethnicity population has not seen any drastic shifts since the 2012 Community Assessment numbers.



Access to Medical Care

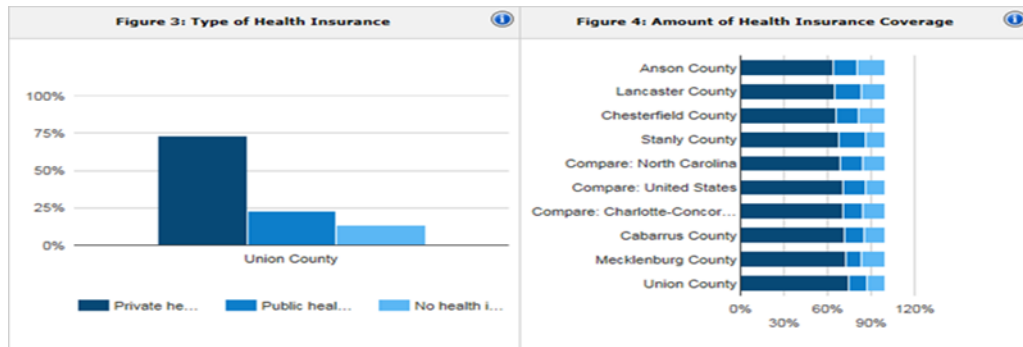
Union County Health Insurance Charts

This section of charts show healthcare data are based on the most recent 2015 from the Census Bureau which tracks healthcare in the United States. **Figure 1** shows the percentage of people who had some form of health care insurance coverage in the area. [Union County](#) North Carolina shows it has 87% health insurance coverage which is more than all the others in the area. The next chart (**Figure 2**) shows the change in the percent of people covered from 2013 to 2014 (latest year available) in the percentage of people in each area who had some form of health insurance coverage. Union County illustrates it has 1.1% change in health insurance coverage which is the 3d most of all other counties in the area. The county with the highest change in health insurance coverage in the area is [Lancaster County](#) with a change in insured of 1.5% which is about 40% larger.

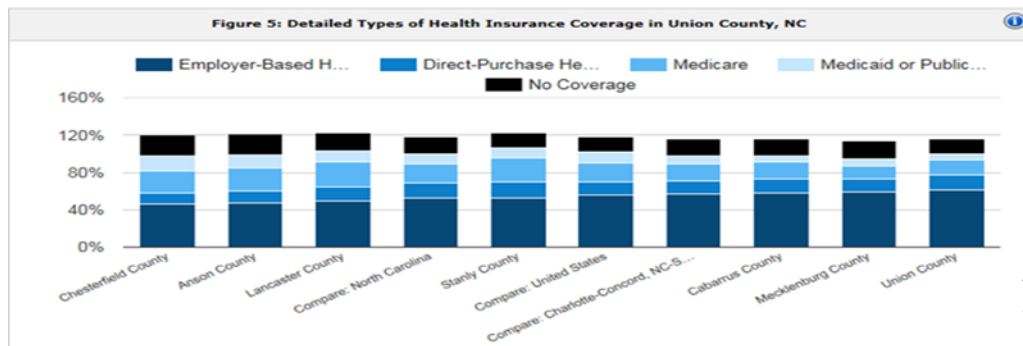


Figures 1 & 2 Source: 2015 American Community Survey

In **Figure 3** the relative proportions of different types of health insurance coverage are shown (broken down by major categories of public versus private.) Union County has the largest proportion of Private health insurance at 73% of the total and is ranked #1. **Figure 4** shows the proportion of people who are covered by more than one health insurance carrier. This occurs when, for instance a person might have Medicare as well as a private policy. Union County has the largest proportion of people with one health care insurance policy at 75% of the total and is ranked #1. The next chart shows a more detailed view of the types of health insurance held by people in the area including employer provided, direct purchased, Medicare, and public healthcare options (e.g. Medicaid.)

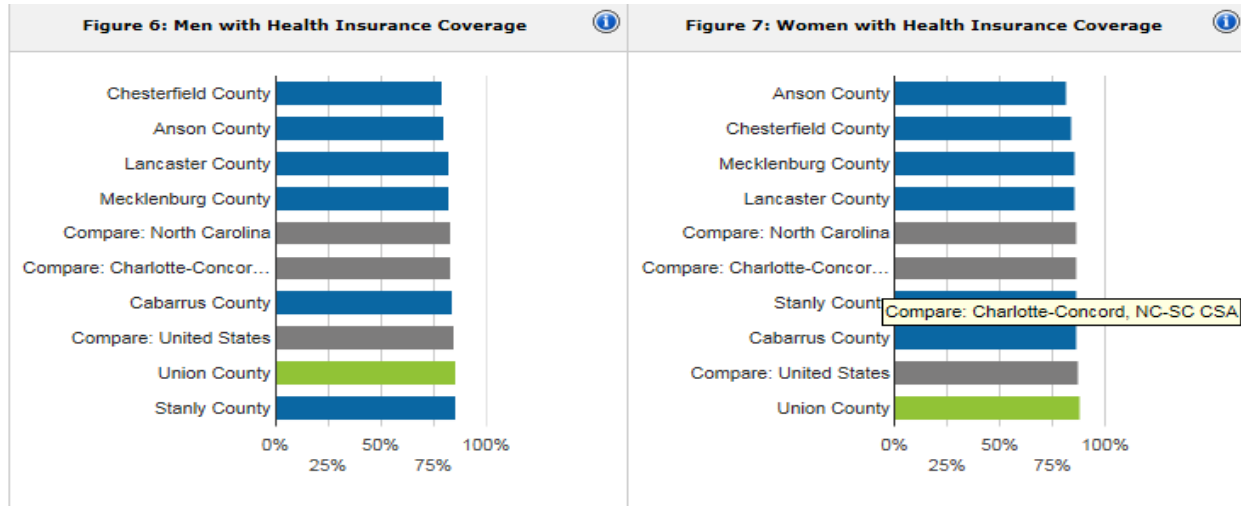


In **Figure 5**, it has the largest proportion of Employer-Based Health Insurance at 61% of the total and is ranked #1.



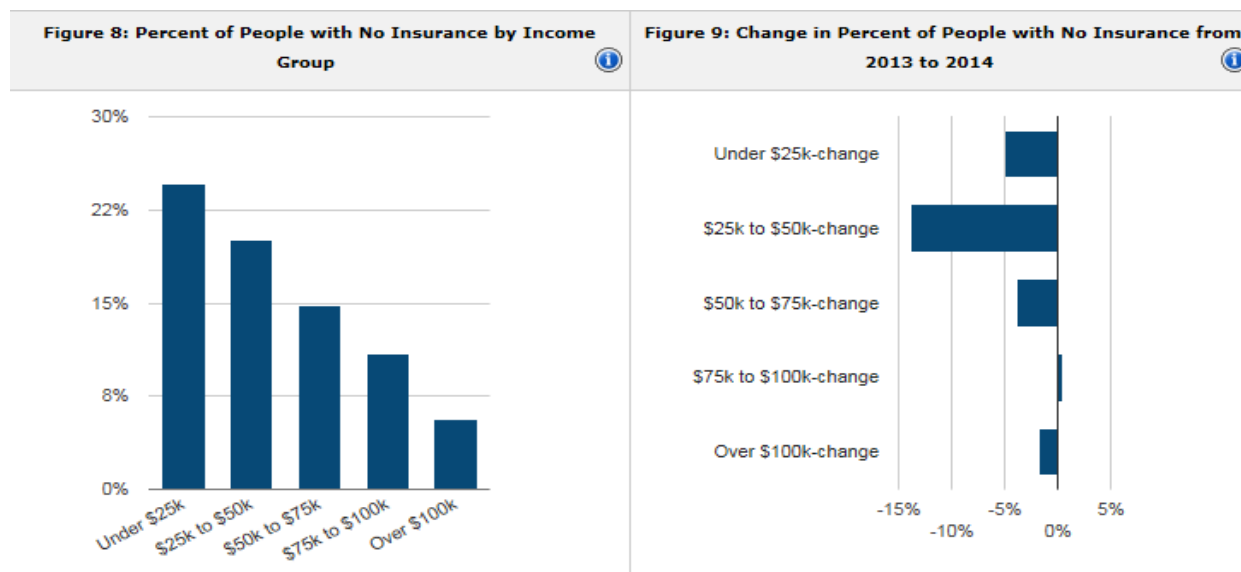
Figures 3, 4 & 5 Source: 2015 American Community Survey

The next two charts show the percentage of men and women with coverage. First, **Figure 6** shows men and it has 85% men with health care insurance coverage which is the 2nd most of all the counties in the area. The county with the highest men with health care insurance coverage in the area is [Stanly County](#) with an insurance coverage of 86% which is about the same size. In the next chart women are shown and sorted in the same order as for the men so that direct comparison for each city can be made. **Figure 7** shows it has 88% women with health care insurance coverage which is more than all the others in the area.

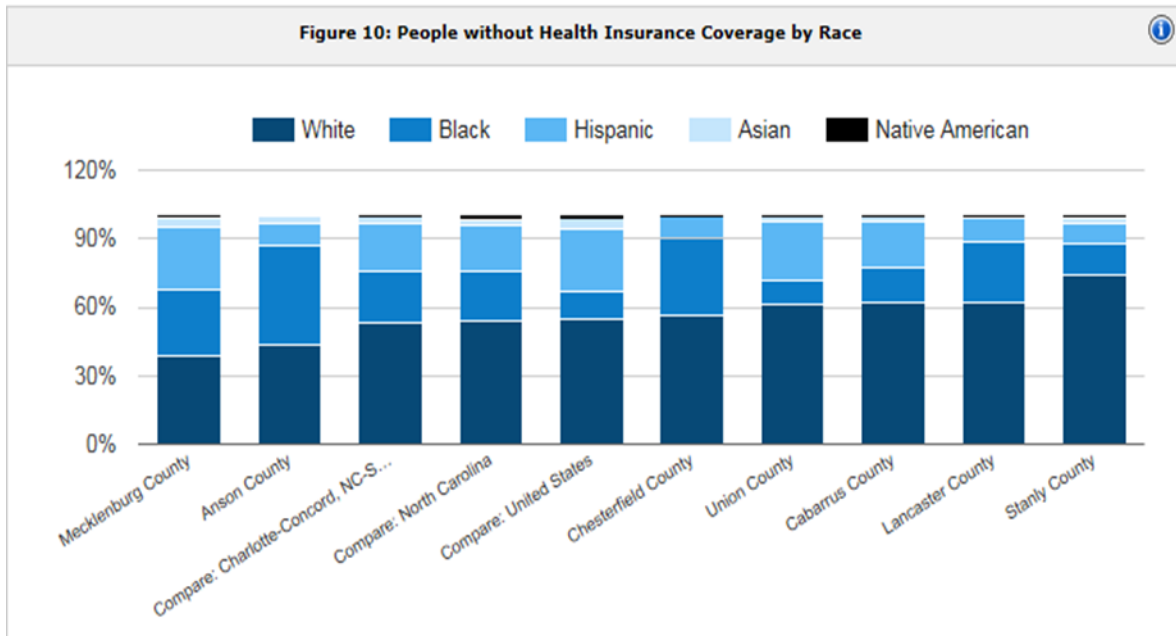


Figures 6 & 7 Source: 2015 American Community Survey

The next two charts show the percentage of people who do not have health care insurance. Both charts show the data broken out by household income with **Figure 8** showing the percent covered by income group. Union County indicates it has the largest change in the percentage of people not covered with insurance of 25% for Under \$25k. **Figure 9** shows the change in the percentage of people who have no insurance from 2013 to 2014. Union County shows it has the largest change in the percentage of people not covered with insurance of 0.4% for \$75k to \$100k-change.

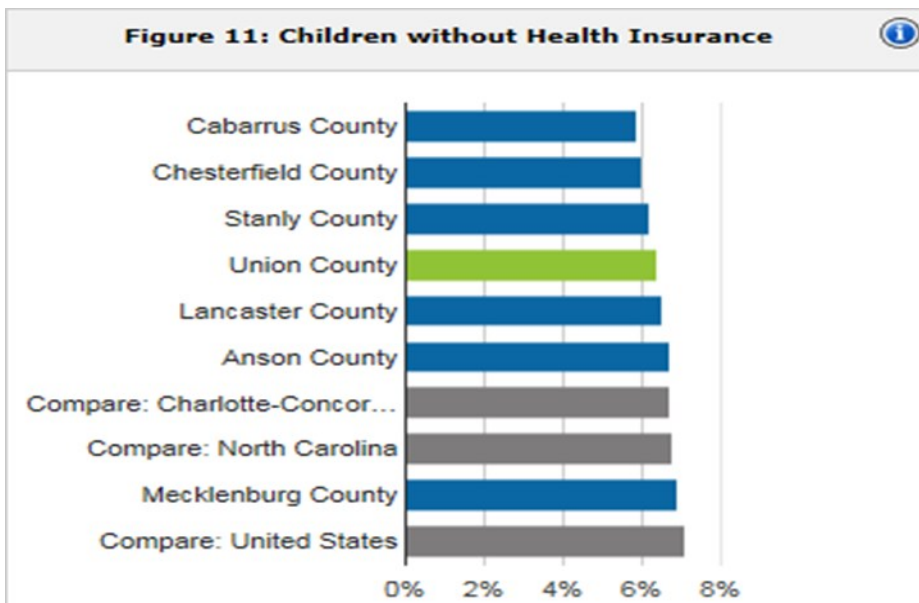


Figures 8 & 9 source: 2015 American Community Survey



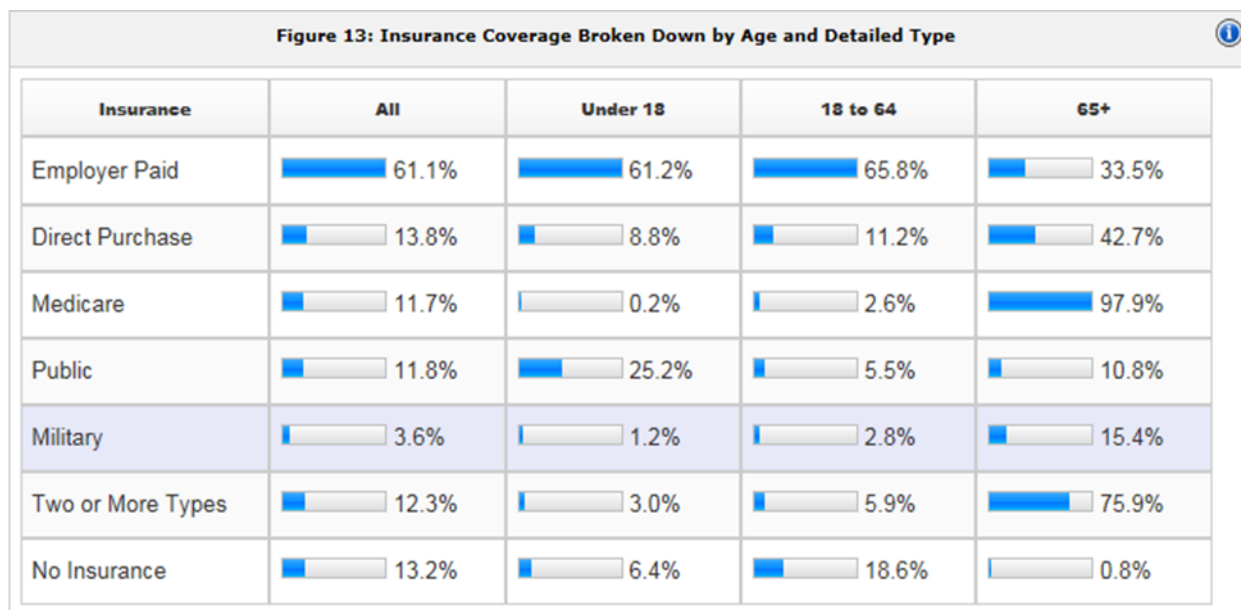
Source: 2015 American Community Survey

Figure 10 shows a breakdown of the people in the area who do not have health insurance. Of the people who DO NOT HAVE healthcare coverage, what is the breakdown by race. Union County has whites without coverage in the mid range of other counties in the area at 61% of the total and is ranked in the middle of the group. Second, it has one of the largest proportions of Hispanics without coverage at 26% of the total and is ranked #2. The only larger county being [Mecklenburg County](#) with 27%. The next chart shows the percentage of children (17 years of age and younger) who do not have health insurance. In **Figure 11**, it has 6.4% Children without Health Insurance which is in the mid range of other counties in the area. The county with the highest Children without Health Insurance in the area is [Mecklenburg County](#) with a children without insurance of 6.9% which is about 8% larger.



Source: 2015 American Community Survey

Figure 13 shows the percentage of people covered by health insurance broken down by age group and type of coverage. Note that Medicare includes not just people over the age of 65 but also younger people with certain disabilities. Public healthcare includes Medicaid and also any other type of government assisted plan for low income or disabled persons. Military includes TRICARE and VA Healthcare. Final note re: coverage. The Census Bureau does not define health plans that cover specific situations such as cancer or long-term care as coverage in this sense. Also, dental/vision/disability insurance are also not considered health insurance coverage in this analysis. Click on column headings to sort. Some tables span multiple pages-click page numbers at bottom to jump to another page. *Source: 2015 American Community Survey*



Source: 2015 American Community Survey

Community Assessment Survey Results

Teen Survey Response Narrative

A total of 102 surveys were completed, representing a balance of gender, race and ethnicity. The majority of respondents were from Monroe, Indian Trail and Waxhaw.

The teen survey was implemented through convenience sampling: health fairs, Boy Scouts, 4-H, church youth groups and at the Health Department and DSS, and within the Union County Group Home.

The main concerns teens had about their health and well-being centered around being obese or over weight. Although the large majority of respondents viewed themselves as a normal weight.

From a safety perspective teens expressed concern about bullying and reckless driving. Admitting to talking and texting while driving in responses, it was not a chief concern.

The main behavior teens claimed as impacting their health was drug abuse. This response would be supported by participant discussion in the Youth focus group and First Responder focus group. Trends of opiate overdoses among all ages and social and economic groups in the county are increasing.

Teens implied poor eating habits as a negative behavior, which they further confirmed in responding that only two servings of fruits and vegetables are consumed daily. The majority of survey respondents indicated that they do not buy school lunch, but bring food from home. They indicated that the meals they eat at home are home cooked, with only a small percent stating that they eat mostly fast food.

Lack of exercise was identified as negatively impacting health, but contradicted themselves saying they engage in physical activity five days or more each week. They indicated that they are physically active outside of school (beyond PE class / organized sports).

Relatively low social media use and screen time was admitted by respondents.

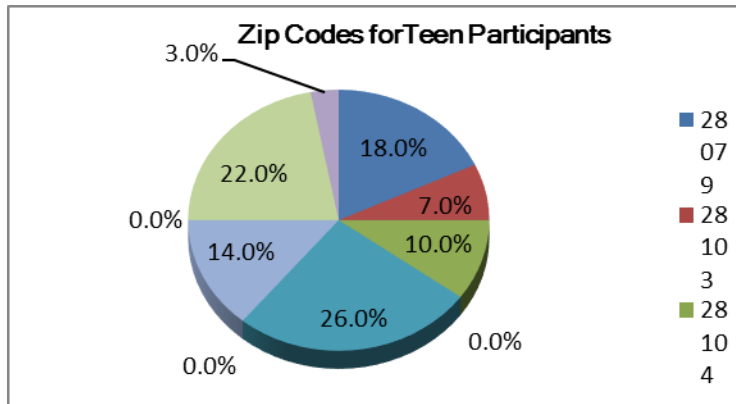
Access to a medical home and a dental home was not an issue within this survey sample. Most stated that they had access to care when it was needed. For the respondents without access to care, it was fear or funds that prevented access. Alost half of the respondents see a doctor within their home county, with a significant subset going to an Urgent Care in Union County.

The majority of survey respondents had received a physical and or immunizations. Only a small number reported only seeing a doctor when an acute medical situation presents itself. Accessing prevention services was not an issue within the sample.

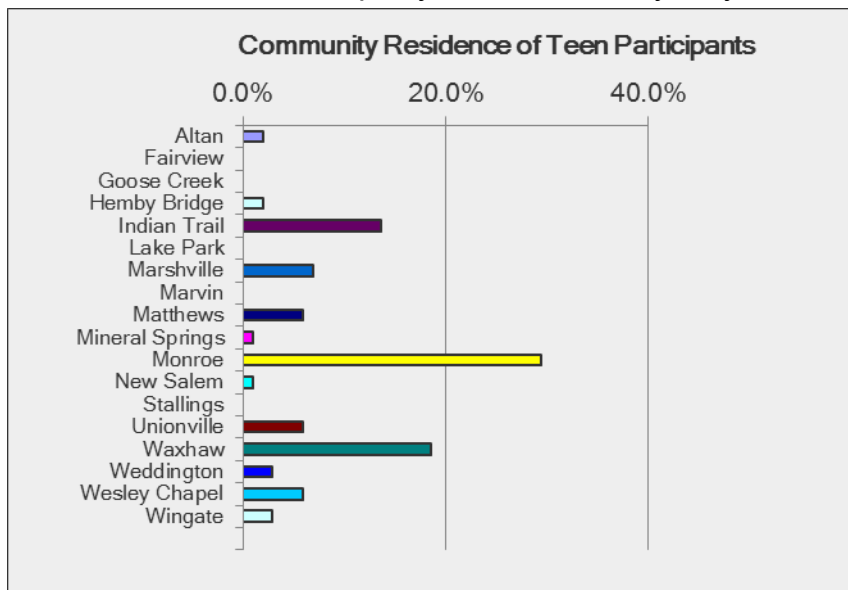
The main concerns teens had about their health and well-being was drug abuse. Trends of opiate overdoses among all ages and social and economic groups in the county are increasing.

2016 Union County CHA Teen Survey Responses

1. What is your Zip Code?

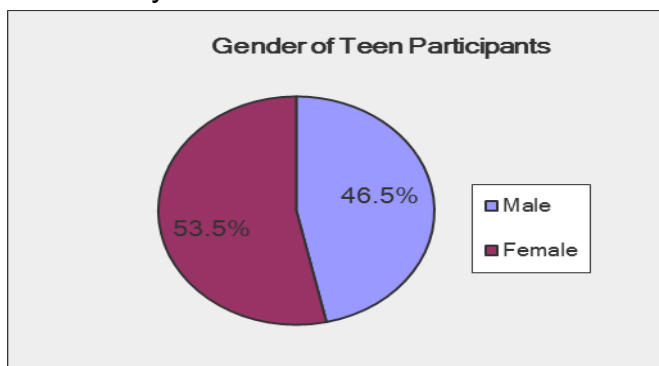


2. Which Town or Municipality in Union County do you reside?

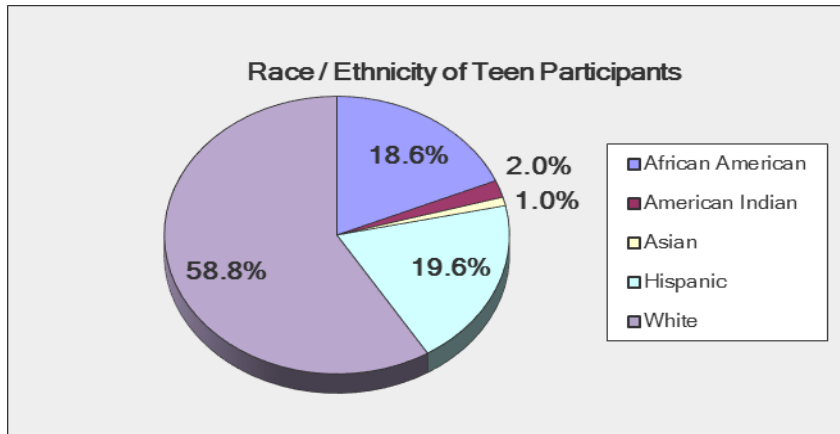


3. What is your Age? (Age range surveyed 13 – 17 years)

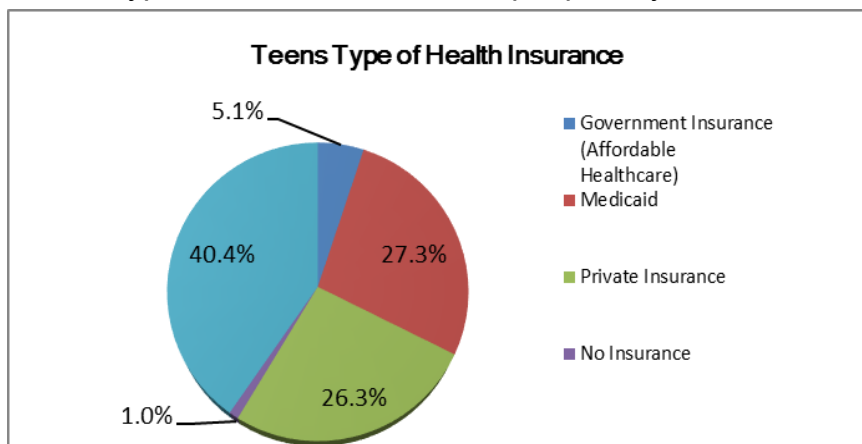
4. What is your Gender?



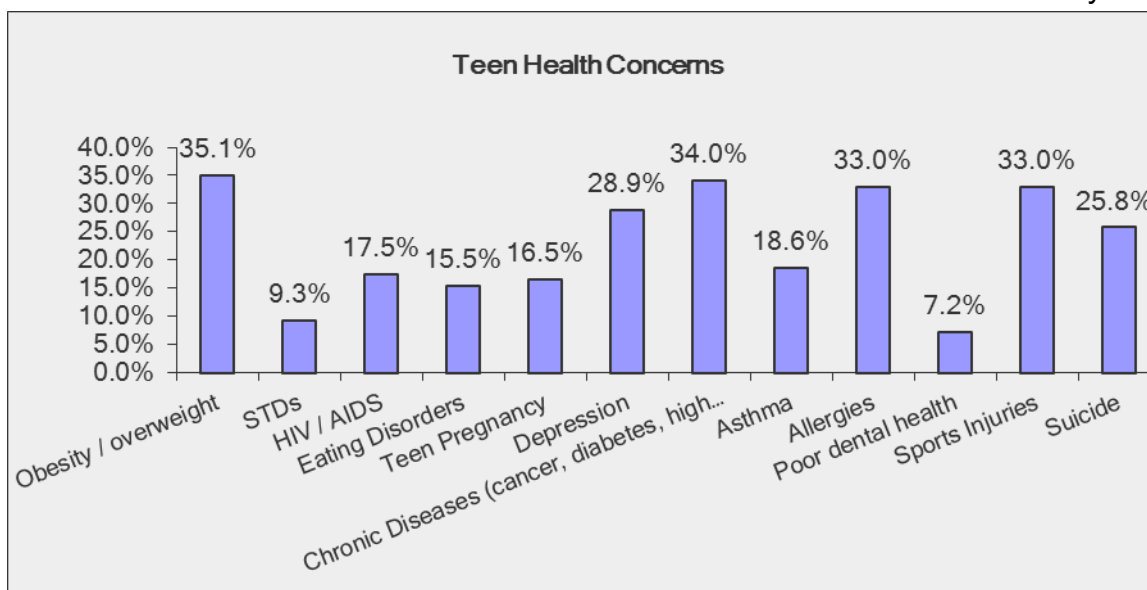
5. What is your Race?



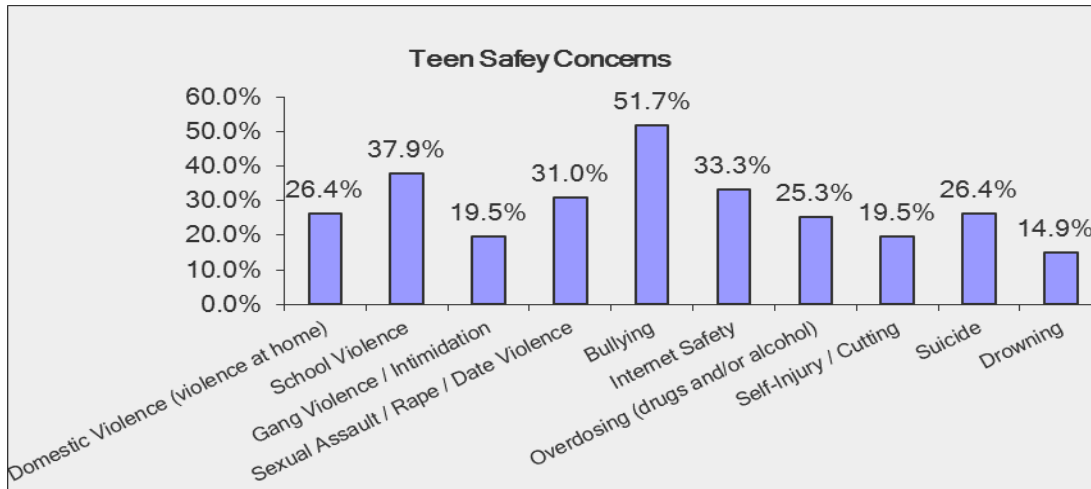
6. What type of health insurance do people in your home have?



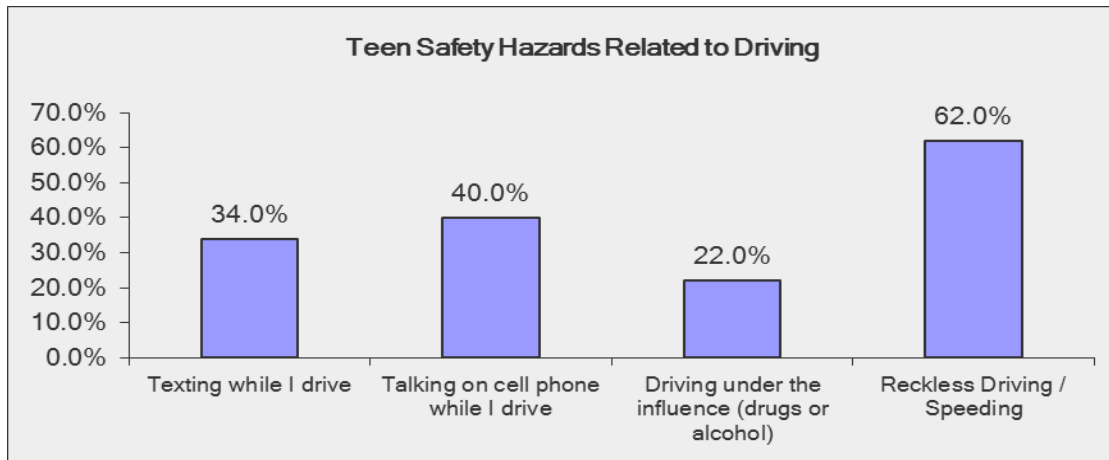
7. Listed below are health concerns. Please check three that MOST concern you.



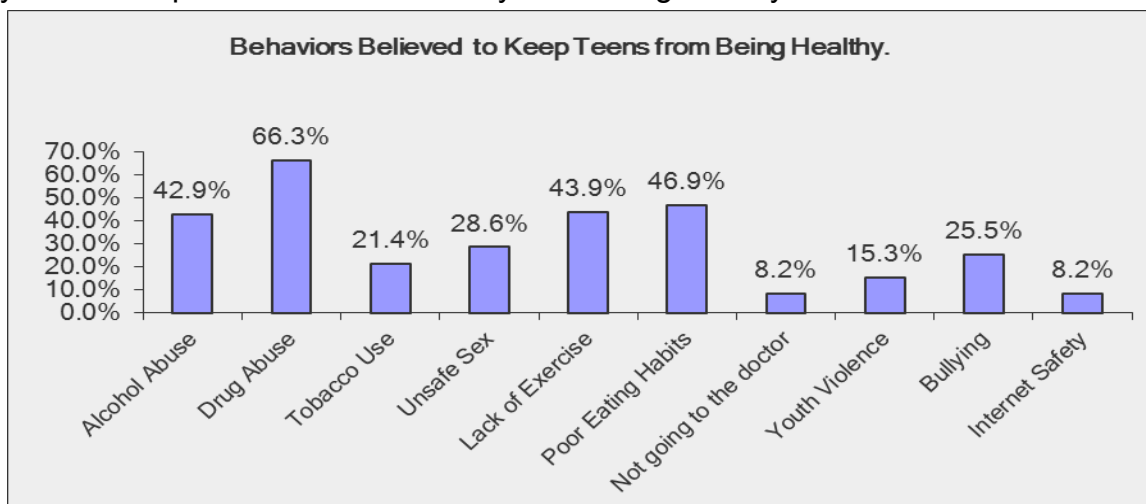
8. Listed below are safety concerns. Please check three that MOST concern you.



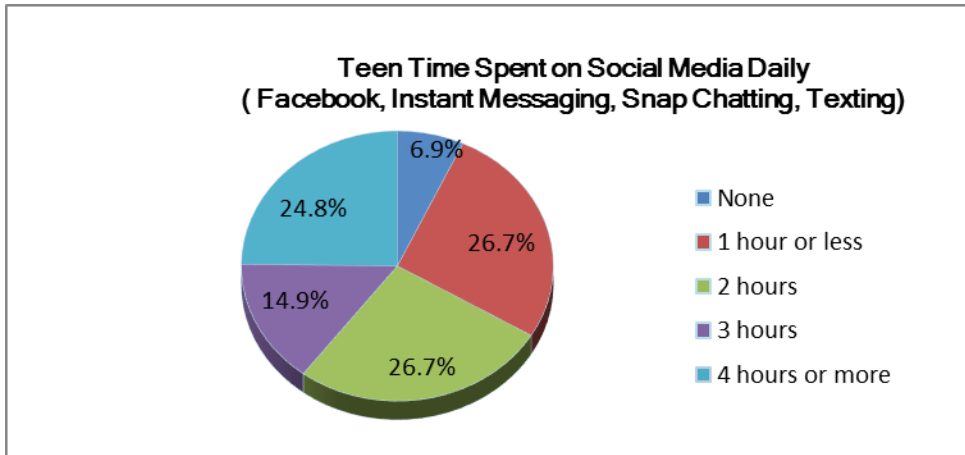
9. Listed below are safety hazards related to driving. Please check ALL that apply to you.



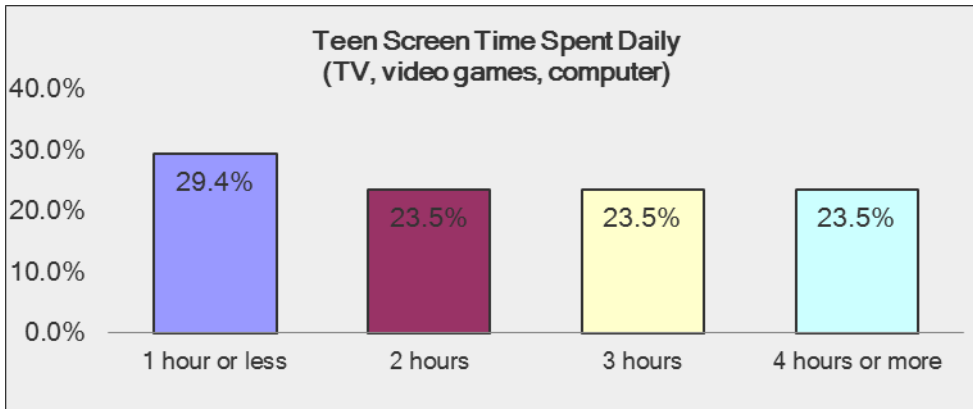
10. Listed below are behaviors that keep people from being healthy. Please check the three that you feel keep teens in Union County from being healthy.



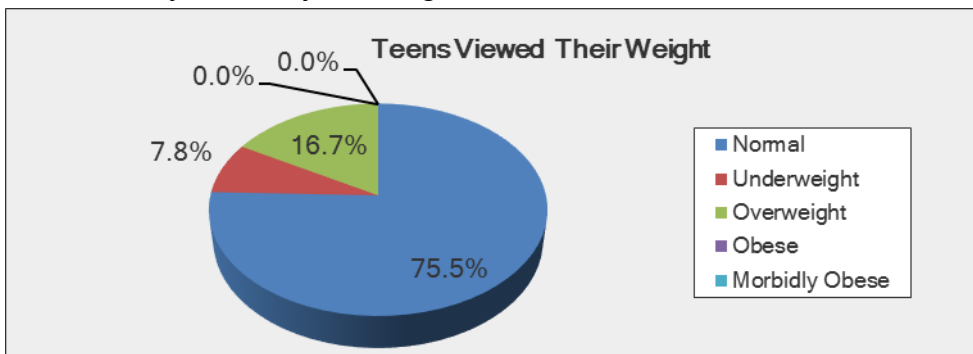
11. Approximately how much time do you spend daily on social media? (Facebook, Instant Messaging, Snap Chatting, Texting).



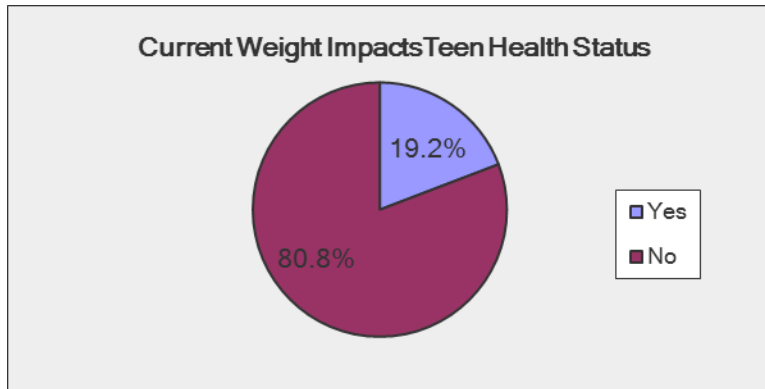
12. How much screen time do you spend daily? (TV, video games, computer)



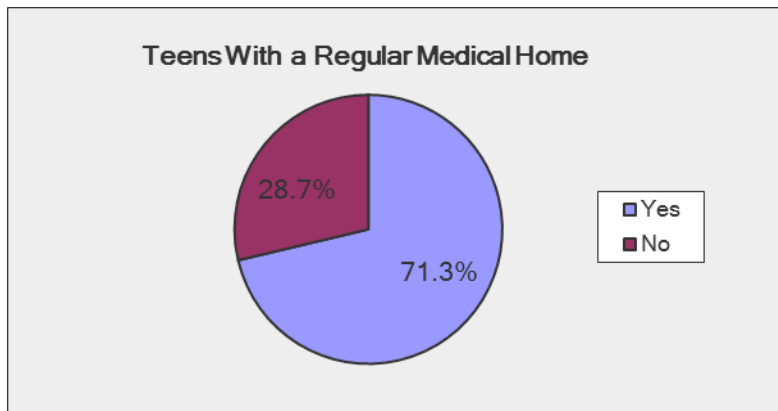
13. How do you view your weight?



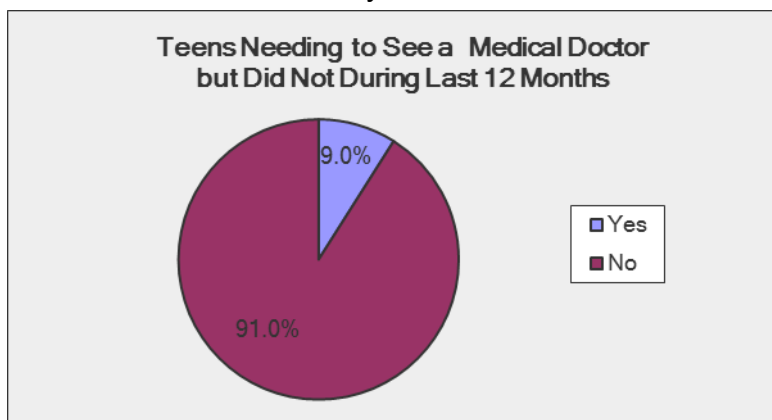
14. Do you feel your current weight is impacting your health status?



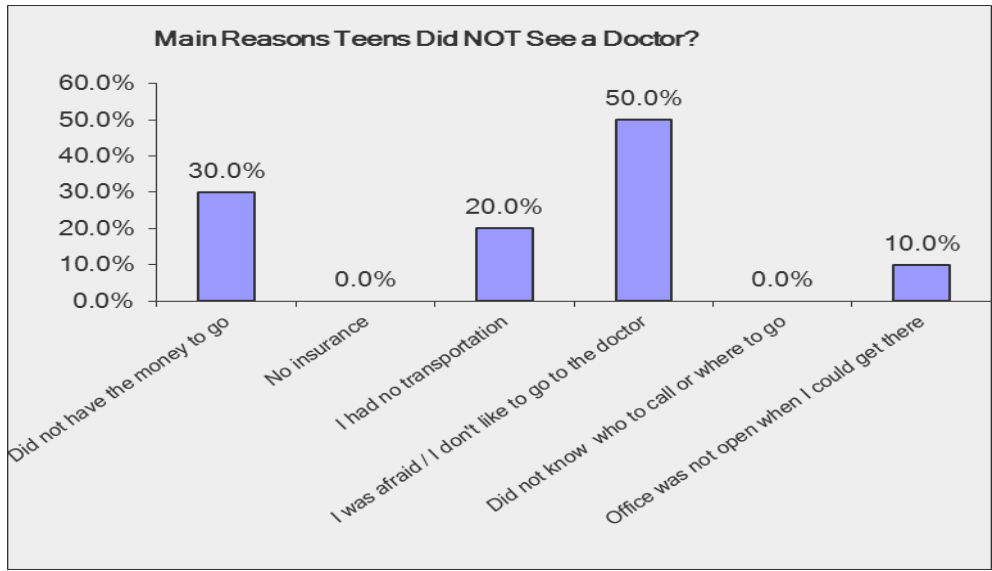
15. Do you have a medical home (doctor you see on a regular basis)?



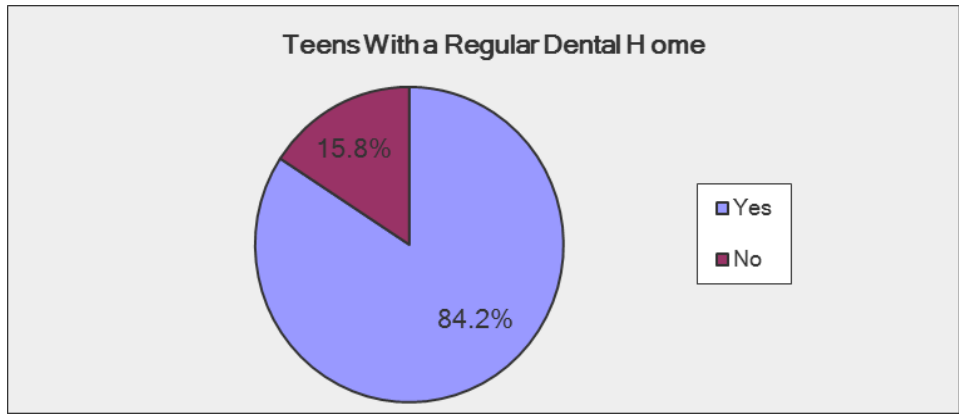
16. Was there a time that you needed to see a doctor during the last 12 months but did not?



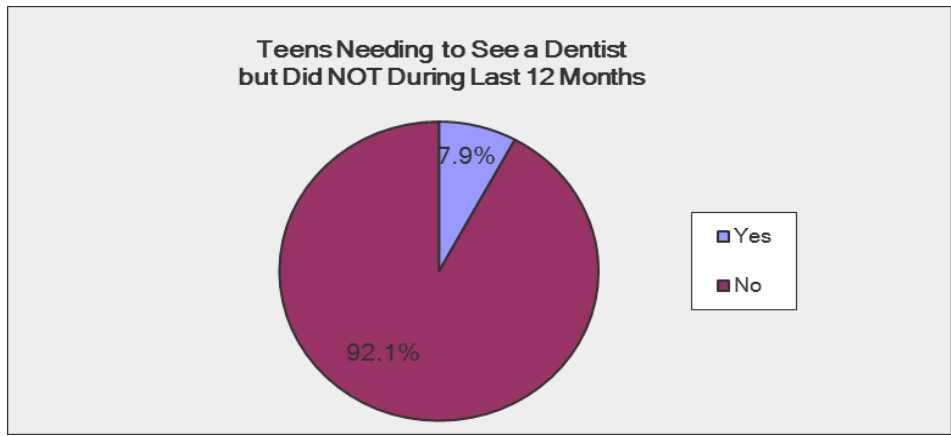
17. If yes, what was the main reason that you did not see a doctor?



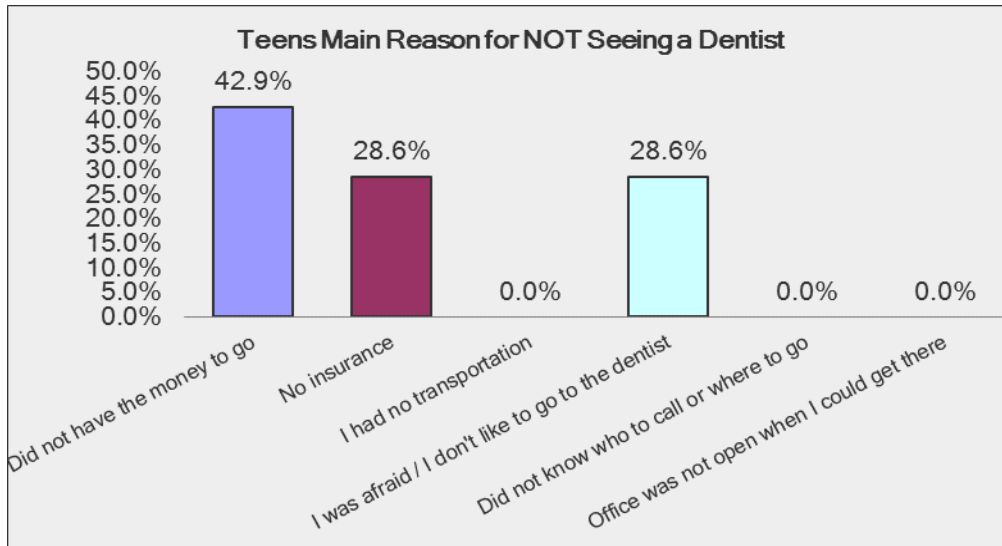
18. Do you have a dental home (dentist you see on a regular basis)?



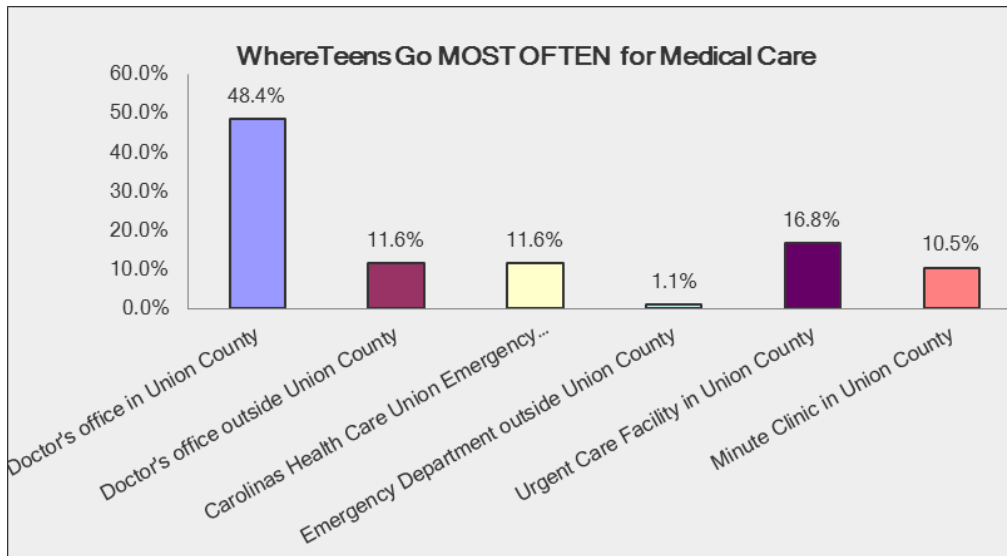
19. Was there a time during the last 12 months when you needed to see a dentist but did not?



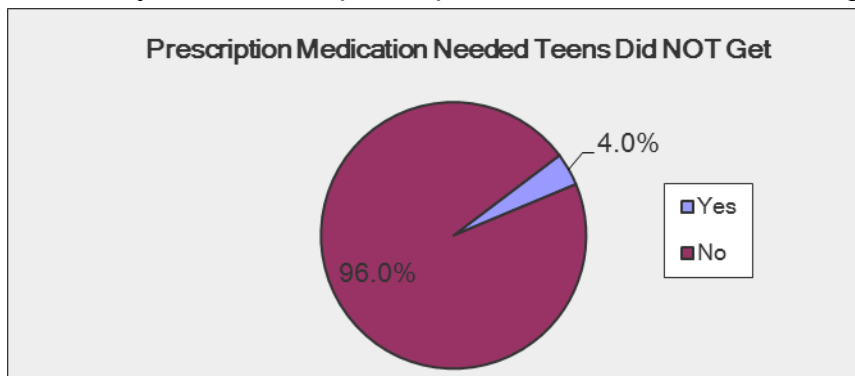
20. If yes, what was the main reason that you did not see a dentist?



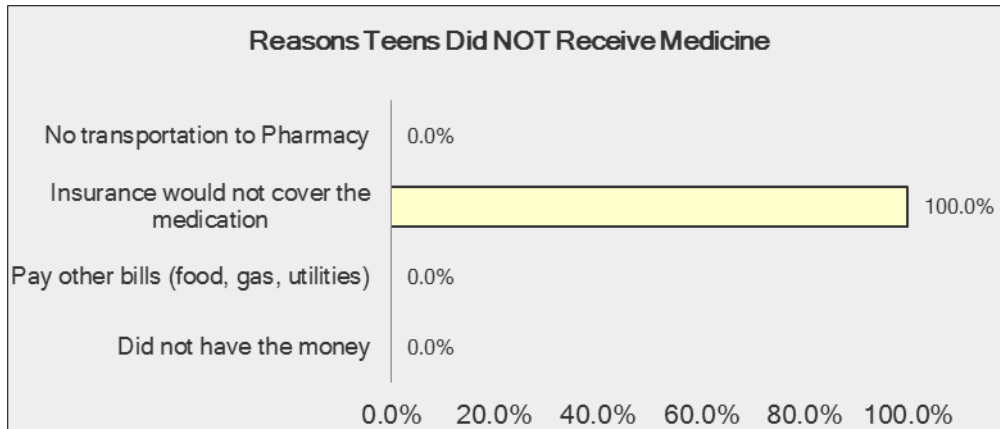
21. Where do you go MOST OFTEN when you are sick and need medical care? Choose ONLY one.



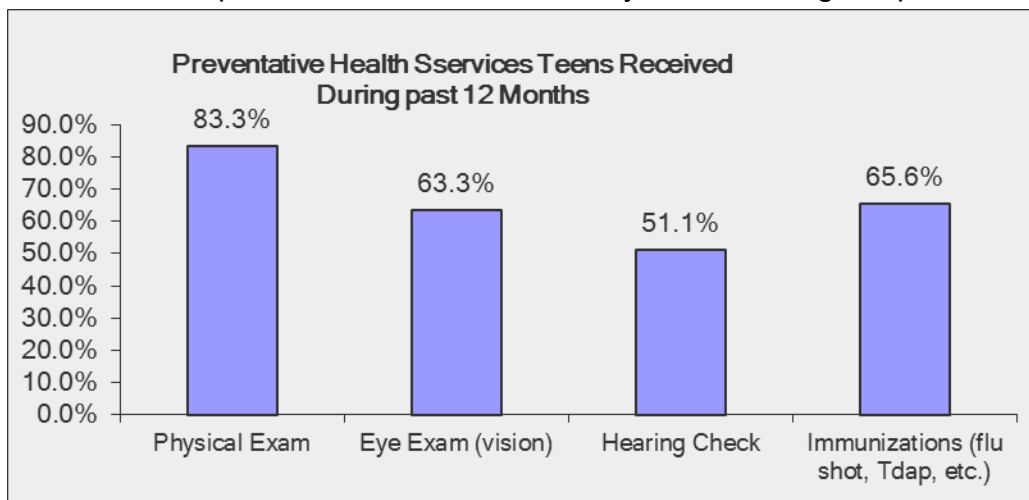
22. Have you needed a prescription medication and did not get it?



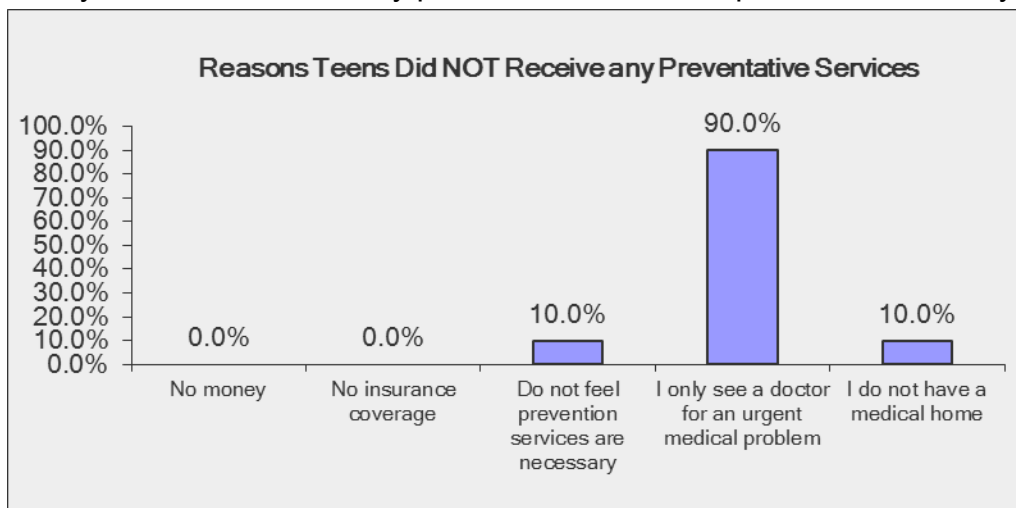
23. If yes, why did you not get your medicine?



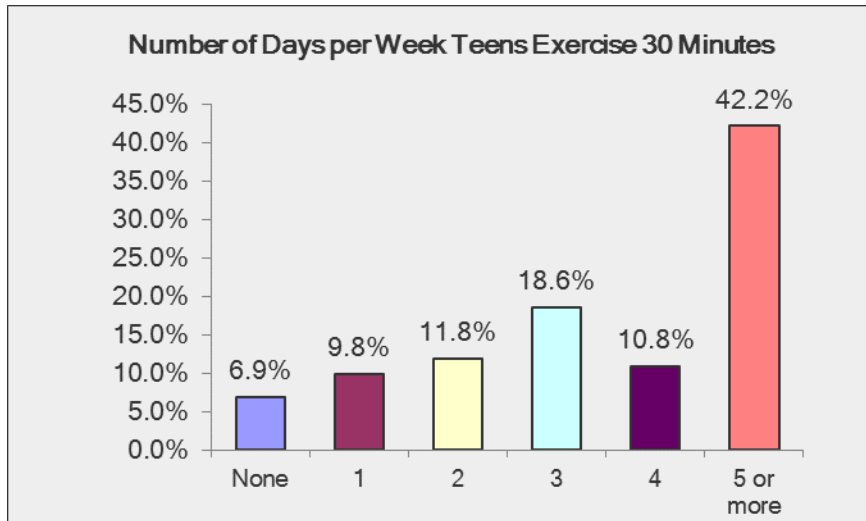
24. Check ALL preventative health services you had during the past 12 months.



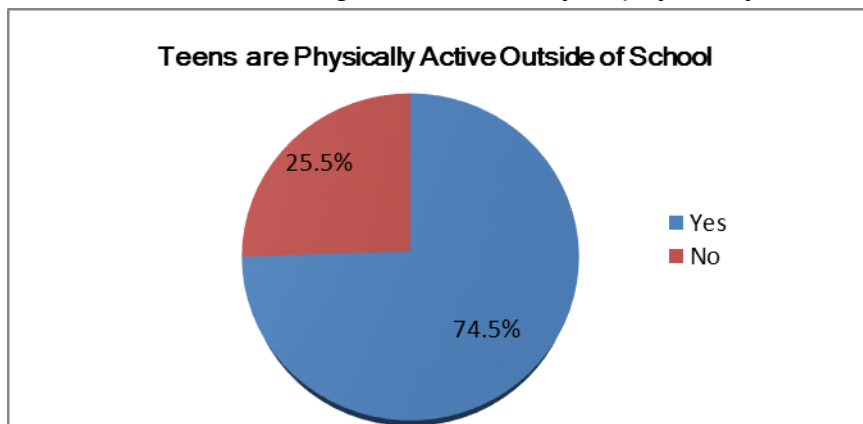
25. If you did not receive any preventative services, please indicate why. Check ALL that apply.



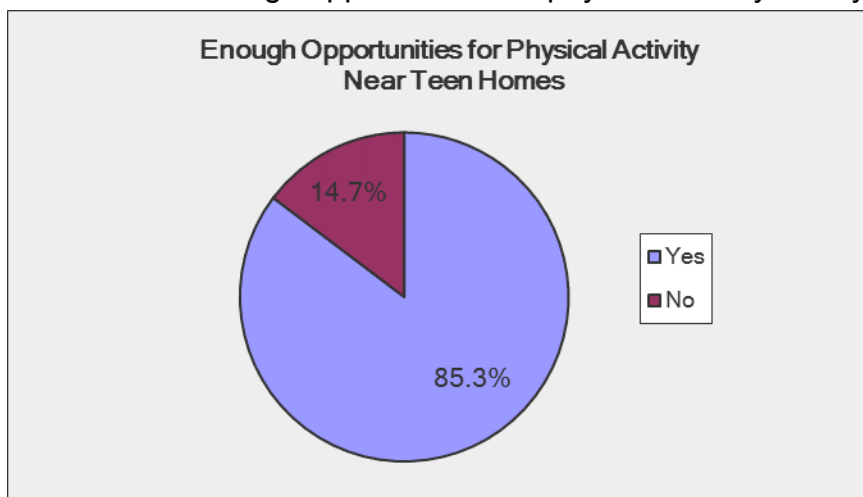
26. How many days a week do you normally get 30 minutes of exercise?



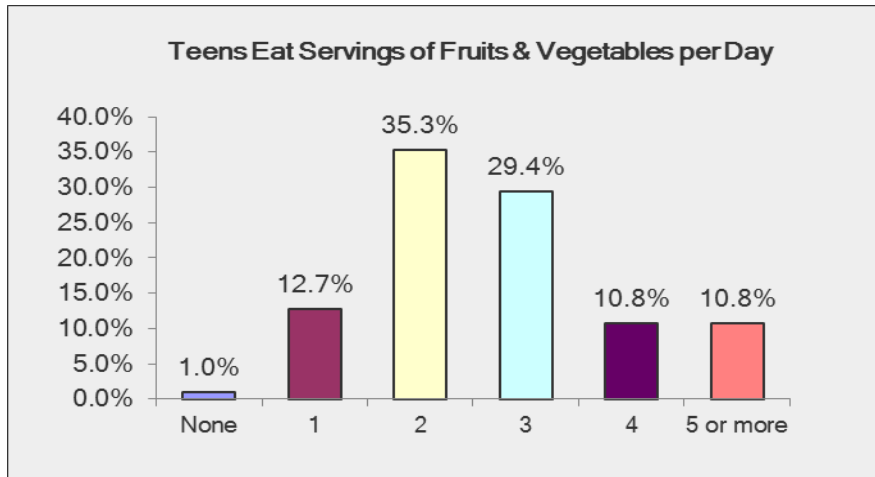
27. Outside of exercising at school, are you physically active?



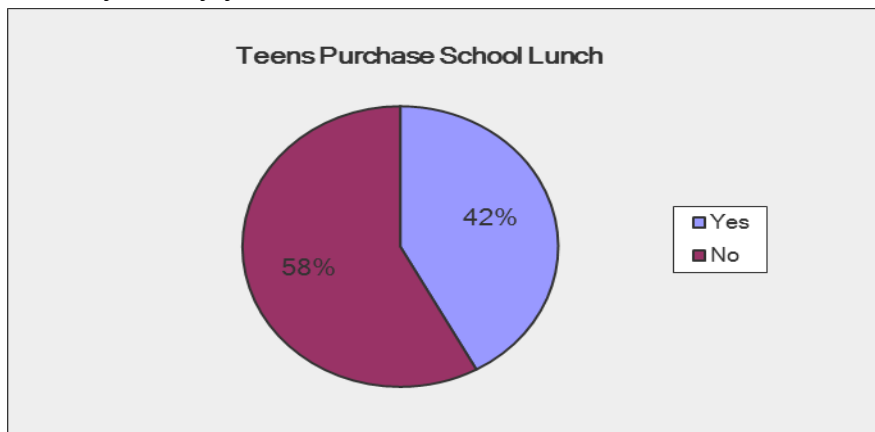
28. Are there enough opportunities for physical activity near your home?



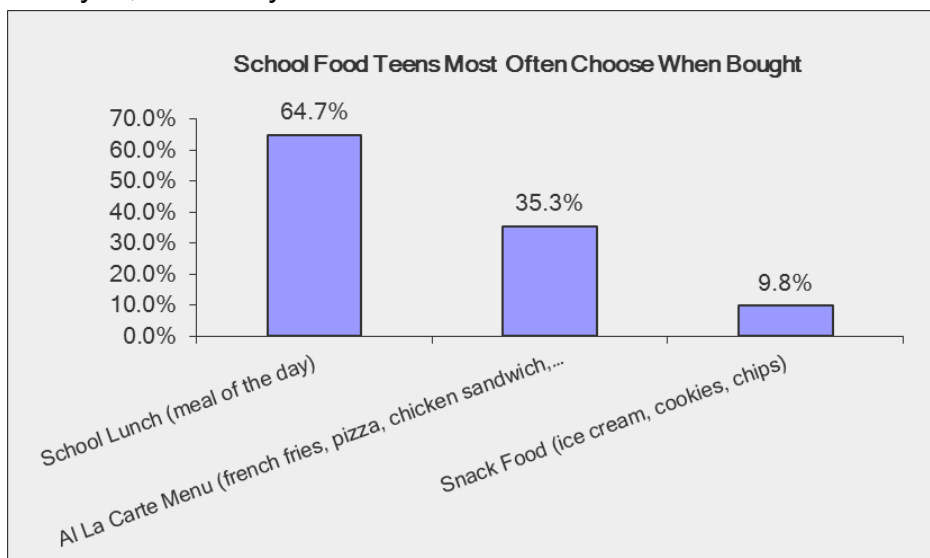
29. How many servings of fruits and vegetables do you normally eat per day?



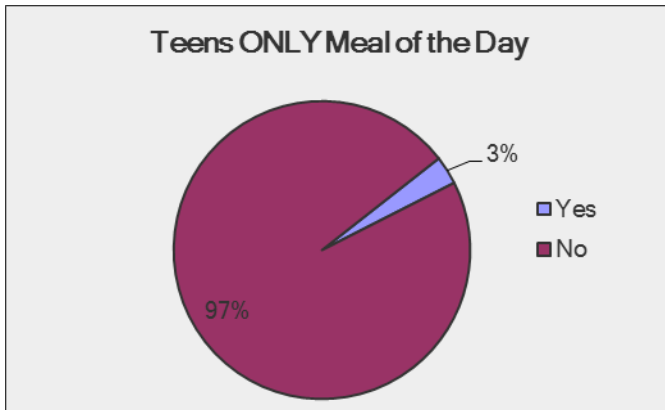
30. Do you buy your lunch at school?



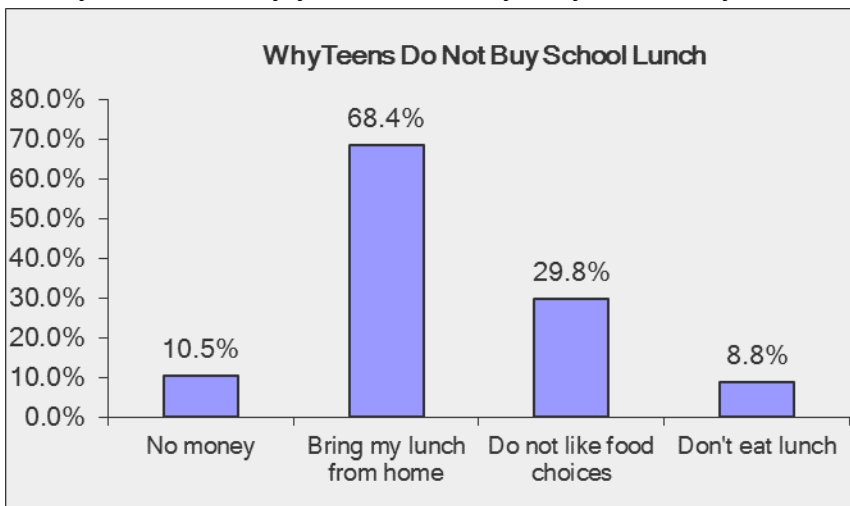
31. If yes, what do you eat most often?



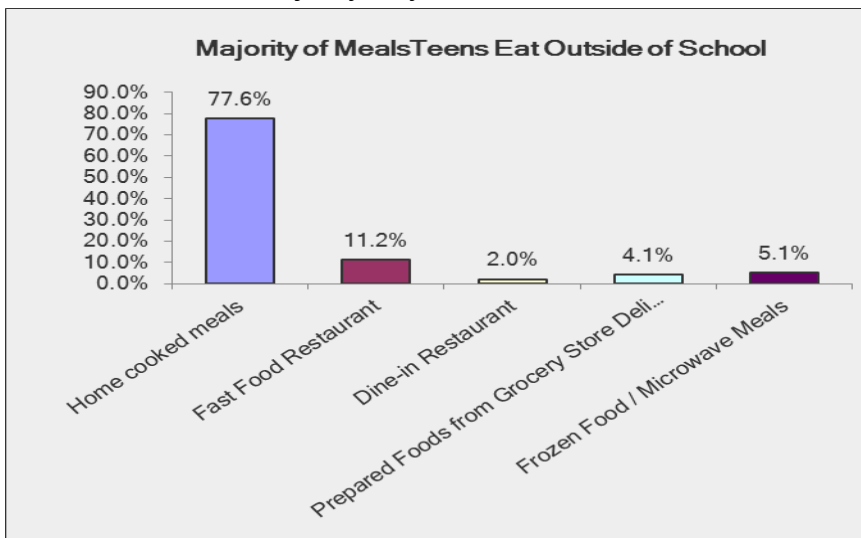
32. Is this your ONLY meal of the day?



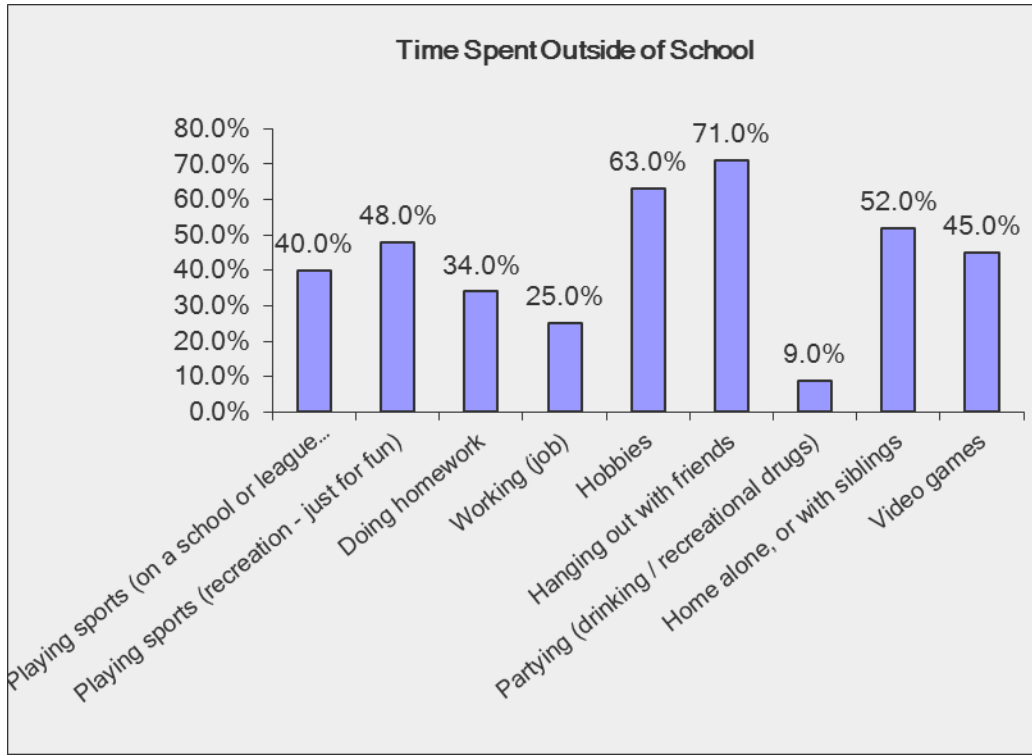
33. If you do not buy your lunch, why do you not buy lunch?



34. Where do the majority of your meals outside of school come from?



35. After school gets out each day, or during the summer how do you spend your time?
Check ALL that apply:



Adult Survey Response Narrative

A total of 1,128 surveys were completed representing a balance of race and ethnicity. The gender responses were skewed with more females than males completing surveys. The majority of respondents were from Monroe, Indian Trail and Waxhaw.

The adult survey was implemented through random sampling in the Union County Jury Pool. Convenience sampling was also conducted countywide at health fairs, faith community, Employment Security Commission, Health Department, Social Services, and Community Health Services.

The majority of respondents indicated that they had private health insurance, with 21% claiming Medicaid and 15% with no insurance coverage at all.

When asked about economic status having an impact on health status, respondents did not indicate this as an issue.

Health concerns that were reflected in responses included hypertension, dental health and vision issues. Mental health concerns included depression, anxiety and sleep issues.

Behaviors considered contributing factors to poor health were: lack of exercise, poor eating habits, drug and alcohol abuse.

The majority of respondents viewed their weight as normal or overweight. They did not view their weight as having an impact on their health.

Respondents get health information from either their doctor or the Internet.

Physical activity level responses ranged from 1 day per week to 3 days per week.

More than half of respondents purchase locally grown fruits and vegetables.

The majority of respondents do not keep an emergency supply of medicines on hand. A small percentage (11.3%) indicated changing the way they take prescription medicine without speaking to a doctor first. The rationale for the changes was saving money, or not liking the way the medicine made them feel.

Physical exams were routine for most respondents. Other prevention services received were: blood pressure checks, cholesterol checks, eye exams and glucose checks. For respondents that did not receive prevention services it was due to either a lack of insurance or money, or they opt out of prevention services until an acute condition occurs.

Mental Health services were not sought by respondents. For people that needed mental health services and were unable to access services it was due to either a lack of insurance or money. Even with the fiscal resources or coverage, they indicated not knowing who or where to call.

Access to prescription medication was an issue for 19.5%. These respondents indicated money and lack of insurance as prohibiting factors.

The large majority of respondents indicated more healthy behaviors than unhealthy. People claim to eat home cooked meals, not smoke or drink alcohol. The majority of smokers want to quit. Only 2.5% smoke e-cigarettes, 53% of those folks were previous smokers. Only 1.5% of all respondents admitted to using marijuana or other recreational drugs. Less than half of the surveys specified using alcohol, and 8.6% of drinkers saw it as having negative effects on their health.

Less than 5% admitted to drinking and driving. However, more than half talk on their cell phone and drive, 13.5% text and drive.

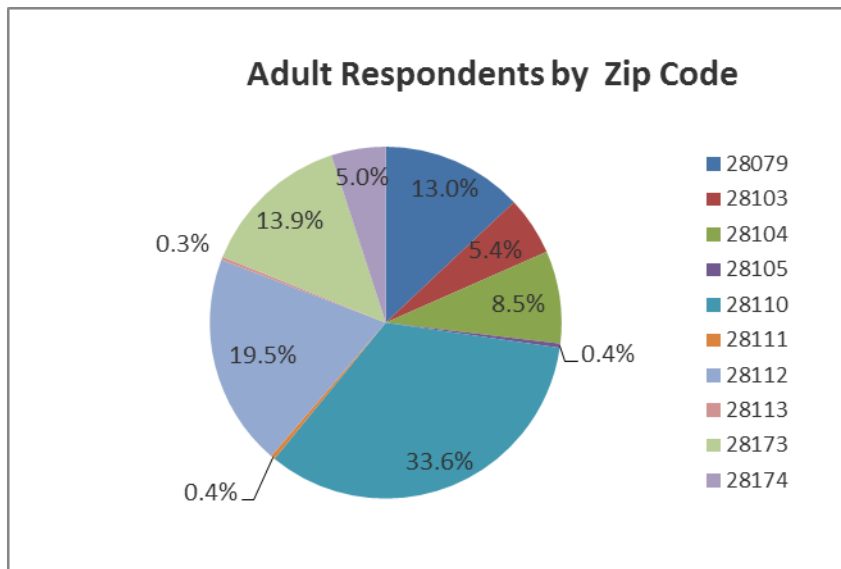
Environmental Health concerns with the most concern being around vector control (mosquitos), followed by preserving greenspace and outdoor air quality.

Drinking water has historically been a concern for county residents. Over 60% of survey respondents had county water, more than half of those folks were concerned about what is in the water, and had specific concerns around the taste of the water.

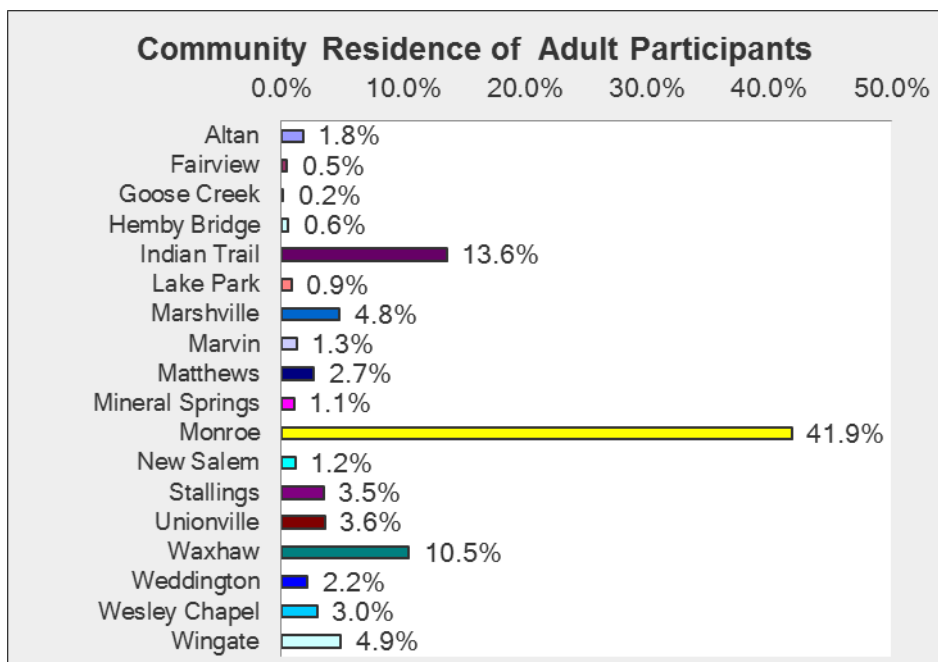
The multifaceted comprehensive approach to data collection, data reporting, data analysis and priority setting is to ensure the outcome is a collaborative community approach to Public Health planning around health within Union County.

2016 Union County CHA Adult Survey Responses

1. What is your Zip Code?

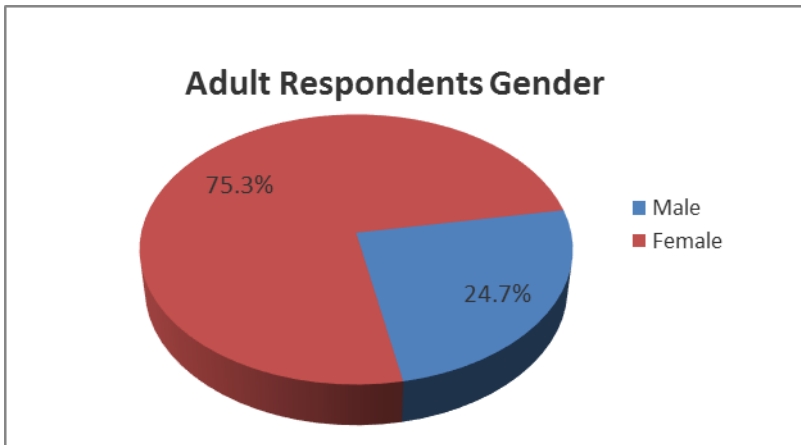


2. Which Town or Municipality in Union County do you reside?

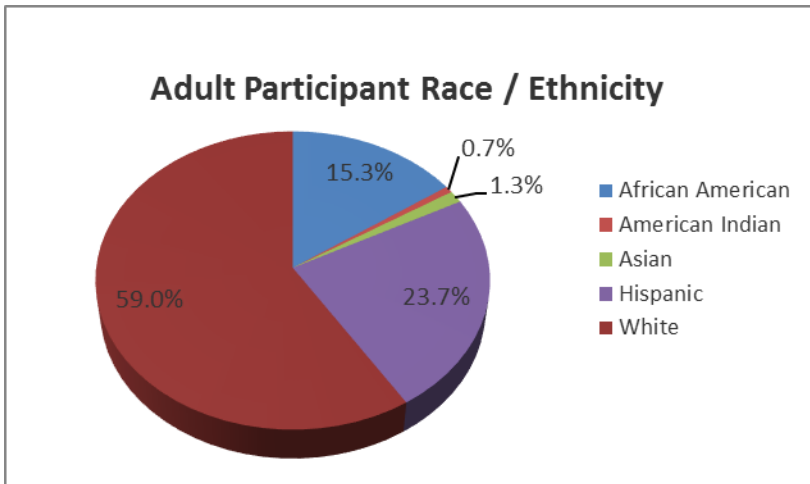


3. What is your Age? (Age range surveyed 18 – 61 years)

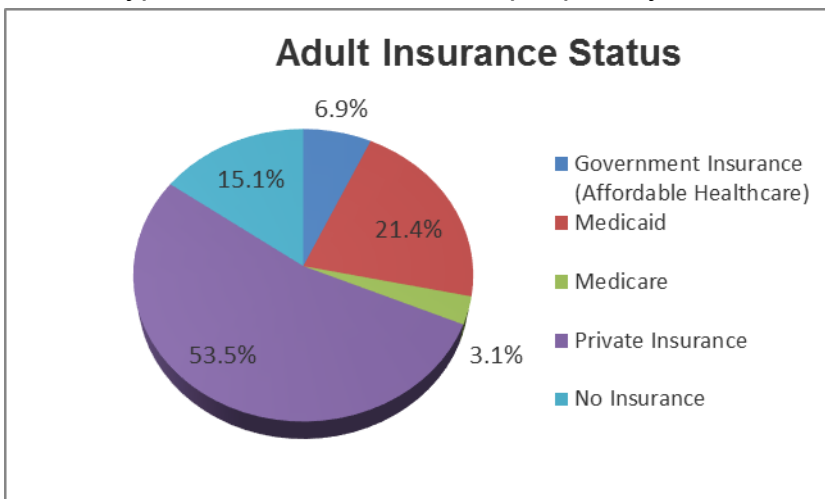
4. What is your Gender?



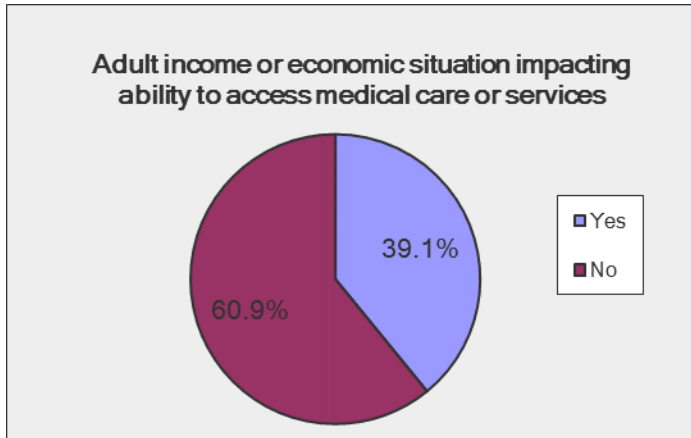
5. What is your Race?



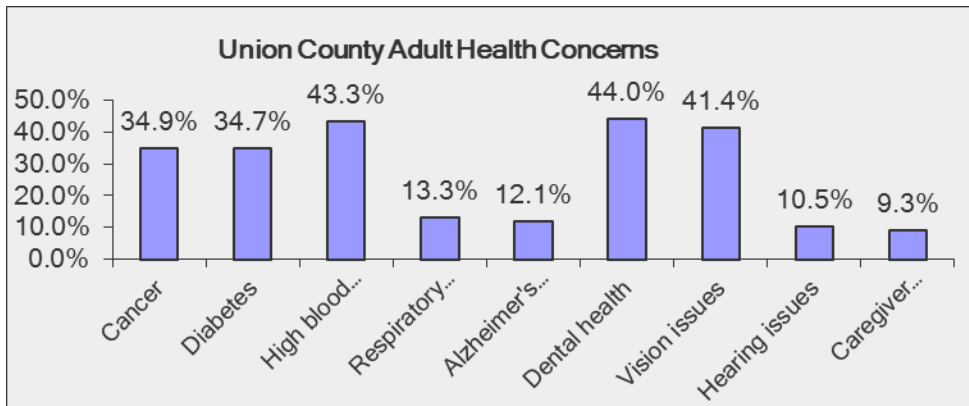
6. What type of health insurance do people in your home have?



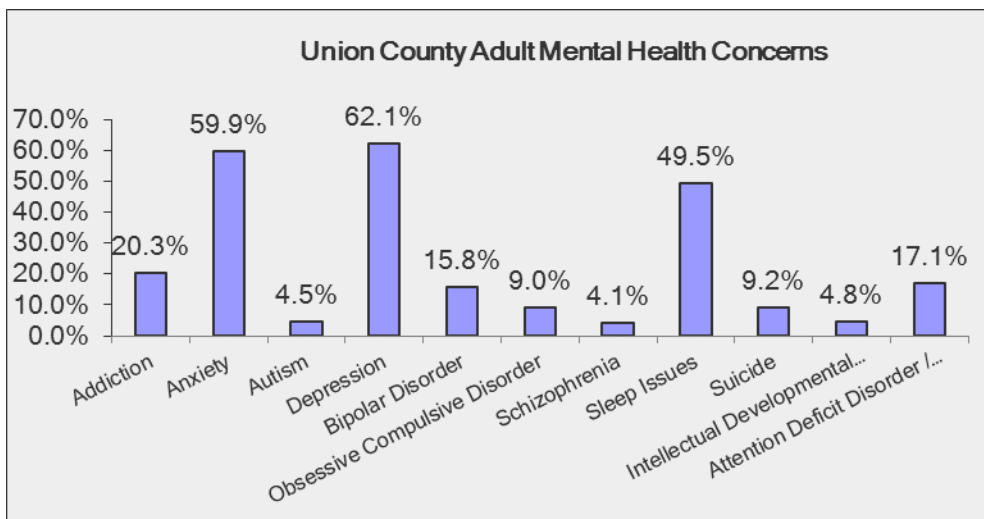
7. Do you feel your income or economic situation is negatively impacting your ability to access medical care or services?



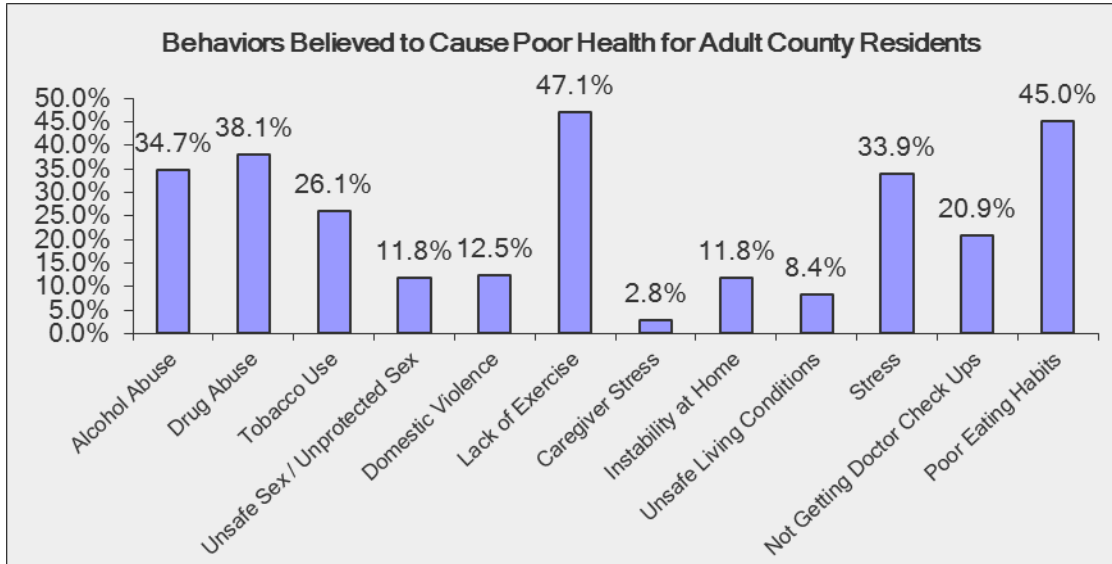
8. Listed below are health concerns. Please check three that MOST concern you regarding your own health.



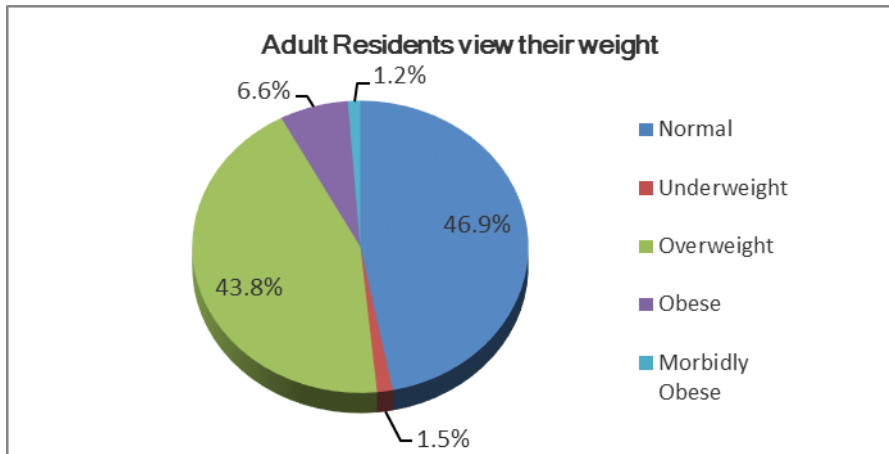
9. Listed below are mental health concerns. Please check three that MOST concern you.



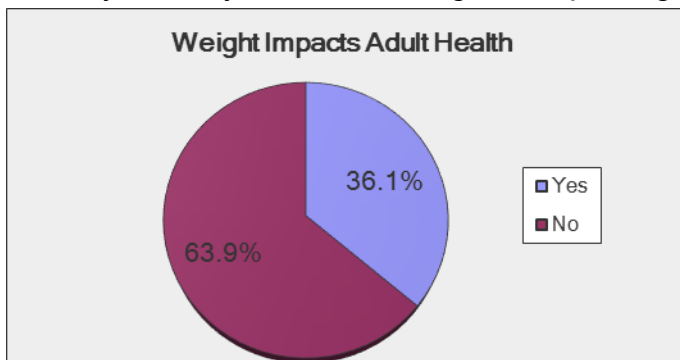
10. Listed below are behaviors that cause poor health. Please check up to three most critical behaviors you feel keep people in Union County from being healthy.



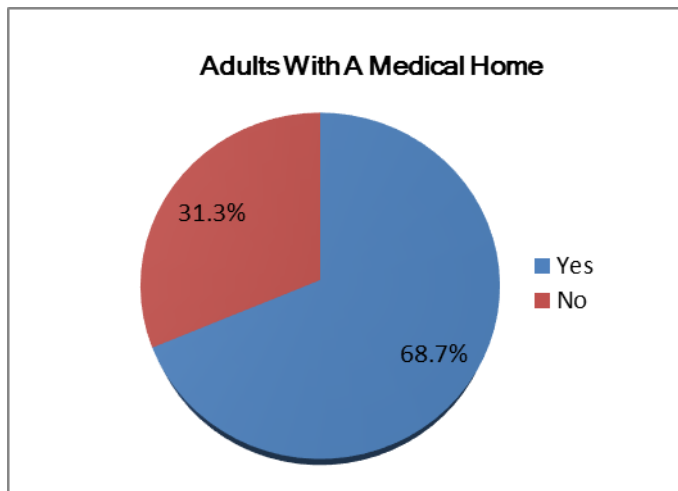
11. How do you view your weight?



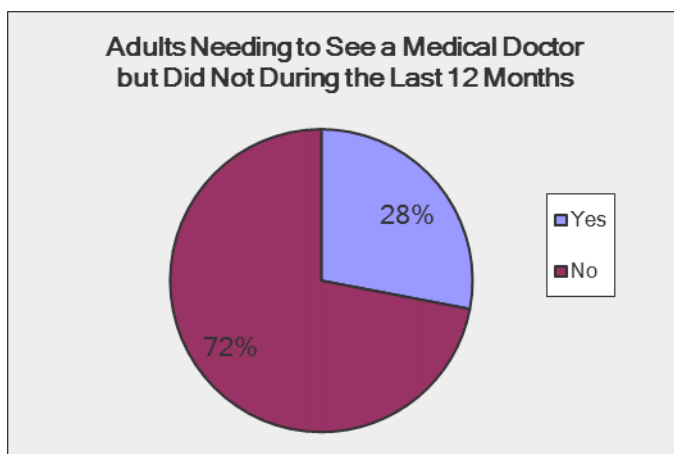
12. Do you feel your current weight is impacting your health status?



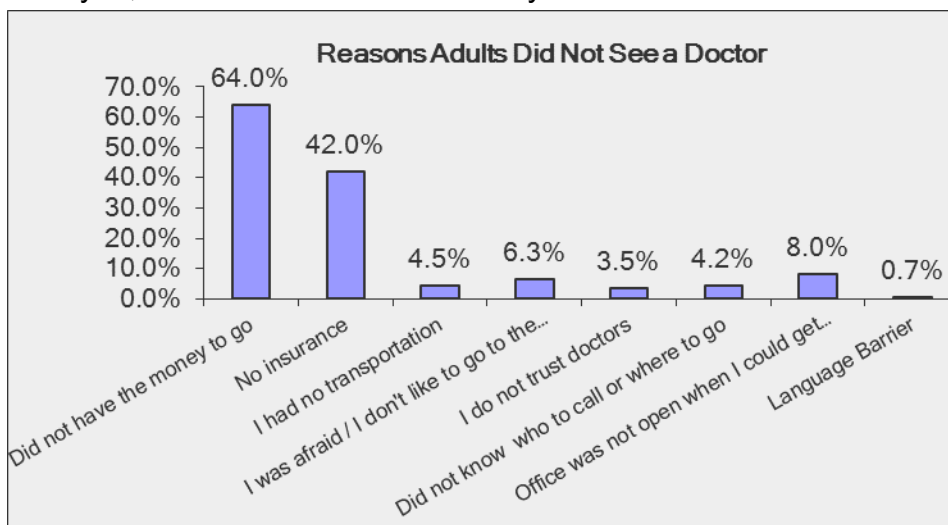
13. Do you have a medical doctor you see on a regular basis?



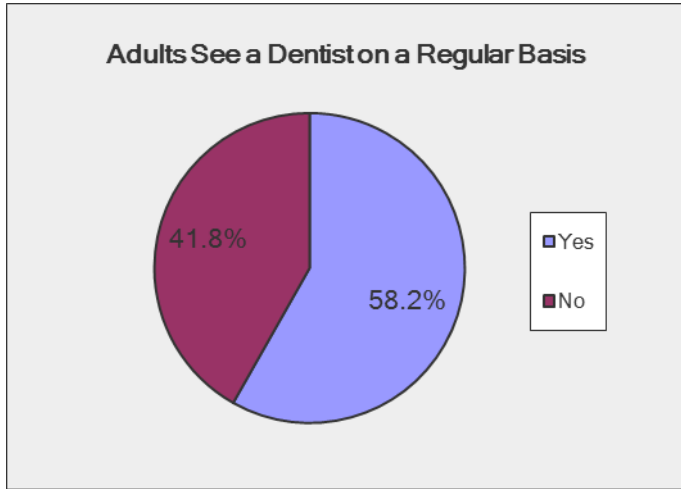
14. Was there a time that you needed to see a doctor during the last 12 months but did not?



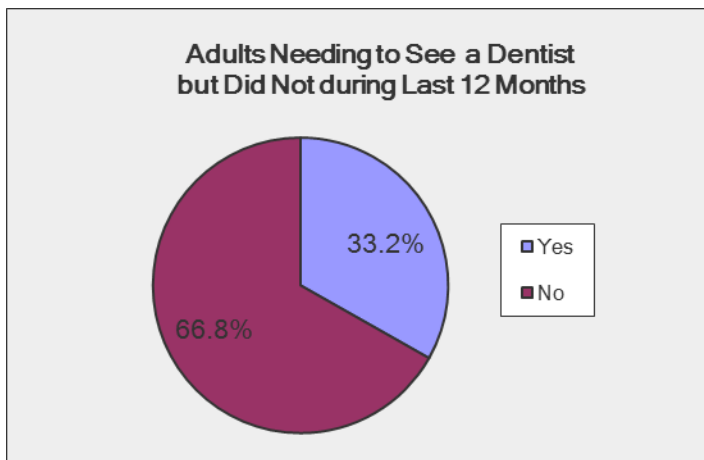
15. If yes, what was the main reason you did not see a doctor?



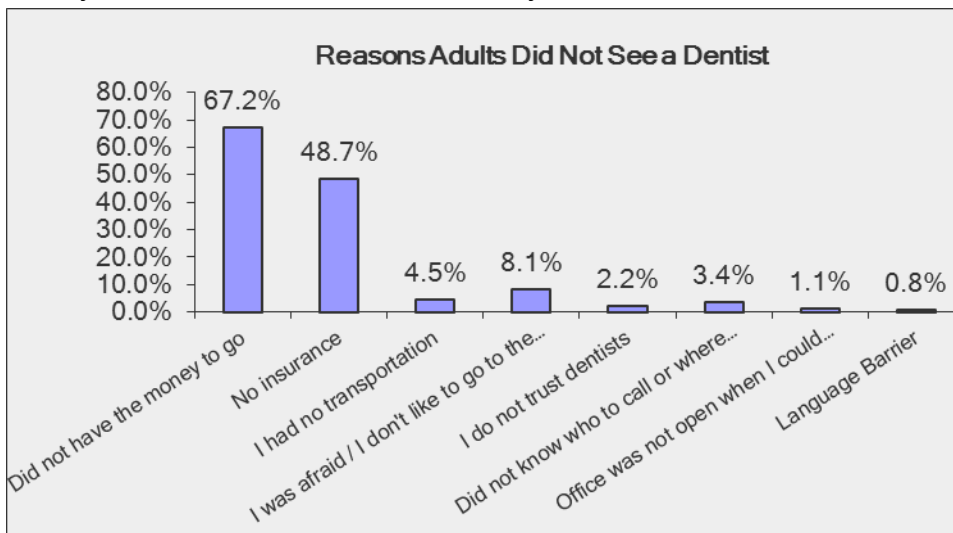
16. Do you see a dentist on a regular basis?



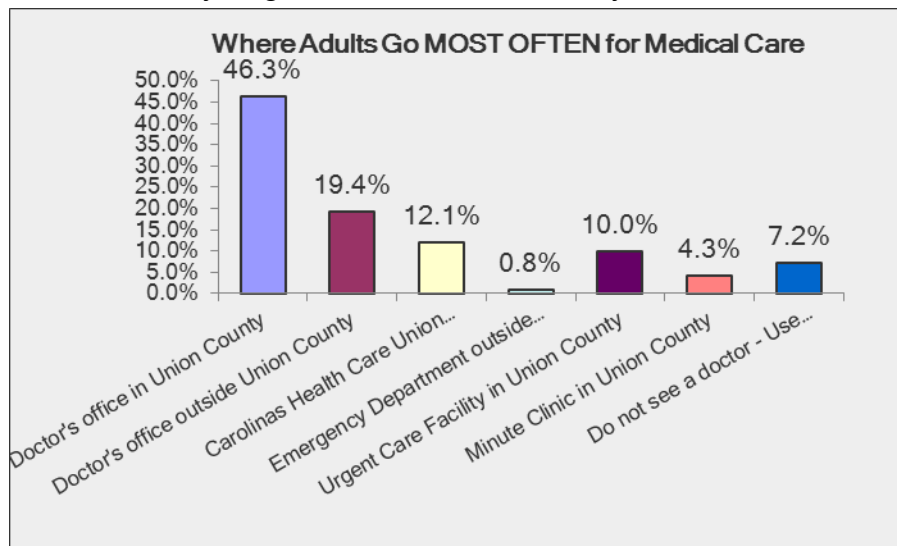
17. Was there a time during the last 12 months when you needed to see a dentist but did not?



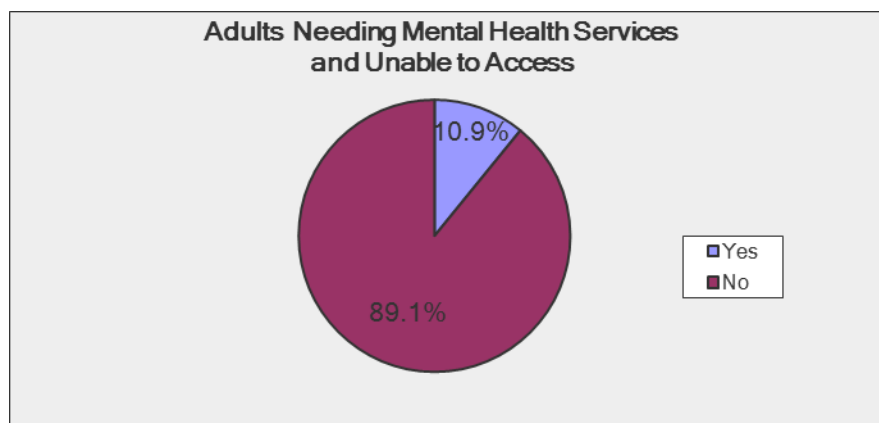
18. If yes, what was the main reason you did not see a dentist?



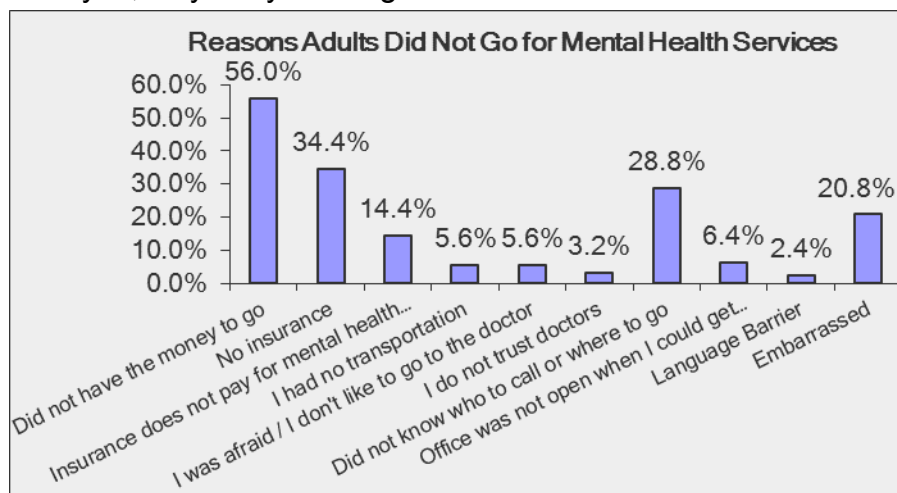
19. Where do you go MOST OFTEN when you are sick and need medical care? Choose ONLY one.



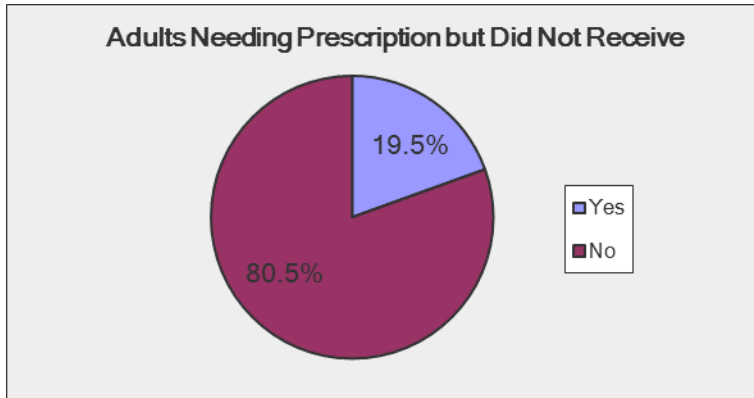
20. Have you ever felt that you needed mental health services and did not get them?



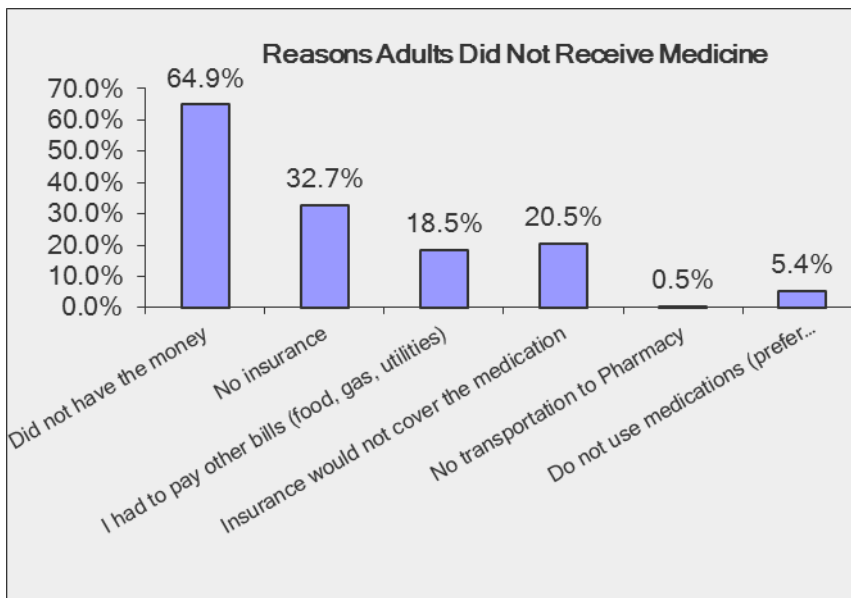
21. If yes, why did you not go for mental health services? Check ALL that apply:



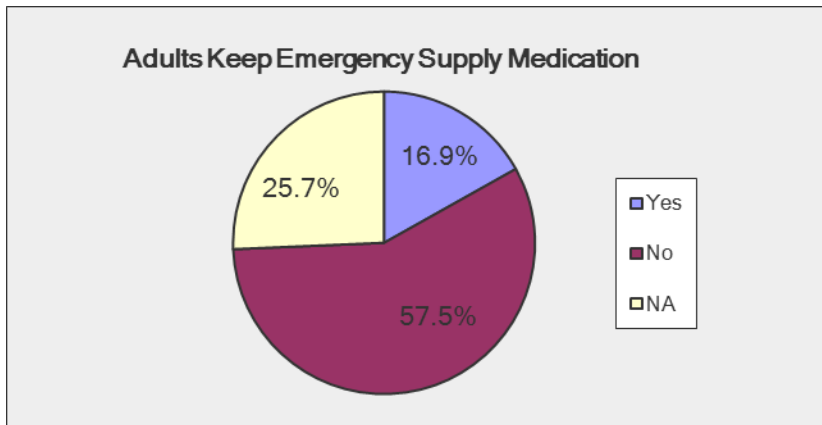
22. Have you needed a prescription medication and did not get it?



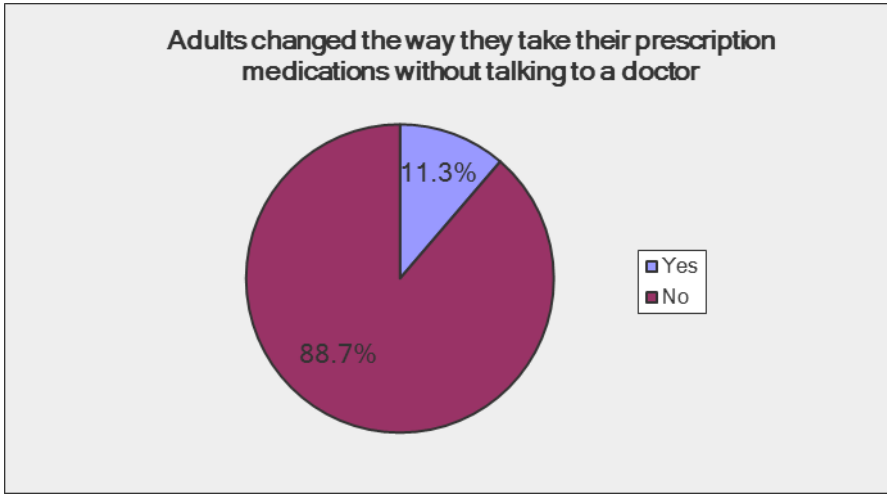
23. If yes, why did you not get your medicine?



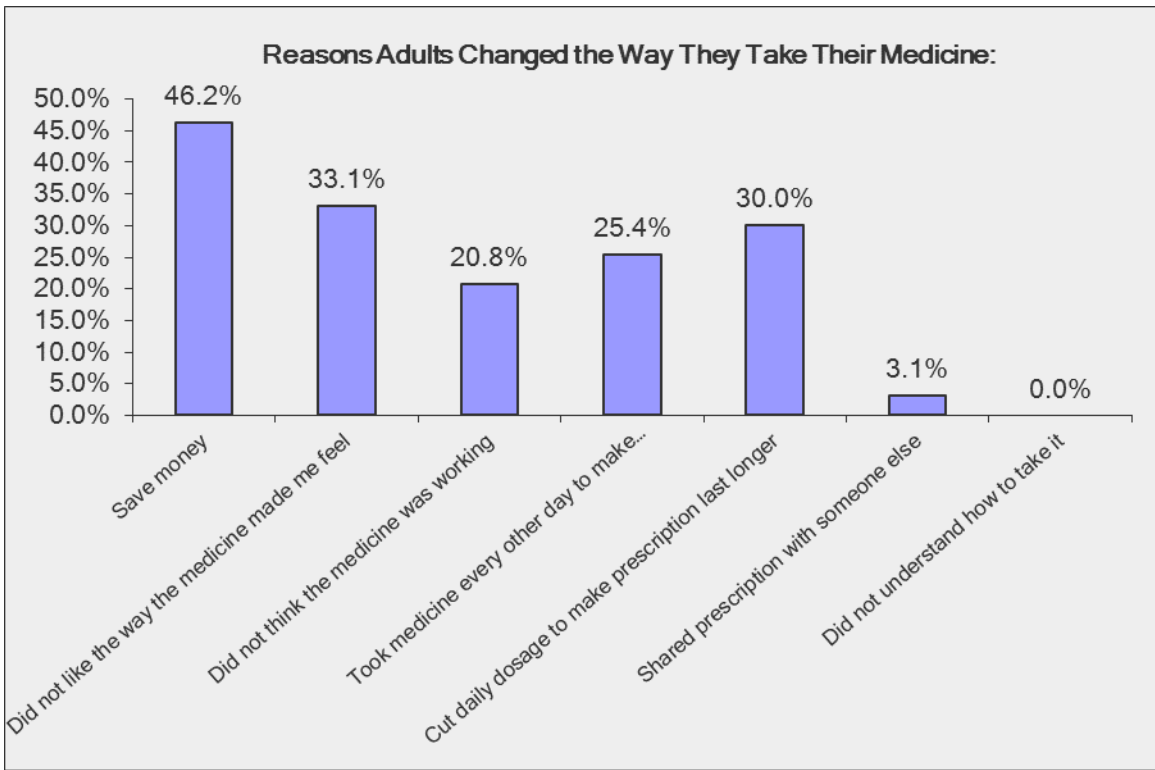
24. Do you keep an emergency supply of your medications?



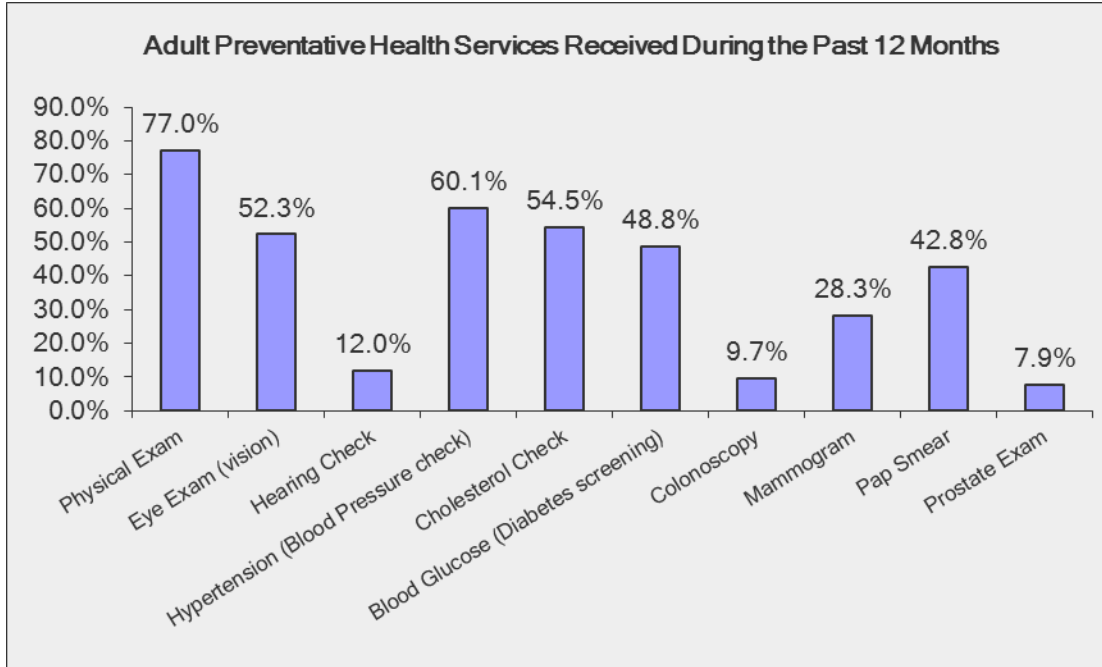
25. Have you changed the way you take your prescription medications without talking to a doctor?



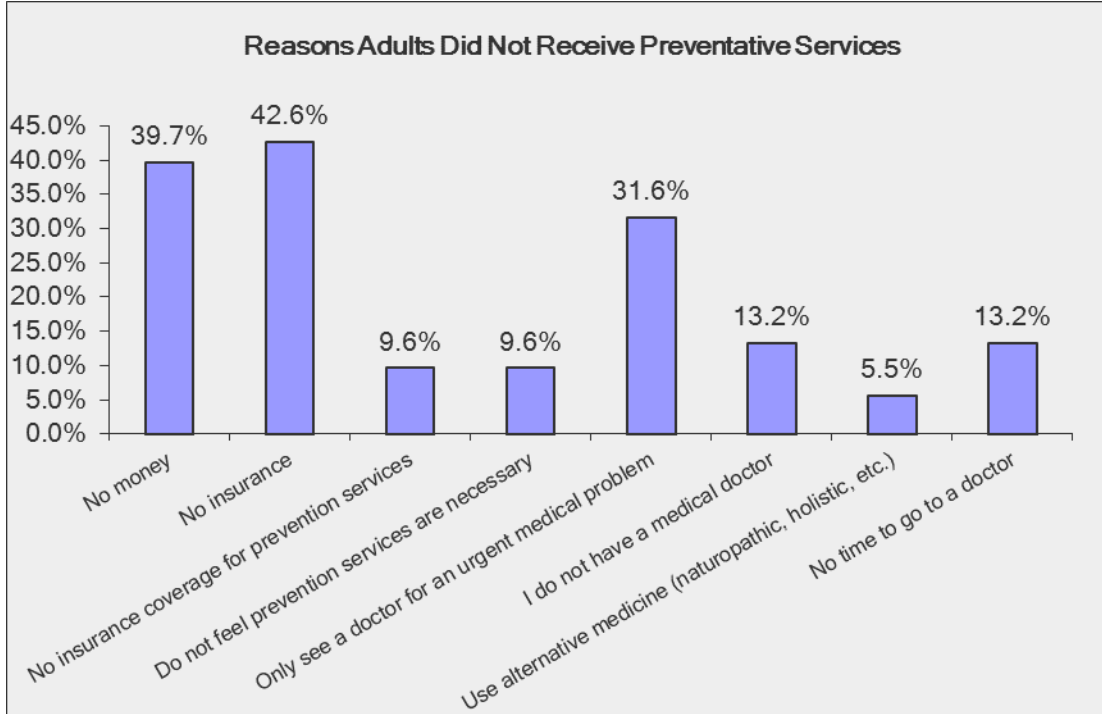
26. If yes, check all the reasons you changed the way you take your medicine:



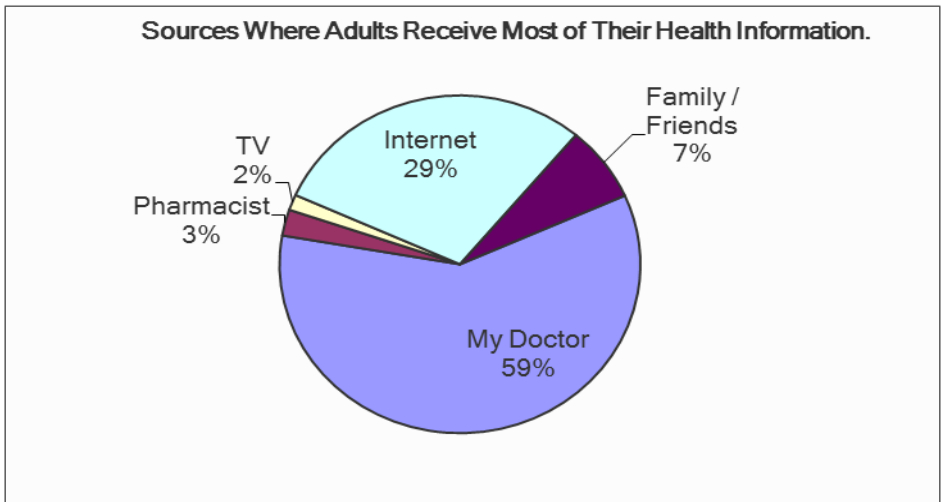
27. Check ALL preventative health services you had during the past 12 months:



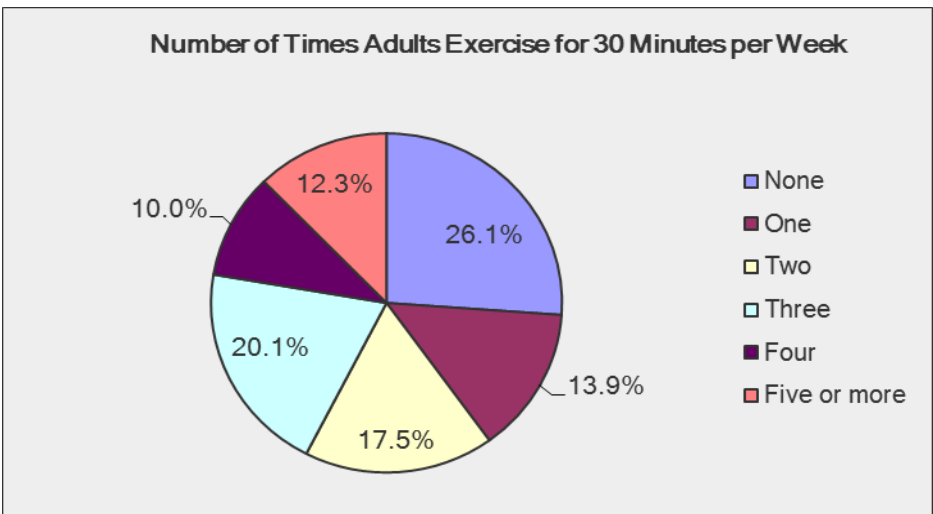
28. If you did not receive any preventative services, please indicate why. Check ALL that apply.



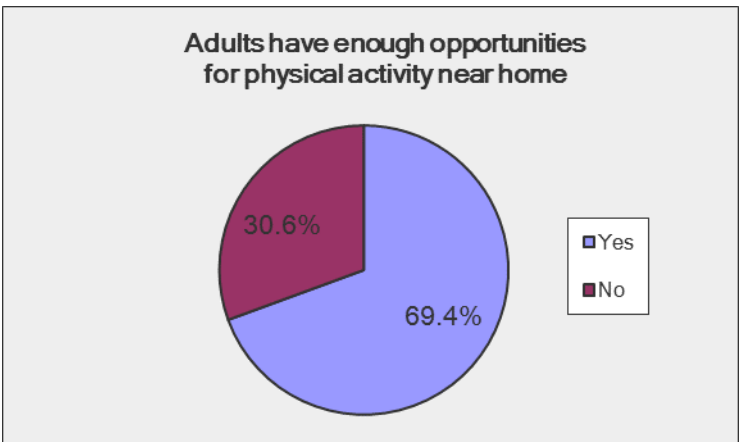
29. Where do you get most of your health information? Check ONLY one.



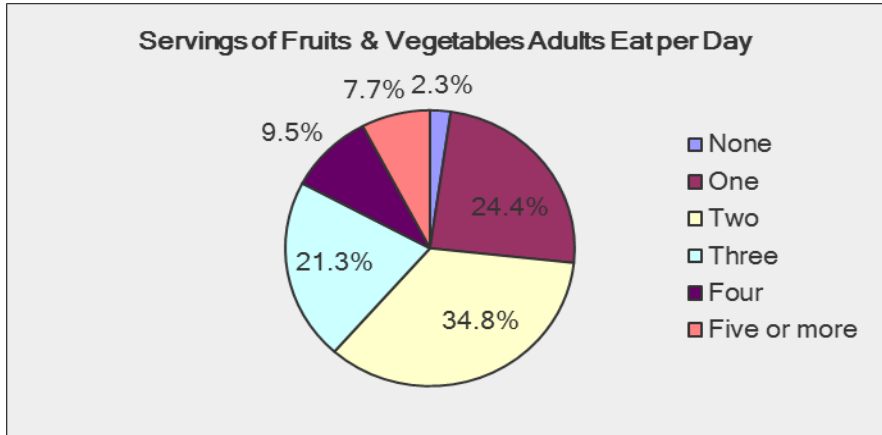
30. How many days a week do you normally get 30 minutes of exercise for fitness?



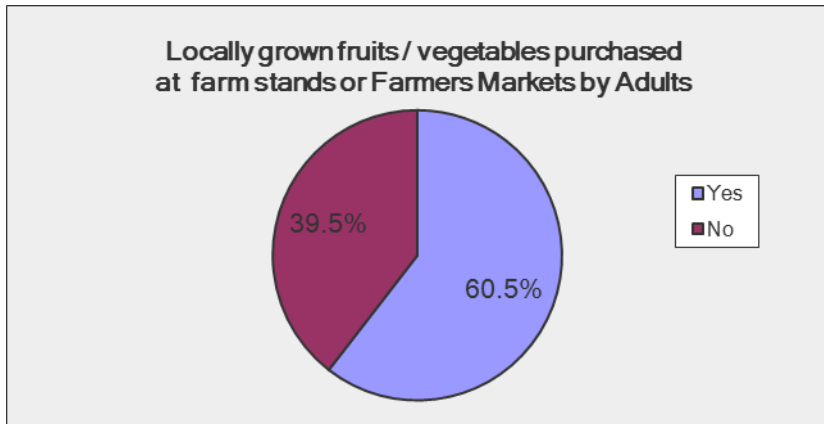
31. Are there enough opportunities for physical activity near your home?



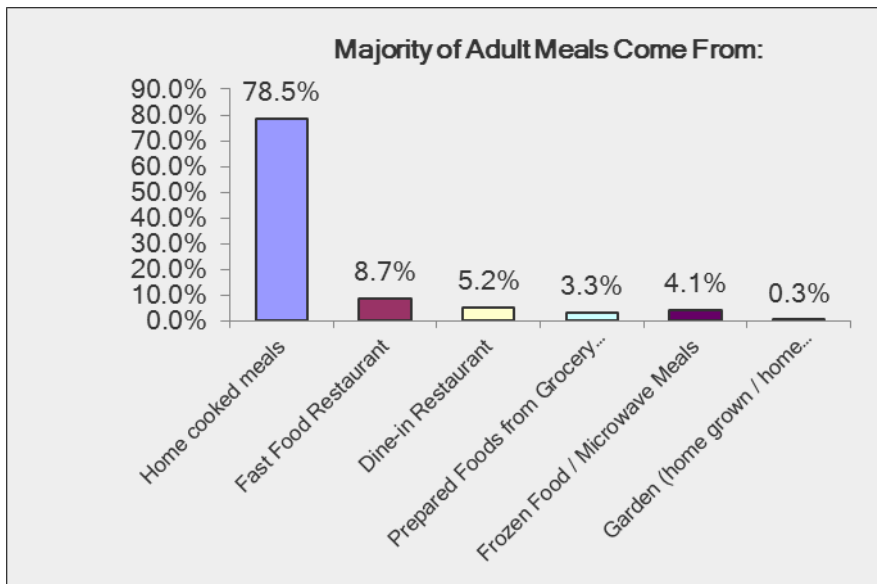
32. How many servings of fruits and vegetables do you normally eat per day?



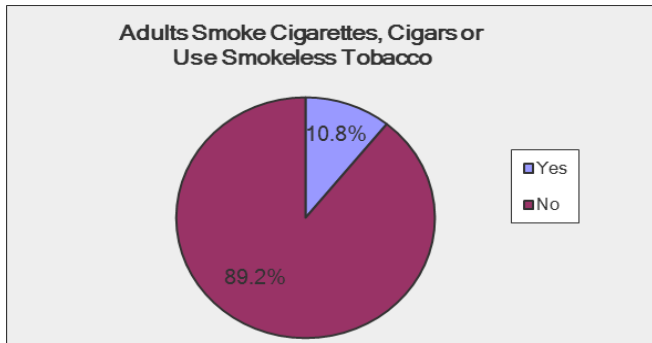
33. Do you purchase locally grown fruits / vegetables at retail markets, farm stands or Farmers Markets?



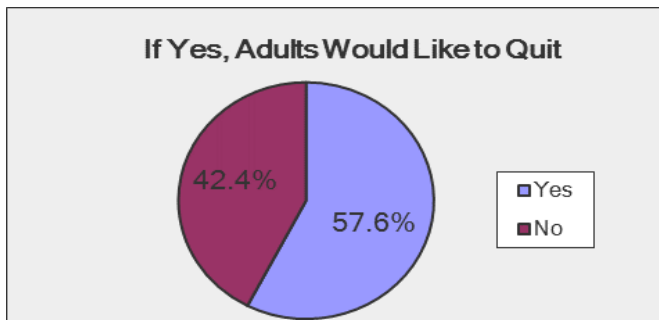
34. Where do the majority of your meals come from?



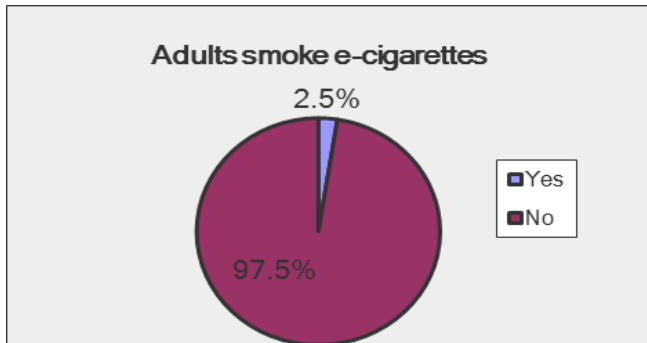
35. Do you smoke cigarettes, cigars or use smokeless tobacco?



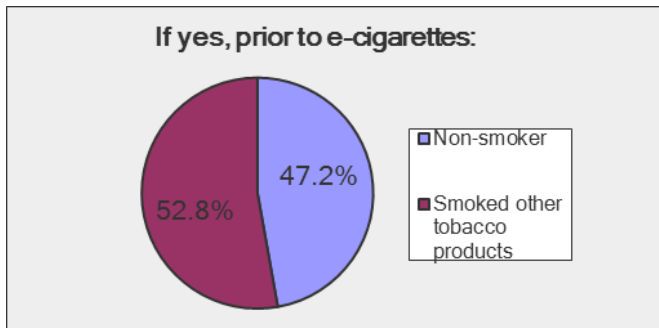
36. If so, would you like to quit?



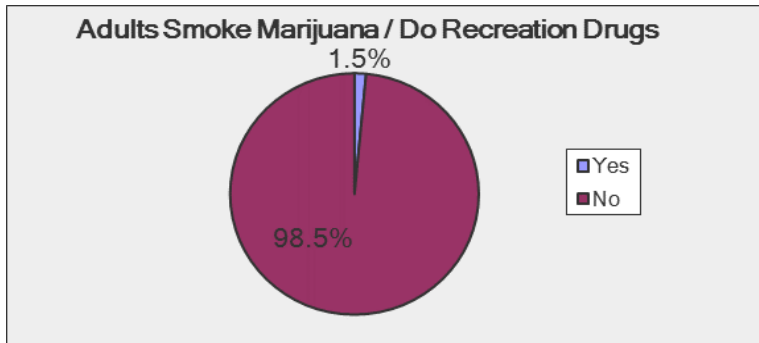
37. Do you smoke e-cigarettes?



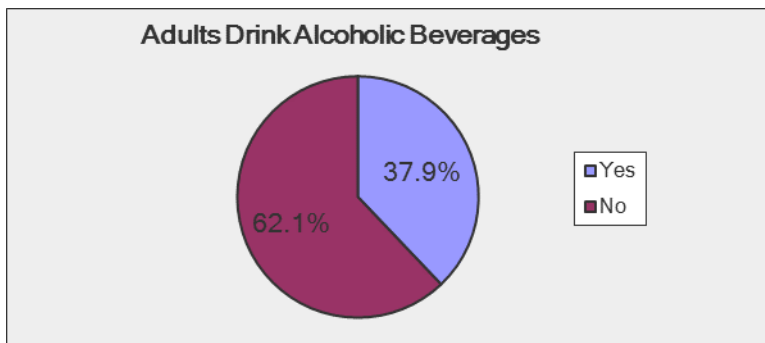
38. If yes, prior to e-cigarettes I _____: (Check one answer)



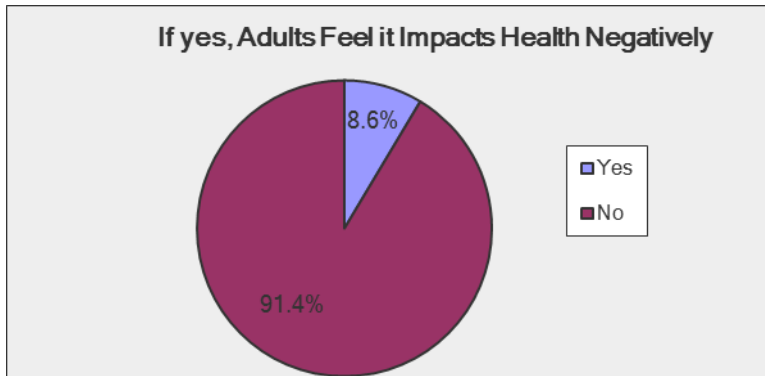
39. Do you smoke marijuana / do recreation drugs?



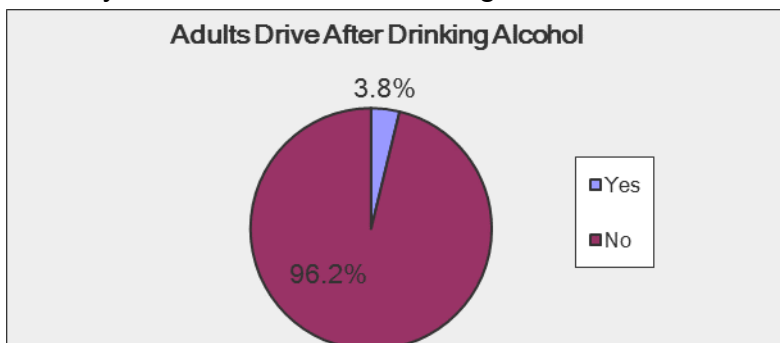
40. Do you drink alcoholic beverages?



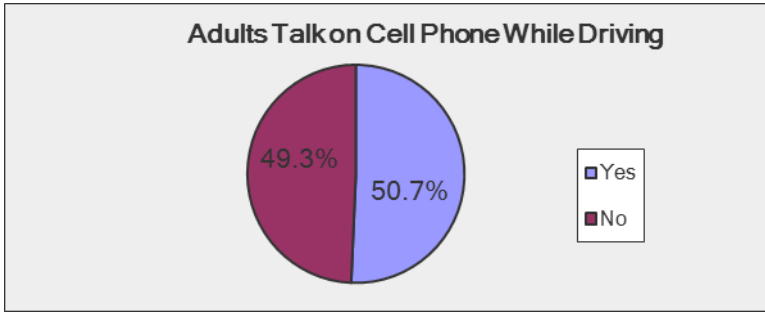
41. If yes, do you feel it impacts your health negatively?



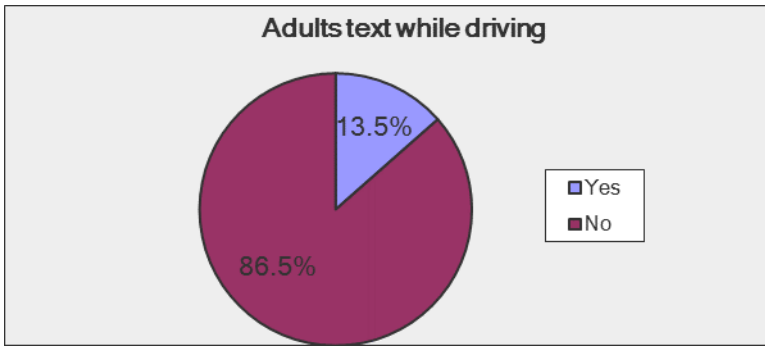
42. Do you ever drive after drinking?



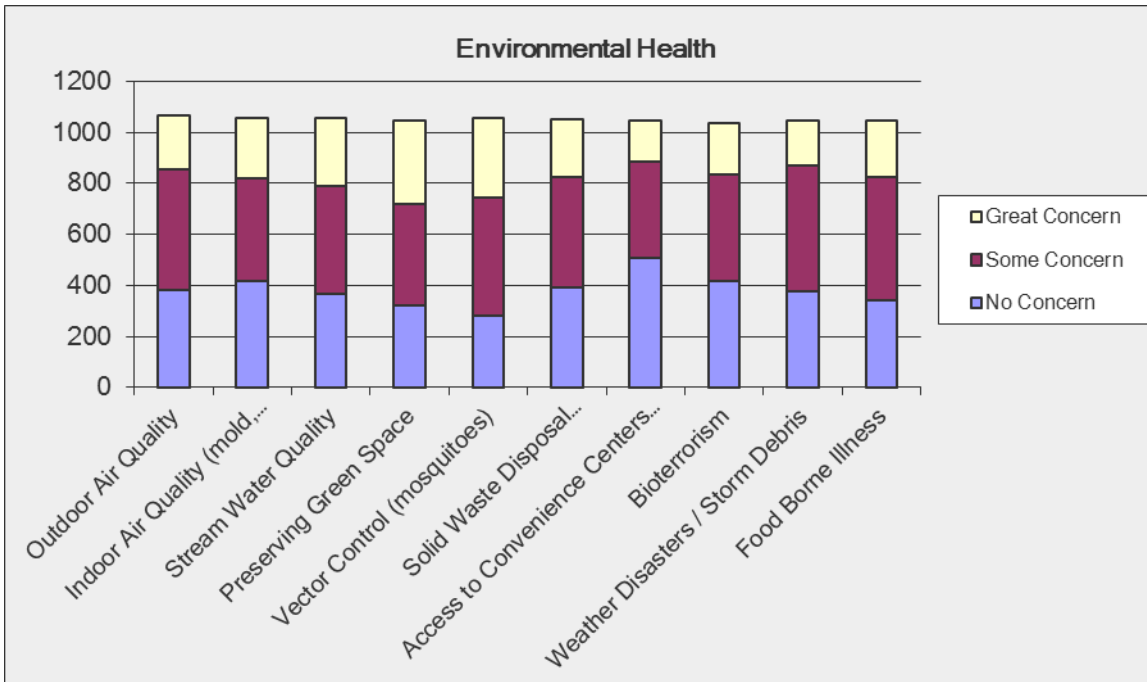
43. Do you talk on your cell phone while driving?



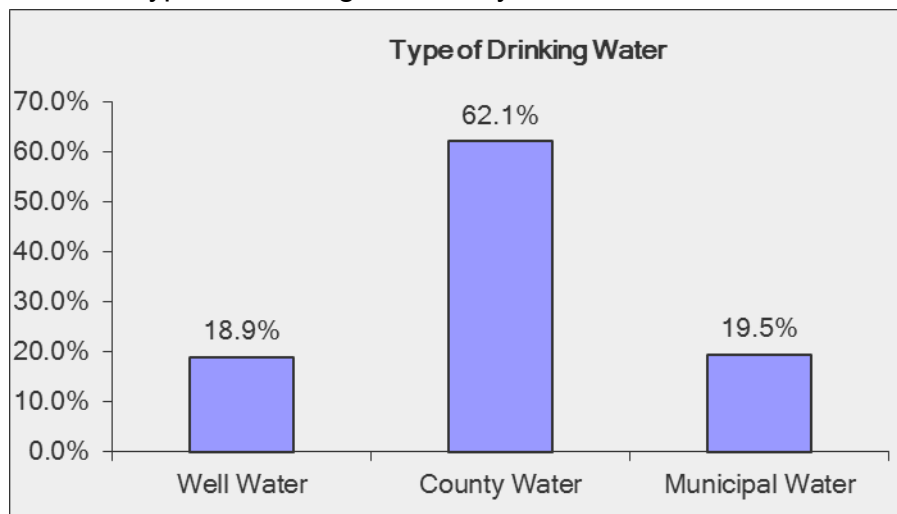
44. Do you text while driving?



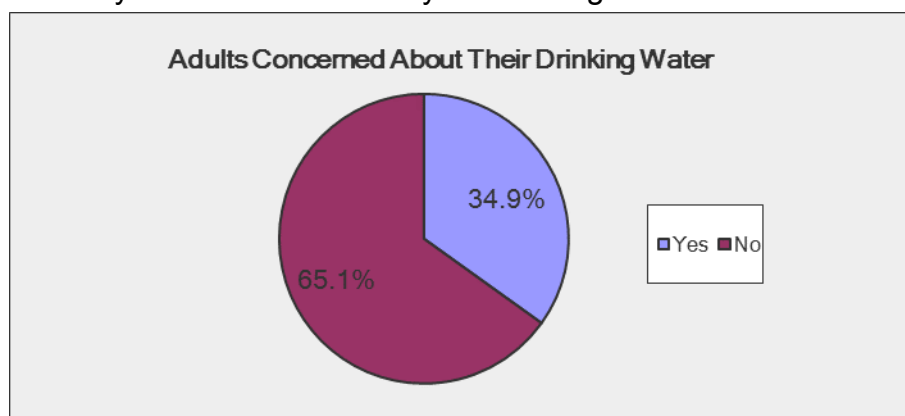
45. Environmental Health (Check one answer per row)



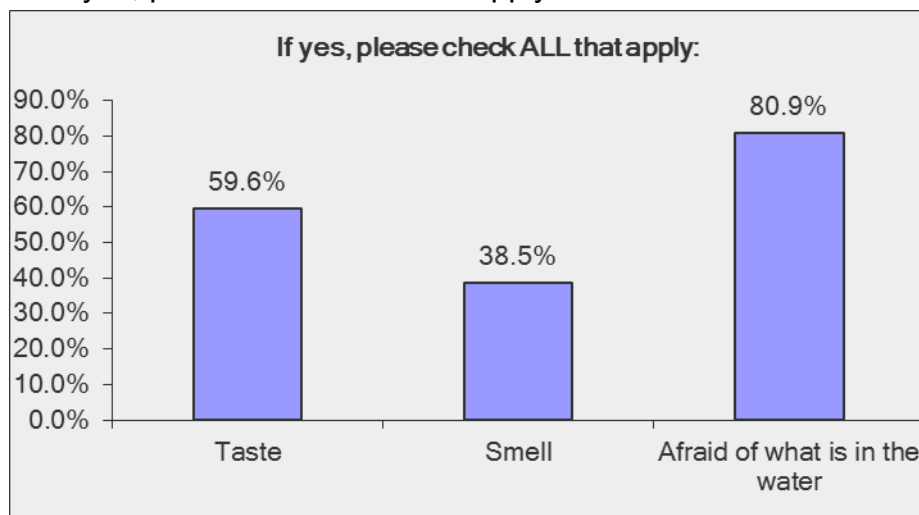
46. What type of drinking water do you have?



47. Are you concerned about your drinking water?



48. If yes, please check ALL that apply:



Senior Survey Response Narrative

A total of 671 surveys were completed representing a balance of race and ethnicity. The gender responses were skewed with more females than males completing surveys. The majority of respondents were from Monroe, Waxhaw, Indian Trail and Stallings.

The senior survey was implemented through random sampling in the Union County Jury Pool. Convenience sampling was also conducted countywide at health fairs, faith community, Employment Security Commission, Health Department, Social Services, and Community Health Services.

The majority of respondents indicated that they had Medicare, with a small percentage claiming private insurance coverage and 2.6% with no insurance coverage at all.

When asked about economic status having an impact on health status, respondents did not indicate this as an issue.

Health concerns that were reflected in responses included hypertension, cancer, diabetes and Alzheimer's Dementia. Mental health concerns included sleep issues, depression, and anxiety.

Behaviors considered contributing factors to poor health were: poor eating habits, lack of exercise, drug and alcohol abuse.

Falling was the main safety concern for seniors, followed by memory problems, and being unable to manage or understand medications. An overwhelming majority (77%) seniors have no one assisting them with medications. 10.7% of seniors reported changing the way they take prescription medicine without talking to their doctor first. The rationale for most was not liking the way the medicine made them feel, or deciding on their own the medicine wasn't working, and a small percentage did it to save money. 32% of respondents reported keeping an emergency supply of prescription medicine.

When asked about knowing how to report elder abuse, the majority would know who to call or tell.

The majority of respondents viewed their weight as normal or overweight. They did not view their weight as having an impact on their health.

Mental Health services were not sought by respondents. For people that needed mental health services and were unable to access services it was due to not knowing who to call or where to go.

Access to prescription medication was an issue for 11.6%. These respondents indicated money and lack of insurance coverage as prohibiting factors.

Only 7% of survey respondents were receiving home health services, 8.6% of those respondents were receiving non-medical assistance.

The majority of seniors were receiving prevention services in the past year, with 80% having had a physical examination, and high percentages reporting testing for: hypertension, cholesterol, diabetes, and vision exams. Prostate exams, hearing exams and colonoscopies were the lowest sought prevention services. The main reason for not seeking prevention services was only seeing a doctor when it is medically necessary.

The majority of seniors get their health information from their medical doctor, followed by the internet.

When asked about physical activity, the range of responses was from 23% that engaged in no physical activity, to 20% that were active five or more days each week. The large majority felt they had sufficient opportunity for physical activity near their home.

Just as with exercise, the consumption of fruits and vegetables was a broad range, from one serving daily to two or three servings daily. More than half reported purchasing locally grown fruits and vegetables at either the farmers market, produce stand, or retail store.

81% of respondents claim to eat home cooked meals the majority of the time.

Less than 10% of seniors reported using tobacco products, and more than half of users want to quit. Less than 3% were smoking e-cigarettes, of the 3%, about half were previous tobacco users.

One quarter of seniors claimed to drink alcohol, but only 5.3% felt it was negatively impacting their health, and 2.3% admitted to drinking and driving. One fourth of seniors talk on their cell phones while driving, but less than 1% text while driving.

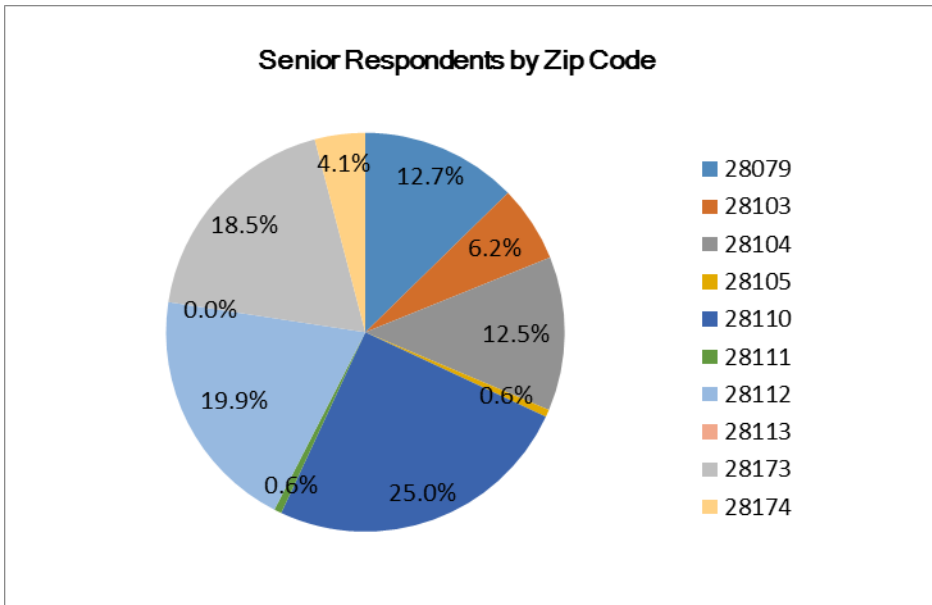
Environmental Health Concerns for seniors included vector control, outdoor air quality, solid waste removal and weather / yard debris.

When asked what the source of their drinking water was, more than half of the respondents were on county water, and the other half were split between municipal water and private wells. 40% of respondents had some concern about the drinking water in their home while 77% were afraid of what was in the water.

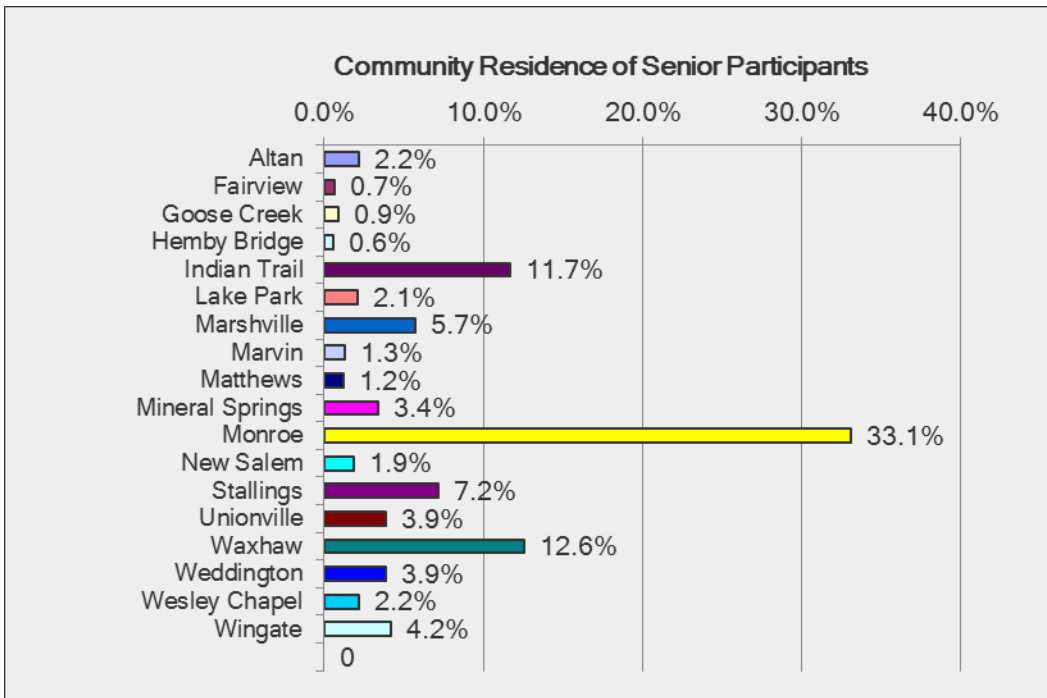
Falling was the main safety concern for seniors, followed by memory problems and being unable to manage or understand medications. AN overwhelming majority (77%) seniors have no one assisting them with medications.

2016 Union County CHA Senior Survey Responses

1. What is your Zip Code?

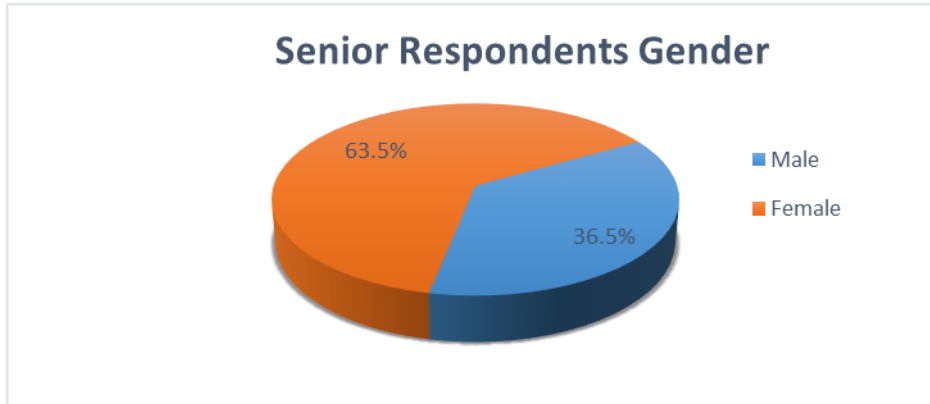


2. Which Town or Municipality in Union County do you reside?

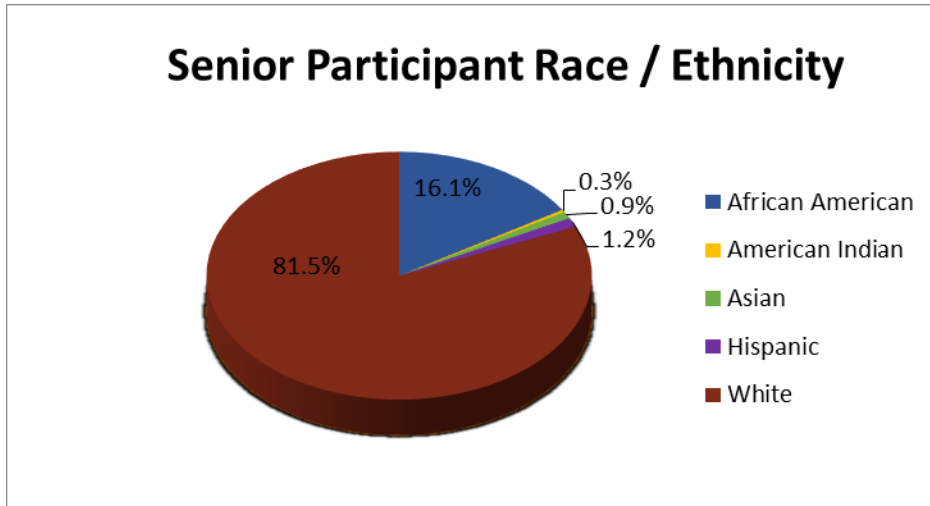


3. What is your Age? (Age range surveyed 62 + years)

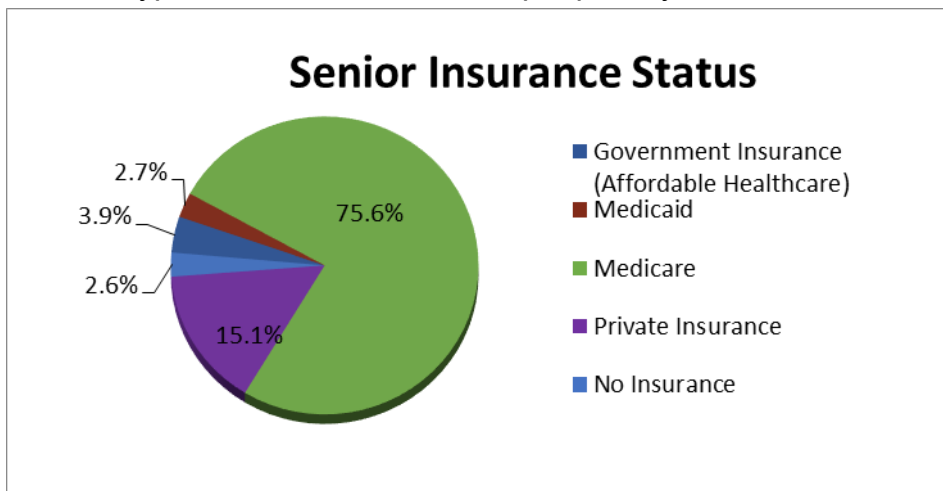
4. What is your Gender?



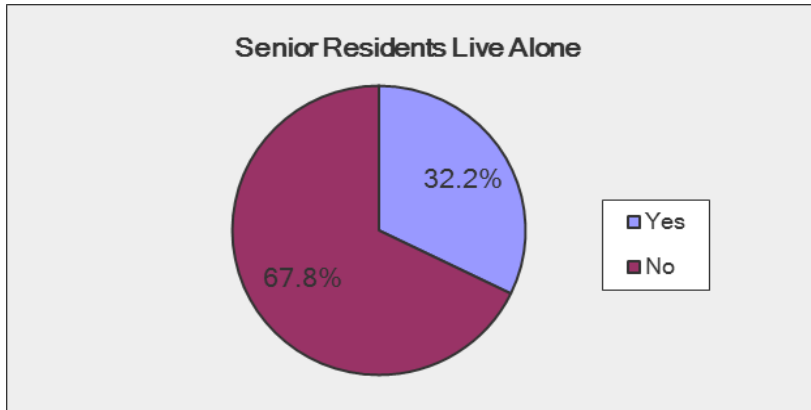
5. What is your Race?



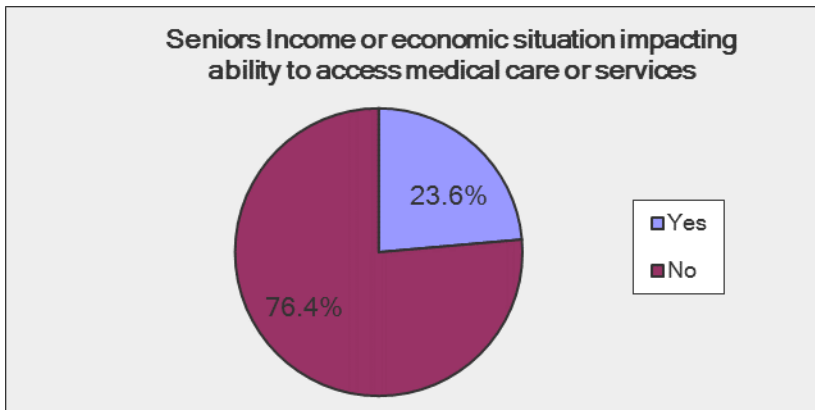
6. What type of health insurance do people in your home have?



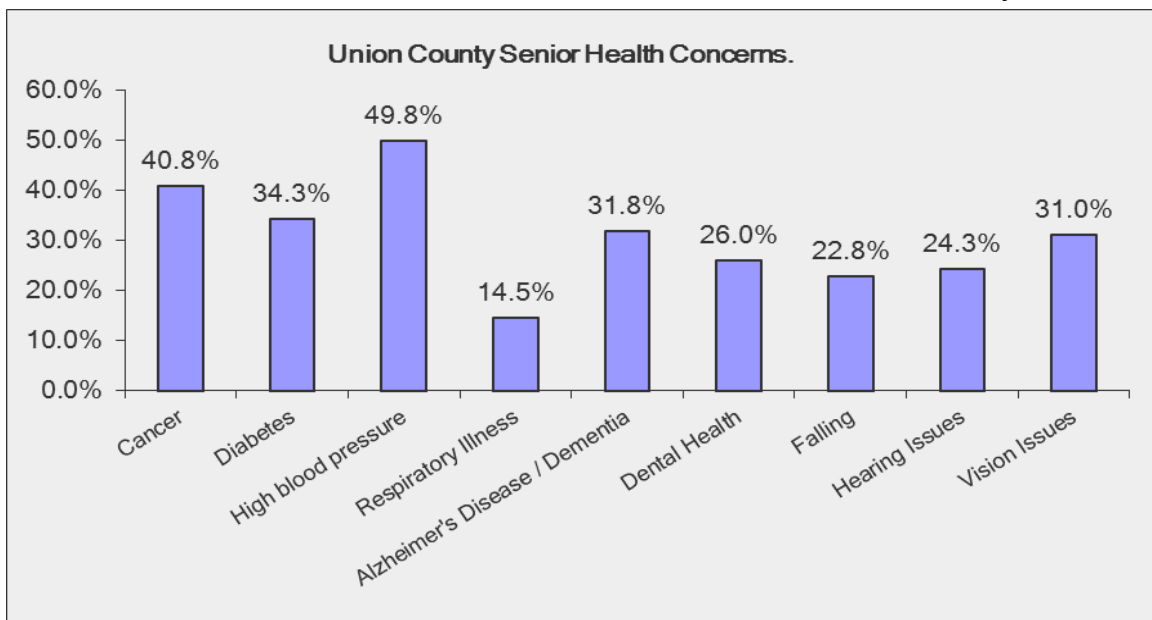
7. Do you live alone?



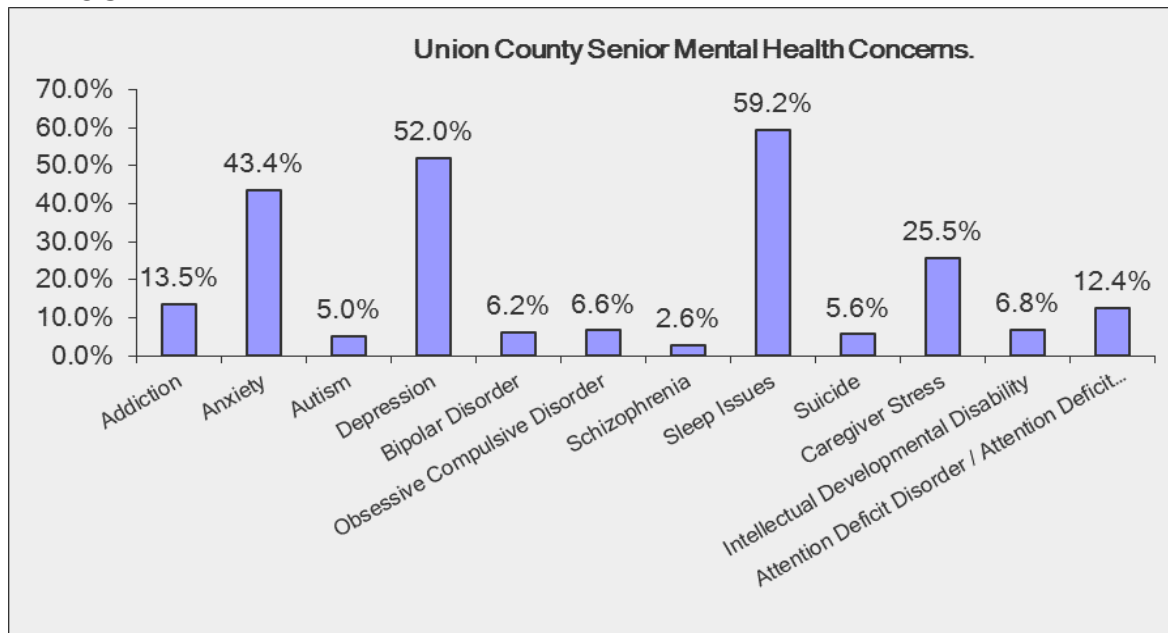
8. Do you feel your income or economic situation is negatively impacting your ability to access medical care or services?



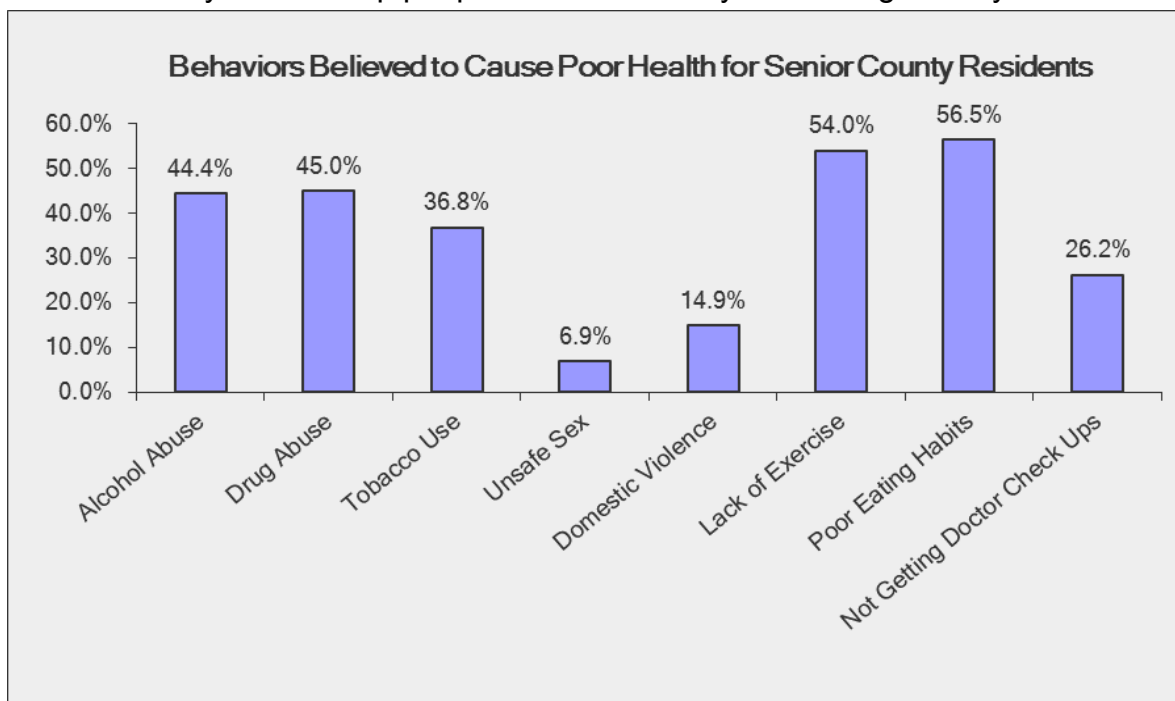
9. Listed below are health concerns. Please check three that concern you MOST.



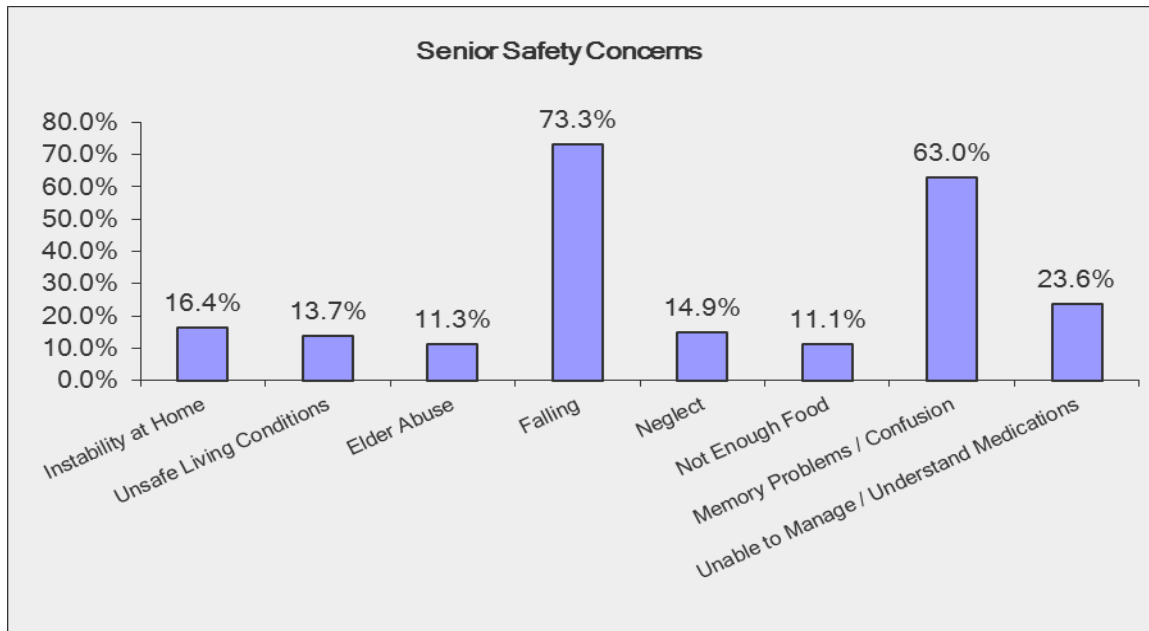
10. Listed below are mental health concerns. Please check three that concern you MOST.



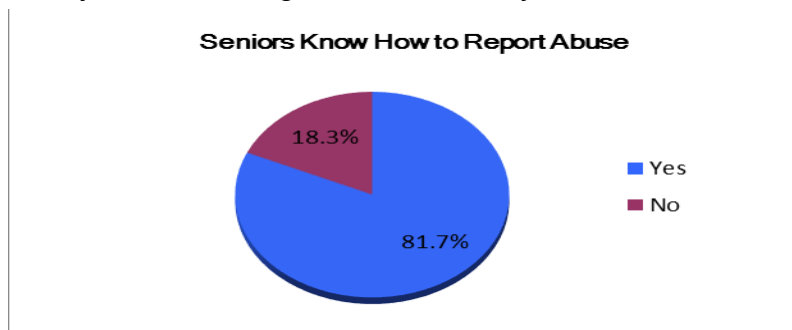
11. Listed below are behaviors that cause poor health. Please check up to three behaviors you feel keep people in Union County from being healthy.



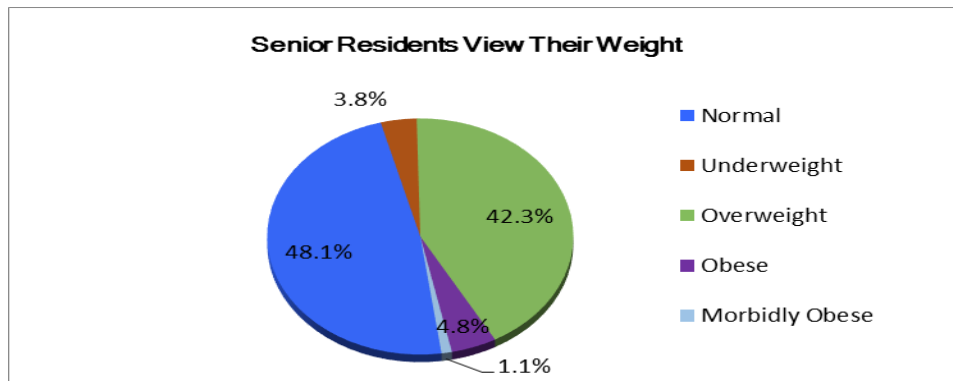
12. Listed below are safety concerns that can impact your health. Please check three that concern you:



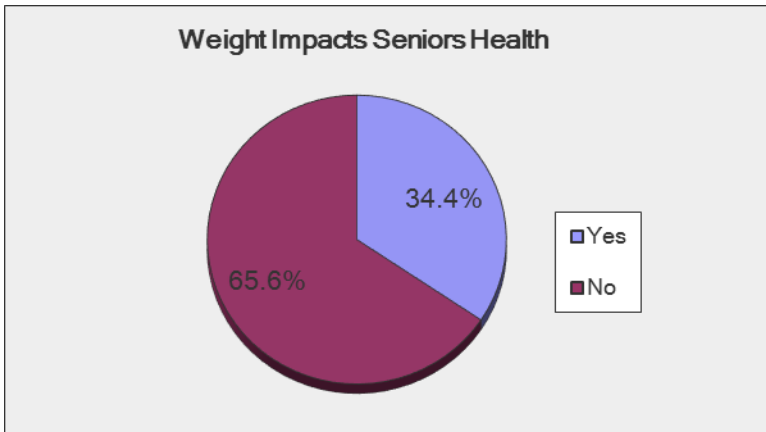
13. If you were being abused, would you know who to call, or how to report it?



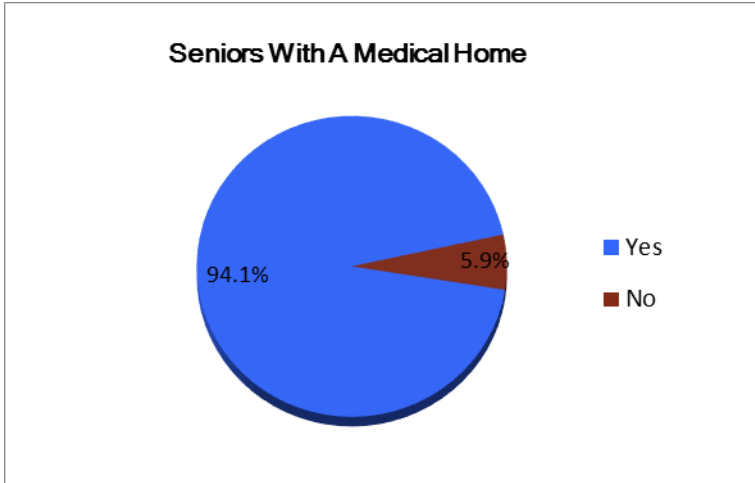
14. How do you view your weight?



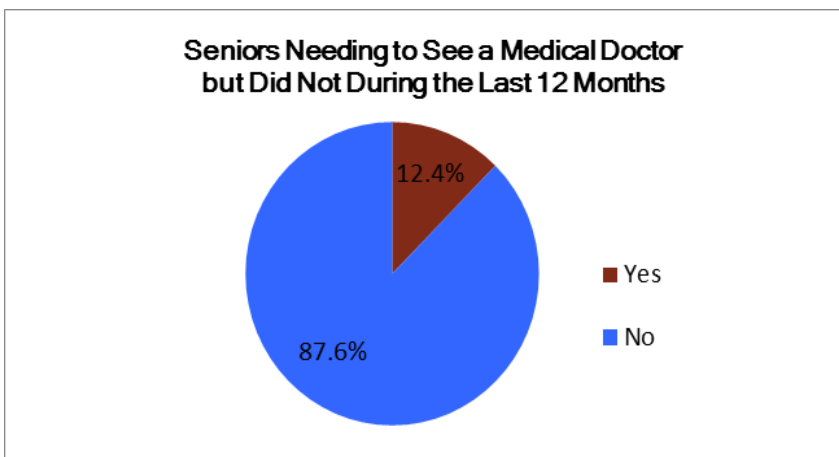
15. Do you feel your current weight is impacting your health status?



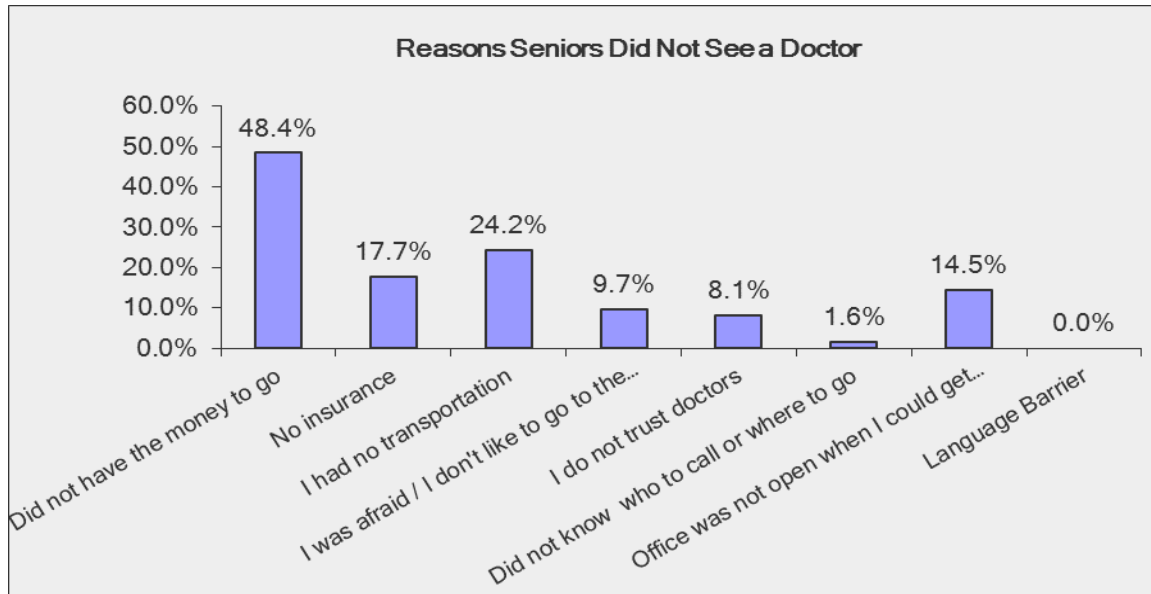
16. Do you have a medical doctor you see on a regular basis?



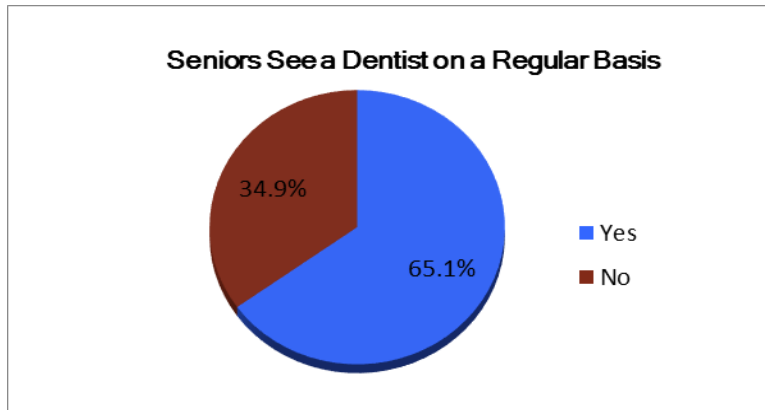
17. Was there a time that you needed to see a doctor during the last 12 months but did not?



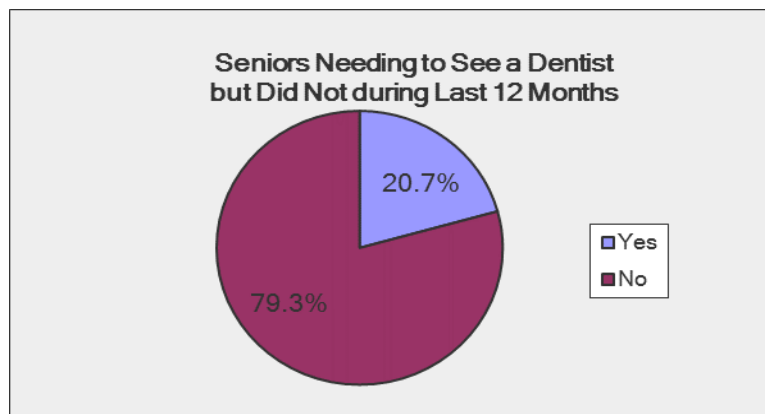
18. If yes, what was the main reason you did not see a doctor?



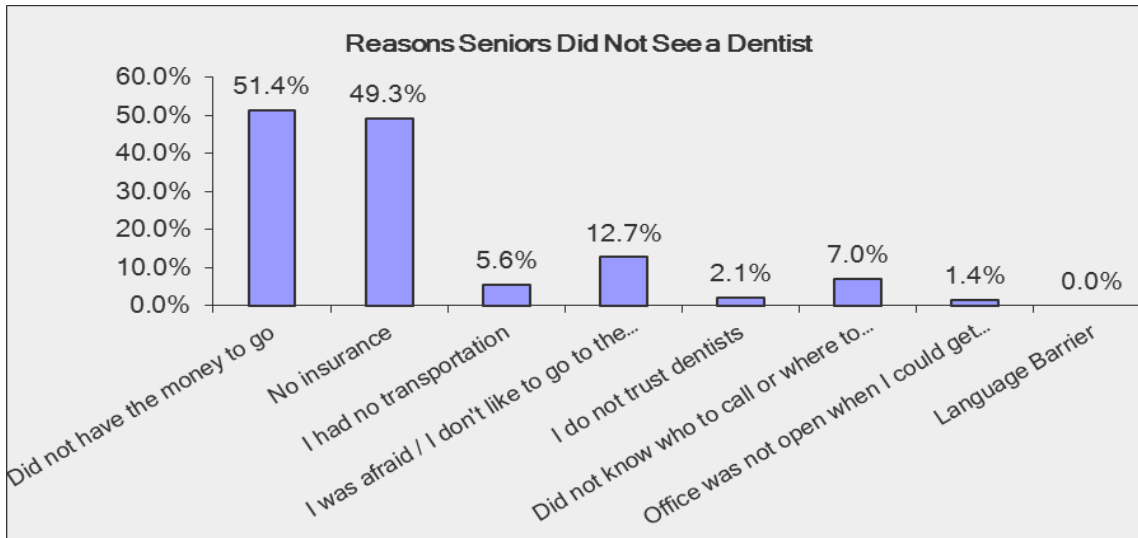
19. Do you have a dentist you see on a regular basis?



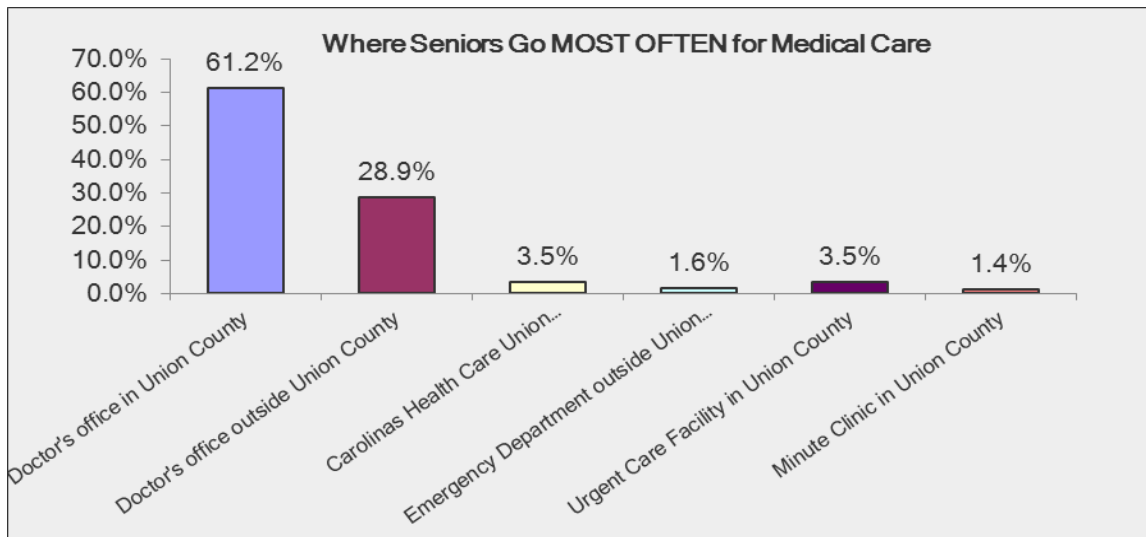
20. Was there a time during the last 12 months when you needed to see a dentist but did not?



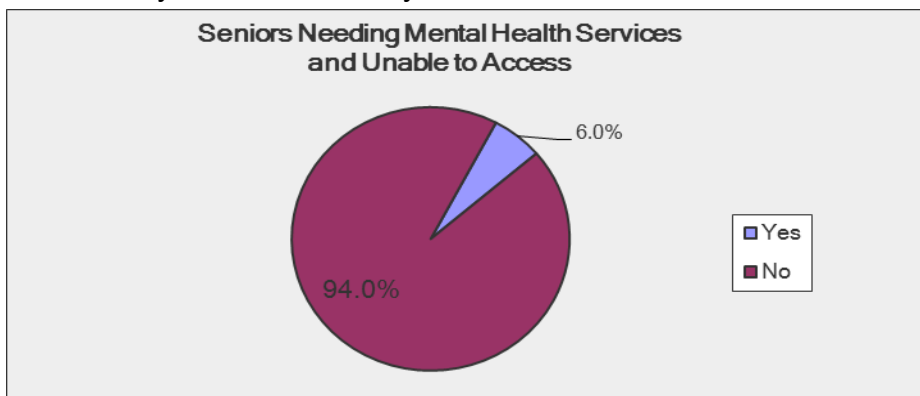
21. If yes, what was the main reason you did not see a dentist?



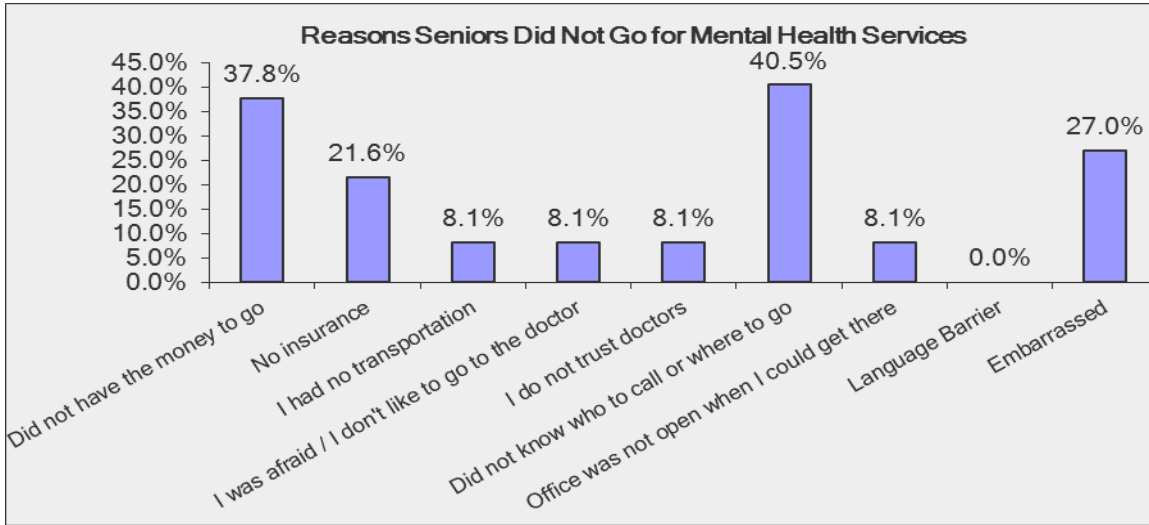
22. Where do you go when you are sick and need medical care? Choose ONLY one.



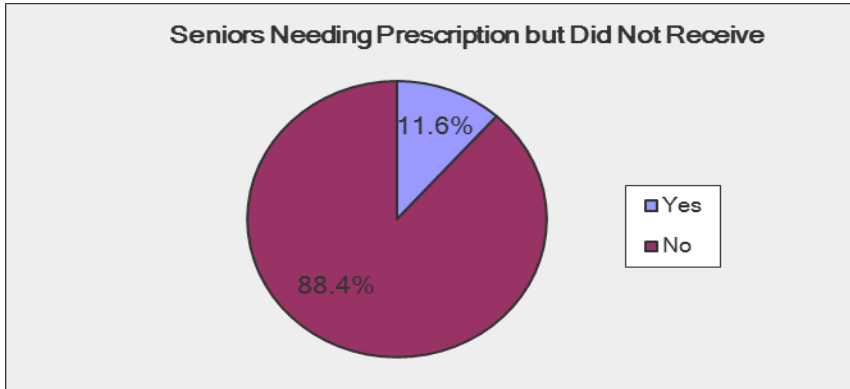
23. Have you ever felt that you needed mental health services and did not get them?



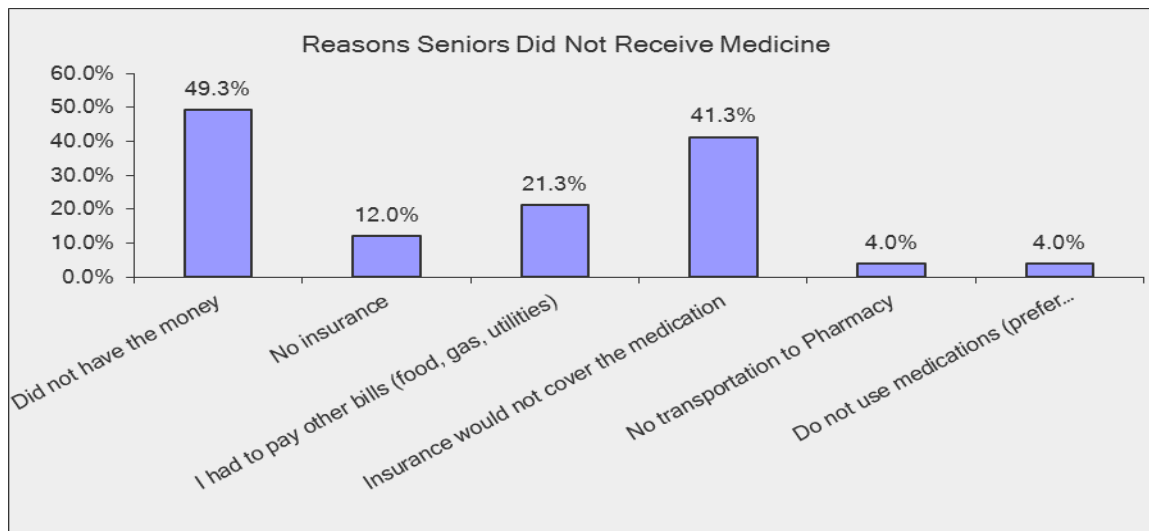
24. If yes, why did you not go for mental health services? Check ALL that apply:



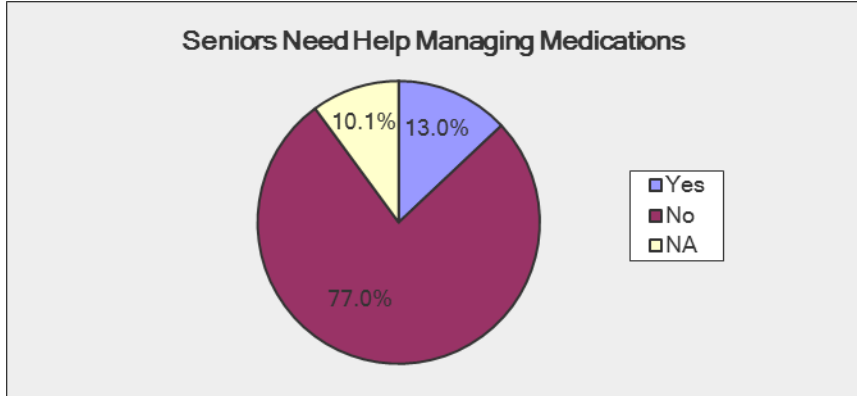
25. Have you needed a prescription medication and did not get it?



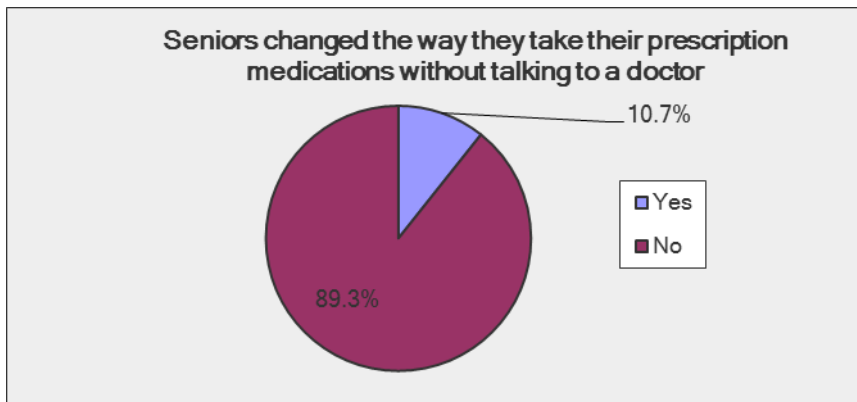
26. If yes, why did you not get your medicine?



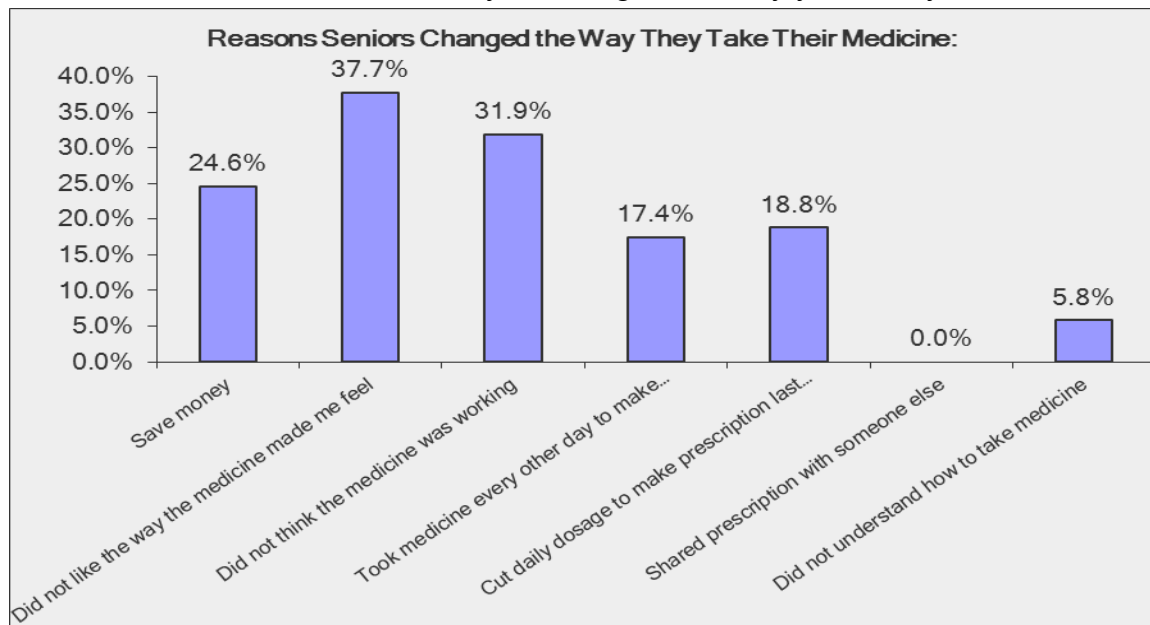
27. Does anyone help you take or manage your medications?



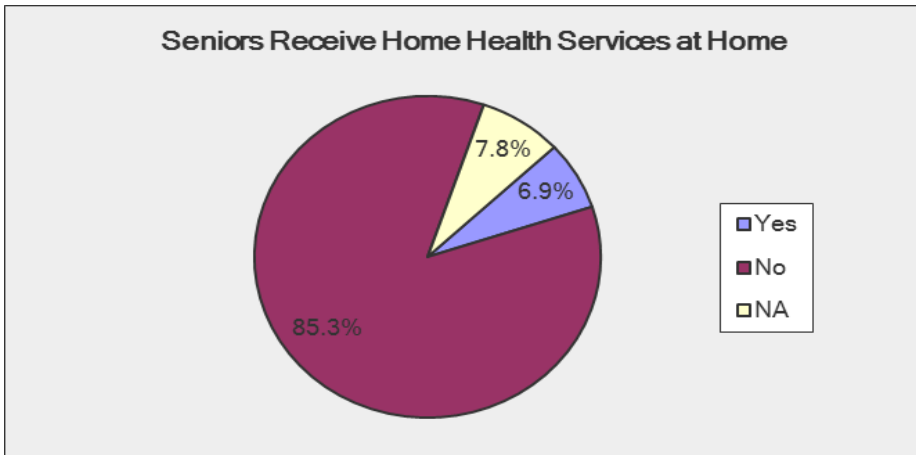
28. Have you changed the way you take your prescription medications without talking to a doctor?



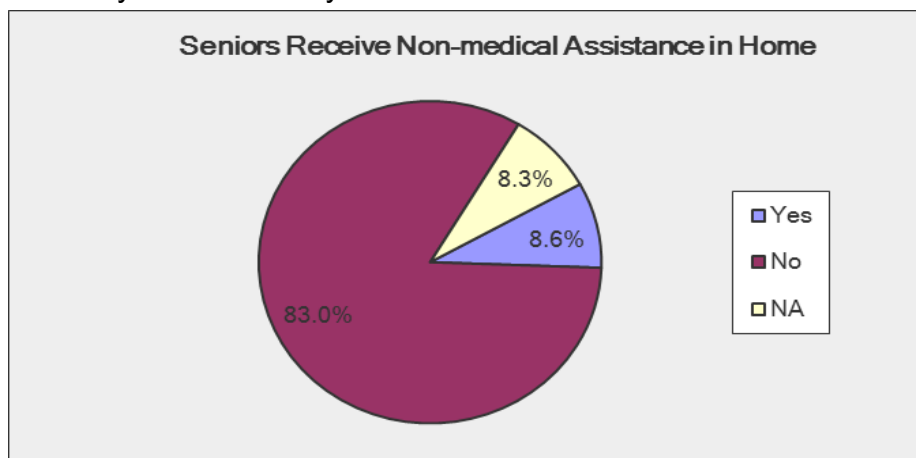
29. If Yes, check all the reasons you changed the way you take your medicine:



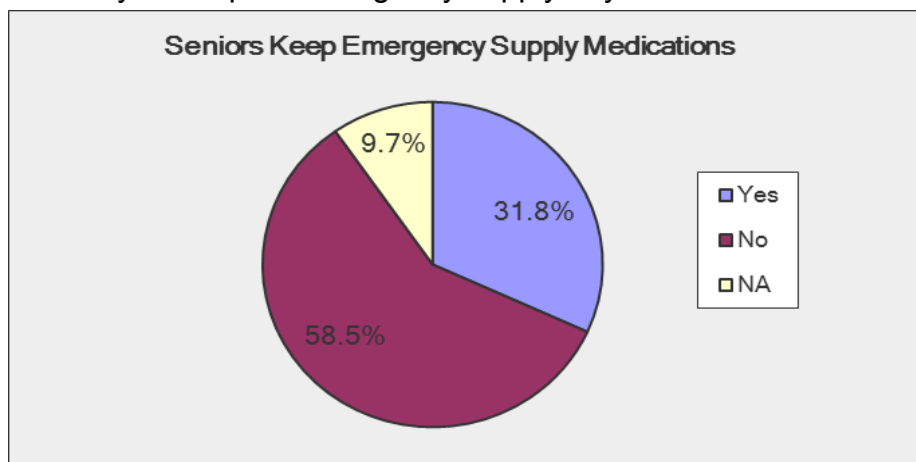
30. Do you receive any home health services in your home?



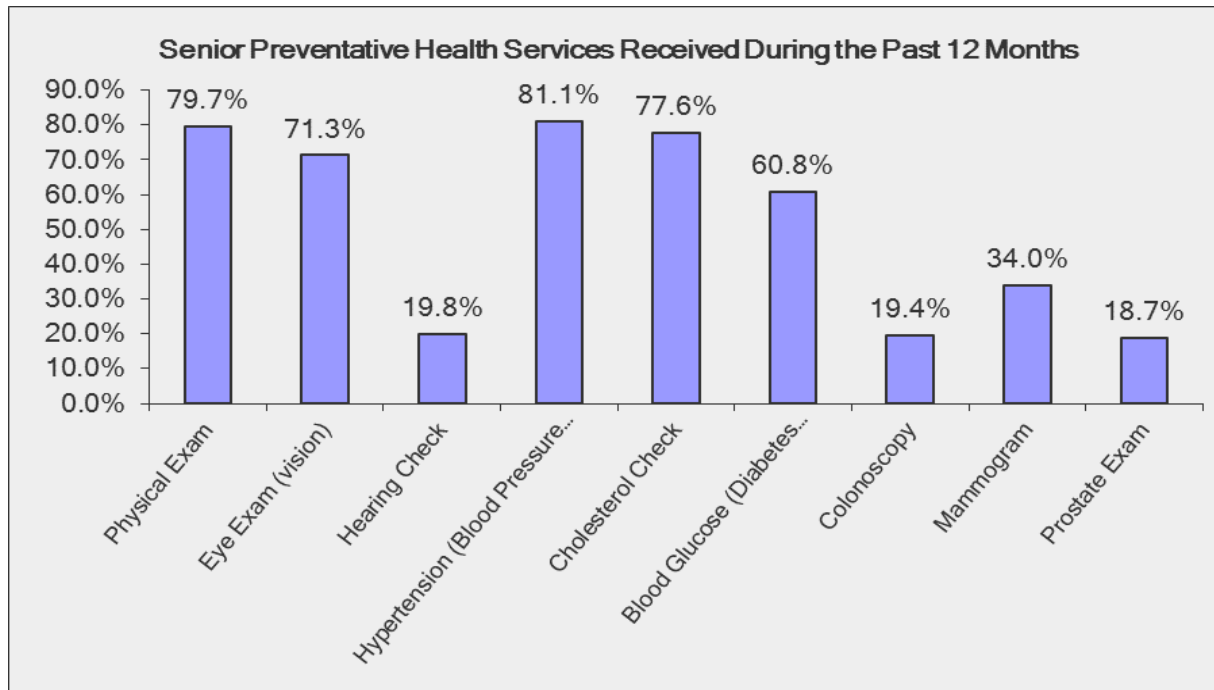
31. Do you receive any non-medical in home assistance?



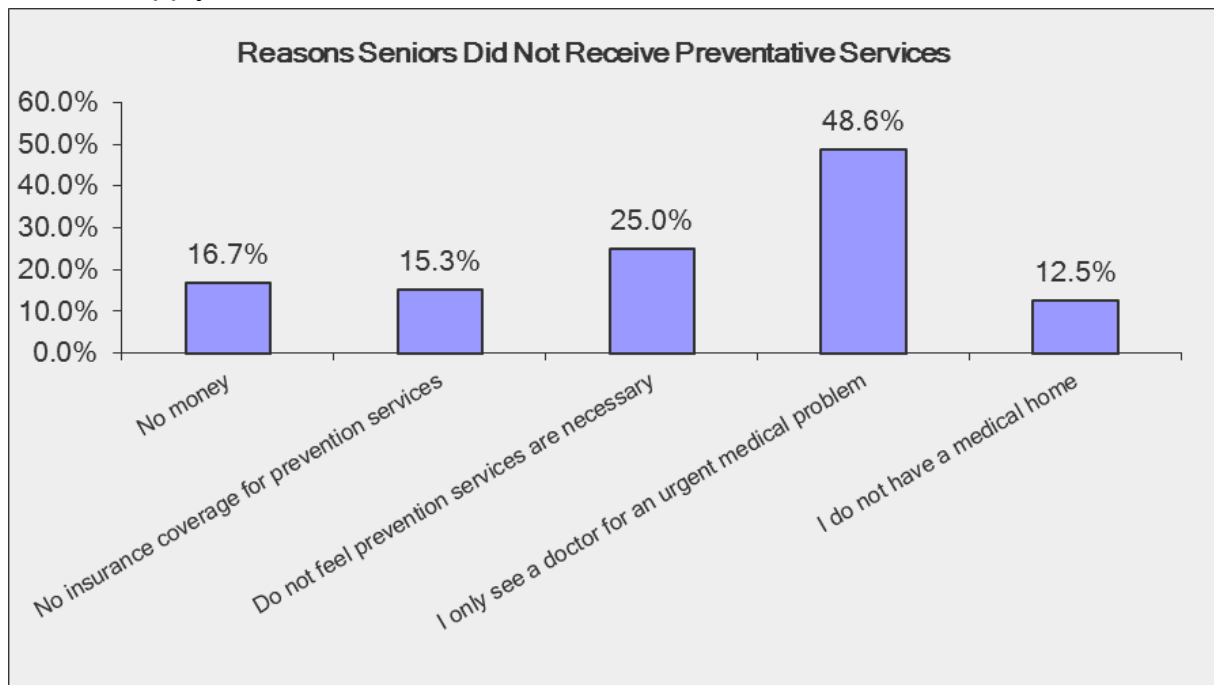
32. Do you keep an emergency supply of your medications?



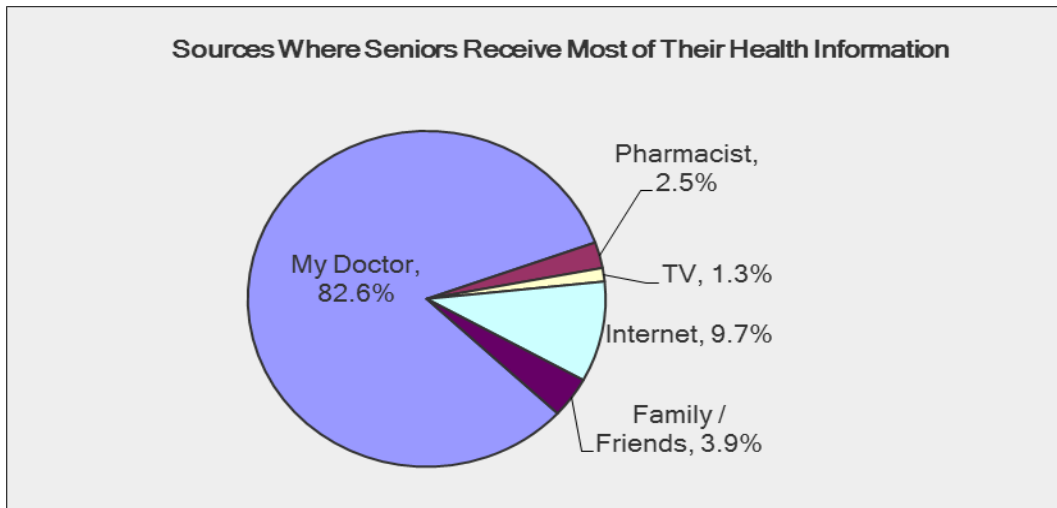
33. Check ALL preventative health services you had during the past 12 months:



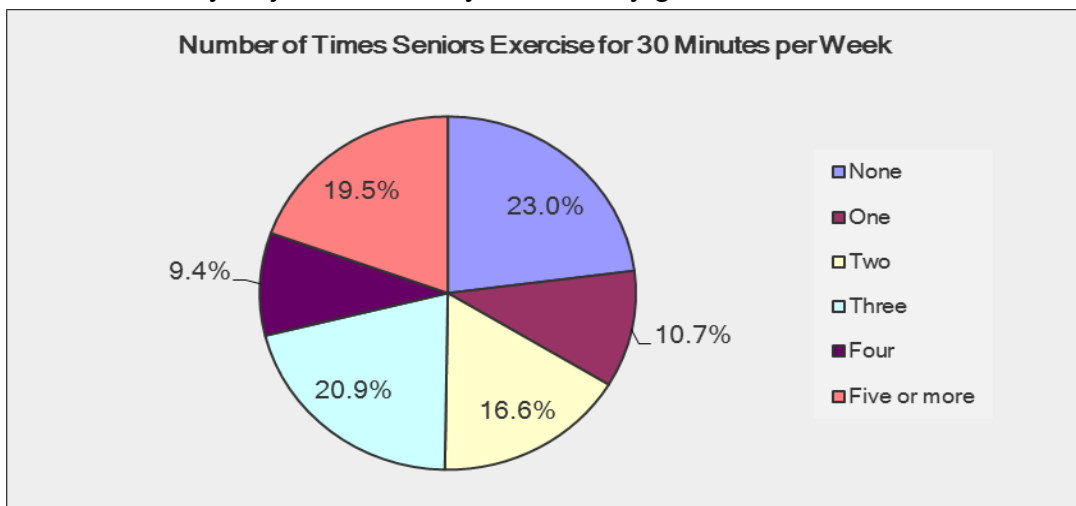
34. If you did not receive any preventative services, please indicate why. Check ALL that apply.



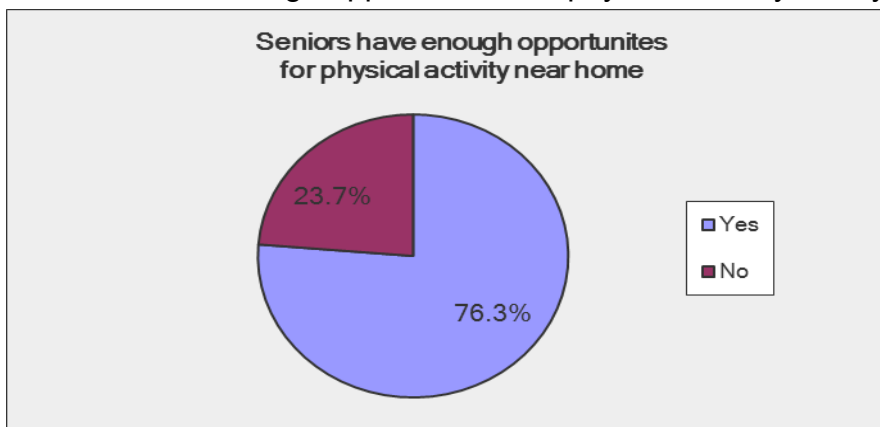
35. Where do you get most of your health information? Check ONLY one.



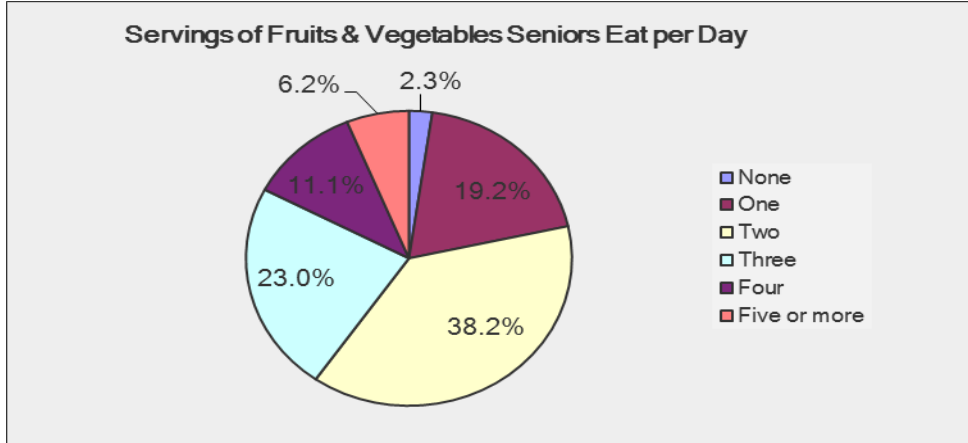
36. How many days a week do you normally get 30 minutes of exercise?



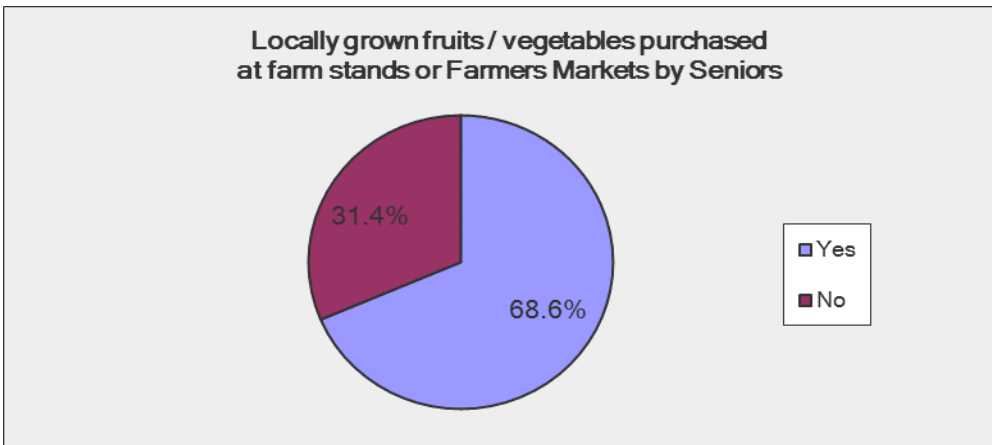
37. Are there enough opportunities for physical activity near your home?



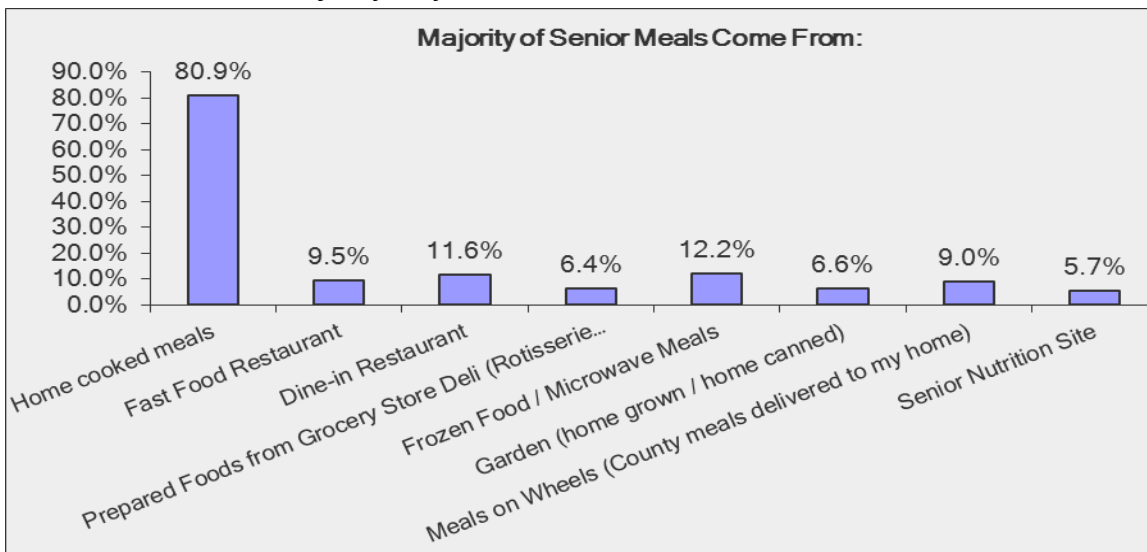
38. How many servings of fruits and vegetables do you normally eat per day?



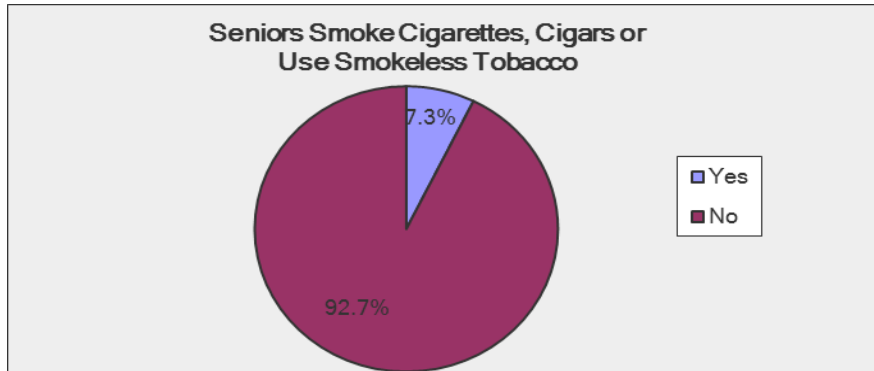
39. Do you purchase locally grown fruits / vegetables at retail markets, farm stands or Farmers Markets?



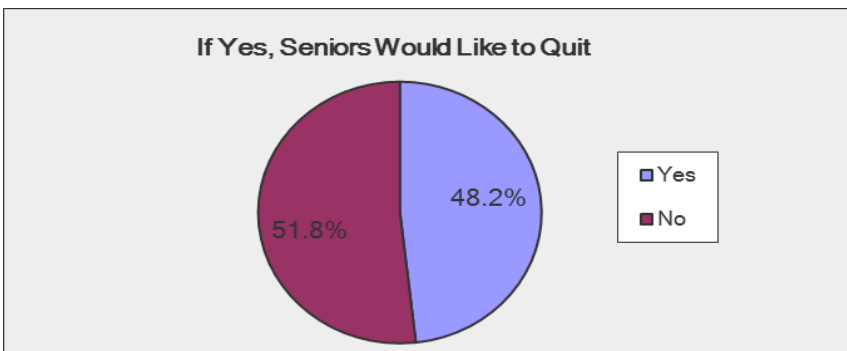
40. Where do the majority of your meals come from?



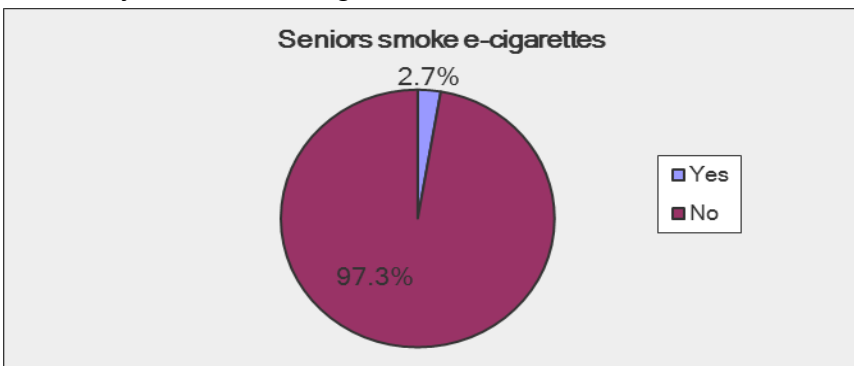
41. Do you smoke cigarettes, cigars or use smokeless tobacco?



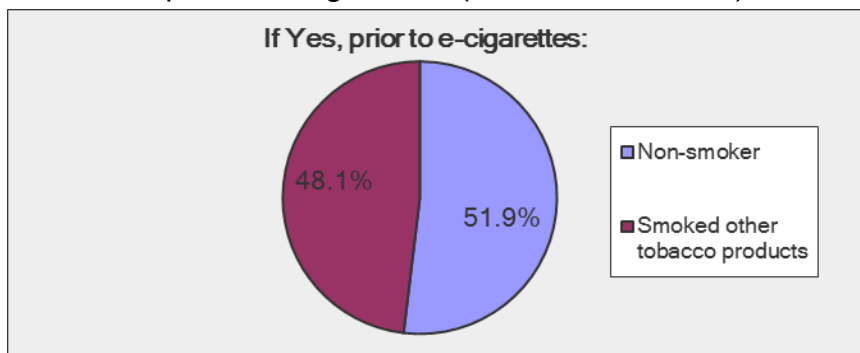
42. If yes, would you like to quit?



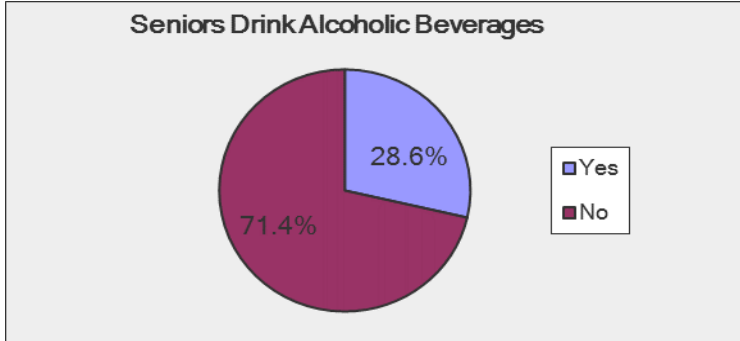
43. Do you smoke e-cigarettes?



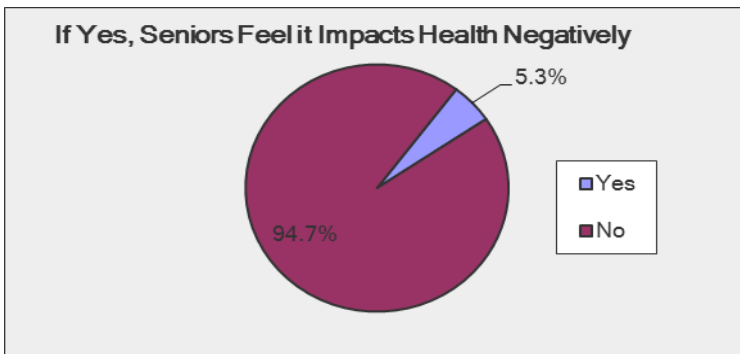
44. If Yes, prior to e-cigarettes: (Check one answer)



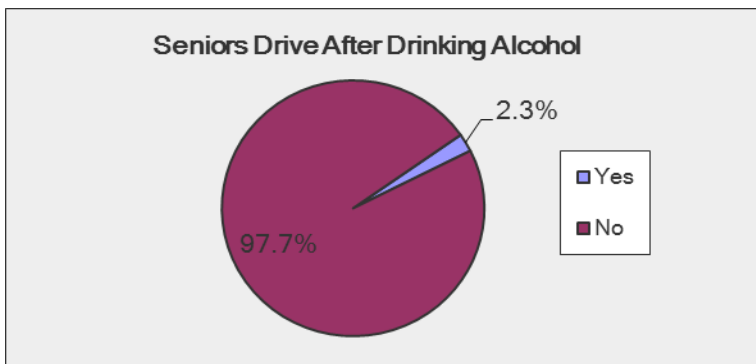
45. Do you drink alcoholic beverages?



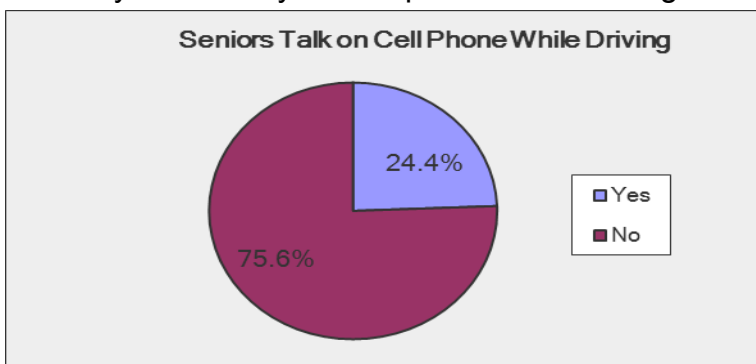
46. If Yes, do you feel it impacts your health negatively?



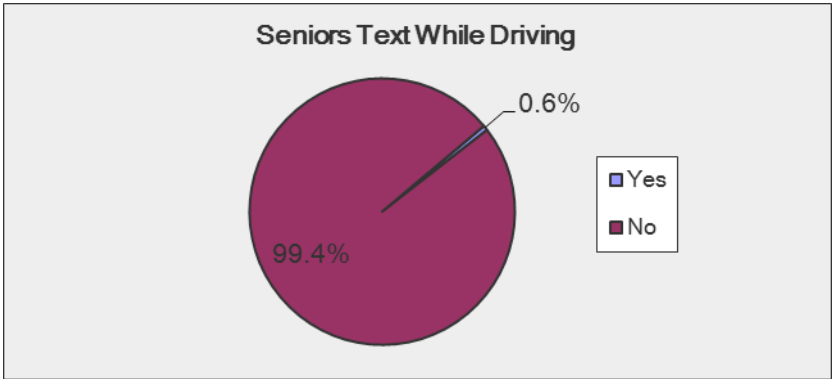
47. Do you ever drive after drinking?



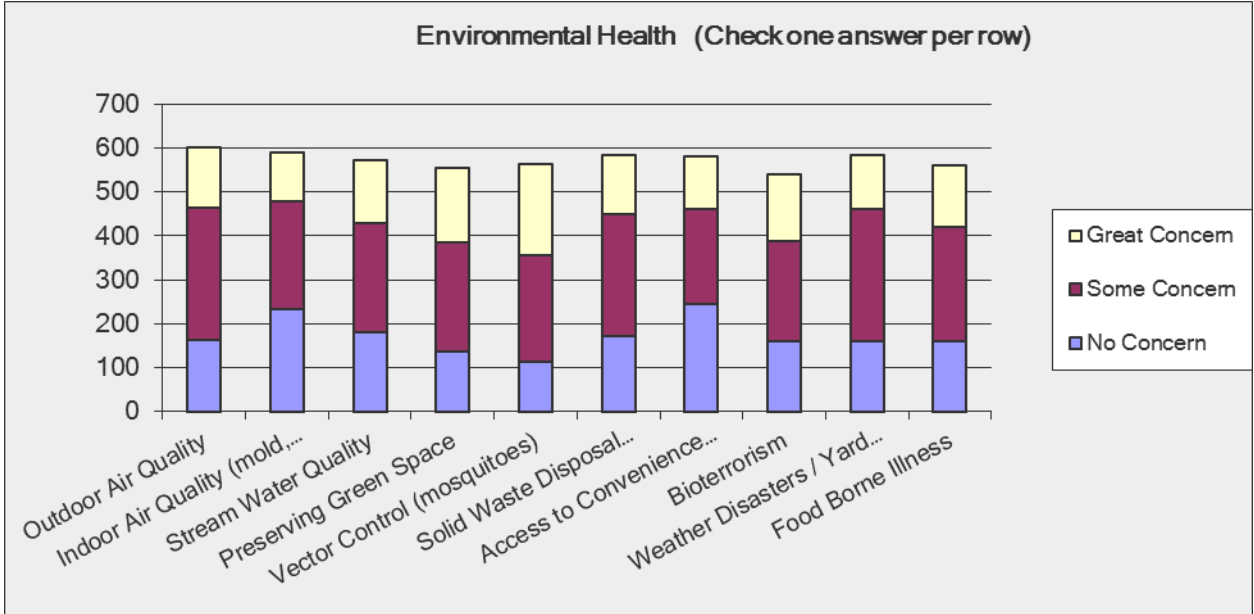
48. Do you talk on your cell phone while driving?



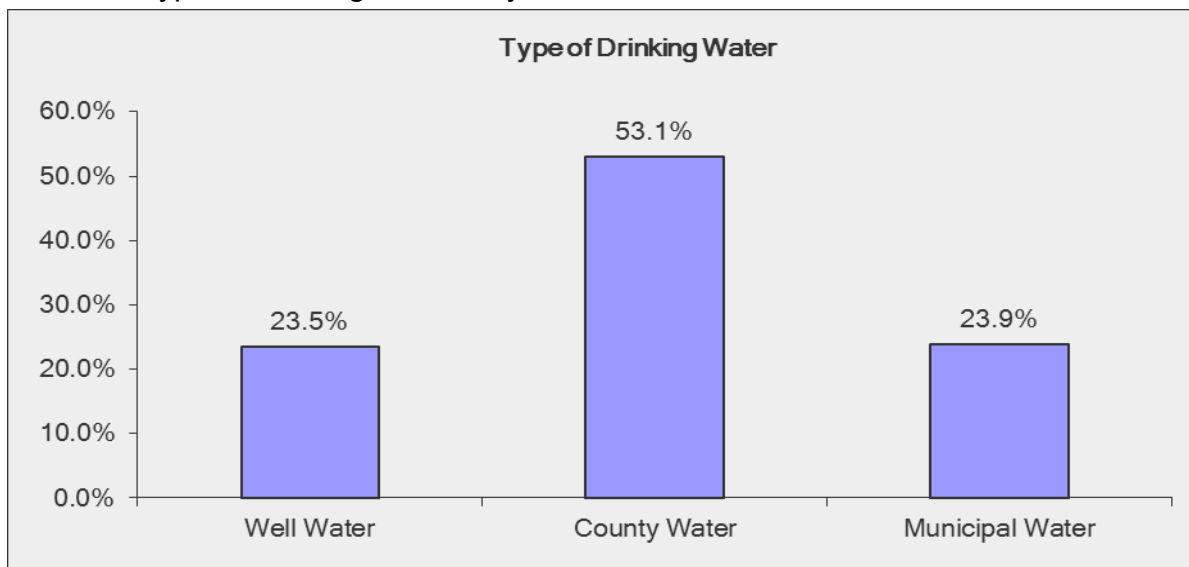
49. Do you text while driving?



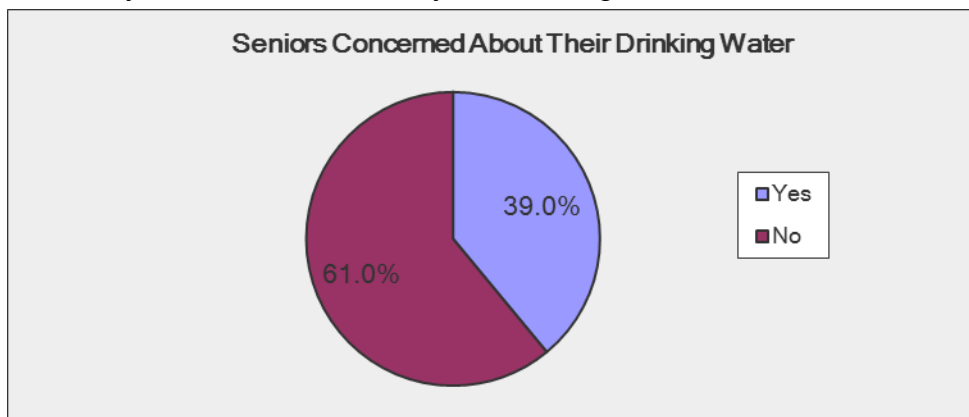
50. Environmental Health (Check one answer per row)



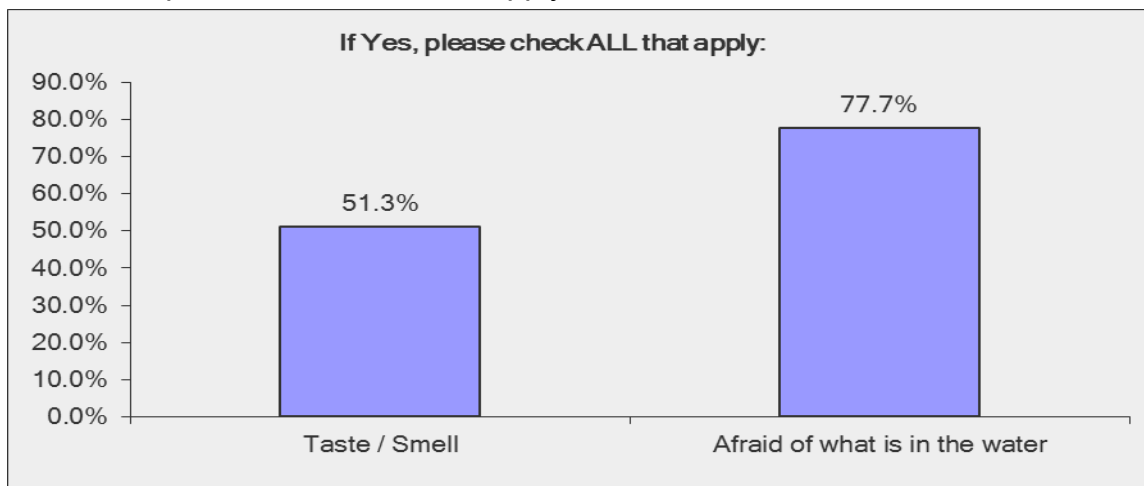
51. What type of drinking water do you have?



52. Are you concerned about your drinking water?



53. If Yes, please check ALL that apply:



Unscripted Community Comments

Adult Survey Comments

Adult residents had the opportunity to write in comments and suggestions on issues impacting adult health in Union County. There were 224 comments captured.

The most common request for improving adult health in Union County were increased opportunities for free or affordable physical activities, specifically passive recreation. More than half of the comments mentioned a more pedestrian friendly environment with sidewalks, bike paths and walking trails. With a lack of a countywide public transportation system people expressed an interest in being able to walk or bike between locations. The heavily traveled roads, lack of sidewalks, and bike lanes makes pedestrian options dangerous and unappealing.

The Aquatics Center was seen as a great resource, with the caveat that it is too expensive for many residents, and is often over crowded. Respondents feel that community parks would improve physical fitness and thereby improve the health of residents. The rural areas of the county requested parks in their communities, with walking paths. Narrow country roads are not safe for walking or cycling. Rural residents feel they have no fitness options where they live.

Free and reduced cost health care was a recurring request. Respondents made many references to the working poor not being poor enough to qualify for assistance, but unable to afford health care and insurance premiums. Affordable care clinics were a recommendation to help discourage utilization of the Carolinas Health Care Emergency Room for routine medical care. The continual escalation of insurance premiums and deductibles were viewed as a barrier to medical access.

Many health behaviors were brought forth. Multiple responses included encouraging residents to take responsibility for their own health. Respondents stated that health education and prevention services were needed, specifically information on healthy eating, chronic disease prevention and stress reduction.

Numerous comments were made around the need to increase healthy food options and access in the county. The majority of the suggestions were around recruitment of more healthy food markets such as Whole Foods, Fresh Market, and Earth Fare. In addition to increasing healthy options, respondents would like to see unhealthy options limited. People feel too many fast food options are already part of the landscape on Highway 74.

The Union County Farmers Market on Skyway Drive was mentioned as a successful market. Suggestions were offered to have healthy cooking classes at the market, and build on the already established success.

Water accessibility and quality were included in multiple responses. Respondents would like county or municipal water available to more residents to avoid well water. People are concerned about what is in the well water and thereby what they are consuming. Statements indicated some people have switched to bottled water out of concern for contaminants in well water. Filtration systems were considered to be too expensive for most residents.

Respondents stated that health education and prevention services were needed, specifically information on healthy eating, chronic disease prevention and stress reduction .

Senior Survey Comments

Senior residents had the opportunity to write in comments and suggestions on issues impacting senior health in Union County. There were 180 comments captured.

The majority of comments included complaints about the high price tag associated with sustaining good health. Many referenced the prohibitive cost of accessing health services, both preventative and acute care. The cost of insurance plans and high dollar prescriptions were a stated barrier to positive health outcomes. Statements were written indicating seniors are having to choose between medicine and food. There were multiple requests for free health care, and free screenings for chronic disease and cancer.

Seniors stated Medicare does not cover dental services, which makes dental health cost prohibitive. Free or reduced cost dental care for seniors is desired.

The comments expressed by respondents frequently discussed a desire for additional programs and services for senior residents that are accessible across the entire county. The programs requested varied: exercise classes, healthy eating, and weight loss classes. Complimentary statements were made about the senior center in Monroe. Additional senior centers located across Union County would be beneficial for socialization for seniors within the community that they live. Seniors expressed feeling lonely and isolated due to no longer driving and being unable to access programs, services, and activities.

Health education was mentioned as a need to raise awareness of services and programs. They would like information and newsletters for senior residents that are not comfortable with the internet. Diabetes, hypertension and heart disease prevention information was specifically requested.

Social determinants were a factor in the ability to sustain health, quality of life and living environment. Monetary constraints prevent seniors from accessing care, being involved in social activities, and proper up keep of housing. Seniors tend to want to remain in their home. However, apprehension develops when they know there are structural issues, sanitation issues, and safety issues. Requests for assistance with routine maintenance and home repairs was stated repeatedly. Respondents felt that with assistance they could age in place and remain home.

Affordable public transportation county wide was requested for various purposes: doctor appointments, grocery shopping, picking up medicine, and social activities. Seniors in rural Union County made statements about being lonely and feeling isolated. Rural settings also present challenges for accessing routine medical appointments, which are frequently put on hold until they become acute.

Senior caregiver problems are often barriers to good health outcomes for both the caregiver and the recipient. Caregivers need respite that they often do not receive. Caregivers struggle to care for their own health due to being unable to leave the person in their charge. Stress and anxiety are often the byproduct of these situations.

The majority of comments included complaints about the high price tag associated with sustaining good health. Many referenced the prohibitive cost of accessing health services, both preventative and acute care.

Focus Group Summary

2016 Community Health Assessment Focus Groups

As part of primary data collecting for the Community Health Assessment (CHA), 12 focus groups were conducted in August and September of 2016. Focus Group sessions consisted of a wide array of county residents and workforce members. Each group was invited to participate based upon a specific niche group they were either a part of, or worked with in the community. The intended purpose of having targeted sessions was to have representation of as much of the county population as possible.

All sessions were asked the same questions.

1. *Does Union County have adequate options for residents to live healthy, active lifestyles, regardless of age, income, or geographical location? If the county could make one change to the existing built environment to create a sustainable impact on population health what do you suggest?*
2. *What health concerns if any do you have about living or working in Union County?*
3. *Is there sufficient access to health care within Union County?*
4. *Genetics play a significant role in health. However, it is often unhealthy behaviors that lead to poor health. What programs or services could be offered to change behaviors in a positive way?*
5. *Which group of county residents do you consider to be at risk?*
6. *(Leading Causes of Death) Which ones are the most concerning? How can we improve?*

At conclusion of the sessions:

- 100 participants (representing 50 partner agencies)
- over 50 Wingate University Pharmacy Students facilitated sessions

2016 Focus Groups

Human Services
Hispanic (conducted in Spanish)
Mental Health / Clergy
Emergency Services /First Responders
Seniors
Business / Industry

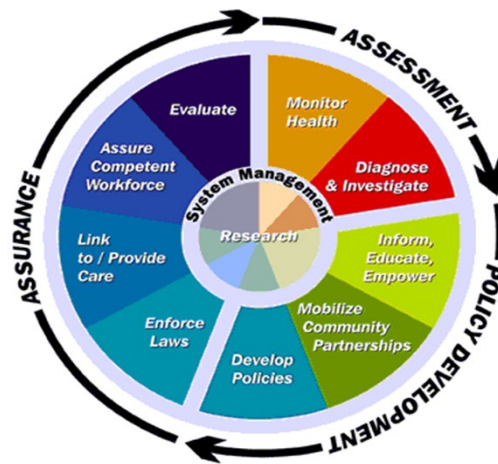
Environmental Health
Public Health
Quality of Life
Agencies Serving Youth
Crisis Response Agencies
Fitness Agencies

Focus Group sessions consisted of a wide array of county residents and workforce members. Each group was invited to participate based upon a specific niche group they were either a part of, or worked with in the community.

Participating Agencies

Alliance for Children	InReach	The Navigation Lady
Cardinal Innovations Healthcare	JCPC/ District Ct Judge Office	Turning Point
Carillon Assisted Living	Latino Coalition	UC -911 Communications
Carolinas Healthcare System-Union	Literacy Council	UC Central Administration
Center for Prevention Services	Mecklenburg Co Public Health	UC Commissioner
Centralina Council of Governments	Monroe Fire Department	UC Emergency Management
City of Monroe Senior Center	Monroe Parks & Recreation	UC Human Resources
Community Health Services	Monroe Police Department	UC Library
Community Services	Monroe-UC Economic Development	UC Planning
Council on Aging	NAMI	UC Public Works
Division of Public Health	NC Cooperative Extension Services	UC YWCA
Division of Social Services	New Testament Child Development Center	UCPS- Exceptional Children
Division of Transportation	Novant Health	Union Academy
Elizabeth Baptist Church	Pilgrim's of Marshville	Union County Public Schools
Environmental Health	Red Cross	Union County Sheriff's Office
Human Services	The Arc of Union	United Way

3 core functions and 10 essential services of Public Health are illustrated below by the "wheel graphic"



Session Responses

Does Union County have adequate options for residents to live healthy, active lifestyles, regardless of age, income, or geographical location? If the county could make one change to the existing built environment to create a sustainable impact on population health what do you suggest?

Consensus across focus groups was that Union County does not have adequate options for residents to live healthy active lifestyles. The main issues expressed as barriers for healthy living were income limitations and disproportionate allocation of recreation facilities, parks, healthcare, and healthy food access county-wide. Participants felt western Union County where the majority of population and wealth reside is where resources are developed and located.

Union County is viewed as not pedestrian friendly and lacking functional connectivity with insufficient walking trails, bike paths or sidewalks. It would improve population health if residents had the option to walk or bike to community destinations, engaging in physical activity as part of mobility within their community. With pedestrian friendly communities participants felt residents might consider leaving vehicles parked, thereby reducing air pollution. In addition to connectivity it creates community based, free passive recreation.

Concern was raised regarding small scale retail chains that sell inexpensive, unhealthy, non-perishable foods targeting rural, economically depressed areas. Participants want retail establishments of this scope turned down for permits rather than allowing them to create access to unhealthy foods in economically challenged communities.

A healthy lifestyle improvement which received positive comment was the County Farmer's Market on Skyway Drive. The market offers fresh local foods and having that healthy food access was seen as an important part of population health. It was suggested that the market further capitalize on the customers it is already pulling in, and offer healthy cooking demonstrations at the market.

Several change options were mentioned regarding sustainable improvements on population health. All suggestions had a transportation / mobility focus: free passive recreation in the form of countywide trail systems, a sidewalk system or bike path, and community connectivity.

The number one identified, repeated need was public transportation. Development of a countywide public transit option would allow rural low income residents access to healthy food options, parks, medical appointments, employment, and social activities.

What concerns if any, do you have about living or working in Union County?

The main concern is water quality, specifically the high number of county residents without access to water infrastructure, (county or municipal) and are reliant on well water. Participants stated concern over arsenic in well water and what health impacts that may cause. In addition to concern about water quality, the cost of water testing and expense of filtration systems were discussed. Participants felt that most residents on well water choose not to test their water due to the cost to install a filtration system being prohibitive. A lot of discussion centered around the county installing water lines that bypass communities that have been on wells for years, to run water lines into new neighborhoods. The consensus was that older communities and communities with known water issues should be given priority when the county makes determinations as to where new water lines are installed. Questions came up with regard to possible connections between county well water containing arsenic and the high Alzheimer's rates, incidence of certain cancers, and other neurological problems. Participants understood that the arsenic is a naturally occurring issue resulting from the Carolina Slate Belt, with potential compounding issues from years of poultry farming in the county.

Air Quality was another issue that raised concerns. The proximity to Charlotte and tremendous residential population growth during the past decade has increased concerns about air pollution. The narrow country roads in Union County simply cannot support the volume of traffic attempting to use them. When cyclists are using the same roads the hazards and congestion are compounded. Participants raised questions about the connection between air pollution and county asthma rates.

Another issue mentioned as concerning included the rise in drug use, specifically opioids and heroin. The Emergency Services session, and the Mental Health sessions both spent a great deal of time discussing this topic. Law Enforcement explained that other drugs and substances are being cut into heroin, therefore when people shoot up heroin they are having a wide range of responses which can include death. Many participants expressed concern over physicians over prescribing opiates to patients. The rise in opioid addiction and abuse was considered problematic. Law enforcement expressed additional concern about the availability of Narcan / Naloxone to addicts, as it has reduced their concern about overdosing. When law enforcement are responding to an OD call and they are first on scene and administer Narcan to an unconscious non-responsive person, they are administering aid and therefore cannot do anything legally to address drug use, or possession. Once the unconscious person regains consciousness they are allowed to leave the scene with no legal consequences. From the perspective of First Responders Narcan can be life-saving and dangerous. Currently Union County Sheriff deputies are the only law enforcement officers in Union County able to administer nasal Narcan.

Participants discussed the lack of prevention services in Union County and how the services that are available are not always well advertised or promoted. A need was expressed for Health Educators that could go out into the county to churches, schools, childcares, agencies, and promote programs, or teach about dental hygiene, nutrition, physical activity, smoking cessation, and drug awareness.

The issue of substandard housing, specifically rental properties was raised in the Environmental Health session. Rental properties are not regulated in any way, or required to meet any minimum standards. In many cases tenants (often families with children) are living in unhealthy environments that create exposures to moisture, mold, and lead paint. Participants suggested the county consider implementing a minimum build standard, or rental property standard to protect tenants from substandard housing conditions.

Is there sufficient access to health care within Union County?

Responses to this question were a resounding no, with additional explanation around the term access. Areas of care that participants felt were severely lacking were: mental health services, adult indigent care, specialty medical services and prevention based health education services.

The insufficient mental health services included both in-patient and outpatient services, counseling for all ages, grief counseling, substance abuse / addiction services and suicide hot line services. The few services that are offered in Union County have long wait lists, not enough providers, and not enough specialized services for children and youth. Needs range from autism to dementia and impact every level of the socioeconomic spectrum.

Many sessions had dialogue focused around mental health and substance abuse issues with youth and adolescents. The sentiment and frustration expressed was that even with insurance and a payer source, you still had to go out of county for services. Without insurance or a payer source, and transportation challenges, many lower socioeconomic residents simply had no access to services for their children.

The Union County School Nurses and Union County School Counselors are not equipped to be dealing with all of the issues that are presented to them in the school setting. Parents have turned to calling 911 to ask for assistance with belligerent children, which occupies law enforcement in a non-emergent scenario, removing that resource from responding to actual emergencies. Parenting was pointed to as a prevention based service that is needed to teach parents basic parenting skills to avoid having to involve law enforcement.

Participants expressed a preference for accessing medical services of all kinds within the community that they live. If it cannot be in their town, they would still prefer that it be within Union County. Although Carolinas Health Care Union has expanded their offerings, many specialty health care services are not available. Missing services that were mentioned include: endocrinologists, neurologists, and sports medicine physicians.

Nutrition services, with a healthy eating, healthy cooking focus was discussed in multiple sessions. Eating unhealthy food is cheaper and more convenient. Participants discussed all the unhealthy fast food options up and down Highway 74, as well as unhealthy ala carte options served in school cafeterias. The statement was made that America has become an electronic device driven culture run by convenience eating that promotes obesity. People of all ages spend more time on electronic devices than engaged in physical activity.

Health Education on nutrition was pointed to as a need, especially with young families. Concerns were raised around the idea that if we focus only on teaching children healthy eating, and parents have poor habits, we have not made an impact. When children go home and are fed fast food and junk food, with no access to fruits and vegetables, they have the potential for developing weight issues, health issues and mental health issues around body image. Prevention services targeting the whole family would be beneficial. Sessions related to better nutrition, rethinking drink choices, economic meal planning, and teaching healthy ways around the southern fried food culture could improve the health of the entire family.

Genetics play a significant role in health. However, it is often unhealthy behaviors that lead to poor health. What programs or services could be offered to change behaviors in a positive way?

Health education and health promotion were mentioned as a needed resource to change behaviors. Participants stated that healthy economical meal planning classes would be a positive option. Unhealthy eating was a known contributor to poor health outcomes. A statement was made that residents need to be taught how to move away from the southern fried culture. Learning to prepare fresh fruits and vegetables in a healthy manner would improve health for families.

Community gardens partnered with gardening classes on what to grow and how to grow it with success were another option mentioned for improving health behaviors.

Parenting classes that had a discipline focus were suggested. Law enforcement is being requested through the 911 dispatch to respond to belligerent children refusing to get up for school or exit a family vehicle in the car rider line at local campuses. Parenting classes could teach acceptable and unacceptable behaviors within the family structure with an emphasis on communication and interpersonal skills. Concern was expressed over law enforcement being kept from true emergencies to handle situations that are actually parenting related.

Fitness programs and classes were mentioned as a need across the county. Participants felt health educators and fitness instructors could provide encouragement for less screen time and more physical activity with families.

Obesity, particularly among young people was a concern. It was largely attributed to sedentary life styles and a reduction in requirements for physical education in public school. A strong sentiment for expanding the physical education requirements beyond ninth grade. Many participants thought that local high schools should have swimming pools and swim teams. With local pools, parents would not have to drive to Charlotte in order for their child to participate on a school affiliated swim team.

More programming for seniors across the county would be welcome as a way to reduce loneliness and encourage social interaction. With more socialization, more sustainable safety checks would occur on rural residents. Seniors caring for seniors was another group mentioned as being in need of assistance. When no respite is available for caregivers stress levels increase and injuries and abuse can occur. Having respite services would be beneficial for both the caregiver and the person in their charge.

Which group of county residents do you consider to be at-risk?

All sessions declared senior citizens / elderly as the most at-risk population in the county. The rationale for the elderly being most at-risk included was the potential to be scammed financially, to suffer physical abuse or neglect, and having to live on a fixed income. Having such a low income may not support basic needs. There was additional concern over seniors not being able to afford necessary medicine. Other risks for the elderly were connected to not being able to live independently and safely. Often the elderly cannot keep their home in a safe state of repair and they may be unable to clean it properly. Unsafe and unclean daily living conditions can negatively impact health. If a senior is unable to properly bathe, or attend to all personal hygiene needs, that can also lead to health issues. Elderly are at risk for falling which often leads to other risk factors.

Elderly caregivers taking care of spouses, grandchildren, family members, etc. are also at risk. Respite for these caregivers is a necessity and not always available. Caregivers become stressed and tired, which can create issues for both themselves and the person they are providing care for and injuries.

The second group considered at-risk was low income residents. Many families fall into the working poor category. They are employed but do not earn a living wage. A lot of people in this category make too much money to qualify for any assistance programs, but not enough to put healthy food on the table, pay for medical care and medicines, and housing costs. As people become part of the assistance program cycle, it can be difficult to regain financial stability and live independently from government programs. Low income, uninsured and underinsured residents have compounded difficulties within daily existence. Each day is spent in survival mode with no time for consideration of whether or not a food choice was healthy, or how much physical activity was engaged in. These residents tend to not have medical homes, do not seek prevention services and use the Emergency Room as a doctor's office.

Another group labeled at risk was anyone abusing or using drugs and alcohol. Several sessions covered the topic of people with mental health conditions that should be on medication, in counseling, or a combination of physician care and medicine. When access to mental health services is non-existent or limited, people self-medicate with drugs and alcohol to cope with the mental health issues. Many people from all socioeconomic backgrounds are becoming addicted to opioids and when they cannot access those drugs, will move on to heroin. Emergency Services and First Responders stated drug users are putting everyone at risk.

Residents living with mental health conditions were thought to be at risk by participants. This group faces specific challenges related to a lack of access to mental health services. Without access to care and treatment, mental health conditions can become dangerous for the individual suffering from the illness, as well as people living and working in proximity to these individuals. Often people living with these conditions turn to drugs or alcohol as a coping mechanism which makes a bad situation worse.

**Out of the Top Ten Leading Causes of Death in Union County, which are most concerning?
How can the county improve?**

Rank	Leading Causes of Death 2010 - 2014	Total Deaths	as % of Deaths
<i>Source: NC State Center for Health Statistics, County Health Data Book—2016</i>			
1	Cancer	1,436	33%
2	Diseases of heart	1345	29.5%
3	Alzheimer’s disease	359	7.5%
4	Chronic lower respiratory disease	320	7.5%
5	Cerebrovascular diseases	307	7%
6	Other unintentional injuries	172	3.5%
7	Nephritis, nephrotic syndrome and nephrosis	156	3.5%
8	Diabetes mellitus	133	3%
9	Pneumonia and influenza	122	2.8%
10	Motor vehicle injuries	121	2.8%
	TOTAL DEATHS — ALL CAUSES	4471	100%

All sessions were most concerned about cancer and heart disease. Cancer was alarming because participants felt most cancers we currently see in Union County may be connected to things residents come in contact with on a daily basis, such as well water. There was a great deal of discussion around pesticides, preservatives and hormones incorporated into producing our food supply being linked to cancer rates. Participants discussed the fact that many convenience, prepackaged foods are prepared in plastic containers that could be leaching unhealthy materials from the packaging into the foods people are consuming. Convenience foods that are prepared in the microwave were a particular concern.

Heart disease was a discussion topic. Increased rates of obesity were viewed as a gateway for other chronic conditions such as diabetes. Chronic conditions become more than just a health concern, they are an economic concern for working poor families and individuals. More children are overweight and obese, and are therefore developing unhealthy behaviors that will put them at risk for poor health as they mature. Obesity, unhealthy eating habits and lack of physical activity were connected to being unhealthy and leading into more serious health problems as well as escalation of health care cost.

Alzheimer's disease is a major concern and was discussed in every session. Participants seemed to be aware that the county's Alzheimer's rate exceeds state rates. There is a genuine concern as to why local rates are higher than the state and what the underlying reason for that rate may be. Many theories were discussed, from well water with arsenic and manganese, to pesticides in foods, to regulations surrounding the recording of vital statistics. It was stated that often the case with Alzheimer's related deaths, the person has multiple co-morbidities that could be contributing factors. This led to the question—are the Alzheimer's deaths actually Alzheimer's deaths, or were they listed as such and caused by a host of factors? With no conclusive answer, and higher county rates continuing to trend upward, the overwhelming answer was a need for additional research.

The secondary part of the discussions surrounding leading causes of death was what could be done to improve? All sessions requested more prevention based programs and services with an emphasis on health education. Participants feel that residents know what is unhealthy, such as eating fast food, convenience food, or selecting less expensive unhealthy options. However, they felt there is not enough emphasis placed on how to reverse the unhealthy eating. Healthy economic cooking classes, along with classes on how to grow your own produce were discussed as needs.

Holistic health services were suggested as a way to prevent unhealthy behaviors from emerging in the first place. Participants felt that if more doctors took a holistic approach treating more than just the physical health, patients would have better outcomes. Stress as an underlying cause of many health problems could be addressed as part of treatment, such as encouraging exercise and alternative natural medicine options.

A countywide public transit option was also suggested as a way to improve health outcomes. Participants feel that many people do not go to doctor appointments, dental appointments, or have access to healthy food options due to a lack of transportation.

“America has become an electronic device driven culture run by convenience eating that promotes obesity. People of all ages spend more time on electronic devices than engaged in physical activity.”

Unscripted Community Comments

Adult Survey Comments

Adult residents had the opportunity to write in comments and suggestions on issues impacting adult health in Union County. There were 224 comments captured.

The most common request for improving adult health in Union County were increased opportunities for free or affordable physical activities, specifically passive recreation. More than half of the comments mentioned a more pedestrian friendly environment with sidewalks, bike paths and walking trails. With a lack of a countywide public transportation system people expressed an interest in being able to walk or bike between locations. The heavily traveled roads, lack of sidewalks, and bike lanes makes pedestrian options dangerous and unappealing.

The Aquatics Center was seen as a great resource, with the caveat that it is too expensive for many residents, and is often over crowded. Respondents feel that community parks would improve physical fitness and thereby improve the health of residents. The rural areas of the county requested parks in their communities, with walking paths. Narrow country roads are not safe for walking or cycling. Rural residents feel they have no fitness options where they live.

Free and reduced cost health care was a recurring request. Respondents made many references to the working poor not being poor enough to qualify for assistance, but unable to afford health care and insurance premiums. Affordable care clinics were a recommendation to help discourage utilization of the Carolinas Health Care Emergency Room for routine medical care. The continual escalation of insurance premiums and deductibles were viewed as a barrier to medical access.

Many health behaviors were brought forth. Multiple responses included encouraging residents to take responsibility for their own health. Respondents stated that health education and prevention services were needed, specifically information on healthy eating, chronic disease prevention and stress reduction.

Numerous comments were made around the need to increase healthy food options and access in the county. The majority of the suggestions were around recruitment of more healthy food markets such as Whole Foods, Fresh Market, and Earth Fare. In addition to increasing healthy options, respondents would like to see unhealthy options limited. People feel too many fast food options are already part of the landscape on Highway 74.

The Union County Farmers Market on Skyway Drive was mentioned as a successful market. Suggestions were offered to have healthy cooking classes at the market, and build on the already established success.

Water accessibility and quality were included in multiple responses. Respondents would like county or municipal water available to more residents to avoid well water. People are concerned about what is in the well water and thereby what they are consuming. Statements indicated some people have switched to bottled water out of concern for contaminants in well water. Filtration systems were considered to be too expensive for most residents.

Respondents stated that health education and prevention services were needed, specifically information on healthy eating, chronic disease prevention and stress reduction.

Senior Survey Comments

Senior residents had the opportunity to write in comments and suggestions on issues impacting senior health in Union County. There were 180 comments captured.

The majority of comments included complaints about the high price tag associated with sustaining good health. Many referenced the prohibitive cost of accessing health services, both preventative and acute care. The cost of insurance plans and high dollar prescriptions were a stated barrier to positive health outcomes. Statements were written indicating seniors are having to choose between medicine and food. There were multiple requests for free health care, and free screenings for chronic disease and cancer.

Seniors stated Medicare does not cover dental services, which makes dental health cost prohibitive. Free or reduced cost dental care for seniors is desired.

The comments expressed by respondents frequently discussed a desire for additional programs and services for senior residents that are accessible across the entire county. The programs requested varied: exercise classes, healthy eating, and weight loss classes. Complimentary statements were made about the senior center in Monroe. Additional senior centers located across Union County would be beneficial for socialization for seniors within the community that they live. Seniors expressed feeling lonely and isolated due to no longer driving and being unable to access programs, services, and activities.

Health education was mentioned as a need to raise awareness of services and programs. They would like information and newsletters for senior residents that are not comfortable with the internet. Diabetes, hypertension and heart disease prevention information was specifically requested.

Social determinants were a factor in the ability to sustain health, quality of life and living environment. Monetary constraints prevent seniors from accessing care, being involved in social activities, and proper up keep of housing. Seniors tend to want to remain in their home. However, apprehension develops when they know there are structural issues, sanitation issues, and safety issues. Requests for assistance with routine maintenance and home repairs was stated repeatedly. Respondents felt that with assistance they could age in place and remain home.

Affordable public transportation county wide was requested for various purposes: doctor appointments, grocery shopping, picking up medicine, and social activities. Seniors in rural Union County made statements about being lonely and feeling isolated. Rural settings also present challenges for accessing routine medical appointments, which are frequently put on hold until they become acute.

Senior caregiver problems are often barriers to good health outcomes for both the caregiver and the recipient. Caregivers need respite that they often do not receive. Caregivers struggle to care for their own health due to being unable to leave the person in their charge. Stress and anxiety are often the byproduct of these situations.

The majority of comments included complaints about the high price tag associated with sustaining good health. Many referenced the prohibitive cost of accessing health services, both preventative and acute care.

Union County Secondary Data / Key Health Indicators

Leading Causes of Death

2011-2015 Ten Leading Causes of Death by:

County of Residence Age Group, Ranking, number of Deaths, and Unadjusted Death Rates Per 100,000

North Carolina			# OF DEATHS	DEATH RATE
AGE GROUP:	RANK	CAUSE OF DEATH:		
TOTAL - ALL AGES	0	TOTAL DEATHS --- ALL CAUSES	419,137	851.4
	1	Cancer - All Sites	93,838	190.6
	2	Diseases of the heart	88,076	178.9
	3	Chronic lower respiratory diseases	24,773	50.3
	4	Cerebrovascular disease	22,863	46.4
	5	Alzheimer's disease	15,585	31.7
	6	Other Unintentional injuries	15,499	31.5
	7	Diabetes mellitus	12,505	25.4
	8	Pneumonia & influenza	9,427	19.2
	9	Nephritis, nephrotic syndrome, & nephrosis	8,749	17.8
	10	Septicemia	7,026	14.3
Union County			# OF	DEATH
AGE GROUP:	RANK	CAUSE OF DEATH:		
TOTAL - ALL AGES	0	TOTAL DEATHS --- ALL CAUSES	6,335	593.7
	1	Cancer - All Sites	1,453	136.2
	2	Diseases of the heart	1,400	131.2
	3	Alzheimer's disease	347	32.5
	4	Chronic lower respiratory diseases	342	32.0
	5	Cerebrovascular disease	304	28.5
	6	Other Unintentional injuries	179	16.8
	7	Nephritis, nephrotic syndrome, & nephrosis	155	14.5
	8	Diabetes mellitus	148	13.9
	9	Pneumonia & influenza	138	12.9
	10	Septicemia	126	11.8

Leading Causes of Death

2011-2015 Ten Leading Causes of Death by:
County of Residence Age Group, Ranking, number of Deaths, and Unadjusted Death Rates Per 100,000

Cabarrus County			# OF DEATHS	DEATH RATE
AGE GROUP:	RANK	CAUSE OF DEATH:		
TOTAL - ALL AGES	0	TOTAL DEATHS --- ALL CAUSES	7,317	776.9
	1	Cancer - All Sites	1,563	165.9
	2	Diseases of the heart	1,400	148.6
	3	Chronic lower respiratory diseases	474	50.3
	4	Cerebrovascular disease	407	43.2
	5	Alzheimer's disease	341	36.2
	6	Other Unintentional injuries	307	32.6
	7	Pneumonia & influenza	227	24.1
	8	Diabetes mellitus	204	21.7
	9	Nephritis, nephrotic syndrome, & nephrosis	148	15.7
	10	Suicide	131	13.9
Johnston County			# OF DEATHS	DEATH RATE
AGE GROUP:	RANK	CAUSE OF DEATH:		
TOTAL - ALL AGES	0	TOTAL DEATHS --- ALL CAUSES	6,404	718.0
	1	Diseases of the heart	1,591	178.4
	2	Cancer - All Sites	1,552	174.0
	3	Chronic lower respiratory diseases	348	39.0
	4	Cerebrovascular disease	303	34.0
	5	Other Unintentional injuries	232	26.0
	6	Nephritis, nephrotic syndrome, & nephrosis	157	17.6
	7	Motor vehicle injuries	154	17.3
	8	Diabetes mellitus	146	16.4
	9	Alzheimer's disease	126	14.1
	10	Pneumonia & influenza	116	13.0

Prevention Quality Indicators

Union County Chronic Disease Incidence Rates per 100,000 Population Age Adjusted to the 2000 US Population

Union County	2005 - 2009	2007 -2011	2011-2015
	Rate	Rate	Rate
Heart Disease	183.2	172.4	136.2
Diabetes	21.4	18.9	13.9
Cerebrovascular Disease	48	44.5	28.5
Chronic Lower Respiratory Disease	45.9	41.9	32
Alzheimer's Disease	57.5	61.9	32.5

Carolinas HealthCare System – Union	
175 licensed hospital beds during 2016	
8,764 General Hospital Discharges during 2016	
CHS - Union	2016 Inpatient Admissions
Diabetes short-term complications	232
Congestive Heart Failure	439
Chronic Obstructive Pulmonary Disease	417
Adult Asthma	70

Source: Carolinas HealthCare System Union 2016

Detailed Mortality Statistics in North Carolina 2015

All Causes

(Source: State Center for Health Statistics, North Carolina)

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	769	865	0	1634
Johnston	726	725	0	1451
Union	688	689	0	1377

Cerebrovascular Disease in NC

160-1698

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	41	44	0	85
Johnston	29	38	0	67
Union	32	36	0	68

Stroke, not specified as hemorrhage or infarction

164—164

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	20	20	0	40
Johnston	14	23	0	37
Union	14	20	0	34

Respiratory Diseases in NC

J00-J699

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	92	100	0	202
Johnston	79	84	0	163
Union	79	79	0	158

Influenza and Pneumonia Deaths

J09-J189

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	24	31	0	55
Johnston	12	14	0	26
Union	13	18	0	31

Chronic Lower Respiratory Diseases

J40-J47

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	51	57	0	108
Johnston	48	54	0	102
Union	41	42	0	83

Adult Respiratory Distress Syndrome

J80-J80

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	No deaths reported resulting from Adult Respiratory Distress Syndrome in Cabarrus			
Johnston	0	3	0	3
Union	2	1	0	3

Diseases of esophagus, stomach and duodenum

K20-K319

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	2	3	0	5
Johnston	0	1	0	1
Union	1	2	0	3

Disorders of gallbladder, biliary tract and pancreas

K80-K87

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	0	6	0	6
Johnston	1	7	0	8
Union	2	2	0	4

Diseases of the Digestive System

K00—K93

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	27	40	0	67
Johnston	20	28	0	48
Union	24	26	0	50

Diseases of the Liver

K70-K77

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	19	16	0	35
Johnston	16	10	0	26
Union	12	9	0	24

Transport Accidents

V01-V99

Age at Death: 0—99 years;

Note: Age indicates age 99 years or older.

Race: All

Gender: Both

Hispanic Origin: All (Hispanic and Non-Hispanic)

County	Gender			Total
	Male	Female	Unknown	
Cabarrus	12	11	0	23
Johnston	24	10	0	34
Union	12	8	0	20

Cancer

2009 – 2013 NC Cancer Incidence Rates per 100,000 Population Age-Adjusted to the 2000 US Population

County	All Cancers		Lung / Bronchus		Female Breast		Prostate		Colon / Rectum	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
North Carolina	256,989	483.4	37,831	70.9	45,146	157.9	33,115	130.6	20,240	38.5
Cabarrus	4,670	515.7	677	77.5	806	162.7	571	133.6	350	38.7
Johnston	263	431.7	34	49.7	50	163.6	27	85.5	25	44.7
Union	3,808	453.4	579	70.7	656	139.2	460	117.6	286	35.9

*Rates based on counts less than 16 are unstable. Use with caution.
Cases may not sum to totals due to unknown or other values*

County	Projected New Cases				
	Total	Lung/ Bronchus	Female Breast	Prostate	Colon/ Rectum
North Carolina	58,339	8,768	10,052	7,704	4,586
Cabarrus	1,049	153	187	136	82
Johnston	973	142	173	128	76
Union	1,149	166	204	153	89

Projections are estimated using 2009-2013 invasive cancer incidence and 2010-2014 mortality rates and 2016 NC population estimates available at: <http://www.osbm.nc.gov/demog/county-projections>. The projected cases and deaths from counties may not sum up to those of the state due to rounding.

County	Projected Deaths				
	Total	Lung/ Bronchus	Female Breast	Prostate	Colon/ Rectum
North Carolina	20,626	6,191	1,416	994	1,658
Cabarrus	358	107	26	16	29
Johnston	326	98	23	14	26
Union	381	115	27	17	31

Projections are estimated using 2009-2013 invasive cancer incidence and 2010-2014 mortality rates and 2016 NC population estimates available at: <http://www.osbm.nc.gov/demog/county-projections>. The projected cases and deaths from counties may not sum up to those of the state due to rounding.

Communicable Disease

Communicable Disease Case Numbers, HIV/AIDS, and Sexually Transmitted Diseases

Communicable Disease	Number of Cases 2015	Number of Cases 2016
	Union County	Union County
Campylobacter	21	16
Chikungunya (Mosquito borne disease)	1	None reported
Cryptosporidiosis	10	5
E. Coli	3	2
Haemophilus influenza, invasive disease	3	1
Hepatitis A	1	1
Hepatitis B	14	27
Hepatitis C	None reported	1
Influenza Death	2	1
Legionellosis	3	2
Listeriosis	None reported	1
Lyme Disease	1	1
Salmonellosis	61	46
Shigellosis	4	4
Pertussis (Whooping Cough)	3	6
Streptococcal invasive infection, group A	3	6
Tuberculosis	None reported	2

Table 1. N.C. Newly Diagnosed HIV Infection^a by County and Year of Diagnosis and 2012-2016

County	2012 Cases	2013 Cases	2014 Cases	2015 Cases	2016 Cases
Cabarrus	12	17	18	13	
Johnston	11	16	15	12	
Union	11	13	15	17	14
NC Total	1,269	1,330	1,351	1,345	

^aHIV infection includes all newly reported HIV infected individuals by the year of first diagnosis, regardless of the stage of infection (HIV or AIDS).
Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 27, 2016).

Table 2. N. C. Newly Diagnosed AIDS^a by County of Residence and Year of Diagnosis, 2012-2016

County	2012 Cases	2013 Cases	2014 Cases	2015 Cases	2016 Cases
Cabarrus	7	10	10	9	
Johnston	12	4	15	8	
Union	7	14	8	7	6
NC Total	782	862	706	738	

^aAIDS (HIV infection Stage 3) is defined by a CD4+ T-lymphocyte cell count of less than 200 or a CD4+ T-lymphocyte percentage of total lymphocytes of less than 14, if cell count test was not available. Those who were classified as AIDS (Stage 3) or who have ever been diagnosed with AIDS (Stage 3) were classified as AIDS (Stage 3) during the year of diagnosis. For the newly diagnosed AIDS (Stage 3) cases, there is a possibility that the individual was diagnosed with HIV in a previous year (or another state). Therefore, adding new AIDS (Stage 3) diagnoses and new HIV diagnoses WILL NOT equal the total number of new HIV diagnoses in North Carolina.

Data Source: enhanced HIV/AIDS Reporting System (eHARS) (data as of June 27, 2016).

Table 3. N.C. Newly Diagnosed Chlamydia by County and Year of Diagnosis, 2012-2016

County	2012 Cases	2013 Cases	2014 Cases	2015 Cases	2016 Cases
Cabarrus	696	699	769	813	
Johnston	437	577	498	715	
Union	492	466	635	775	815
NC Total	49,478	49,220	49,956	54,383	

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2016).

Table 4. N.C. Newly Diagnosed Gonorrhea by County and Year of Diagnosis, 2012-2016

County	2012 Cases	2013 Cases	2014 Cases	2015 Cases	2016 Cases
Cabarrus	137	150	165	159	
Johnston	93	117	115	196	
Union	172	109	119	210	283
NC Total	13,740	14,114	14,952	17,047	

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2016).

Table 5. N.C. Newly Diagnosed Early Syphilis (Primary, Secondary, Early Latent) Cases and Year of Diagnosis, 2012-2016

County	2012 Cases	2013 Cases	2014 Cases	2015 Cases	2016 Cases
Cabarrus	1	2	8	26	
Johnston	2	4	13	20	
Union	3	5	7	15	
NC Total	564	688	1,137	1,866	

Data Source: North Carolina Electronic Disease Surveillance System (NC EDSS) (data as of June 1, 2016)

Data Source: <http://epi.publichealth.nc.gov/cd/stds/figures/std11rpt.pdf>

Reproductive Health

Live Birth Data

North Carolina Resident Live Birth Rates per 1,000 Population, 2011-2015

County of	Non-Hispanic											
	Total		Total		White		Black		Other		Hispanic	
	Births	Rate	Births	Rate	Births	Rate	Births	Rate	Births	Rate	Births	Rate
North	600,927	12.2	511,391	11.4	335,127	10.4	143,455	13.3	32,809	16.9	89,536	20.6
Cabarrus	11,673	12.4	9,659	11.4	7,141	10.7	1,996	12.9	522	17.9	2,014	21.9
Johnston	11,213	12.6	8,801	11.4	6,929	11.1	1,722	12.4	150	13.8	2,412	20.5
Union	11,789	11.0	9,658	10.1	7,620	9.6	1,660	13.0	378	13.6	2,131	18.5

Prepared by NC-DHHS State Center for Health Statistics

Rates based on small numbers (fewer than 20 cases) are unstable and should be interpreted with caution

Birth Weight

2011-2015 North Carolina Resident Live Births by County of Residence: Number and Percent of Low (<= 2500 grams) and Very Low (<= 1500 grams) Weight Births by Race and Ethnicity

County of Residence	Birth Weight	Non-Hispanic											
		Total		Total		White		Black		Other		Hispanic	
		Births	Pct.	Births	Pct.	Births	Pct.	Births	Pct.	Births	Pct.	Births	Pct.
North Carolina	Low	53,957	9	47,866	9.4	24,935	7.4	19,908	13.9	3,023	9.2	6,091	6.8
	Very Low	10,489	1.7	9,367	1.8	4,214	1.3	4,683	3.3	470	1.4	1,122	1.3
Cabarrus	Low	1,007	8.6	867	9	529	7.4	288	14.4	50	9.6	140	7
	Very Low	187	1.6	159	1.6	92	1.3	62	3.1	5	1	28	1.4
Johnston	Low	890	7.9	729	8.3	479	6.9	233	13.5	17	11.3	161	6.7
	Very Low	167	1.5	144	1.6	80	1.2	58	3.4	6	4	23	1
Union	Low	934	7.9	769	8	479	6.3	258	15.5	32	8.5	165	7.7
	Very Low	138	1.2	113	1.2	58	0.8	52	3.1	3	0.8	25	1.2

Prepared by NC-DHHS State Center for Health Statistics

Rates based on small numbers (fewer than 20 cases) are unstable and should be interpreted with caution

Pregnancy Rates

2011-2015 NC Resident Pregnancy Rates per 1,000 population:

Females age 15 – 17 by race, perinatal care regions and county of residence

	Total Pregnancies	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Pregnancies	Rate
RESIDENCE: NC	16,283	17.4	5,935	10.9	6,419	26.3	578	14.2	3,289	31.3
CABARRUS	276	13.4	117	8.8	72	17.1	1	*	85	33.6
JOHNSTON	339	17.5	140	11.0	87	25.7	3	*	108	35.6
UNION	265	9.7	100	5.0	89	24.6	6	*	69	21.7

2011-2015 NC Resident Pregnancy Rates per 1,000 population:

Females age 15 - 19 by race, perinatal care regions and county of residence

	Total Pregnancies	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Pregnancies	Rate
RESIDENCE: NC	57,752	36.2	23,766	25.6	21,516	50.2	2,157	31.7	10,071	58.2
CABARRUS	980	31.6	466	23.4	258	40.8	13	*	239	60.3
JOHNSTON	1,095	37.7	491	26.3	252	47.5	9	*	341	71.8
UNION	918	21.6	426	13.9	267	46.1	13	*	208	41.6

2011-2015 NC Resident Pregnancy Rates per 1,000 population:

Females age 19- 44 by race, perinatal care regions and county of residence

	Total Pregnancies	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Pregnancies	Rate
RESIDENCE: NC	712,161	72.2	376,481	63.1	193,962	80.2	37,763	78.1	100,993	101.0
CABARRUS	13,350	70.1	7,917	62.7	2,592	72.7	564	75.6	2,227	105.8
JOHNSTON	12,783	72.4	7,690	64.3	2,231	77.3	181	71.6	2,646	102.9
UNION	13,221	63.0	8,343	55.6	2,083	76.6	424	65.9	2,330	89.4

Fertility Rates

2011-2015 NC Resident Fertility Rates per 1,000 population:

Females age 15 – 17 by race, perinatal care regions and county of origin

	Total Births	Fertility Rate	White Non-Hispanic	Fertility Rate	Af. Am. Non-Hispanic	Fertility Rate	Other Non-Hispanic	Fertility Rate	Hispanic Births	Fertility Rate
RESIDENCE: NC	12,711	13.6	4,646	8.5	4,629	19.0	485	11.9	2,951	28.1
CABARRUS	226	10.9	90	6.8	57	13.5	1	*	78	30.9
JOHNSTON	261	13.5	105	8.3	62	18.3	2	*	92	30.4
UNION	202	7.4	61	3.1	72	19.9	6	*	63	19.8

2011-2015 NC Resident Fertility Rates per 1,000 population:

Females age 15 – 19 by race, perinatal care regions and county of origin

	Total Births	Fertility Rate	White Non-Hispanic	Fertility Rate	Af. Am. Non-Hispanic	Fertility Rate	Other Non-Hispanic	Fertility Rate	Hispanic Births	Fertility Rate
RESIDENCE: NC	46,057	28.8	19,396	20.9	16,037	37.4	1,767	26.0	8,857	51.2
CABARRUS	795	25.6	371	18.7	195	30.9	12	*	217	54.8
JOHNSTON	909	31.3	394	21.1	203	38.3	5	*	307	64.7
UNION	731	17.2	318	10.3	213	36.8	12	*	188	37.6

2011-2015 NC Resident Fertility Rates per 1,000 population:

Females age 19 – 44 by race, perinatal care regions and county of origin

	Total Births	Fertility Rate	White Non-Hispanic	Fertility Rate	Af. Am. Non-Hispanic	Fertility Rate	Other Non-Hispanic	Fertility Rate	Hispanic Births	Fertility Rate
RESIDENCE: NC	600,927	60.9	335,127	56.2	143,455	59.3	32,809	67.9	89,536	89.6
CABARRUS	11,673	61.3	7,141	56.6	1,996	56.0	522	69.9	2,014	95.7
JOHNSTON	11,213	63.5	6,929	58.0	1,722	59.7	150	59.3	2,412	93.8
UNION	11,789	56.2	7,620	50.7	1,660	61.1	378	58.7	2,131	81.8

Abortion Rates

2011-2015 NC Resident Abortion Rates per 1,000 population:

Females age 15 – 17 by race, perinatal care regions and county of origin

	Total Abortions	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Abortions	Rate
RESIDENCE: NC	3,457	3.7	1,253	2.3	1,740	7.1	87	2.1	315	3.0
CABARRUS	50	2.4	27	2.0	15	*	0	*	7	*
JOHNSTON	78	4.0	35	2.8	25	7.4	1	*	16	*
UNION	62	2.3	39	2.0	16	*	0	*	6	*

2011-2015 NC Resident Abortion Rates per 1,000 population:

Females age 15 – 19 by race, perinatal care regions and county of origin

	Total Abortions	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Abortions	Rate
RESIDENCE: NC	3,457	3.7	1,253	2.3	1,740	7.1	87	2.1	315	3.0
CABARRUS	50	2.4	27	2.0	15	*	0	*	7	*
JOHNSTON	78	4.0	35	2.8	25	7.4	1	*	16	*
UNION	62	2.3	39	2.0	16	*	0	*	6	*

2011-2015 NC Resident Abortion Rates per 1,000 population:

Females age 19 - 44 by race, perinatal care regions and county of origin

	Total Abortions	Rate	White Non-Hispanic	Rate	Af. Am. Non-Hispanic	Rate	Other Non-Hispanic	Rate	Hispanic Abortions	Rate
RESIDENCE: NC	107,136	10.9	39,636	6.6	48,779	20.2	4,780	9.9	10,979	11.0
CABARRUS	1,599	8.4	738	5.8	570	16.0	41	5.5	200	9.5
JOHNSTON	1,520	8.6	740	6.2	489	16.9	30	11.9	226	8.8
UNION	1,355	6.5	685	4.6	401	14.8	43	6.7	185	7.1

Infant Mortality

NC RESIDENT INFANT (<1 YEAR) DEATH RATES PER 1,000 LIVE BIRTHS, 2011-2015

	Total Infant Deaths	Rate	White Non-Hispanic Infant Deaths	Rate	Af. Am. Non-Hispanic Infant Deaths	Rate	Other Non-Hispanic Infant Deaths	Rate	Hispanic Infant Deaths	Rate
RESIDENCE: NC	4,325	7.2	1,834	5.5	1,851	12.9	194	5.9	446	5.0
CABARRUS	64	5.5	34	4.8	20	10.0	2	*	8	*
JOHNSTON	72	6.4	40	5.8	16	*	3	*	13	*
UNION	63	5.3	21	2.8	23	13.9	2	*	17	*

PREPARED BY NC-DHHS STATE CENTER FOR HEALTH STATISTICS

NOTE: RATES BASED ON SMALL NUMBERS (FEWER THAN 20 CASES) ARE UNSTABLE AND ARE NOT REPORTED*

NC RESIDENCE NEONATAL (<28 DAYS) DEATH RATES PER 1,000 LIVE BIRTHS, 2011-2015

	Total Neonatal Deaths	Rate	White Non-Hispanic Neonatal Deaths	Rate	Af. Am. Non-Hispanic Neonatal Deaths	Rate	Other Non-Hispanic Neonatal Deaths	Rate	Hispanic Neonatal Deaths	Rate
RESIDENCE: NC	2,966	4.9	12,15	3.6	1,302	9.1	131	4.0	318	3.6
CABARRUS	44	3.8/	23	3.2	12	*	2	*	7	*
JOHNSTON	47	4.2	27	3.9	10	*	1	*	9	*
UNION	48	4.1	12	*	21	12.7	2	*	13	*

NC RESIDENT POSTNEONATAL (28 DAYS – 1 YEAR) DEATH RATES, 2011-2015

	Total Post Neonatal Deaths	Rate	White Non-Hispanic Post Neonatal Deaths	Rate	Af. Am. Non-Hispanic Post Neonatal Deaths	Rate	Other Non-Hispanic Post Neonatal Deaths	Rate	Hispanic Post Neonatal Deaths	Rate
RESIDENCE: NC	1,359	2.3	619	1.9	549	3.9	63	1.9	128	1.4
CABARRUS	20	1.7	11	*	8	*	0	*	1	*
JOHNSTON	25	2.2	13	*	6	*	2	*	4	*
UNION	15	*	9	*	2	*	0	*	4	*

Life Expectancy

2015 State of NC and 2013—2015 County Life Expectancy at Birth

GEOGRAPHIC AREA	Total		Sex				Race			
			Male		Female		White		African American	
	L.E.	C.I. (95%)	L.E.	C.I. (95%)	L.E.	C.I. (95%)	L.E.	C.I. (95%)	L.E.	C.I. (95%)
State of North Carolina	77.7	77.6-77.8	75.2	75.1-75.4	80.2	80.0-80.3	78.5	78.4-78.7	75.4	75.2-75.6
Cabarrus County	78.2	77.8-78.6	76.2	75.7-76.8	80.0	79.5-80.5	78.5	78.1-78.9	76.6	75.5-77.6
Johnston County	78.1	77.7-78.5	75.9	75.3-76.4	80.2	79.7-80.8	78.3	77.9-78.8	78.1	77.0-79.2
Union County	79.6	79.2-79.9	77.5	76.9-78.0	81.7	81.2-82.1	80.3	79.9-80.7	75.9	74.8-77.1

L.E.: Life Expectancy

C.I. (95%): 95 percent Confidence Interval

Life expectancy is the average number of additional years that someone at a given age would be expected to live if current mortality conditions remained constant throughout their lifetime.

PREPARED BY NC-DHHS STATE CENTER FOR HEALTH STATISTICS

Union County Secondary Data / Environmental Health

Air Quality

On a federal level the Division of Air Pollution Control (DAPC) ensures compliance with the federal Clean Air Act and the Emergency Planning and Community Right-to-Know Act as part of its mission to attain and maintain air quality at a level that protects the environment and public health.

At a local level Union County air quality is monitored through the North Carolina Division of Air Quality (DAQ). The (DAQ) consists of five sections located in the central offices in Raleigh and seven regional offices located across the state. The sections are further broken down into branches, each responsible for specific tasks in achieving an overall mission. Union County is part of the Mooresville Regional office. Only three North Carolina counties (Buncombe, Forsyth, Mecklenburg) have local air programs that enforce federal, state and local regulations for protecting air quality.

State of the Environment 2016 / Mecklenburg County Health Department

Healthy air is essential for residents to enjoy a full quality of life. There are six federal health-based air quality standards for criteria pollutants: Carbon Monoxide (CO); Lead (Pb), Nitrogen Dioxide (NO₂), Ozone (O₃), Particulate Matter (PM), and Sulfur Dioxide (SO₂). The Charlotte region has historically failed to comply with the federal standard for ozone. Currently, Mecklenburg County narrowly meets the standard for ozone compliance with a preliminary 2016 of value 68 parts per billion (ppb). This is the first time since 1997 that all six standards are within the margin of success. Future efforts led by the Air Quality Division of LUESA will continue to prioritize the reduction of ozone throughout our community. As air quality in Charlotte improves, surrounding counties such as Union will benefit.

New NC Rule on Air Quality passed in 2016

A new environmental rule passed by the Environmental Management Commission (effective June 13, 2016) will reduce paperwork for more than 1,400 NC business owners and free up resources North Carolina will use to protect air quality. The businesses that would qualify for air permit exemptions include food manufacturing and colleges and universities. The new rule does not remove or relax any existing emissions standards.

The state environmental department will continue to issue permits, conduct inspections, and collect data on larger sources that account for most air emissions from industrial facilities. The resources that are freed up by reducing paperwork for very small sources of air pollution will be focused on additional inspections and on larger, more environmentally significant sources of emissions.

Industrial facilities will have to keep and maintain any air pollution control equipment they already have in place and they could be inspected at any time, whether they are exempt from permitting requirements or not.

Air Quality

Union County

If you live in Union County, the air you breathe needs your support.

Ozone

D

Particle Pollution 24-hour

DNC

Particle Pollution Annual

DNC

The air you breathe needs your support.

You can make a difference in the air that you breathe.

High Ozone Days

Ozone Grade:	D	How is my grade calculated?
Weighted Average	2.7	Change since 1999: 32.8 less days this year

View Orange, Red, and Purple Ozone Days

Particle Pollution - 24 Hour

Grade:	DNC	How is my grade calculated?
Weighted Average:	DNC	No monitor for this pollutant exists in this county.

View Orange, Red, and Purple Particle Pollution Days

Particle Pollution - Annual

Grade:	DNC	How is my grade calculated?
Design Value	DNC	No monitor for this pollutant exists in this county.

Groups At Risk

Total Population:	218,568	Risks to the population
Pediatric Asthma:	7,171	Risks to people with Asthma
Adult Asthma:	12,245	Risks to people with Asthma
COPD:	11,961	Risks to people with COPD
Cardiovascular Disease:	15,069	Risks to people with Cardiovascular Disease
Diabetes:	16,648	Risks to people with Diabetes
Children Under 18:	62,408	Risks to children and teens
Adults 65 & Over:	24,735	Risks to older adults
Poverty Estimate:	23,279	Risks to people with low incomes

Air Quality

Find your air quality forecast so you can stay safe.



1. What do the colors mean?

They are from the Air Quality Index, shown here. We compare the monitored data against the Air Quality Index, a color-coded scale that EPA developed to help the public understand daily air pollution forecasts and protect themselves. Each color provides a specific warning about the risk associated with air pollution in that range.

2. How do we calculate the grades?

In our analysis of ozone and short-term levels of particle pollution, we assign increasing weights to the days when air pollution levels reach the higher ranges to calculate our grades. We add those together and calculate the weighted average, then assign grades based on that weighted average. For year-round levels of particle pollution, we use annual average levels calculated by EPA.

3. What does DNC mean?

DNC means “Data Not Collected.” Most counties don’t have monitors. The state and EPA decide where to place monitors. Monitors are located in less than 1,000 of the 3,068 counties in the United States. Counties where the grade shows “DNC” are counties where no monitors exist to collect information about that pollutant.

4. What does INC mean?

INC means “Incomplete.” A county needs three years of data to adequately compare levels of pollution with national standards. If the county lacks three years of data, then the information is listed as “incomplete.”

5. How can I improve my county’s grade?

Drive less. Use less electricity. Don’t burn wood or trash. Support measures in your community that can cut air pollution. Tell your local and state officials to take steps to clean up air pollution. Send a message to Congress to tell them we need them to support cleaner, healthier air.

Source: *The American Lung Association “State of the Air® 2016”.*

Water Quality

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower.

The relative susceptibility rating of each source for Union County was determined by combining the contaminant rating (number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the well or watershed and its delineated assessment area). The assessment findings are summarized in the table below:

Susceptibility of Sources to Potential Contaminant Sources (PCS)		
Source Name	Susceptibility Rating	SWAP Report Date
Pee Dee River	Moderate	Jul-15
Catawba River	Moderate	Annual Review

Turbidity

(This measures cloudiness of water). Measure is an indication of the effectiveness of the filtration system. Turbidity rule requires that 95% or more of the monthly samples must be less than or equal to 0.3 Nephelometric Turbidity Unit (NTU).

Contaminant (units)	Treatment Technique (TT) Violation	Your water	MCLG	Treatment Technique (TT) Violation if:	Likely Source of Contaminant
Turbidity (NTU) Highest single turbidity measurement				Turbidity > 1 NTU	Soil runoff
Anson	NA	0.11 NTU	NA		
Catawba	NA	0.10 NTU	NA		
Turbidity (NTU) lowest monthly percentage of samples meeting turbidity limits				Less than 95% of monthly Turbidity measurements are < 0.3 NTU	
Anson	NA	99%	NA		
Catawba	NA	100%	NA		

Tables of Detected Contaminants

Water Quality Definitions

MCL: maximum contaminant level, highest level of contaminant allowed in drinking water.

MCLG: maximum contaminant in drinking water below which there is no known or expected risk to health.

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

Microbiological Contaminants in Distribution System – For systems that collect 40 or more samples per month

Contaminant (units)	MCL Violation	Your Water	MCLG	MCL	Likely Source of Contaminant
Total Coliform Bacteria (presence or absence) Union County	No violation	within acceptable limits	0	5 % of monthly samples are positive - note: if either an original routine sample (s) are fecal coliform or E. Coli positive, a Tier I violation exists	Naturally present in the environment
Fecal Coliform or E. coli (presence or absence) Union County	No violation	within acceptable limits	0		Human and animal fecal waste

Inorganic Contaminants

Contaminant (units)	sample data	MCL Violation	Your water	Range Low - High	MCLG	MCL	Likely Source of Contaminant
Fluoride (ppm)							Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Anson	2015	NA	0.61	0.0 - 1.36	4	4	
Catawba	2015	NA	0.54	0.54 - 0.54			

Contaminant (units)	sample data	MCL Violation Y / N	Range low high	Your Water	MCLG	MCL	Likely Source of Contaminant
Arsenic (ppb) Catawba	2015	N	0 - 0	0	0	10	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production wastes

Total Organic Carbon (TOC)

Contaminant (units)	TT Violation Y / N	Your Water (RAA Removal Ratio)	Range Monthly Removal Ratio Low High	MCLG	TT (treatment technique)	Likely Source of Contaminant	Compliance Method (Step 1 or ACC#)
Total Organic Carbon (removal ratio) TOC - Treated							
Anson	N	1.7	1.4 - 2.5	NA	TT	Naturally Present in Environment	SUVA Method
Catawba	N	1.09	1.09	NA	TT		

Water Quality

Union County residents access drinking water through either a private drinking water well, county water or municipal water supplies.

The Union County Public Works Department (UCPW) operates and maintains a regional water utility system that provides retail water and wastewater service to over 43,000 water customers and 28,000 sewer customers within unincorporated Union County and 11 of the 14 municipalities within the County. UCPW currently meets the water and wastewater needs of more than one half of Union County's population. UCPW provides wholesale water supply to the Town of Wingate and also has a water sales agreement with the City of Monroe to sell up to 2 million gallons per day to the City as part of their long term water supply strategy.

Union County Public Works is pleased to present to you an Annual Drinking Water Quality Report. This report is a snapshot of last year's water quality. Included are details about your source(s) of water, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water.

The full Annual Drinking Water Quality Report is available on line.

<http://www.co.union.nc.us/LivingHere/PublicWorks/Water.aspx#3288177-annual-water-quality-reports>

The mission of Union County Public Works is to protect and enrich the wellbeing, economic stability, and environment of Union County through the production and distribution of clean drinking water and collection and treatment of waste water, at all times meeting or exceeding Federal and State standards, with transparency and accountability to our residents.

In 2015 Union County pumped nearly 4.5 billion gallons of safe, potable water to residents. Other improvements were made to protect and improve water quality and The mission of Union County Public Works is to protect and enrich the wellbeing, economic stability, and environment of Union County through the production and distribution of clean drinking water and collection and treatment of waste water, at all times meeting or exceeding Federal and State standards, with transparency and accountability to our residents.

In 2015 Union County pumped nearly 4.5 billion gallons of safe, potable water to residents. Other improvements were made to protect and improve water quality and access:

Accomplishments:

- Ice pigging the water distribution system

What is Pigging?

Pigging technology has been around in different forms since the early part of the 20th century, and a wide variety of sectors, industries and applications that process liquids now use pigging systems. It has progressed from basic equipment used to clean oil pipes, to advanced, fully automated industrial product recovery and liquid transfer technology used today.

[Pigging has many benefits](#), but its basic purpose is to remove or recover residual liquid that remains in a pipe or pipelines after liquid has been transferred from one location to another. The main reasons organisations in process industries use pigging is to recover product from pipelines, which increases yields and reduces waste. Process industries also use pigging to clean pipes, transfer liquids, reduce the use of cleaning fluids, use less water, save time, improve process efficiency and ultimately increase profits. In addition, because pigging saves resources, product and time, it also helps towards sustainability.

- System wide chlorine burnout
- Completed three year valve exercising program, cleaning, repairing and operating over 16,000 valves
- Added 27 miles of water main

Water Quality

Advancements:

- Ice pigging water distribution system in Olde Syscamore
- Completion of Weddington Water Tower
- Forest Park Pump Station Replacement
- Sandblast and paint Austin Road Water Tower
- Galvanized water line replacement

Union County water comes from two surface sources, the Catawba River located in Lancaster County, S. C. and the Pee Dee River located in eastern Anson County.

The primary source of water for Union County is the Catawba River. Union County jointly owns and operates the Catawba River Water Treatment Plant with the Lancaster County Water and Sewer District (LCW&SD) in Lancaster SC. Currently 80% of our water needs are met through this facility.

Union County also has a purchase water agreement with Anson County, NC to purchase up to 4 million gallons per day. Union County currently has a total of 25.0 million gallons per day (MGD) water supply capacity.

Future Water Supply

In May 2013 Union County entered into an agreement with the Town of Norwood in Stanly County to develop a new water intake off of Lake Tillery as part of Union's effort to bring a new water source from the Yadkin River to Union County. Seventy-five percent of the County's land area is within the Yadkin River Basin but only 20% of our current water supply comes from the Yadkin River though our purchase agreement with Anson County. This new Yadkin River Water Supply program is a 7 to 10 year effort to permit, design and construct a new intake, a raw water pipeline and a new water treatment plant in Union County to meet the 2050 water supply needs of eastern Union County without having to transfer additional water from the Catawba River to the Yadkin River Basin.

Contaminants

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
- **Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems
- **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities

Water Quality

Nitrate / Nitrite Contaminants

Contaminant (units)	sample data	MCL Violation Y / N	Your Water	Range		MCLG	MCL	Likely Source of Contaminant
				Low	High			
Nitrate (as Nitrogen) (ppm) Catawba	2015	No	1.5	1.5	1.5	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits

Unregulated VOC Contaminants

Contaminant (units)	sample data	Your Water (average)	Range low high
Chloroform (ppb) Anson	2015	80	25.0 - 80.0
Chloroform (ppb) Catawba	2015	0	
Bromodichloromethane (ppb) Anson	2015	12.05	6.6 - 15
Bromodichloromethane (ppb) Catawba	2015	0	

Lead and Copper Contaminants

Contaminant (units)	sample data	Your Water	Number of sites found above AL	MCLG	AL	Likely Contamination Source
Copper (ppm) (90th percentile) Union County	2013	0.14	0	1.3	AL = 1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb) (90th percentile) Union County	2013	0.01	2	0	AL = 15	Corrosion of household plumbing systems; erosion of natural deposits

(AL represents Action levels or the concentration of a contaminant that triggers treatment of other required actions by the water supply).

Water Quality On-Site Protection Program Activities

Well Field Activities

Type of Well Codes and a Description of Each Well Code	Number of Field Activities Associated with Each Code
<i>W-1, Well site permitting evaluation for the construction or repair of a well.</i>	430
<i>W-2, Grouting inspection for the placement, repair, or the addition of grout.</i>	216
<i>W-3, A well consultative visit is any visit not described in a different activity.</i>	407
<i>W-4, Inspection of a well head.</i>	154
<i>W-5, Observation of a well abandonment.</i>	23
<i>W-10, Certificate of a successful completion of a well.</i>	178
<i>W-16, Consultative contacts made; phone calls, letters, emails, and/or office visits.</i>	2266
<i>W-21, Well camera inspection performed.</i>	29

Permits

Type of Permit	Number of Permits Issued
<i>Drinking Water Well</i>	242
<i>Irrigation Well</i>	65
<i>Well Abandonment</i>	90
<i>Well Repair</i>	21
<i>Well Replacement</i>	12

Well Water Quality Analysis

Bacterial Analysis

Number of Bacteria Samples Collected	Type of Bacteria Contaminant Detected	Number of Samples Found to be Positive for the Presence of Contaminant
367	<i>Coliform bacteria</i>	122 of 367 (33.24%)
	<i>Escherichia Coliform (E.coli)</i>	8 of 367 (2.2%)

Inorganic Analysis

Number of Inorganic Samples Collected	Type of Sample Collected	Number of Samples Collected
249	<i>Inorganic</i>	160 of 249 (64.9%)
	<i>Inorganic and Nitrite/Nitrate (Also Known as New Well Panel)</i>	89 of 249 (35.7%)

Inorganic Contaminants

Type of Contaminant	Number of Contaminants Above the Environmental Protection Agency's (EPA) Maximum Contaminant Level (MCL) or Secondary Maximum Contaminant Level (SMCL)
Arsenic	57 of 249 were at or above the MCL of 0.010 parts per million (ppm)
Lead	3 of 249 were at or above the MCL of 0.015 ppm
Iron	54 of 249 were at or above the SMCL of 0.3 ppm
Manganese	91 of 249 were at or above the SMCL of 0.05 ppm
Nitrate	4 of 249 were at or above the MCL of 10 ppm
Nitrite	0 of 249 were at or above the MCL of 1 ppm

Organic Analysis

Type of Sample Collected	Number of Samples Collected	Number of Samples Above the Environmental Protection Agency's Maximum Contaminant Level
<i>Petroleum/Volatile Organic Chemicals (VOCs)</i>	1	0
<i>Pesticides</i>	3	0
<i>Herbicides</i>	1	0

Microbiology

Type of Sample Collected	Number of Samples Collected	Number of Samples that Test Positive for Each Contaminant
<i>Iron Bacteria</i>	2	0
<i>Sulfur Bacteria</i>	3	2

On-Site Wastewater Field Activities

Type of OSWWP Code and a Description of the OSWWP Code	Number of Field Activities Associated with Each OSWWP Code
<i>S-1, Site visit not described in a different activity.</i>	2584
<i>S-1e, Site visit made to evaluate soil and to issue an Improvement Permit.</i>	570
<i>S-13, Inspection of existing system to allow construction of an addition or separate building, or the reuse of the existing system.</i>	362
<i>S-13d, Sites denied after an inspection of existing system for construction of an addition or separate building, or the reuse of the existing system.</i>	37
<i>S-14a, Maintenance program inspection; existing system inspection as required by Rule .1961.</i>	14
<i>S-15, Notice of violation(s) (NOV) issued.</i>	27
<i>S-25, Sewage complaints investigated</i>	67
<i>S-27, Consultative contacts; phone calls, letters, emails, and/or office visits.</i>	8890

OWWSP Permits

Type of Permit	Number of Permits
<i>Improvement Permit</i>	364
<i>Construction Authorization Permit</i>	364
<i>Operational Permit</i>	241

Union County Solid Waste and Recycling

Month	Year	*ONP/ *OCC Out- bound Tons	*Comingle Outbound Tons	Total Outbound Recycle Tons	Yard Waste Tons	Pallets Tons	Oil Tons	Oil Gallons	# Oil Filters Drums Count	White Goods & Scrap Tons	Tires Tons	Dead Animals Tons
July	2015	66.61	44.67	111.28	265.78	14.67	6.58	1,778.00	4	18.74	289.28	105.98
Aug	2015	81.04	37.04	118.08	259.65	22.75	6.09	1,647.00	5	6.60	266.48	79.95
Sept	2015	57.64	39.26	96.9	294.34	12.31	5.28	1,426.00	12	14.47	325.26	121.38
Oct	2015	69.4	44.94	114.34	302.72	6.12	5.07	1,370.00	0	20.62	231.51	151.31
Nov	2015	78.6	32.64	111.24	310.12	8.41	3.69	997.00	0	0.00	226.33	95.25
*Dec	2015	91.76	27.78	119.54	276.5	3.27	5.23	1,413.00	4	18.39	210.96	121.81
Jan	2016	66.28	29.24	95.52	195.41	1.92	0.41	820.00	0	38.66	246.55	127.46
Feb	2016	75.62	24.19	99.81	250.73	0.23	7.24	1,957.00	5	14.10	216.04	108.05
Mar	2016	90.06	21.16	111.22	484.6	2.48	3.97	1,072.00	3	22.30	303.58	151.99
*Apr	2016	47.28	35.58	82.86	362.9	7.81	9.53	2,576.00	5	21.07	231.35	117.71
May	2016	61.01	23.7	84.71	348.64	4.29	5.67	1,533.00	0	15.86	263.23	160.05
June	2016	72.38	23.06	95.44	314.47	3.49	5.86	1,584.00	10	31.42	243.43	86.88
TOTAL		857.68	383.26	1,240.94	3,665.86	87.75	64.62	18,173.00	48.00	222.23	3,054.00	1,427.82
AVERAGE		71.47	31.94	103.41	305.49	7.31	5.38	1,514.42	4.00	18.52	254.50	118.99

*ONP-Old News Print

*OCC-Old Corrugated Cardboard

*Comingle-mix of plastic containers (#1-#7), Aluminum Cans, Steel Cans, Glass, etc.

*effective December 1st
- separating glass

*April includes HHW
day

FY 2016 tons for disposal of Solid Waste = 78,746 (tons)

Solid Waste, Recycling

Electronics Tons	Electronics Total Loads	Lead Acid Batteries Count	Anti-Freeze Gallons	Pesticide container (2.5) & (1.0) gallon drums	*HHW Total Pounds	HHW Total Tons	Paint Pounds	Paint Tons	Glass Pounds	Glass Total Pick-up (# per cart)	Glass Tons	Year	Month
14.03	10	0	40	0	7,378.00	3.69	6,224.00	3.11	0.00		0.00	2015	July
16.27	9	0	0	0	10,880.00	5.44	9,471.00	4.74	0.00		0.00	2015	Aug
20.14	10	77	131	500	7,681.00	3.84	6,796.00	3.40	0.00		0.00	2015	Sept
14.85	9	0	0	0	9,700.00	4.85	7,545.00	3.77	0.00		0.00	2015	Oct
18.18	7	0	0	0	7,592.00	3.80	6,315.00	3.16	0.00		0.00	2015	Nov
27.49	10	0	0	0	11,306.00	5.65	8,926.00	4.46	44,400.00	148.00	22.20	2015	*Dec
20.76	8	0	0	0	7,040.00	3.52	5,749.00	2.87	44,400.00	148.00	22.20	2016	Jan
19.28	8	0	0	1,300	7,653.00	3.83	6,100.00	3.05	61,200.00	204.00	30.60	2016	Feb
32.42	10	0	103	0	11,523.00	5.76	9,501.00	4.75	50,700.00	169.00	25.35	2016	Mar
25.24	9	101	234	0	16,946.00	8.47	12,122.00	6.06	49,200.00	164.00	24.60	2016	*Apr
23.33	8	0	36	0	11,478.00	5.74	8,993.00	4.50	60,900.00	203.00	30.45	2016	May
23.32	10	0	51	0	10,172.00	5.09	8,148.00	4.07	50,100.00	167.00	25.05	2016	June
255.31	108.00	178.00	595.00	1,800	119,349.00	59.67	95,890.00	47.95	360,900.01	1,203.00	180.45	Total	
21.28	9.00	14.83	49.58	150	9,946	9	7,991	4	30,075	172	15	Average	

*Household Hazardous Waste

Source: Union County Public Works

Food, Lodging, and Institutions Program Activities

Facility Type	Number of Facilities	Number of Inspections by Risk Category (The number 1,2,3 or 4 corresponds with mandated number of unannounced inspections required per year)				
		1	2	3	4	Total
<i>Food Service</i>						
<i>Restaurants (*)</i>	333	1	149	133	679	962
<i>Food Stands</i>	110		107	79	66	252
<i>School Cafeterias (a)</i>	55				220	220
<i>Meat Markets</i>	19			54		54
<i>Limited Food Service</i>	37		45			45
<i>Temporary Food Service</i>	54	54				54
<i>Mobile Food Units (*), Pushcarts (*)</i>	32		9	13	15	37
<i>Elderly Nutrition Sites</i>	4				16	16
<i>Educational Food Service</i>	1				4	4
<i>Institutional Food Service</i>	12	5			28	33
<i>Lodging</i>						
<i>Lodging</i>	11	11				11
<i>Bed and Breakfasts</i>	3	3				3
<i>Institutions</i>						
<i>Nursing Homes</i>	15		30			30
<i>Hospital (Building) (b)</i>	1		2			2
<i>Jail</i>	1	1				1
<i>Adult Day Care</i>	4	2				2
<i>Residential Care</i>	39	30				30
<i>Swimming Pools</i>	153	134	11			145
<i>Mass Gatherings</i>	5	5				5
<i>Tattoo Artist</i>	17	17				17

Children's Environmental Health Program Activities

Childcare Facilities and Schools

Type of Facility or Institution	Number of Facilities or Institutions	Number of Inspections	Number of New Facilities or Institutions	Number of Consultative Visits	Number of Plan Reviews
<i>Child Care Facilities</i>	90	192	3	24	5
<i>Public, Private and Religious Schools</i>	71	67	2	8	4

Camps

Type of Camp	Number of Inspections	Number of Consultative Visits	Number of Permits
<i>Residential Camp</i>	2	1	1
<i>Summer Camp</i>	N/A*	3	1

*The summer camp was not been inspected as of June 30th 2016.

Child Lead Prevention Program

Type of Activity	Number Associated with Each Activity
<i>Confirmed Elevated Blood Lead Level Cases</i>	1
<i>Confirmed Lead Poisoning Cases</i>	2
<i>Lead Hazard Investigations</i>	3
<i>Clearance Testing and Consultative Visits</i>	8
<i>Annual Maintenance Program Inspections</i>	5

Complaint Investigations associated with child care facilities and schools

Type of Activity	Number Associated with Each Activity
<i>Communicable Disease Investigations and Consultations</i>	18
<i>Complaint Investigations</i>	15

Methamphetamine Laboratories

Type of Activity	Number Associated with Each Activity
<i>Meth Labs reported through the State Bureau of Investigation</i>	2
<i>Meth lab decontamination notices sent</i>	2

APPENDIX A COMMUNITY HEALTH ASSESSMENT SURVEY TOOLS

2016 Union County Community Health Assessment Survey For Teens (13 - 17)

The intent of this survey is to help identify the major health issues facing Union County teens today. Please take a few minutes to complete the survey.

The survey is anonymous. DO NOT put your name on the survey. Your answers will not be connected to you in any way.

1. What is your Zip Code?

- | | | |
|-----------------------------|-----------------------------|-----------------------------|
| <input type="radio"/> 28079 | <input type="radio"/> 28110 | <input type="radio"/> 28173 |
| <input type="radio"/> 28103 | <input type="radio"/> 28111 | <input type="radio"/> 28174 |
| <input type="radio"/> 28104 | <input type="radio"/> 28112 | |
| <input type="radio"/> 28105 | <input type="radio"/> 28113 | |

2. Which Town or Municipality in Union County do you reside?

- | | | |
|------------------------------------|---------------------------------------|-------------------------------------|
| <input type="radio"/> Altan | <input type="radio"/> Marvin | <input type="radio"/> Waxhaw |
| <input type="radio"/> Fairview | <input type="radio"/> Matthews | <input type="radio"/> Weddington |
| <input type="radio"/> Goose Creek | <input type="radio"/> Mineral Springs | <input type="radio"/> Wesley Chapel |
| <input type="radio"/> Hemby Bridge | <input type="radio"/> Monroe | <input type="radio"/> Wingate |
| <input type="radio"/> Indian Trail | <input type="radio"/> New Salem | <input type="radio"/> Out of County |
| <input type="radio"/> Lake Park | <input type="radio"/> Stallings | |
| <input type="radio"/> Marshville | <input type="radio"/> Unionville | |

3. What is your Age?

4. What is your Gender?

- Male
- Female

5. What is your Race?

- African American American Indian Asian Hispanic White

6. What type of health insurance do people in your home have?

- Government Medicaid Private Insurance No Insurance Do Not Know

Insurance (Affordable
Healthcare)

Health-Teen

7. Listed below are health concerns. Please check three that MOST concern you.

- | | |
|---|---|
| <input type="checkbox"/> Obesity / overweight | <input type="checkbox"/> Chronic Diseases (cancer, diabetes, high blood pressure) |
| <input type="checkbox"/> STDs | <input type="checkbox"/> Asthma |
| <input type="checkbox"/> HIV / AIDS | <input type="checkbox"/> Allergies |
| <input type="checkbox"/> Eating Disorders | <input type="checkbox"/> Poor dental health |
| <input type="checkbox"/> Teen Pregnancy | <input type="checkbox"/> Sports Injuries |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Suicide |

Other (please specify)

8. Listed below are safety concerns. Please check three that MOST concern you.

- | | |
|--|--|
| <input type="checkbox"/> Domestic Violence (violence at home) | <input type="checkbox"/> Internet Safety |
| <input type="checkbox"/> School Violence | <input type="checkbox"/> Overdosing (drugs and/or alcohol) |
| <input type="checkbox"/> Gang Violence / Intimidation | <input type="checkbox"/> Self-Injury / Cutting |
| <input type="checkbox"/> Sexual Assault / Rape / Date Violence | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Bullying | <input type="checkbox"/> Drowning |

Other safety concern, please list:

9. Listed below are safety hazards related to driving. Please check ALL that apply to you.

- | | |
|--|---|
| <input type="checkbox"/> Texting while I drive | <input type="checkbox"/> Driving under the influence (drugs or alcohol) |
| <input type="checkbox"/> Talking on cell phone while I drive | <input type="checkbox"/> Reckless Driving / Speeding |

10. Listed below are behaviors that keep people from being healthy. Please check the three that you feel keep teens in Union County from being healthy.

- | | |
|---|--|
| <input type="checkbox"/> Alcohol Abuse | <input type="checkbox"/> Poor Eating Habits |
| <input type="checkbox"/> Drug Abuse | <input type="checkbox"/> Not going to the doctor |
| <input type="checkbox"/> Tobacco Use | <input type="checkbox"/> Youth Violence |
| <input type="checkbox"/> Unsafe Sex | <input type="checkbox"/> Bullying |
| <input type="checkbox"/> Lack of Exercise | <input type="checkbox"/> Internet Safety |

Other behaviors, please list:

11. Approximately how much time do you spend daily on social media? (Facebook, Instant Messaging, Snap Chatting, Texting)

- None 1 hour or less 2 hours 3 hours 4 hours or more

Health-Teen

12. How much screen time do you spend daily? (TV, video games, computer)

- 1 hour or less 2 hours 3 hours 4 hours or more

13. How do you view your weight?

- Normal Underweight Overweight Obese Morbidly Obese

14. Do you feel your current weight is impacting your health status?

- Yes No

15. Do you have a medical home (doctor you see on a regular basis)?

- Yes No

16. Was there a time that you needed to see a doctor during the last 12 months but did not?

- Yes No

17. If yes, what was the main reason that you did not see a doctor?

- Did not have the money to go
 No insurance
 I had no transportation
 I was afraid / I don't like to go to the doctor
 Did not know who to call or where to go
 Office was not open when I could get there

Other reason:

18. Do you have a dental home (dentist you see on a regular basis)?

- Yes No

19. Was there a time during the last 12 months when you needed to see a dentist but did not?

- Yes No

Health-Teen

20. If yes, what was the main reason that you did not see a dentist?

- Did not have the money to go
- No insurance
- I had no transportation
- I was afraid / I don't like to go to the dentist
- Did not know who to call or where to go
- Office was not open when I could get there

Other reason:

21. Where do you go MOST OFTEN when you are sick and need medical care? Choose ONLY one.

- Doctor's office in Union County
- Doctor's office outside Union County
- Carolinas Health Care Union Emergency Room (formerly CMC)
- Emergency Department outside Union County
- Urgent Care Facility in Union County
- Minute Clinic in Union County

Other:

22. Have you needed a prescription medication and did not get it?

- Yes
- No

23. If yes, why did you not get your medicine?

- Did not have the money
- Pay other bills (food, gas, utilities)
- Insurance would not cover the medication
- No transportation to Pharmacy

Other (please specify)

24. Check ALL preventative health services you had during the past 12 months:

- Physical Exam
- Eye Exam (vision)
- Hearing Check
- Immunizations (flu shot, Tdap, etc.)

Health-Teen

25. If you did not receive any preventative services, please indicate why. Check ALL that apply.

- No money
- No insurance coverage
- Do not feel prevention services are necessary
- I only see a doctor for an urgent medical problem
- I do not have a medical home

26. How many days a week do you normally get 30 minutes of exercise?

- None 1 2 3 4 5 or more

27. Outside of exercising at school, are you physically active?

- Yes No

28. Are there enough opportunities for physical activity near your home?

- Yes No

29. How many servings of fruits and vegetables do you normally eat per day?

- None 1 2 3 4 5 or more

30. Do you buy your lunch at school?

- Yes No

31. If yes, what do you eat most often?

- School Lunch (meal of the day)
- Snack Food (ice cream, cookies, chips)
- Al La Carte Menu (french fries, pizza, chicken sandwich, etc.)

32. Is this your ONLY meal of the day?

- Yes No

33. If you do not buy your lunch, why do you not buy lunch?

- No money
- Do not like food choices
- Bring my lunch from home
- Don't eat lunch

Other reason:

Health-Teen

34. Where do the majority of your meals outside of school come from?

- Home cooked meals
- Fast Food Restaurant
- Dine-in Restaurant
- Prepared Foods from Grocery Store Deli (Rotisserie chicken, sub sandwich, etc)
- Frozen Food / Microwave Meals

Other (please specify)

35. After school gets out each day, or during the summer how do you spend your time?

Check ALL that apply:

- Playing sports (on a school or league team)
- Playing sports (recreation - just for fun)
- Doing homework
- Working (job)
- Hobbies
- Hanging out with friends
- Partying (drinking / recreational drugs)
- Home alone, or with siblings
- Video games

36. Do you have any other concerns about the health of teens in Union County?

2016 Union County Community Health Assessment Survey For Adults (18 - 61)

The intent of this survey is to help identify the major health issues facing Union County Residents today. Please take a few minutes to complete the survey.

The survey is anonymous. DO NOT put your name on the survey. Your answers will not be connected to you in any way.

1. What is your Zip Code?

- 28079
- 28103
- 28104
- 28105
- 28110
- 28111
- 28112
- 28113
- 28173
- 28174

2. Which Town or Municipality in Union County do you reside?

- Altan
- Fairview
- Goose Creek
- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Matthews
- Mineral Springs
- Monroe
- New Salem
- Stallings
- Unionville
- Waxhaw
- Weddington
- Wesley Chapel
- Wingate
- Out of County

3. What is your Age?

4. What is your Gender?

- Male
- Female

5. What is your Race?

- African American
- American Indian
- Asian
- Hispanic
- White

6. What type of health insurance do people in your home have?

- Government Insurance (Affordable Healthcare)
- Medicaid
- Medicare
- Private Insurance
- No Insurance

7. Do you feel your income or economic situation is negatively impacting your ability to access medical care or services?

- Yes
- No

8. Listed below are health concerns. Please check three that MOST concern you regarding your own health.

- | | | |
|--|--|---|
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Respiratory Illness | <input type="checkbox"/> Vision issues |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Alzheimer's Disease | <input type="checkbox"/> Hearing issues |
| <input type="checkbox"/> High blood pressure | <input type="checkbox"/> Dental health | <input type="checkbox"/> Caregiver Stress |

Other (please specify)

9. Listed below are mental health concerns. Please check three that MOST concern you.

- | | | |
|-------------------------------------|--|--|
| <input type="checkbox"/> Addiction | <input type="checkbox"/> Bipolar Disorder | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Obsessive Compulsive Disorder | <input type="checkbox"/> Intellectual Developmental Disability |
| <input type="checkbox"/> Autism | <input type="checkbox"/> Schizophrenia | <input type="checkbox"/> Attention Deficit Disorder / Attention Deficit Hyperactivity Disorder |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Sleep Issues | |

Other safety concern (please specify)

10. Listed below are behaviors that cause poor health. Please check up to three most critical behaviors you feel keep people in Union County from being healthy.

- | | | |
|---|--|---|
| <input type="checkbox"/> Alcohol Abuse | <input type="checkbox"/> Domestic Violence | <input type="checkbox"/> Unsafe Living Conditions |
| <input type="checkbox"/> Drug Abuse | <input type="checkbox"/> Lack of Exercise | <input type="checkbox"/> Stress |
| <input type="checkbox"/> Tobacco Use | <input type="checkbox"/> Caregiver Stress | <input type="checkbox"/> Not Getting Doctor Check Ups |
| <input type="checkbox"/> Unsafe Sex / Unprotected Sex | <input type="checkbox"/> Instability at Home | <input type="checkbox"/> Poor Eating Habits |

Other behaviors (please specify)

11. How do you view your weight?

- Normal
- Underweight
- Overweight
- Obese
- Morbidly Obese

12. Do you feel your current weight is impacting your health status?

- Yes No

13. Do you have a medical doctor you see on a regular basis?

- Yes No

14. Was there a time that you needed to see a doctor during the last 12 months but did not?

- Yes No

15. If yes, what was the main reason you did not see a doctor?

- | | |
|--|---|
| <input type="checkbox"/> Did not have the money to go | <input type="checkbox"/> I do not trust doctors |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Did not know who to call or where to go |
| <input type="checkbox"/> I had no transportation | <input type="checkbox"/> Office was not open when I could get there |
| <input type="checkbox"/> I was afraid / I don't like to go to the doctor | <input type="checkbox"/> Language Barrier |

Other reason:

16. Do you see a dentist on a regular basis?

- Yes No

17. Was there a time during the last 12 months when you needed to see a dentist but did not?

- Yes No

18. If yes, what was the main reason you did not see a dentist?

- | | |
|---|---|
| <input type="checkbox"/> Did not have the money to go | <input type="checkbox"/> I do not trust dentists |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Did not know who to call or where to go |
| <input type="checkbox"/> I had no transportation | <input type="checkbox"/> Office was not open when I could get there |
| <input type="checkbox"/> I was afraid / I don't like to go to the dentist | <input type="checkbox"/> Language Barrier |

Other reason:

19. Where do you go MOST OFTEN when you are sick and need medical care? Choose ONLY one.

- | | |
|---|---|
| <input type="radio"/> Doctor's office in Union County | <input type="radio"/> Urgent Care Facility in Union County |
| <input type="radio"/> Doctor's office outside Union County | <input type="radio"/> Minute Clinic in Union County |
| <input type="radio"/> Carolinas Health Care Union Emergency Room (formerly CMC) | <input type="radio"/> Do not see a doctor - Use Naturopathic Remedies |
| <input type="radio"/> Emergency Department outside Union County | |

Other:

20. Have you ever felt that you needed mental health services and did not get them?

- Yes No

21. If yes, why did you not go for mental health services? Check ALL that apply:

- | | |
|--|---|
| <input type="checkbox"/> Did not have the money to go | <input type="checkbox"/> I do not trust doctors |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Did not know who to call or where to go |
| <input type="checkbox"/> Insurance does not pay for mental health services | <input type="checkbox"/> Office was not open when I could get there |
| <input type="checkbox"/> I had no transportation | <input type="checkbox"/> Language Barrier |
| <input type="checkbox"/> I was afraid / I don't like to go to the doctor | <input type="checkbox"/> Embarrassed |

22. Have you needed a prescription medication and did not get it?

- Yes No

23. If yes, why did you not get your medicine?

- Did not have the money Insurance would not cover the medication
 No insurance No transportation to Pharmacy
 I had to pay other bills (food, gas, utilities) Do not use medications (prefer alternative medicines / naturopathic)

Other (please specify)

24. Do you keep an emergency supply of your medications?

- Yes No NA

25. Have you changed the way you take your prescription medications without talking to a doctor?

- Yes No

26. If Yes, check all the reasons you changed the way you take your medicine:

- Save money Cut daily dosage to make prescription last longer
 Did not like the way the medicine made me feel Shared prescription with someone else
 Did not think the medicine was working Did not understand how to take it
 Took medicine every other day to make prescription last longer

27. Check ALL preventative health services you had during the past 12 months:

- Physical Exam Cholesterol Check Pap Smear
 Eye Exam (vision) Blood Glucose (Diabetes screening) Prostate Exam
 Hearing Check Colonoscopy
 Hypertension (Blood Pressure check) Mammogram

28. If you did not receive any preventative services, please indicate why. Check ALL that apply.

- | | |
|--|--|
| <input type="checkbox"/> No money | <input type="checkbox"/> Only see a doctor for an urgent medical problem |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> I do not have a medical doctor |
| <input type="checkbox"/> No insurance coverage for prevention services | <input type="checkbox"/> Use alternative medicine (naturopathic, holistic, etc.) |
| <input type="checkbox"/> Do not feel prevention services are necessary | <input type="checkbox"/> No time to go to a doctor |

29. Where do you get most of your health information? Check ONLY one.

- | | |
|----------------------------------|--|
| <input type="radio"/> My Doctor | <input type="radio"/> Internet |
| <input type="radio"/> Pharmacist | <input type="radio"/> Family / Friends |
| <input type="radio"/> TV | |

Other (please specify)

30. How many days a week do you normally get 30 minutes of exercise for fitness?

- None
- One
- Two
- Three
- Four
- Five or more

31. Are there enough opportunities for physical activity near your home?

- | | |
|---------------------------|--------------------------|
| <input type="radio"/> Yes | <input type="radio"/> No |
|---------------------------|--------------------------|

32. How many servings of fruits and vegetables do you normally eat per day?

- None
- One
- Two
- Three
- Four
- Five or more

33. Do you purchase locally grown fruits / vegetables at retail markets, farm stands or Farmers Markets?

- Yes No

34. Where do the majority of your meals come from?

- Home cooked meals Prepared Foods from Grocery Store Deli (Rotisserie chicken, sub sandwich, etc)
- Fast Food Restaurant Frozen Food / Microwave Meals
- Dine-in Restaurant Garden (home grown / home canned)

Other (please specify)

35. Do you smoke cigarettes, cigars or use smokeless tobacco?

- Yes No

36. If yes, would you like to quit?

- Yes No

37. Do you smoke e-cigarettes?

- Yes No

38. If yes, prior to e-cigarettes: (Check one answer)

- Non-smoker Smoked other tobacco products

39. Do you smoke marijuana / do recreation drugs?

- Yes No

40. Do you drink alcoholic beverages?

- Yes No

41. If yes, do you feel it impacts your health negatively?

- Yes No

42. Do you ever drive after drinking?

- Yes No

43. Do you talk on your cell phone while driving?

Yes

No

44. Do you text while driving?

Yes

No

45. Environmental Health (Check one answer per row)

	Great Concern	Some Concern	No Concern
Outdoor Air Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indoor Air Quality (mold, allergens, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stream Water Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preserving Green Space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vector Control (mosquitoes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solid Waste Disposal (appliances, mattresses, tires, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to Convenience Centers for Trash Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bioterrorism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weather Disasters / Storm Debris	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food Borne Illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

46. What type of drinking water do you have?

Well Water

County Water

Municipal Water

47. Are you concerned about your drinking water?

Yes

No

48. If yes, please check ALL that apply:

- Taste
- Smell
- Afraid of what is in the water

Other (please specify)

49. Is there anything that could be done to improve the health of adults in Union County? Please explain.

The intent of this survey is to help identify the major health issues facing Union County Residents today. Please take a few minutes to complete the survey.

The survey is anonymous. DO NOT put your name on the survey. Answers will not be connected to you in any way.

1. What is your Zip Code?

- 28079
- 28103
- 28104
- 28105
- 28110
- 28111
- 28112
- 28113
- 28173
- 28174

2. Which Town or Municipality in Union County do you reside?

- Altan
- Fairview
- Goose Creek
- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Matthews
- Mineral Springs
- Monroe
- New Salem
- Stallings
- Unionville
- Waxhaw
- Weddington
- Wesley Chapel
- Wingate
- Out of County

3. What is your Age?

4. What is your Gender?

- Male
- Female

5. What is your Race?

- African American
- American Indian
- Asian
- Hispanic
- White

6. What type of health insurance do people in your home have?

- Government Insurance (Affordable Healthcare)
- Medicaid
- Medicare
- Private Insurance
- No Insurance

7. Do you live alone?

- Yes
- No

8. Do you feel your income or economic situation is negatively impacting your ability to access medical care or services?

- Yes
- No

9. Listed below are health concerns. Please check three that concern you MOST.

- | | |
|---|---|
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Dental Health |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Falling |
| <input type="checkbox"/> High blood pressure | <input type="checkbox"/> Hearing Issues |
| <input type="checkbox"/> Respiratory Illness | <input type="checkbox"/> Vision Issues |
| <input type="checkbox"/> Alzheimer's Disease / Dementia | |

Other (please specify)

10. Listed below are mental health concerns. Please check three that concern you MOST.

- | | | |
|-------------------------------------|--|--|
| <input type="checkbox"/> Addiction | <input type="checkbox"/> Bipolar Disorder | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Anxiety | <input type="checkbox"/> Obsessive Compulsive Disorder | <input type="checkbox"/> Caregiver Stress |
| <input type="checkbox"/> Autism | <input type="checkbox"/> Schizophrenia | <input type="checkbox"/> Intellectual Developmental Disability |
| <input type="checkbox"/> Depression | <input type="checkbox"/> Sleep Issues | <input type="checkbox"/> Attention Deficit Disorder / Attention Deficit Hyperactivity Disorder |

Other safety concern (please specify)

11. Listed below are behaviors that cause poor health. Please check up to three behaviors you feel keep people in Union County from being healthy.

- | | | |
|--|--|---|
| <input type="checkbox"/> Alcohol Abuse | <input type="checkbox"/> Unsafe Sex | <input type="checkbox"/> Poor Eating Habits |
| <input type="checkbox"/> Drug Abuse | <input type="checkbox"/> Domestic Violence | <input type="checkbox"/> Not Getting Doctor Check Ups |
| <input type="checkbox"/> Tobacco Use | <input type="checkbox"/> Lack of Exercise | |

Other behaviors (please specify)

12. Listed below are safety concerns that can impact your health. Please check three that concern you:

- | | | |
|---|--|--|
| <input type="checkbox"/> Instability at Home | <input type="checkbox"/> Falling | <input type="checkbox"/> Memory Problems / Confusion |
| <input type="checkbox"/> Unsafe Living Conditions | <input type="checkbox"/> Neglect | <input type="checkbox"/> Unable to Manage / Understand Medications |
| <input type="checkbox"/> Elder Abuse | <input type="checkbox"/> Not Enough Food | |

Other safety concerns (please specify)

13. If you were being abused, would you know who to call, or how to report it?

- Yes No

14. How do you view your weight?

- Normal
 Underweight
 Overweight
 Obese
 Morbidly Obese

15. Do you feel your current weight is impacting your health status?

- Yes No

16. Do you have a medical doctor you see on a regular basis?

- Yes No

17. Was there a time that you needed to see a doctor during the last 12 months but did not?

- Yes No

18. If yes, what was the main reason you did not see a doctor?

- | | |
|--|---|
| <input type="checkbox"/> Did not have the money to go | <input type="checkbox"/> I do not trust doctors |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Did not know who to call or where to go |
| <input type="checkbox"/> I had no transportation | <input type="checkbox"/> Office was not open when I could get there |
| <input type="checkbox"/> I was afraid / I don't like to go to the doctor | <input type="checkbox"/> Language Barrier |

Other reason:

19. Do you have a dentist you see on a regular basis?

- Yes No

20. Was there a time during the last 12 months when you needed to see a dentist but did not?

- Yes No

21. If yes, what was the main reason you did not see a dentist?

- | | |
|---|---|
| <input type="checkbox"/> Did not have the money to go | <input type="checkbox"/> I do not trust dentists |
| <input type="checkbox"/> No insurance | <input type="checkbox"/> Did not know who to call or where to go |
| <input type="checkbox"/> I had no transportation | <input type="checkbox"/> Office was not open when I could get there |
| <input type="checkbox"/> I was afraid / I don't like to go to the dentist | <input type="checkbox"/> Language Barrier |

Other reason:

22. Where do you go when you are sick and need medical care? Choose ONLY one.

- Doctor's office in Union County
- Doctor's office outside Union County
- Carolinas Health Care Union Emergency Room (formerly CMC)
- Emergency Department outside Union County
- Urgent Care Facility in Union County
- Minute Clinic in Union County

Other:

23. Have you ever felt that you needed mental health services and did not get them?

- Yes
- No

24. If yes, why did you not go for mental health services? Check ALL that apply:

- Did not have the money to go
- No insurance
- I had no transportation
- I was afraid / I don't like to go to the doctor
- I do not trust doctors
- Did not know who to call or where to go
- Office was not open when I could get there
- Language Barrier
- Embarrassed

25. Have you needed a prescription medication and did not get it?

- Yes
- No

26. If yes, why did you not get your medicine?

- Did not have the money
- No insurance
- I had to pay other bills (food, gas, utilities)
- Insurance would not cover the medication
- No transportation to Pharmacy
- Do not use medications (prefer alternative medicines / naturopathic)

Other (please specify)

27. Does anyone help you take or manage your medications?

- Yes
- No
- NA

28. Have you changed the way you take your prescription medications without talking to a doctor?

- Yes
- No

29. If Yes, check all the reasons you changed the way you take your medicine:

- | | |
|---|--|
| <input type="checkbox"/> Save money | <input type="checkbox"/> Cut daily dosage to make prescription last longer |
| <input type="checkbox"/> Did not like the way the medicine made me feel | <input type="checkbox"/> Shared prescription with someone else |
| <input type="checkbox"/> Did not think the medicine was working | <input type="checkbox"/> Did not understand how to take medicine |
| <input type="checkbox"/> Took medicine every other day to make prescription last longer | |

30. Do you receive any home health services in your home?

- Yes No NA

31. Do you receive any non-medical in home assistance?

- Yes No NA

32. Do you keep an emergency supply of your medications?

- Yes No NA

33. Check ALL preventative health services you had during the past 12 months:

- | | | |
|--|--|--|
| <input type="checkbox"/> Physical Exam | <input type="checkbox"/> Hypertension (Blood Pressure check) | <input type="checkbox"/> Colonoscopy |
| <input type="checkbox"/> Eye Exam (vision) | <input type="checkbox"/> Cholesterol Check | <input type="checkbox"/> Mammogram |
| <input type="checkbox"/> Hearing Check | <input type="checkbox"/> Blood Glucose (Diabetes screening) | <input type="checkbox"/> Prostate Exam |

34. If you did not receive any preventative services, please indicate why. Check ALL that apply.

- | | |
|--|--|
| <input type="checkbox"/> No money | <input type="checkbox"/> I only see a doctor for an urgent medical problem |
| <input type="checkbox"/> No insurance coverage for prevention services | <input type="checkbox"/> I do not have a medical home |
| <input type="checkbox"/> Do not feel prevention services are necessary | |

35. Where do you get most of your health information? Check ONLY one.

- | | |
|----------------------------------|--|
| <input type="radio"/> My Doctor | <input type="radio"/> Internet |
| <input type="radio"/> Pharmacist | <input type="radio"/> Family / Friends |
| <input type="radio"/> TV | |

Other (please specify)

36. How many days a week do you normally get 30 minutes of exercise?

- None
- One
- Two
- Three
- Four
- Five or more

37. Are there enough opportunities for physical activity near your home?

- Yes
- No

38. How many servings of fruits and vegetables do you normally eat per day?

- None
- One
- Two
- Three
- Four
- Five or more

39. Do you purchase locally grown fruits / vegetables at retail markets, farm stands or Farmers Markets?

- Yes
- No

40. Where do the majority of your meals come from?

- Home cooked meals
- Fast Food Restaurant
- Dine-in Restaurant
- Prepared Foods from Grocery Store Deli (Rotisserie chicken, sub sandwich, etc)
- Frozen Food / Microwave Meals
- Garden (home grown / home canned)
- Meals on Wheels (County meals delivered to my home)
- Senior Nutrition Site

Other (please specify)

41. Do you smoke cigarettes, cigars or use smokeless tobacco?

- Yes
- No

42. If yes, would you like to quit?

Yes

No

43. Do you smoke e-cigarettes?

Yes

No

44. If Yes, prior to e-cigarettes: (Check one answer)

Non-smoker

Smoked tobacco products

45. Do you drink alcoholic beverages?

Yes

No

46. If Yes, do you feel it impacts your health negatively?

Yes

No

47. Do you ever drive after drinking?

Yes

No

48. Do you talk on your cell phone while driving?

Yes

No

49. Do you text while driving?

Yes

No

50. Environmental Health (Check one answer per row)

	Great Concern	Some Concern	No Concern
Outdoor Air Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indoor Air Quality (mold, allergens, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stream Water Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preserving Green Space	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vector Control (mosquitoes)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Solid Waste Disposal (appliances, mattresses, tires, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to Convenience Centers for Trash Disposal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bioterrorism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Weather Disasters / Yard Debris	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Food Borne Illness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

51. What type of drinking water do you have?

- Well Water
 County Water
 Municipal Water

52. Are you concerned about your drinking water?

- Yes
 No

53. If Yes, please check ALL that apply:

- Taste / Smell
 Afraid of what is in the water

Other (please specify)

54. What specific things could be done to improve the health of Seniors in Union County? Please explain.

APPENDIX B
COMMUNITY HEALTH ASSESSMENT
PRIORITY SETTING SURVEY

2016 CHA - Community Priority Survey

Ranking Health And Wellness Issues That Impact Union County Residents

Please prioritize numerically the following categories in the order that you feel is best for the community. Number 1 being the MOST IMPORTANT .

1. Built Environment

	1	2	3	4	5
Parks / Greenspace	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pedestrian Connectivity (sidewalks, walking trails)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Access to Union County Public School Facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Water Infrastructure (Public Works)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bike Lanes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. Infrastructure

	1	2	3	4
Water Lines (planned with Public Health and Environmental Health)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Public Transportation Countywide	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recruit Health Conscience Retail (Whole Foods, Fresh Market, Earth Fare)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Family / Children Counseling & Therapy Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Environmental

	1	2	3	4
Well Water Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outdoor Air Quality	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vector Control (mosquito born viruses)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indoor Air Quality Education (mold, lead, allergens, carbon monoxide, radon and pesticides)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Behaviors / Health Education

	1	2	3	4	5
Increase Physical Activity	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Healthy Eating	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
STD Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chronic Disease Prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Opiate Issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. At-Risk Populations

	1	2	3	4	5
Drug Users (heroin / opiates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elderly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sexually Active Adults Practicing Unprotected Sex	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Elderly Caregivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indigent Adults	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

APPENDIX C
SECONDARY DATA
SUPPORTING DOCUMENTATION /
HEALTHY NC 2020

HEALTHY NORTH CAROLINA 2020 OBJECTIVES

	Current	2020 Target
Tobacco Use		
1. Decrease the percentage of adults who are current smokers	20.3% (2009)	13.0%
2. Decrease the percentage of high school students reporting current use of any tobacco product	25.8% (2009)	15.0%
3. Decrease the percentage of people exposed to secondhand smoke in the workplace in the past seven days	14.6% (2008)	0%
Physical Activity and Nutrition		
1. Increase the percentage of high school students who are neither overweight nor obese	72.0% (2009)	79.2%
2. Increase the percentage of adults getting the recommended amount of physical activity	46.4% (2009)	60.6%
3. Increase the percentage of adults who consume five or more servings of fruits and vegetables per day	20.6% (2009)	29.3%
Injury and Violence		
1. Reduce the unintentional poisoning mortality rate (per 100,000 population)	11.0 (2008)	9.9
2. Reduce the unintentional falls mortality rate (per 100,000 population)	8.1 (2008)	5.3
3. Reduce the homicide rate (per 100,000 population)	7.5 (2008)	6.7
Maternal and Infant Health		
1. Reduce the infant mortality racial disparity between whites and African Americans	2.45 (2008)	1.92
2. Reduce the infant mortality rate (per 1,000 live births)	8.2 (2008)	6.3
3. Reduce the percentage of women who smoke during pregnancy	10.4% (2008)	6.8%
Sexually Transmitted Disease and Unintended Pregnancy		
1. Decrease the percentage of pregnancies that are unintended	39.8% (2007)	30.9%
2. Reduce the percentage of positive results among individuals aged 15 to 24 tested for chlamydia	9.7% (2009)	8.7%
3. Reduce the rate of new HIV infection diagnoses (per 100,000 population)	24.7 (2008)	22.2
Substance Abuse		
1. Reduce the percentage of high school students who had alcohol on one or more of the past 30 days	35.0% (2009)	26.4%
2. Reduce the percentage of traffic crashes that are alcohol-related	5.7% (2008)	4.7%
3. Reduce the percentage of individuals aged 12 years and older reporting any illicit drug use in the past 30 days	7.8% (2007-08)	6.6%
Mental Health		
1. Reduce the suicide rate (per 100,000 population)	12.4 (2008)	8.3
2. Decrease the average number of poor mental health days among adults in the past 30 days	3.4 (2008)	2.8
3. Reduce the rate of mental health-related visits to emergency departments (per 10,000 population)	92.0 (2008)	82.8

HEALTHY NORTH CAROLINA 2020: A Better State of Health

HEALTHY NORTH CAROLINA 2020 OBJECTIVES

	Current	2020 Target
Oral Health		
1. Increase the percentage of children aged 1-5 years enrolled in Medicaid who received any dental service during the previous 12 months	46.9% (2008)	56.4%
2. Decrease the average number of decayed, missing, or filled teeth among kindergartners	1.5 (2008-09)	1.1
3. Decrease the percentage of adults who have had permanent teeth removed due to tooth decay or gum disease	47.8% (2008)	38.4%
Environmental Health		
1. Increase the percentage of air monitor sites meeting the current ozone standard of 0.075 ppm	62.5% (2007-09)	100.0%
2. Increase the percentage of the population being served by community water systems (CWS) with no maximum contaminant level violations (among persons on CWS)	92.2% (2009)	95.0%
3. Reduce the mortality rate from work-related injuries (per 100,000 equivalent full-time workers)	3.9 (2008)	3.5
Infectious Disease and Foodborne Illness		
1. Increase the percentage of children aged 19-35 months who receive the recommended vaccines	77.3% (2007)	91.3%
2. Reduce the pneumonia and influenza mortality rate (per 100,000 population)	19.5 (2008)	13.5
3. Decrease the average number of critical violations per restaurant/food stand	6.1 (2009)	5.5
Social Determinants of Health		
1. Decrease the percentage of individuals living in poverty	16.9% (2009)	12.5%
2. Increase the four-year high school graduation rate	71.8% (2008-09)	94.6%
3. Decrease the percentage of people spending more than 30% of their income on rental housing	41.8% (2008)	36.1%
Chronic Disease		
1. Reduce the cardiovascular disease mortality rate (per 100,000 population)	256.6 (2008)	161.5
2. Decrease the percentage of adults with diabetes	9.6% (2009)	8.6%
3. Reduce the colorectal cancer mortality rate (per 100,000 population)	15.7(2008)	10.1
Cross-cutting		
1. Increase average life expectancy (years)	77.5 (2008)	79.5
2. Increase the percentage of adults reporting good, very good, or excellent health	81.9% (2009)	90.1%
3. Reduce the percentage of non-elderly uninsured individuals (aged less than 65 years)	20.4% (2009)	8.0%
4. Increase the percentage of adults who are neither overweight nor obese	34.6% (2009)	38.1%

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